Prepared by the Global Centre for ICT in Parliament
A partnership initiative of the United Nations Department of Economic and Social Affairs
and the Inter-Parliamentary Union inspired by the outcome of the
World Summit on the Information Society

World e-Parliament Report 2012

United Nations

Inter-Parliamentary Union

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Note

The Global Centre for Information and Communication Technologies (ICT) in Parliament is a partnership initiative of the United Nations and the Inter-Parliamentary Union inspired by the outcome of the World Summit on the Information Society (WSIS) in 2005. The Global Centre for ICT in Parliament pursues two main objectives: a) strengthening the role of parliaments in the promotion of the Information Society, in light of the WSIS outcome; and, b) promoting the use of ICT as a means to modernize parliamentary processes, increase transparency, accountability and participation, and improve inter-parliamentary cooperation.

The Global Centre for ICT in Parliament is administered by the Division for Public Administration and Development Management of the United Nations Department of Economic and Social Affairs.

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ST/ESA/PAD/SER.E/176
ISBN: 978-92-1-123193-9
e-ISBN: 978-92-1-055908-9
Sales n° E.12.II.H.5

Foreword

The progress of the information society is part of the everyday life of citizens, businesses and public institutions. Parliaments face challenges in keeping abreast of the rapid changes in society and the uses of technology. As part of their efforts to modernize, parliaments are continually looking for the most appropriate tools to support their law-making, representation and oversight functions.

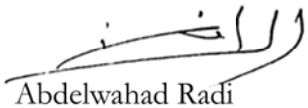
The past few years have seen a tremendous rise in the interaction among individuals and groups through social media, as well as new opportunities provided by mobile broadband and cloud computing. These evolutions have an impact on the way that parliaments organize their work and interact with the public.

Nevertheless, technology cannot be considered in isolation from the wider context of the work of legislatures. We must always remember that the primary purpose of information and communication technology in parliaments is to reinforce the values of transparency, openness, accountability and effectiveness.

By analyzing data contributed by 156 parliaments against the results of the 2008 and 2010 editions, the *World e-Parliament Report 2012* offers an unprecedented comparative investigation of the major trends, practices and experiences in the use of information and communication technology in the parliamentary environment.

The 2012 edition also describes innovations and trends that have emerged since the previous Report, such as tablet devices and open data. The Report seeks to provide insights into, and raise awareness about, the opportunities and challenges that these innovations present for the parliamentary community. We hope that this Report serves as a useful instrument for enhancing inter-parliamentary cooperation at regional and international levels.

Wu Hongbo
Under-Secretary-General
for Economic and Social Affairs
United Nations



Abdelwahad Radi
President
Inter-Parliamentary Union

Acknowledgements

The main authors of the *World e-Parliament Report 2012* are Jeffrey Griffith and Gherardo Casini, who also provided coordination during its preparation. Important contributions were received by Flavio Zeni and Andy Richardson. Data analysis and presentation, along with statistical advice, were provided by Giorgina Brown, while Costantino Scammacca contributed to data management and processing. All chapters benefited from the expert advice of Jane Bortnick Griffith. The United Nations Department of Economic and Social Affairs through the Division for Public Administration and Development Management has provided substantive and administrative support for the Report.

The Report, however, could not have been prepared without the contribution of ideas, practices, experiences and conceptual approaches received from a group of parliamentary staff and experts who exchanged their views with the authors. Many of them provided inputs, some reviewed parts of the document, and others have given suggestions for improvements. These are, in alphabetical order: Patricio Alvarez Cabezas, Timothy Arnold-Moore, Liselotte Astrup, Edmund Balnaves, Soufiane Ben Moussa, Avinash Bikha, Fatima Boltman, Georges Brion, Thomas Bruce, Carlos Magno Cataldi Santoro, Rob Clements, Ludovic Delepin, Bassel Dohaini, Deo Dookie, Antonio Esposito, Claudio Fabiani, Garreth Ferguson, Soledad Ferreiro, Cristiano Ferri, Hernán Figueroa, Mauro Fioroni, Moira Fraser, Adolfo Furtado, Daniela Giacomelli, Jason Goldstein, Eduardo González, Kirsten Gullikson, Ashok Hariharan, Scott Hubli, Serge Kapto, Ganyani Khosa, Juha-Pekka Leskinen, João Lima, Andrew Mandelbaum, Carlo Marchetti, Franklyn Michael, Fernando Milán Zuber, Joan Miller, Michael Mukuka, Monica Palmirani, Sari Pajula, Ilaria Paresce, Ravi Poliah, John Pullinger, Otto Redegeld, Robert Reeves, Silvana Rubino-Hallman, Innocent Rugambwa, Antonio Saad, Donna Scheeder, Daniel Schuman, Reynold Schweickhardt, Enrico Seta, Andreas Sidler, Carlo Simonelli, Oleksiy Sydorenko, Antonieta Teixeira, Raissa Teodori, Dick Toornstra, João Viegas Abreu, Fabio Vitali, Andy Williamson, and John Wonderlich.

Ideas and substantial information gathered during workshops, capacity building activities and working group meetings represented a precious source for refining its content.

Specific contributions provided by parliamentary services and other organizations, along with comments provided by legislatures when completing the survey, enriched and improved the analysis and have been incorporated in the Report as an integral part of its text in specific boxes.

The Global Survey of ICT in Parliaments 2012, on which the Report is based, was designed by Jeffrey Griffith with important suggestions offered by Giorgina Brown, Gherardo Casini, Daniela Giacomelli, Joao Viegas Abreu and Flavio Zeni.

As was the case for the 2008 and 2010 Reports, the preparation of the Report 2012 greatly benefited from the presentations made by members of parliament, Secretaries General, parliamentary officials and experts at various meetings, and from the open discussions held on those occasions. Special reference is made in this edition of the Report to international forums and meetings addressing e-parliament issues. Where possible, these contributions are openly acknowledged in the text and in footnotes.

Special thanks are due to the parliamentary staff and officials from one hundred and fifty six legislatures around the world who spent considerable time completing the survey and sharing their experiences. The quality of this Report is a direct result of their thoughtful responses and insights.

The layout, design and all graphic work were done by Ludovica Cavallari.

Executive Summary

The extraordinary advances and rapid social and economic diffusion of information and communication technologies (ICT) have had a profound impact on the lives of individual citizens and on the functioning of public institutions. As technology, citizen engagement, and the political process have come together, parliaments have been confronted with growing demands to be more open and more responsive to citizens. Currently, however, global economic conditions are forcing many legislatures to work with fewer resources. Technology alone cannot address all the challenges, but when planned and implemented strategically, it can generate gains in efficiency and effectiveness throughout the legislature's operations, while fostering the parliamentary democratic values of transparency, accountability and accessibility.

The *World e-Parliament Report 2012* documents the efforts of legislatures to use information and communication technologies (ICT) to support their constitutional functions. The Report is based on the Global Survey of ICT in Parliaments 2012 conducted by the Global Centre for ICT in Parliament between February and May 2012, which is the third in a series of surveys that began in 2007. The number of parliaments responding to the surveys has increased over time, from 105 in 2007 to 134 in 2009 and 156 in 2012. These 156 parliaments represent a membership of 28,613 legislators.

The goals of these surveys and their accompanying World e-Parliament Reports are to present the latest data on the worldwide use of systems, applications, hardware and tools in various parliamentary services, to provide readers with concrete examples of the adoption of ICT in the most significant areas of parliamentary business, and to promote the sharing of knowledge and experiences in technology among legislative bodies.

This Report covers the following topics:

- Developments in ICT and parliaments since 2010
- Communication and engagement with citizens
- Achieving openness, transparency, and accountability through websites
- Technology services for members
- The management of parliamentary documentation
- Libraries and research services
- Human resources and technical infrastructure
- ICT strategic planning and implementation for e-parliament
- The state of e-parliament in 2012
- Advances in international cooperation

While many of the challenges to the effective use of ICT noted in the previous Reports are still present in the 2012 edition, the findings of the latest survey suggest that there has been limited, but nevertheless important progress in the state of e-parliament in the past two years. Data

indicate that: more political leaders are engaged in setting the goals and objectives for ICT in the institution; mobile devices and applications are being adopted more rapidly than expected; the implementation of XML for managing bills has increased; more parliaments now have systems for managing plenary and committee documents; and, both the intent and the actions of parliaments to share information and to collaborate on improving technology have risen substantially. One example is the considerable progress made towards establishing an international parliamentary and legislative XML standard.

From a development perspective, particularly significant is the finding that despite the challenges faced, parliaments in the lowest income level are closing the technology gap. While still very large, the gap between the average e-parliament score in the highest and the lowest income groups has decreased significantly, by over 25 per cent in the past two years.

A majority of parliaments reported that the three most important improvements in their work made possible by ICT were: 1) more information and documents on the website 2) increased capacity to disseminate information and documents; and, 3) more timely delivery of information and documents to members. While these three enhancements serve members well, they also help parliament to be more open and transparent to citizens.

Other positive findings can be found in the area of basic ICT services, such as personal computer support, systems administration, web publishing, and network operations. Of the nine services assessed by the survey, six are provided by 75 per cent or more of parliaments. Furthermore, Internet is available in almost 100 per cent of parliaments and most have wireless access to it. In assessing the short term goals (2010-2012) of the e-Parliament Framework 2010-2020[1], findings suggested that 8 of the 12 targets appeared to have been met by early 2012.

Despite these signs of progress, however, many parliaments still face substantial obstacles in their efforts to enhance the state of ICT to support the work and purposes of the institution. For example, many members are not provided with personal computers and are not connected to the parliament's local area network (LAN); many libraries still lack the technology that would enable them to provide better services; XML has been implemented by only about one quarter of all chambers; and best practices in the use of the new media for two-way communication with citizens have still not emerged. An additional challenge is that the use of XML continues to be highly correlated with the income level of the country.

In the area of communication, there is a technology gap between citizens and parliaments, as well as a knowledge gap. Almost one fifth of parliaments reported that citizens do not use ICT to communicate with them. Nearly one quarter said that citizens do not have access to the Internet, and more than one quarter reported that citizens were not familiar with technology. However, the knowledge gap affected even more parliaments. Most noted that their major communication challenge was not a lack of access to technology, but a lack of knowledge. Over half of all parliaments cited citizens' lack of understanding of the legislative process as a primary obstacle, while just under half cited members' lack of experience with technology.

Most parliaments identified two challenges that were particularly difficult to overcome: lack of financial resources and lack of adequate staff. Parliaments at all income levels reported that they face financial constraints. And it is especially telling that even parliaments at the highest income

1 Proposed by the Board of the Global Centre for ICT in Parliament; see *World e-Parliament Report 2010*, Chapter 10.

level said that an adequate ICT staff was the biggest challenge. Many parliaments also face serious external problems. These include their country's limited access to high speed Internet, the lack of public access to technologies such as personal computers, and parliament's lack of an independent budget and hiring authority.

There are a number of strategies which parliaments, working individually and collectively, and with the support of the international donor community, can undertake to address these obstacles. Based on the experiences of those that have reached the most advanced levels of technology, there are at least seven good practices to pursue.

The first of these is to invest in people. Parliaments need to establish an ongoing training programme for internal staff and/or employ contract staff who already have the necessary skills and experience and can transfer know-how to the organization. Members too need to understand how technology can serve both the institution and themselves as representatives of the people. And, other parliamentary staff need to acquire knowledge about ICT that goes beyond just how to operate a system designed to support their work.

Training needs to be framed within a strategic approach to technology. A strategic plan serves many purposes: affirming goals and priorities; identifying intended outcomes; estimating costs and schedules; assessing progress and making changes as needed; and communicating the parliament's primary objectives for technology to all internal and external stakeholders, including funders. A well-executed implementation plan encompasses all technology projects; maps their relationships, interdependencies, and potential synergies; and leads to a more rational allocation of time and resources.

Parliaments also need to capitalize on recent advances in ICT. The benefits of mobile technologies for parliaments are becoming increasingly evident. They are more flexible, can be fast to implement, and are able to be used for connecting and communicating with growing numbers of citizens in new ways. Exploiting cloud services also offers many advantages to parliaments, although there may be obstacles to doing so where reliable and high speed Internet access is still lacking.

Sharing experiences and solutions can help greatly in identifying which technologies work best in the legislative setting and what approaches are most productive. As a public institution, it is too expensive and an inefficient use of scarce resources for each parliament to create its own unique solutions given the extensive research, evaluation, development, testing and implementation often required. The findings from the 2012 survey strongly underscore that the time is right for collaboration as many parliaments seek opportunities for greater cooperation and sharing of knowledge.

Finally, transforming legislatures into modern institutions capable of using technology effectively requires a strong commitment to transparency, accountability and accessibility. Political leaders and members must make this a high priority strategic goal. Establishing a culture of transparency is consistent with the responsibility of parliament as the peoples' representative, and with the values of citizens who live in the information society. Promoting genuine dialogue with citizens and not just one-way communication goes hand-in-hand with greater transparency. The use of new communication tools can help parliaments to focus less on *talking to* citizens and more on *listening to* citizens, and engage the public in a productive dialogue that promotes citizen participation in the political process.

Contents

ANNEXES

Introduction

The release of the *World e-Parliament Report 2008* represented the initial step to document on a global basis the efforts of parliaments to employ information and communication technologies (ICT) as instruments to strengthen their institutional role and democracy. The 2008 Report, the first of its kind, was based on the results of a world-wide survey, undertaken in mid-2007, which examined how legislatures were implementing ICT in a number of critical areas. Its publication was intended to advance the state of knowledge among the parliaments of the world and promote international debate and cooperation on these matters.

The 2008 Report established an authoritative baseline for parliaments and contained specific conclusions about the state of technology in national parliaments. As a result, parliaments were able to measure their own use of ICT in daily operations, to confirm strengths and to identify areas for improvement.

The *World e-Parliament Report 2010*, based on a global survey distributed in 2009, followed the path of the 2008 edition in guiding readers through the unique environment of parliaments and technology. Its purpose was to help legislatures – their leaders, members and staff – to harness the potential benefits of ICT for their work and establish key goals and priorities for exploiting this valuable resource. While providing evidence of the complexities of e-parliament, the Report suggested ways to overcome some of the obstacles to the effective use of technology in parliamentary settings.

The *World e-Parliament Report 2012* presents the latest data on the use and availability of systems, applications, hardware and tools in parliaments all over the world and, where possible, it offers comparisons with the 2008 and 2010 findings. It also provides readers with concrete examples of the adoption of ICT in the most significant areas of the parliamentary business. These come from a variety of sources. First, they are based on direct comments provided by legislatures in response to the survey. Second, they are drawn from the presentations made and discussions held at the World e-Parliament Conference 2010 and at other forums and meetings addressing e-parliament issues. And thirdly, the Report was enriched by the analysis of publicly available studies, documents and experiences.

The 2012 Report is intended to be read in conjunction with the 2008 and 2010 Reports. In addition to summarizing a great deal of data, these Reports included a considerable amount of technical information and extended background discussions of key issues related to ICT in parliament. The 2012 Report builds upon this foundation but does not repeat it; instead it updates the contextual information where necessary to reflect recent developments. As in 2010, the primary focus of the 2012 Report is on what is new, what has changed, and what parliaments need to know to move forward in their use of technology.

METHODOLOGY

The findings presented in the *World e-Parliament Report 2012* are based on the results of the Global Survey of ICT in Parliaments 2012 conducted by the Global Centre for ICT in Parliament between February and May 2012. Significant enhancements were made to the 2007 and 2009 versions of the survey to address in greater depth some of the most important emerging issues. Efforts were also made, however, to retain as much consistency as possible with the previous editions.

The survey covered the following seven topics:

1. Oversight and management of ICT (22 questions)
2. Infrastructure, services, applications and training (31 questions)
3. Systems and standards for creating legislative documents and information (12 questions)
4. Library and research services (28 questions)
5. Parliamentary websites (21 questions)
6. Communication between citizens and parliament (24 questions)
7. Inter-parliamentary cooperation (11 questions)

The 149 questions were designed to be answered as easily and quickly as possible. The survey relied extensively on a "yes/no" answer format. Topics requiring more detail were addressed through a checklist format. A few questions were open-ended. At the end of each section respondents had the opportunity to add a qualification or a comment to any question, and to share any lessons learned or good practices they felt to be of interest to others.

The questionnaire was sent to 269 chambers of unicameral and bicameral parliaments in 190 countries and to two regional parliaments. 156 responses were received, continuing the significantly increasing trend from the 105 responses received in 2007 and the 134 responses received in 2009. The chambers and parliaments that responded to the survey are listed in Box A.1. They represent national legislative bodies from 126 countries and one regional legislative body from Europe (see Figure A.1).

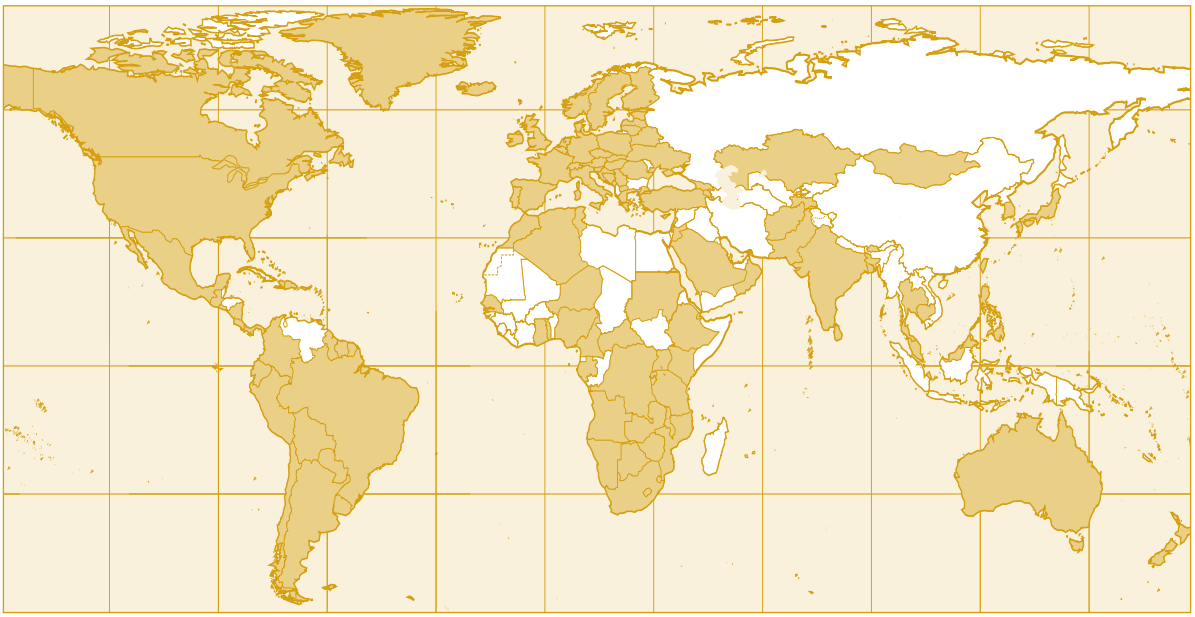
64 responses (41 per cent) were received from unicameral parliaments, 92 (59 per cent) from bicameral parliaments. Of the 156 replies on which the analyses presented in this Report are based, 21 bicameral parliaments answered the questionnaire as one entity due to their administrative and organizational structure. The results of the survey, therefore, encompass a universe of 177 chambers.

Of these chambers, excluding the regional parliament, 35 have less than 50 seats, 41 have 50 to 99 seats, 50 have 100 to 199 seats, 20 have 200 to 299 seats, 15 have 300 to 399 seats and 15 have more than 400 seats (see Figure A.2). Taken together, these national legislative bodies represent a membership of 28,613 legislators (up from 27,249 in 2009), 61 per cent of the world total of 47,095 (44,788 in 2009) members of national parliaments (see Figure A.3).

To enable comparisons of the data from the previous surveys, questions used in 2012 employed the same or similar language as the questions asked in 2009 and 2007 whenever possible. Comparing the results of the three surveys on the same or similar questions provides a valid indication of the status of ICT at the time of each survey for those who responded and gives some general indications of trends over the four-year timeframe.

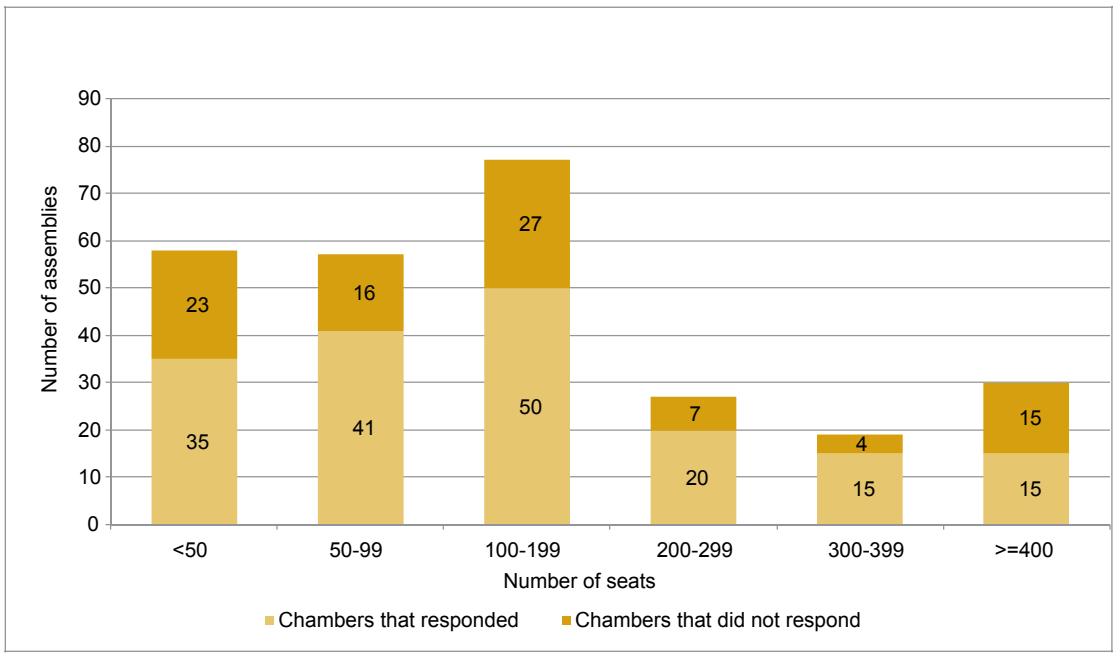
However, because not all assemblies responded to all three surveys, when assessing certain trends it was necessary to use two different subgroups for purposes of comparison. Therefore, the 2012 Report sometimes includes the results from one or both of these comparison groups in addition to the results from the answers provided by the total number of respondents to one or more of the surveys (2012=156; 2009=134; 2007=105). These groups are referred to in the Report as the 2009:2012 comparison group, which includes a total of 108 assemblies (all respondents to both the 2009 and 2012 surveys); and the 2007:2012 comparison group, which includes a total of 74 assemblies (all respondents to all three surveys - 2007, 2009 and 2012).

Figure A.1: Countries whose parliament or chamber(s) participated in the survey



(Participating countries are shaded in yellow)

Figure A.2: Number of seats in national chambers that responded or did not respond to the survey



Box A.1: Parliaments and chambers that participated in the 2012 survey

NATIONAL

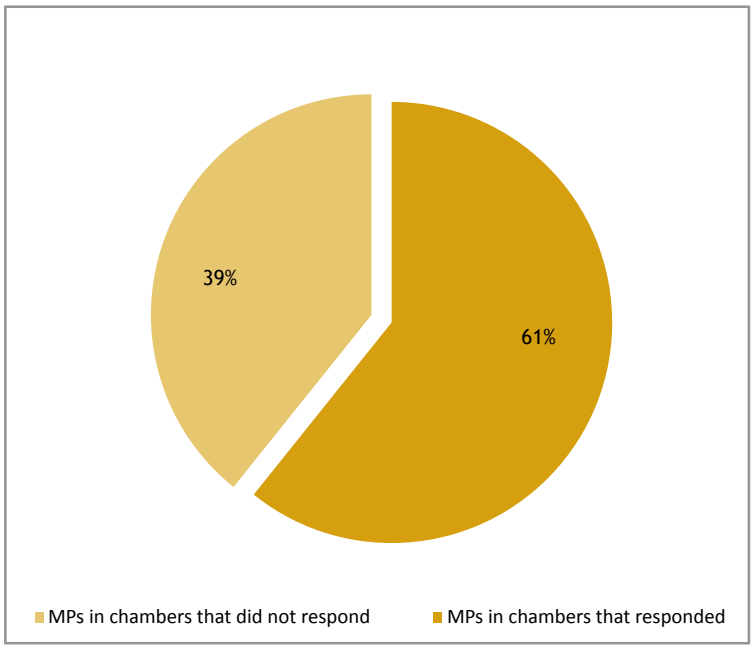
1. Afghanistan, National Assembly*
2. Algeria, Council of the Nation
3. Andorra, General Council
4. Angola, National Assembly
5. Antigua and Barbuda, Parliament*
6. Argentina, Senate
7. Argentina, Chamber of Deputies
8. Armenia, National Assembly
9. Australia, Parliament*
10. Austria, Parliament*
11. Bangladesh, Parliament
12. Belarus, Council of the Republic
13. Belarus, House of Representatives
14. Belgium, Senate
15. Belgium, House of Representatives
16. Belize, National Assembly*
17. Bhutan, National Council
18. Bhutan, National Assembly
19. Bolivia (Plurinational State of), Chamber of Senators
20. Bolivia (Plurinational State of), Chamber of Deputies
21. Bosnia and Herzegovina, Parliamentary Assembly*
22. Botswana, National Assembly
23. Brazil, Federal Senate
24. Brazil, Chamber of Deputies
25. Burundi, National Assembly
26. Cambodia, Senate
27. Cambodia, National Assembly
28. Cameroon, National Assembly
29. Canada, Senate
30. Canada, House of Commons
31. Central African Republic, National Assembly
32. Chile, Senate
33. Chile, Chamber of Deputies
34. Colombia, Senate
35. Colombia, House of Representatives
36. Costa Rica, Legislative Assembly
37. Croatia, Croatian Parliament
38. Cyprus, House of Representatives
39. Czech Republic, Senate
40. Czech Republic, Chamber of Deputies
41. Democratic Republic of the Congo, Senate
42. Denmark, The Danish Parliament
43. Djibouti, National Assembly
44. Dominica, House of Assembly
45. Dominican Republic, Senate
46. Dominican Republic, Chamber of Deputies
47. Ecuador, National Assembly
48. El Salvador, Legislative Assembly
49. Estonia, The Estonian Parliament
50. Ethiopia, House of the Federation
51. Finland, Parliament
52. France, Senate
53. France, National Assembly
54. Gabon, National Assembly
55. Georgia, Parliament
56. Germany, Federal Council
57. Germany, German Bundestag
58. Ghana, Parliament
59. Greece, Hellenic Parliament
60. Grenada, Parliament*
61. Guatemala, Congress of the Republic
62. Guyana, National Assembly
63. Haiti, Senate
64. Haiti, Chamber of Deputies
65. Hungary, National Assembly
66. Iceland, Parliament
67. India, Council of States
68. India, House of the People
69. Israel, Parliament
70. Italy, Senate
71. Italy, Chamber of Deputies
72. Jamaica, Parliament*
73. Japan, House of Councillors
74. Japan, House of Representatives
75. Jordan, Senate
76. Kazakhstan, Parliament*
77. Kenya, National Assembly
78. Latvia, Parliament
79. Lebanon, National Assembly
80. Lesotho, Senate
81. Lesotho, National Assembly
82. Lithuania, Parliament
83. Luxembourg, Chamber of Deputies
84. Malawi, National Assembly
85. Malaysia, Parliament*
86. Malta, House of Representatives
87. Mauritius, National Assembly
88. Mexico, Senate
89. Mexico, Chamber of Deputies
90. Mongolia, State Great Hural
91. Montenegro, Parliament
92. Morocco, House of Councillors
93. Morocco, House of Representatives
94. Mozambique, Assembly of the Republic
95. Namibia, Parliament*
96. Netherlands, Senate
97. Netherlands, House of Representatives
98. New Zealand, House of Representatives
99. Nicaragua, National Assembly
100. Niger, National Assembly
101. Nigeria, National Assembly*
102. Norway, Parliament
103. Oman, State Council
104. Pakistan, Senate
105. Panama, National Assembly
106. Paraguay, Senate
107. Paraguay, Chamber of Deputies
108. Peru, Congress of the Republic
109. Philippines, Senate
110. Philippines, House of Representatives
111. Poland, Senate
112. Poland, Sejm
113. Portugal, Assembly of the Republic
114. Republic of Korea, National Assembly
115. Republic of Moldova, Parliament
116. Romania, Senate
117. Romania, Chamber of Deputies
118. Rwanda, Parliament*
119. Saint Kitts and Nevis, National Assembly
120. Saint Lucia, Houses of Parliament*
121. Saint Vincent and the Grenadines, House of Assembly
122. Sao Tome and Principe, National Assembly
123. Saudi Arabia, Consultative Council
124. Senegal, National Assembly
125. Serbia, National Assembly
126. Seychelles, National Assembly
127. Slovakia, National Council
128. Slovenia, National Assembly
129. Slovenia, National Council
130. South Africa, Parliament*
131. Spain, Senate
132. Spain, Congress of Deputies
133. Sri Lanka, Parliament
134. Sudan, Council of States
135. Sudan, National Assembly
136. Suriname, National Assembly
137. Swaziland, Parliament*
138. Sweden, Parliament
139. Switzerland, Federal Assembly*
140. Tajikistan, House of Representatives
141. Thailand, House of Representatives
142. The former Yugoslav Republic of Macedonia, Assembly of the Republic
143. Timor-Leste, National Parliament
144. Togo, National Assembly
145. Trinidad and Tobago, Parliament*
146. Tunisia, National Constituent Assembly
147. Turkey, Grand National Assembly
148. Uganda, Parliament
149. Ukraine, Parliament
150. United Kingdom of Great Britain and Northern Ireland, Parliament*
151. United Republic of Tanzania, National Assembly
152. United States of America, House of Representatives
153. Uruguay, General Assembly*
154. Zambia, National Assembly
155. Zimbabwe, Parliament*

REGIONAL

156. European Parliament

* bicameral parliaments that answered as one entity due to their organizational structure

Figure A.3: Percentage of all members of parliaments worldwide whose chambers responded or did not respond to the survey



In addition to global findings, the analysis of data was also carried out, when it proved informative, according to countries' income level. The classification of economies is based on the World Bank practices and includes the following: Low income (20 respondents), Lower Middle Income (38 respondents), Upper Middle Income (49 respondents) and High Income (48 respondents). The regional parliament was not included in the analyses by income level.

Moreover, when a sufficient number of chambers and parliaments responding to the survey allowed for a geographical representation, further analyses were added to enrich the global findings. For the purposes of this Report, meaningful geographical groupings were possible for Europe (48 respondents, not including the European Parliament), Africa (36 respondents), Latin America (22 respondents), Caribbean (15 respondents, including Belize, Suriname, and Guyana because of their affiliation to the Caribbean Community - CARICOM) and Southern and South-Eastern Asia (15 respondents), as a sub-group of Asia (see Annex 2).

STRUCTURE OF THE DOCUMENT

The *World e-Parliament Report 2012* is organized into three parts and consists of 11 chapters. Part 1 focuses on the challenges that the age of information and communication technologies continues to pose for parliaments and highlights two critical issues - the demands for transparency, openness and accountability and the advances in technology. Part 2 describes the status of ICT in parliament in several key areas, including the management of technology, technical infrastructures and applications, and the provision of services. Part 3 offers a discussion of global e-parliament levels and highlights critical development issues by looking at inter-parliamentary cooperation and collaboration mechanisms. A final chapter contains the main conclusions and recommendations

of the Report. The results from most, but not all survey questions, are included in the relevant chapters.

Throughout the text of the Report, the terms "parliament", "chamber", "legislature" or "respondent" have been used interchangeably to indicate those institutions that replied to the survey. To assist the reader, the questions from the 2012 survey used as the basis for each figure are identified below it. The complete 2012 Global Survey of ICT in Parliaments is included as an annex to the Report. Figures that include findings from the 2008 and 2010 World e-Parliament Reports reference the page number of those reports where the findings may be found.

PART 1

PARLIAMENTS, CITIZENS, AND THE INFORMATION SOCIETY

Chapter 1
Major Global Trends since 2010 and Possible Developments beyond 2012

INTRODUCTION

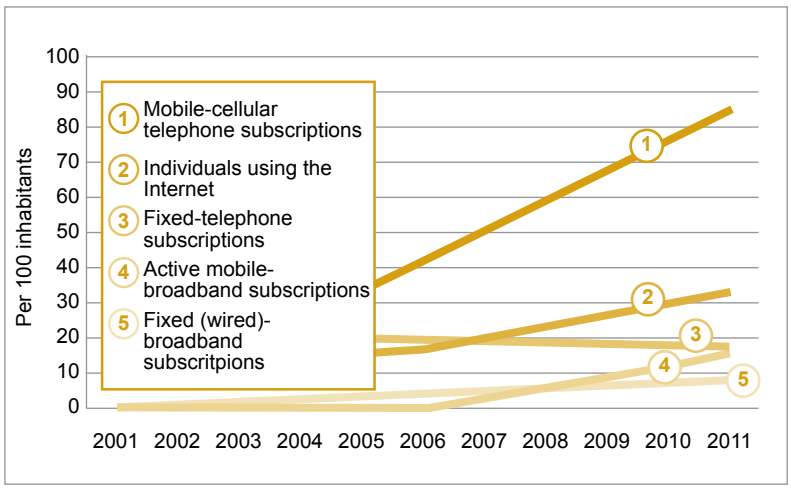
Since the publication of the *Word e-Parliament Report in 2010* the evolution of the information society has continued unabated with impressive achievements in terms of ICT growth and penetration. Key statistical highlights[1] released in June 2012 by the International Telecommunication Union (ITU) show that total mobile-cellular subscriptions reached almost 6 billion by end of 2011, corresponding to a global penetration of 86 per cent. This growth was driven by developing countries, which accounted for more than 80 per cent of the 660 million new mobile-cellular subscriptions added in 2011. By the end of 2011, there were 105 countries with more mobile-cellular subscriptions than inhabitants, including African countries such as Botswana, Gabon, Namibia, Seychelles and South Africa.

Mobile broadband has become the single most dynamic ICT service reaching a 40 per cent annual subscription growth in 2011. By the end of the year, there were more than 1 billion mobile-broadband subscriptions worldwide and more mobile-broadband subscriptions than inhabitants in the Republic of Korea and Singapore. In Japan and Sweden, active mobile-broadband penetration surpassed 90 per cent. Although developing countries are catching up in terms of 3G coverage, huge disparities remain between mobile-broadband penetration in the developing (8 per cent) and the developed world (51 per cent). However, in 2011, 144 million mobile-broadband subscriptions were added in five countries - Brazil, the Russian Federation, India, China and South Africa -, accounting for 45 per cent of the world's total subscriptions added in 2011.

By the end of 2011, there were 590 million fixed (wired) broadband subscriptions worldwide. While fixed broadband growth in developed countries is slowing (a 5 per cent increase in 2011), developing countries continue to experience high growth (an 18 per cent increase in 2011). However, the penetration remains low in some regions, such as Africa and the Arab States, with 0.2 per cent and 2 per cent respectively by end 2011. Countries where fixed broadband penetration increased the most in 2011 include Bahrain, Costa Rica, Ecuador, Mauritius and Uruguay. However, among these, only Bahrain and Uruguay surpassed the 10 per cent fixed broadband penetration by the end of 2011. Countries with the highest percentages – such as France, Denmark, the Netherlands, Norway, the Republic of Korea and Switzerland – had fixed broadband penetrations above 35 per cent by the end of 2011.

1 Source: *ITU World Telecommunication/ICT Indicators Database 2012*. See http://www.itu.int/ITU-D/ict/

Figure 1.1: Growth in cellular, mobile-broadband, fixed-telephone, fixed-broadband subscriptions and Internet users 2001 – 2011 per 100 inhabitants

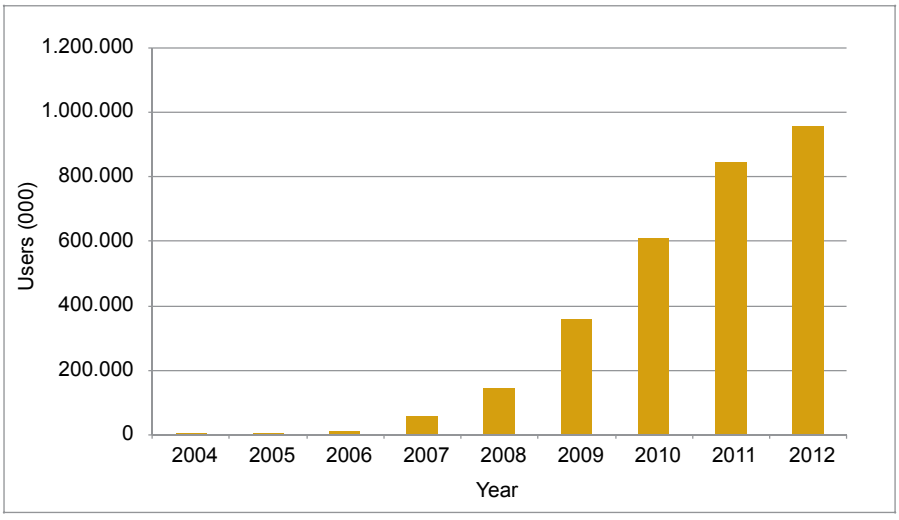


(Source: ITU World Telecommunication /ICT Indicators database)

The percentage of individuals using the Internet continues to grow worldwide and by the end of 2011 2.3 billion people were online. In developing countries, the number of Internet users doubled between 2007 and 2011, but only a quarter of inhabitants in the developing world were online by end 2011. The percentage of individuals using the Internet in the developed world reached the 70 per cent landmark by end 2011. In Iceland, the Netherlands, Norway and Sweden more than 90 per cent of the population is online. By the end of 2011, 70 per cent of the total households in developed countries had Internet, whereas only 20 per cent of households in developing countries had Internet access. Some exceptions include Lebanon and Malaysia with 62 per cent and 61 per cent of households with Internet respectively.

In this connected environment, the number of individuals, groups, businesses and public institutions using social media to interact with each other also grew exponentially in the past two years. The *World e-Parliament Report 2010* showed the growth of Facebook up to mid-2010 as approximately 400 million users[2]. As of June 2012, Facebook reported 955 million monthly active users with approximately 81 per cent of them outside the United States of America and Canada. On average, there were 552 million daily active users in June 2012 and 543 million daily active users who used Facebook mobile products.

Figure 1.2: Growth in Facebook users 2004 - 2012



(Source: Facebook.com. Data for 2012 reflect June active users.)

2 See *World e-Parliament Report 2010*, p. 9.

ADVANCES IN TECHNOLOGY AND PUBLIC POLICY AND THEIR IMPACT ON PARLIAMENTS

Besides the increasing penetration of Internet and communication opportunities around the world, in the past two years there have been a number of developments at the intersection of technology and public policy that have significant implications for parliaments.

The growing sophistication of cellular and smart phones, as well as the rapid advances in the tablet devices industry, have brought more citizens in contact with each other and, in many cases, with their representatives in the legislative body. These same technologies have also made it possible for some legislatures to conduct their work in a more efficient digital environment and to consume fewer of the resources required in the traditional paper-bound setting. However, the demands for information services that satisfy the mobility requirements of members, parliamentary staff and citizens were only partially met by a few parliaments, making this area a challenging domain for parliamentary administrations in the near future.

Box 1.1

> Using smart phones to communicate with members for any communication is cutting down the use of paper. This contributes towards greener IT and economic benefits.
>
> *Comment by a respondent to the 2012 Survey*

Similarly, the developments in so called "cloud computing", made possible by faster and more reliable Internet connections, have the potential to free many parliaments – both rich and poor – from some of the burden of building and maintaining expensive technical infrastructures. Instead these powerful and flexible services can be "rented" at affordable prices and made available in a fraction of the time that it takes to establish traditional computer centers. Among other advantages, cloud computing offers institutions greater capabilities to meet mobility demands, and legislatures are evaluating how to benefit from this technology while still meeting requirements for data ownership and security. In addition, shared applications that are based on open source or commercial software may enable parliaments to acquire more easily many of the tools needed to support the work of their members and staff.

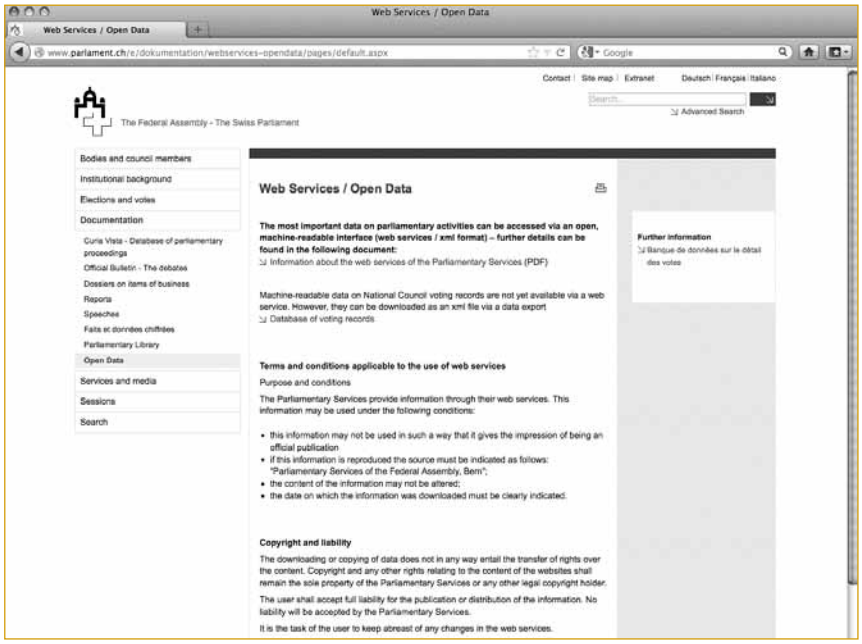
Box 1.2

> Traditionally ICT has been looked at as an afterthought to provide basic connectivity to software and databases. We realize that ICT today is the backbone of any organization to provide access to data and services whenever needed, wherever needed, however needed.
>
> *Comment by a respondent to the 2012 Survey*

Initiatives by governments on open data provision, as well as the examples of the Open Government Initiative[3] and the Open Government Partnership[4], have increasingly influenced the perception of governing institutions about the importance of releasing data and documents in structured and open formats as a means to achieve greater transparency and openness and to regain public trust. While parliaments have been slowly advancing on this front for some time, as highlighted in the *World e-Parliament Report 2008* and *2010*, the open data movement generated throughout the world have the potential to encourage legislatures to provide open data services and

3 http://www.whitehouse.gov/open
4 http://www.opengovpartnership.org/

Figure 1.3: Web page of open data web services of the Federal Assembly of the Swiss Parliament



(Source: http://www.parlament.ch/e/dokumentation/webservices-opendata/pages/default.aspx)

embrace open standards in their documentation and information processes (see Chapter 5).

The expanding number of Parliamentary Monitoring Organizations (PMOs) around the world and the emergence of an international network of these entities are increasingly focusing public attention upon parliamentary bodies. The majority of PMOs are using technologies in a sophisticated way to provide citizens with additional instruments to scrutinize the parliamentary environments. They are also attracting the public's interest by presenting and retrieving information on user-friendly platforms with social networking layers that support civic engagement. As underlined in the Global Parliamentary Report "such organizations have their strengths and weaknesses, but, crucially, they seem to be creating a new form of external validation of parliamentary representation. Furthermore, although parliamentarians might resist such assessments, it seems unlikely that they will disappear; indeed, they may even come to enhance the public position of parliaments"[5].

This brief listing of the major trends and their effect on parliaments is based in part on findings from the Global Survey of ICT in Parliaments 2012 and in part on observations and reports of activities that have taken place in legislatures all over the world. Some illustrative examples of early parliamentary impact observed around the world are:

- Members of parliament in plenary session looking at the draft of a bill on their tablets which were provided by the parliamentary administration and paid for with savings accrued from the reduction of printing costs;
- A parliament with a limited technical infrastructure establishing its first ever institutional e-mail service via the cloud;
- A parliament lacking the resources to maintain a current website of parliamentary activities now using Facebook to publish the order paper for its upcoming plenary session and the minutes of the previous session;
- A parliamentary library assisting a committee to receive confidential information from constituents as it considers legislation on domestic violence by promoting participation on web and social media sites that engage the victims of these crimes;
- A member of parliament without an office communicating regularly with constituents via Facebook, Twitter, and email, as well as successfully rebutting inaccurate reports of votes

5 Inter-Parliamentary Union, United Nations Development Programme, *Global Parliamentary Report. The changing nature of parliamentary representation,* [Geneva - New York]: Inter-Parliamentary Union and United Nations Development Programme, 2012, p.53. [http://www.ipu.org/dem-e/gpr.htm].

published by the local newspaper through these platforms;

- A parliament adopting an open document standard for bills by coordinating with a government ministry;
- A parliament enabling civil society organizations and other media groups to download its documents in bulk and formatted in an open standard for data reuse in creative and informative ways;
- A parliament experiencing attendance increases after a parliamentary monitoring organization published the attendance records of its members in plenary;
- A parliament offering members, the media and the public the possibility to create video clips from the recording of plenary and committee meetings for further posting on social media and websites.

In the following chapters these anecdotal examples are supplemented by statistical data from the Global Survey of ICT in Parliaments 2012 that show some of these trends among parliaments. However, the Survey also introduced for the first time a series of questions aimed at gaining a better understanding about the use of technology by parliaments in the transition time between surveys: what the institution sees as its most important accomplishments using ICT, what it wants to accomplish next, and what its biggest challenges were. The survey posed these four specific questions, but limiting respondents to their top three choices:

1. What are the three most important improvements in the work of the parliament that have been made possible by ICT in the past two years?
2. Which technologies have you introduced or begun using in new ways during the past two years that have been the most useful in helping to improve the work of the parliament?
3. What are the parliament's most important objectives for ICT in the next two years?
4. What are the parliament's three biggest challenges in using ICT effectively?[6]

These questions mainly relate to strategic planning for ICT, since they refer to the parliament's own assessment of its current state and its goals and objectives for the near term. The findings therefore provide some interesting context to the responses given to the more detailed questions of the survey presented in later chapters.

MOST IMPORTANT IMPROVEMENTS IN THE LAST TWO YEARS MADE POSSIBLE BY ICT

Figure 1.4 shows the responses to the question regarding the three most important improvements in the work of the parliament made possible by ICT in the last two years. The results are presented for all respondents (last column) and for each of the four country income levels.

The top three enhancements, each of which was selected by almost 50 per cent of all parliaments, are about the basic work of the parliament in managing and disseminating documents. They deal with increasing the capacity of parliaments to manage their information and their documents and to make them more readily available. All other choices were selected by one third or fewer of the respondents. It is interesting to note that all four income groups rated *more information and documents on the website* as their first or second choice and that this was the only choice that was selected by 50 per cent or more in each group. While *increased capacity to disseminate information and*

6 Survey 2012, Section 1, Questions 19-22.

documents was second overall, it was a bit higher for those in the two lower income groups.

It is to be noted that the top two improvements – *more information and documents on the website* and *increased capacity to disseminate information and documents* – serve both members and the public. These improvements have the effect of increasing the levels of transparency and accountability of the institution as well as serving members.

Access to more information is fourth overall (33 per cent), but is clearly more important to parliaments in low income countries (50 per cent), which ranked it third among their choices. Other related improvements such as *exchange of information with other parliaments* and *better access to research* show the same relationship – they are more important to parliaments in low income countries than to others. It is reasonable to assume from these findings that parliaments in higher income countries are better able to meet their needs for more information, better research, and exchange of information with other parliaments, while this is still a significant need for those in low income countries.

The capacity to provide *more timely publication of plenary proceedings* shows a different pattern. While this is rated as an important improvement by only 25 per cent of all respondents, it was selected by 47 per cent of parliaments in the lower middle income group. One possible interpretation of these data is that those in the lower middle income group reached the point in the last two years where they had the resources and the desire to work on this problem. This interpretation would further assume that those in the low income group are not yet at this point, while those in upper middle and high income groups have solved it. There is some support for this interpretation in Figure 1.5, which lists parliament's most important objectives for ICT in the next two years. The data there indicate that *more timely delivery of information and documents to members* is also a major objective for the next two years for more parliaments in the lower middle income group (63 per cent versus an average of 45 per cent for all income groups combined). The objective of *more timely publication of reports of plenary proceedings* remains more important for parliaments in the lower middle income group than the average, but the difference between this group and the average for all groups is not as large (32 per cent versus 20 per cent). However, it does rise in importance for those in the low income group, suggesting that more of them have the desire to address this challenge in the near term.

Improvements achieved in the past two years that relate specifically to citizens – *more interaction with citizens* and *more information provided to citizens* – were noted by only one fourth or fewer of all parliaments. However, as noted above, the first two improvements – *more on information and documents on the website* and *better dissemination* – do serve citizens. It is worth noting that fewer parliaments in low income countries pick these two items. It appears that as income level goes up, more interaction with citizens and more information for them becomes important to more parliaments. This seems a reasonable finding. A parliament must first have the capacity to manage and disseminate its own documents and information effectively before it can focus on providing those documents to its citizens. In addition, the digital divide and the smaller percentage of Internet penetration, with which many lower income countries are still dealing with, have to be addressed before more citizens can receive information about the parliament in electronic format and engage in online interactions with it.

Figure 1.4: Most important improvements in the work of parliament that have been made possible by ICT in the past two years by income level

	Low	Lower middle	Upper middle	High	All
More information and documents on the website	50%	53%	58%	51%	54%
Increased capacity to disseminate information and documents	55%	69%	40%	43%	49%
More timely delivery of information and documents to members	40%	44%	48%	49%	47%
Access to more information	50%	36%	38%	19%	33%
Better management of documents	20%	25%	27%	34%	28%
More timely publication of reports of plenary proceedings	20%	47%	21%	15%	25%
More interaction with citizens	10%	28%	25%	23%	23%
More efficient preparation of legislation	15%	19%	25%	21%	22%
More information provided to citizens	5%	17%	17%	30%	19%
Access to older documents	10%	19%	6%	26%	16%
Exchange of information with other parliaments	25%	14%	13%	11%	14%
Better access to research	20%	14%	10%	11%	13%
More timely publication of reports of committee proceedings	15%	17%	10%	4%	11%
More communication with young people	5%	6%	2%	6%	5%
Other	5%	0%	2%	4%	3%

(Source: Survey 2012, Section 1, Question 19. Sorted by percentages for All Respondents)

When the findings from Figure 1.4 are considered collectively one conclusion is that the most important improvements in the last two years for most parliaments - *more information and documents on the website* and *increased capacity to disseminate information and documents* are enhancements that benefit *both* citizens *and* members *and also* focus on the fundamental work of the parliament. However, as it will be seen in further discussion of Figure 1.5 concerning the most important objectives for ICT in the next two years, many parliaments feel they still have more to do in this area.

MOST IMPORTANT OBJECTIVES FOR ICT IN THE NEXT TWO YEARS

Compared to the most important improvements of the previous two years, the top priorities for the next two years are spread over a larger number of objectives (none were selected by more than half or more of all parliaments; six were selected by 35 per cent-46 per cent). However, as with improvements cited in the previous years, all but one of these deals with the management and dissemination of documents.

Increased capacity to disseminate information and documents shows the highest number of respondents (46 per cent), but as with previous accomplishments it is still more important to those in the two lower income groups. *Better management of documents* is third on the list (43 per cent) and it rises in importance among parliaments at the higher income levels. It is possible that more of these parliaments are satisfied with their ability to provide information and documents to members and the public and that they are now focusing on managing those documents better, perhaps using XML, adopting mobile applications, etc. As noted with past improvements, these objectives serve the needs of both members and citizens and they increase transparency and accountability.

As mentioned previously, *more interaction with citizens* was rated an important accomplishment in the last two years by less than one fourth of parliaments (see Figure 1.4). However, many

acknowledge that there is more to be done in this area, as evidenced by the fact that almost two fifths of parliaments rated it as an important objective for the next two years (see Figure 1.5). It is somewhat surprising in light of this finding that *more communication with young people* was identified as an objective by only 12 per cent of parliaments. Perhaps many parliaments feel they have met this need or that it does not matter as much as other challenges. Although more of them selected it as an objective for the next two years than as an accomplishment of the past two years, the percentages are quite small.

Nevertheless, when taken together, the responses to these two questions (most important accomplishments and most important objectives for ICT) suggest that parliaments will continue to work on improving access to documents and information about their work, and that this will have positive results for members and citizens and for the goal of becoming a more open institution.

Figure 1.5: Parliament's most important objectives for ICT in the next two years

	Low	Lower middle	Upper middle	High	All
Increased capacity to disseminate information and documents	60%	61%	35%	40%	46%
More timely delivery of information and documents to members	35%	63%	41%	36%	45%
Better management of documents	25%	39%	47%	47%	43%
More information and documents on the website	45%	47%	43%	34%	41%
More interaction with citizens	30%	34%	43%	43%	39%
More efficient preparation of legislation	30%	45%	39%	26%	35%
More information provided to citizens	15%	37%	20%	30%	26%
More timely publication of reports of plenary proceedings	30%	32%	16%	11%	20%
Access to more information	20%	24%	16%	19%	19%
Exchange of information with other parliaments	30%	21%	10%	17%	17%
Access to better research	20%	18%	14%	11%	15%
More timely publication of reports of committee proceedings	20%	26%	8%	9%	14%
Access to older documents	10%	26%	12%	6%	14%
More communication with young people	0%	16%	12%	13%	12%
Other	0%	3%	4%	13%	6%

(Source: Survey 2012, Section 1, Question 21)

MOST USEFUL TECHNOLOGIES INTRODUCED TO IMPROVE THE WORK OF PARLIAMENT

Figure 1.6 shows the technologies that parliaments identified as being the most useful in helping to improve the work of the parliament. Only two were selected by more than one third of all parliaments: *audio and/or video capture of proceedings* and *systems for putting information and documents onto websites.*

Many parliaments experience difficulty in capturing and publishing records of plenary proceedings on a timely basis. The introduction or continued used of traditional transcription technologies faces challenges because there are fewer people with the skills required by these systems. Audio and/or video records of proceedings that can then be transcribed directly onto PCs provide some parliaments with alternative means for preparing and publishing records on a more timely basis. Audio and/or video capture combined with improvements in webcasting technology also offers the possibility of making these records available to members and to the public on the parliament's website.

Figure 1.6: Most useful technologies introduced in the past two years to improve the work of parliament

	Low	Lower middle	Upper middle	High	All
Audio and/or video capture of proceedings	60%	70%	40%	43%	51%
Systems for putting information and documents onto websites	55%	49%	52%	35%	46%
Systems for ensuring the preservation of documents in digital formats	10%	30%	42%	22%	28%
TV broadcasting of plenary sessions	15%	16%	35%	24%	24%
Mobile communication devices	5%	8%	17%	46%	22%
Mobile communication applications for members	15%	14%	17%	35%	21%
Webcasting	0%	19%	27%	22%	20%
Social media like Facebook or Twitter	5%	24%	21%	20%	19%
Document repositories	5%	27%	15%	20%	18%
Open source software	20%	30%	19%	7%	18%
Systems for creating and editing documents	15%	19%	17%	13%	16%
Open standards such as XML	10%	0%	8%	24%	11%
Radio broadcasting of plenary sessions	15%	14%	8%	4%	9%
Speech-to-text dictation software	5%	3%	8%	7%	6%
Systems for managing e-mail from citizens	5%	5%	10%	0%	5%
Mobile communication applications for citizens	0%	0%	2%	11%	5%

(Source: Survey 2012, Section 1, Question 20)

The *World e-Parliament Report 2010* found that 43 per cent of parliaments were already webcasting plenary proceedings and 29 per cent were planning or considering doing it. Based on those results, the report concluded that audio and video would become predominant methods of communicating with citizens in the next few years. The findings shown in Figure 1.6 are consistent with these observations.

In addition, Figure 1.4 showed that the most important accomplishment of the past two years selected by the highest number of parliaments (54 per cent) was *more information and documents on the website*. Consistent with this finding is the fact that *systems for putting information and documents onto websites* were rated most useful by 46 per cent of parliaments.

As more parliaments move to digital formats for all documents, it becomes increasingly important that they have a digital archive that can ensure permanent access. In this context, it is not clear how to interpret the finding that only 28 per cent of parliaments selected *systems for ensuring the preservation of documents in digital formats* as one of the most important technologies. It may be that many have not yet found satisfactory systems, or it may mean that they are not yet concerned about the issue of preservation. It is likely that both are true, which suggests the need for more analysis and sharing of best practices in this vital area.

Mobile devices and mobile communication applications for members were ranked fifth and sixth respectively on the list (22 per cent and 21 per cent). Mobile communication applications for citizens were last on the list (5 per cent of parliaments). What is striking about these technologies is how their perceived value goes up for those in the high income group. Mobile communication devices were actually the technology ranked important by the highest percentage of parliaments in the high income group (46 per cent) compared to the percentage of all respondents (22 per cent). Mobile communication applications for members were rated by the third highest percentage of these same parliaments. Because of the low cost of these devices and many of their applications, it is probable that this is an indication of the future importance of mobile technologies for all parliaments rather than just for those at the high income end. As will be seen in Chapter 3, the number of parliaments offering access to their websites for both members and the public through mobile services increased from 2009 to 2012.

Nearly one fifth of parliaments identified *social media* such as *Facebook or Twitter* as being important. As will be seen in Chapter 2, this is consistent with the finding of increases between 2009 and 2012 in the percentages of those that use or are planning to use these technologies. As with other technologies the small number of parliaments in the low income group rating this technology as important may be a reflection of higher priorities and the size of the digital divide within the country.

Open source software and open standards for documents have an inverse relationship to the income levels of the parliaments. As might be expected, more parliaments in the lower income groups rank open source software important compared to those in the higher groups. Conversely, open standards such as XML are rated important by just over 10 per cent of all respondents, but by almost one quarter of those in the high income group. If the adoption of XML follows the pattern predicted for mobile technologies suggested above, it would mean that high income parliaments will be the earliest adopters and those in the other income groups would follow. However, open document standards are arguably more complex to implement than mobile technologies, which require less customization. It is therefore equally possible that the adoption of open document standards will not follow the same pattern.

Finally, it is interesting to note that while parliaments in the low and lower middle income groups may already have technology for *radio broadcasting of plenary sessions*, two to three times as many in these two groups still rank this technology important compared to those in the upper middle and high income groups.

BIGGEST CHALLENGES IN USING ICT EFFECTIVELY

The biggest challenges in using ICT effectively have been the same for many years - budget and human resources - even for parliaments in the high income group. Figure 1.7 presents the responses to this question for all respondents and for each income level. Perhaps equally surprising is that, even among parliaments in the high income group, *inadequate staff capacity* is not only among the top two challenges, it is listed first by the largest number in this income group. One interpretation of these results is that for those in the lower income groups, not having a large enough ICT staff is understandable; the challenge faced by those in higher income groups may be in not having an ICT staff with the right skills in the rapidly changing world of technology.

Figure 1.7: Parliament's biggest challenges in using ICT effectively

	Low	Lower middle	Upper middle	High	All
Inadequate financial resources	68%	76%	61%	41%	59%
Inadequate staff capacity	42%	47%	47%	48%	47%
Members' lack of knowledge of ICT	32%	42%	29%	30%	33%
Lack of a strategic plan for ICT	47%	26%	29%	20%	27%
Lack of engagement by the leaders of the parliament	11%	21%	22%	4%	15%
Lack of access to best practices	26%	21%	12%	7%	14%
None of the above	0%	5%	6%	35%	14%
Lack of support from international donor community	21%	11%	6%	2%	8%
Other	0%	3%	6%	15%	7%
Lack of control of financial resources	0%	11%	8%	2%	6%
Insufficient ICT market and vendors in the country	5%	8%	6%	2%	5%
Access to PCs and the Internet for citizens	5%	5%	6%	0%	4%
Inadequate Internet access in the parliament	5%	8%	2%	0%	3%
Unreliable electrical power	11%	3%	0%	0%	2%

(Source: Survey 2012, Section 1, Question 22)

These challenges speak to the critical importance of an ongoing training program for ICT staff, as discussed further in Chapter 7. They also speak to the importance of sharing knowledge and possibly to collaborating on solutions to common needs when the natural barriers to such undertakings can be overcome. This applies to parliaments in all income groups. There are examples of this type of collaboration, such as those described in Chapter 5 on open document standards and in Chapter 10 on international cooperation. Resource constraints may in fact make it necessary in the future to find ways to manage the difficulties inherent in developing shared solutions. Parliaments may have to move from sharing ideas to sharing the work.

Strategic planning is also a means of addressing the challenges of financial resources and staff capacity. Chapter 8 suggests how strategic planning can help find ways for dealing with some of these issues.

Finally, it is important to note that advances in technology such as cloud computing increasingly offer lower cost solutions to many requirements. Chapter 7 on infrastructure and human resources

discusses this in more detail. However, it is important to note that while these advances may lower the cost of building an adequate technical infrastructure, they do not eliminate the need for a skilled staff that can evaluate and integrate some of these lower cost shared services with the elements of the infrastructure that the parliament has to maintain for itself.

Box 1.3

> The Parliament is entering a phase of progress toward better organization of ICT; for the first time ICT is practiced with a clear vision. The awareness is created, which will help us to implement the necessary changes.
>
> *Comment by a respondent to the 2012 Survey*

Figure 1.7 shows that there are other important challenges, but they are cited by only a third or fewer parliaments. While members' lack of knowledge of ICT does remain a challenge for at least one third, it is also true that two thirds do not put members' understanding of technology in the top three. Nevertheless this is a concern in parliaments at every income level and it is likely to be so for quite some time. Chapter 7 discusses findings related to training and orientation programs for members.

Box 1.4

> Usually members are people from the rural areas where ICT is not seen to be important, as a result, such people need intensive training.
>
> *Comment by a respondent to the 2012 Survey*

Figure 1.7 shows one interesting finding that might increasingly be regarded as a relative "non-concern": *lack of engagement by the leaders of the parliament* (in the ICT domain) is a major problem for only 15 per cent of all respondents. While this varies by income level, the percentages are still comparatively low. Chapter 8 on strategic planning presents further evidence that this is the case. This is not to suggest that leadership at the top is not critical; it is simply to suggest that it is not as major a problem for many parliaments as are other concerns.

Among other challenges, lack of access to best practices and lack of support from the international donor community remain a problem, as expected, for 20 per cent and 25 per cent of parliaments in the low income group.

The conclusion from these findings is that human and financial resources continue to be the most important challenges for using ICT effectively in legislatures. The possible solutions include better training for the ICT staff, more effective strategic planning, enhanced international cooperation, and the intelligent adaptation of advances in technology that offer lower cost options.

Chapter 2
Communication and Engagement

INTRODUCTION

Since the advent of newer generations of mobile networks, social media and multimedia platforms, parliaments have been increasingly experimenting with these technologies primarily for two purposes: a) to raise public awareness and understanding of the role of parliament in the country's governance by informing citizens about its history, functions, processes and actions; and, b) to increase the participation of citizens in the law-making process by engaging them in consultations, hearings, committee work and polls through technology tools.

Only a few parliaments, however, have been able to address coherently and in a strategic manner these two goals by coordinating and leveraging the capabilities available in the different departments of their administrations, or by establishing newly tasked communication and information units and guidelines for this purpose[1].

Box 2.1

> Communication with the citizens is the mission of the Directorate General for Communication. We are using websites and social platforms (YouTube, Facebook, Twitter, MySpace, etc.).
>
> *Comment by a respondent to the 2012 Survey*

However, there *are* examples of successful strategic initiatives by parliaments in utilizing ICT to improve information and communication services, such as those by the House of Commons of the Parliament of the United Kingdom of Great Britain and Northern Ireland, supported by its Select Committee on Modernisation (see Box 2.2), the Chamber of Deputies of Brazil with its e-Democracia programme[2], and the European Parliament's efforts to integrate the use of social media during and after elections[3].

1 The Inter-Parliamentary Union and the Association of Secretaries General of Parliaments are working in partnership with the IFLA Section on Library and Research Services for Parliaments and the Global Centre for ICT in Parliament on a document dealing with issues and suggested guidelines for the use of social media in parliaments. The document will be presented at a joint conference on Parliamentary representation and communication, and the role of social media to be held in the third quarter of 2012. Depending on comments at the conference and official reviews the document is expected to be made available by the end of 2012 or early 2013.

2 See http://edemocracia.camara.gov.br/

3 See http://www.europarl.europa.eu/news/en/headlines/content/20120220STO38576/html/Social-media-revolutionising-the-way-EP-communicates-with-you

Box 2.2

The Education Committee recently sought posts on StudentRoom for its inquiry into Services for Young People (http://www.thestudentroom.co.uk/wiki/Parliament_wants_your_view).

The Treasury Committee used MoneySavingExpert.com for Credit Searches inquiry (http://forums.moneysavingexpert.com/showthread.php?t=1960685).

In January 2012 we crowd-sourced Twitter questions (using the hashtag #AskGove) for a committee evidence session with Education Secretary Michael Gove. We received over 7000 tweets (the majority questions – over 5000 before the deadline) making this one of the most successful initiatives of this kind ever carried out in the UK.

We followed this up with a Transport Committee evidence session with the ministers responsible for cycling policy. The #AskCycleMinisters hashtag generated around 700 tweeted questions for ministers. http://www.parliament.uk/business/committees/committees-a-z/commons-select/transport-committee/news/cycle-ministers-twitter-answers/.

John Pullinger, Librarian and Director General of Information Services of the House of Commons of the UK Parliament. Extracts from "Citizen Engagement and Access to Information", presentation at the Regional Workshop "The Impact of New Technologies in the Transformation of the Legislative Branch: From Awareness, to Planning, to Action". See http://www.ictparliament.org/node/4648.

The immediacy of social media as a vehicle to inform the public "as things occur" is part of the equation and can provide citizens with a sense of greater participation in public life. In addition, when instant information is first channeled via social networks, particularly by members of parliament, traditional media are able to keep abreast of the developing news and activities through these platforms. Recent examples have seen the President of the National Assembly of Ecuador[4] announcing in a tweet the convocation of an extraordinary session of the legislature, and senators in Chile running livestream twitcam sessions from the plenary by using the video camera incorporated on the workstation provided to them by the Senate.

These examples of parliaments communicating with citizens are representative of the growing and innovative use of some of the latest ICT-based methods of communication; they also illustrate some of the opportunities and challenges that confront parliaments when they introduce them. There is no doubt that more and more parliaments are attempting to use social networks, along with other approaches like e-consultations, in an effort to inform and involve citizens in the political and policy making process. Some of these efforts have been judged to be successful; others have not.

Box 2.3

[…] On the other hand, when a chamber in the Caribbean offered citizens the opportunity to comment on a major bill that had been tabled very few comments were received and little was of value to the members.

Comment provided by a participant in the Regional Workshop "The Impact of New Technologies in the Transformation of the Legislative Branch: From Awareness, to Planning, to Action"

The explosive growth of social media and access to the supporting mobile technologies has created unprecedented opportunities for citizens to communicate with parliaments, to share concerns among themselves, and to come together to engage in direct political action. These technologies have sometimes been used to initiate and coordinate protest movements, including confrontations among competing factions and, in some cases, popular uprisings that resulted in regime change.

4 See http://www.asambleanacional.gov.ec/201208158389/noticias/boletines/asamblea-podria-ser-convocada-a-sesion-extraordinaria-fernando-cordero.html

As a number of commentators have pointed out, these new means of communication have not themselves caused the end result, be it a demonstration or the downfall of a leader, but they have facilitated the actions of citizens with speed, flexibility, and effectiveness that have rarely, if ever, been witnessed before.

Given this increasing pervasiveness and power of social media and the rapid diffusion of mobile communication devices and applications throughout society, even in developing countries, many parliaments will want to, or will feel the need to, make use of these new technologies to reach out to citizens and collect their comments and opinions during the legislative process. Determining what works well and how these new methods can be employed most effectively by parliaments, however, is likely to remain a challenge for the next few years.

As noted in the *World e-Parliament Report 2010,* the use of new communication technologies to affect political activity does not necessarily lead to the use of these same technologies for sound governance. The process of making the policies and laws of a nation, the need to oversee the government, and the obligation to represent the interests and concerns of citizens are primary responsibilities of parliaments, but also require meaningful communication with the public. Parliaments are still learning how to employ technology successfully to do this well.

The voices of citizens

In the political environment of almost every nation there have been political parties, as well as various forms of media and civil society organizations, mediating between the parliament and its members and the public. Concurrent with the growth of communication technologies there has been an increase in the number of individuals who communicate directly with parliaments, or comment on them, and in the number of organizations that communicate on their behalf. These developments can be directly linked to changes in technology. Access to widely available means of communication enables groups of citizens, or organizations claiming to act for them, to come together in support of one or several common causes. This inevitably affects the political landscape and influences, at least to some degree, the work of the parliament.

One of the more recent types of civil society groups to appear on the political scene are Parliamentary Monitoring Organizations (PMOs), already mentioned in Chapter 1. According to a recent survey conducted by the National Democratic Institute[5], there are more than 190 PMOs that monitor more than 80 national parliaments worldwide. According to this study, PMOs are "[…] citizen-based groups that monitor or assess the functioning of parliaments or their individual members, often seeking to facilitate and promote public knowledge of, and participation in, parliamentary processes. PMOs have shown promise in strengthening a number of components of democratic governance, including accountability of parliaments to the electorate, citizen engagement in the legislative process, and access to information about parliaments and their work." These organizations are sometimes supported by benefactors, but more often they achieve their goals through the efforts of volunteers and/or a very small staff. Regardless of the extent of their resources, a common contributor to their capacity is modern communication technology.

5 Mandelbaum, Andrew G., *Strengthening Parliamentary Accountability, Citizen Engagement and Access to Information. A Global Survey of Parliamentary Monitoring Organisations*. Washington, D.C.: National Democratic Institute and World Bank Institute, 2011 [http://www.ndi.org/files/governance-parliamentary-monitoring-organizations-survey-september-2011.pdf].

As the number of these PMOs has increased many have begun collaborating on issues of mutual concern. One of the first concrete results of this cooperation has been the establishment of an international network of PMOs which has worked collectively towards the release of a *Declaration of Parliamentary Openness* in 2012 (see Box 2.4).

Box 2.4

The *Declaration on Parliamentary Openness* is a call to parliaments by civil society parliamentary monitoring organizations (PMOs) for an increased commitment to openness and to citizen engagement in parliamentary work. PMOs are increasingly recognized as playing an important role in enhancing citizens' abilities to understand and participate in the legislative process, improve public access to parliamentary information and strengthen parliamentary accountability. Drawing on a variety of documents endorsed by the international parliamentary community, including the Inter-Parliamentary Union's *Guidelines for Parliamentary Websites*, and good practices exhibited by parliaments themselves, the Declaration seeks to promote discussion and collaboration between PMOs and parliaments to ensure that increased openness and citizen engagement help strengthen representative institutions and lead to more democratic societies.

The Declaration was developed with input from more than 60 PMOs. It was initially released for discussion online in advance of a conference that gathered PMO leaders from 38 countries in Washington, DC in May 2012. Co-hosted by the National Democratic Institute, the Sunlight Foundation and the Latin American Network for Legislative Transparency, the conference provided an opportunity for participants to review the Declaration section-by-section and to offer their support. A second draft of the Declaration was released with commentary to accompany each provision in advance of the Paris Open Legislative Data Conference in July 2012. The conference, which was co-hosted by the French PMO Regards Citoyens, Centre d'études Européennes de Sciences Po and Médialab Sciences Po, provided an opportunity for nearly 25 PMOs and many more parliamentary researchers to consider the Declaration. Other PMOs provided comments online, via email and through the Sunlight Foundation's PublicMarkup.org website. The Declaration is available at OpeningParliament.org, a website developed by the organizers of the Washington conference to encourage collaboration within the international PMO community.

The *Declaration on Parliamentary Openness* contains four sections in addition to a preamble. The Declaration's initial section encourages parliaments to promote a culture of openness by upholding public ownership of parliamentary information. It calls for parliaments to ensure citizen access to basic freedoms, including expression and assembly, as well as the release of complete, accurate and timely parliamentary information. The Declaration's second section specifies the information that parliaments should make public. This includes documents created and received by parliament during the legislative process, including preparatory documents, committee minutes, votes and reports received by parliament from government institutions. The Declaration's third section calls for information to be broadly accessible to all citizens through multiple channels, including print, live and on-line broadcasts. It specifies that citizens should have physical access to parliament and access to parliamentary information that is free and available in multiple languages.

The Declaration's final section focuses on electronic information and how parliaments enable citizen participation online. It notes that even in countries with limited Internet penetration, parliamentary websites are important enablers of communication and participation in a modern, interconnected world. Beyond the existence of a website, the Declaration emphasizes that the format of parliamentary information is also critical. Many PMOs – in developed and developing contexts – develop and implement new technologies that help to organize and display information in ways that enhance the public's understanding of parliamentary work. Other PMO technologies help citizens participate in the legislative process by commenting on draft legislation or communicating with their representatives. The ability of PMOs and citizens – and even the parliament – to develop innovative tools for exploring and analyzing parliamentary information is greatly enhanced by the availability of information in open and structured formats, such as XML. These formats are machine processable, enabling the use of software to help search, visualize and scrutinize parliamentary information. This same quality has proven attractive to parliaments due to the efficiencies and potential cost-savings that may result.

The availability of parliamentary information in open and structured formats is insufficient for parliamentary information to be "open" in a truly meaningful way. The Declaration also indicates that parliamentary information should be downloadable, including in bulk, so that information users have greater flexibility to analyze and engage with parliamentary information. The release of information in non-proprietary

formats ensures that information is not subject to intellectual property controls. Clear and concise privacy policies that forgo onerous registration requirements that may deter visitors from consuming parliamentary information should be adopted.

The Declaration contains several other provisions that may help parliamentary websites better serve users. To enhance searchability, interrelated information (such as a bill, the corresponding committee report and hearing transcripts) should be hyperlinked. URLs should remain permanent so that citizens can continuously reference information they deem important, while measures should be taken to ensure that technological barriers should not prevent the use of information. Parliamentary websites should provide subscription services that alert citizens to new developments, such as the scheduling of hearings of a particular committee. Parliaments should also endeavor to use interactive technologies that allow citizens to provide meaningful input into parliamentary processes and communicate with their representatives.

National Democratic Institute. Contribution to the World e-Parliament Report 2012

Because of technology, traditional media is also becoming more diverse, sometimes by necessity. Many newspapers face serious financial challenges as people increasingly find their news through other means. New web-based media, and sometimes individual bloggers, are crowding into the space that had been occupied in the past solely by paper-based news organizations. The World Wide Web also makes it possible for individuals, including members of parliaments, to be their own publishers of information, in a variety of formats, including text and (inexpensive) video.

It is too early to say how these various developments will play out and what the long term effects will be on parliamentary democracy, but it seems certain that in the near term there will be a greater number of voices of both individual citizens and citizen-based organizations expressing their views on policy matters. It also seems likely that there will be more people and groups systematically watching and reporting on parliaments with increasing frequency.

The voices of the parliament

The voices of the parliament are also growing in diversity. Because of technology, many more individuals and groups can communicate about the work of the legislature. Parliaments face a particular challenge in this regard because by their nature it is rarely possible to identify one single person or office that speaks *for* the parliament. The very nature of the work of the parliament – bringing together different individuals, groups and parties to decide, through discussion and compromise, what the policies and laws of the country shall be – implies that democratic parliaments have many voices. Even the presiding officers and the senior staff in the parliamentary administration must exercise considerable restraint when speaking *for* the parliament. At the same time, there are many who can speak *about* the parliament, with or without restraint, such as the political leaders of the parties represented in the institution, the chairs of the parliamentary groups, the chairs of the committees, and, of course, the members themselves. While this results, purposefully, in a diversity of views, it does not eliminate the need for parliament as an institution to explain its work to the public in an objective and timely manner and to make its actions and documents transparent and accessible.

Technology makes this challenge somewhat easier, but at the same time more daunting. Increasingly ICT gives parliaments more options for communicating with citizens through mobile technologies and a variety of tools. These new possibilities create an environment in which there are increased opportunities for communication and higher expectations from citizens, even in

countries with limited penetration of Internet. Therefore, parliaments must do *something* to meet the demands of citizens to communicate through all available channels.

As will be seen in the findings from the 2012 survey presented later in this chapter, many parliaments are doing that – using a variety of methods for communicating with the public about the work of the institution. Even among those that are not yet able to use many of these modalities, there is a clear intent to do so when they have the means and the knowledge required. As parliaments are increasingly successful in these efforts, however, they are confronted with questions that are inherent in any attempt to communicate effectively. How do the technologies that can gather large crowds on the street be used for thoughtful consideration of public polices inside the parliamentary building? How should/can parliament as an institution respond to the communications it receives from its citizens? How should/can members or committees respond? How can these new tools be used to ensure not just one-way communication *from* the institution to citizens but also two-way communication *between* the institution and citizens? How can the institution benefit from the communications it receives from the public? And finally how does the institution foster a culture of listening?

RESULTS AND FINDINGS FROM THE 2007/2009 SURVEYS

The 2007 survey[6] found that while there was some use of ICT to disseminate information to the public, there were few truly interactive parliaments. There were a number of experiments with blogs and other interactive technologies underway, and there were efforts in a few countries to develop online discussions and to receive citizen's comments. The findings from the 2009 survey[7] suggested that this situation was changing and that a greater number of parliaments and members were trying to use these technologies more effectively to engage with citizens.

In 2009, over three quarters of parliaments reported that some or most members used e-mail to communicate with citizens, an increase over the findings from 2007. An even larger percentage reported that at least some of the members who use e-mail reply to these messages, suggesting that the responsiveness of members to e-mail had also increased. Nevertheless, only about a fifth of parliaments were using an automated system to support handling and answering incoming e-mail; a quarter said they were planning or considering such a system; but over half said they were not using one and not planning or considering one.

Slightly more than half of the parliaments responding to the 2009 survey reported that members use websites. The reason listed most often was to communicate the member's personal views. However, three quarters also said members sought comments and opinions from the public.

In 2009 more parliaments reported that committees used e-mail, although the percentage was smaller than the percentage for members. Many legislatures stated that committees do respond to these messages. However, only a third of parliaments reported that committees use websites, and while over 90 per cent stated that the purpose was to communicate information about the work of the committee, just over half said it was to seek comments and opinions from the public.

Besides e-mail and websites, parliaments reported in 2009 that they used, or were planning or considering using a variety of other methods to communicate with the public, but no single

6 See *World e-Parliament Report 2008*, Chapter VIII.
7 See *World e-Parliament Report 2010,* Chapter 2.

method was currently in use at that time by half or more of all parliaments. The method implemented by the largest number of parliaments (43 per cent) was webcasting of plenary sessions. The next most popular methods utilized audio or video technology. Of the ten methods in use by the fewest parliaments (10 per cent - 16 per cent), seven were interactive and included some of the newest technologies, such as Twitter and YouTube. Based on what parliaments were currently using and what they reported that they were planning or considering using, the 2010 Report concluded that it was likely that audio- and video-based one-way technologies would be predominant for the next few years. However, of the technologies that seemed to have the largest projected growth, the top five were all interactive. The 2009 survey noted that very few parliaments had conducted assessments of these new methods. It also underscored the rise of mobile phones and the need to assess mobile technologies in the next survey.

Parliaments identified a number of significant challenges in implementing these new communication technologies. First was the fact that in over one third of legislatures, members were not familiar with the technology. The same number of parliaments – one third—reported that a major problem for the public was that it was not familiar with the legislative process. A fifth of parliaments also noted that citizens were challenged by the technology, both in terms of familiarity and access.

In 2009 over 70 per cent of parliaments reported that they had initiatives to communicate with young people underway or were planning/considering them. Most used web technology for this purpose, combined with some form of new interactive technology, such as games, blogs, and social media. At the time, these interactive technologies were used by more parliaments to communicate with young generations than they were to communicate with the general public.

One of the most positive finding in 2009 was that 85 per cent of parliaments that had implemented ICT-based methods for communication reported an increased usage by citizens. This suggested that there were good reasons for parliaments to be optimistic about the potential of ICT to improve communication and to engage citizens.

RESULTS AND FINDINGS FROM THE 2012 SURVEY

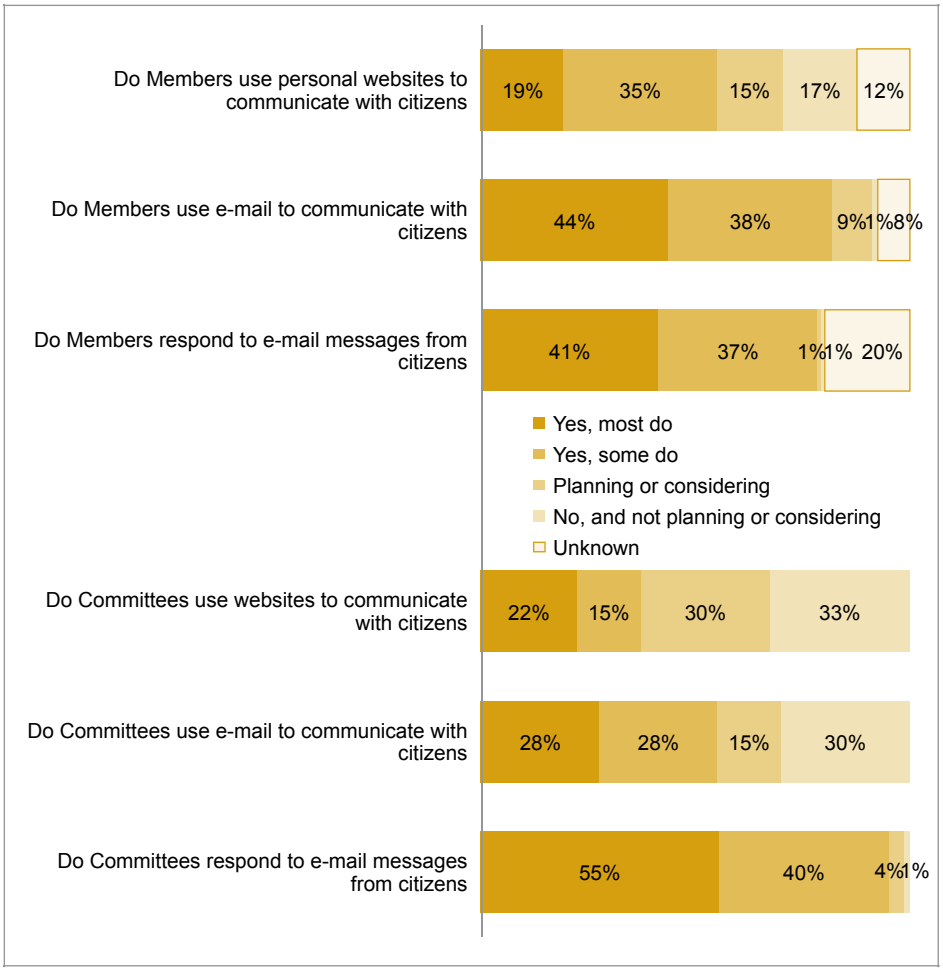
The 2012 survey focused on many of the same issues as the 2009 survey. It asked about the use of email and websites by members and committees; other methods of communication used by the parliament, such as webcasting and social media; communication with young people; the objectives and the challenges in using ICT for communication. The 2012 survey also added new questions regarding the use of mobile technologies.

Use of e-mail and websites by members and committees

Responses in 2012 regarding member and committee use of e-mail and websites suggest a mixed picture with relatively little change from 2009. The following summary is based on the results reported in the *World e-Parliament Report 2010*[8] and on the results from the 2012 survey shown in Figure 2.1.

8 See *World e-Parliament Report 2010*, p. 28.

Figure 2.1: Use of e-mail and websites by member and committees to communicate with citizens



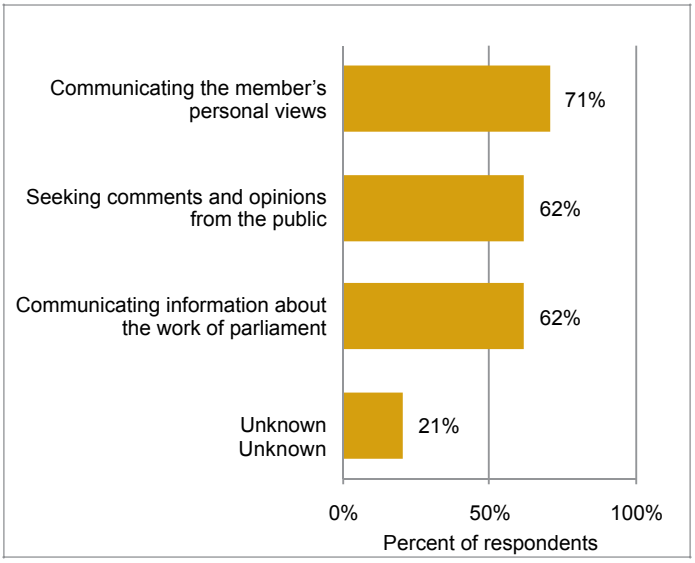
(Source: Survey 2012, *Members*, Section 6, Question 1, 3, 4; percentage responding to e-mail from citizens based on 126 respondents that reported that members use e-mail; *Committees*, Section 6, Question 6, 8 and 9; percentage responding to e-mail from citizens based on 85 respondents that reported that members use e-mail)

E-mail. Members' use of e-mail is up slightly. In 2012, 82 per cent of parliaments reported that *most* or *some* members use e-mail to communicate with citizens, compared with 78 per cent in 2009. Committee use of e-mail in 2012 remained the same as in 2009 (56 per cent compared to 55 per cent). However, members' responsiveness to e-mail messages dropped off in 2012. In 2009, 88 per cent of parliaments reported that *most* or *some* members who use e-mail responded to messages from citizens; in 2012 the percentage is 78 per cent. Committee responsiveness to e-mail is the same in 2012 and 2009: 95 per cent.

The use of an automated system to manage e-mail is down in 2012, compared to both 2009 and 2007. Equally importantly, however, is that the percentage of those planning or considering the use of an automated system remained below 1/3 in all three surveys[9]. Either parliaments do not consider these systems important or they have not found them helpful, or both.

9 Sources: Survey 2012, Section 6, Question 5; Survey 2009, Section 6, Question 6; Survey 2007, Section 8, Question 5.

Figure 2.2: Purposes for which members use websites



(Source: Survey 2012, Section 6, Question 2; percentages based on 82 respondents that use websites)

Websites. In 2012, the percentage of parliaments that said *most* members use websites declined compared to 2009 (19 per cent compared to 25 per cent). However, more said that *some do*, and comparing the combined percentages of *most* and *some*, the numbers are about the same for both years (54 per cent compared to 51 per cent). There is a slight increase in the number of parliaments reporting that committees use websites (combining *most* or *some*: 2012=37 per cent; 2009=34 per cent). While this represents an improvement, the reality is that committees are starting from a very low base, i.e., only about 1/3 of parliaments reported that committees use websites at all.

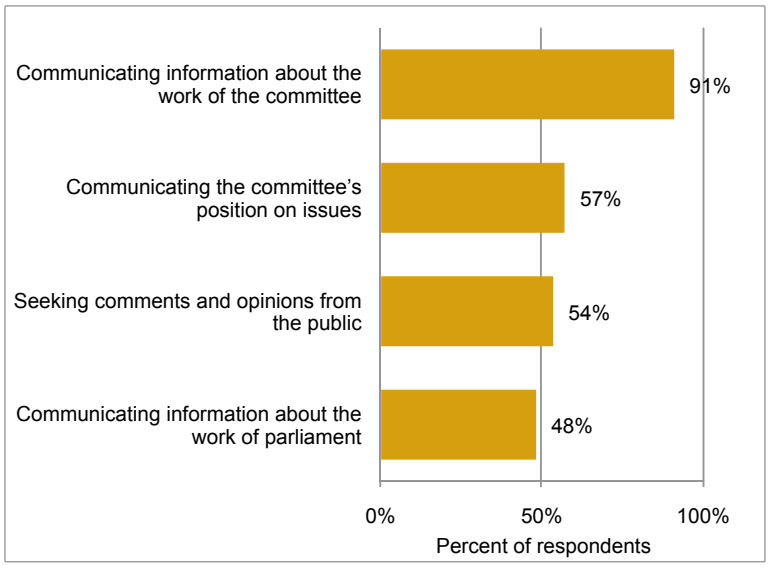
Regarding the purposes for which websites are used by members and committees, Figure 2.2 and 2.3 show the respective results for 2012. The overall percentages were down for members in 2012 compared to 2009[10]:

- *Communicate member's personal views: 71 per cent (2012), 81 per cent (2009);*
- *Seek comments and opinions from the public: 62 per cent (2012), 75 per cent (2009);*
- *Communicate information about the work of parliament: 62 per cent (2009), 68 per cent (2009).*

The percentages for each purpose remained the same for committees in the two years.

Conclusion. Based on the selected findings from the 2007 and 2009 surveys and on the findings from 2012, it is possible to conclude that there is now a steady state or perhaps even decreasing interest in the use of e-mail and websites by members and committees. For members the use of websites is holding constant, but purposes are down; use of e-mail is up, but responsiveness is down. Committees' use of websites is up slightly but from a low base; use of e-mail and responsiveness to e-mail

Figure 2.3: Purposes for which committees use websites



(Source: Survey 2012, Section 6, Question 7; percentages based on 56 respondents that use websites)

10 See *World e-Parliament Report 2010*, p. 30, Figure 2.3.

messages is constant. However, other methods may be growing in importance compared with e-mail and websites (see next section.). While this is speculative and cannot be answered without more data, it appears to be a reasonable hypothesis based on the 2012 figures.

Other methods of communication

Box 2.5

> Parliament is in the process of enhancing its communication system to improve communication with the citizens. The major communication channel has been through the website and the TV channel through state TV on parliamentary proceeding. Now, there is a plan to introduce audio and video streaming and a YouTube channel to reach out to a wider audience.
>
> *Comment by a respondent to the 2012 Survey*

Figure 2.4 shows the ICT-based methods, other than e-mail or websites being used or considered by parliaments for communicating with citizens as reported in both the 2012 and 2009 surveys. The figure is sorted by the percentage of parliaments that reported that they were *using* a specific method in 2012. Several important findings emerge from this figure regarding changes between the 2009 and the 2012 survey results.

Figure 2.4: Other methods of communication with citizens used by parliaments: comparison of all respondents to the 2012 and 2009 surveys

Communication Method	2012			2009		
	Using	Planning	Using & Planning	Using	Planning	Using & Planning
Webcasting of plenary sessions	52%	37%	89%	43%	29%	72%
TV programs (on other TV channels)	44%	16%	60%	35%	11%	46%
Parliament TV channel(s) (broadcast TV)	35%	29%	64%	30%	20%	50%
Webcasting of special programs	35%	36%	71%	21%	22%	43%
Social networking sites such as Facebook or MySpace	31%	35%	66%	13%	14%	27%
Webcasting of committee meetings	30%	36%	66%	20%	30%	50%
Twitter	29%	33%	62%	12%	12%	24%
Radio programs (on other radio channels)	27%	20%	47%	27%	12%	39%
Alerting services	26%	42%	68%	21%	27%	48%
Parliament Web TV	26%	36%	62%	21%	24%	45%
e-Consultation on bills	24%	45%	69%	16%	26%	42%
e-Consultation on issues	22%	42%	64%	15%	25%	40%
e-Petition	20%	36%	56%	12%	25%	37%
Online polls	18%	30%	48%	11%	25%	36%
YouTube or other video sharing service	18%	39%	57%	12%	15%	27%
Satellite channel	17%	20%	37%	13%	12%	25%
Parliament radio channel	15%	25%	40%	13%	16%	29%
Blogs	14%	39%	53%	22%	19%	41%
Online discussion group	8%	47%	55%	10%	28%	38%
Videos within e-mails	5%	24%	29%	3%	13%	16%

(Sources: Survey 2012, Section 6, Question 10; *World e-Parliament Report 2010*, p. 32, Figure 2.5. Table sorted by percentage of parliaments' used methods in 2012)

- Webcasting of plenary sessions continues to be a high priority for parliaments. More parliaments reported using webcasting for plenary sessions in 2012 (52 per cent) compared to 2009 (43 per cent), and more reported planning or considering it (37 per cent versus 29 per cent).
- The increase in the use of webcasting of plenary session is consistent with findings from the 2009 survey and reported in the 2010 Report. In that year, 29 per cent of parliaments stated that they were *planning or considering* webcasting the sessions. By 2012 the increase in the percentage indicates that 21 per cent of them were actually doing this.
- Video is a dominant mode of communication among parliaments. Of the methods reported being used by the most parliaments, four out of the top five involve video. Two involve webcasting and two involve TV broadcasting. Video combined with audio account for seven of the top ten methods.
- New participatory media appeared for the first time in the top 10: social networking sites such as Facebook ranked fifth at 31 per cent and Twitter ranked seventh at 29 per cent. This represents very large gains for these media since 2009, as will be discussed later.

Box 2.6

> Our experience with Twitter has been very positive, allowing us to tell our stories, rather than having them filtered through traditional media. We can drive people back to the Senate Committee websites where they can browse through information about our activities and come to their own conclusions. Our followers include journalists, politicians, stakeholders, political junkiest citizens, academics and students. They are debating with each other and are engaged in the political process becoming better informed about public policy and how it is shaped.
>
> *Comment by a respondent to the 2012 Survey*

Figure 2.5 shows the combined percentages of parliaments, by income level, that currently *use* or are *planning or considering using* these other communication methods. As seen in the highlighted figures in the first column, parliaments in low income countries use *radio programs on other radio channels* (50 per cent) and *TV programs on other TV channels* (71 per cent) much more than do parliaments in countries with higher income levels. This comparatively greater use by low income countries of technologies that have been available much longer mirrors the findings of the 2010 Report[11].

Box 2.7

> The parliament does record video and audio and makes this available in formats that can be used by other parties (e.g. TV, radio, and PM office) to have it broadcasted live or webcasted. But the Parliament does not broadcast anything by itself.
>
> *Comment by a respondent to the 2012 Survey*

11 See *World e-Parliament Report 2010*, p. 35, Figure 2.8.

By contrast, far more parliaments in high income countries have already implemented webcasting for committee meetings (63 per cent) and plenary sessions (87 per cent) compared with parliaments at the other income levels (see Figure 2.5).

Figure 2.5: Other methods of communication with citizens used or being planned/considered by parliaments, by income level groups

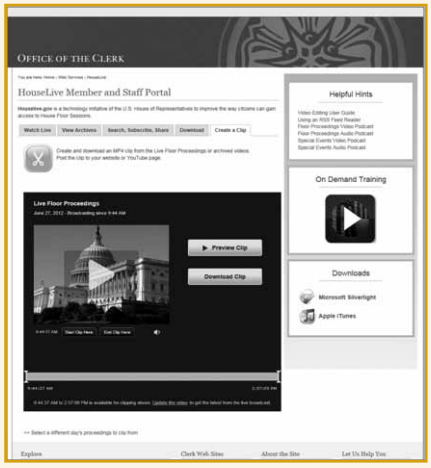
Communication Method	Currently Using				Planning or Considering			
	Low income	Lower middle income	Upper middle income	High income	Low income	Lower middle income	Upper middle income	High income
Alerting services	0%	13%	18%	56%	56%	55%	41%	29%
Blogs	0%	3%	17%	26%	50%	58%	37%	24%
e-Consultation on bills	5%	23%	40%	18%	53%	65%	33%	40%
e-Consultation on issues	5%	13%	38%	23%	58%	60%	30%	34%
e-Petition	0%	12%	32%	21%	28%	58%	27%	33%
Online discussion group	0%	6%	7%	15%	50%	58%	44%	40%
Online polls	6%	24%	18%	20%	28%	55%	27%	18%
Parliament radio channel	17%	9%	15%	20%	44%	45%	22%	5%
Parliament TV channel(s) (broadcast TV)	17%	24%	45%	43%	44%	50%	24%	12%
Parliament Web TV	0%	14%	26%	43%	53%	66%	24%	18%
Radio programs (on other radio channels)	50%	28%	31%	13%	28%	38%	17%	8%
Satellite channel	0%	9%	20%	29%	41%	36%	10%	7%
Social networking sites such as Facebook or MySpace	24%	38%	31%	31%	29%	38%	36%	36%
TV programs (on other TV channels)	71%	35%	47%	38%	12%	35%	12%	7%
Twitter	17%	10%	36%	40%	22%	53%	27%	29%
Videos within e-mails	0%	0%	10%	5%	33%	29%	22%	20%
Webcasting of committee meetings	6%	7%	20%	63%	53%	57%	41%	11%
Webcasting of plenary sessions	6%	31%	54%	87%	67%	54%	39%	11%
Webcasting of special programs	6%	15%	40%	59%	61%	58%	33%	14%
YouTube or other video sharing service	6%	17%	23%	21%	33%	41%	35%	45%

(Source: Survey 2012, Section 6, Question 10; Figure is sorted by methods in alphabetical order.)

Box 2. 8

HouseLive.gov – U.S. House of Representatives

HouseLive.gov is the U.S. House of Representatives' video-streaming service that broadcasts and archives all proceedings on the House floor. Since its inception in April 2010, thousands of viewers have watched the proceedings using this service. Over the last two years the Office of the Clerk has continued to improve HouseLive by adding improved search capabilities, an embedded player that can be placed on Member websites, a redesigned user interface and support for mobile devices.

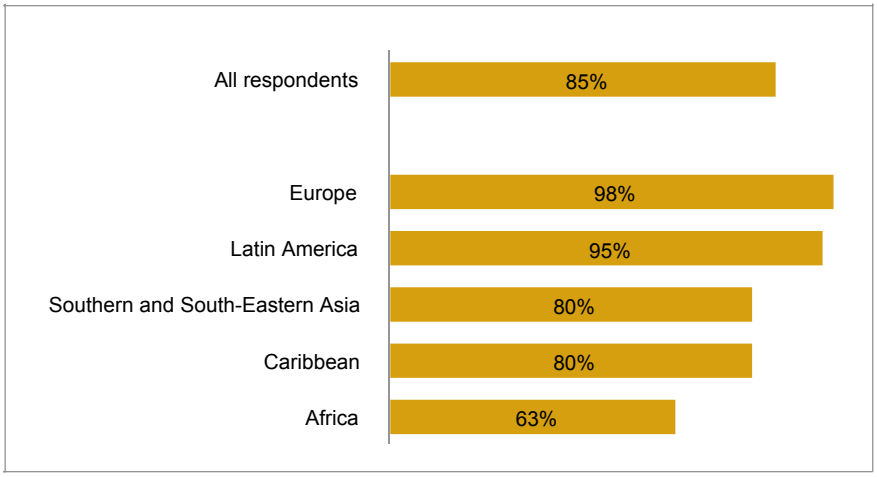


In May 2011, the Office of the Clerk released an internal HouseLive video clipping tool for use by Member offices to post House floor videos to their web or social media sites. The video clipping tool works on both the "live" video broadcast and archived video broadcast. The tool was designed to be very simple to use: once the start and end points in the video are chosen, by pressing the download button the Member office can save the MP4 version of the video to the desktop. The tool also has a feature that allows previewing the video clip created before downloading it to the PC. In the first year since the video clipping tool has been made available, over 2,000 video clips have been created.

Office of the Clerk of the House of Representatives of the United States of America. Contribution to the World e-Parliament Report 2012)

It is also interesting to note that while individual forms of social media considered by themselves, such as social networking sites or e-Consultations, are still used by relatively few parliaments, the use of *any form of social media* by parliaments is high by all regions. Figure 2.6 shows the percentage of parliaments using any form of social media for all respondents and for each region.

Figure 2.6: Use of any form of social media*, by region



(Source: Survey 2012, Section 6, Question 10)

*Use of social media includes use of any of the following methods for communicating with citizens: *e-Petition; e-Consultation on bills; e-Consultation on issues; Online discussion group; Blogs; YouTube or other video sharing service; Twitter; Social networking sites such as FaceBook or MySpace; Online polls*. (Personal e-mails and websites are not included).

Methods planned or being considered

A somewhat different picture emerges when looking only at the percentage of parliaments *planning or considering* particular methods of communication in 2012 as opposed to currently using them (see Figure 2.7). Among the top 10, video based methods drop to the lower half with the exception of YouTube, which ranks number 5. The upper half includes:

- Online discussion groups
- e-Consultation on bills
- Alerting services
- e-Consultation on issues

It is also worth noting that in 2012 a larger percentage of parliaments reported that they are planning to use a greater variety of methods than in 2009. Figure 2.6 shows the percentage of parliaments *planning or considering* using the different communication methods as reported in the surveys for both years. Figure 2.7 is sorted by the 2012 percentage. In that year, 30 per cent or more parliaments indicated that 14 methods were under consideration. As seen in the last column of Figure 2.7, only one method (Webcasting of committee meetings) reached the 30 per cent threshold in 2009.

Figure 2.7: Other methods of communication with citizens being *planned or considered* by parliaments in 2012 and 2009

Rank by 2012 Planning	Method	2012 Planning	2009 Planning
1	Online discussion group	47%	28%
2	e-Consultation on bills	45%	26%
3	Alerting services	42%	27%
4	e-Consultation on issues	42%	25%
5	YouTube or other video sharing service	39%	15%
6	Blogs	39%	19%
7	Webcasting of plenary sessions	37%	29%
8	Webcasting of special programs	36%	22%
9	Webcasting of committee meetings	36%	30%
10	Parliament Web TV	36%	24%
11	e-Petition	36%	25%
12	Social networking sites such as Facebook or MySpace	35%	14%
13	Twitter	33%	12%
14	Online polls	30%	25%
15	Parliament TV channel(s) (broadcast TV)	29%	20%
16	Parliament radio channel	25%	16%
17	Videos within e-mails	24%	13%
18	Radio programs (on other radio channels)	20%	12%
19	Satellite channel	20%	12%
20	TV programs (on other TV channels)	16%	11%

(Sources: Survey 2012, Section 6, Question 10; *World e-Parliament Report 2010*, p. 32, Figure 2.5)

Box 2.9

Especially since 2007, the Parliament has made a significant effort to engage citizens through ICT. The Parliament provides all the relevant information and gives citizens tools to increase the participation. Citizens may consult all the legislative process and the relevant documents in the parliamentary website; the parliamentary committees promote the creation of online forum and discussions, open to the entire community to put into public discussion legislative initiatives. There is also an IT application for Online Data Collection concerning legislative initiatives. That tool provides the immediate availability of Citizen Contributions/Participations regarding one legislative initiative or several autonomous initiatives with different structures.

Comment by a respondent to the 2012 Survey

Finally, as seen in Figure 2.8, there may be an interesting mix in the next few years of communication methods being used by parliaments. This figure shows the combined percentage of those currently *using* and those *planning or considering* the various modalities. Five of the top ten are video based (1, 2, 6, 8, 10), four are newer interactive methods (3, 5, 7, 9), and one represents (presumably) a web form of traditional alerting services (4). Because the interactive methods are newer and because it is not yet clear how they can be used most effectively by parliaments, it will be important to study developments in this area and to share learning experiences and good practices that may emerge.

Figure 2.8: Other methods of communication with citizens being used or planned by parliaments in 2012

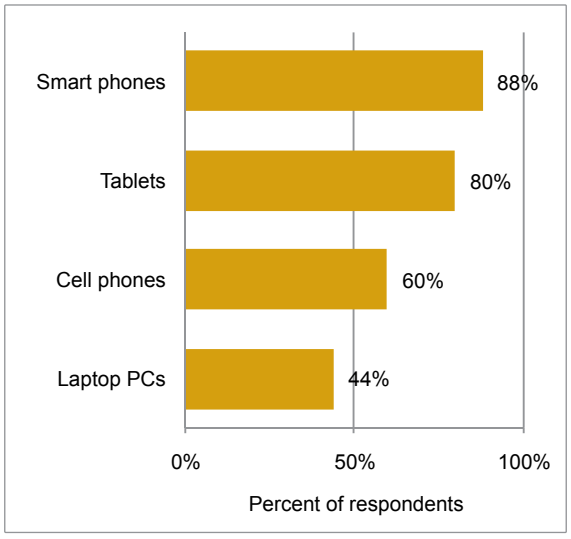
Rank	Communication Method	Using or Planning
1	Webcasting of plenary sessions	89%
2	Webcasting of special programs	71%
3	e-Consultation on bills	69%
4	Alerting services	68%
5	Social networking sites such as Facebook or MySpace	66%
6	Webcasting of committee meetings	66%
7	e-Consultation on issues	64%
8	Parliament TV channel(s) (broadcast TV)	64%
9	Twitter	62%
10	Parliament Web TV	62%
11	TV programs (on other TV channels)	60%
12	YouTube or other video sharing service	57%
13	e-Petition	56%
14	Online discussion group	55%
15	Blogs	53%
16	Online polls	48%
17	Radio programs (on other radio channels)	47%
18	Parliament radio channel	40%
19	Satellite channel	37%
20	Videos within e-mails	29%

(Source: Survey 2012, Section 6, Question 10)

Mobile devices and mobile applications

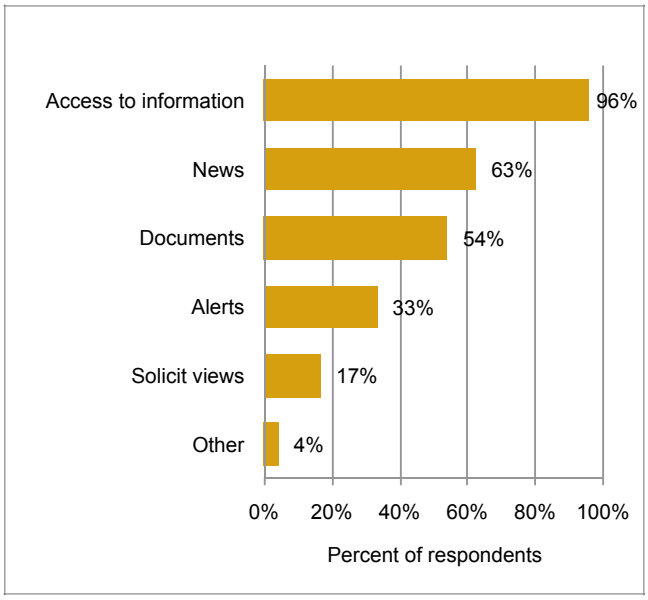
As noted above, mobile technologies received special focus in the 2012 survey. While only 25 per cent of parliaments reported that they were using mobile technologies for communicating with citizens[12], 41 per cent indicated that they were planning or considering them. Especially interesting is that of the 25 per cent that are currently using mobile technologies, two thirds have developed applications specifically for mobile devices[13]. Many are supporting applications for smart phones and tablets (see Figure 2.9), particularly for providing access to parliamentary information (see Figure 2.10). Twenty four parliaments reported that they were live streaming parliamentary debates to mobile devices[14]. As will be seen in Chapter 4, this mirrors the increased use of mobile technology to support members and the work of the parliament.

Figure 2.9: Mobile devices supported by specific applications developed by parliaments



(Source Survey 2012, Section 6, Question 18; 25 respondents)

Figure 2.10: Purposes of the specific mobile applications developed by parliaments



(Source: Survey 2012, Section 6, Question 19; 24 respondents)

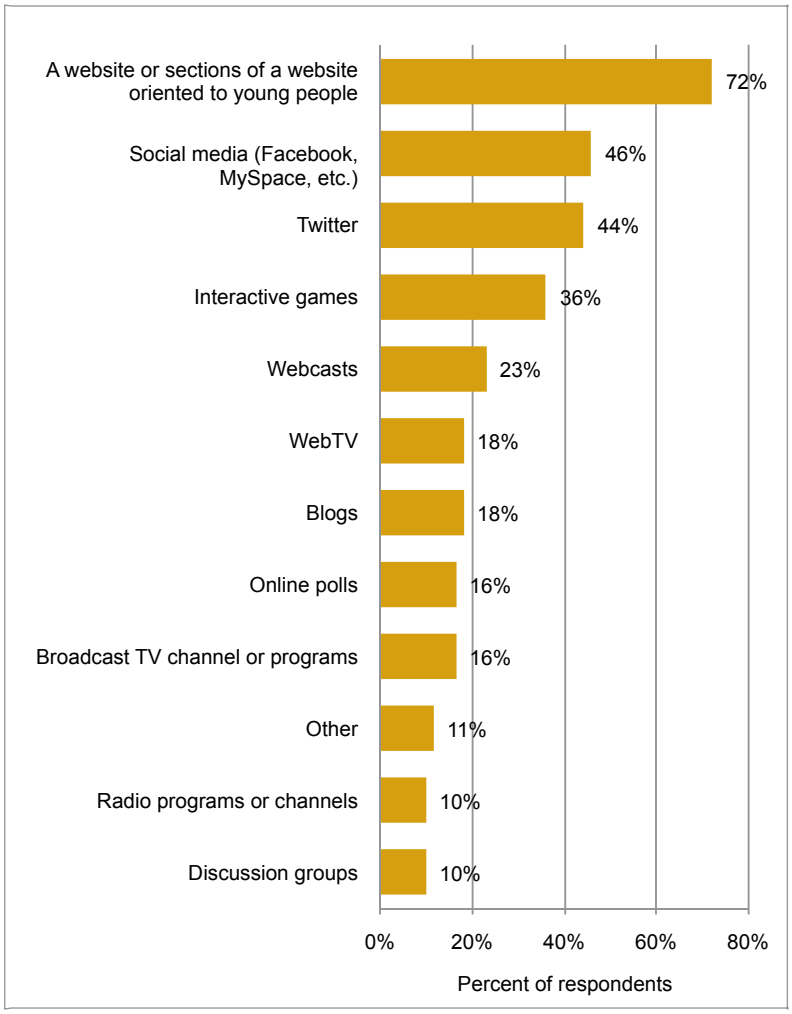
Communication with young people

Communicating with young people remains a priority for many parliaments, although the percentages have not grown significantly since 2009. When asked whether the parliament uses any ICT-based methods for this goal, 39 per cent answered yes (37 per cent in 2009) and 35 per cent said they were *planning* or *considering it* (36 per cent in 2009). Those who said *no* remained constant at about one fourth of respondents[15].

The methods for communicating with young people also remained largely the same (see Figure 2.11 for the 2012 results) except that use of social media went up in 2012 (2012=46 per cent; 2009=34 per cent); Twitter went up (2012=44 per cent; 2009=30 per cent); but games took a slight dip (2012=36 per cent; 2009=40 per cent)[16].

12 Source: Survey 2012, Section 6, Question 16.
13 Source: Survey 2012, Section 6, Question 17.
14 Source: Survey 2012, Section 6, Question 20.
15 Source: Survey 2012, Section 6, Question 14. The 2009 survey results are reported in the *World e-Parliament Report 2010*, p. 41.
16 The 2009 survey results are reported in the *World e-Parliament Report 2010*, p. 42, Figure 2.13.

Figure 2.11: Methods used to communicate with young people



(Source: Survey 2012, Section 6, Question 15; 61 respondents)

Purposes of communication

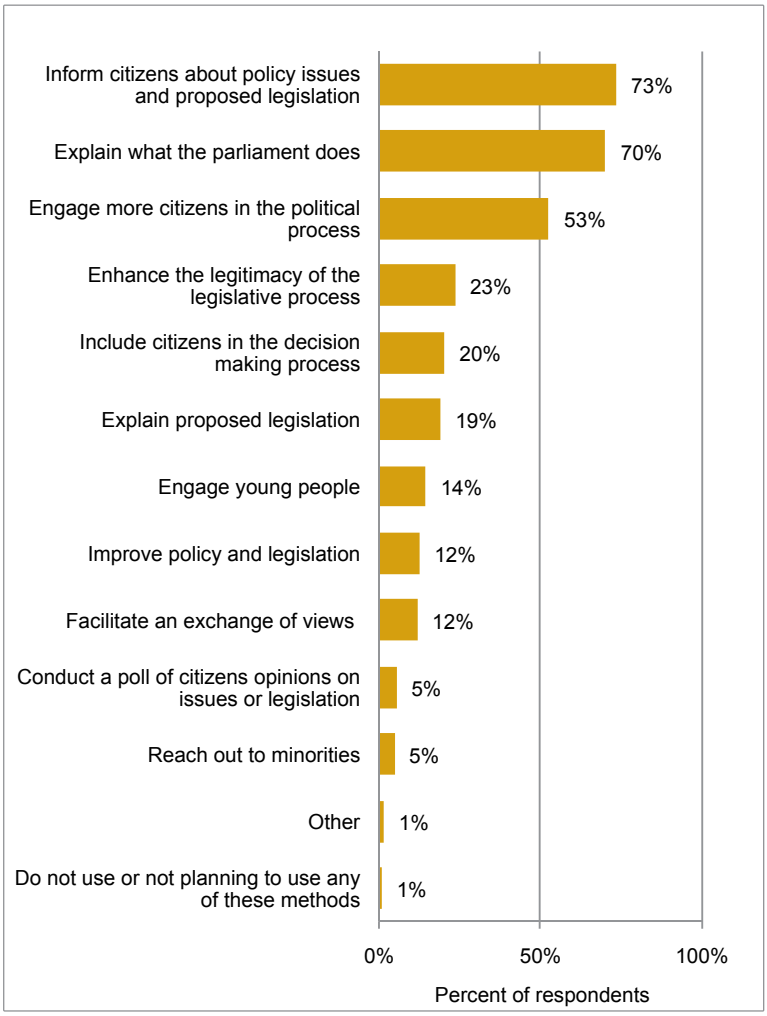
The three most important objectives for using ICT-based methods of communication remained the same in 2012, although the percentage of parliaments that listed the top two went up (see Figure 2.12 for the 2012 results[17]). These were:

1. *Inform citizens about policy issues and bills*: 2012=73 per cent; 2009=67 per cent;
2. *Explain what Parliament does*: 2012=70 per cent; 2009=59 per cent;
3. *Engage more citizens*: 2012=53 per cent; 2009=54 per cent.

Perhaps the one concern in these results is that the percentage of parliaments that listed the purpose of engaging citizens remained the same in 2012 and 2009, and that this goal is third on the list after "*inform*" and "*explain*". This may be understandable in the context of the findings discussed above that one-way communication, such as video, remains dominant among the various modalities (see Figure 2.4 above). It will be important to see if this changes as two-way or interactive modalities become prevalent as suggested in Figure 2.6.

17 The 2009 survey results are reported in the *World e-Parliament Report 2010*, p. 38.

Figure 2.12: Most important objectives in using ICT-based methods of communication



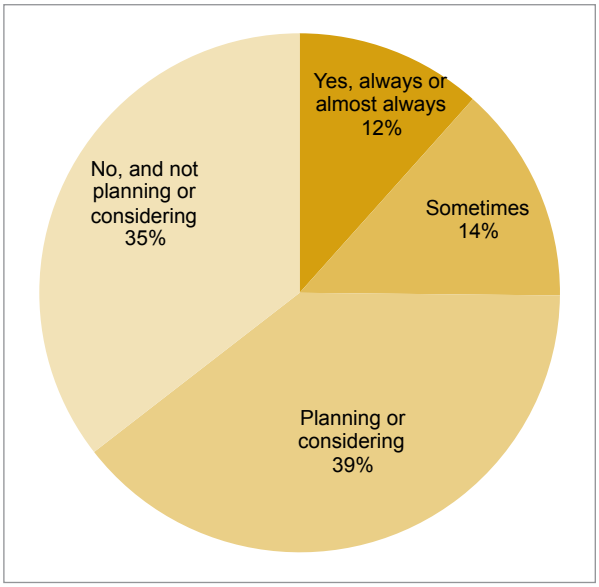
(Source: Survey 2012, Section 6, Question 11)

Policies and practices regarding citizens' communications

Only 16 per cent of parliaments reported that they have a policy regarding the retention of electronic communications received from citizens; 39 per cent reported that they were planning of considering a policy[18]. With regard to the current practice, 26 per cent reported that they *always* or at least *sometimes* use special tools to help collect and categorize citizens' comments more efficiently (see Figure 2.13). This finding appears to be consistent with results reported previously that relatively few parliaments have a system to help members handle and respond to e-mail from citizens. It is evident that while many parliaments want to facilitate communications with citizens, they have not yet established policies or systems that will enable them to manage and benefit from these communications more effectively.

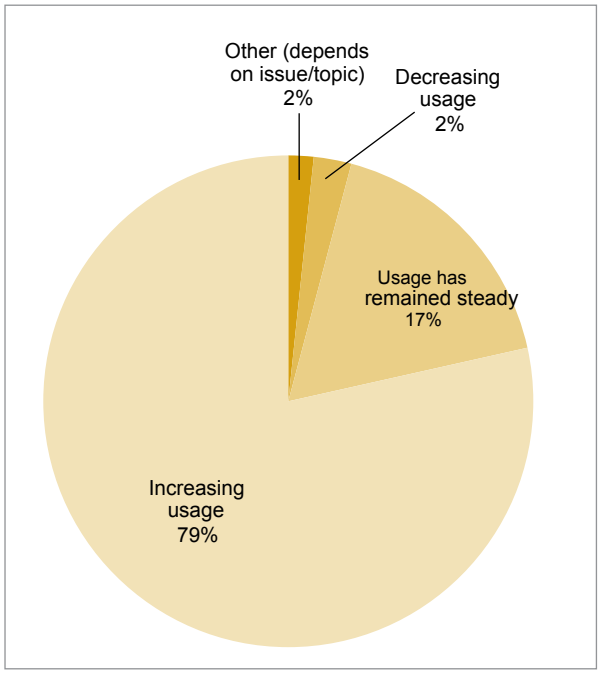
18 Source: Survey 2012, Section 6, Question 22. Note that this question was new in 2012 and comparison with 2009 is not possible.

Figure 2.13: Use of special tools for organizing citizens' comments



(Source: Survey 2012, Section 6, Question 23)

Figure 2.14: Trends in citizen use of technology-based communication methods



(Source: Survey 2012, Section 6, Question 24; 121 respondents)

Trends in citizen use of ICT for communication

In the 2009 survey 85 per cent of parliaments reported that citizens' communication using various ICT-based methods had increased since they became available[19]. The percentage remains close to this number in 2012 at 79 per cent (see Figure 2.14). This is a positive finding.

It is important to note, however, that these percentages pertain only to parliaments whose citizens have the means to communicate using technology-based methods. In response to this same question in the 2012 survey, 18 per cent (almost one fifth) of parliaments reported that citizens do not use ICT-based methods to communicate with parliament[20].

Box 2.10

> Most of our citizens do not own computers. A very high number of them are not familiar with computers or internet.
>
> *Comment by a respondent to the 2012 Survey*

Considered together, these findings underscore the potential of ICT to improve communication between parliaments and citizens, but also the size of the gap that exists when technology-supported communication is not an option.

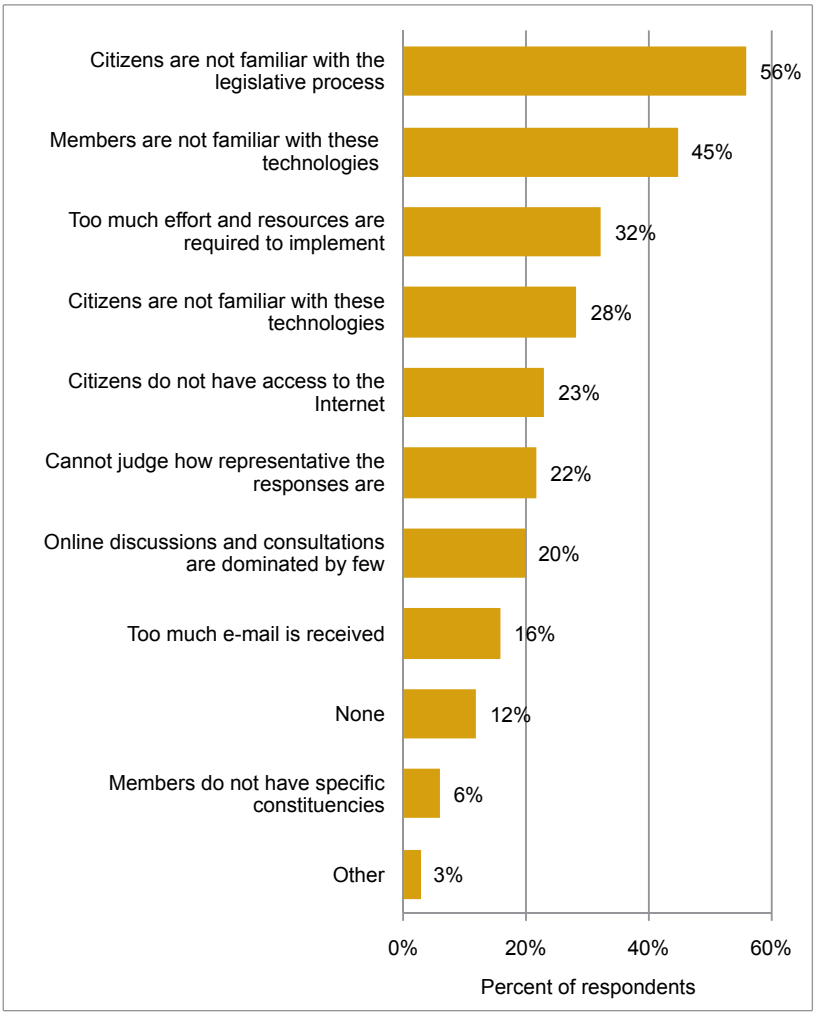
19 See *World e-Parliament Report 2010*, p. 44, Figure 2.15.
20 Source: Survey 2012, Section 6, Question 24, 121 respondents.

Challenges of ICT-based communication

Finally, it is worth noting the challenges that parliaments encounter when using communication technologies. In 2009[21] the top three were:

1. *Members are not familiar with the technologies* (2009=37 per cent);
2. *Citizens are not familiar with the legislative process* (2009=32 per cent);
3. *Too much effort and resources are required to implement these systems* (2009=26 per cent);

Figure 2.15: Challenges in using communication technologies



(Source Survey 2012, Section 6, Question 13; 152 respondents)

In 2012 these remained the top three challenges, but the percentages of parliaments reporting each of them changed in important ways (see Figure 2.15). The problem of citizens understanding of the legislative process became number 1, mentioned by 56 per cent of parliaments, an increase of more than 50 per cent over 2009. The problem of members not being familiar with the technology was noted by 45 per cent of parliaments, an increase of 40 per cent. Effort and resources was identified by 32 per cent of parliaments, an increase of 23 per cent. The challenges clearly remain and they are of concern to an increasing number of parliaments, perhaps reflecting the decision by more parliaments to use ICT to improve communication.

It is also important to note that an increasing number of parliaments are attempting to evaluate these various methods to help them determine their value. The percentage of parliaments carrying out such evaluations more than doubled from 17 per cent in 2009 to 36 per cent in 2012[22]. It is hoped that the results of these evaluations will be increasingly shared by parliaments.

21 The 2009 survey results are reported in the *World e-Parliament Report 2010*, p. 40, Figure 2.12.
22 Sources: Survey 2012, Section 6, Question 12; Survey 2009, Section 6, Question15.

Chapter 3

Achieving Openness, Transparency, and Accountability through Websites

INTRODUCTION

As the findings reported in Chapter 2 indicate, parliaments are using a variety of methods to reach out to citizens and engage them in the political process. To the extent that these efforts are successful, they will affect the perception of parliament as an open and transparent institution. Despite their projected growth, however, it will take several more years before these methods of communication are used by the majority of parliaments in an effective, converging and structured way. For the moment, parliamentary websites remain the primary means by which parliaments make their work and their documents known to civil society, to the media and to citizens.

Since the 2007 survey, well over 90 per cent of parliaments have reported having a website. These sites provide a variety of information sources. The best of them integrate a broad array of legislative and policy data and documents into a highly valuable public record of the work of the parliament. A legislature that is seeking to become more transparent will provide citizens with timely access to the most current information about proposed legislation, oversight activities, and the national budget through its website. It will also provide the means for understanding how the parliament works, who its members are, what they have done, and how to communicate with them. To be more open and accessible, it will offer information in different formats, including text and video, using a variety of tools that enable citizens to find what they are looking for quickly and easily and to understand better what they find. And to be inclusive they will adopt open document and data standards that lower barriers to public records for all citizens.

During the past decade the goals of parliamentary websites have become more complex and more challenging. They began with the objective of providing basic information about the history, the functions, the leadership, and the membership of the legislature. They were soon tasked to provide copies of official texts of proposed legislation, then the verbatim accounts of debates and summaries of plenary actions, and copies of committee documents. When webcasting technologies became available, they became the vehicles to provide live coverage of plenary sessions and other official meetings. And as the interactive web has emerged, some parliaments have added new tools on their sites that encourage two-way communication between members and citizens, inviting them to share their views and engaging them in the policy process.

Websites have also had to improve methods of access to their content. In addition to obtaining copies of texts, many members and citizens now use search engines to find specific documents

and speeches. Alerting services enable them to be notified of the introduction and changes in proposed legislation, the filing of committee documents, and members' activities and speeches. Increasingly, they can learn about the parliament through a variety of media such as audio or video webcasting, live or through an on-demand archive.

Parliaments have been further challenged to improve the design and usability of their websites so that they are understandable and easy to operate. They have also had to enhance accessibility, ensuring that they can be used by all, including persons with disabilities. And they have had to address a variety of related issues, such as multiple official languages.

The most recent challenges have come from two different sources - advances in technology and increasing demands from civil society. New mobile technologies offer the possibility of making website information in both text and video formats accessible on a growing number of wireless devices. While this requires additional technical development efforts, many parliaments are already doing this for the benefit of members who want access to parliamentary information from anywhere on any acceptable device. At the same time, civil societies are calling for more information to be available not only on the parliament's own website but also through applications that enable the downloading of documents in bulk (i.e. in large volumes) in open standard formats.

Increasingly, parliamentary websites are becoming a means for promoting members' and committees' accountability to the electorate by presenting their work in new ways, for example by linking on one page their functions, responsibilities, activities, speeches and other records. Moreover, either on their initiative or in some cases as a result of the enactment of transparency laws, more and more parliaments are offering on their websites details on the salaries and emoluments of both members and staff, expenditures for missions, and other particulars referring to the costs of the institution.

Websites have also become critical resources for helping parliaments to achieve greater efficiency in their operations. Due to their increasing sophistication and availability of trusted and timely content, they have transformed into valuable sources of information to many members, committees, and staff.

Beyond all of these functions, however, one of their fundamental purposes is to support a culture of transparency, openness and accountability. This was one of the primary reasons for the Inter-Parliamentary Union (IPU) to revise its *Guidelines for the Content and Structure of Parliamentary Websites*[1], published in 2000, and to re-publish it as *Guidelines for Parliamentary Websites* in March 2009[2]. One of the strategic values of this document is that it serves as a set of recommendations and standards for helping parliaments assess and improve not only their efficiency, but also the state of their transparency.

It is worth noting that the *Guidelines for Parliamentary Websites,* available in several languages, have been widely used by parliaments since their publication, as Figure 3.2 shows later in this chapter. In an international meeting held in February 2012, participants from parliaments suggested a further revision of the *Guidelines* in the near future to incorporate elements concerning open data and open document standards, as well as guidance for internal benchmarking of the level of transparency and openness of a parliament[3].

1 Inter-Parliamentary Union, *Guidelines for the Content and Structure of Parliamentary Web Sites*, [Geneva]: Inter-Parliamentary Union, 2000 [http://www.ipu.org/cntr-e/web.pdf].

2 Inter-Parliamentary Union, *Guidelines for Parliamentary Websites*, [Geneva]: Inter-Parliamentary Union, 2009 [www.ictparliament.org/resources/guidelines_en.pdf].

3 International Meeting: "Achieving Greater Transparency through the Use of Open Document Standards", organized by the United Nations, the Inter-Parliamentary Union and the U.S. House of Representatives in Washington in February 2012 [http://www.ictparliament.org/XMLMeeting2012].

SUMMARY OF FINDINGS FROM 2007/2009 SURVEYS

The findings of the 2007 survey reported in the *World e-Parliament Report 2008* documented the widespread use of parliamentary websites. Most of these websites did an acceptable job in providing general information about the parliament, but many did not incorporate important information about legislative activities, especially committee documents and explanatory material. The Report also found that more work needed to be done in linking relevant information to proposed legislation to provide a more complete picture of the bills. A substantial number of parliaments employed formal usability testing (or were planning to), but far fewer were meeting accessibility standards for persons with disabilities. Many were broadcasting plenary sessions and a large number were planning to do so.

The section on parliamentary websites of the 2009 survey was based on the *Guidelines for Parliamentary Websites*, which are organized into four areas: 1) General information about the parliament; 2) Specific information regarding the legislative, oversight, and budget work of the parliament and the activities that occur in committee and plenary sessions; 3) Tools for finding and viewing information; and, 4) Usability and accessibility of the site.

General information. The 2009 survey found that over half of the parliaments had 70 per cent or more of the 54 items that provide general information about parliaments. This represents the most basic and most static information about the legislature, and it is the minimal starting point for transparency. The *World e-Parliament Report 2010* suggested that from this perspective, these figures were a concern, especially because many parliaments have had websites for a number of years. The Report argued that the percentage of items and the percentage of parliaments should have been higher.

Legislation, oversight, budget. The 2009 survey included a total of 34 individual items covering each of these areas of work, as well as the activities of plenaries and committees. Over half of the parliaments reported that they had almost 40 per cent or more of these items on their website. Information was provided by just over half of the parliaments about legislation and plenary activities; significantly less than half provided information about committee activities and about the work of oversight and budget review. This latter finding may have reflected the differences in the role that committees play in some parliaments and differences in their responsibilities for oversight and budget review and approval.

The timeliness of the documentation provided was judged to be satisfactory, although the Report suggested that agendas needed to be available sooner in many parliaments. Completeness, however, as measured by the number of relevant items linked to proposed legislation, still needed to be improved in many parliaments. And efforts to achieve greater clarity, by providing material that explained bills and offered an assessment of their impact, were made in very few parliaments.

Tools. The vast majority of parliaments reported that they had some type of *search engine*. Almost half of the parliaments indicated that they had the capacity to *broadcast or webcast live meetings* of any parliamentary body as well as parliamentary events and programmes. And almost half reported that they had *alerting services* for at least one type of document or activity. Only one fifth of parliaments reported that they provided mobile services for members that enable them to access information and documentation as they were made available on the website; 12 per cent provided such services for the public. Only one quarter of parliaments provided secure services for members and less than 10 per cent provided authentication services such as digital signatures.

Usability and accessibility tool and techniques. Three quarters of parliaments reported that they based the content and the design of their site on an understanding of the needs of different groups of users. However, less that 40 per cent reported the use of usability testing and other methods for ensuring that the design of the website was understandable by its intended audiences. The survey found that 45 per cent of parliaments did follow standards to ensure that the website could be used by persons with disabilities; this meant, however, that over half did not, a finding of some concern. Multiple languages remained a challenge for many parliaments trying to make their websites accessible to all citizens.

Intranets. Many parliaments reported that they maintained websites on intranets for members-only (61 per cent) or were planning/considering them (22 per cent). The existence of these members-only websites raised some issues concerning the information available on these websites and whether it should be made available to the public as well, especially research reports, voting records, and explanatory material.

Conclusions from 2009. While many parliaments stated that they wanted to be more transparent and accessible, the collective findings from the 2009 survey suggested that much still needed to be done by many parliaments to achieve these goals. Transparency requires that more documentation be made available. In some cases it needed to be more current; in many cases it needed to be more complete; and in nearly all cases, it needed to be more understandable. Accessibility requires that more parliaments implement capable search engines, extend webcasting, increase alerting services, greatly enhance mobile services, and add authentication functions. And it requires usability testing and the implementation of accessibility standards for persons with disabilities.

FINDINGS FROM THE 2012 SURVEY

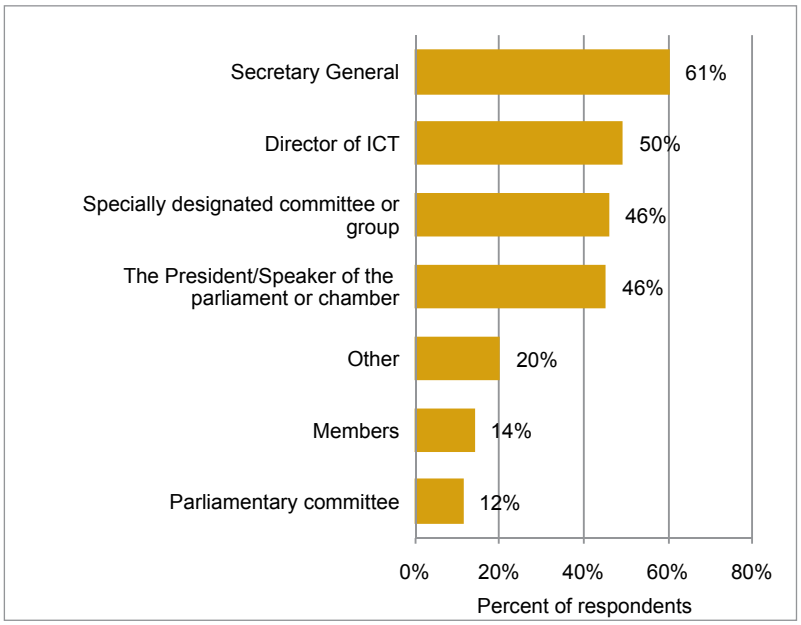
The section of the 2012 survey that focused on openness, transparency and accountability through parliamentary websites was essentially unchanged from the 2009 survey. The questions were again based on the *Guidelines for Parliamentary Websites*, organized into four areas: 1) General information about the parliament; 2) Specific information regarding the legislative, oversight, and budget work of the parliament and the activities that occur in committee and plenary sessions; 3) Tools for finding and viewing information; and, 4) Usability and accessibility of the site.

The *Guidelines* also contained recommendations regarding the management of websites, and findings related to this area are also included in this chapter. In addition, the 2012 survey included a question about the most important improvements in the parliament's website in the last two years, as well as the most important improvements planned for the next two years.

Management of websites

The management of parliamentary websites presents special challenges. Its content must be objective and acceptable to the various political groups represented in the parliament. The information must also be accurate, timely, and complete. It must be accessible in a variety of formats to different groups of users, including the members and the public. It also requires leadership at the highest levels and, equally importantly, cooperation among the various offices of the parliamentary administration. Cooperation must involve technical staff as well as staff who

Figure 3.1: Responsibility for setting website goals



(Source: Survey 2012, Section 5, Question 2; 147 respondents)

are responsible for managing parliament's information and documentation. Finally, the management of the parliament's website should reflect the procedures in place for managing the broader requirements of all aspects of ICT within the institution.

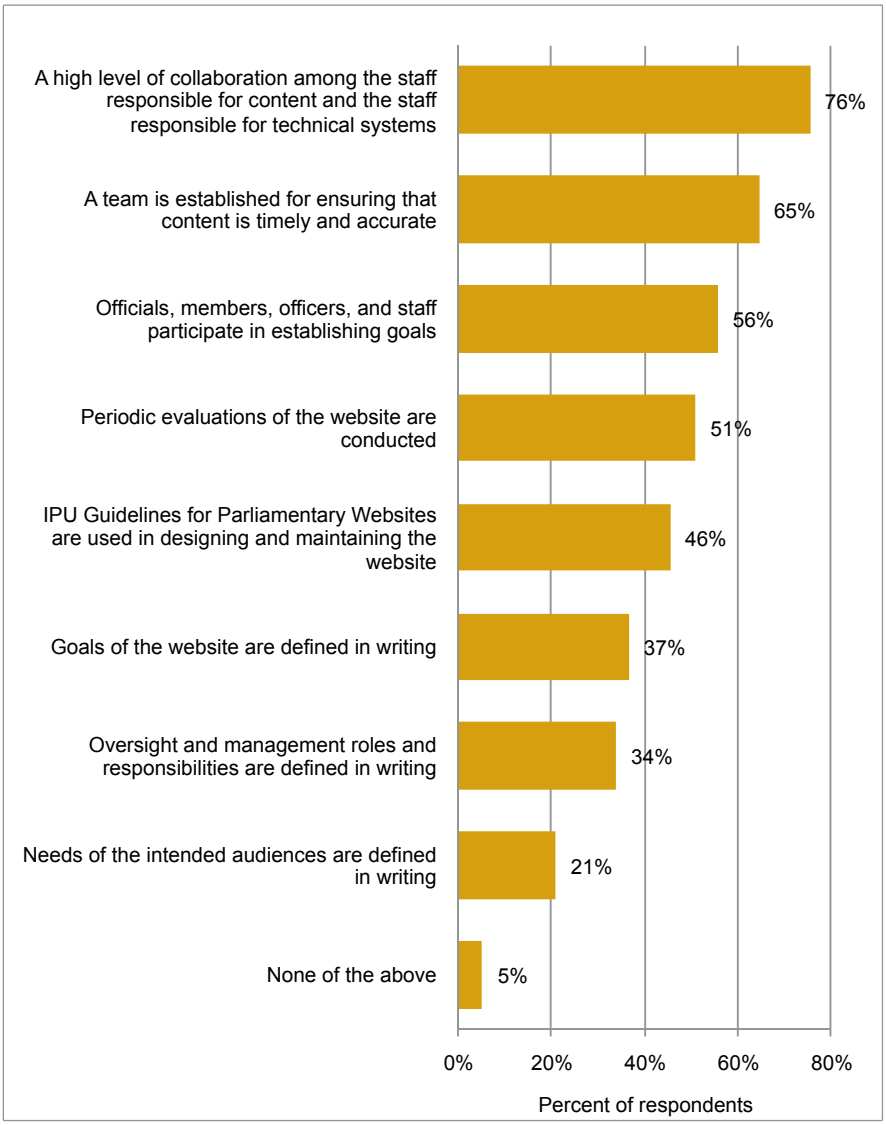
The survey question related to website management issues allowed parliaments to identify more than one person or one entity responsible for setting the goals of the website. As shown in Figure 3.1, the majority of parliaments (61 per cent) reported that the Secretary General establishes the goals. Also indicated by many parliaments were the Director of ICT (50 per cent), a specially designated committee or group (46 per cent), and the President/Speaker of the chamber (46 per cent). As will be seen in Chapter 8 on *Strategic planning and implementation*, these percentages mirror the way ICT is managed in general, although with one interesting variation: the specially designated committee or group is mentioned far more often with regard to websites. This is consistent with the findings shown in Figure 3.2, which indicates that 56 per cent of parliaments reported that officials, members, officers, and staff participate in setting goals. This percentage is higher than the 45 per cent of parliaments that reported on this same question in the 2009 survey[4].

In 2012 more parliaments also reported a cooperative approach to managing the website. As shown in Figure 3.2, 76 per cent said there was *a high level of collaboration among the staff responsible for the content and the staff responsible for technical systems*. The figure for 2009 was 69 per cent[5]. The percentage reporting that *a team is established for ensuring that content is timely and accurate* was about two thirds in both 2012 and 2009.

Other areas of improvement in 2012 were that periodic evaluations of the website were mentioned by more parliaments (2012=51 per cent; 2009=47 per cent); oversight and management roles were defined in writing by more parliaments (2012=34 per cent; 2009=26 per cent); and the needs of audiences were defined in writing by more parliaments (2012=21 per cent; 2009=14 per cent)[6].

4 Source: Survey 2009, Section 5, Question 15; 130 respondents.
5 Source: Survey 2009, Section 5, Question 15; 130 respondents.
6 Source: Survey 2009, Section 5, Question 15; 130 respondents.

Figure 3.2: Activities that take place for the management of parliamentary websites

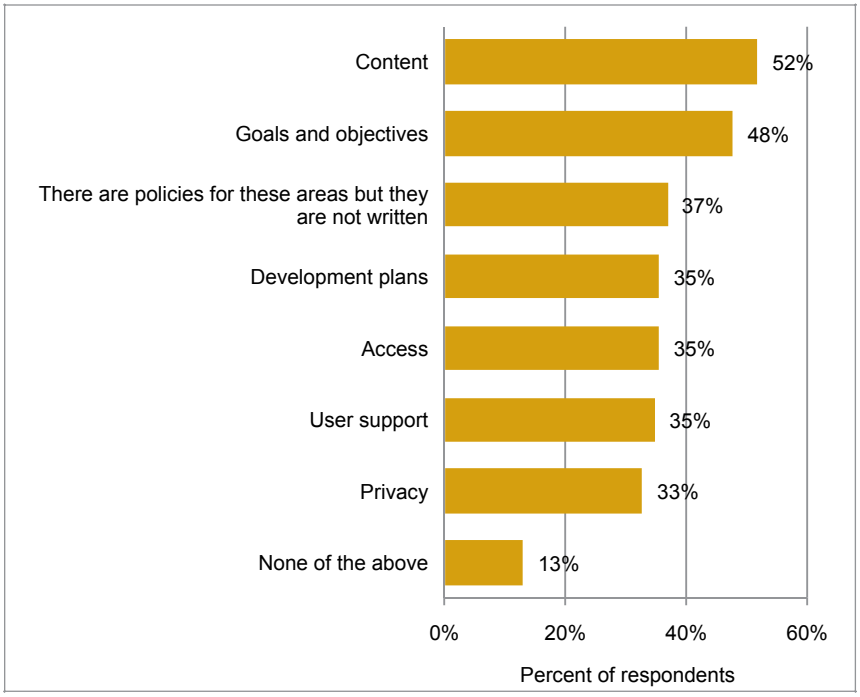


(Source: Survey 2012, Section 5, Question 13; 147 respondents)

There was also improvement in the percentage of parliaments having written policies in a number of areas that affect the website, as expressed in Figure 3.3. These included content (2012=52 per cent; 2009=43 per cent); and goals and objectives (2012=48 per cent; 2009=41 per cent). And the percentage of parliaments that reported that there were policies in those areas, but not written, declined (2012=37 per cent; 2009=45 per cent).

Finally, it is a very positive sign that almost half of all respondents (46 per cent) indicated that the IPU's *Guidelines for Parliamentary Websites* were used in designing and maintaining the website, as Figure 3.2 shows.

Figure 3.3: Written policies for the website by areas



(Source: Survey 2012, Section 5, Question 3; 147 respondents)

Based on these collective findings it is possible to conclude that the management of websites has improved in many parliaments in the last two years. Compared to 2009, there are broader inputs from and engagement of key stakeholders, more collaboration, and wider use of good management practices.

General information

One of the first goals of a parliamentary website is to provide citizens with a basic introduction to their legislature. This includes practical information such as how to visit the parliament, how to obtain its documents online or in printed form, and what information services it provides. The website needs to give an overview of a parliament's history, activities, and organization, including its various committees and commissions and its leadership. Of special importance is information about members, past and present, and their representational duties and activities. Also in this category is an explanation of how parliament works. Although much of this information is static, it is essential for communicating to the public the role of the legislature and its place in society.

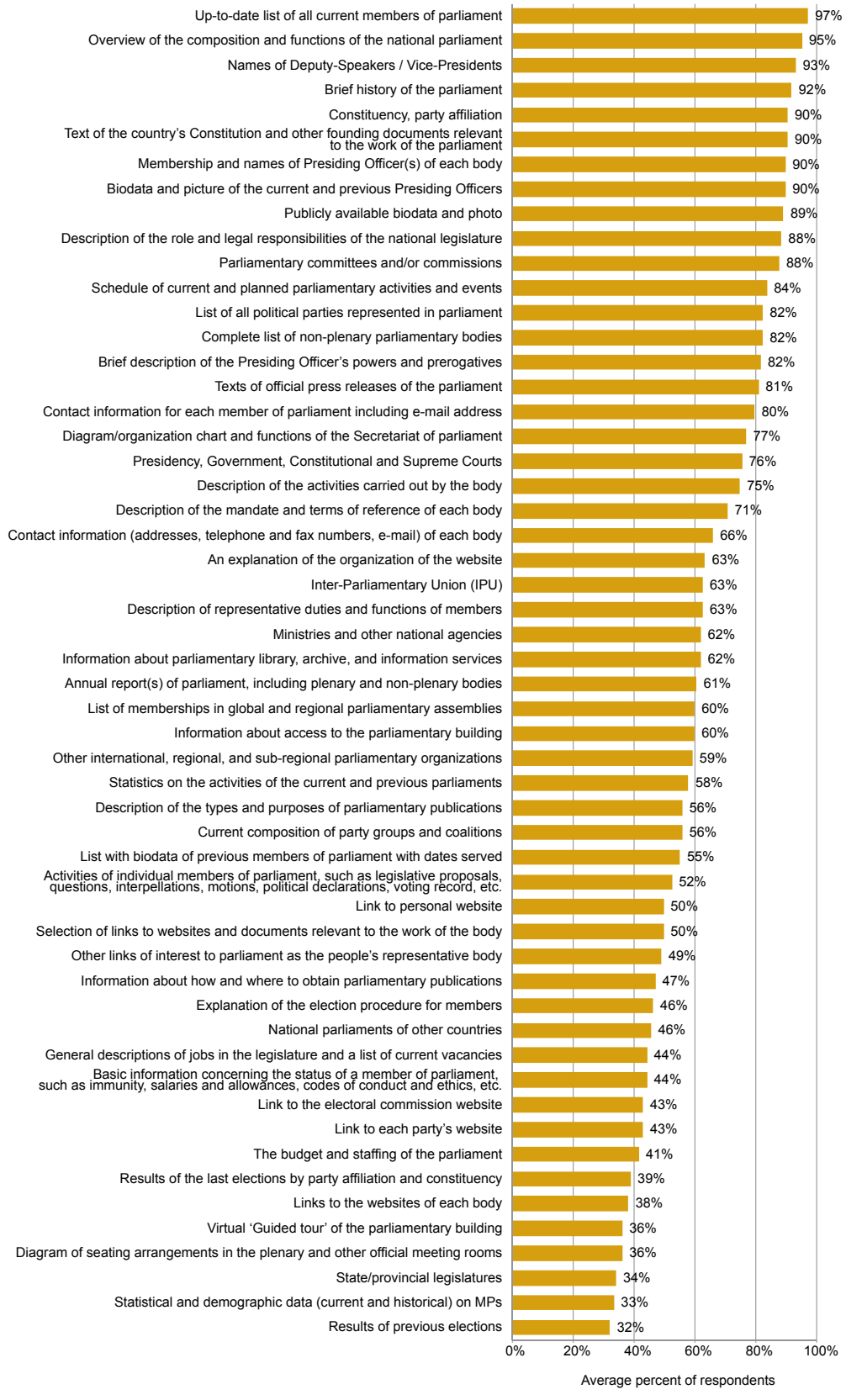
Both the 2012 and 2009 surveys focused on the following areas, with the numbers in parentheses indicating the number of items listed under each:

- Access to the parliament (4)
- History and role (3)
- Functions, compositions, and activities (7)
- Elected leaders (3)
- Committees, commissions, and other non-plenary bodies (7)
- Members of parliament (11)
- Political parties in parliament (2)
- Elections and the electoral process (5)
- Administration of parliament (2)
- Publications, documents, and information services (3)
- General links to websites (7)

These 11 categories included a total of 54 individual items. Results for each of these items are shown in Figure 3.4. For 2012 approximately 70 per cent of the items were reported by one half or more of all respondents to be on their websites; the figures for 2009 were basically the same. The average percentage of parliaments having any given item in both 2012 and 2009 is 64 per cent[7].

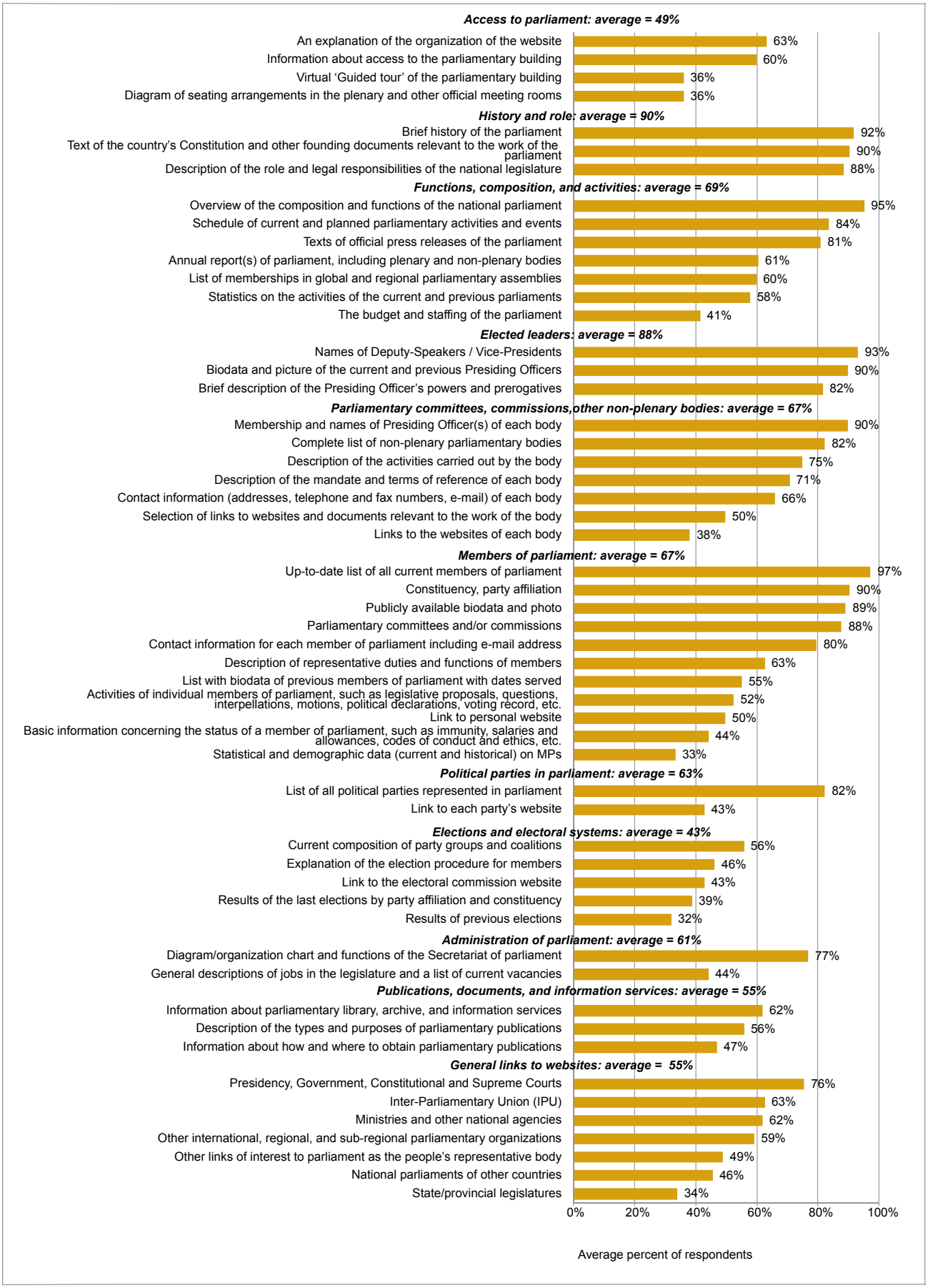
7 Source: Survey 2009, Section 5, Question 4.

Figure 3.4: General information about parliament on the website, sorted by percentage



(Source: Survey 2012, Section 5, Question 4; 147 respondents)

Figure 3.5: General information about parliament on the website, sorted by category



(Source: Survey 2012, Section 5, Question 4; 147 respondents)

Figure 3.5 groups each of the items of general information under its category; the category title shows the average of percentages of parliaments having each of the items in that category. Again, these percentages are approximately the same for both 2009 and 2012.

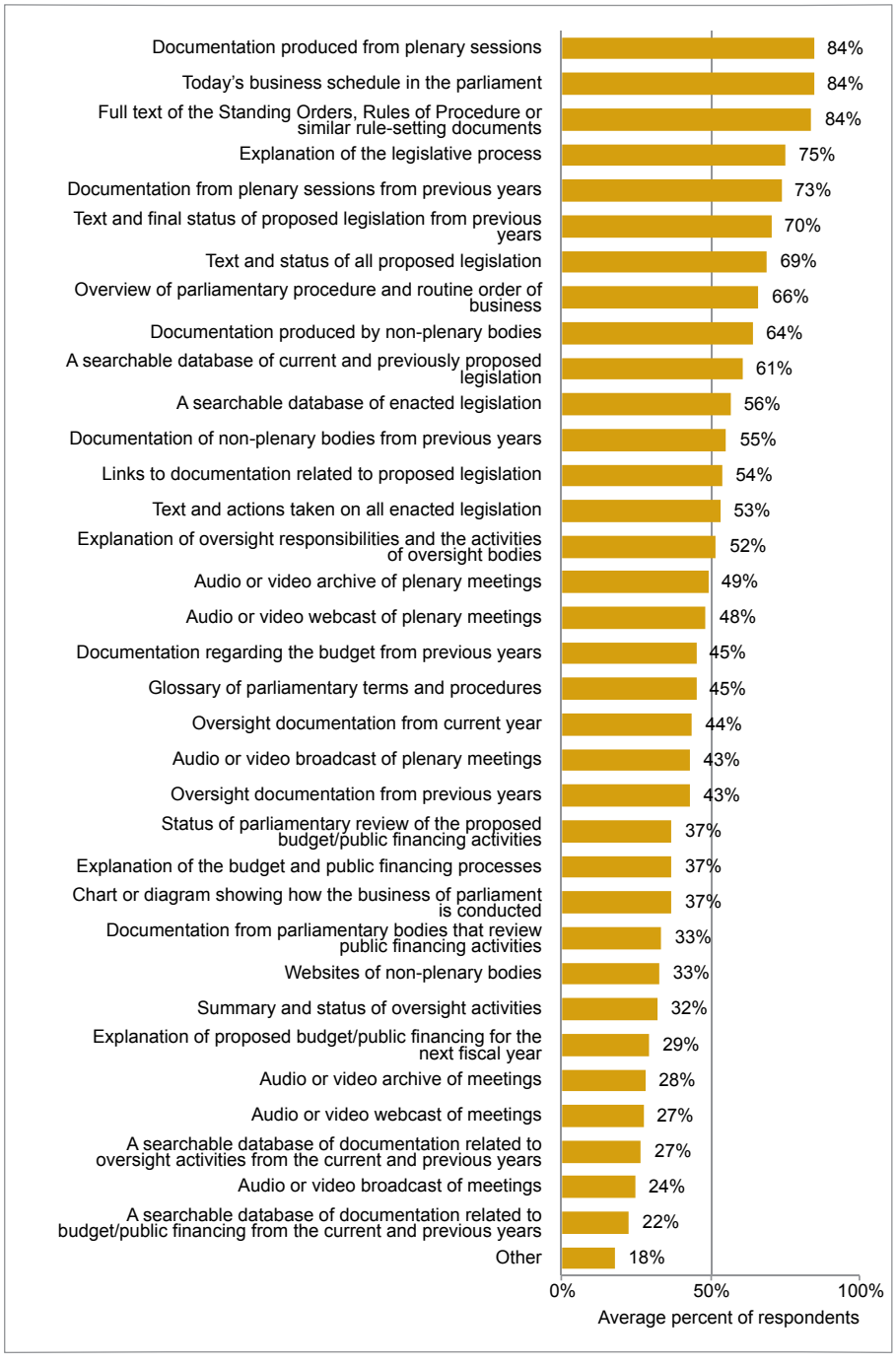
Legislation, budget, and oversight (scrutiny)

Legislative, oversight and budget responsibilities are the core of the work of a parliament. A legislature becomes transparent to citizens as its documents and related information sources in these critical areas are made available on the website. Because the nature and extent of these responsibilities vary among legislatures, however, the survey included questions about all three areas, but with the understanding that they may not be equally applicable to all parliaments.

In addition, because policy work takes place in their plenary sessions in nearly all parliaments and in their committees/commissions in many parliaments, the survey included questions about the documents and information available from these bodies. In this way, the survey was able to examine the transparency of the work of the parliament from the point of view both of its functions (law-making, oversight, etc.) and organization (plenary, committees, etc.). Finally, the survey asked a number of general questions that pertained to all facets of work and to all bodies, for example, *Today's business schedule* and *Glossary of parliamentary terms and procedures.*

These six categories (legislation, oversight, budget, committees, plenary, and general information) included a total of 34 individual items. The results for all 34 items are shown in Figure 3.6.

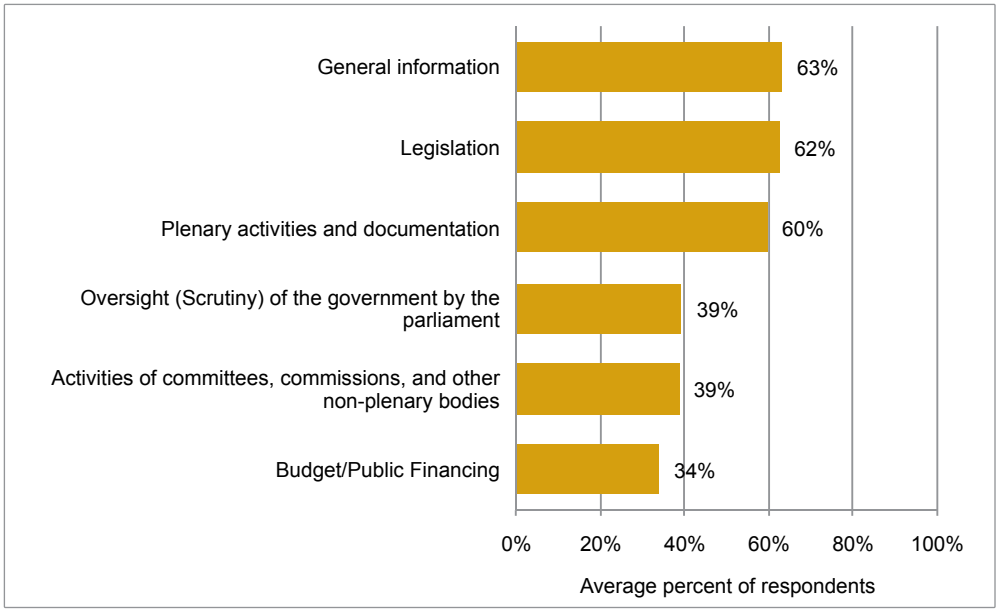
Figure 3.6: Information about legislation, budget, and oversight activities on the website of the parliament, by percentage



(Source: Survey 2012, Section 5, Question 5; 147 respondents)

Figure 3.7 shows the results by category. The overall findings suggest a small degree of improvement for many of the individual items; the average percentage of parliaments having any given item is 49 per cent for all respondents in 2012, while it was 46 per cent for all respondents in 2009[8]. The average percentage for each category also went up (see Figure 3.8.). The data suggest that many parliaments are now doing a better job of providing more information and documents in these key areas. While the gains may be less than hoped for, they are nevertheless significant.

Figure 3.7: Average percentage of parliaments having the items in each of the categories of legislation, budget, and oversight



(Source: Survey 2012, Section 5, Question 5; 147 respondents)

Figure 3.8: Average percentage of parliaments having the items in each of the categories of legislation, budget, and oversight by year

Information Category	2012	2009
General information	63%	61%
Legislation	62%	58%
Plenary activities and documentation	60%	56%
Oversight (Scrutiny) of the government	39%	33%
Activities of committees, other non-plenary	39%	36%
Budget/Public Financing	34%	32%

(Sources: Survey 2012, Section 5, Question 5; Survey 2009, Section 5, Question 5; *World e-Parliament Report* 2010, p. 58, Figure 3.4)

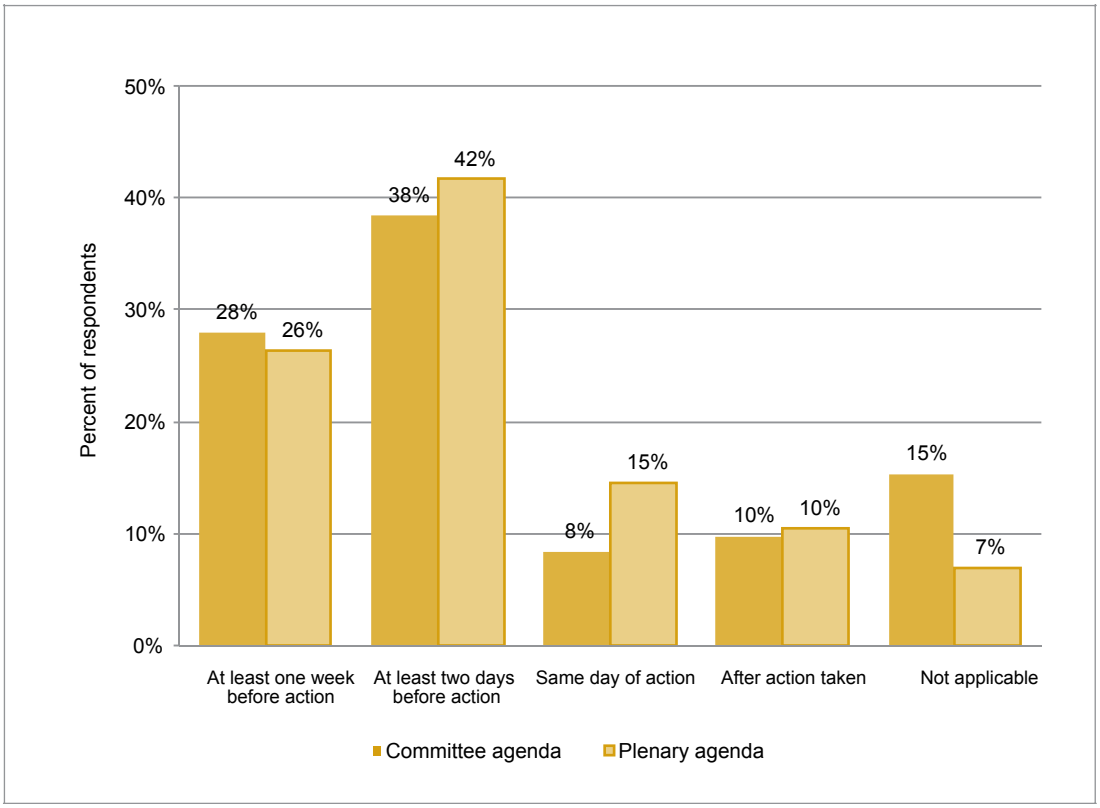
While the presence of more legislative, oversight, and budget documents on websites is important, several of their characteristics also affect their value and are an additional indication of transparency and openness. These include timeliness, completeness, and clarity.

8 See *World e-Parliament Report 2010*, p. 56.

Timeliness

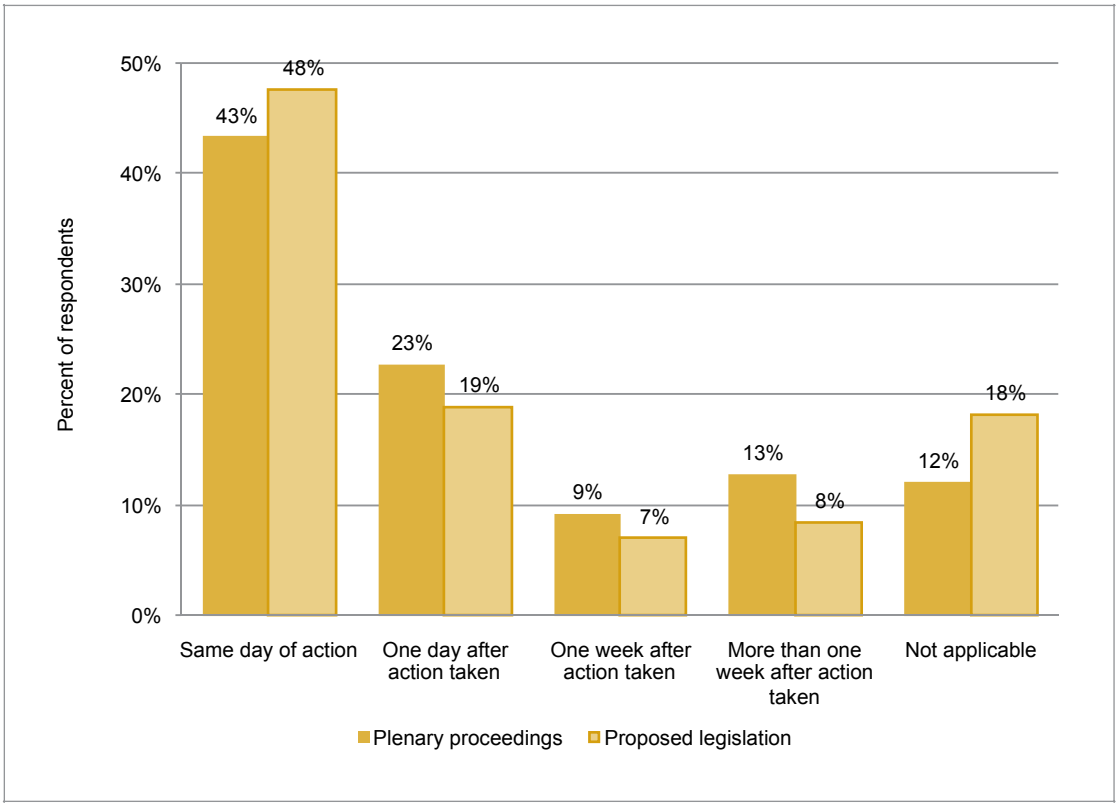
Timeliness refers to how soon a document can be seen on the website. If a document is available to citizens relatively quickly, for example within 24 hours after its preparation, this is an indication of greater openness of the parliament; if they are available only after a considerable time has elapsed, especially if they are available to members well before the public, then openness declines. The survey asked about the availability of four types of documents: plenary and committee agendas, proposed legislation, and records of plenary proceedings. The results for all respondents in 2012 are shown in figures 3.9 and 3.10.

Figure 3.9: Timeliness of plenary and committee agendas on the website of the parliament



(Source: Survey 2012, Section 5, Question 7a; Committee=143 respondents, Plenary=144 respondents)

Figure 3.10: Timeliness of bills and plenary proceedings on the website of the parliament



(Source: Survey 2012, Section 5, Question 7b; Plenary proceedings = 141 respondents, Proposed legislation =143 respondents)

Comparison of these results with those from all respondents to the 2009 survey and the results of the 2009:2012 comparison group suggest a mixed picture. The summary below combines the findings shown in Figures 3.9 and 3.10 with those published in the 2010 Report and also it presents the findings from the comparison group.

Plenary agenda available at least two days or earlier before meeting[9]:

- All respondents to surveys: 2012=68 per cent; 2009=71 per cent
- Comparison group: 2012=69 per cent; 2009=71 per cent

Plenary proceedings published same day or within one day of meeting:

- All respondents to surveys: 2012=66 per cent; 2009=76 per cent
- Comparison group: 2012=70 per cent; 2009=69 per cent

Committee agenda available at least 2 days or earlier before meeting[10]:

- All respondents to surveys: 2012=66 per cent; 2009=77 per cent
- Comparison group: 2012=71 per cent; 2009=67 per cent

9 This percentage combines those who said *at least one week before action* (26 per cent) with those who said *at least two days before action* (42 per cent).

10 This percentage combines those who said *at least one week before action* (28 per cent) with those who said *at least two days before action* (38 per cent).

Proposed legislation available same day or within 1 day of action:

- All respondents to surveys: 2012=67 per cent; 2009=76 per cent
- Comparison group: 2012=69 per cent; 2009=69 per cent

As can be seen from this summary, the results from *all respondents to the surveys* suggest a decline in timeliness for all documents. However the results from the *2009:2012 comparison group* suggest that this is not the case when looking at only those who responded to both surveys. The answer to the question of whether plenary agendas and proceedings, committee agendas, and proposed legislation are becoming less available on a timely basis is therefore somewhat unclear. It is important to note, however, that in the worst cases, at least two thirds of all parliaments meet the implied standard of timeliness for these documents, i.e., at least two day or sooner for agendas and same next or next day for bills and reports of plenary proceedings.

In light of these findings, it is also useful to note that when asked if parliamentary documentation was available to the public as soon as it is available to members and officials, 81 per cent responded *always* or *most of the time* in 2012, while 72 per cent gave the same answers in 2009. If there has been an actual decline in timeliness, it would appear to be affecting both members and the public[11].

Completeness

Proposed legislation on a website cannot be considered to be complete based solely on the availability of its text. To understand the status and the meaning of a bill, members and citizens need: the associated reports prepared by committees, subject experts, and others; descriptions of all the actions taken on the legislation; the amendments proposed and their status; links to parliamentary debate and votes on the bill, and other related material. Proposed legislation is the type of document that benefits from the capacity of the web to link related documents to each other on a timely basis. Achieving completeness requires understanding the scope and importance of this requirement and providing the means to address it. The absence of completeness in documentation translates into a lower level of transparency.

Figure 3.11 shows the percentage of all parliaments responding to the surveys in 2007, 2009 or 2012 that reported a link between proposed legislation and 18 related documents and items of information. *None* - i.e. nothing was linked - was also a possible response. The figure is sorted by the percentages for 2012.

Percentages for 10 of the 18 items were highest in 2012; percentages for 7 of the 18 were highest in 2009; one item was the same for both years. It is important to note that percentages in both 2009 and 2012 exceeded those in 2007. Also significant are: 1) the average of the percentages for all items went up in each survey – as shown in the last row in figure 3.11; and, 2) the percentage of parliaments that said that no items were linked has declined by 50 per cent since 2007 (2007=28 per cent; 2012 =14 per cent). On balance it is reasonable to conclude that there has been some progress in this area.

11 Sources: Survey 2012, Section 5, Question 14, 142 respondents; Survey 2009, Section 5, Question 16, 130 respondents.

Figure 3.11: Percentage of parliaments that have various items linked to proposed legislation, by year

Items linked to proposed legislation	2012	2009	2007
Laws/statutes	63%	56%	58%
Plenary speeches and debate (*plenary debate* in 2007)	62%	64%	61%
Committee reports	61%	57%	54%
Plenary actions	50%	56%	46%
Plenary votes	46%	53%	49%
Committee actions	46%	49%	29%
Amendments (Plenary)	43%	45%	42%
Amendments (Committee)	36%	43%	39%
Explanations of bills	35%	33%	34%
News stories	32%	28%	30%
All committee and plenary actions of other chamber*	28%	16%	16%
All committee and plenary documents of other chamber*	28%	16%	14%
Committee hearings	27%	29%	30%
Government positions or statements	23%	20%	20%
Explanations of actions	21%	14%	17%
Committee votes	20%	20%	17%
Impact assessment of bills	20%	17%	12%
Budget assessment of bills	20%	12%	13%
None of the above (*no response* in 2007)	14%	21%	28%
Average	**36%**	**34%**	**32%**

* For bicameral parliaments only

(Source: Survey 2012, Section 5, Question 6, 147 respondents; Survey 2009, Section 5, Question 6, 130 respondents; Survey 2007, Section 7, Question 8, 99 respondents. Table sorted by 2012 percentage)

An additional criterion for completeness pertains to bicameral legislatures. Over 70 per cent of assemblies in bicameral legislatures that responded to the survey reported that each chamber has its own website[12]. The survey asked several questions about coordination and linkage between these websites. It remains a particular concern, in the context of completeness, that when action by both chambers is required, only 42 per cent reported that their websites include the actions of the other chamber. Results in 2009 were similar[13].

Clarity

Because proposed legislation often deals with current statutes and, if passed, must be incorporated into the existing body of law, it is usually drafted in legal language that can be difficult to understand. A number of parliaments have begun to recognize the importance of providing explanations of bills and legislative actions in language understandable to citizens.

Related to the need for language that is more easily understood is the need to provide documents that explain the possible impact of proposed legislation. Predicting the effect of a bill can involve a great many uncertainties and preparing valid impact assessments can be very difficult. Nevertheless, such efforts can at least provide a description of some of the *possible* ways in which the proposed legislation may affect the country, and they can serve as a factual basis

12 Source: Survey 2012, Section 5, Question 17, 84 respondents.
13 See *World e-Parliament Report 2010*, p. 62, Figure 3.9.

for judging some of the more extreme claims of a bill's advocates and opponents. A number of parliaments have successfully used the work of experts to better understand and assess the impact of proposed budgetary measures[14].

In addition to the challenge of understanding legislative texts, there is the challenge of understanding legislative procedures. Standing orders and the rules of procedure can seem obscure and arcane to many citizens and in some cases even to new members joining the parliament. They have often evolved over a long time and their purposes can be difficult to grasp. Moreover, the complexity of legislative procedures can be an impediment to the transparency of parliaments.

Providing information to make legislation and legislative procedures more understandable is a need that many parliaments still do not recognize. Also, some do not feel it is the responsibility of the parliament to provide anything more than the actual texts, leaving it to others, such as civil society organizations, to offer explanations and interpretations. Nevertheless, this is a concern, especially in light of the finding reported in Chapter 2 that citizens' lack of familiarity with the legislative process is the challenge cited by most parliaments (56 per cent) when trying to use technology to improve communication.

Results from 2012 indicate there has been only modest improvement in this area. When asked if explanatory material is provided on the website to make the text of legislation and procedural steps understandable, 38 per cent of parliaments replied *always* or *most of the time*. In 2009 36 per cent gave the same answers. However, on a positive note, the percentage who replied *rarely* or *never* declined to 38 per cent in 2012 from 48 per cent in 2009[15].

The results were similar for the question that asked if there was material on the website that explained the context or assessed the possible impact of proposed legislation. In 2012 27 per cent replied *always* or *most of the time*; in 2009 26 per cent gave the same response. And again the percentage of those who said *rarely* or *never* declined, although by a somewhat smaller amount, from 61 per cent to 56 per cent[16].

Tools available to users

As the documents and information available on parliamentary websites continue to grow and become more complex, software tools that enable both members and citizens to find and display that content easily becomes increasingly important. Providing different types of tools has also become necessary because of the advances in technology allowing the use of a variety of devices to access websites from various locations.

Search engines that can serve the needs of both members and citizens, at both the beginning and advanced levels, have become essential. Methods for providing audio and video webcasting, and the archives required for on-demand access, have become increasingly important, as noted in Chapter 2. Alerting services and especially mobile technologies have also become valuable tools. Many of these new and highly useful means of access, however, require adequate security and the means for authentication. The availability and the capabilities of these tools have a direct effect on the accessibility of the parliament to citizens. Results from the 2012 survey suggest that there has been some improvement in the number of parliaments that are offering a broader array of such instruments.

14 See for example the U.S. Congressional Budget Office (www.cbo.gov).
15 Source: Survey 2012, Section 5, Question 15; *World e-Parliament Report 2010*, p. 62.
16 Source: Survey 2012, Section 5, Question 16; *World e-Parliament Report 2010*, p. 63, Figure 3.10.

Search engines

From 2009 to 2012 there was an increase in the percentage of parliaments that reported to have *a search engine that can be used to find and view all parliamentary documentation and information* (see Figure 3.12, row 1). However, there was little improvement in the other features of these search engines (see rows 2, 3, and 5). There was, however, a significant increase in the percentage of parliaments that have a search engine that can link results with relevant audio and video records (see row 14). Although this is consistent with the findings reported in Chapter 2 regarding the use of video for communication with citizens, it involved relatively few parliaments (2012=18 per cent; 2009=12 per cent).

Figure 3.12: Tools for finding and viewing information on websites of parliaments, by year

Tool	2012	2009
1. A search engine that can be used to find and view all parliamentary documentation and information	75%	68%
2. A search engine that searches for major elements, such as words in the text, status of legislation, and other components that may be required	63%	60%
3. A search engine that is designed to be understandable to both novice and expert users	53%	52%
4. Capacity to broadcast or webcast live meetings of any parliamentary body as well as parliamentary events and programs	53%	47%
5. A search engine that sorts results by various criteria	41%	45%
6. An archive of broadcast or webcast meetings, events, and programs that permits on-demand viewing	41%	32%
7. Secure services that enable MPs to receive, view, and exchange information and documentation on a confidential basis	39%	25%
8. Mobile services that enable members to access information and documentation as they are made available on the website	34%	19%
9. Alerting services for committee activities	32%	36%
10. Alerting services for plenary activities	31%	35%
11. Mobile services that enable the public to access information and documentation as they are made available on the website	23%	12%
12. Alerting services for introduction of, and changes to, the status of legislation	22%	22%
13. Alerting services for members' activities	19%	22%
14. A search engine that links the results from searches of documentation to relevant audio and video records	18%	12%
15. Alerting services for oversight and scrutiny activities	16%	15%
16. Alerting services for changes to the text of legislation	14%	16%
17. Authentication services, such as digital signatures that enable the authenticity of documentation and information to be verified by any user of the website	10%	9%

(Sources: Survey 2012, Section 5, Question 8, 147 respondents; Survey 2009, Section 5, Question 8, 130 respondents, *World e-Parliament Report 2010*, p. 64, Figure 3.11. Table sorted by 2012 percentage)

Webcasting and broadcasting

The growth in the percentage of parliaments reporting that the website had *the capacity to broadcast or webcast live meetings of any parliamentary body as well as parliamentary events and programs* as shown in row 4 of Figure 3.10 is also consistent with the findings indicated in Chapter 2. And it is positive that the number of those that now maintain an archive of video records that supports on-demand viewing increased significantly (row 6 of Figure 3.10) from 32 per cent in 2009 to 41 per cent in 2012.

Alerting services

An analysis that combined the various types of alerting services shown in Figure 3.12 revealed that approximately 44 per cent of parliaments offer some version of this service, a percentage similar to that of 2009 (47 per cent)[17]. As suggested in the 2010 Report it appears that almost twice as many parliaments offer this service to members compared to citizens. However, the percentage of parliaments that reported that they were *planning* or *considering* to implement this service for citizens increased significantly in 2012 (2012=42 per cent; 2009=27 per cent)[18]. This might be due to parliaments' and/or citizens' increased interest in mobile technologies.

Mobile services

Mobile services that allow access to a parliament's website are up significantly for both members (2012=34 per cent; 2009=19 per cent, Figure 3.12, row 8) and the public (2012=23 per cent; 2009=12 per cent, Figure 3.12, row 11). This is consistent with other findings that underscore the growth in use of mobile technology by parliaments. See, for example, Chapter 2, section entitled *Mobile devices and mobile applications* and Chapter 4, section entitled *General Services*, especially the subsection *Tablets and smart phones*.

Security and authentication

Secure services, particularly those that enable members of parliament to receive, view, and exchange information and documentation on a confidential basis, are in use by more parliaments (2012=39 per cent; 2009=25 per cent, row 7, Figure 3.12). Given the growing expectation among members that they should be able to work remotely and yet on a confidential basis, this is a positive sign. Authentication services, however, such as digital signatures that enable the authenticity of documentation and information to be verified by any user of the website, still need attention from more than the 10 per cent of parliaments that currently employ them (row 17, Figure 3.12).

Documents downloadable in bulk

An issue of continuing interest to many individuals and parliamentary monitoring organizations is whether parliaments make their documents available not only on the web, but also in downloadable formats that can be incorporated into systems developed by others. When this occurs, groups within civil society are able to create systems that offer views of parliamentary actions that are not normally available on the official websites of the legislative body. The practice of offering open data is occurring increasingly as part of e-government programs, and is one of the purposes of the international initiative known as the Open Government Partnership[19]. This initiative has remained static among parliaments since the 2009 survey. In that year 44 per cent of parliaments reported that were providing this service and 30 per cent reported that they were planning or considering doing it[20]. In 2012 the percentages were almost the same – 44 per cent providing the service and 35 per cent planning or considering it[21].

17 See *World e-Parliament Report 2010*, p. 64.
18 Source: For 2012 and 2009 see Figure 2.4 in this Report.
19 See http://www.opengovpartnership.org/.
20 See *World e-Parliament Report 2010*, p. 65.
21 Source: Survey 2012, Section 3, Question 8.

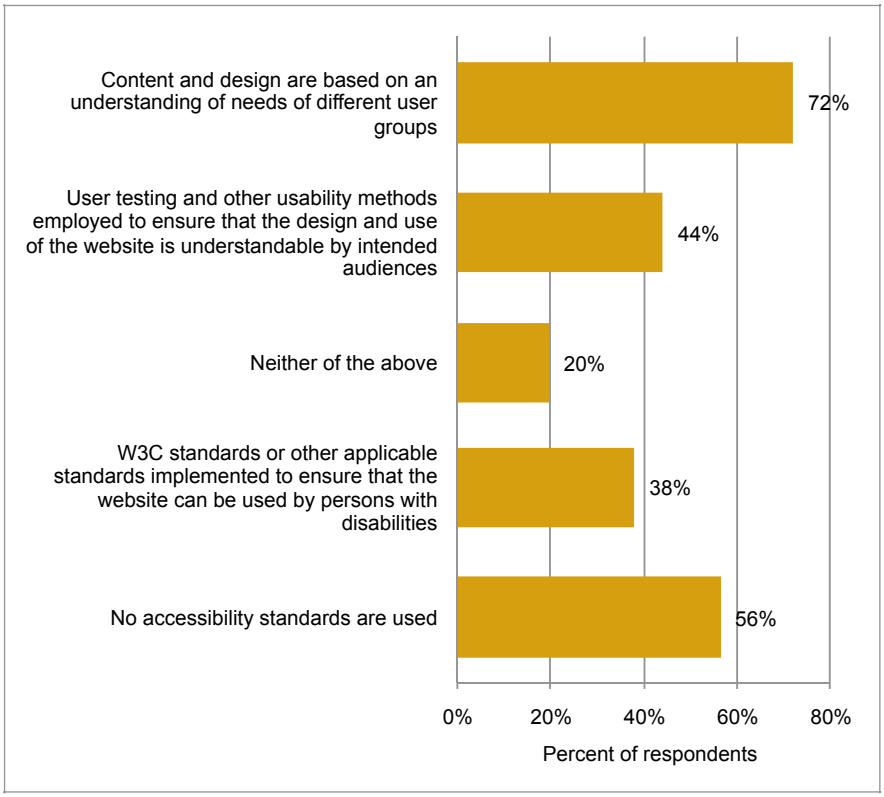
Usability and accessibility of the site

Just as with parliamentary documents, the tools for finding and viewing the information on websites must be understandable to citizens. The ability to use these tools depends on a number of design techniques and standards. These include methods that have been identified through various usability studies for making a website intuitively easier to navigate and accessibility standards that ensure persons with disabilities are able to use them. They also include recommendations contained in the *Guidelines for Parliamentary Websites* for responding to the challenge of multiple languages within a country.

Usability techniques and accessibility standards

As shown in Figure 3.13, the percentage of parliaments that based content and design on an understanding of the needs of different user groups remains high in 2012 (2012=72 per cent; 2009=73 per cent)[22]. User testing and the employment of usability methods increased from 38 per cent in 2009[23] to 44 per cent in 2012 (Figure 3.13).

Figure 3.13: Tools and guidelines for the design of websites



(Source: Survey 2012, Section 5, Question 9; 147 respondents)

Unfortunately the increase in usability techniques was not accompanied by an increase in the implementation of standards to ensure that the parliamentary website could be used by persons with disabilities. In fact, there was a decline in the percentage of parliaments reporting the use of such standards from 45 per cent in 2009[24] to 38 per cent in 2012 (see Figure 3.13). This is a disappointing finding, especially because there appeared to have been some improvement between the 2007 and 2009 surveys[25].

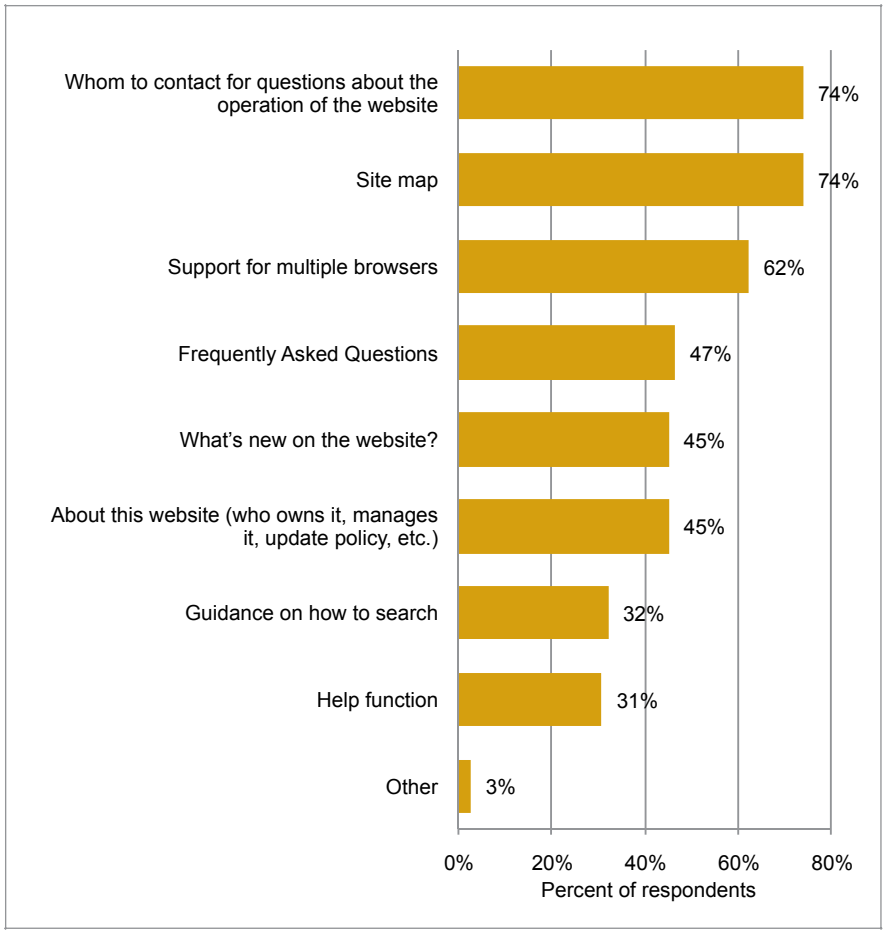
Design elements

Although efforts to improve usability were somewhat up on the basis of the findings cited in the previous section, there is no improvement in the use of specific design elements and there are, in fact, some declines. For example the percentage of parliaments providing information about who to contact for questions regarding the website declined from 82 per cent in 2009[26]

22 See *World e-Parliament Report 2010*, p. 65.
23 *Ibid.*
24 See *World e-Parliament Report 2010*, p. 66.
25 *Ibid.*
26 *Ibid*, Figure 3.12.

to 74 per cent in 2012 (see Figure 3.14). Similarly, information about the website (who owns it, manages it, updates policy, etc.) declined from over half (55 per cent) in 2009[27] to less than half (45 per cent) in 2012.

Figure 3.14: Design elements available to users



(Source: Survey 2012, Section 5, Question 12; 146 respondents)

Languages

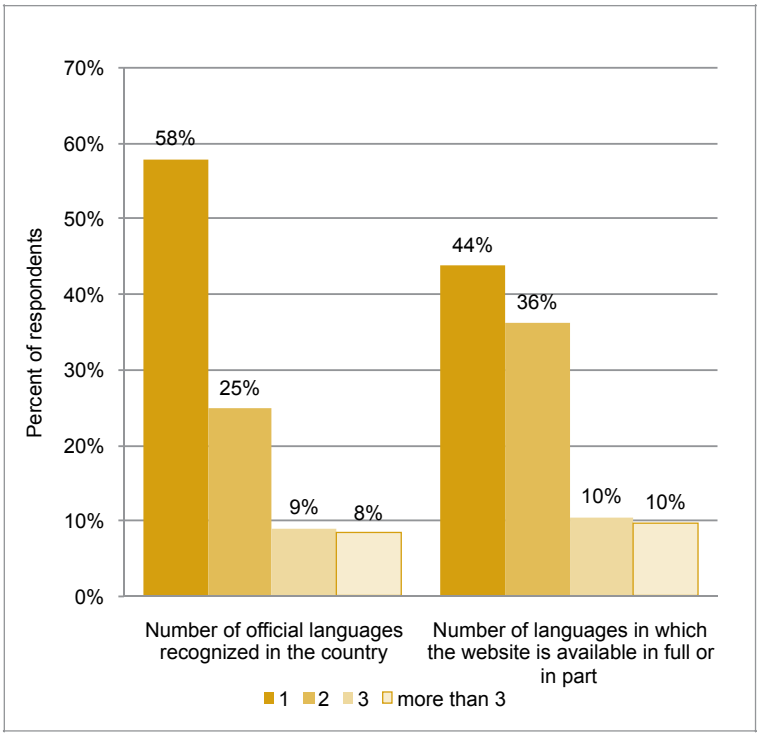
As noted in the *World e-Parliament Report 2010*, parliaments of countries with multiple official languages face one of the major hurdles of the digital divide. The percentages of parliaments having single or multiple languages remains approximately the same in both the 2012 survey and the 2009 survey[28]. In 2012 almost 60 per cent reported having just one official language, 25 per cent have two, and the remaining have three or more, as shown in Figure 3.15. This figure also shows the percentage of parliaments that make the website available in more than one language.

However, Figure 3.15 may understate the complexity of the challenge. Figure 3.16 groups parliaments by the number of their official languages and then shows the number of languages in which the website is available in full or in part. It is worth noting that one third of the parliaments

27 *Ibid*, Figure 3.12.
28 See *World e-Parliament Report 2010*, pp. 66-67.

that have *only one official language* make their website available in full or in part in *more than one* language. This finding suggests that even among parliaments of countries with one official language, many are attempting to address the needs of a multi-lingual citizenry.

Figure 3.15: Number of official languages and number of languages in which the website is available



(Source: Survey 2012, Section 5, Questions 10 and 11; Official languages = 145 respondents, Languages of the website = 144 respondents)

Figure 3.16: Number of official languages and number of languages in which the website is available, a cross analyses

Number of official languages recognized in the country	Number of languages in which the website is available in full or in part									
	1		2		3		more than 3		Total	
1	42	67%	14	22%	3	5%	4	6%	63	100%
2	28	54%	14	27%	6	12%	4	8%	52	100%
3	9	60%	3	20%	3	20%	0	0%	15	100%
more than 3	4	29%	4	29%	1	7%	4	29%	14	100%

(Source: Survey 2012, Section 5, Question 10 and 11; Official languages=145 respondents, Languages of the website=144 respondents)

Intranets for members and staff only

Parliamentary websites are important tools for members, committees, and staff. They are often the fastest and most reliable vehicle for obtaining copies of draft bills, receiving agendas, getting summaries of committee actions and the text of committee documents, and learning what members have said and how they have voted. They have become essential for enabling the parliamentary leadership and members to carry out their legislative and oversight work.

Many parliaments now maintain websites on intranets for members and staff only (57 per cent in 2012)[29] and there is a growing interest in these systems as evidenced by the 33 per cent of parliaments that reported they *were planning* or *considering them*. These intranet sites are also growing in terms of content. Although they started from a low level, it is especially interesting to see increases in explanations of bills, explanations of actions, impact assessments, and budget assessments between 2012 and 2009 (see Figure 3.17). It is also interesting to see the growth in the percentage of parliaments providing draft documents, research reports, tools for work groups, and committee activities, all of which started at higher levels.

Figure 3.17: Information and services available to members and staff in intranets

Information/Services	2012	2009
Draft documents	48%	41%
Research reports	47%	39%
Tools for work groups	44%	34%
Committee activities	39%	24%
Draft bills sooner	29%	26%
News stories	29%	37%
Explanations of bills	25%	9%
Voting records	205	12%
Explanations of actions	19%	7%
Impact assessments	14%	7%
Government positions/statements	14%	9%
Budget assessments of bills	13%	6%
None of above	8%	21%

(Sources: Survey 2012, Section 5, Question 21, 85 respondents; *World e-Parliament Report 2010*, p. 67, Figure 3.13)

MOST IMPORTANT IMPROVEMENTS

The following sections contain selected and slightly edited responses to the questions:

- What were the most important improvements made to the website in the last two years?
- What are the most important improvements to the website planned for the next two years?

The wide range of answers well describes the different challenges faced by parliaments and their level of website developments, trends and goals. It is worth noting the many references to the compliance with the *Guidelines for Parliamentary Websites* released by the Inter-Parliamentary Union (IPU) in 2009.

Last two years

- Webcasting and archives, video in the "News" section, committee meetings minutes and publications;
- Committee schedule and order of the day;
- The inclusion of lots of old documents which can be important source of information for the members;
- Open data, webcasting plenary and committee sessions live, new e-democracy website;

29 Source: Survey 2012, Section 5, Question 20.

- Increase the interoperability with the citizens, easier access to the information, new design with the queries used the most now on the first page;
- Used better graphic design; improved web page design; completed 85 per cent of National Assembly website contents for Internet and Intranet following the proposed Guidelines of the Inter-Parliamentary Union (IPU);
- Updated from static to dynamic website;
- Change of design, more intuitive structure. More news and information by chairman and committee activities;
- Webcasts and audio and video archives from plenary sessions, plenary minutes in XML format;
- Video on demand and new English website;
- Extension of the webcasting, mobile version, youth site, blogs;
- Setting up a video portal; setting up a version for tablets and mobile phones;
- Media library, live streaming on two channels, smart phone apps;
- The implementation of an app for mobile devices which offers an overview of most important content of the website;
- In June 2010, the redesign of the parliament's website was completed, including improvements according to the IPU *Guidelines for Parliamentary Websites*;
- Complete searchable repository of Parliamentary Debates, Accessibility features;
- A new file management system; Revamped section of press releases; Open data sources; Synchronized protocols (text and video);
- Improved web TV area; new open source search engine; standardized and improved committee websites; new open source digital archive system; new RSS feeds for each printed act; access to documentation in eBook format through tablet optimized service;
- Improved on the Budget analysis and the research papers on the bill process and most of the committee reports;
- New section "Easy to read" was created;
- In 2012 we are working on reshaping the website according to IPU Guidelines;
- Podcasting;
- A review of the website was conducted and recommended that the website be redesigned with strict conformity to the IPU Guidelines for content and structure of parliamentary websites. The contract to redesign the website was awarded in February 2012;
- No improvements were made except a review to determine extent to which it aligns with the IPU Guidelines;
- Establishing an online archive for videos of plenary sessions;
- An education page for pupils;
- New design, broadcast & webcast for committees;
- Dematerialization of the "Youth Parliament" section; development of thematic sites in order to promote specific events held in the Parliament; inclusion of the website "Youth Space", a page mainly dedicated to young people, as a citizenship project;
- Improvement in accessibility to the website for the visually-impaired persons;
- New version of web-site published and the new one finally has content up to date;
- We are gradually implementing webcasting of committee meetings (currently 6 standing committees);

- The website was recently developed and we are in the stage of fine-tuning it with the aid of the IPU guidelines. Currently we are working on including more information and links to publications and getting the documents uploaded and categorized in a timely manner;
- New professional design according to the IPU Guidelines;
- Totally new design launched in 2012. Closer connection between documents and video, improved search engine, all documents tied together to be able to visualize the decision chain and to explain the decision-making process;
- All minutes of parliaments are searchable from 1908 up to now, e-legislation process on website;
- We are in the process of designing a new website that will follow the IPU Guidelines.

Next two years

- Transparency of committee activity; webcasting; improvement of site search;
- Live Streaming, video on demand;
- Live broadcast or webcast of Parliament debates in plenary hall and committees;
- To make the web more interactive, such as an online forum which can engage members to answer questions from public;
- Multimedia bills project - information integration for bills with: news, audio, video, e-democracy website communities and related lexml website documents;
- Improving citizens' participation with the new portal "e-citizenry", where the citizens will be able to make proposals, projects, etc.;
- Train more ICT staff in web design and development, create a mechanism to evaluate the website quality, use the IPU Guideline to further improve the website quality and attract the users;
- Over the next two years, the House, the Senate and the Library will continue to collaborate on the planning and development phases toward launching a portal for information about members of parliament;
- Provision of videos of public meetings on demand;
- Moving images; continue mobile applications;
- A complete re-launch of the website and the implementation of a live stream of the plenary sessions and a video archive;
- Webcasting, bill tracking;
- Social media integration, metadata and annotations for multimedia content, improved documentation for legislative works especially for amendments, automatic updating of the web site content from the internal Integrated Informatics System;
- Fully upgrade to meet IPU Guidelines;
- Redesigning of the present website to be more user friendly W3C compliant;
- Video archives of House;
- More links to the members' pages regarding their parliamentary work; More links between parliamentary procedures and their related documents; Improved individual web sites for each committee; New and improved look and user experience design;
- Open data (XML tagging), Open linked data (semantic web);

- Further improvement of access to documentation in digital format and to multimedia contents (e.g. streaming of Committee sittings); alerting services (RSS);
- To improve quality of the Web contents and to provide Website which can be viewed more easily; innovation with a view to achieve better Web accessibility;
- To comply with the revised country's Industrial Standards on Web accessibility;
- We intend to include Webcast/Audio and Video streaming through the website;
- Audio version of the "Easy to read" section;
- Reshaping the website layout allowing easier access to information;
- The website is being re-designed to fully comply with IPU Guidelines;
- To have a better search engine;
- Introduction of video streaming and a more user friendly search engine;
- Mobile technology support;
- Complete modernization of web site;
- A complete overhaul that will allow for greater search capabilities, linking data and cater for a more younger audience;
- Completely new website in summer 2012. Via an API parliamentary documents and information on the parliamentary process will become public on the website. Also new look-and-feel, including social media buttons;
- Overhauling website to meet international standards;
- Presentation of votes + statistical information, official post journal;
- The website will be completely revamped to focus on public participation. The website will become the portal for all users, internal and external, to find the information needed and collaborate with the appropriate stakeholders. It will also be tightly integrated with social media sites like Facebook and Twitter;
- Public discussion on amendments using social tools (discussion list open for public);
- To provide mobile services;
- Development of a portal for customized access to the website of the Chamber of Deputies; use of social networking sites for communicating with citizens; fast identification of a citizen's representative in the Chamber of Deputies (based on automatic mapping);
- Online forum and radio of parliament on the Internet;
- The next two years should see the emergence of a database, as well as an archive category for parliamentary documents and recordings of plenary sittings. We are also hoping to include more information regarding committee sessions as well as a feedback from the public on proposed legislation;
- Complete the IPU Guidelines requirements;
- Improvement of the new web site. Web-TV in iPhones and iPads and continued development for web TV; search function and search interface will be developed and improved; the documents need to be more readable in html. Supplying a subject entrance to provide users to take advantage of all parliamentary questions by topic;
- Increasing amount of information, dynamic website, more bandwidth required for website, add more features such as web streaming, audio streaming, etc.;
- Improved segmentation by customer group, improved platform distribution.

PART 2

BUILDING THE FOUNDATION OF E-PARLIAMENT

Chapter 4
Technology Services for Members

INTRODUCTION

Technology serves many goals. It can make business operations more efficient and it can help to inform and engage the public. But its first priority must be to support the work of members as they carry out their responsibilities for representing citizens, overseeing the government, and scrutinizing legislation. In smaller parliaments, where members do not have assigned staff or assistants, technology is vital for enabling them to communicate, receive and review documents, draft speeches and statements, and interact with citizens. In larger parliaments that have more staff and more resources technology is still essential for ensuring the efficiency of parliamentary work so that members can deal with the broad array of issues more effectively.

Technology can be deployed to support members in a variety of ways. At the most basic level members need personal computers (PCs) and access to the Internet. Even if they do not have personal offices, as many do not, ICT can provide them with a "virtual office". They also need systems that enable the parliament to prepare and disseminate agendas, draft laws and publish reports of meetings so that they can stay informed on a timely basis. And they need systems that support their work in plenary sessions and committee meetings so that information can be gathered, issues can be discussed, votes can be taken, and records can be published, all in an efficient manner.

Many parliaments do provide members with basic services such as personal computers (PCs) and communication networks, and some are already supplying them with the latest mobile devices and technologies that are less costly and yet easier to use in multiple locations. A number of parliaments have also begun to implement technologies in their chambers that add considerably to the efficiency of parliamentary sessions. These include workstations for every member, electronic voting systems, systems that make available internal documents and agendas in digital format, large display screens, and access to e-mail and the Internet from the floor. Workstations installed in the plenary often have a very small footprint, which, when combined with wireless connectivity, can be important for the historic buildings in which many parliaments work. The introduction of these technologies on the floor is possible due to the investment made by parliaments on basic infrastructure, including physical devices, communications capacity, and the staff to support them.

While ICT staff need the most current information and training, there is also a growing recognition of the need for educating members about technology. Many parliaments have identified members' lack of familiarity with technology as one of the primary challenges in using ICT to communicate with citizens. Even though members who grew up with technology are beginning to succeed to those who did not, this will continue to be a challenge for most parliaments for some time.

SUMMARY OF FINDINGS FROM THE 2007/2009 SURVEYS

Findings from the Global Survey of ICT in Parliaments 2009 suggested that most parliaments were doing reasonably well in providing members with much of the *basic technology* needed, such as PCs and access to the Internet to support their legislative and oversight work and to be able to communicate with citizens. Among parliaments that had a local area network (LAN), however, a significant percentage reported that not all members and committees were connected. This can lead to duplicate work and to the risk of not providing timely access to information and documents to all concerned.

Support for legislative functions was also a concern. The 2009 survey asked whether the parliament had ICT systems that related to legislative activities. Only one system – a database of laws passed by the parliament – ranked in the top 10, and only one other – the status of bills – had been implemented by over half of all parliaments. The remaining three legislative applications – bill drafting, amendment drafting, and amendment status – fell below 50 per cent. And functions supporting oversight and budget review fell below these three[1].

There was, however significant support for the work of members in the plenary. Among the top 10 activities supported through ICT by the most parliaments, the largest number (4) related to plenary activities. Many parliaments had introduced or were planning or considering introducing a number of technologies in the chamber, including those that had e-voting systems (over 80 per cent) and digital displays (over 60 per cent), and that provided or were planning or considering providing PCs (over 50 per cent). Parliaments also reported employing a variety of techniques, including webcasting, to record and provide verbatim reports of plenary sessions. Finally, a large percentage or parliaments (more than three fifths) were also providing ICT training or orientation courses for members, or were planning or considering providing them (over one fourth).

Despite these positive findings, the 2010 Report also underscored some of the shortfalls in ICT support for members that these results represented. The analysis suggested that there were serious infrastructure and managerial obstacles that: prevented many members from using technologies that could be of benefit in their daily work; limited their access to key parliamentary information and documents, as well as policy related research and analyses; and, constrained their ability to be in contact with their constituencies.

For example, of the approximately 27,250 legislators represented in parliaments that responded to the survey in 2009:

- 16 per cent did not have personal access to the Internet in their parliament
- 20 per cent did not have a personal desktop or laptop computer at their disposal
- 28 per cent could not access the text and current status of proposed legislation on their parliament's websites
- 31 per cent were not connected to the parliament's intranet
- 31 per cent were not offered any type of ICT training or orientation programs by their parliament
- 47 per cent served in parliaments that had not implemented accessibility standards for persons with disabilities on their websites, disallowing these citizens the ability to follow members' and parliament's work.

1 See *World e-Parliament Report 2010*, p. 122, text and Figure 7.5.

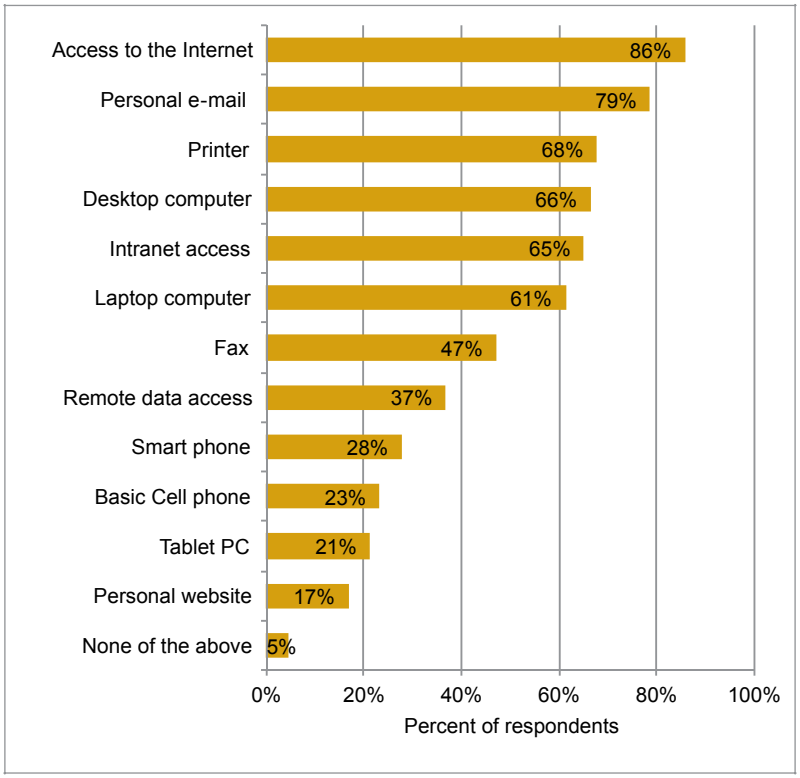
FINDINGS FROM THE 2012 SURVEY

General Services

Basic technical support

As shown in Figure 4.1 most parliaments are able to provide basic equipment and a number of important technical services for members, such as access to the Internet, personal e-mail, printers and a PC. Further analysis of the data in Figure 4.1 found that 82 per cent of parliaments provide members with *either* a desktop or a laptop computer and 46 per cent provide both. These percentages are quite high and similar to those from the 2009 survey[2].

Figure 4.1: Items provided by parliaments to members for personal use



(Source: Survey 2012, Section 2, Question 2)

Tablets and smart phones

For the first time the 2012 survey asked about smart phones, as distinct from basic cell phones, and about tablets. The combined percentage of parliaments that provide one or the other is 51 per cent. It is especially interesting, and a positive sign, that the percentage of respondents that provide the more versatile and utilitarian smart phone is higher.

2 See *World e-Parliament Report 2010*, p. 120, text and Figure 7.2.

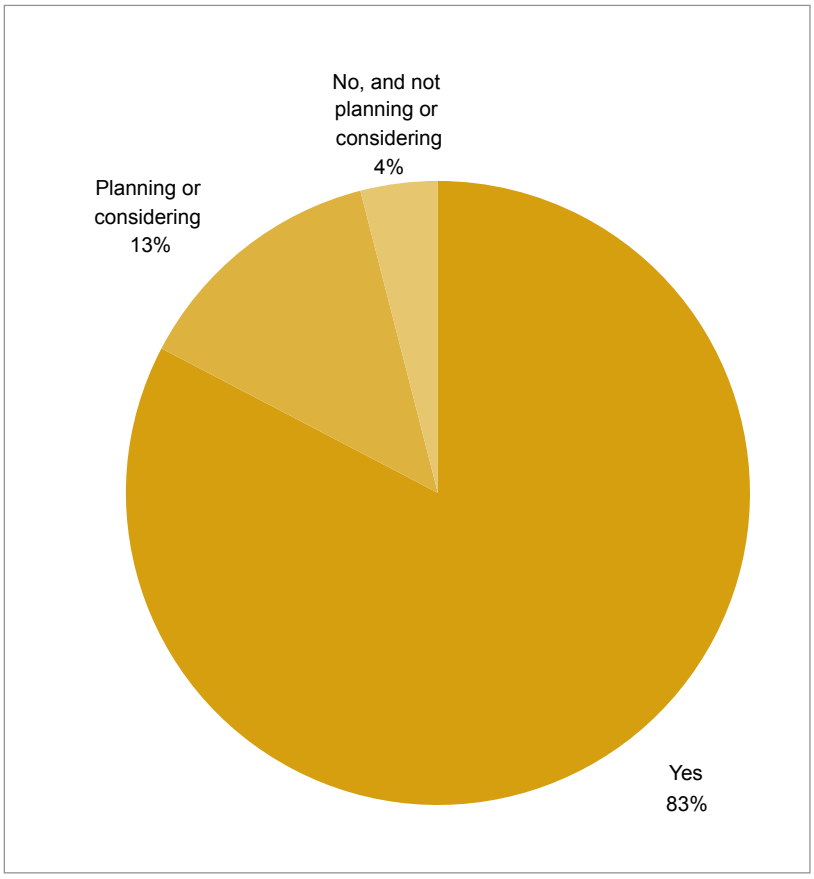
The percentage of those providing a tablet is also a positive finding. In most cases parliaments are relatively conservative about adopting new technologies. The fact that over one fifth already provide tablets in such a short time after their market introduction is an indication that either many parliaments are becoming more aware of the benefits of ICT and more willing to incorporate new advances earlier or there is greater interest from members, or a combination of the two elements.

Equally interesting is that 23 per cent of parliaments provide *applications* for tablets[3], which is slightly more than the percentage of those providing the devices themselves (see Figure 4.1). In fact, further analysis of the data indicates that 31 per cent of parliaments are providing *either* the device itself *or* an application for the device[4].

There are similar findings regarding smart phones; 24 per cent provide *applications* for these devices. Further analysis indicates that 35 per cent are providing *either* the device itself *or* an application for the device[5].

This is quite a good sign. Not only are parliaments providing members with some of the latest mobile communication devices, but also a number of them are building applications for these devices even though they do not provide the devices themselves to their members. The demand by members for greater mobility in the "always connected society" is surely behind these positive findings.

Figure 4.2: Wireless access to the Internet in the parliament



(Source: Survey 2012, Section 2, Question 9)

Connectivity

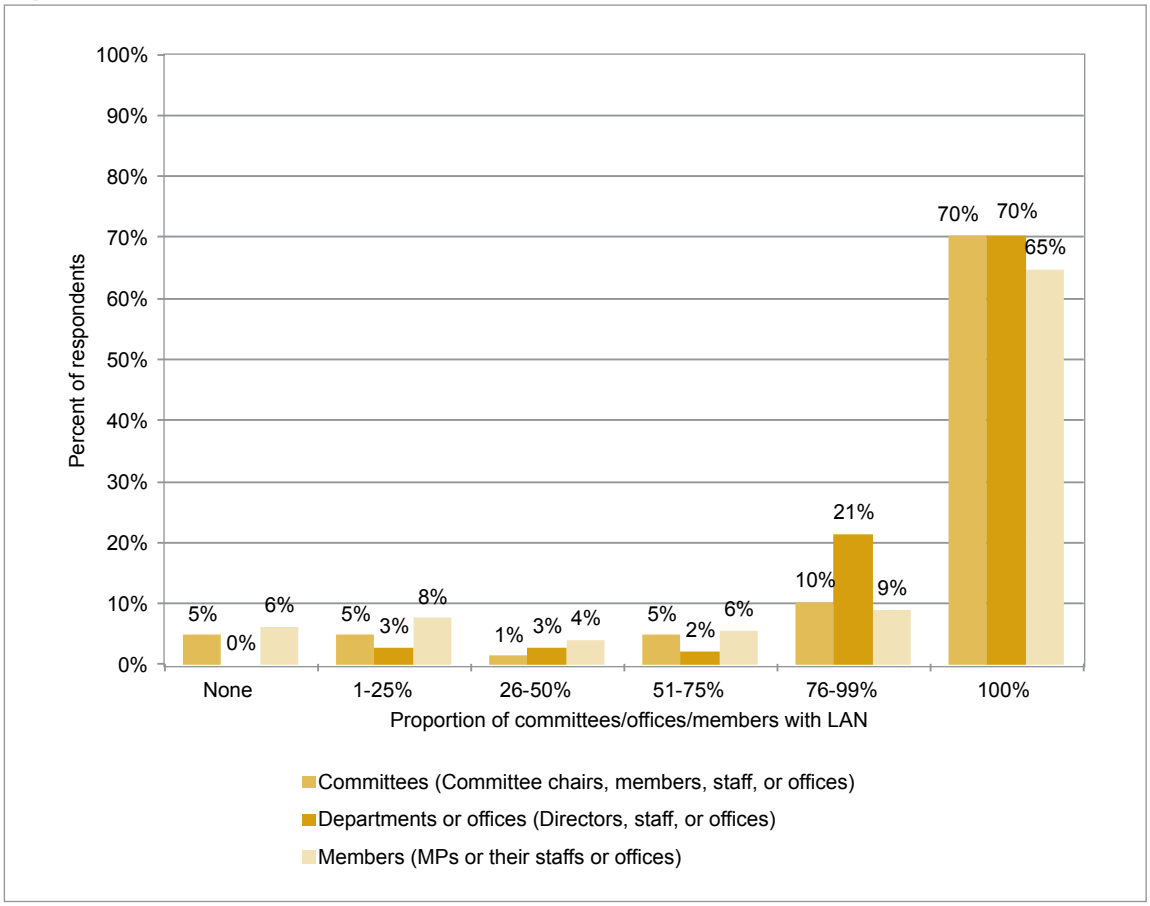
All parliaments in the survey reported that they have access to the Internet. Equally positive is that over 80 per cent reported that the speed of their connection was *adequate* or *more than adequate* and 90 per cent reported that reliability was also *adequate* or *more than adequate*[6]. There was also an increase reported in 2012 in the percentage of parliaments providing wireless access to the Internet (83 per cent), shown in Figure 4.2, compared to 2009 (77 per cent). The combined percentage of those that said *yes* they have it or are *planning or considering* it also increased from

3 Source: Survey 2012, Section 2, Question 3.
4 Source: Survey 2012, Section 2, Questions 2 and 3.
5 Source: Survey 2012, Section 2, Questions 2 and 3.
6 Source: Survey 2012, Section 2, Questions 6 and 8.

85 per cent in 2009[7] to 96 per cent in 2012, another indication of the growing importance of wireless technology in parliaments.

As in the 2009 survey, nearly all parliaments have a local area network (LAN)[8]. However, as in 2009, there is a significant shortfall in 2012 in the percentage of members who are connected to it (see Figure 4.3). The wording of this question in 2012 was more precise than in 2009, asking parliaments to estimate the actual percentage of members who were connected. The implication of the results shown in Figure 4.3 is that at least 35 per cent of parliaments have not connected all members to the LAN.

Figure 4.3: Members, committees, and departments connected to the LAN



(Source: Survey 2012, Section 2, Question 5)

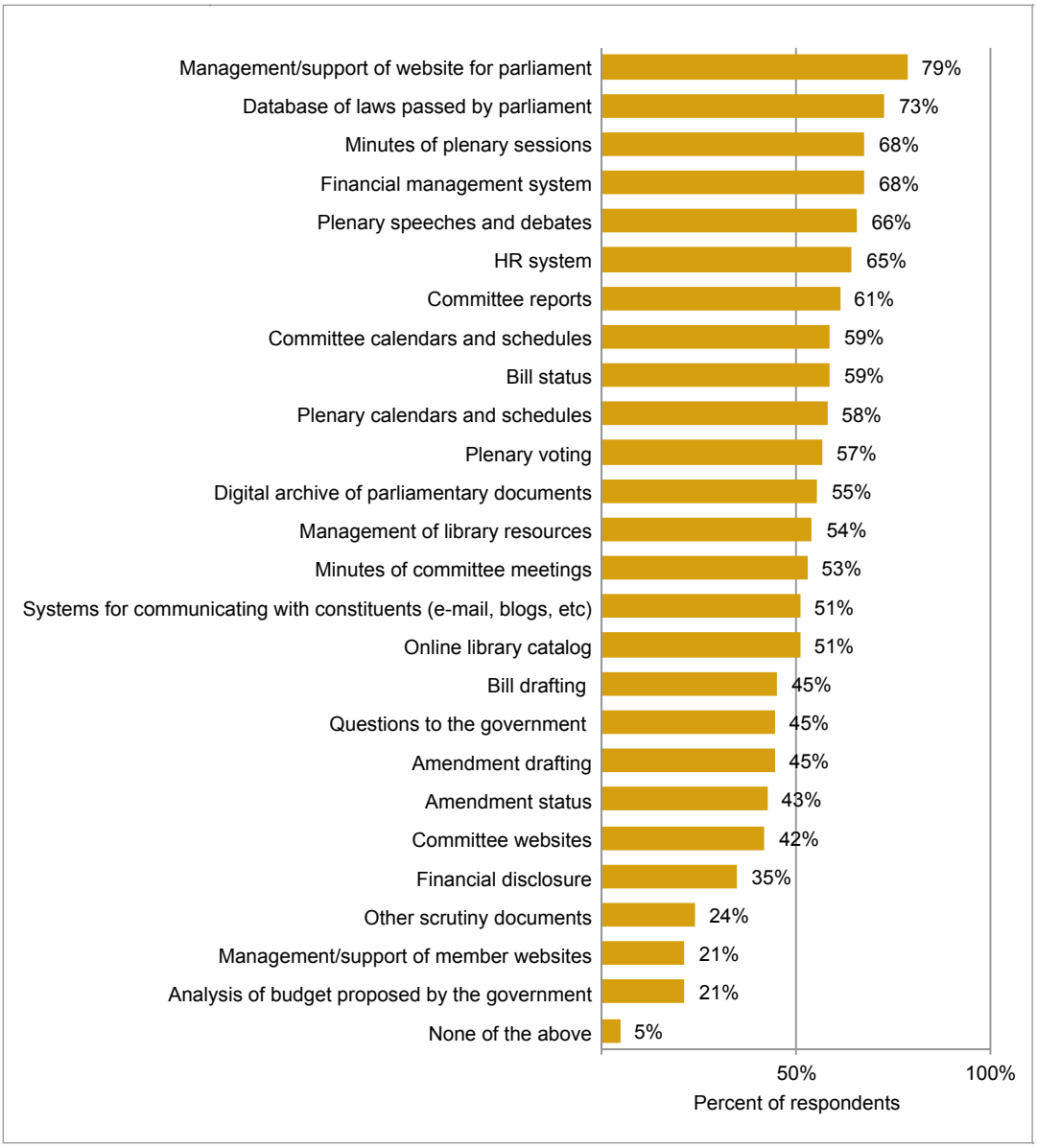
This gap significantly affects the capacity of these members to have access to shared files and other services that a LAN can support. As noted in the 2010 Report, the full value of a LAN for a parliament can only be realized when all members and committees are connected. The lack of complete connectivity can create duplication of work to ensure adequate communication, make the parliament less efficient, and risk excluding some users from having timely access to information and documents. A necessary criterion for an e-parliament is that all members and committees are connected by a local area network.

7 See *World e-Parliament Report 2010*, p. 119.
8 Sources: Survey 2012, Section 2, Question 4; *World e-Parliament Report 2010*, p. 120, text and Figure 7.3.

Applications that support the work of members

One of the primary purposes of the basic tools and services of technology is that they enable a parliament to create systems that serve its fundamental legislative, oversight, and representational work, as well as its administrative tasks. Figure 4.4 shows the percentage of parliaments that have implemented a system to support these various activities of a legislature. To focus directly on the work of members, the functions in Figure 4.4 that relate to legislative, plenary, committee, and oversight activities have been grouped into their appropriate services as shown in Figure 4.5.

Figure 4.4: Parliamentary functions, activities and services supported by ICT applications



(Source: Survey 2012, Section 2, Question 14)

As can be seen in Figure 4.5 only two items are supported by two thirds or more of all parliaments – a *database of laws passed by the parliament* (73 per cent) and *minutes of plenary sessions* (68 per cent). Of the total of 16 items, only four are supported by at least 60 per cent of parliaments. The average of all items is 51 per cent.

Figure 4.5: Functions and services supported by ICT applications

Function and Service	%
Legislative	
Database of laws passed by parliament	73%
Bill status	59%
Bill drafting	45%
Amendment drafting	45%
Amendment status	43%
Plenary	
Minutes of plenary sessions	68%
Plenary speeches and debates	66%
Plenary calendars and schedules	58%
Plenary voting	57%
Committees	
Committee reports	61%
Committee calendars and schedules	59%
Committee meeting minutes	53%
Committee websites	42%
Oversight	
Questions to the government	45%
Other scrutiny documents	24%
Analysis of budget proposed by the government	21%
Average of all items	**51%**

(Source: Survey 2012, Section 2, Question 14)

Given the importance of these functions, the percentages of parliament that have applications supporting them are arguably low. There are various possible explanations for this situation. First, not all chambers have a substantial role in reviewing and amending legislation. In these cases, the chamber may consider that investing in systems to support its legislative activities is not a high priority. Similarly committees in some parliaments do not have a major legislative or oversight role and applications for these functions may also have a low priority. Of perhaps more concern is the low percentage of parliaments with applications that support their oversight and scrutiny work. Future analyses of these issues will need to take into account the actual legislative and oversight responsibilities of the parliament and its committees.

Box 4.1

> The Parliament is currently in the process of developing a Parliamentary and Legislative Management Information system to automate Bill drafting, Amendment drafting, Bill status, and Systems for communicating with constituents.
>
> *Comment by a respondent to the 2012 Survey*

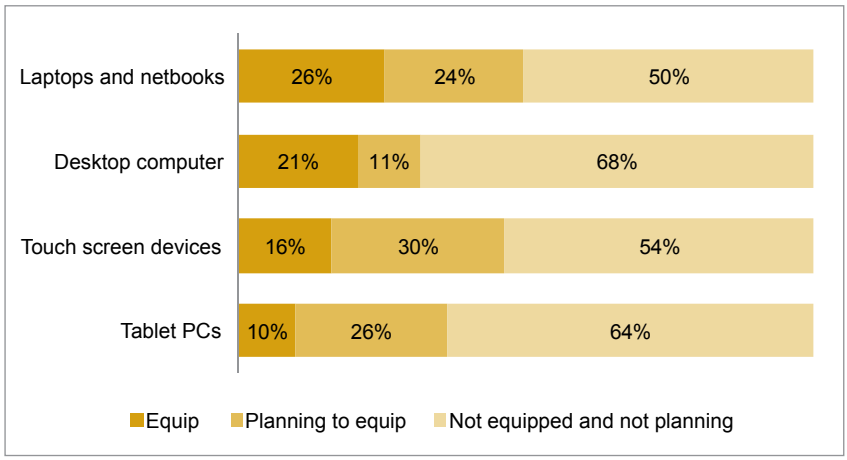
One area showing positive results concerns the group of applications that support plenary sessions. Over two thirds of all parliaments have applications for two of the four plenary activities included in the survey (see Figure 4.5), and all four activities are supported by over 55 per cent of respondents. Especially in smaller parliaments, much of legislative and oversight work of members takes place in the plenary, and it is both understandable and valuable that many parliaments have focused ICT support in this area. Specific examples of these applications are given in the next section.

Support for plenary activities

Computer devices and network services

The 2012 survey identified a number of ways in which parliaments are providing, or planning to provide, ICT support for the work of members in plenary sessions. Figure 4.6 shows the percentage of parliaments that *equip or are planning/considering equipping* their plenary meeting room with various PC-type devices. A total of 39 per cent of parliaments provide *either* a laptop/netbook *or* a desktop PC. Figure 4.7 shows that even more parliaments allow various devices owned by the members themselves to be used in the plenary. It is particularly striking that already nearly three quarters of parliaments allow tablets in plenary and 65 per cent permit smart phones. By comparison in the 2009 survey only 46 per cent of parliaments allowed *mobile phones* in plenary[9]. While some parliaments are still considering the implications of such devices on their plenary rules and customs, most are adapting to them.

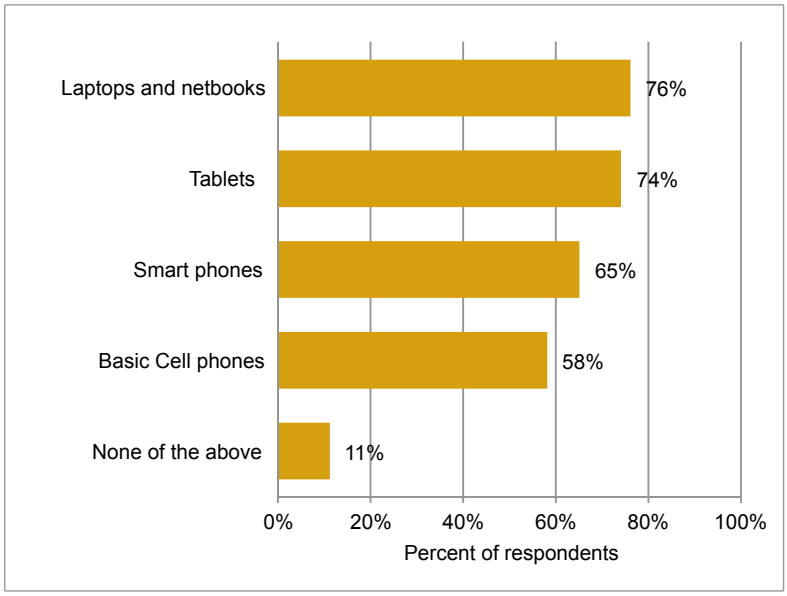
Figure 4.6: Equipment provided by the parliament in the plenary room



(Source: Survey 2012, Section 2, Question 21)

9 See *World e-Parliament Report 2010*, p. 125, Figure 7.9. The question was worded slightly differently in the 2009 survey and listed only *mobile phones* as one of the choices.

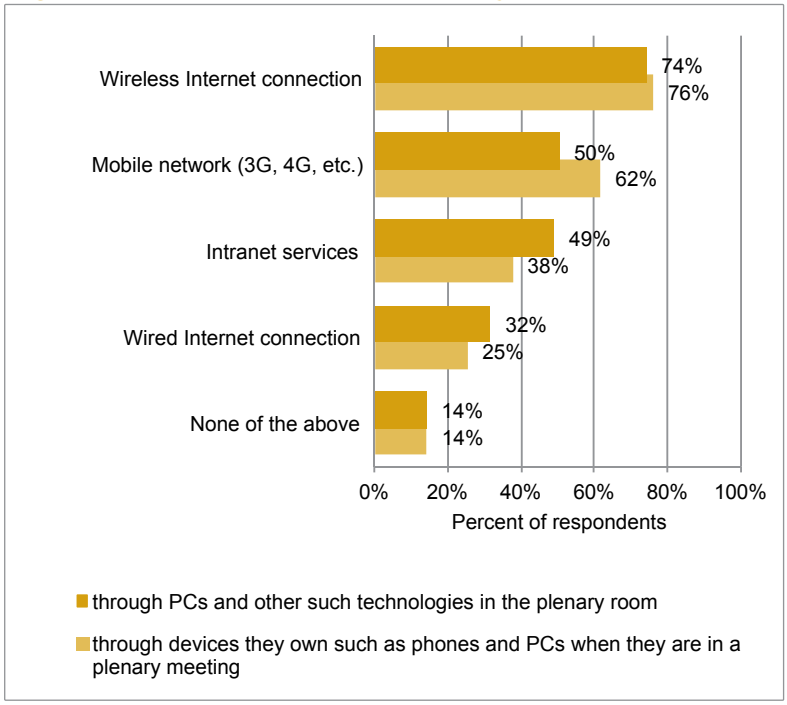
Figure 4.7: Devices owned by members that can be used in the plenary room



(Source: Survey 2012, Section 2, Question 23)

Figure 4.8 shows the services available in plenary to members using their own devices or their devices supplied by parliament. Access to the Internet grew substantially in 2012 (74 per cent) from 2009 (62 per cent)[10]. For reasons of security it is a good practice that relatively fewer parliaments permit members to connect their own devices to the intranet. It is hoped that those doing it have strong security policies and requirements in place.

Figure 4.8: Services available in the plenary room



(Source: Survey 2012, Section 2, Question 24)

10 See *World e-Parliament Report 2010*, p. 125, Figure 7.9.

One of the most advanced and comprehensive implementations of tablets to support the work of members in plenary is found in the Senate of The Netherlands (see Box 4.2). The description of the development of this capacity and the cost savings that have resulted suggest that this use of ICT is within reach of many parliaments. As the number of legislatures using this technology increases, and as successful practices are shared, the benefits to the parliamentary community at all income levels could be significant.

Box 4.2

The Dutch Senate: a paperless Parliament

On 13 September 2011 the Senate of the Dutch Parliament started to distribute its meeting documents to its 75 Senators by tablet computer. At the start of the first session after the summer recess, the Senators each received an iPad with an application (App) designed especially for the Senate. The Members of the Senate can use this modern communication tool to consult and manage the complete information flow of calendars, legislative bills, parliamentary correspondence and other meeting documents.

With that, the Senate of the States General took the step to switch completely to the digital provision of information. Although several parliaments throughout Europe are working on the further digitisation of their documents, the Dutch Senate is the first to completely switch to meetings which are fully based on the use tablet computers by parliamentarians.

In doing so, the Senate is breaking with an almost 200-year history of distributing bills, letters from the government, reports and other meeting documents in printed form. This generated thousands of pages of printed matter per Senator per week, which had to be delivered to the homes of the Senators by courier until now. And since national parliaments have been allowed to state their opinions on policy proposals of the European Union, the amount of parliamentary post has grown even further. From now on, the 75 Senators will be able to view all documents directly on their iPads and add notes to meeting documents. The calendar 'links' directly to the national and European files.

The Senators received the iPads, which will remain the property of the Senate, at a special meeting prior to the first regular plenary meeting following the summer recess. At this occasion the introduction of the tablet computer was marked as a defining moment in the history of the Senate.

The introduction of the iPads was preceded by careful preparations, which included the development of software for the efficient management of calendars and complete bill dossiers. The decision was based partly on considerations concerning sustainability and cost efficiency. Practical advantages, such as efficient recordkeeping and continuous updating of calendars and files also played an important role.

The Senate developed the system in cooperation with the 'Knowledge and Operations Centre for Official Government Publications' (*Kennis- en Exploitatiecentrum Officiële Overheidspublicaties*) (a division of ICTU) and PDC Information Architecture. The application itself was designed and delivered by a contracted ICT service provider. The App was tested thoroughly during the summer recess. Results showed that the electronic publication of parliamentary papers is efficient, dependable and reliable. Wireless communication is supported by the 21 Wi-Fi transmitters located in the historic Senate building as of early September.

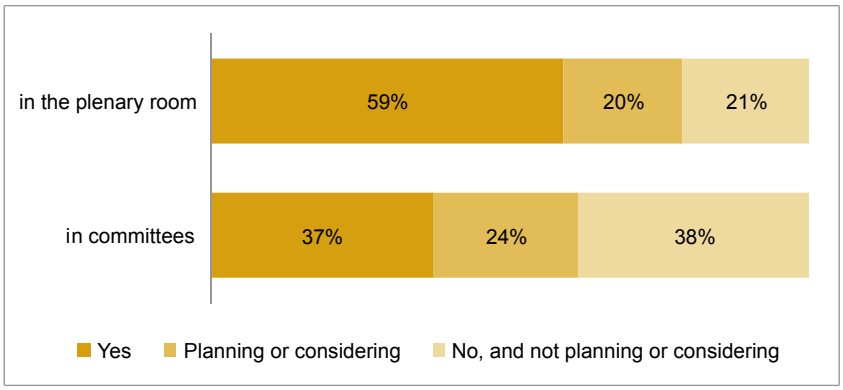
With the system, which is now operational, the Senate wants to take a leading position in the application of technology in the context of the paperless government. The introduction of the tablet computers and the development of the App are associated with an investment of €148,000. Much of this amount will be recouped in the first year through reduction in the costs of printing and courier services for the Senate. These costs amount to €142,686 (price level 2010). Over time the savings will grow even larger.

Geert Hamilton, Secretary General of the Senate of the States General of The Netherlands. Extracts from "The Dutch Senate: a paperless Parliament", Communication to the Association of Secretaries General of Parliaments, Bern Session, October 2011. See http://www.asgp.info/en/pastmeetings/)

Large digital displays

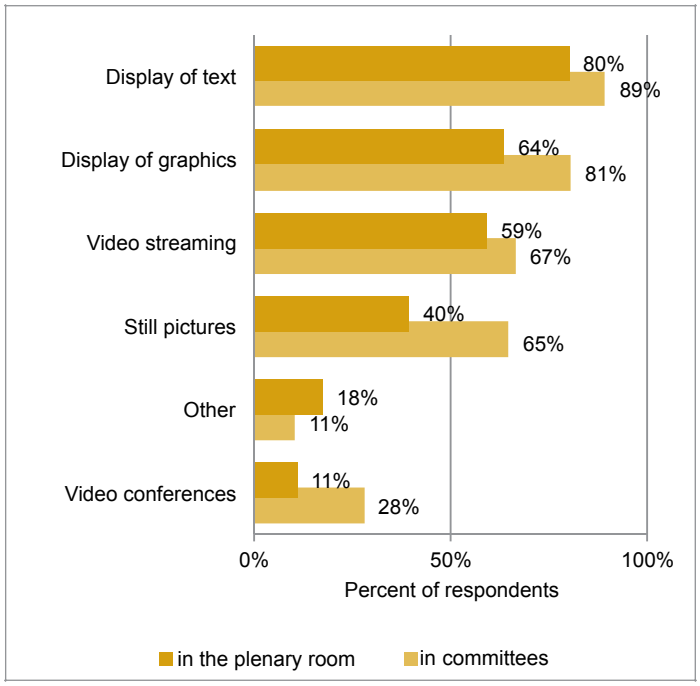
Many parliaments now *use*, or are *planning or considering using*, large displays in plenary and, to a lesser extent, in committees (see Figure 4.9). Although the same result may be achieved if all members have networked PCs, large displays can be less costly, easier to manage, and visible to more people in the room. The purposes for which the displays are used are quite varied (see Figure 4.10). Although fewer committees have them compared to plenary rooms (see Figure 4.9), it appears that of those that do, many use them for a wider range of purposes. For example, the difference between plenary use for video conferencing (11 per cent) and committee use for video conferencing (28 per cent) is significant.

Figure 4.9: Use of large displays in plenary and committee rooms



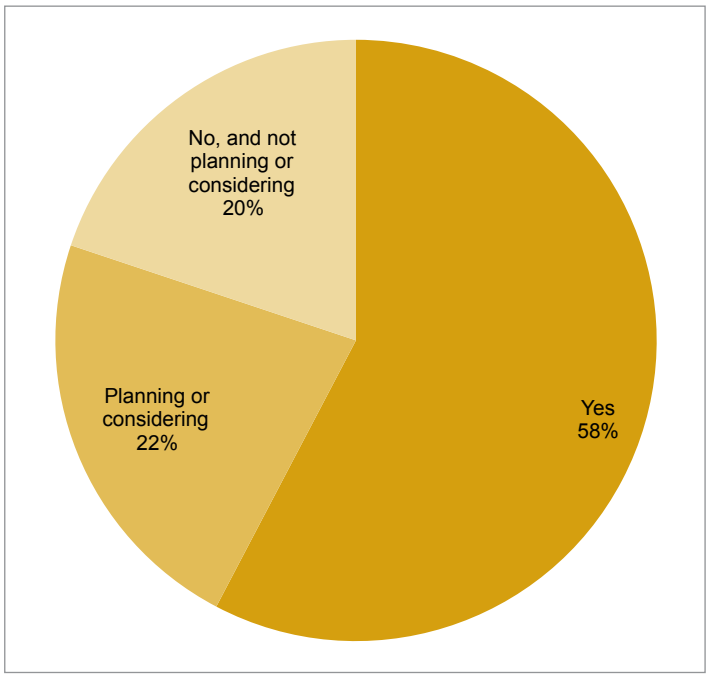
(Source: Survey 2012, Section 2, Questions 17 and 19)

Figure 4.10: Purposes for using large displays in plenary and committee rooms



(Source: Survey 2012, Section 2, Questions 18 and 20)

Figure 4.11: Use of electronic voting systems in the plenary room



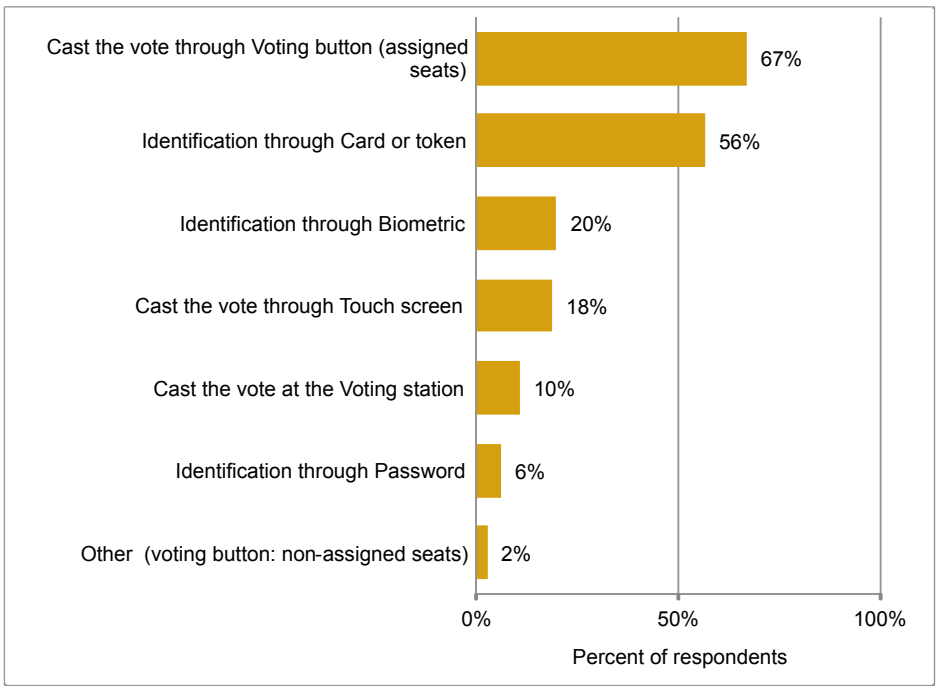
(Source: Survey 2012, Section 2, Questions 15)

Electronic voting

As noted above, 57 per cent of parliaments have an application to support voting in plenary. Figure 4.11 is consistent with this finding; approximately the same percentage report that they have electronic voting systems. The results from the 2009 survey were the same[11].

Figure 4.12 shows the variety of systems that can be used to authenticate the users and therefore the current options available to parliaments that intend to introduce voting systems.

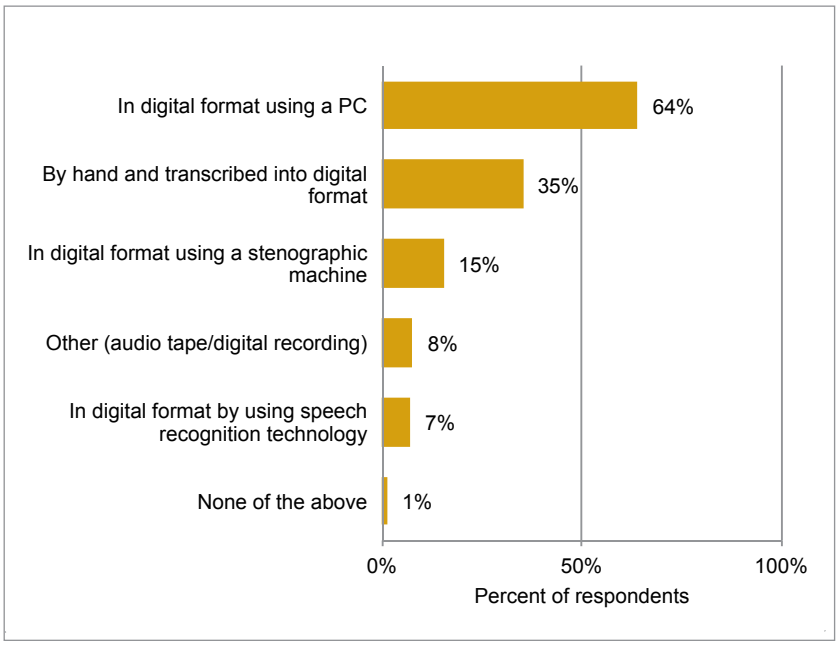
Figure 4.12: Methods of authentication for electronic voting



(Source: Survey 2012, Section 2, Questions 16)

11 See *World e-Parliament Report 2010*, p. 124.

Figure 4.13: Methods used for preparing verbatim reports of plenary sessions



(Source: Survey 2012, Section 2, Questions 25)

Verbatim reports of plenary sessions

Figure 4.5 also showed that 66 per cent of parliaments have systems for plenary speeches and debates. Figure 4.13 provides some additional indication of the methods used for preparing those verbatim reports. It is perhaps not surprising that between 2009 and 2012 the percentage preparing verbatim reports in digital format using a PC went up from 57 per cent to 64 per cent. Conversely the percentage preparing them by hand and transcribing them into digital format went down from 43 per cent to 35 per cent. The percentage preparing them using a stenographic machine remained at 15 per cent in both surveys. Given the challenge in many countries of finding staff that are trained in stenography, this percentage is likely to decline in the future. The percentage using some form of speech recognition technology remained about the same for both surveys[12].

Training and orienting members in ICT

Most members are extremely busy individuals and have little time for formal training or even brief orientation sessions. The most helpful technology for members is often the kind that can be mastered quickly. Smart phones and tablets are examples of this type of technology, and the relatively rapid expansion of their use in the last two years is evidence of the importance of ease of use, even for sophisticated devices.

Box 4.3

Giving training on basics of ICT to newly elected members saves time and energy of ICT staff of parliament

Comment provided by a respondent to the 2012 Survey

We provide ICT training for members, [but] they are busy in performing their duties. Therefore, we have continued training their staff upon their request.

Comment provided by a respondent to the 2012 Survey

12 See *World e-Parliament Report 2010*, p. 126, text and Figure 7.12.

Many parliaments and members, however, still recognize the need for some type of orientation even though many members find it difficult to allocate time to it. As noted in Chapter 2 on communication and engagement, the challenge cited by the second largest percentage of parliaments in using ICT to communicate with citizens was members' lack of familiarity with the technology[13]. In 2012, 56 per cent of parliaments said they do provide ICT training or orientations for members and 31 per cent said they were *planning or considering it*. This is a positive finding concerning a need that, because of the constant and rapid advances in technology, is likely to exist for many more years.

THE EFFECT ON MEMBERS OF NOT HAVING TECHNOLOGY

Just as the *availability* of ICT systems and support *helps* members of parliament carry out their work more efficiently, so too does the *lack* of those services *hinder* their effectiveness. To underscore this point, the 2010 Report estimated the number of members who were affected by the absence of a dozen key ICT capabilities[14]. The comparative results from the 2009 and 2012 surveys are shown in Figure 4.14. In the 2012 analysis four additional items were added as noted in the last column.

Of the 12 items that were common to both surveys, 8 improved (those marked by the  symbol). Improvement in this instance means that the percentage of members who lack the specific service or capability declined. Stated in positive terms this means that in 2012 more members count on:

- Reliable electrical power
- Personal desktop or laptop computer provided by parliament
- ICT training or orientation programs provided by parliament
- A legislature with a strategic plan for ICT
- Access to the Internet
- Access to the parliament's intranet
- Access to a database of the laws passed by parliament
- Personal e-mail accounts provided by parliament

Four items remained the same or became worse (those marked by the  symbol). This means that the number of members who lacked the specific service or capability stayed the same or increased. Thus in 2012 the same number of members or more do not count on:

- A library website that organizes information based on policy issues
- A website with the text and status of bills
- Plenary calendars and schedules online
- Accessibility standards for the parliament's website that meets the needs of persons with disabilities

13 See Figure 2.14 in Chapter 2.
14 See *World e-Parliament Report 2010*, pp. 138-139.

Figure 4.14: Number of members of parliament lacking specific ICT services

ICT service that is not provided to members	Survey year				
	No. of members		% of members		
	2012	2009	2012	2009	
ICT management and infrastructure					
Reliable electrical power in the parliament	3,442	3,817	12%	14%	
Personal desktop or laptop computer provided by parliament	3,643	5,365	13%	20%	
ICT training or orientation programs by their parliament	5,218	8,508	18%	31%	
Legislature has strategic plan for ICT	8,594	9,997	30%	37%	
Members provide ideas for ICT goals and objectives	9,383		33%		New
Access to information and research					
Personal access to the Internet	2,564	4,301	9%	16%	
Personal access to the parliament's intranet	6,603	8,530	23%	31%	
Library website organizes information based on policy issues	12,772	12,038	45%	44%	
Can send requests to library electronically	10,045		35%		New
Supporting applications					
Website has text and status of bills	8,061	7,726	28%	28%	
Timely access to plenary proceedings	8,151		28%		New
Plenary calendars and schedules on-line	9,232	8,019	32%	29%	
Access to database with the laws passed by the parliament	5,864	8,373	20%	31%	
Communication services					
Personal e-mail accounts	3,855	5,149	13%	19%	
Accessibility standards for persons with disabilities	14,022	12,840	49%	47%	
Mobile services for the public on parliament website	19,338		68%		New

(Source: The findings in this table are taken from results presented in other parts of this report. The number and percentage of members were calculated on the basis of the actual number of seats in each parliament that stated that it did not have a particular capacity or item. See also *World e-Parliament Report 2010*, pp. 138-139)

While collectively these findings suggest that there has been some progress in ICT support for members in the past two years, this alternative way of looking at levels of e-parliament underscores again, as in 2010, the infrastructure and managerial obstacles that are seriously preventing members of parliament from using technologies to the benefit of their daily work.

In 2012, of the 28,613 parliamentarians represented in the legislatures that responded to the survey: 3,442 (12 per cent) cannot count on reliable electrical power in their parliament; 3,643 (13 per cent) do not have a personal desktop or laptop computer at their disposal; 5,218 (18 per cent) are not offered any type of ICT training or orientation programmes by their parliament; 8,594 (30 per cent) work in legislatures that have not yet devised a strategic plan for ICT; and, 9,383 (33 per cent) do not contribute to providing ideas for ICT goals and objectives of the parliament.

Other obstacles are influencing the ability of members to search for information and make informed decisions: 2,564 (9 per cent) do not have personal access to the Internet in the parliament; 6,603 (23 per cent) are not provided with personal access to the parliament's intranet; 10,045 (35 per cent) cannot send requests to the parliamentary library electronically; and, 12,772 (45 per cent) do not have access to a library website that organizes information on issues of concern to members.

The lack of ICT applications can create additional barriers by making it more difficult for members to have easy access to key parliamentary information: 5,864 (20 per cent) cannot access a database with the laws passed by the parliament; 8,061 (28 per cent) cannot access the text and current status of proposed legislation on their parliament's websites; 8,151 (28 per cent) do not have timely access to plenary proceedings; and, 9,232 (32 per cent) cannot access the plenary calendars and schedules on-line, either through an intranet or the Internet.

Moreover, the lack of software and systems can seriously affect the ability of members to be in contact with their constituencies: 3,855 (13 per cent) are not yet provided with personal e-mail accounts by their parliament; 14,022 (49 per cent) serve in parliaments that have not implemented accessibility standards for persons with disabilities on their websites, disallowing these citizens from following members' and parliament's work; and, 19,338 (68 per cent) serve in parliaments that do not provide mobile services for the public on the parliament website, and therefore are missing on the opportunities created by the "smart phone and tablet revolution" of the recent years to strengthen representation and accountability.

Chapter 5

From Paper Documents to Digital Information: Managing Parliamentary Documentation

INTRODUCTION

Systems for managing documentation in digital formats make parliamentary operations more efficient and help support transparency. These systems need to encompass the entire lifecycle of documents, from the time they are *sent* to the parliament, for example as draft bills from the government, or *created* by the parliament itself, such as committee reports and verbatim records of plenary sessions, until the time they are permanently *archived*. In between these actions, an effective document management system (DMS) must be able to support a range of important functions relating to document processing, including: editing by various "authors"; exchanging with different organizations and systems; transforming for a variety of purposes, such as searching or displaying; validating and certifying via digital signatures; rendering in various modes, including on paper and on multiple digital devices; and, integrating with other documents.

Box 5.1

> Good practices: 1. Adhering to file/folder structures, naming conventions of files, profiling of documents; 2. Central storage, access and editing of documents in digital format; 3. Effective version control of documents; 4. Establishing information ownership.
>
> *Comment by a respondent to the 2012 Survey*

The nature of what should be considered parliamentary documentation is also expanding. Audio and video formats are increasingly available, enriching and diversifying the records of parliamentary activities. Because of the current state of the technology, most parliaments manage written and audio/video records through parallel but separate systems. However, some progress is being made in integrating these different formats. For example, an increasing number of parliaments are able to link specific parts of the text of a plenary report to the related audio and/or video portion of that report. While this chapter focuses on the technologies for creating, managing and preserving documentation in written formats, future reports will need to take a more integrated perspective[1].

Box 5.2

> We are currently working on converting all our verbatim recordings, which are in analog film format, into digital format.
>
> *Comment by a respondent to the 2012 Survey*

1 As one example, the Global Centre for ICT in Parliament is finalizing a handbook on *Technology Options for Capturing and Reporting Parliamentary Proceedings*. The handbook is expected to be published before the end of the year.

The increasing efforts among legislatures to provide members and the public with digital versions of parliamentary records, combined with the increasing use of mobile technologies, are placing new demands on document management systems. They must now support permanent and easy access to all plenary and committee documentation on a variety of mobile devices that have different screen sizes. Some parliaments have already adopted a "paperless" approach to plenary activities by providing members with tablets for viewing documents that are under consideration in the session, as discussed in Chapter 4. Effective use of a document management system can enable the parliament to continue to provide paper copies on demand when needed or if preferred by some members, while still relying primarily on digital versions displayed on mobile devices used by most members in plenary. Document management systems can also allow members to create their own personal libraries or electronic dossiers containing documents that only they can access.

The growing diversity of parliamentary documentation and the fact that digital formats enable parts of a "document" to be integrated with other documents, presented in different styles, edited by more than one person, and used for a variety of purposes, means that the concept of what a digital document represents needs to be understood somewhat differently from that of a paper document.

Parliamentary documents *on paper* have a structure, a form, and an intellectual integrity that have served and will continue to serve an essential role in the life of a society. Parliamentary documents *in digital formats* offer more flexibility because they can be easily restructured and reformatted. Yet they must maintain the same referential and intellectual integrity as their paper versions if they are to be considered valid and useful. It is for these reasons, and because the political records of a country are increasingly digital in their origin, that this chapter is entitled "From paper documents to digital information; managing parliamentary documentation".

All of these developments make open documents standards a critical requirement in the parliamentary environment. For a parliament to continue to reap the full benefits of these technical advances, documentation needs to be built on an open standard, especially for tagging the elements of records so that they can be interpreted properly by various computers and mobile devices for editing, displaying, searching, exchanging, and preserving. Documents prepared in proprietary formats - that is formats that can only be managed with particular software or specific hardware from a few vendors - constrain the options available for using them, limit the capacity for meeting future requirements, and ultimately cost more money to maintain, because they will need to be periodically converted to newer standards. An example of this perpetual challenge is experienced daily by many people, as certain word processing files cannot be read by older versions of the software. If parliaments decide to publish their documentation in an open standard format, there is no need for constant conversion to different formats. Hence, the many benefits for long-term preservation. Moreover, in addition to generating benefits for preservation, and for searching and exchanging between systems, some open standards offer greater ease of portability of information and documentation over different channels including via websites or "Apps" (for use in popular tablet devices). One such standard is XML (eXtensible Mark-up Language).

However, despite these many benefits, there is no doubt that implementing open standards such as XML is challenging for most parliaments, especially because these standards can be complex to initiate and require knowledgeable staff trained in their use. Collaborative efforts among parliaments and between parliaments and governments can offer a number of benefits in addressing these challenges.

The long term preservation of the written parliamentary record in digital format poses its own set of issues especially because of the need for effective policies, sound management practices, and the capacity to accommodate constantly evolving technologies. Different organizational units within a parliament may have overlapping responsibilities for managing, distributing, and preserving its records, and it can sometimes be difficult to reconcile competing mandates. Potential conflicts may need to be resolved by the highest administrative or, occasionally, political authorities in the parliament.

To develop systems, implement open standards, and establish policies governing parliamentary documents requires first and foremost a visionary outlook, followed by a multi-year commitment by the political and administrative leadership of the parliament. Short and long term planning must be undertaken to acquire the needed technical skills and infrastructure, and cooperation from users must be secured, particularly from those in the parliamentary administration whose work procedures will change. The experiences of many parliaments show that it is important not to underestimate the time and the commitment needed to build and sustain effective systems for creating and managing written records of the parliament. The long term benefits and efficiency gains, however, can be substantial, as described in Box 5.3.

Box 5.3

History of Open Document Format in the House of Commons of Canada

- 2000: the Prism platform
  - 2000: Hansard, committee evidence, Notice Paper, Order Paper and Journals in XML
  - 2002: bills in XML in collaboration with the Justice Department
  - 2006: access and retrieval of parliamentary information; linking information islands
  - 2009: release of votes in XML
  - 2011: Hansard, committee evidence and bills released in XML to public

Hansard, Notice Paper, Order Paper and Journals in XML

Moving the institution from a paper digitization culture to a digital information service culture

- Challenges
  - Focus on information presentation
  - Lack of interest in information semantic
  - Lack of understanding of potential benefits
  - Complex work environment
  - Implementation cost and governance

Hansard, Notice Paper, Order Paper and Journals in XML

- Benefits
  - Ability to innovate
  - Linking information islands (databases and text in XML)
  - Ability to reduce operating costs
  - Better information quality across all systems
  - Information is easily reused in new contexts
  - Ability to respond to evolving business needs
  - Ability to embrace new technologies

Efficiency gained through the adoption of XML

- Publishing staff: reduced by 60%
- Indexing staff are reduced by more than 30%.
- Increase in the volume of committee meetings by 30% without any new staff added.
- House publications are now published within 2 hours after House adjournment.
- Product richness highly enhanced

Achieving Greater Transparency through the Use of Open Document Standards

Transparency and Participation

How technology teams can help

- *Enable parliamentarians when they want to improve government transparency and openness* by identifying any gaps to be filled in creating/adopting a complete suite of standards to enable open government information and ease the goal of linkable public sector information.
- *Enable parliamentarians when they want to identify ways to increase citizenship participation*: recognize new channels, ways to get the information to the citizens where the citizens are looking for it and make better use of tools as a means to increase citizenry awareness and participation while supporting champions, i.e., acknowledge and help active citizens and public servants (howtheyvoted.ca and openparliament.ca).
- *Identify ways to increase citizen and business use of eGovernment services*: get information on benefits of Web use for government services, identify main factors that encourage people and businesses to use eGovernment services, such as time, money savings and simplicity, and identify ways to improve them.

Seamless Integration of Data

- *Parliamentary transparency is not simply achieved by making parliamentary information available in machine readable format, but rather by enabling seamless integration with external information sources.*
- Open data protocol and applications need to show real improvement in areas that elected officials, government officers and citizens actually need.

Relationships and Collaborations

- Greater transparency through the use of open documents and protocol vision cannot be achieved without stronger collaboration, communication and governance within government agencies and other organizations (inter-parliamentary organizations, UN, EC, W3C, OASIS, etc.)

Soufiane Ben Moussa, Chief Technology Officer, House of Commons of Canada. Extracts from "Open Documents + Protocols For Greater Transparency", presentation at the International Meeting "Achieving Greater Transparency through the Use of Open Document Standards", Washington D.C., 27- 29 February 2012. See *http://www.ictparliament.org/XMLMeeting2012.*

SUMMARY OF FINDINGS FROM THE 2007/2009 SURVEYS

Findings from the 2009 survey indicated that there had been relatively little progress since 2007 in the number of parliaments that have systems for managing proposed legislation. While there was a very small increase from 43 per cent to 46 per cent of the total number of parliaments that had a document management system for bills, an analysis of responses from the 2007:2009 comparison group suggested that there might have been an actual drop in the number of parliaments that were planning or considering systems, and an increase in the percentage of those that were not planning or considering one at all. The percentage of parliaments that had systems for documents other than bills, however, was more encouraging, reaching as high as 71 per cent for plenary speeches. Over half of all parliaments reported having systems for five of the six types of committee and plenary documents included in the 2009 survey. The lower percentage having systems for bills might have been due to their greater complexity or possibly to the fact that some chambers may not have legislative responsibilities that make a DMS for bills a high priority.

The implementation of open document standards – XML specifically – also lagged between 2007 and 2009. Of those parliaments that had a system for managing bills, only a third used the XML format. This represented 16 per cent of the 134 parliaments responding to the 2009 survey. The comparable figure for the 2007 survey was 12 per cent. While the 16 per cent in 2009 represented a 30 per cent increase over 2007, it was still well below a fifth of all parliaments that responded to the survey. The situation is much the same for other parliamentary records. Of those parliaments that had systems for managing a variety of committee and plenary documents, the percentages that used XML ranged from 11 per cent to 20 per cent. Overall, only 25 per cent of parliaments (34 of the 134 who responded to the survey) used XML for any parliamentary document[2].

The 2009 survey highlighted some of the major challenges in implementing XML and reasons why progress had been so slow. These included lack of staff knowledge and training, lack of financial resources, and difficulties finding adequate authoring and editing software. The 2010 Report noted that a number of these barriers could be overcome through various modalities of cooperation among parliaments and the support of the international community.

The 2010 Report suggested that XML was at a crucial stage in its development in parliaments. Despite previously noted commitments to the goal of using this open standard, implementation was lagging for a variety of reasons, including technical complexity, the requirement to have well trained staff, and the necessity for better tools. At the time, however, significant multi-national discussions and collaborative initiatives that held the potential for meeting a number of these challenges were taking place at the international and regional levels.

Finally, the 2009 findings suggested that many parliaments were making progress in the policies, management practices, and technologies needed to preserve digital documents. For the near term, dual systems for paper and digital formats would be required, but as more parliaments evolved toward being less paper intensive institutions, more sophisticated technical solutions and open standards for all records, including those in written, audio, and video formats, would be required.

FINDINGS FROM THE 2012 SURVEY

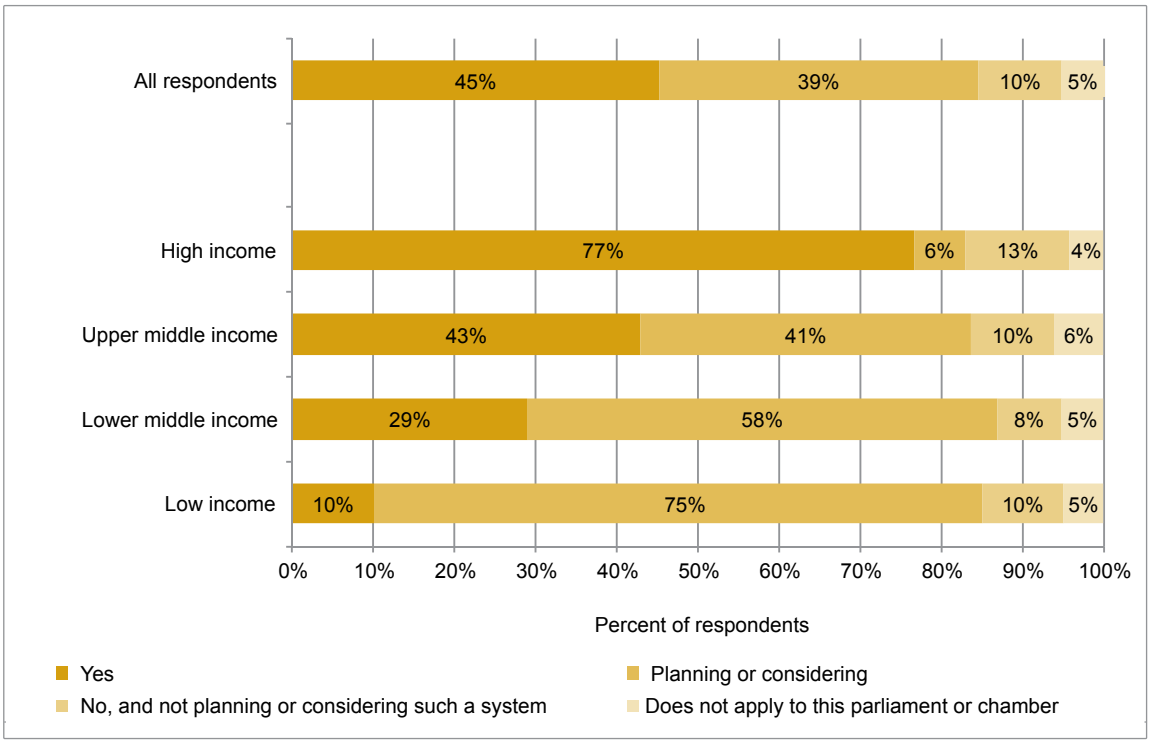
Both the Global Surveys of ICT in Parliaments 2012 and 2009 focused on the same components of standards and systems for parliamentary documents. These were: 1) document management systems for proposed legislation (bills); 2) document management systems for other types of documents, such as plenary and committee reports; 3) the use of XML; and, 4) digital preservation programs.

Systems for managing bills

The percentage of parliaments that have a document management system for bills was approximately the same in 2012 and 2009[3] (see Figure 5.1 for the 2012 results.). In both years the income level of a country had a direct relationship to whether the parliament had a DMS for proposed legislation. In 2012 77 per cent of parliaments in high income countries have a system but only 10 per cent of low income countries have one (see Figure 5.1).

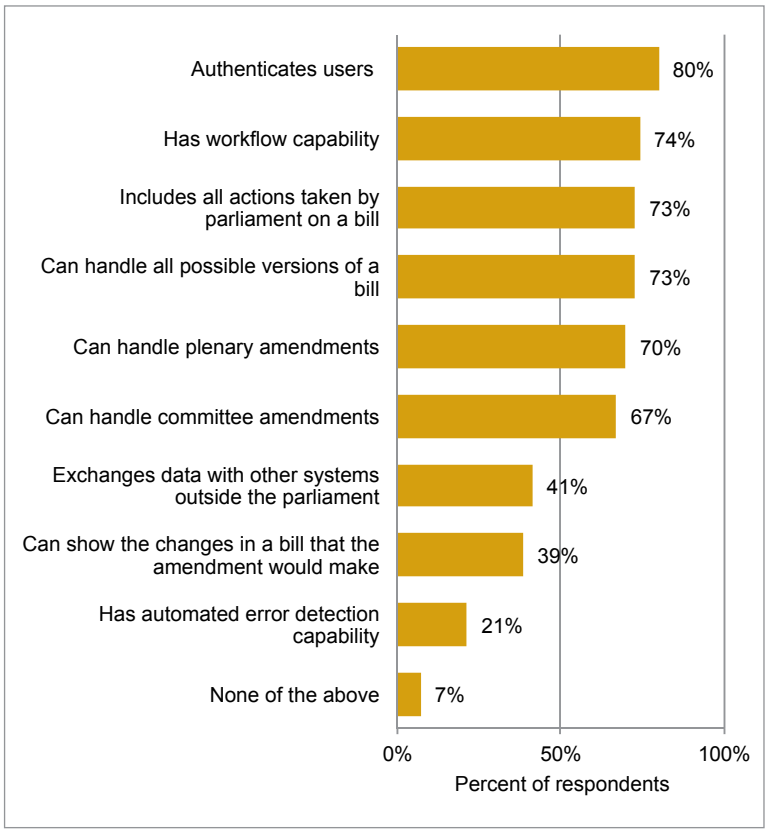
2 See *World e-Parliament Report 2008*, pp. 76-79 and *World e-Parliament Report 2010*, pp. 94-97.
3 See *World e-Parliament Report 2010*, p. 88, Figure 5.1 for the 2009 survey results.

Figure 5.1: Parliaments with systems for managing the text of bills, by income groups



(Source: Survey 2012, Section 3, Question 1; 155 respondents)

Figure 5.2: Features of document management systems for bills



(Source: Survey 2012, Section 3, Question 2; 70 respondents)

The survey also asked about the capabilities of the DMS for bills, as shown in Figure 5.2. In the 2012 survey there are some differences in the capabilities of the systems compared to the findings from the 2009 survey[4]. For example, there are lower percentages of parliaments reporting that their systems can handle plenary amendments (2012=70 per cent; 2009=82 per cent), committee amendments (2012=67 per cent; 2009=82 per cent), and all versions of a bill (2012=73 per cent; 2009=79 per cent). However, in 2012 a higher percentage of parliaments reported that their DMS had workflow functions (2012=74 per cent; 2009=65 per cent). All other functions are the same in both surveys. Despites these differences, the results shown in Figure 5.2 are encouraging – 70 per cent or more of parliaments reported that

4 See *World e-Parliament Report 2010*, p. 90, Figure 5.3 for the 2009 survey results.

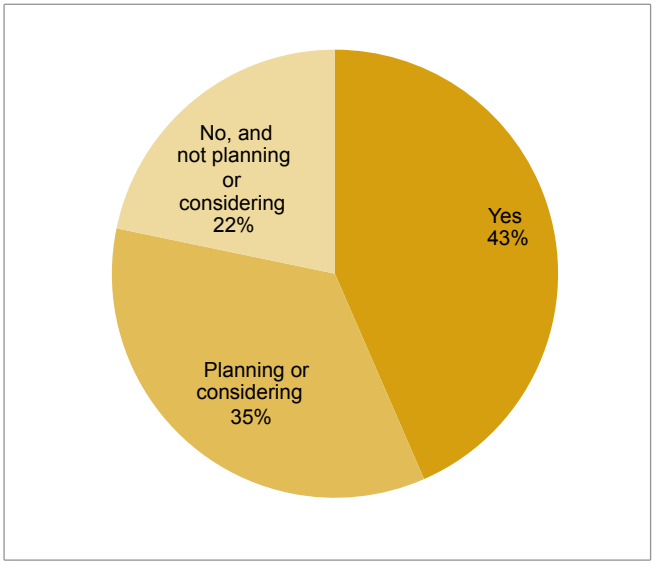
their systems have five of the most important functions: authenticating users, workflow capacity, tracing all actions, handling all versions, and handling plenary amendments. The lower percentage (67 per cent) that can handle committee amendments is less a concern because not all parliaments allow committees to make amendments to bills.

XML for bills

Although the discussion in the previous section indicated that there had been little change since the 2009 survey in the percentage of parliaments that have a document management system for bills, Figure 5.3 contains a more positive finding regarding the use of the open standard XML. In 2012, 43 per cent of those that have a document management system for bills reported that the system uses XML as the document standard. The comparable percentage from the 2009 survey was 34 per cent[5]. The percentage of those *planning* or *considering* XML remained about the same (2012=35 per cent; 2009=37 per cent), but the percentage of parliaments that said they were *not planning or considering* went down (2012=22 per cent; 2009=29 per cent).

These findings for *all respondents* to the 2012 and the 2009 surveys are mirrored in the results from both the 2007:2012 comparison group (same parliaments responding in all three survey years) and the 2009:2012 comparison group (same parliaments responding in both survey years). As shown in Figures 5.4 and 5.5 the results from these comparison groups suggest that the use of XML has risen even higher among parliaments than shown in Figure 5.3. This is clearly good news, at least as far as bills are concerned.

Figure 5.3: Use of XML for bills by parliaments with a document management system for bills



(Source: Survey 2012, Section 3, Question 3; 70 respondents)

Figure 5.4: Use of XML for bills by 2007:2012 comparison group

	2012		2009		2007	
Yes	20	48%	13	33%	13	35%
No, but planning for or considering using XML	10	24%	14	36%	16	43%
No, and there are no plans or consideration for XML	12	29%	12	31%	8	22%
Total	**42**		**39**		**37**	

(Sources: Survey 2012, Section 3, Question 3, 42 respondents; Survey 2009, Section 3, Question 3, 39 respondents; Survey 2007, Section 3, Question 2, 37 respondents)

5 See *World e-Parliament Report 2010*, p. 95 for the 2009 survey results.

Figure 5.5: Use of XML for bills by 2009:2012 comparison group

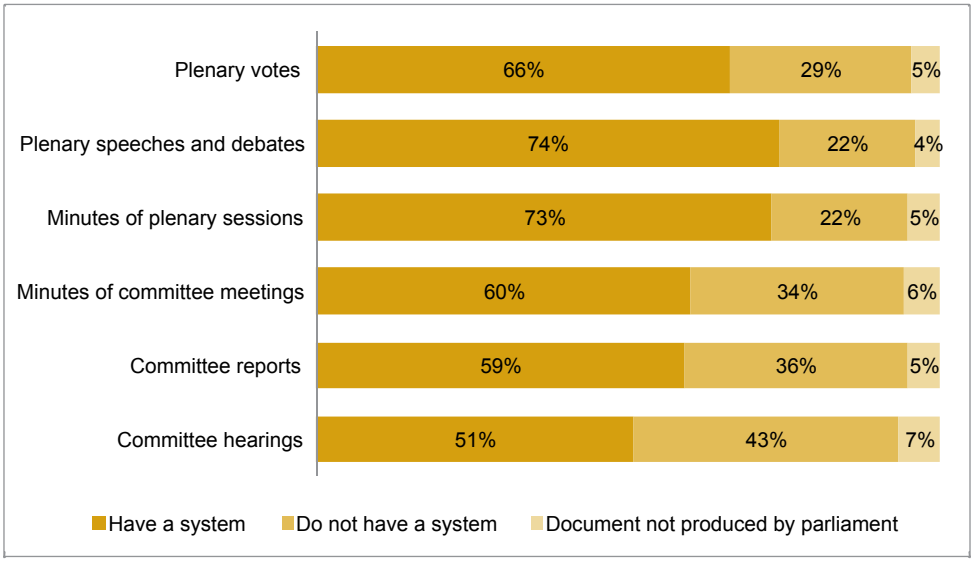
	2012		2009	
Yes	27	47%	20	35%
No, but planning for or considering using XML	17	30%	22	39%
No, and there are no plans or consideration for XML	13	23%	15	26%
Total	**57**	**100%**	**57**	**100%**

(Sources: Survey 2012, Section 3, Question 3, 57 respondents; Survey 2009, Section 3, Question 3, 57 respondents)

Systems for managing other plenary and committee documents

Between the 2007 survey and the 2009 survey, there was an increase in the percentage of parliaments that had systems for managing documents other than legislation[6] (an important qualification in light of the findings regarding systems for bills). This positive trend continued in 2012. The percentage of parliaments in 2012 with a system for each document type is shown in Figure 5.6. The three highest percentages are for plenary documents, with two reported by over 70 per cent of all parliaments.

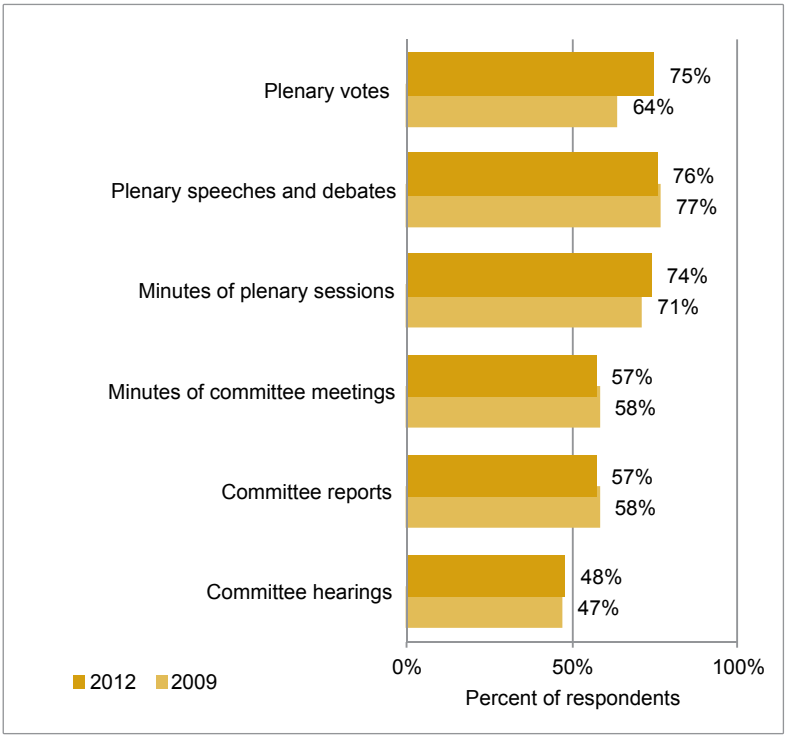
Figure 5.6: DMS for plenary and committee documents



(Source: Survey 2012, Section 3, Question 5; 152 respondents)

6 See *World e-Parliament Report 2010*, p. 91, Figure 5.6.

Figure 5.7: DMS for plenary and committee documents by 2009:2012 comparison group



(Sources: Survey 2012, Section 3, Question 5, 108 respondents; *World e-Parliament Report* 2010, p. 91, Fig. 5.5)

Figure 5.7 shows the percentages for each type of document for the 2009:2012 comparison group. Within this subgroup, nearly three quarters of all parliaments reported having systems for all three plenary documents. The increase among those that now have systems for reporting plenary votes is significant.

Figure 5.8 compares *all respondents to each of the three surveys*. This figure reflects the significant growth that has occurred since 2007. The last row of this figure highlights the average percentage of all parliaments for all documents for each survey year. The increase from 2007 (average=50 per cent) to 2012 (average=64 per cent), which is a period of approximately 4.5 years based on the dates of the surveys, is substantial.

Figure 5.8: DMS for plenary and committee documents, all respondents, all surveys

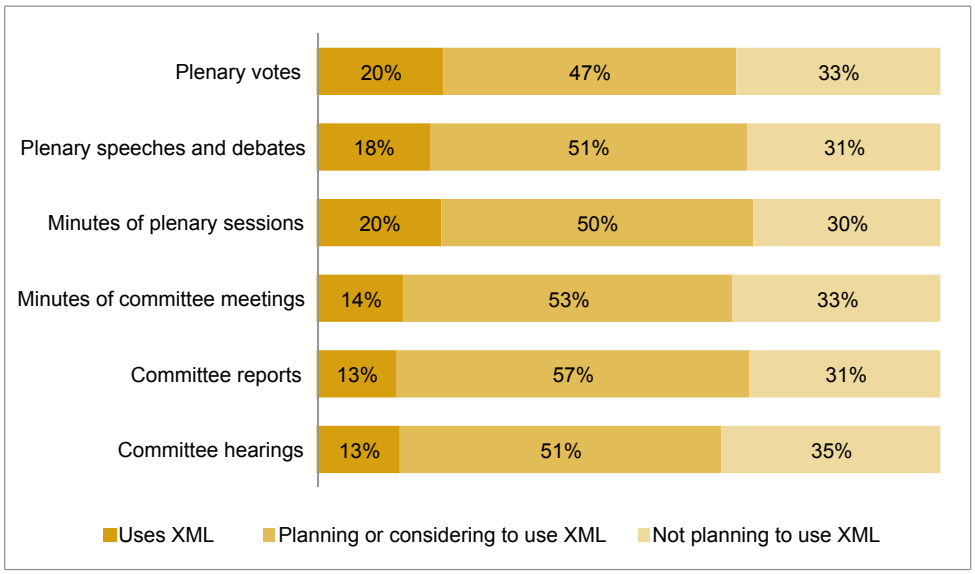
Document Management System for:	In 2012	In 2009	In 2007
Committee meeting minutes	60%	54%	52%
Committee reports	59%	54%	47%
Committee hearings	51%	43%	42%
Plenary minutes	73%	67%	50%
Plenary speeches and debates	74%	71%	59%
Plenary Votes	66%	57%	52%
Average percentage of parliaments	64%	58%	50%

(Sources: 2012: Survey 2012, Section 3, Question 5; 2009: *World e-Parliament Report 2010*, p. 91, Fig. 5.5; 2007: *World e-Parliament Report 2008*, p. 69, Fig. 5.7 and p. 72, Fig. 5.11)

XML for other documents

However, the increase in the percentage of parliaments that have systems for managing the various plenary and committee documents just discussed is not yet matched by the use of XML for these documents. Figure 5.9 shows for 2012 the percentages of parliaments that *use* XML for each document type, the percentages that are *planning* or *considering it*, and the percentages that are *not planning to use XML*. This latter percentage has remained at about one third of parliaments over all three surveys.

Figure 5.9: XML for plenary and committee documents in parliaments with a DMS



(Source: Survey 2012, Section 3, Question 6; 92 respondents)

Figure 5.10 shows the percentage of parliaments using XML for all documents, including bills, in all three surveys. Despite the improvement in the use of XML for bills, the use of this standard for other documents has remained relatively static. The last row in Figure 5.10 shows that the average percentage of parliaments with a document management system and that uses XML for each of the survey years has remained at about one fifth. *In 2012 the number of parliaments that use XML for any document was found to be 26 per cent of the total of 156 parliaments that responded to the survey, the same percentage found in the 2009 survey*[7].

Figure 5.10: XML for all document types by year

XML used in DMS for:	In 2012	In 2009	In 2007
Bills	43%	34%	30%
Committee meeting minutes	14%	14%	14%
Committee reports	13%	18%	19%
Committee hearings	18%	11%	18%
Plenary minutes	18%	19%	14%
Plenary speeches and debates	18%	20%	21%
Plenary Votes	20%	17%	15%
Average percentage of parliaments	21%	19%	19%

(Sources: 2012: Survey 2012, Section 3, Question 6; 2009: *World e-Parliament Report 2010,* p. 95, Fig. 5.11; 2007: *World e-Parliament Report 2008*, p. 78, Fig. 5-16)

7 Source: Survey 2009, Section 3, Questions 3 and 5. See *World e-Parliament Report 2010*, p. 96.

Uses and challenges of open standards for documents

Reasons for using XML

As outlined in both the 2008 and 2010 editions of this report, there are a number of important advantages to the use of open standards in parliaments which are worth repeating here:

- ***Exchange of documents.*** Open standards make it easier to exchange documents between individuals and organizations even if they use different software for editing and managing documents. This can facilitate the exchange of documents between departments within the parliament, with another chamber, between parliament and the government (e.g. courts and national law databases), with citizens and the civil society (e.g. parliamentary monitoring organizations), and with legislative bodies and organizations in other countries.
- ***Search.*** Search engines can provide more accurate results and users can formulate more precise queries if data is tagged for its specific content. Document can in fact be searched using both the text and the tags together. Open standards permit documents to be used with a variety of search engines, thereby giving legislatures choices in the selection of a search engine.
- ***Linking among documents and reuse.*** Legislative documents are highly interrelated. Open standards allow links among documents to be created automatically and even have the potential, depending on the depth of tagging, to support linking between elements within documents. For example, a section of a proposed bill could be automatically linked to the portion of an existing law that it would amend.
- ***Multiple forms of output and channels.*** In an ever diversifying environment of personal computing devices, a source document tagged with an open standard could be used to produce different appearances of a bill such as for display in an "App" (in tablet device) or a website, a paper copy, or a version modified to be incorporated into another document. XML can also be used to produce versions which could be easier for persons with disabilities to access by supporting, for example, large type fonts or audio output. In all of its appearances however, the referential and intellectual integrity of the information and documentation is maintained at all times.
- ***Consistency in formatting.*** Tagging standards can be used to encourage or even enforce proper formatting so that members and others who prepare the texts do not have to know the exact conventions used when they draft bills or amendments.
- ***Ease of preparation.*** Open standards can be demanding to use but once understood they can ease the effort required to prepare a bill or amendment by guiding the drafter through the required formatting steps.
- ***Preservation.*** One of the most important uses of open standards is to ensure the long-term preservation of documents. Proprietary systems change constantly in response to market pressures for new capabilities. As these systems are enhanced, they often reach a point where they cannot be used to access documents prepared using older versions of the same software because the documents use tags that are not understood by the newer software. Over time this has the potential for making it difficult, if not impossible, to read the digital version of documents prepared earlier. It becomes a more complex version of the kind of problem faced by programmers at the beginning of the year 2000 when many systems could not properly read dates because they used only two digits to represent the year.
- ***Access for citizens.*** The problem of long-term preservation becomes most acute in the context of ensuring permanent access for citizens to legislative documents. Electronic information

accessible today may become inaccessible over time because previous media, software, and proprietary formats are no longer supported. And this could prevent public institutions from guaranteeing that electronically archived public records will remain accessible in the future.

Additional advantages, some elaborating on those above, are contained in a discussion paper recently released by the Inter-American Development Bank[8] and shown in Box 5.4.

Box 5.4

When XML is used to represent legal documents - legislative or parliamentary (bills, acts, debates, administrative measures, etc.) - there are some special features of such representation that need to be kept in mind as requisites:

- XML contains information that contributes to the direction of the **workflow**. Thus, each stage of the legislative process can be traced, as it leaves a mark in the XML file with metadata.
- XML supports national legislative drafting and **best practices**. The technical rule standardizes the way to go about drafting legislation, thus making it possible to check the texts' compliance with the minimum standards included in the XML schemas. We can thus say that XML improves the **quality of law**.
- XML is **interoperable** with other institutions and other resources. The XML format enables every institution to mark up its own documents and to accordingly manage its own parts of the legislative process, while using a common vocabulary of tags and a common language for ascribing meaning to the data. This makes it easier for institutions to exchange data and collaborate in such a way that each institution retains its own autonomy.
- XML is enriched by contributions from citizens. Every citizen can add annotations in the XML file and reuse the XML data, as is happening in the United States with the *Open Gov* and *Open Data* initiatives. This encourages **participation**, and as with other similar tools, such as blogs, wikis, and social networks, XML facilitates cooperation and promotes data reuse.
- XML **preserves** a document's legal validity over a long period of time. As an open data format, XML is technology-independent and so it may be the right format to preserve legal documents over time. Indeed, even only ten years from now we might not be able to read legally valid data stored today. XML solves this problem by allowing us to archive documents and create backup files that continue to be valid indefinitely.
- XML is **accessible** to all through multiple channels. XML allows you to display contents in an accessible way, even for people with disabilities, thus helping to solve the problem of *accessibility* and the *digital divide*.
- XML can be **accessed by anyone for inspection**, while ensuring a balance between privacy and security. Because XML can be understood without additional applications, all citizens can inspect parliamentary documents, without the barrier of any filtering software. XML thus makes it possible for information to be *transparent* and enables citizens to hold government institutions *accountable*.
- **Dissemination and usability**. XML makes it possible to disseminate legal texts without discriminating between the tools used, thus enhancing usability, even by people who do not have sophisticated tools. In short, it does not favor any one technology over the others.
- XML can also be used with **common tools** and document-management systems *(effectiveness)*. XML can become a common format to store data in document-management systems and to create original XML databases that may be distributed and shared among different institutions. By sharing DTD or XML schemas, XML favors the growth of a multilateral community that can agree on how to interact through its data and how to cooperatively develop the various stages of the legislative process (parliament, commission, government agencies, political parties, etc.)."

"Legislative XML: Principles and Technical Tools", Discussion paper No. IDB-DP-222, Institution for Development (IFD), Inter-American Development Bank, May 2012, pp. 13-14. http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=36893582

8 Palmirani Monica, Vitali Fabio, *Legislative XML: Principles and Technical Tools*, Discussion paper No. IDB-DP-222, Institution for Development (IFD), Inter-American Development Bank, May 2012.

An example that illustrates well the importance of XML to openness, transparency and accountability comes from the United States of America. In April 2011, the Speaker and the Majority Leader of the House of Representatives of the United States of America sent a letter[9] to the Clerk of the House, calling for the development and adoption of new electronic data standards to help make legislative information more open and Congress more accountable to the American people. The letter stated the following:

> "[…] At the start of the 112th Congress, the House adopted a Rules Package that identified electronic documents as a priority for the institution. Towards that end, we are asking all House stakeholders to work together on publicly releasing the House's legislative data in machine-readable formats.
>
> The Rules of the House, adopted on the opening day of this Congress, directed the Committee on House Administration to establish and maintain electronic data standards for the House and its committees. We have asked that this standard be developed in conjunction with your office for the purpose of transitioning the House to more open data formats, such as XML.
>
> We believe that this legislative data, using standardized machine-readable formats, should be publicly available on House websites. The Clerk's office should work to ensure the consistent public availability and utility of the House's legislative data.
>
> Ultimately, legislative data is the property of the American public. It is our hope that these reforms will continue to rebuild the trust between Congress and the people we serve."

As a result of this initiative, in December of the same year, the Committee on House Administration approved the Standards for the Electronic Posting of House and Committee Documents and Data (see Box 5.5).

9 See http://www.speaker.gov/press-release/speaker-boehner-majority-leader-cantor-call-new-data-standards-make-congress-more-open.

Box 5.5

Standards for the Electronic Posting of House and Committee Documents & Data

Approved by the Committee on House Administration on December 16, 2011

In accordance with the Speaker's initiative to increase transparency of House and committee operations, the Committee on House Administration, as directed by House Rules[10], has established the following standards for posting House and committee documents and data electronically. These standards will be phased in and subject to periodic review and reissuance. The standards are intended to ensure that Members and the public have easy, advance access to legislation considered by the House and its committees.

Documents and Data Covered by Standards
The following House and committee documents and data files are covered under these standards:

House Documents:
Bills to be considered by the House
Resolutions to be considered by the House
Amendments to be considered by the House
Conference Reports to be considered by the House

Committee Documents:
Committee rules
Bills to be considered by committees
Resolutions to be considered by committees
Prints or other legislative text intended to serve as the base text for further amendment
Meeting notices
Witness lists
Witness testimony
Truth in Testimony disclosure forms[11]
Public notices
Amendments adopted by committees
Committee record votes

Although not required by House rules, committees are encouraged to post additional committee documents online, including oversight plans, committee transcripts, committee prints, and committee activity reports.

House Documents
The Committee on House Administration directs the Clerk of the House to establish a centralized website where Members and the public can access all House documents in a downloadable, open format[12] within the time frames established by House Rules. This centralized location shall be established for House Documents no later than January 1, 2012.

XML Standards
Committees are encouraged to post documents in XML when possible and should expect XML formats to become mandatory in the future. The Office of the Clerk will update XML standards as required to support these documents. The XML standards will be publically available at http://xml.house.gov.

File Naming Standards
The Office of the Clerk will publish and maintain naming standards for each document to be posted. These standards will facilitate automated searching and uploading of such documents. Files will be posted using permanent URL links. These links will facilitate outside and committee usage of these files. In addition, permanent URL links will allow each archived committee website to maintain functionality.

Committee Documents
The Committee on House Administration further directs that the Clerk provide additional functionality on the centralized website for House documents to support committee documents; until the completion of such

10 Rule X, clause 4 (d)(1), states that the Committee on House Administration shall establish and maintain standards for making documents publicly available in electronic form by the House and its committees.
11 Due to signature requirements Truth in Testimony forms will be scanned with an original signature. Forms will be OCRed to maximize searchability.
12 For this purpose, open formats are defined as formats that are widely available and permit data indexing. The House uses XML for most legislative documents. The documents are drafted using standards documented at http://xml.house.gov/.

functionality, House committees are responsible for posting committee documents in a searchable PDF format in an appropriate location on the committee majority's website. XML versions of documents, when available, should be posted at the same location.

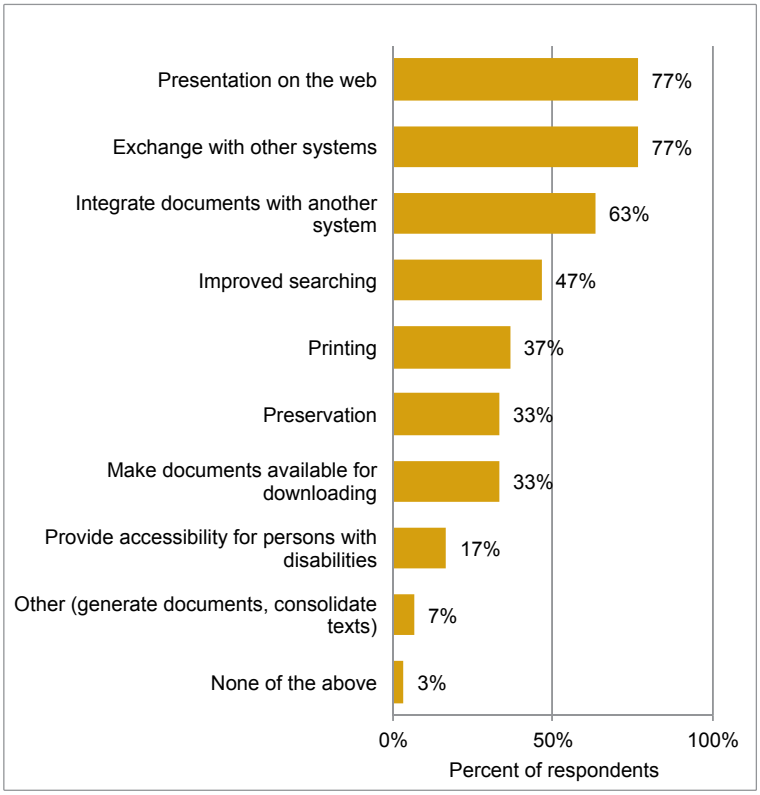
Committee Documents
The Committee on House Administration further directs that the Clerk provide additional functionality on the centralized website for House documents to support committee documents; until the completion of such functionality, House committees are responsible for posting committee documents in a searchable PDF format in an appropriate location on the committee majority's website. XML versions of documents, when available, should be posted at the same location.

Video Requirements
Committee video of hearings and markups will be stored by the House to meet requirements for archiving, access, searchability, and authenticity.

Additional Review and Reissuance
To ensure documents are made available in user-friendly formats that preserve their integrity, these standards will be subject to periodic review and reissuance by the Committee on House Administration. It is the intent of the Committee to implement standards that require documents to be electronically published in open data formats that are machine readable to enable transparency and public review.

Office of the Clerk, House of Representatives of the United States. Contribution to the World e-Parliament Report 2012

Figure 5.11: Purposes for using XML



(Source: Survey 2012, Section 3, Question 4; 30 respondents)

The 2012 survey asked parliaments to identify the purposes for which they are currently using XML. The results, shown in Figure 5.11, highlight exchanging documents with other systems (77 per cent), presenting documents on the web (77 per cent), integrating documents with another system (63 per cent), and improving searching (47 per cent). Printing and preservation were also mentioned (by 37 per cent and 33 per cent respectively). Only 17 per cent are using XML to provide accessibility for persons with disabilities. This list illustrates both the range and the value of the goals that XML supports.

Future objectives will likely include the adoption of parliamentary information for mobile communication devices and more effective integration with new web technologies. The important point is that open standards such as XML offer greater flexibility for meeting both current and future needs for parliamentary document systems.

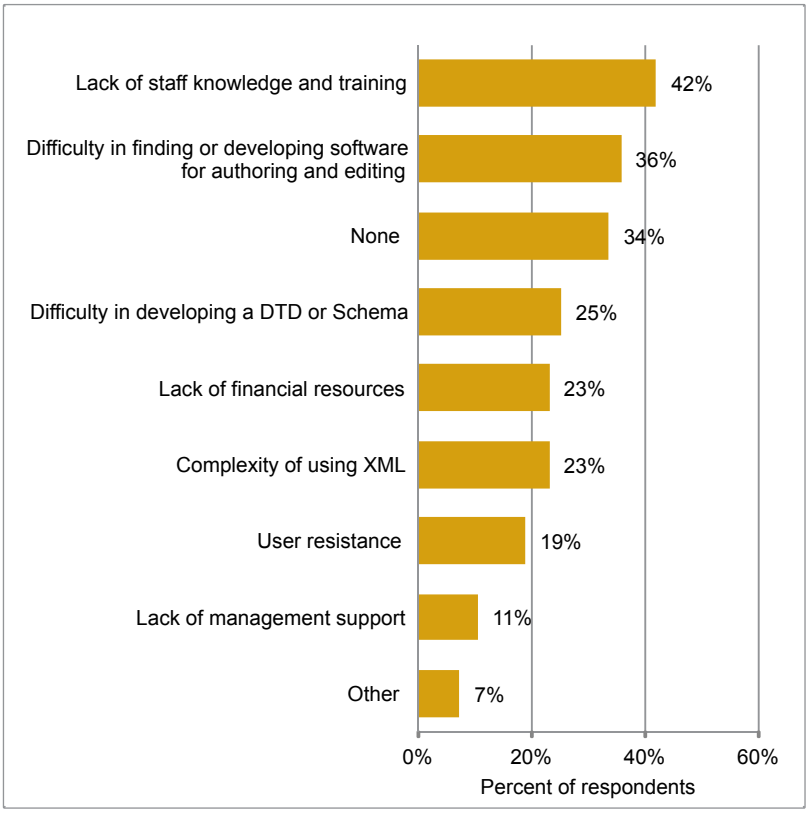
Challenges

The implementation of XML does present a number of challenges. Figure 5.12 lists the ones mentioned the most parliaments that are using or have tried to use XML. It is useful to note the following:

- Staff knowledge and training is the challenge cited by the most parliaments (42 per cent);
- The next two most frequently mentioned challenges are technical in nature – authoring and editing software (36 per cent) and document schemas (34 per cent);
- Lack of financial resources is mentioned by less than one quarter (23 per cent);
- Complexity and user resistance round out the list of challenges that are mentioned by at least 1 in 5;
- Lack of management support is noted by only a tenth.

As discussed in the 2010 Report there are a variety of ways to address a number of these challenges, often through cooperation among parliaments and the support of the international community, as for example described in Box 5.6. Because parliaments represent a relatively small market, commercial solutions are not always available or appropriate. Sharing knowledge and collaborating on initiatives can sometimes yield better results, especially for parliaments in developing countries. While primary responsibility for financial resources must always rest with the legislature itself, well formulated and managed startup support from outside donors can have a significant effect, especially for training staff and establishing initial document schemas.

Figure 5.12: Challenges in using XML



(Source: Survey 2012, Section 3, Question 7; 95 respondents)

Box 5.6

Bungeni Editor

The Bungeni Editor is a Java application that extends the OpenOffice.org word processor to support the mark up of parliamentary, legislative and judiciary documents in user-defined XML schemas. Currently the Akoma Ntoso standard is supported by it.

The Bungeni Editor extends the Open Office word processor interface by building specific and customizable functionalities alongside the traditional word processor capabilities to provide a familiar user interface for the drafting and mark up of legislative and parliamentary documents.

The marking up of documents is done by simply highlighting the relevant portion of the text and applying word processor-like formatting without exposing users to any of the XML technicalities and requirements. If the mark up requires metadata, pop-up windows are presented to the user for input. It also provides an assistive UI to help the user create proper mark up, by providing steps to follow in the mark up and contextually highlight and enable only specific actions to indicate valid mark-up options. Once marked up, the different parts of the document are displayed in colour-coded gradients which allow the user to easily identify different components of the document.

Bungeni Editor also provides two levels of mark-up validation – a semantic validation layer which provides checks at the OpenOffice.org word processor document level and an XML validation layer which checks the transformed document against any XML schema.

Users in the course of the work may need to have copies formatted, e.g. a Bill into PDF or other formats. The Bungeni Editor supports this by allowing the formatting of documents to the specific requirements and then supporting their conversion to PDF, DOC, HTML etc.

The Bungeni Editor supports the conversion of the marked up OpenOffice.org documents into custom XML, in this case Akoma Ntoso XML, as well as into HTML and PDF for presentation purposes.

The UI of the editor is also internationalized to support i18n message strings and provide a clear separation between screen/display text and application functionality.

Bungeni Editor source code and technical documentation is freely available at code.google.com/p/bungeni-editor/ while less technical information and news can be found at www.bungeni.org.

Source: Africa i-Parliaments Action Plan initiative[13]*. Contribution to the* World e-Parliament Report 2012.

Cooperative regional efforts can be useful for addressing problems such as the need for appropriate language versions of software. Collaboration among those who share common legislative backgrounds can also be useful for dealing with DTDs and document schemas that need to be adapted to follow particular traditions and procedures. Partnerships between two parliaments can also be valuable if they involve a legislature that has successfully implemented XML and one that is just beginning. Sustained mentoring of staff who are learning to use XML soon after they have had a basic introductory course can be highly beneficial.

Another approach successfully implemented by some parliaments is a cooperative arrangement with the government. An essential first step, surprisingly absent in many countries, is to establish procedures whereby the government sends a proposed bill, report, or any other document to be considered by the parliament in a digital format via electronic communication means. Some governments have recognized the value of XML and are already preparing documents using this standard. It then falls on the parliament to have a system that can manage the receipt, storage, organization, and dissemination of these documents to both internal and external users. If the document is in XML, it may be possible for the parliament to use the same tools as the government for authoring and editing as needed. Hence a cooperative approach could have many

13 The Africa i-Parliaments Action Plan is an Africa-wide initiative to empower African parliaments to better fulfill their democratic functions by supporting their efforts to become open, participatory, knowledge-based and learning organizations, implemented by the United Nations Department for Economic and Social Affairs (UN/DESA). See http://www.parliaments.info/.

benefits, where all actors that are creating, managing, using and preserving legislative documents (e.g. government legislative drafting offices, parliament – including parliamentary libraries or archives --, courts and Ministries of Justice, national libraries, etc.) come together to develop a national open standard. A shared government-wide system would have a number of operational benefits, including shared costs, training of users and the provision of technical support. It should be noted, however, that having more actors involved may increase the complexity of implementation.

Preservation of digital documents

A little over half of the parliaments (53 per cent) responding to the 2012 survey reported that they now maintain a digital archive for parliamentary documents. This represents a small increase over 2009 (48 per cent). There was no change in the percentage that have a programme for converting paper documents to digital formats, or the percentage that have established a policy regarding digital preservation[12].

These findings suggest that many parliaments are making some progress in ensuring the preservation of their digital records. Substantial challenges lie ahead, however, especially as technology continues to evolve and as more parliaments move toward operations that are primarily paperless.

Box 5.7

> Digital archiving is a challenge because the storing time is unlimited. The Parliament is trying to make use of the national system for digital storing of official documents of the administration.
>
> *Comment by a respondent to the 2012 Survey*

As noted above, open standards such as XML can play an important role because they are less dependent on changes in the underlying hardware and application software. But for the near term, dual preservation modes – in paper and in digital format – are likely to be necessary. This is an especially complex problem because a variety of people and organizations with complementary responsibilities but sometimes conflicting priorities, are usually involved in solving it, including archivists, technologists, and librarians.

12 Source: Survey 2012, Section 3, Questions 9, 11 and 12.

INTERNATIONAL COOPERATION AND DOCUMENT STANDARDS

The development of document management systems and the implementation of open standards for parliamentary documentation can be a complex and costly endeavor for parliaments. Yet, the benefits they yield to parliament's efficiency and to openness, transparency and accountability should all be factored into the cost-benefit analysis of such investments.

As underlined in the *World e-Parliament Report 2010*, in parliaments lacking financial and technical resources, or in those experiencing budget cuts, collaborative software development among partnering legislatures offers a unique opportunity to leverage limited funds for deploying such systems and ensuring a high quality and sustainable documentation process. One such possibility is the *Bungeni* Parliamentary and Legislative Information System, developed in the framework of the *Africa i-Parliaments Action Plan* initiative and described in Box 5.8.

Box 5.8

Bungeni Parliamentary and Legislative Information System

Bungeni is an open source Parliamentary and Legislative Information System (PLIS) that aims to make parliaments more open and accessible to citizens, virtually allowing them "inside parliament", or "bungeni" in Swahili.

The Bungeni system covers the entire document life-cycle of parliamentary documents from drafting to publication of documents such as questions, motions, bills, tabled documents, etc. as well as reports such as agenda, minutes and debate records. It meets typical legislative document archival requirements by recording the whole history and versions of a document at various points in time through various stages of the parliamentary process and stores documents in XML format for re-usability and long term preservation. Bungeni PLIS consists of three main components as follows:

Bungeni Institutional Portal:

The institutional portal contains information about a parliament and its parliamentary activities. The Portal has been designed to meet the information requirements of citizens as well as of civil society. Bungeni through the portal provides information about

- **Members:** bio-notes, offices held, address, etc. and all the documents that a Member may have authored as well as all the interventions recorded in the parliamentary debates;
- **Parliamentary Documents:** their history, any events related to the parliamentary procedures, attachments, if any, the version across time, the extracts of the debates related, etc.;
- **Sittings:** all the reports, from agenda to minutes and debate reports as well as easy access to all documents debated.

Any document on the portal can be downloaded in different formats, PDF, ODT, RTF, and XML to allow re-usability by both people and software applications. Documents can be accessed through different media, from PC, to mobile phone and tablets and as the documents are stored as XML they can be easily adapted to any new media. Should you wish to track a specific document, for example, a new motion, you can subscribe to a RSS service or opt to receive an e-mail notification.

Bungeni Interactive Portal:

The interactive portal provides a space, separate from the institutional one, where discussions with parliament and among citizens about parliamentary activities can be undertaken. It allows easy access and open discussion allowing members to directly communicate with citizens and highlight their own initiatives and activities.

Members can create their own content which can be in the form of blogs, events, documents to download, links, and news. Citizens may be allowed by members to access their space and to comment, or take part in polls or surveys to gauge the mood of citizens on specific issues.

Committees can, through this space publish documents and enlist public contributions and hold discussions in a context that by virtue of being separate from the institutional portal can allow more free and creative discussions.

Bungeni Back-office:

The Back-Office Workspaces are for registered parliamentary users such as members of parliament, staff of the Secretary General's offices, committees' clerks, etc. This is the space where all the content of the Bungeni Institutional Portal and some content of the Bungeni Interactive Portal is created and managed. Access to the Bungeni Back-office Workspaces is limited to authorized users. Different users have different rights, according to their roles and responsibilities, on what documents they may be able to see, create or edit.

Workspaces support the creation and management of all parliamentary content (e.g. question, motions, bills, but also agenda, minutes and debate reports) as well the publication of general information about the parliaments and its activities, news, etc.

Committees and Political groups may have their own virtual workspaces and can share information just among themselves or with the public at large.

Presiding Officers can monitor the workload (flow) and receive notifications in case documents are not attended to on time. An audit trail also provides the opportunity to know who has done what and when.

Bungeni PLIS is fully internationalized and can be localized to any language since it supports both left-to-right as well as right-to-left writings.

The main stakeholders of Bungeni PLIS are citizens, members of parliament and managers of parliamentary administrations. To them it brings the following benefits:

Citizens	Members of parliament	Senior management
Access to information on parliamentary activities and documents are provided: • in real-time; • through multichannel access; • comprehensively; • with both push and pull updates; • in open/reusable documents.	• opportunity to submit, review and monitor documents from anywhere any time; • track the progress of one's own documents and those of other members; • private space to store important documents; • public space to publish their blogs/info/etc.; • virtual workspace to access, e.g. committee relevant documentation and work; • personalize notifications to better follow up on parliamentary work.	• real-time assessment of workload; • audit trail regarding who did what and when; • documents in a format suitable for long term preservation; • total ownership of data and application.

Bungeni source code and technical documentation are freely available at code.google.com/p/bungeni-portal/ while less technical information and news can be found at www.bungeni.org.

Source: Africa i-Parliaments Action Plan initiative. Contribution to the World e-Parliament Report 2012.

The *Africa i-Parliament Action Plan* initiative is continuing to support a number of parliaments to implement the Bungeni Parliamentary and Legislative Information System in Africa. However, Bungeni has received increasing interest from parliaments in countries of other continents.

Box 5.9

> Our Parliament is one of the legislatures of East African countries currently implementing the parliamentary Information Management System (Bungeni) to keep track of the legislative process. Most of the information will be in XML, and currently we are populating the data into the system.
>
> *Comment by a respondent to the 2012 Survey*

In 2011 and 2012 a series of events organized in cooperation with or by the Global Centre for ICT in Parliament has emphasized the increasing appreciation by parliaments of the need to achieve a higher level of cooperation in the field of open document standards so that knowledge, expertise, tools and practices involving XML can be effectively shared within the broader community. Despite the fact that their approach to open document standards may sometimes differ, legislatures share many of the same challenges and needs in this domain.

In addition to these activities, OASIS, a non-profit international consortium that creates interoperable industry specifications based on public standards, opened the LegalDocML Technical Committee[13] in late 2011 to establish a common legal document standard for the specification of parliamentary, legislative and judicial documents, for their interchange between institutions anywhere in the world and for the creation of a common data and metadata model that allows experience, expertise, and tools to be shared and extended by all participating peers. The intended document standard aims to provide a format for long-term storage of, and access to, parliamentary, legislative and judicial documents that allows search, interpretation and visualization of the documents. The work of the Technical Committee is based on Akoma Ntoso[14], the XML-based language developed by the United Nations in the framework of the *Africa i-Parliaments Action Plan* initiative as a set of common standards to produce, classify and share digital parliamentary and legislative documents. Akoma Ntoso has increasingly been adopted by legislatures around the world in the past two years.

In February 2012, the importance of inter-parliamentary cooperation in the area of open document standards and standardization was recognized by the Meeting of the Secretaries General of Parliaments of the European Union who, in the *Conclusions* of their meeting, mandated the IPEX[15] Board to:

> "[…] a) start cooperation with the relevant EU Institutions, as well as with the ECPRD and with the UN/IPU Global Centre for ICT in Parliament in order to act as an unique "information point" on digital standardization; b) explore

13 See https://www.oasis-open.org/committees/tc_home.php?wg_abbrev=legaldocml.
14 See http://www.akomantoso.org/.
15 IPEX, the InterParliamentary EU information eXchange, is a platform for the mutual exchange of information between the national Parliaments and the European Parliament. The main part of IPEX is the Documents database which contains draft legislative proposals, consultation and information documents coming from the European Commission, parliamentary documents and information concerning the European Union. See http://www.ipex.eu/IPEXL-WEB/home/home.do.

> the possibility of sharing a common open format standard and using the EU-ROVOC thesaurus for parliamentary documents concerning the scrutiny of EU Affairs uploaded by the national Parliaments in IPEX".

Furthermore, in the *Presidency Conclusions* of the Conference of Speakers of the European Union Parliaments, held in Warsaw on 20 – 21 April 2012, the EU Speakers noted the *Conclusions* of the Meeting of the Secretaries General and underlined:

> "the importance of ensuring maximum transparency and the most accurate and timely information on parliamentary activities by providing the relevant data online in freely accessible ways and formats, while promoting the adoption of open, common international standards favouring the treatment and re-use of the published data by all parties concerned".

In between these two gatherings, the United Nations, the Inter-Parliamentary Union and the U.S. House of Representatives co-organized, through the Global Centre for ICT in Parliament, the international event *Achieving Greater Transparency in Legislatures through the Use of Open Document Standards*. The meeting, held at the U.S. House of Representatives in Washington, D.C. on 27, 28 and 29 February 2012, convened parliaments that were using XML for parliamentary records with a view to: a) determine how XML has been implemented by parliaments around the world and how it is being used by them and by civil society organizations to enhance citizens' participation; b) exchange experiences about the policy and organizational challenges faced by parliaments' senior management to increase transparency; c) identify current best practices and state of the art applications; d) outline projects anticipated by legislatures over the next five years and explore venues of possible collaborations and synergies to reduce costs; and e) elaborate policy and technical recommendations for the use of open document standards in parliaments[16].

As described in Box 5.10, consensus emerged among the delegates about the future focus of common work in a number of priority areas and the establishment of an inter-parliamentary Working Group on Open Document Standards under the framework of the Global Centre for ICT in Parliament.

16 Other invitees included legislative and legal informatics experts from a selected number of international organizations, universities, foundations and civil society organizations. Approximately 83 participants, including delegates from 16 parliamentary chambers took part in the policy and technical debates during the three-day agenda. The presentations delivered at the meeting are available in video at the Global Centre's YouTube channel http://www.youtube.com/user/GlobalCentreICTP/videos?view=1 and in PowerPoint at the webpage http://www.ictparliament.org/XMLMeeting2012

Box 5.10

Meeting Summary

Delegates from 16 parliamentary chambers along with representatives of civil society organizations and the academic community participated in the International Meeting *Achieving Greater Transparency in Legislatures through the Use of Open Document Standards*, co-organized by the U.S. House of Representatives, the United Nations and the Inter-Parliamentary Union, through the Global Centre for ICT in Parliament, on 27, 28 and 29 February 2012.

During the meeting discussions several important themes emerged:

- Open document standards are a vital technology for supporting the values of parliamentary democracy as defined by the Inter-Parliamentary Union in 2006, with particular emphasis on transparency and efficiency.
- Only a limited number of parliaments have implemented or are planning the use of open standards in parliamentary records in the near future, making this topic an emerging issue for inter-parliamentary cooperation in the years to come.
- Despite differences in their approach to open document standards, legislatures share the same challenges and needs. There is significant value in continuing the dialogue among parliaments about open document standards, both at regional and global level, also taking into consideration the perspectives of civil society organizations and the academic community.
- Open document standards can be leveraged to quickly and flexibly embrace new communication channels for members and the public, such as mobile devices and video. The expectations of rapid technological developments in these areas will require special attention by parliaments in the future.
- A higher level of cooperation is needed among parliaments so that knowledge, expertise, tools and practices on open document standards can be effectively shared and placed at the disposal of the parliamentary community.
- There is a need to identify a series of internationally-agreed criteria and benchmarks for assessing the contribution of the use of open document standards to the values of a democratic parliament: representation, transparency, accessibility, accountability and effectiveness. These benchmarks should guide parliaments in their implementation of open document standards as well as help them determine the degree of their success in advancing both their efficiency objectives and overall transparency goals.

To this end, consensus emerged among the delegates for the establishment of an inter-parliamentary Working Group on Open Document Standards under the framework of the UN and IPU's Global Centre for ICT in Parliament. This Group, open to legislatures using open document standards, will provide a forum for advancing the state of open document standards in parliaments by identifying problems, analyzing potential solutions, and recommending guidelines and standards. It will serve as a hub for providing visibility to the various initiatives taking place in this arena. The working modalities of the Group, and its interaction with interested stakeholders, including global and regional parliamentary networks, will be defined by the participating parliaments at their first meeting.

Delegates welcomed the opportunity of a fruitful exchange of experiences and practices offered by the International Meeting *Achieving Greater Transparency in Legislatures through the Use of Open Document Standards* and expressed their appreciation to the U.S. House of Representatives, the United Nations and the Inter-Parliamentary Union, for having taken the initiative of organizing this important consultation.

International Meeting: Achieving Greater Transparency in Legislatures through the Use of Open Document Standards. Meeting summary. See http://www.ictparliament.org/XMLMeeting2012.

At the meeting *Achieving Greater Transparency in Legislatures through the Use of Open Document Standards*, participants raised two important issues: how can parliaments turn the current financial crisis and subsequent reduced budgets into an opportunity to improve the efficiency of the parliamentary processes by applying XML-based technologies? What benefits can end users derive from the implementation of such processes, whether inside or outside a parliament's administration?

To respond to these challenges, the European Parliament's Office for Promotion of Parliamentary Democracy (OPPD) and Directorate General for Innovation and Technological Support, in association with the Global Centre for ICT in Parliament, held the international workshop *Identifying benefits deriving from the adoption of XML-based chains for drafting legislation* in Brussels in May 2012. The workshop focused on: a) improving the quality of the debate among parliaments that have already undertaken activities towards the use of XML-based tools for their production chain; b) sharing the experience of more advanced parliaments in this field with others interested in setting up XML-based production chains and using this knowledge to offer practical support to the parliaments of new and emerging democracies; and c) demonstrating practical users' cases along with evaluations of the benefits that justified the investments.

The workshop participants stressed that much still needed to be done to evaluate the benefits deriving from the implementation of an XML-based chain not only from the publication/dissemination point of view, but also from the perspective of supporting the production of legislative content inside parliaments' administrations. Anticipating the adoption of XML in the very first phases of the law-making process can in fact reinforce the rigour of law-drafting, reduce subsequent transformations, limit mistakes, and improve the overall document quality. Moreover, working with structured information from the beginning of the process makes it easier to manage that same information during the production process without additional transformations and the attendant risk of loosing content. Nevertheless, parliaments will not be able to address exhaustively the question of the benefits deriving by the introduction of an XML-based chain if the positive effects provided by the adoption of such technologies are not analysed in depth by those parliaments that have had the opportunity to be the pioneers in this field and shared with others.

To this end, at the international workshop the Vice President of the European Parliament[17] announced the decision to provide the open source version of AT4AM, the application currently used by the European Parliament for authoring amendments to parliamentary texts, for legislative and non-legislative procedures, and the production of amendments lists for downstream services. This version will allow amending content submitted in the Akoma Ntoso schema and obtaining amendments in the same format, as described in Box 5.11.

17 Mr. Rainer Wieland, Member of the European Parliament and Vice President http://www.europarl.europa.eu/meps/en/2323/Rainer_WIELAND.html. See also http://joinup.ec.europa.eu/news/european-parliament-share-amendment-web-tool-open-source

Box 5.11

The e-Parliament program at European Parliament - Update on the current status of activities

The Directorate General for Innovation and Technological Support (DG ITEC) of the European Parliament (EP) launched the e-Parliament program in 2009.

The eParliament vision is to ensure the use of the most appropriate ICT tools and applications in support of the EP parliamentary processes (legislative and nonlegislative), with a view to enabling the institution to perform its duties in the most effective and efficient way, to better support the work of its Members, and to become more transparent, accessible and accountable to the European citizens it serves.

e-Parliament is designed as a major multi-annual change program aimed at modernising the EP's core parliamentary information system. To control the changes and risks introduced by the program, e-Parliament progressively achieves its objectives by implementing the following two phases:

1. The first phase is focused on the parliamentary text management and may induce changes in related processes (Business/IT alignment). It deals with the nature of the product (text) and its control in terms of life cycle and versioning.
2. The second phase will be activity/process oriented. It deals with the optimization of the text production processes and their supporting workflows.

Each phase consists in two steps:

1. Definition of the e-Parliament architecture, progressive setup of foundation components through the iterative cutover to production of a "pilot text production chain".
2. Incremental alignment of the other parliamentary text production chains and supporting applications on e-Parliament architecture.

The operational objectives of the current phase (phase 1 - step 1) are:

- To shift the parliamentary text production from a document-centric to a content-aware management by using an open format, the XML language. This will make it possible to build and handle a document as a contextual assembling of a number of text pieces - "content" - that are themselves created and managed autonomously and can be reused when needed.
- To introduce a unique content repository for the parliamentary text production.
- To implement an appropriate security framework and infrastructure for the electronic signature.
- To develop a new integrated architecture based on the definition of "poolable" functions.

e-Parliament manages the changes by considering each parliamentary text production chain. A text production chain is a set of processes, actors and tools aiming at producing a collection of texts. The "pilot text production chain" of the current phase is the adaptation of the parliamentary amendment production chain including Reports, Opinions, Adopted texts and Consolidated texts production for different types of procedures.

In this context, AT4AM has been successfully introduced at the beginning of 2010. This application is the eParliament specific business component covering the authoring of amendments on parliamentary texts (for legislative and non-legislative procedures) and the production of amendments lists for downstream services. It has become a working tool daily used by Members and hundreds of civil servants supporting the parliamentary drafting activities. At present, more than 190,000 amendments were created with AT4AM. The keys of the success of the tool reside on the rapidity to draft amendments due to its ease of use.

DST has been successfully introduced in May 2012. This application is the eParliament reusable business component covering the verification of parliamentary texts produced by authoring tools aligned to the e-Parliament architecture. It currently allows the extension of the XML chain to the linguistic and legislative verification of the amendments.

DG ITEC is currently working on the digital signature of the amendments and the extension of the XML chain (Akoma Ntoso format) to the translation of the amendments and to the production of amendments list, with the delivery of new components:

- CAT4TRAD is the e-Parliament reusable business component covering the translation of parliamentary texts (for legislative and non-legislative procedures) produced by authoring tools aligned to the e-Parliament architecture.
- DM-XML is the e-Parliament technical supporting service providing a unique services layer for XML text handling to the applications compliant to the e-Parliament architecture.
- PURE-XML is the eParliament technical supporting service providing a unique content repository to the applications compliant to the eParliament architecture.

Following the considerable success of AT4AM and an increasing demand to share the experience made, DG ITEC has decided to run a project aimed at providing an open source version of AT4AM. This version, foreseen for 2013, will allow amending content submitted in Akoma Ntoso and obtaining amendments in the same format.

Mr. Rainer Wieland, Member of European Parliament and Vice-President for Informatics and Telecom, officially announced the decision of providing the open source version of AT4AM at the International Workshop "Identifying benefits deriving from the adoption of XML-based chains for drafting legislation" that took place in Brussels on 3 and 4 May 2012.

The European Parliament will work jointly with the United Nations Department of Economic and Social Affairs (UN/DESA) and the Akoma Ntoso authors to deliver a set of open source tools to treat content in XML Akoma Ntoso.

The open source version of AT4AM will be delivered by the European Parliament as a tool to be used as it is, without any further customisation. Parliaments which are interested in using all or part of AT4AM, will have, if they need, to customize the services to fit their IT architecture. The European Parliament will not provide end user support except user and architecture guides.

With this ambitious program, the European Parliament is undertaking an important step towards the modernisation of ICT in support of its legislative production chain. DG ITEC believes that moving to an XML-based chain is the right strategy to boost the processes around the treatment of the legislative content.

Directorate General for Innovation and Technological Support (DG ITEC) of the European Parliament. Contribution to the World e-Parliament Report 2012

To support parliaments of Latin America and the Caribbean to advance in the adoption of open document standards, on 4, 5 and 6 June 2012 the Inter-American Development Bank (IDB), in collaboration with the Chamber of Deputies of Brazil and the Global Centre for ICT in Parliament, organized the regional workshop *Connected Parliaments - Introduction to Legislative XML*. The workshop was conducted within the framework of the RIPALC network[18]. The event, held at the Chamber of Deputies of Brazil, convened the heads of IT departments of parliamentary assemblies of the 26 IDB borrowing countries. The meeting was structured as a training session with presentations delivered by academic experts and staff of parliaments using XML in the Latin American and Caribbean region. The goal was to provide participants with the knowledge and tools for using open documents standards for legislative acts. Examples given during the training were based on the Akoma Ntoso schema, increasingly used by legislatures in Latin America as a reference for the implementation of XML[19].

Based on the results and the discussions held at these international events, it is clear that there is significant value in continuing the dialogue among parliaments about the development and adoption of open document standards at the global level, with the goal of providing a framework for, and visibility to, the various initiatives being undertaken around the world. This dialogue, however, should be helpful both to parliaments that have implemented XML or are about to do so, and those that have limited knowledge of, and skills in, this subject, and that should be encouraged to consider XML for greater efficiency and openness. The dialogue should also take into consideration the perspectives of civil society organizations, which increasingly seek to acquire and present parliamentary information online, and the academic community.

Finally, as many technically advanced parliaments that have successfully implemented open standards like XML often show a willingness to share their experiences and lessons learned, this could translate into concrete technical assistance activities through well-coordinated international cooperation frameworks.

18 See Chapter 10.

19 The presentations and information about the event are available at www.ripalc.org and http://www.ictparliament.org/node/4773

Chapter 6
Libraries and Research Services

INTRODUCTION

Parliamentary libraries and the librarians who staff them can play a special role in advancing e-parliament. They understand how to integrate parliamentary information and documents to create a more complete legislative record; and they can provide a more thorough understanding of the political, economic, and social context of a bill by linking it to resources outside the parliament.

Libraries have always been able to carryout these tasks at a deliberate pace after action on a bill had been completed and to create a useful and comprehensive history of the legislation that could be placed in a collection or archive.

Information and communication technologies now make it possible for this to happen much more quickly and to place this information in the hands of members and committees as they consider the bill. Web technology allows libraries to design portals that give easy access to the text of bills, committee reports, plenary debates and to documents from outside the parliament that are highly relevant to proposed legislation. Collections of resources and digital archives organized and maintained by libraries can now be dynamic tools accessed on a daily basis to provide background and context to current policy debates.

Box 6.1

> The Library's research and analyses delivered to members of parliament in direct response to a question are not available to the public on the website; this work is confidential. The Library produces general publications that are freely available to the public on the website, for example, Bills Digests (plain English explanations of Bills presented to the Parliament); Research papers (on topics of current interest to the Parliament); Flagpost (a blog used to disseminate short pieces on current issues.
>
> *Comment by a respondent to the 2012 Survey*

Technology enables libraries to offer a wider range of services to members, such as: handling inquiries and interactions with members of parliament electronically; creating personalized alerting services delivered to a variety of stationary and mobile devices; building websites that organize information based on the issues the parliament is dealing with; maintaining archives and permanent access to parliamentary documentation in digital formats; and, sharing their knowledge and experience both within the national parliament and with other parliaments.

Box 6.2

> The Library has its own module on the intranet portal. All business processes are automated: cataloguing (through COBISS), library and interlibrary loan, subject requests, selective dissemination of information on request for members only, databases (EBSCO; EU databases), parliamentary publication (e-books), catalogue desiderata, news, etc. The Library is the only department that has those activities automated and in daily use.
>
> *Comment by a respondent to the 2012 Survey*

However, only a few parliamentary libraries have been able to develop and provide these advanced services. Many are small, resource poor and lagging behind in their adoption of technology, even as ICT moves forward in other parts of the institution. The challenges that some libraries face include inadequate resources for staff training and limited access to the technology.

Box 6.3

> There are documents and literature stored, in a limited way at the Parliament Office; they are far from being kept in a manner that can be called a library. Whatever is stored is made available to members on request.
>
> *Comment by a respondent to the 2012 Survey*

Nevertheless, the knowledge embodied in libraries still exists, and the opportunities are still there to leverage the library science to the benefit of all. Acquiring, organizing and integrating parliamentary and external information sources in a way that enables the creation of a parliamentary knowledge base has major value for legislative institutions. A solid ICT infrastructure combined with skilled library and research staff can greatly enhance member access to key information resources, whether they are from inside the legislature, from political bodies, or from a variety of outside sources.

In attempting to achieve this higher level of service one of the fundamental concerns shared by many parliamentary libraries is the lack of staff resources, both in terms of numbers and of training occasions, especially in technology. While this concern is legitimate, the increasing availability of ICT in parliaments offers the potential to begin to address these issues. But to take advantage of the opportunities made possible through technology requires two critical elements: 1) access to the technology itself, with support from ICT specialists; and, 2) a library staff with the knowledge and skills to exploit technology to the benefit of the parliament. Also, it is vital to raise the understanding of the institution's senior management regarding the added value that libraries can bring to e-parliament and e-services.

To guide parliamentary libraries in the field of technology, the United Nations, the Inter-Parliamentary Union and the International Federation of Library Associations and Institutions (IFLA) jointly published the Handbook *Information and Communication Technologies in Parliamentary Libraries*[1]. The Handbook was prepared by the Global Centre for ICT in Parliament and the IFLA Section on Library and Research Services for Parliaments with the objective of outlining the innovations and emerging trends brought about by ICT in parliamentary libraries. It therefore covers various topics, ranging from digital information services and digitization of resources, to services through social media.

1 United Nations, Inter-Parliamentary Union, International Federation of Library Associations and Institutions, Global Centre for ICT in Parliament, *Information and Communication Technologies in Parliamentary Libraries: Handbook,* [New York]: United Nations, 2012 [http://www.ictparliament.org/handbook-libraries].

This Chapter of the Report complements the Handbook in providing a picture of the current and evolving state of ICT in parliamentary libraries over the past years, by comparing the findings from the earlier 2007 and 2009 surveys, with the findings from the 2012 survey.

SUMMARY OF FINDINGS FROM THE 2007/2009 SURVEYS

The 2010 Report noted that the increasing use of new technologies and the emergence of e-parliaments had created a growing demand for information services and had raised the bar for libraries by requiring that the information they provide be more current, more complete, and more tailored to the individual needs of members, committees and other library clients.

The Report also pointed out, as noted above, that librarians have the knowledge and the discipline to meet these requirements, but it underscored that they must have access to the technology and be skilled in its use if the goal is to improve the services they provide in a way that benefits the whole institution.

While findings from the 2007 survey indicated that many libraries had been able to adopt new technologies to support their traditional tasks of acquiring and organizing information resources, in 2009 many still reported challenges in further developing them. Most parliamentary libraries had basic ICT-supported capabilities, such as systems for managing library resources. However, over 40 per cent were not connected to a parliamentary intranet, even though LANs are in place in nearly all legislatures. This severely limited the nature and extent of e-services that libraries could provide, such as online access to information sources that are organized according to the policy issues that the parliament is addressing.

In 2009 libraries contributed to e-parliament in a number of ways. Many were taking an active role in maintaining an archive of parliamentary documents in digital formats. Over 50 per cent did this already and an additional 30 per cent were planning or considering doing it. These archives included some of the most important parliamentary documents, such as bills, plenary documents, committee documents, and research reports. Libraries also contributed to the website of the parliament, most often by providing some of its content. A significant number were also engaged in updating and maintaining the website, and some were involved in the organization, testing, and design of the site. Two thirds of parliamentary libraries reported that they served the public and a majority of these allowed access to the library's website.

However, while acknowledging the contribution of some libraries to e-parliament, and underscoring that librarians know how to acquire, integrate, and deliver information and how to preserve and ensure its continuous availability, the 2010 Report concluded that only a few libraries had been able to respond effectively and creatively to the increasing demands of parliaments by integrating technology into their work in new and innovative ways. Those that had done so were clearly leaders in their field. But many libraries continue to face challenges that stem from inadequate resources for training, limited availability of technology and, in some cases, lack of appreciation of the contribution they can make to e-parliament.

Box 6.4

> As of now, we have a very small library with limited collections on other parliaments and newspapers which are managed manually using the Dewey decimal classification system. We are working on moving to online commercial systems soon with the help of consultants from outside. The Library does not have ICT staff of its own as of now. This might be considered in the future when the Library expands.
>
> *Comment by a respondent to the 2012 Survey*

Libraries in parliaments in low income countries continued to face significant challenges. Compared to those in high income countries, far fewer had systems to manage traditional library resources, were connected to the parliament's intranet, and participated in networks for the exchange of information, ideas, and best practices.

With specific regard to networking and cooperation, in 2010 only 45 per cent of libraries were reported to participate in formal online networks for sharing information with other libraries and research services. The Report pointed out that this was less than the 59 per cent that said that the parliaments as an institution participated in formal networks for the exchange of information and experiences regarding ICT.

FINDINGS FROM THE 2012 SURVEY

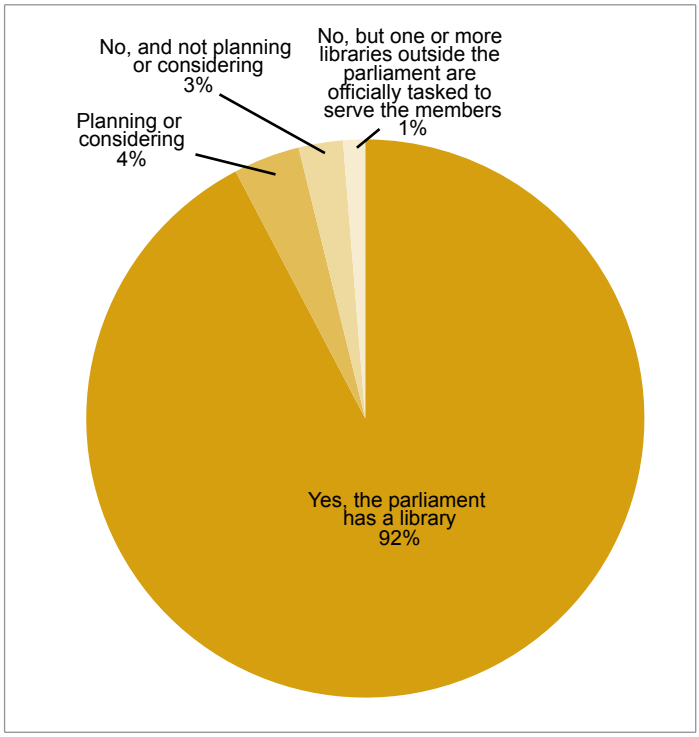
The Global Survey of ICT in Parliaments 2012 focused on the digital capacities and digital information services through which library and research offices are supporting parliaments. It included questions related to the types of support provided and their characteristics, along with questions regarding the availability of services to the public.

Box 6.5

> What I have learnt from the questions [is] that we need to beef up and be up to date with the international standards about the systems and services that we provide
>
> *Comment by a respondent to the 2012 Survey*

However, the first issue to be addressed was whether parliaments even possess a library or an information centre to serve its members. As shown in Figure 6.1, 92 per cent replied *yes*, 4 per cent said *planning* or *considering*, and 3 per cent mentioned *no and not planning or considering*. These percentages match

Figure 6.1: Parliaments that have a library



(Source: Survey 2012, Section 4, Question 1)

those of the 2009 survey[2]. In 2012 approximately 1 per cent of parliaments reported that they are served by libraries outside the institution. Among bicameral parliaments, 56 per cent reported that one library serves both chambers, up from 44 per cent in 2009[3]. This increase in chambers that share a library may have several causes, including the decision to rationalize resources and avoid duplication of effort by using a single structure.

The findings that follow apply to the 144 parliaments that responded that they do have a library.

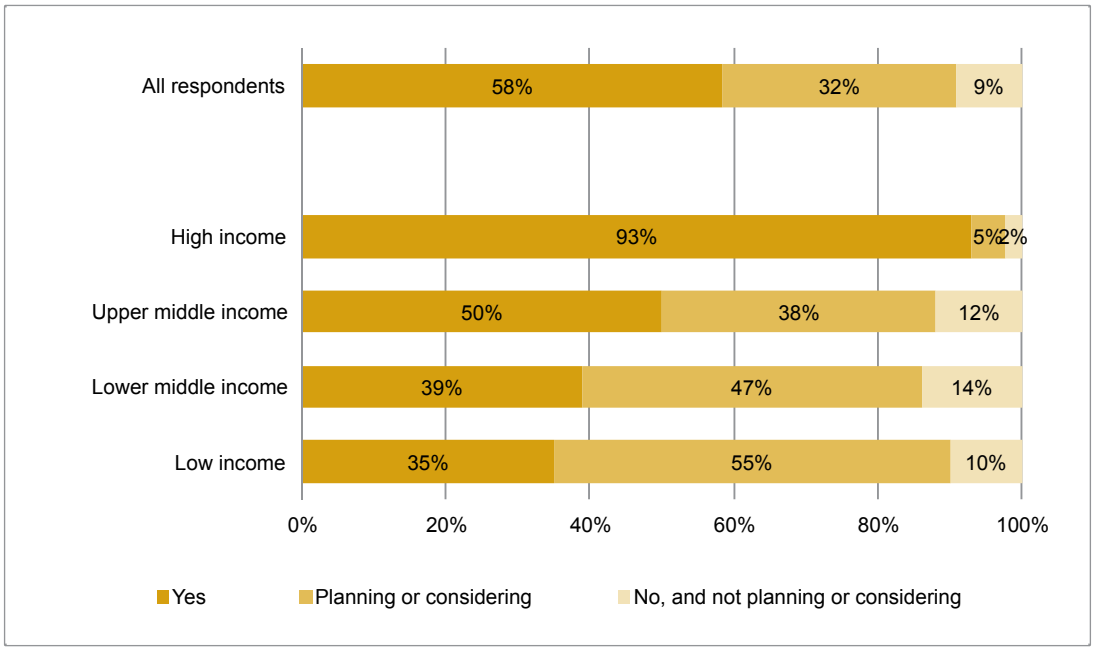
Digital capacities

Digital capacities refer to the basic technical resources and technologies which libraries can use to develop services for members and committees. There are, of course, other important types of support that libraries provide to parliaments that do not depend on ICT, but technology based services are becoming increasingly critical to the efficient operation of the institution. The capabilities considered in the 2012 survey included connection to an intranet and systems and services for managing the acquisition, organization, and preservation of documentation and other information resources.

Connection to an intranet

Despite the fact that over 90 per cent of parliaments reported that they have a local area network (LAN) in both 2012 and 2009, only 58 per cent of the libraries in those parliaments reported in both surveys that they have access to the parliamentary intranet[4]. The relationship with the income level of the country is especially strong. As shown in Figure 6.2, in 2012 over 90 per cent of the parliamentary libraries in high income countries are connected, while 50 per cent or less are connected for all other income groups.

Figure 6.2: Libraries connected to an intranet, by income groups



(Source: Survey 2012, Section 4, Question 6)

2 See *World e-Parliament Report 2010*, p. 107.
3 Sources: Survey 2012, Section 4, Question 2; Survey 2009, Section 4, Question 20.
4 Sources: Survey 2012, Section 4, Question 6; *World e-Parliament 2010*, p. 108, Figure 6.3.

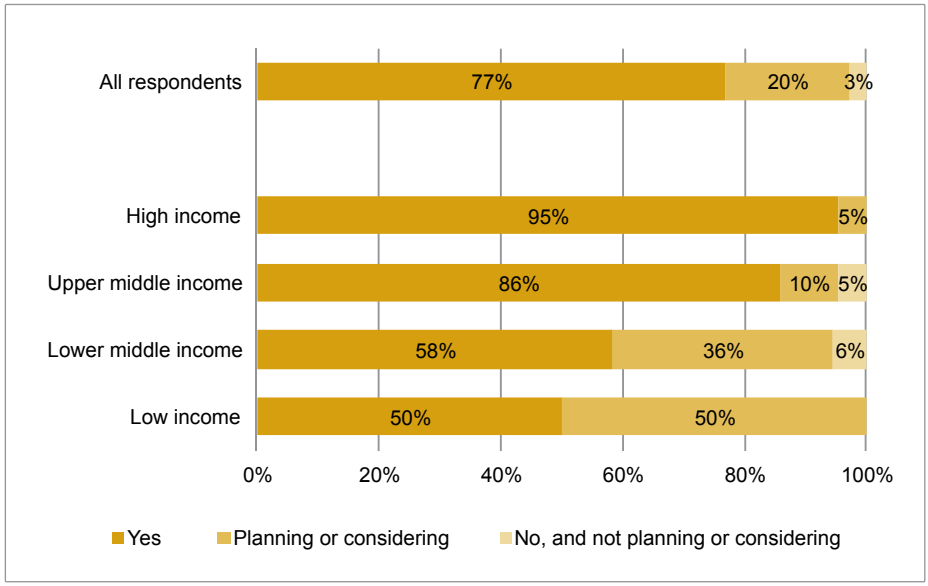
Lack of connectivity to an intranet represents a serious constraint on the ability of libraries to offer digital services to members, committees, and the political leadership. The relatively large percentage of respondents that are not connected (more than 40 per cent) limits the number of libraries that can: a) design and maintain a web page that organizes access to policy related material; b) receive requests and questions from members electronically; and c) offer alerting services, as further discussed in this chapter.

While many are planning or considering offering these services, the lack of connection to the parliament's intranet is a critical requirement that must be addressed first.

Systems for acquiring, organizing, and preserving resources

Over three quarters of the libraries (77 per cent) reported that they have an automated system for managing library resources (see Figure 6.3), which represents an overall increase from 2009 (72 per cent)[5]. The greater improvements in this area, when compared to 2009, have been experienced by those in the upper middle (2012=86 per cent; 2009=75 per cent) and lower middle (2012=58 per cent; 2009=50 per cent) income groups[6]. The comparison between results in Figures 6.2 and 6.3 shows in fact that having an automated system is less strongly related to the income level of the country than having access to an intranet.

Figure 6.3: Use of automated systems for managing library resources, by income groups



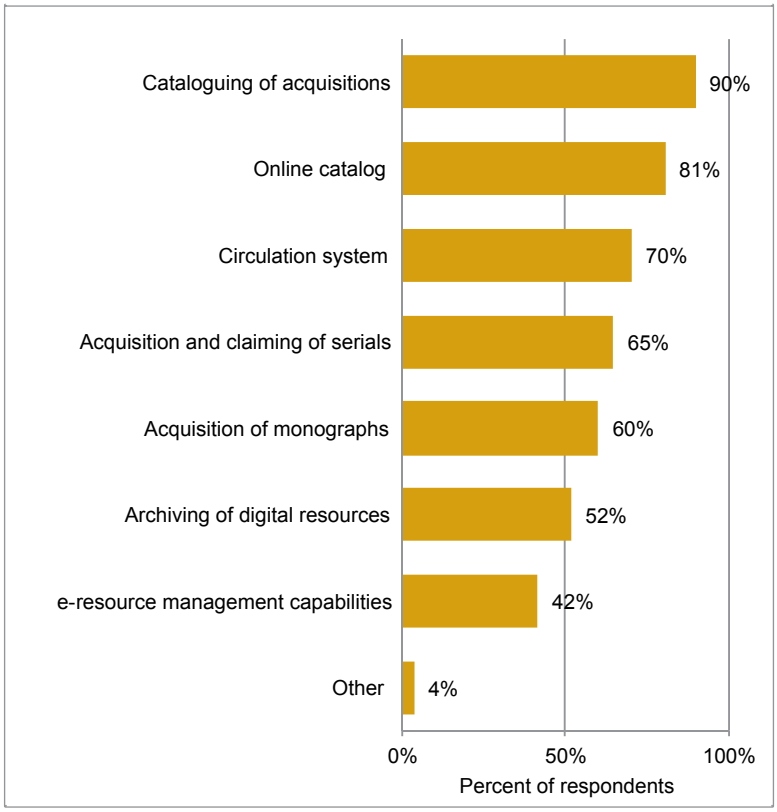
(Source: Survey 2012, Section 4, Question 3)

As shown in Figure 6.4, a high percentage of the parliamentary libraries have systems with traditional capabilities, including cataloguing acquisitions (90 per cent), an online catalogue (81 per cent), circulation control (70 per cent), acquisition and claiming of serials - typically magazines and newspapers – (65 per cent), and monographs (60 per cent). However, fewer have systems for managing material in digital format, such as archiving (52 per cent) and managing digital resources (42 per cent).

5 See *World e-Parliament Report 2010*, p. 107, Figure 6.1.
6 *Ibid.*

Connection to the internet allows libraries to access a number of free online information sources for the purpose of providing research for their users. In addition to these services, parliamentary libraries can purchase subscriptions to online journals and databases that contain expert research and analysis. Fewer parliaments reported that they purchase subscriptions to online journals and databases in 2012 (49 per cent)[7] compared to 2009 (54 per cent)[8]. Access to these electronic resources can be achieved, in some cases, through consortia arrangements that can be negotiated by groups of libraries at the national level. Of the parliamentary libraries responding that they purchase subscriptions to electronic information resources, less than half participate in consortia to acquire them[9].

Figure 6.4: Capabilities of automated systems for managing library resources



(Source: Survey 2012, Section 4, Question 4)

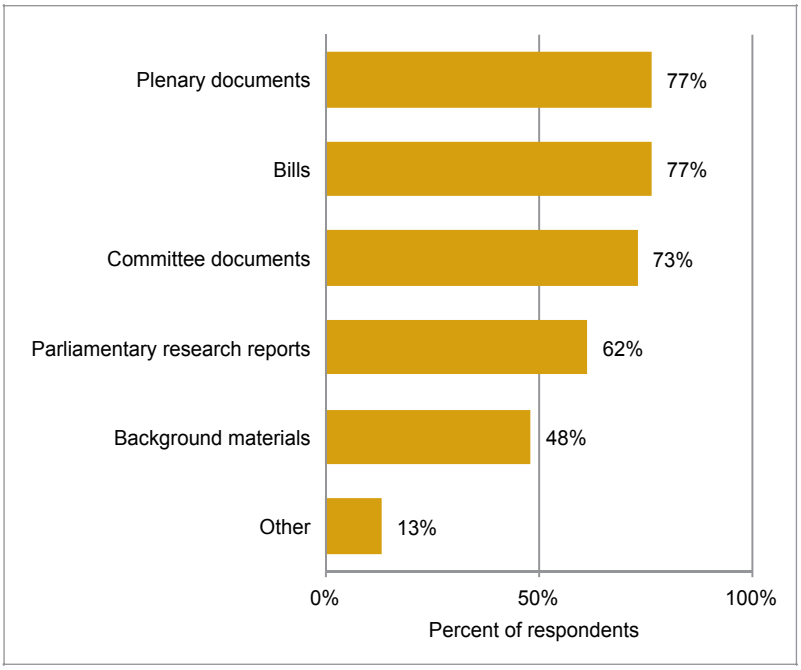
In addition to managing current resources libraries have a strong interest in preservation and in ensuring that there is permanent access to all parliamentary documents. Somewhat less than half (43 per cent) reported that the library maintains an archive of parliamentary documentation in digital formats[10]. The combined percentage of those that replied *yes* or *planning* or *considering* doing this was 73 per cent.

However, these percentages must be viewed within the broader framework of the digital archiving policy of the parliament. As noted in Chapter 5, over half of the parliaments (53 per cent) responding to the 2012 survey reported that they now maintain a digital archive for parliamentary documents[11]. In fact, in addition to their libraries, some parliaments task other units with the responsibility for archiving, preserving and ensuring access to parliamentary papers, debates and documents[12]. The crucial need is that collections are managed by a staff that has the knowledge and methodology for ensuring the proper organization of archived material and long term access to it. Librarians and archivists may work closely together on these tasks.

As illustrated in Figure 6.5, findings from the 2012 survey show that among those libraries that do maintain a digital archive, approximately three quarters preserve the most important documents, including plenary reports (77 per cent), bills (77 per cent), and committee documents (73 per cent).

7 Source: Survey 2012, Section 4, Question 13.
8 See *World e-Parliament 2010*, p. 110.
9 Source: Survey 2012, Section 4, Question 14.
10 Source: Survey 2012, Section 4, Question 15.
11 Source: Survey 2012, Section 3, Question 11.
12 See Cuninghame, Keith, *Guidelines for Legislative Libraries* [2nd completely updated and enlarged edition], Berlin: De Gruyter Saur, 2009 [http://www.ifla.org/en/publications/ifla-publications-series-140].

Figure 6.5: Documents maintained in the archive in digital format



(Source: Survey 2012, Section 4, Question 16)

The advent of digital archives makes the task easier because it reduces the continual need to find additional space for a growing paper collection and because of the multiple access keys to documentation that digital support may allow. Building a digital archive is helped when the digital record is identified as at least one of the official versions to be preserved. However, it must be pointed out that this is an area that requires effective collaboration among librarians, IT staff, and those who create and/or manage parliamentary documents. This is vital to guarantee that access to the digital version of older documents will not become a challenge in several more years.

One positive aspect related to digital capacities of parliamentary library and research services has to do with the extent of internal collaboration through ICT among library and/or research staff. The 2012 survey shows an increase in the use of software to support collaboration among staff from 25 per cent in 2009 to 35 per cent in 2012[13].

Digital services

The digital capacities discussed in the previous section are the essential building blocks for providing digital services to the library's users. These include members and committees, and, for some libraries, the public.

Members and committees

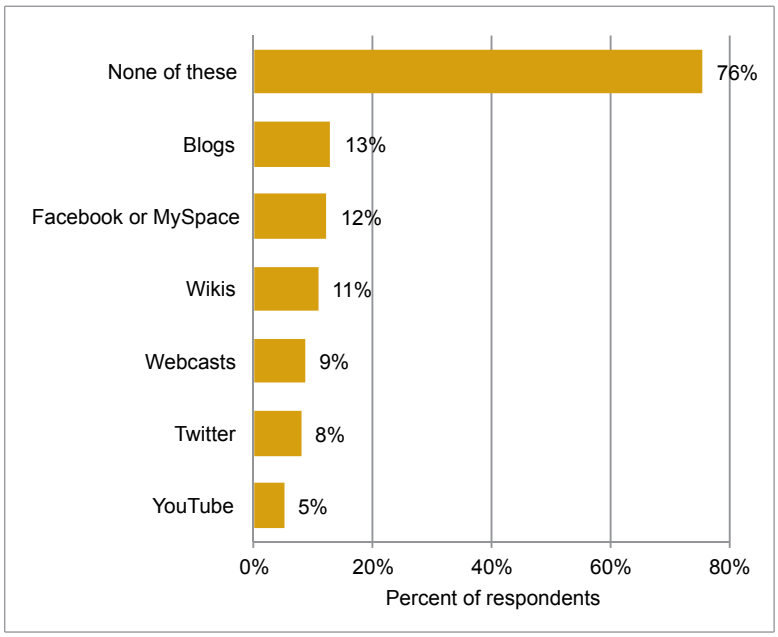
Over 60 per cent of parliaments reported that their libraries are able to receive requests and questions from members electronically (see Figure 6.6). While this represents only a slight increase over 2009 (58 per cent)[14], it is a positive indication of the willingness of libraries to implement digital services for members and committees. Unfortunately, Figure 6.6 also shows that far fewer libraries are able to offer other digital services that can help respond efficiently to many of these requests.

For example, only 43 per cent have their own website that provides access to information sources and which they organize on the basis of issues of concern to the parliament[15]. And only 35 per cent offer alerting services for members[16].

13 Sources: Survey 2012, Section 4, Question 12; Survey 2009, Section 4, Question 10. See *World e-Parliament Report 2010*, p. 109.
14 See *World e-Parliament Report 2010*, p. 109, Figure 6.4.
15 Source: Survey 2012, Section 4, Question 8.
16 Source: Survey 2012, Section 4, Question 10.

Even though the percentage of parliamentary libraries using some of the new communication tools increased significantly in 2012 compared to 2009, the actual numbers still remain very low (see Figure 6.6). These technologies represent a new way to deliver services and may be relevant to parliamentary libraries both as a tool for research and as a means of promoting library services[17]. However, although some libraries have made very effective use of them, it must be noted that it is too early to determine how they can be best used by most libraries, especially those that lack adequate access to and training in ICT.

Figure 6.6: Newest communication tools being used by libraries

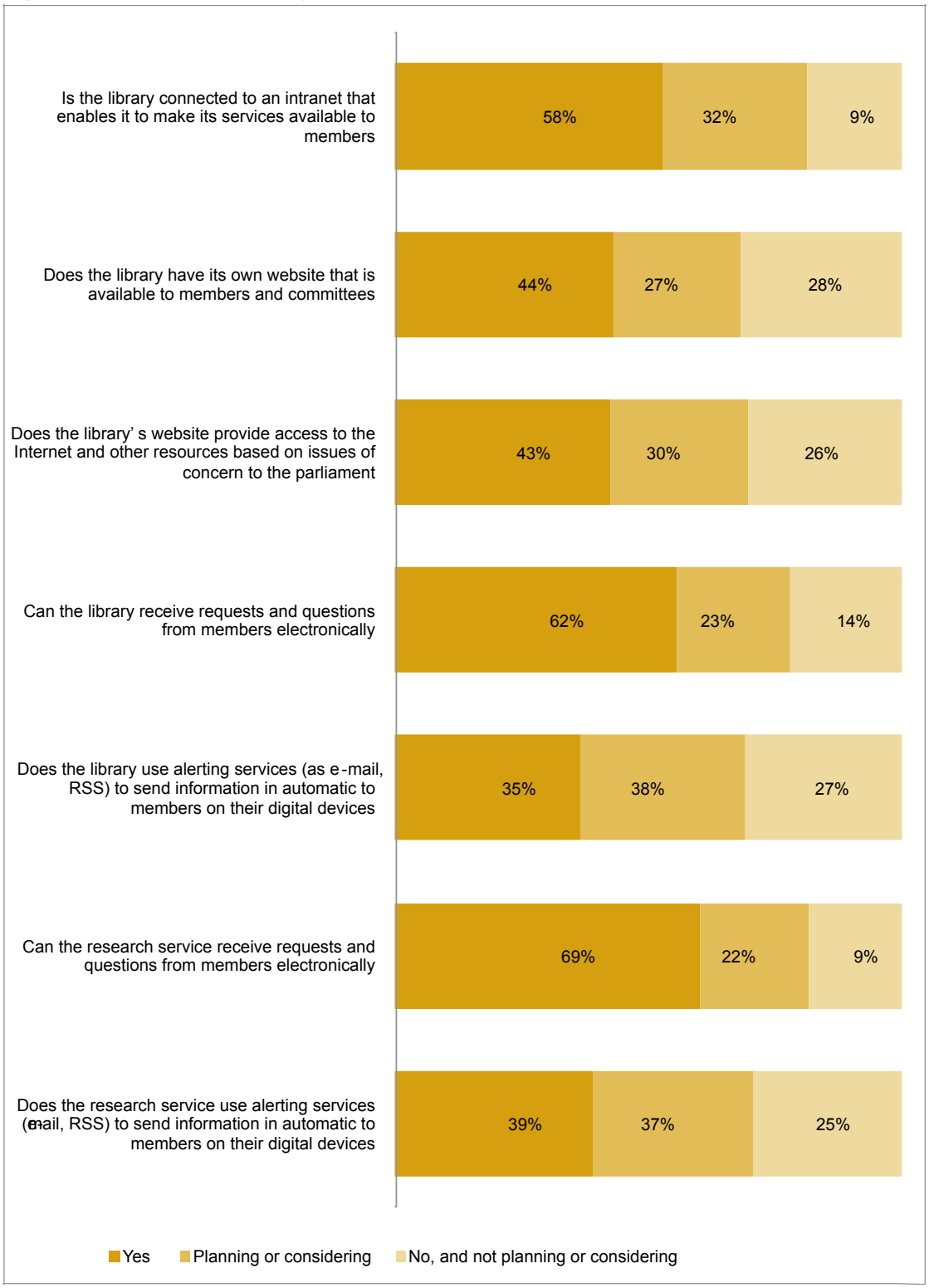


(Source: Survey 2012, Section 4, Question 11)

The survey results further show that even parliaments that employ subject matter experts for providing research services to the parliament do not offer a substantially higher percentage of digital services. For example, only 69 per cent of these reported that their subject matter experts can receive requests electronically, and only 39 per cent offer alerting services, such as email or RSS, to send information automatically to members (see Figure 6.7).

17 See Chapter 5 of the Handbook *ICT in Parliamentary Libraries*, cit.

Figure 6.7: e-Services offered by libraries

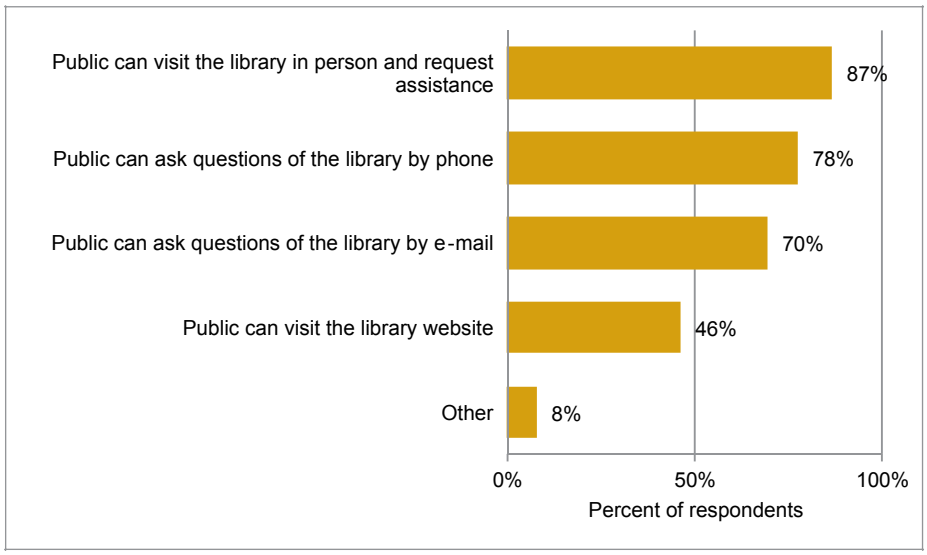


(Source: Survey 2012, Section 4, Questions 6, 7, 8, 9, 10, 25, 26)

The Public

The mission of 72 per cent of parliamentary libraries includes serving the public[18]. As predicted in the 2010 Report, this percentage has grown since the 2009 survey (66 per cent)[19]. However, the growth in digital services available to the public is somewhat mixed (see Figure 6.8 for the 2012 results). While the percentage of parliaments that said the public can ask questions via e-mail has increased since the 2009 survey (2012=70 per cent; 2009=63 per cent), the percentage of all respondents to the survey that said the public can visit the library website was slightly lower (2012=46 per cent; 2009=51 per cent)[20]. However, results from the 2009:2012 comparison group indicated that the percentage has remained constant for this smaller group at about 55 per cent.

Figure 6.8: Services available to the public

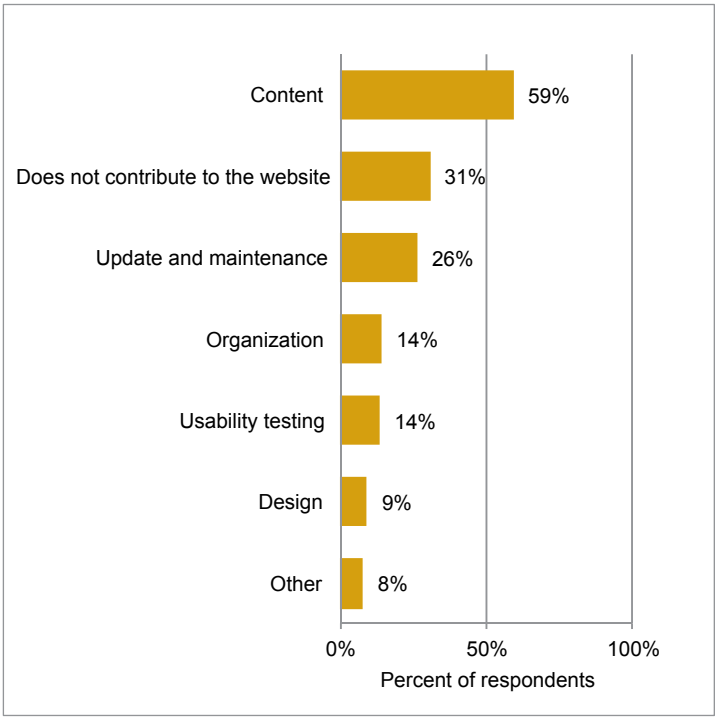


(Source: Survey 2012, Section 4, Question 18)

It is possible that this lack of growth in public access to library websites may be caused in some cases by information from the library being made available on the main parliamentary website. However, the results from the 2012 survey regarding the various contributions that libraries make to the parliament's own website do not support this explanation. The percentages shown in Figure 6.9 are lower for each item than those from the 2009 survey[21]. For example, while the percentage of those that do not contribute anything to the website remained the same (31 per cent), the percentages of those contributing content declined (21012=59 per cent; 2009=64 per cent), as did the percentage of those helping update and organize the website (2012=26 per cent; 2009=31 per cent).

18 Source: Survey 2012, Section 4, question 17.
19 See *World e-Parliament Report 2010*, p. 112; Survey 2009, Section 4, question 15.
20 See *World e-Parliament Report 2010*, p. 112, Figure 6.10.
21 See *World e-Parliament Report 2010*, p. 112, Figure 6.9.

Figure 6.9: Library's contributions to the website of the parliament

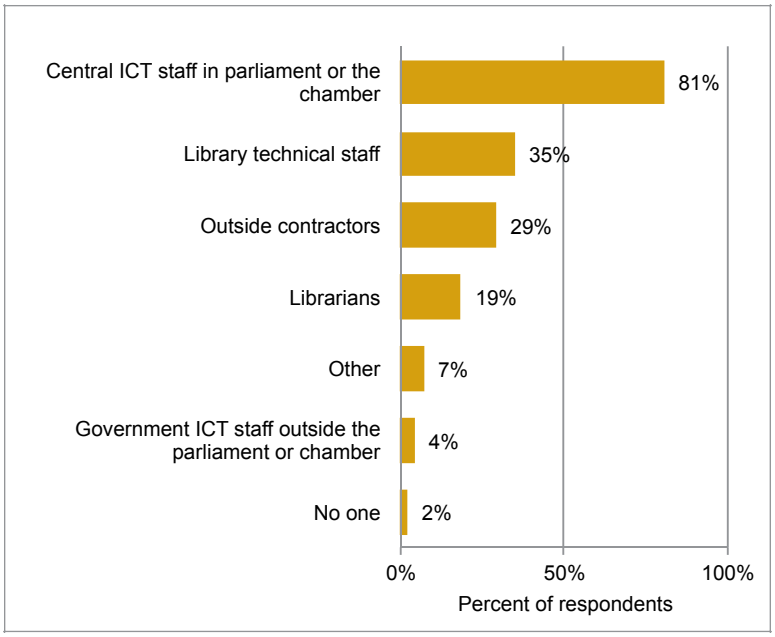


(Source: Survey 2012, Section 4, Question 21)

Management issues

ICT support for libraries continues to come from a variety of sources and often by combining them, as it did in 2007 and 2009. In over 80 per cent of parliaments the central ICT staff is involved in providing technology support to the library; in 35 per cent the support is provided by library technical staff; in 29 per cent by outside contractors (compared to 36 per cent in 2009); and, in 19 per cent by librarians (compared to 28 per cent in 2009).

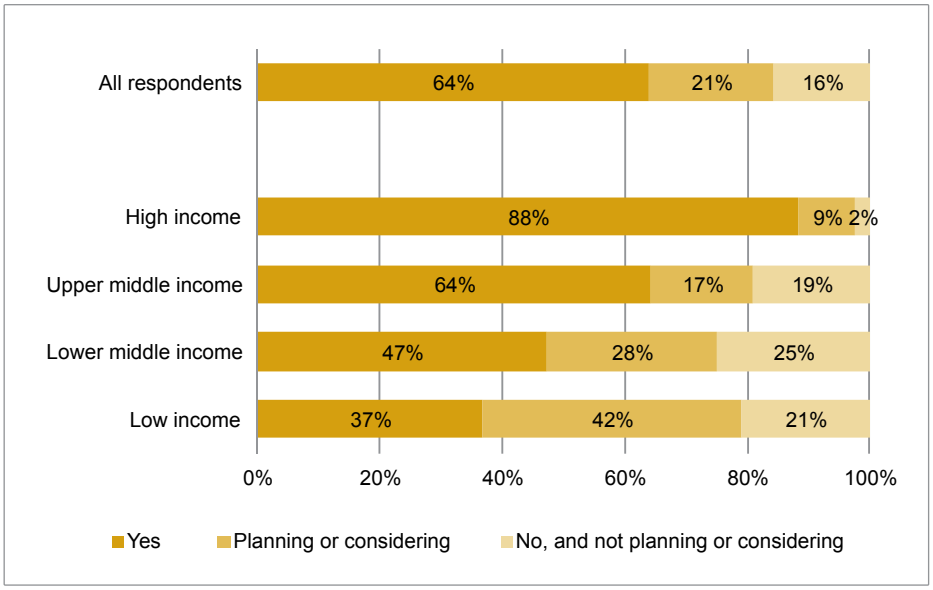
Figure 6.10: Staff support for ICT in libraries



(Source: Survey 2012, Section 4, Question 5)

PARLIAMENTARY LIBRARY NETWORKS AND ASSOCIATIONS

Figure 6.11: Libraries that participate in networks, by income groups

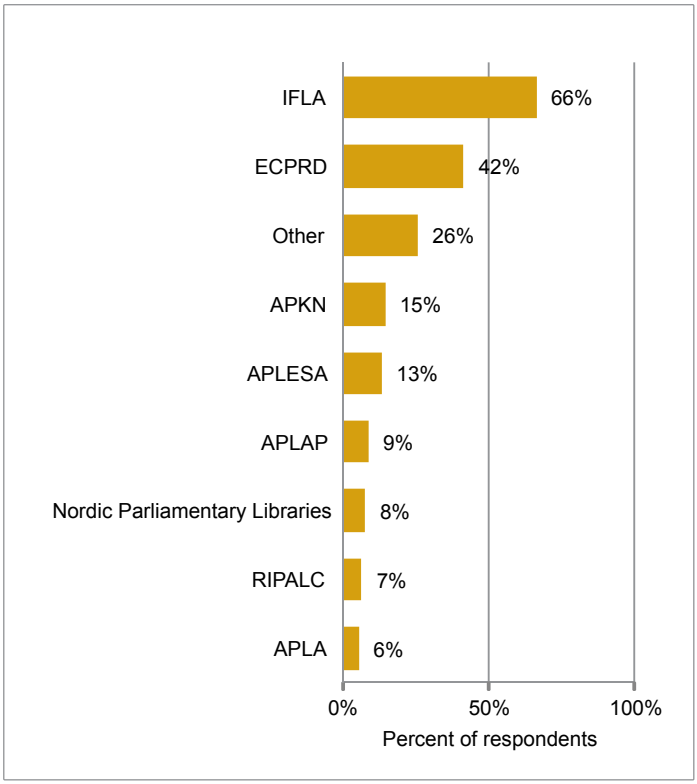


(Source: Survey 2012, Section 4, Question 19)

Parliamentary libraries have established a number of associations, working groups and networks operating at the global and regional level, as well as joint initiatives and partnerships. Figure 6.11 shows the extent of participation in these groups and initiatives in 2012. Since the release of the 2010 Report the percentage of libraries that participate in online networks for sharing information with other libraries has grown from 45 per cent[22] in 2009 to 64 per cent in 2012[23]. This growth has occurred across all income levels. The percentages shown in Figure 6.11 represent an average increase of almost 60 per cent for all groups.

Figure 6.12 shows the extent of participation by parliamentary libraries in specific formal networks. The next section of this chapter provides an overview of some of these networks, operating in the domain of parliamentary library and research services, at the global and regional level. Special attention is given to networks established after the release of the 2009 survey and to activities undertaken in the field of ICT and parliamentary libraries.

Figure 6.12: Libraries that participate in formal networks



(Source: Survey 2012, Section 4, Question 20)

22 See *World e-Parliament Report 2010*, p. 112, Figure 6.11.
23 Source: Survey 2012, Section 4, Question 19.

Newly established networks for cooperation at the regional level

Associations and networks at the regional level are complementary to global initiatives and vital for encouraging cooperation between institutions that share geographical proximity, similarity of concerns and parliamentary traditions, close cultural and linguistic identity, and common historical background.

The progress in the level of cooperation in the past two years is demonstrated by the establishment of three new regional networks among parliamentary libraries that have emerged in Africa, Latin America and the Caribbean and the Arab region. These are: the Working Group on Libraries of the Africa Parliamentary Knowledge Network (APKN), the Working Group on Libraries of the Exchange Network of Parliaments of Latin America and the Caribbean (ENPLAC)[24], and the Arab Parliamentary Libraries Network (APLN).

Africa Parliamentary Knowledge Network (APKN) - Working Group on Libraries

In December 2009, the three-day workshop "Strengthening the Cooperation among Parliamentary Libraries in the Framework of the Africa Parliamentary Knowledge Network (APKN)"[25] led to the establishment of the Working Group on Information and Research within the APKN, aimed at encouraging parliamentary libraries of African assemblies to join efforts and resources using ICT tools to enhance the quality of their services. One major achievement of the Working Group in the past two years has been the implementation of the APKN Federated Parliamentary Library Portal[26], a collaboratively built, jointly owned and centrally managed collection of library resources of parliaments of Africa, where the library catalogues of the different member parliaments across Africa can now be accessed, collectively or in each specific library.

Exchange Network of Parliaments of Latin America and the Caribbean (ENPLAC) - Working Group on Libraries

From 19 to 21 January 2011, the National Congress of Chile, the Global Centre for ICT in Parliament and the IFLA Section on Library and Research Services for Parliaments organized the workshop "*Leveraging ICT to improve services and promote networking and knowledge sharing among Latin American parliamentary libraries*"[27] in Valparaiso. The meeting intended to respond to some of the challenges confronted by libraries and IT departments of Latin American legislatures on the use of ICT in parliamentary libraries[28]. The Workshop facilitated the creation of an informal working group of parliamentary libraries in the region, and provided a first platform for sharing ideas and identifying a possible roadmap for the establishment of a formal mechanism for inter-

24 While the English acronym is ENPLAC, the network is more known as RIPALC, the acronym for "Red de Intercambio de los Parlamentos de América Latina y el Caribe". See http://www.ripalc.org/

25 http://www.apkn.org/. The Workshop was hosted from 17 to 19 December 2009 by the Italian Joint Parliamentary Library in Rome and supported by the United Nations Department of Economic and Social Affairs, through the Global Centre for ICT in Parliament and the Africa i-Parliaments Action Plan, with the cooperation of the IFLA Section on Library and Research Services for Parliaments.

26 http://fpl.apkn.org/

27 http://www.ictparliament.org/internationalworkshopchile. The workshop was attended by representatives of fifteen (15) countries including Directors of Libraries and IT Departments. The report of the event, prepared with the collaboration of the Senate of Brazil, is available at: http://www.ictparliament.org/node/3636

28 Before the workshop, a survey was circulated among parliamentary libraries of Latina America and the Caribbean. The findings of the survey were analyzed by the Library of the Congress of Chile in cooperation with the Global Centre for ICT in Parliament and were the basis for the Report "Parliamentary Libraries of Latin America and the Caribbean".

parliamentary cooperation at the regional level, to be agreed upon by Secretaries General of Parliaments. A meeting of Secretaries General of Parliaments of Latin America and the Caribbean held in April 2011 in Panama, in conjunction with the annual meeting of the Association of Secretaries General of Parliaments (ASGP), discussed and agreed on the establishment of such network (see details in Chapter 10).

As a follow up to the workshop held in January in Chile, the Global Centre for ICT in Parliament, the Office of Legislative Services of the Legislative Assembly of Puerto Rico and the IFLA Section on Library and Research Services for Parliaments organized a skills development activity[29] directed at the heads of library and research services from parliaments of Latin America and the Caribbean. The activity, held in conjunction with the Annual Conference and activities of the IFLA Section on Library and Research Services for Parliaments was attended by parliamentary representatives of twenty countries, and focused on the use of new technologies and on international standards to enhance the capacity of parliamentary libraries to develop, manage and deliver digital resources[30].

Arab Parliamentary Libraries Network (APLN)

On 19 and 20 January 2012, the first regional meeting of Arab parliamentary libraries was convened by the Arab Institute for Parliamentary Training and Legislative Studies in Beirut, Lebanon, with the technical support of the Legislative Strengthening Program funded by USAID and implemented by the Center for International Development (CID) of the State University of New York (SUNY). During this event, librarians and research staff from the parliaments of the Arab region discussed services offered by their libraries and research offices, opportunities for networking and collaboration, and ways to improve services provided to members and staff of their respective parliaments, including through ICT. To achieve these goals, participants agreed on the establishment of the Arab Parliamentary Libraries Network (APLN), drafted the Network's statutes, elected the Network's executive committee, and devised a plan of action for its future developments[31]. As a follow up to the meeting in Lebanon, and building on previous joint initiatives targeting the Arab region held in 2009, the Global Centre for ICT in Parliament, the IFLA Section on Library and Research Services for Parliaments and the Parliament of Finland organized a skills development activity for parliamentary libraries of the Arab region in Helsinki. The activity, held in conjunction with the IFLA parliamentary Section pre-conference from 8 to 10 August 2012, focused on the strategic use of new technologies to provide more effective information services to the parliament and the public. It was attended by heads of parliamentary libraries from 14 chambers from the Arab region.

Other networks and association for cooperation at the regional level

While findings from the 2012 survey show an increase in participation in networking, partly due to the establishment of these new associations, other previously existing groups continue to act as strong platforms for cooperation among parliamentary libraries and research services.

29 Held in San Juan, Puerto Rico, from 12 to 15 August 2011.
30 See http://www.ictparliament.org/node/3462 and http://iflaparl2011.org/en/training.html
31 In order to formalize the Network, the Secretary General of the Arab Inter-Parliamentary Union agreed to issue formal invitations to Secretaries General of all Arab parliaments inviting and encouraging their parliaments to become members of the new network.

The Area of Interest "Parliamentary Research Services, Libraries and Archives"[32] of the European Centre for Parliamentary Research and Documentation(ECPRD) continues to be an active platform for cooperation and knowledge sharing among parliamentary assemblies of the member states of the European Union and the Council of Europe[33]. As do other ECPRD Areas of Interest, it shares peer knowledge, information and best practices through a specific page on the ECPRD portal, online forums among members, and annual seminars.

The 2011 Libraries Area seminar, hosted in June by the Danish Parliament, focused on "Members' use of information and changing visions of the Parliamentary Library". Presentations in the seminar were predominantly ICT-oriented, including topics such as status of digitization and strategies, applications for parliamentary documents, use of tablets, digital services to members, and e-enabling members.

In the north European context, it is worth mentioning the network of Parliamentary Libraries of Nordic Countries (Denmark, Finland, Iceland, Norway, Sweden), which first met in 1922.It is still very vital and since 1965 has held meetings every year to discuss managerial and technical issues, including ICT topics.

Other examples of valuable ICT-based cooperation for the provision of effective access to parliamentary documents are: a) the joint digital parliamentary library of the parliaments of the Czech Republic and Slovakia[34]; and, b) the Visegrad Digital Parliamentary Library, which provides, through a single portal, fast and easy access to current and past activities of legislators of the Czech Republic, Hungary, Poland, Slovakia and, more recently, Austria[35].

In Africa the Association of Parliamentary Librarians of Eastern and Southern Africa (APLESA), founded in 1994, renewed its work plan during the 13th Annual Conference, which took place in Namibia in May 2012. During the meeting APLESA's members underlined in a resolution that "…realizing the high cost of accessing e-resources (…) Parliamentary library and Research Services should consider partnerships through consortia to access e-resources".

In the Asia Pacific region, the findings show a stable membership to the Association of Parliamentary Librarians of Asia and the Pacific (APLAP) and the Association of Parliamentary Libraries of Australasia (APLA). Under the leadership of the Library of Parliament of Australia, an international symposium and training event, with specific information sharing sessions focused on developing ICT knowledge and skills, took place in Canberra at the beginning of March 2011[36].

32 ECPRD was established in June 1977.
33 Canada, Israel, Mexico and the Congressional Research Service of the United States of America have the status of observers and can participate to the network's activities.
34 Established in 2002. See http://www.nrsr.sk/dl/
35 The project started to be implemented in 2008. Austria joined in 2010 (after which the name changed to Visegrad Digital Parliamentary Library Plus). See http://www.v4dplplus.eu
36 http://symposium2011.aph.gov.au/

The global level: IFLA Section on Library and Research Services for Parliaments

As mentioned in the *World e-Parliament Report 2008* and *2010*, the global network of parliamentary library and research services is the Section on Library and Research Services for Parliaments of the International Federation of Library Associations and Institutions (IFLA)[37].

The use of ICT in parliamentary libraries has been increasingly addressed during the Section's annual activities in conference panels as well as through its channels for sharing knowledge and information, such as mailing lists, a website, a newsletter, and various Section publications.

Since 2007 the Section has developed an intense cooperation with the Global Centre for ICT in Parliament, notably through the co-organization of training sessions on the occasion of the Section's annual pre-conferences (2009, 2011, 2012), regional training sessions for parliamentary staff of Africa, Latin American and Arab legislatures (2009, 2011, 2102) and joint panels during the World e-Parliament Conferences (2007, 2008, 2009, 2010, 2012).

Its involvement in the recent creation of regional networks and working groups of libraries (APKN Working Group, ENPLAC Working Group, and APLN) allowed the Section to broaden its worldwide audience.

One major achievement of the cooperation between the Section and the Global Centre for ICT in Parliament was the publication of the Handbook *Information and Communication Technologies in Parliamentary Libraries* described in the introduction of this Chapter.

Finally, in the context of this global cooperation, it is worth highlighting the renewal of the *World Directory of Parliamentary Libraries*, an electronic directory meant to contain basic data on parliamentary libraries of sovereign states[38]. The Directory is hosted by the German Bundestag which, in 2010, revised the database and simplified the entries for easier and continuous update by each parliamentary library. In 2011 the Bundestag has invited all parliamentary libraries worldwide to check and update their data.

THE GENERAL STATE OF DIGITAL CAPACITIES AND DIGITAL SERVICES

The 2009 and 2012 surveys are a useful tool for assessing the general state of digital capacities and digital services in libraries over time. It must be noted, however, that these surveys can only measure the existence or non-existence of a service or a capacity. They cannot measure the quality of that service or capacity[39].

37 See http://www.ifla.org/en/services-for-parliaments. See *World e-Parliament Report 2010*, pp. 148-149 for a broader introduction to the Section.

38 http://www.bundestag.de/htdocs_e/documents/library/wdpl/index.html

39 A more complete assessment requires additional data not collected in the 2012 survey, such as how many users, or potential users, of these services there are, how many full time equivalent staff members the library has, and their skill level with respect to technology.

However, using only the questions contained in Section 4 of the Global Surveys for ICT in Parliaments, digital capacities and digital services could be defined as follows:

- Capacities of the library
  - Has an automated system for managing resources
  - Is connected to the intranet
  - Has its own website
  - Uses software to support collaboration among staff
  - Purchases subscriptions to databases and online journals
  - Maintains a digital archive of parliamentary documents
  - Participates in formal networks
- Services of the library
  - Has a website organized by issues of concern to the parliament
  - Can receive requests electronically
  - Uses alerting services to send information to members
  - Uses social media
  - Contributes to the parliamentary website
  - If public is served, include services
    - e-mail
    - website

Findings from 2012 and some comparisons with 2009

Figures 6.13 and 6.14 below are intended to stimulate further discussion. They propose a global digital capacities score and a global digital services score based on the average percentage of parliaments that reported that their libraries had the items listed in each figure. Using two metrics adds to and complements the analysis represented by the e-parliament score for libraries discussed in Chapter 9.

Based on responses to the two surveys, the *average global digital capacities score was over 50 per cent in both 2009 and 2012* and the *average global digital services score was also over 50 per cent in both years, if the use of social media is excluded*. If social media is *included*, the average digital services scores drop to 45 per cent and 44 per cent respectively. As noted above, a number of libraries are experimenting with various forms of social media and some have been able to use them successfully, but it is likely to be some time before best practices are widely known and more parliamentary libraries can use them effectively. It is reasonable, therefore, to monitor two scores for the time being, one that includes and one that excludes the use of social media.

These scores for digital capacities and digital services are higher than the global e-parliament score for libraries, which were in the low 40 per cent for both years (see Chapter 9). This may be due in part to the fact that the use of social media is included in the e-parliament score for libraries. Because the scores shown in Figures 6.13 and 6.14 include more items and distinguish between services and capacities, which are a prerequisite for the former, they may provide a more complete picture of parliamentary libraries in the digital era.

One positive interpretation of the Figures 6.13 and 6.14 is that services are not lagging behind capacities. That is, when given the digital tools, parliamentary libraries are able to provide the essential digital support.

Figure 6.13: Global scores for digital capacities

Library: Capacities	2012 Yes	2009 Yes
Has a system for managing resources	77%	72%
Is connected to intranet	58%	58%
Has own website	44%	n.a.
Collaborates digitally	35%	26%
Subscribes to databases and journals online	49%	54%
Maintains digital archive	43%	53%
Participates in networks	64%	45%
Average e-Capacity Score	**53%**	**51%**

(Sources: Survey 2012, Section 4, Questions 3, 6, 7, 12, 13, 15 and 19; Survey 2009, Section 4, Questions 2, 5, 10, 11, 13 and 17)

Figure 6.14: Global scores for digital services

Library: Services	2012 Yes	2009 Yes
Has website organized by issues	43%	50%
Can receive requests electronically	62%	58%
Uses alerting services	35%	30%
Uses social media	13%	6%
Contributes to parliamentary website	59%	64%
If public is served, include e-services (e-mail, website)	58%	57%
Average e-Services Score including social media	45%	44%
Average e-Services Score without social media	**51%**	**52%**

(Sources: Survey 2012, Section 4, Questions 8, 9, 10, 11, 12, 18 and 21; Survey 2009, Section 4, Questions 6, 7, 8, 9, 16, and 19)

Chapter 7
Human Resources and Technical Infrastructure

INTRODUCTION

The essential technical foundation for e-parliament is an adequate infrastructure. This includes sophisticated and flexible hardware, software, and communication services. Since the 2010 Report, there have been several advances in technology that have significant potential benefits for parliaments. These include new user-friendly mobile devices and applications, the deployment of faster wireless communication systems, and the evolution of cloud computing[1]. These developments offer parliaments new and often more affordable options than have been available in the past. For example, through cloud technology, parliaments can now consider maintaining an e-mail system or provide extensive amounts of storage for digital documents at relatively low cost and without having to build and support the servers, operating systems, and application software themselves.

Many of the traditional components of a basic infrastructure, however, are still needed. Local area networks (LANs) are essential to support the work of parliaments, which involves multiple stakeholders and activities, including members, staff, committees, the plenary sessions, and the various offices. Building and maintaining a wired network is a labor intensive effort, yet it is one of the most important basic technologies for a public institution. Wireless capacity provides additional advantages for mobility and access, and the increasingly widespread use of smart phones and tablet have made this even more important. There is still, however, a fundamental need for a wired system to ensure adequate bandwidth and security.

Access to the Internet is also a critical issue for parliaments, both for the legislature's internal operations and for communication with citizens. Fortunately, there is growing connectivity worldwide, and many developing countries are gaining better access to the network. The challenge is now to provide the legislature with the sufficient bandwidth to support the many types of information that are becoming accessible.

Increasing opportunities for external communication – whether wired or wireless – expand the need for better security, the assurance of member confidentiality, and adequate defenses against hacking and cybercrime. While some parliaments have long recognized the vital nature of this requirement, others have been slower to take appropriate measures. This is a challenge that parliaments acting on their own can solve only in part. It calls for coordinated and collaborative efforts with other public institutions within the country and with other organizations on a world-wide basis. Nevertheless, recognition of the problem followed by the establishment of good policies and sound practices must begin at home with the parliament itself.

1 Cloud computing is a technology model that allows organizations to run and deliver IT systems and services over a network, avoiding the need for physically hosting servers and equipment, as well as installing software locally.

The most important element of the technical infrastructure, however, is the staff. Personal computers (PCs), networks, and applications can all be acquired, but they must be installed and supported by people who have expert technical knowledge and an understanding of legislative bodies. They can be either internal employees or external contractors hired to fill gaps in capacity and knowledge, or a combination of these resources. For a parliament to take maximum advantage of technology, it is essential that those who allocate resources within the legislature understand the critical importance of a capable and well trained staff.

SUMMARY OF FINDINGS FROM THE 2007/2009 SURVEYS

Findings from the Global Survey of ICT in Parliaments 2009 regarding the technical infrastructure of parliaments suggested that there had been some advances, but also a number of continuing challenges. For example, there was an increase in the number of parliaments that reported that they lack reliable electrical power. This is an obstacle as fundamental and as serious as the digital divide. Moreover, the use of open source software among parliaments was still at a relatively low level and tended to be concentrated in a few areas, such as server operating systems.

Given the importance of websites for providing transparency and accessibility to the parliament, it was a positive finding that the management and support of the website was the function supported by almost 90 per cent of the parliaments. As noted in Chapter 4, however, it was a concern that very few of the functions that relate to legislation had been implemented by over half of all parliaments. Only the applications related to administrative functions - such as financial management - and plenary support - such as systems for reporting speeches and debates -had a combined average of more than 60 per cent of parliaments.

Data from the 2009 survey suggested that parliaments were relying more on internal staff than on contractors. Most parliaments used their own staff rather than contractors to manage ICT functions and for functions that are closer to the user, such as PC installation, maintenance, and user support. Two areas in which contractors were reported play a relatively larger role were application development and training.

Almost 90 per cent of parliaments either had training/orientation programmes or were planning or considering them. Of note was an increase in both internal and contract staff for training. More than 80 per cent of parliaments provided training for in-house ICT staff, a decisive increase from 2007. The average percentage of staff who received training each year among all parliaments was close to 50 per cent, a figure comparable to the findings of 2007. And among the top training priorities for the most parliaments were systems administration, website management, and security. A large percentage or parliaments were also providing ICT training or orientation courses for members, or were planning or considering providing them. Even more provided training to non-ICT staff.

The overall sense from the 2009 findings was that many parliaments were making progress in implementing a capable technical infrastructure and in training both ICT and non-ICT staff, as well as offering orientation sessions for members. However, in addition to the serious problems faced by those that do not have reliable electrical power, areas of concern continue to be the relatively low level of use of open source software, the lack of connectivity of all members and committees to intranets, and the lag in development of applications that support legislative activities.

FINDINGS FROM THE 2012 SURVEY

The Global Survey of ICT in Parliaments 2012 focused on four key requirements for building a robust and responsive infrastructure for a legislature: 1) basic technologies and services, such as the acquisition and management of PCs, networks, and software; 2) systems that provide support for the most essential functions of a parliament, such as managing documents; 3) levels of service and staff support; and, 4) training for technical staff, members, and other users. It is worth recalling that Chapter 4 in this Report addressed the findings from the 2012 survey related to technical services for members and for plenary sessions and committee work. Therefore, it is important to consider Chapter 4 and 7 as complementary from the perspective of basic technology and services.

General Services

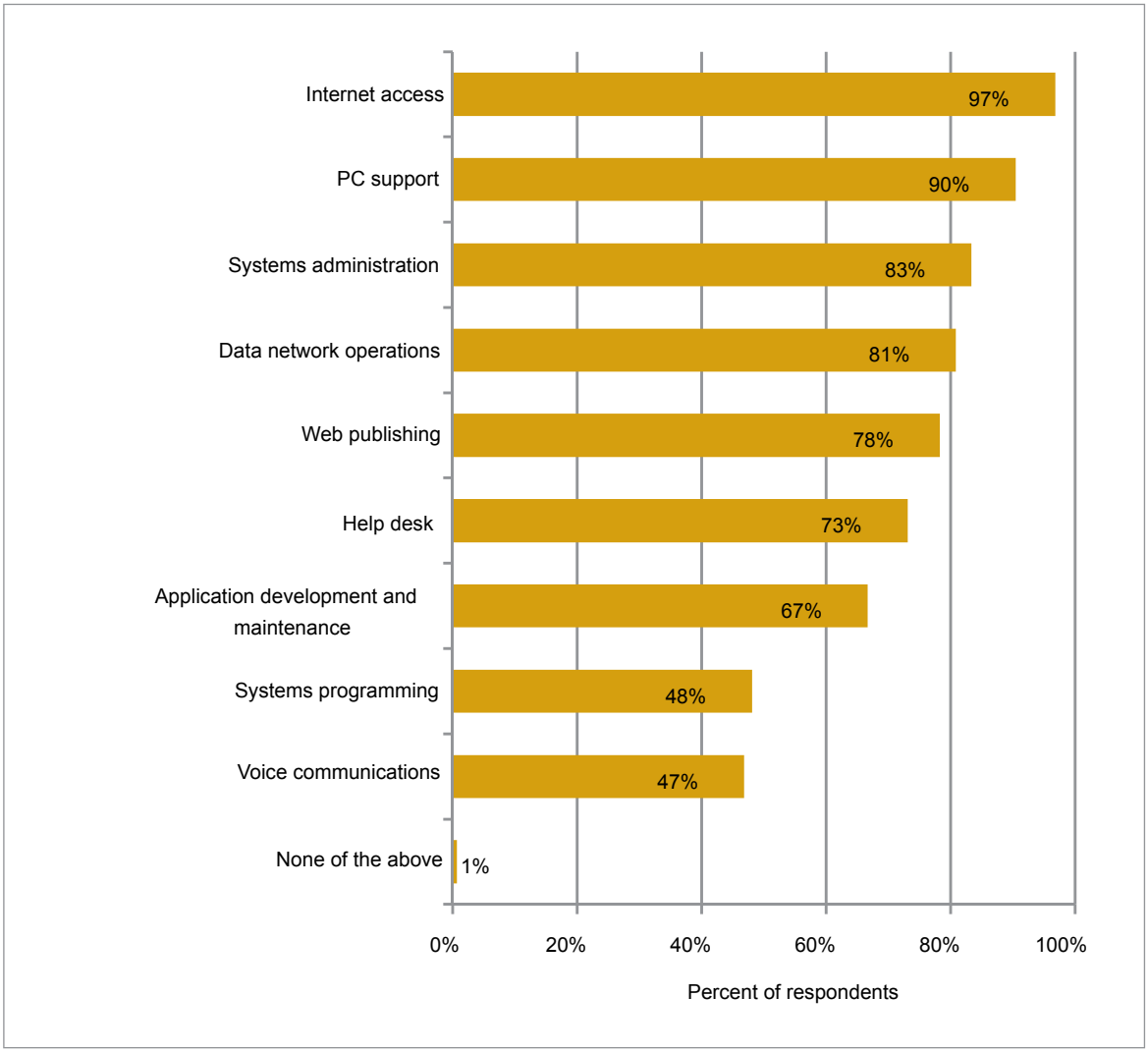
Basic technical support

Reliable electrical power is one of the most fundamental requirements for any public institution using technology. Therefore, it is a concern that in response to the question "Does the parliament have reliable electrical power 24 hours per day?" approximately the same percentage of parliaments replied *no* in 2012 as did in 2009 (2012=14 per cent; 2009=16 per cent)[2]. Whatever the causes may be – continued weakening economic conditions, technical limitations or poor management of critical resources – the fact is that this is a significant problem for one in every six parliaments.

As shown in Figure 7.1, however, most parliaments reported that they are able to provide basic ICT services, such as PC support, systems administration, web publishing, and network operations. These results are similar to those from the 2009 survey, although there were some declines in PC support (2012=90 per cent; 2009=97 per cent), web publishing (2012=78 per cent; 2009=86 per cent), and Help desk (2012=73 per cent; 2009=81 per cent)[3]. Despite these decreases, the overall percentages remained high in 2012. Of the nine services listed, four are provided by over 80 per cent of parliaments and two more by almost three quarters.

2 Source: Survey 2012, Section 2, Question 14; Survey 2009, Section 2, Question 13.
3 See *World e-Parliament Report 2010*, p. 119, Figure 7.1.

Figure 7.1: General ICT services available in the parliament



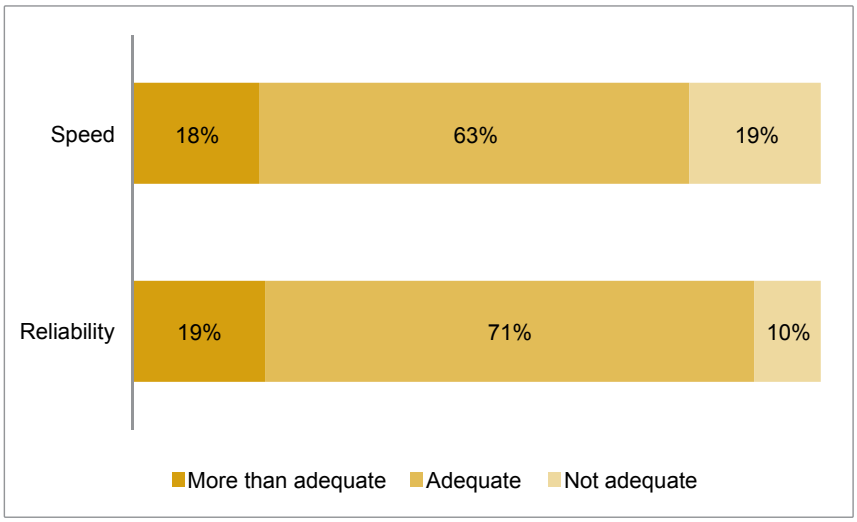
(Source: Survey 2012, Section 2, Question 1; 156 respondents)

Connectivity

Access to the Internet also continues to be high –almost 100 per cent in both 2009 and 2012. As shown in Figure 7.2 most parliaments rated connectivity to the Internet adequate or better in terms of speed (81 per cent) and reliability (90 per cent) in 2012. As expected, speed and reliability are related to income. Of those in the low income group, 35 per cent reported that reliability was not adequate, and 45 per cent reported that speed was not adequate. Most parliaments also have wireless access to the Internet or are considering acquiring it (see Figure 7.3). Internal connectivity through a local area network (LAN), however, still lags for members (see Chapter 4) although 70 per cent of parliaments reported that all offices are connected[4].

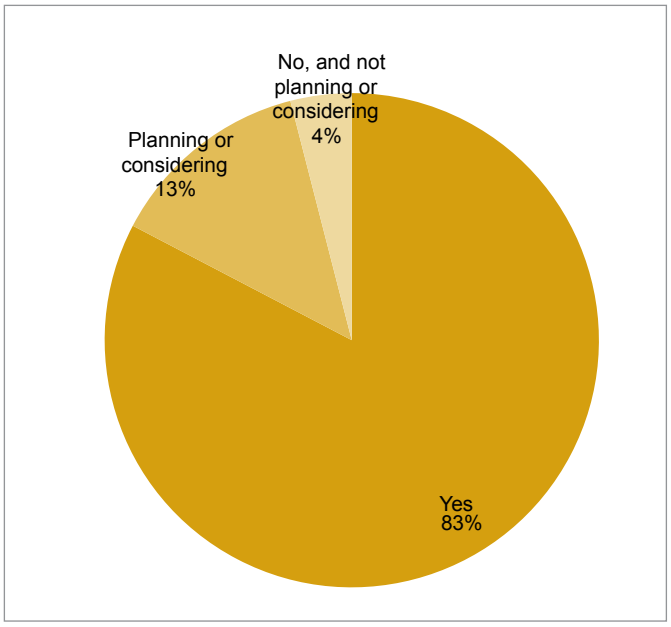
4 Source: Survey 2012, Section 2, Question 5.

Figure 7.2: Adequacy of Internet connection



(Source: Survey 2012, Section 2, Question 8; 152 respondents)

Figure 7.3: Wireless access to Internet



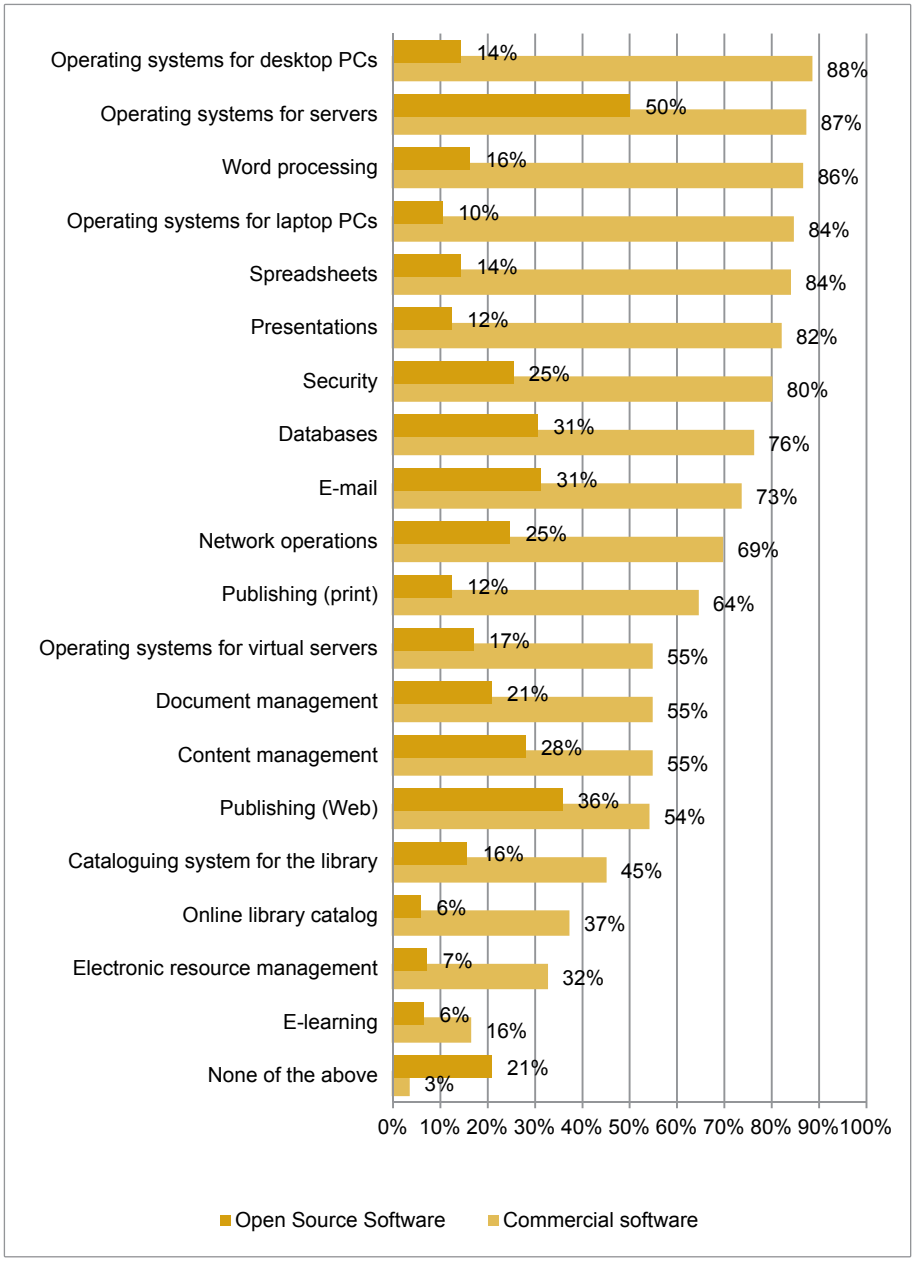
(Source: Survey 2012, Section 2, Question 9; 150 respondents)

Open source software

Box 7.1

> Parliament has automated most of its business operations and the majority of them are supported by commercial applications (proprietary software). However, there is a big shift to open applications due to cost reduction and flexibility of the software in terms of applications customization.
>
> *Comment by a respondent to the 2012 Survey*

Figure 7.4: Use of commercial and open source software



(Source: Survey 2012, Section 2, Question 13; 154 respondents)

Open source software can be of particular interest to parliaments because it can help reduce costs. Figure 7.4 shows the comparative use of commercial software and open source software by parliaments for various operations, services, and applications. The results are similar to those of 2009[5], although the percentage that uses open source software for at least one purpose went up from 74 per cent in 2009 to 80 per cent in 2012. Uses by the largest percentage of parliaments stayed the same – operating systems for servers (50 per cent) and web publishing (36 per cent). The use of opens source software did go up for some applications. Document management systems went from 10 per cent in 2009 to 21 per cent in 2012 and content management systems went from 15 per cent to 28 per cent.

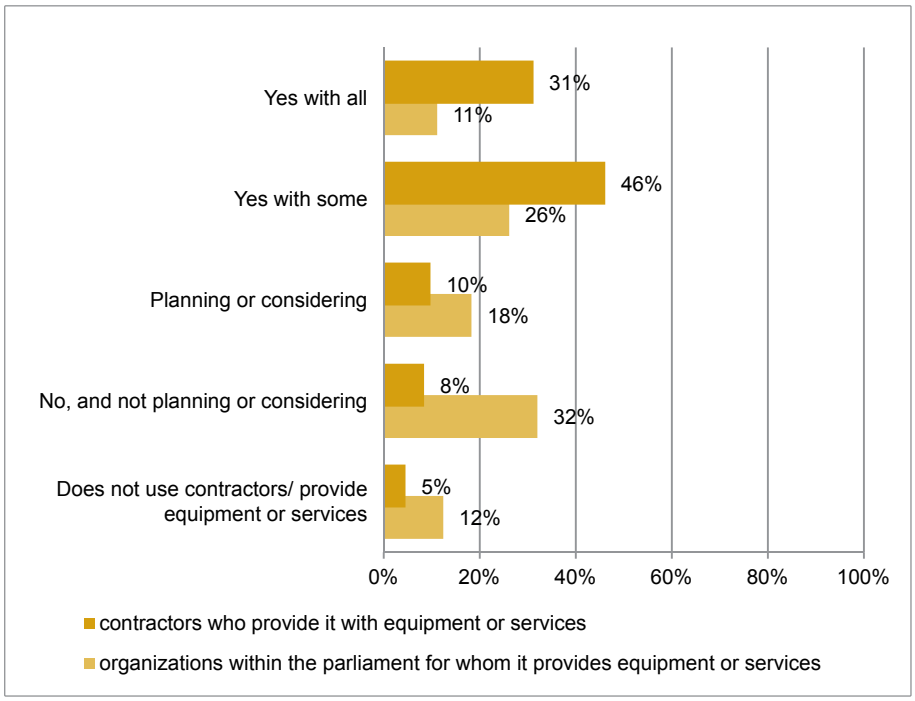
5 See *World e-Parliament Report 2010*, p. 121, Figure 7.4.

Service level agreements

Having agreements with external contractors on the level of service to be provided - and the means for measuring those levels - is a best practice in ICT. Figure 7.5 shows the percentage of parliaments that have service level agreements (SLAs) with external contractors and with internal clients - i.e. organizations within the parliament for whom the ICT department provides equipment or services.

As Figure 7.5 indicates, parliaments are more demanding of external contractors than they are of their own ICT departments for achieving specific levels of service. One positive finding from this survey question is that the percentage of parliaments that replied *yes with all contractors* rose from 24 per cent in 2009[6] to 31 per cent in 2012, an increase of nearly 30 per cent. At the same time the percentage who said *yes with some contractors* declined by about 25 per cent. These trends could be a sign that this practice is improving among parliaments.

Figure 7.5: Service level agreements



(Source: Survey 2012, Section 2, Question 10 and 11; 153 respondents)

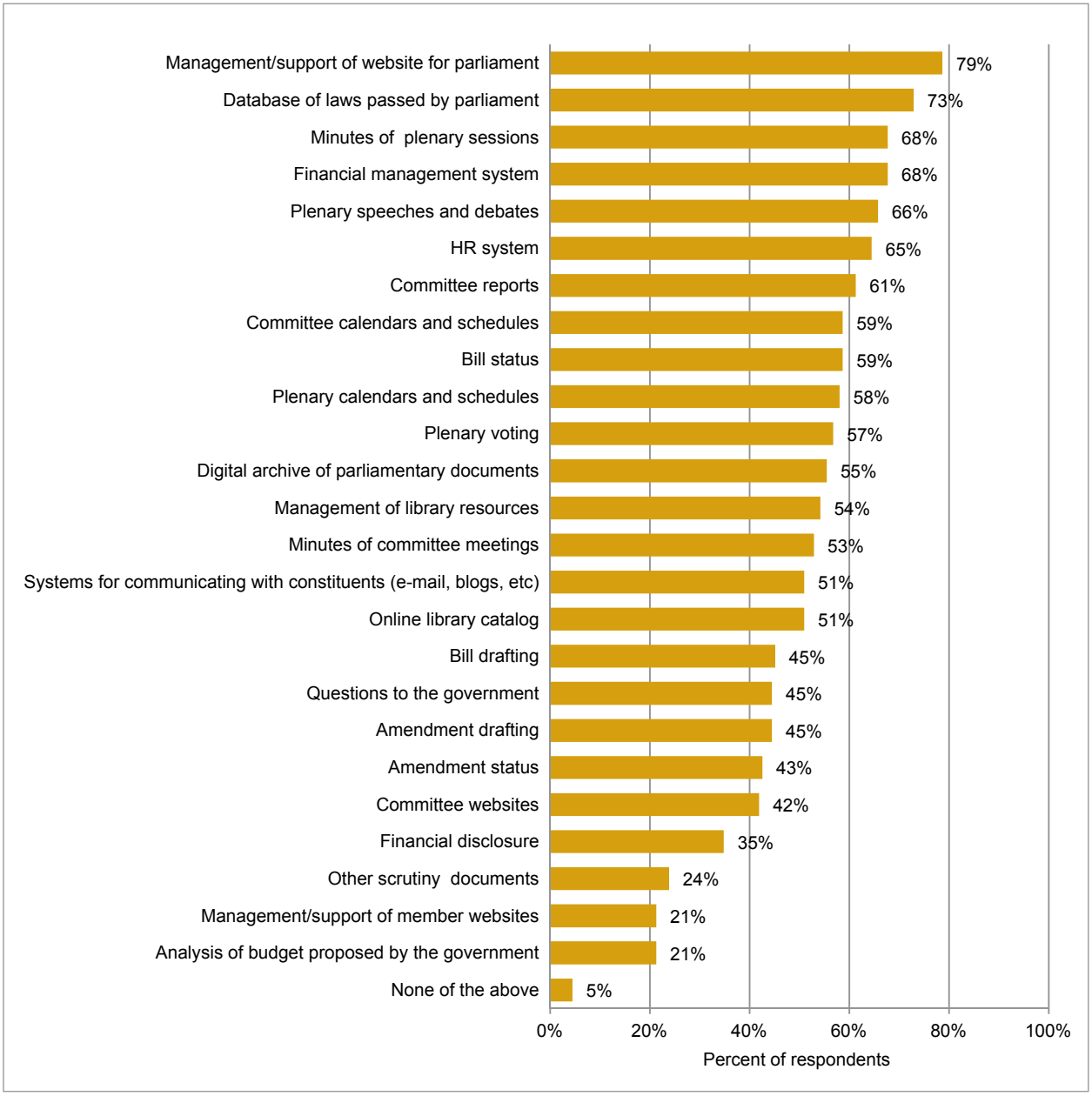
Applications for parliamentary functions

As noted in Chapter 4, one of the primary purposes of the basic tools and services is that they enable a parliament to create systems that serve its fundamental responsibilities, as well as to carry out its administrative functions more efficiently. For the aims of this discussion Figure 7.6 repeats the same results shown previously in Figure 4.4, which presented the percentages of parliaments that have implemented a system to support the activities of the legislature.

6 See *World e-Parliament Report 2010*, p. 127, Figure 7.13.

The average percentage of parliaments that provide supporting applications for any of these functions is 50 per cent, the same as in 2009[7]. Among the top 10 applications supported by ICT in the most parliaments, three relate to plenary sessions, two to committee activities, two to legislation, two to administrative functions, and one to communication[8].

Figure 7.6: Parliamentary functions supported by ICT



(Source: Survey 2012, Section 2, Question 14; 155 respondents)

Financial management systems and systems for managing human resources are widely available in the public and private sectors, and have been so for quite some time. The fact that in 2012 only two thirds of parliaments have these systems may be an indication of the relatively conservative approach that many parliaments have taken in introducing ICT even for their basic administrative operations.

7 See *World e-Parliament Report 2010*, p.122, Figure 7.8.
8 The applications related to legislative, plenary, committee, and oversight activities have already been discussed in Chapter 4.

Figure 7.7 shows the result of grouping each of the functions listed in Figure 7.6 into its appropriate category (Administrative, Plenary, etc.) and gives the average percentage of parliaments having applications for each of these categories for both 2009 and 2012. For example, the category "Administration" shows the average percentage of parliaments having applications for *financial management* and for *human resources* for both 2012[9] and 2009[10]. The category "Libraries" shows the average percentage of parliaments having applications for *management of library resources, online library catalogue,* and *digital archive*. The findings contained in Figure 7.7 suggest that there has been little progress in developing and implementing systems for the primary functions of the parliament. This is in contrast to the state of basic services such as access to the Internet and PCs for members (see Chapter 4), which are available in much higher percentages of parliaments.

Figure 7.7: Categories of applications

CATEGORY(Number of functions)	2012 AVG%	2009 AVG%
Administration (2)	66%	65%
Plenary (4)	62%	66%
Committees (4)	54%	52%
Libraries (3)	54%	54%
Legislation (5)	53%	52%
Transparency (4)	47%	47%
Oversight and scrutiny (3)	30%	29%

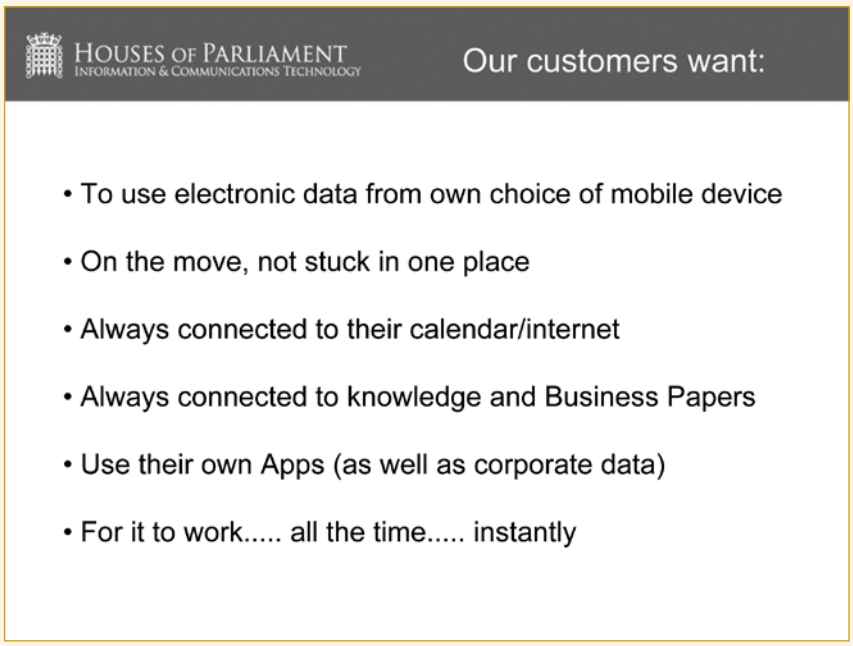
(Sources: Survey 2012, Section 2, Question 14; 155 respondents; *World e-Parliament Report 2010*, p. 123, Figure 7.6)

On the one hand, this disparity is understandable. It is significantly more challenging, in terms of technical and staff resources – particularly considering the different knowledge and skills level of those staff - to develop and maintain applications than to install and maintain PCs or an Internet connection. On the other hand, some of the latest developments in ICT, such as open source systems like Bungeni[11] that can support a number of parliamentary functions, and/or the advances in cloud computing, may make the task of building supporting applications, particularly for mobile purposes, somewhat less difficult.

Some parliaments have begun to do this with good results. However, it is still too soon to say which of the options now becoming available will be most effective, most useful, and most affordable for parliaments. This is an area in which sharing ideas, plans, and experiences will be especially valuable[12].

9 See Figure 7.6 for percentages from 2012 survey.
10 See *World e-Parliament Report 2010*, p.122, Figure 7.5 for percentages from the 2009 survey.
11 See Box 5.8.
12 See, for example, the YouTube video "What should we do with clouds?" by Joan Miller, Director of Parliamentary ICT, UK Parliament at http://www.youtube.com/watch?v=wHwoIBqhdCw. Also, see the presentation by Carlos Magno Cataldi Santoro, former CIO of the Federal Senate of Brazil at http://www.ictparliament.org/sites/default/files/panel11_carlos_magno_cloud.pdf

Box 7.2



Joan Miller, Director of Parliamentary ICT, UK Parliament. Extract from "Electronic papers in the UK Parliament", presentation at the International Meeting "Achieving Greater Transparency through the Use of Open Document Standards", Washington D.C., 27-29 February 2012. See http://www.ictparliament.org/XMLMeeting2012.

Staffing and training

Staffing levels

There is no easy or simplified method for determining the optimum number of ICT staff for a parliament. The answer depends on many factors, including the number, scope, and complexity of the tasks to be carried out; the extent to which the parliament depends on other organizations, especially the government, for some or all of its ICT support; the number of users who must be supported; the availability of competent ICT contractors; the resources available to the legislature and the degree to which it has independent control of those resources.

For baseline purposes, the 2009 and 2012 surveys asked about the number of users of ICT services (both members and staff but not the public) and the number of internal and external (contracted) ICT staff the parliament employed. These numbers are intended to be descriptive of the current situation and should not be construed as prescriptive. A more detailed study of staffing will have to take into account not only the staff in a dedicated ICT unit but also staff who are employed by user departments, who may be ICT professionals hired by those departments and not by the ICT office itself.

Box 7.3

Our parliament has only one (1) Information Technology person; we do not have an IT department. So most of the ICT or anything technically related is done by this one person.

Comment by a respondent to the 2012 Survey

Figure 7.8: ICT staff, 2007:2012 comparison group

	Internal ICT staff			External ICT staff		
	2012	2009	2007	2012	2009	2007
mean	52	50	38	28	21	26
median	20	20	17	2	1	3

(Sources: Survey 2012, Section 1, Questions 15 and 16; Survey 2009, Section 1, Questions 15 and 16; Survey 2007, Section 2, Questions 12 and 14)

For purposes of comparison, the numbers presented in this Report are the ratios of users to ICT staff. While this does not take into account the technical complexity of the ICT environment, it gives a rough basis for noting trends. For example, based on the findings from all respondents to the 2012 survey and all respondents to the 2009 survey, the ratio of users (members and staff) to ICT staff (internal and external contractors) was 25:1 in 2012 and 22:1 in 2009[13]. These numbers are based on the average number of users and the average number of ICT staff reported by all parliaments. Findings from the 2009:2012 comparison group are similar. In this case, the ratios were 24:1 in 2012 and 23:1 in 2009.

Because averages can be skewed by those with very large and very small numbers of users or staff, the ratios using medians are also presented here for comparison purposes. Based on this metric the findings from the 2009:2012 comparison group are identical. The ratio of the median number of users to ICT staff for the comparison group was 39:1 for both years. Median can skew data differently from averages; hence both figures are presented for consideration.

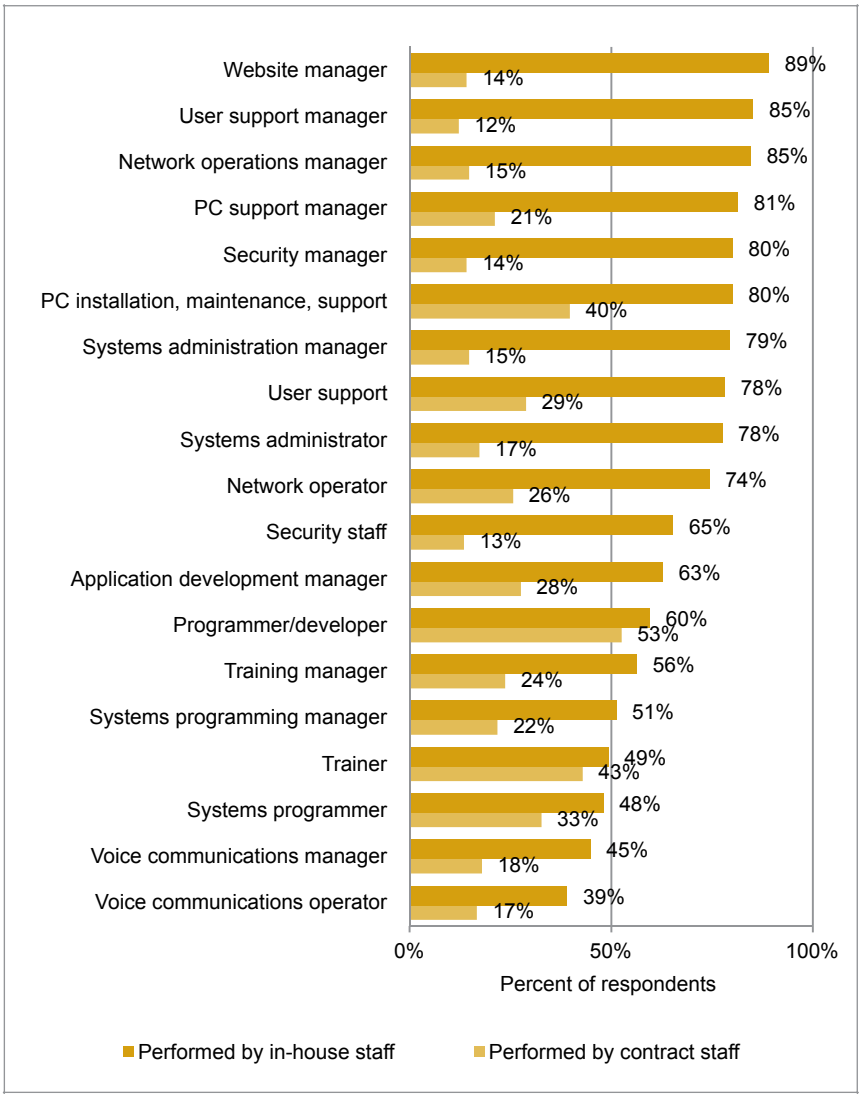
Finally it is interesting to look at total ICT staff for the 2007:2012 comparison group. The 2007 survey did not ask about total users, but the numbers shown in Figure 7.8 are interesting nonetheless. Combining the number of internal and external staff suggests that the average ICT staffing levels for parliaments have increased each year from 2007 (64), through 2009 (71), to 2012 (80). Nevertheless, it is important to note that there are still many parliaments in developing countries that have a very small staff, sometimes as few as 1 or 2.

Staff functions

Parliaments continue to use both internal and external staff to perform a variety of functions (see Figure 7.9). Contractors play a relatively larger role in application development and training. Parliaments use their own staff more for managing and for direct interaction with users. Although PC installation changed slightly in 2012 - more use contractors, fewer use internal staff - the split is still large (2012=80 per cent:40 per cent; 2009=90 per cent:38 per cent)[14].

13 Survey 2012, Section 1, Questions 14-16; Survey 2009, Section Questions 14-16.
14 See *World e-Parliament Report 2010*, p. 127, Figure 7.14.

Figure 7.9: Functions performed by internal ICT staff and contractors



(Source: Survey 2012, Section 2, Question 26; 156 respondents)

Training

Training for ICT staff is a high priority. In today's rapidly advancing technical world, training is never finished and the knowledge level of parliamentary ICT staff needs to be as current as possible if they are to be effective in their roles. The good news in this area is that in 2012 75 per cent of parliaments reported that they do provide training for in-house ICT staff through either internal or outside services[15]. This is down somewhat from the 2009 figure (84 per cent)[16], but the 2007:2012 comparison groups indicates that the multi-year trend is still quite positive and training remains a high priority (see Figure 7.10).

15 Survey 2012, Section 2, Question 27.
16 See *World e-Parliament Report 2010*, p. 128.

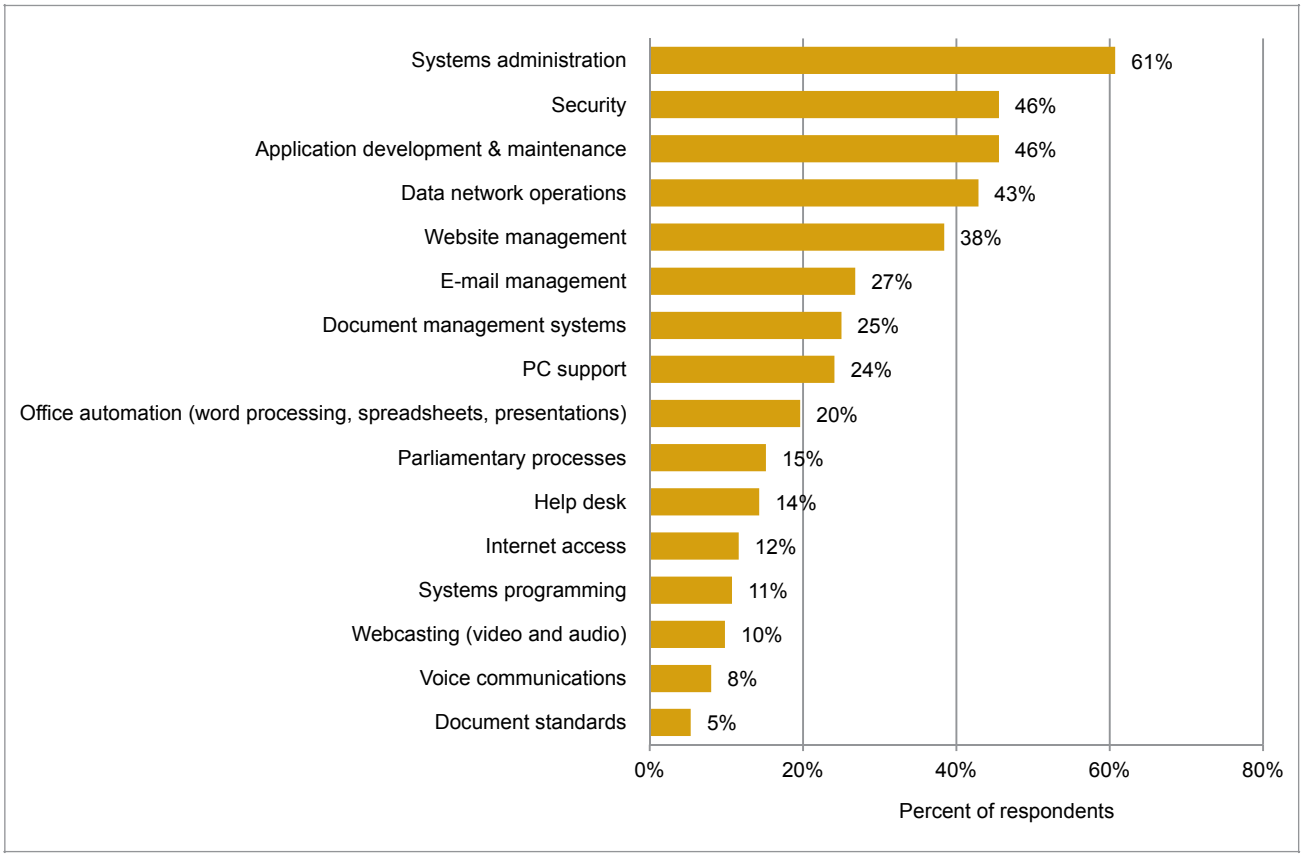
Figure 7.10: Training provided for ICT staff, by year

	2012		2009		2007	
Yes	58	79%	60	82%	47	64%
No	15	21%	13	18%	26	36%
Total	73	100%	73	100%	73	100%

(Percentages are for 2007:2012 comparison group)

The percentage of in-house ICT staff that received training in the last year remained nearly the same for both 2009 (average=46 per cent)[17] and 2012 (average=44 per cent)[18]. Figure 7.11 shows results from the question that asked parliaments to identify their top five training priorities. These results indicate some shifts from the previous survey. In 2012 *security* was ranked in the top five by more parliaments (46 per cent) than in 2009 (38 per cent) and *office automation* went down (2012=20 per cent; 2009=33 per cent). Training in *webcasting* went up although to only 10 per cent in 2012 from 2 per cent in 2009[19].

Figure 7.11: Training priorities

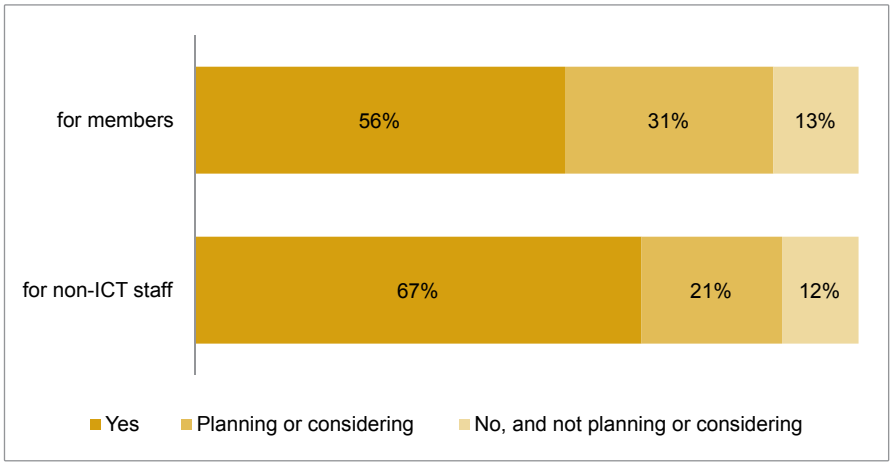


(Source: Survey 2012, Section 2, Question 29; 112 respondents)

17 Survey 2009, Section 2, Question 28 as reported in *World e-Parliament Report 2010*, p.128.
18 Survey 2012, Section 2, Question 28.
19 See *World e-Parliament Report 2010*, p.128, Figure 7.15.

Figure 7.12 shows the percentage of parliaments that provide training or orientation session for members and for non-ICT staff. The percentages are slightly lower than in 2009 (members=61 per cent; non-ICT staff=71 per cent). However, the combined percentages for parliaments that replied *yes* or *planning or considering* were still quite high. In 2012 they were 87 per cent for members and 88 per cent for non-ICT staff. In 2009 they were also 87 per cent for members and 89 per cent for non-ICT staff. These results suggest that most parliaments do recognize the importance of training for members and for all parliamentary staff.

Figure 7.12: Training/orientation for members and non-ICT staff



(Source: Survey 2012, Section 2, Questions 30-31; 156 respondents)

Box 7.4

Good Practices - Training:
1. Parliament is an ICDL certified institution;
2. Develop an end-user training plan and programme for members and staff for the year;
3. Communicate training programme effectively;
4. Have internal training capacity.

Lessons Learnt - Training:
Availability of staff remains a challenge.

Comment by a respondent to the 2012 Survey

Box 7.5

The Parliament does not provide training to its staff members and this is a problem since this affects the use and the provision of information to the parliamentarians.

Comment by a respondent to the 2012 Survey

Chapter 8

ICT Strategic Planning and Implementation for e-Parliament

INTRODUCTION

When resources have to be used more effectively due to financial constraints, ICT strategic planning and management become of special importance to meet the targets for efficiency imposed by the organization. During the past years, limited resources have become a challenge for many more parliaments than before, as even legislatures in upper income countries have had to deal with significant reductions in their ICT budgets, while at the same time looking at technology to generate gains in efficiency throughout the legislature's operations. Perhaps not surprisingly, when asked in the survey what were the most critical objectives for ICT in the next two years, one respondent from a technically advanced parliament replied: "do more for less money".

Box 8.1

Most important objectives for next 2 years:
1. provide mobile access to parliamentary data;
2. provide flexibility of hardware device used for access;
3. do more for less money.

Comment by a respondent to the 2012 Survey

One of the most valuable contributions of a strategic planning process under these circumstances is that it forces decision makers to focus not just on the "what" of ICT, but also on the "why". It requires parliaments to clearly link strategic priorities to actions and to identify the benefits they will gain as a result of implementing new systems or purchasing equipment, and to weigh those benefits against the costs of introducing them. This leads to the establishment of a "smart budget", one that links the hardware and software that is requested to the positive outcomes that will result. It also leads to the identification of strategic priorities and an improved ability to assess how projects can be phased in when, as increasingly happens, funds have to be allocated over several years.

This process is not new. It has been used, and is often required, by many organizations that want to see a clear relationship between such actions, as the purchase of a group of computers or servers, or the installment of a LAN, and the beneficial outcomes. However, two elements about this process are relatively new for parliaments.

First is the recognition of the essential role that technology has come to play for parliaments in helping them fulfill their mandated responsibilities. In this respect, the importance of ICT in parliaments may simply be a reflection of its wider role in the society. But most parliaments have come only recently to accept the need for more rigorous planning and management of this increasingly critical asset.

Box 8.2

Sixth observation: The onset of new information and communications technologies has fundamentally altered the style of interaction between deputies, the administration and citizens. Today deputies are directly and permanently connected to the social body that they represent. Managing communication and information has become an essential part of political work. From now on, it is simply not possible to imagine performing parliamentary work without efficient IT and telematic resources. On a technical level there are growing demands in terms of availability, quality and systems security.

Philippe Schwab, Secretary of the Council of States of Switzerland. Extract from "Strategic plan of the parliamentary service of the Swiss Parliament for 2012–16" Communication at the meeting of the Association of Secretaries General of Parliaments (ASGP), Session 2012, Kampala, Uganda, by. See http://www.asgp.info/en/pastmeetings/.

Second, ICT strategic planning is a discipline which does not always appear to fit well in an institution that is more accustomed to operating by debate and compromise, one that often defers action until a consensus can be reached, and sometimes chooses even not to act as a way of making a decision. Strategic planning, by contrast, requires clear goals and an efficient decision making process. However, on closer examination, it is evident that other aspects pertaining to the way parliaments work are potential assets in undertaking strategic planning exercises. For example, to be effective, ICT strategic planning needs to draw upon the views, and be responsive to the needs of multiple stakeholders. These include, first, the requirements of the members, who are themselves a distinctive group. It also includes members in particular roles, such as chairs of committees or political leaders. And it includes the parliamentary administration as it serves the members through its many support functions. In this regard, ICT strategic planning needs to be an open and inclusive process, just as parliamentary democracy is.

ICT strategic planning also calls for establishing the goals and priorities that parliaments want to achieve through the instruments of technology. Similarly, one of parliament's responsibilities is to establish or affirm the goals and objectives of public policies through the passage of laws. Once those policies are established, implementation becomes the responsibility of the government while oversight is the responsibility of the parliament. This function of overseeing the government is similar, although on a much larger scale, to the need for regular assessment of the implementation process for ICT that is an essential element of strategic planning.

Perhaps the most difficult operational requirement in the implementation of ICT strategic plans in parliaments is the need to take specific corrective action on a timely basis when needed. For this reason, parliaments have often, and wisely, assigned this management responsibility to the senior administrative officer, such as the Secretary General or Clerk and held her or him responsible for successful implementation.

One challenge that many, but not all parliaments face in ICT strategic planning and implementation is a lack of independence in determining their own budgets and staff. This can represent a severe obstacle for parliaments that are entirely dependent on the government for funding and that do not have hiring or firing authority over their own staff. In fact, in some countries, parliaments lack any control over the resources to manage their own technology and depend entirely on the executive for this service. In such cases ICT staff are employees of the public service, the only entity with real authority over them. In these situations the parliament may be considered as just another department competing for ICT resources, be they financial or human. Therefore, it may be able to set its own goals, but it may lack the power to achieve them.

There is no easy solution to the challenge that this lack of separation of powers poses for some parliaments. Certainly, having a credible ICT strategic plan that is compelling in its goals and realistic in its priority projects and indicators of achievements can be a helpful way for dealing with it. It can also be useful to be able to recognize opportunities for collaboration. For example, many governments want to advance the state of their e-government services. Parliaments may be able to reach some of their own ICT objectives by coordinating their efforts with these e-government initiatives. To do this, however, requires a strategic planning process that enables those tasked with implementation to see these ICT opportunities when they arise and to be able to take advantage of them.

Finally, as it has been stated in the *World e-Parliament Report 2008* and *2010*, regardless of the degree of independent authority that a parliament has over its resources, aligning the ICT strategic plan to the wider objectives of the institution and receiving the commitment of the leadership are critical elements for effective planning and management of technology. This requires the active involvement of the political governing body of the parliament, and the engagement throughout the institution of several groups of stakeholders, including its members, committee chairs and the administration, in determining what the parliament wants to achieve through ICT, what the benefits will be, how it will be done, and how to monitor success or failure.

Box 8.3

Good Practice:

1. Having an ICT Strategy aligned with the political imperatives and strategic objectives of Parliament;
2. Having a structured process for implementation and project management methodology;
3. Having sound governance process and structure for monitoring the implementation of the plan;
4. Developing sound business cases to motivate new ICT initiatives, provide cost benefit analysis and request for funding; and,
5. Alignment of ICT Strategy and Implementation plan with the Parliament budget cycle.

Lessons learnt:

1. Change management is important for successful adoption of new systems;
2. It is important to design a business solution and not only a technical solution that should incorporate processes, information and technology.

Comment by a respondent to the 2012 Survey

SUMMARY OF FINDINGS FROM 2007/2009 SURVEYS

Some of the findings from the Global Survey of ICT in Parliaments 2009 showed that many chambers were planning and managing technology well; other findings, however, underscored the need for substantial improvements on a worldwide basis. Over two fifths of parliaments reported that political leaders at the level of the President and Speaker were *very highly* or *highly engaged* in ICT, although nearly one quarter reported that they were engaged very little or not at all. To some extent the establishment of a special committee or group to provide ICT direction and oversight, along with leadership by the Secretary General and the Director of ICT, can compensate for the absence of involvement at the top. It was positive that over 60 per cent of

parliaments had established such groups and that the Secretary General and the Director of ICT established goals and objectives in 68 per cent and 60 per cent of parliaments respectively. In addition, a number of parliaments sought ideas and proposals for the use of ICT from a wide range of users. However, members were reported to be a source of proposals in less than two fifths of parliaments.

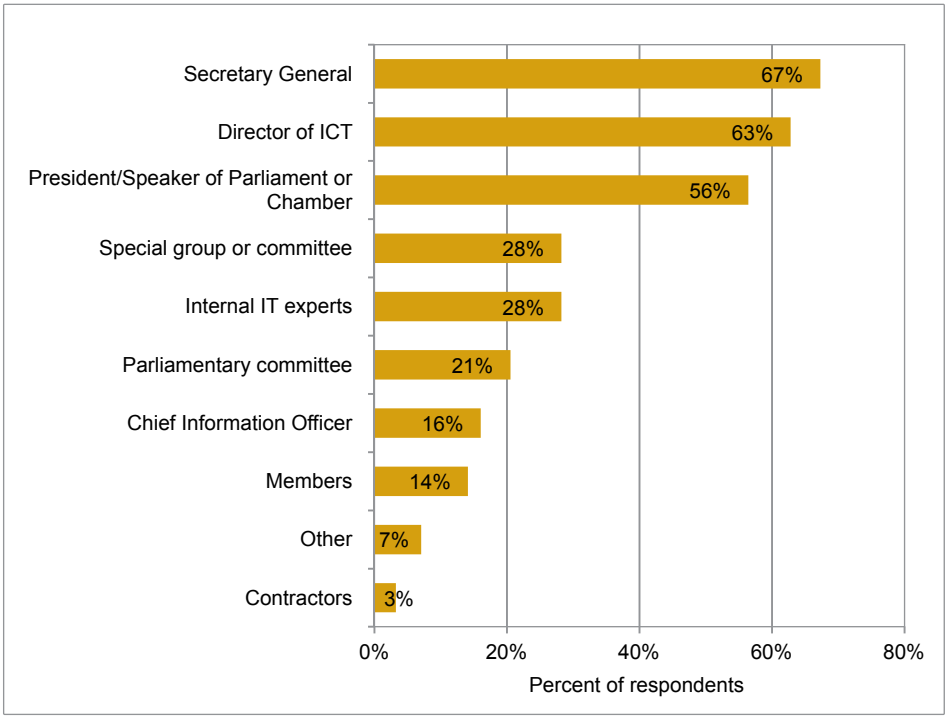
The availability of a written vision statement in just over 40 per cent of parliaments was a significant concern. A higher percentage said that they had an ICT strategic plan that is regularly updated (nearly 60 per cent), although this was somewhat lower than the percentage that reported that they had plans in 2007. The conclusion from the 2009 findings was that ICT strategic planning appeared to be well managed by the parliaments that did it, although many more parliaments still needed to take this path.

The reported funding for ICT as a percentage of the total budget for the entire parliament averaged just above 4 per cent. This ranged from less than 1 per cent to 5 per cent or more among the parliaments with the lowest and highest percentages.

FINDINGS FROM THE 2012 SURVEY

The 2012 survey focused on four key aspects of planning and managing ICT in parliament: 1) the engagement of the parliamentary leadership; 2) the involvement of other key stakeholders; 3) the strategic planning process and implementation; and, 4) the financial resources committed to ICT[1].

Figure 8.1: Establishment of goals and objectives for ICT in parliament



(Source: Survey 2012, Section 1, Question 2; 156 respondents)

Engagement of leaders

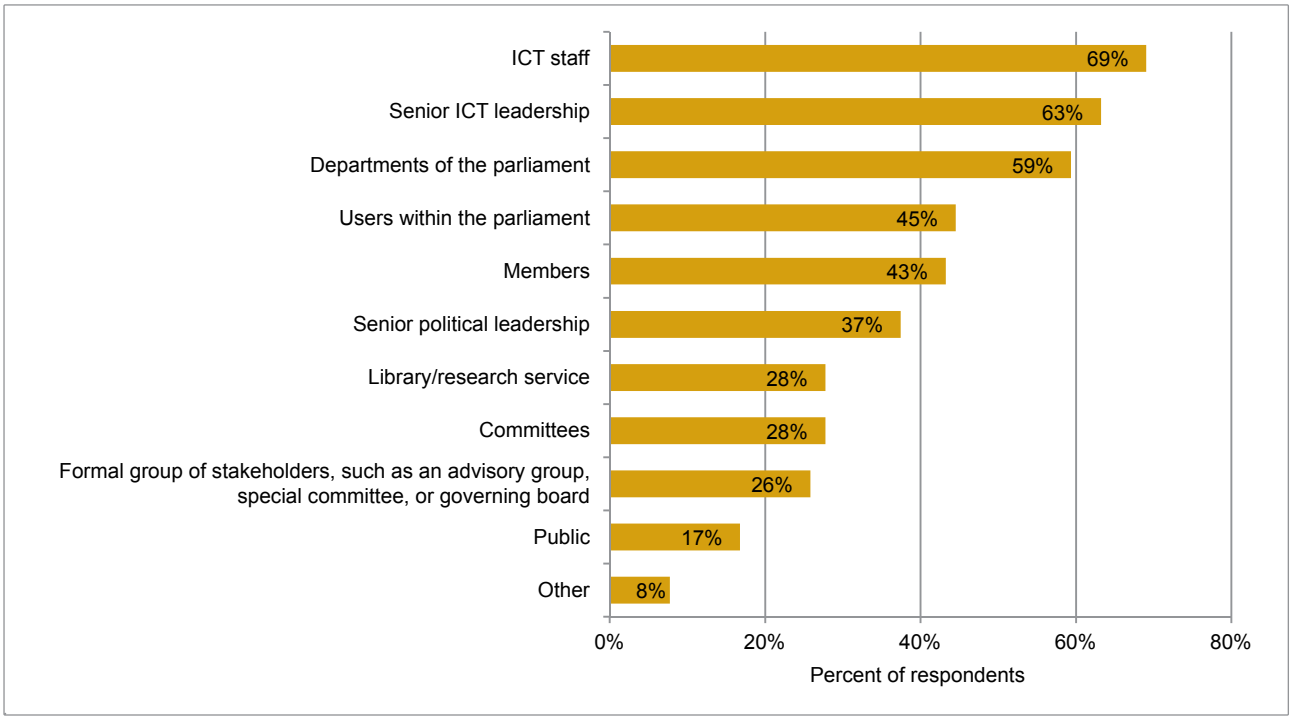
In general the involvement of the senior political leaders in ICT strategic planning appears to be increasing. Figure 8.1 shows those who establish the goals and objectives for ICT in the parliament (the question allowed parliaments to select all the answers that applied to their circumstances). As in 2009 the largest percentage of parliaments identified the Secretary General and the Director of ICT. What is significant in 2012

1 Staff resources are discussed in details in Chapter 7.

is the increase in the number of parliaments that also identified the President or Speaker, up from 41 per cent in 2009[2] to 56 per cent in 2012.

There was also an increase, although a smaller one, in the percentage of parliaments that reported that the senior political leadership was *a source of ideas and proposals for ICT* goals and projects. As shown in Figure 8.2, 37 per cent of parliaments selected this group, up from 31 per cent in 2009[3].

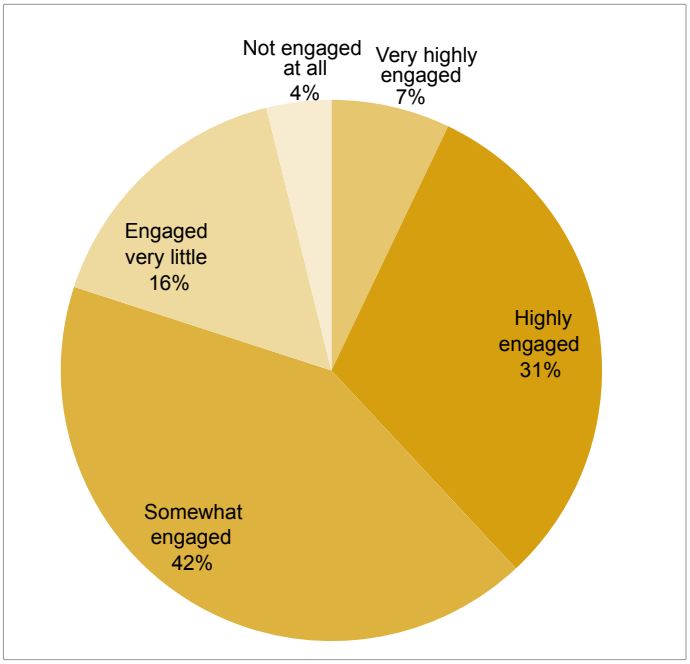
Figure 8.2: Source of ideas and proposals for ICT goals and projects



(Source: Survey 2012, Section 1, Question 3; 155 respondents)

The level of engagement with ICT on the part of political leaders remained reasonably high in 2012 (see Figure 8.3). This is a subjective measurement that makes it difficult to judge what the ideal situation should be. The combined results of *very highly engaged* and *highly engaged* decreased slightly in 2012, which had a combined percentage slightly under two fifths (38 per cent), compared to 2009, which had a combined percentage of just over two fifths. The perceived degree of involvement by political leaders – who are among the busiest persons in the parliament -- may be less important than the fact that they are actively involved in setting goals and proposing ideas for ICT projects, as shown in Figures 8.1 and 8.2.

Figure 8.3: Level of engagement of political leaders of the parliament in ICT



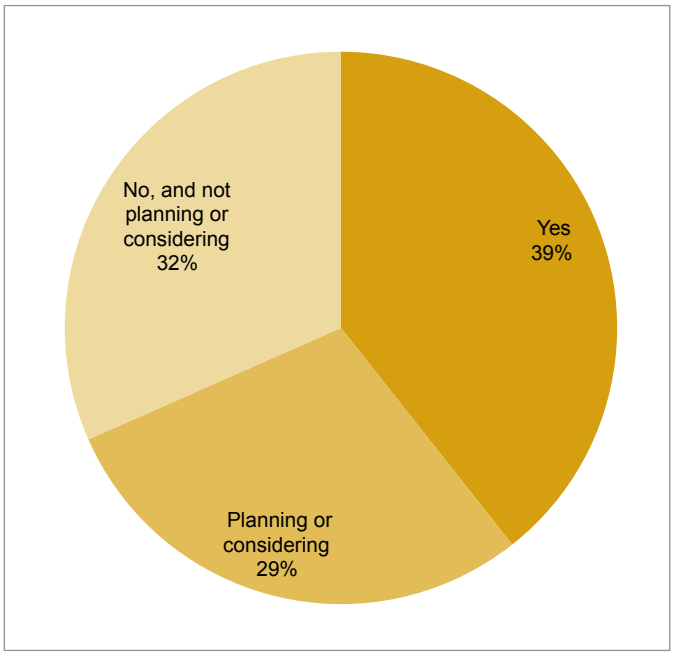
(Source: Survey 2012, Section 1, Question 5; 155 respondents)

2 *World e-Parliament Report 2010*, p. 79, Figure 4.4.
3 *World e-Parliament Report 2010*, p. 79, Figure 4.3.

Involvement of stakeholders

Figure 8.2 provides another positive finding from the 2012 survey: the involvement of other key stakeholders in ICT goals and projects. In 2012 ICT staff and the senior ICT leadership are mentioned by the largest percentages of parliaments, although by slightly lower numbers than in the 2009 survey. There were increases, however, in the percentages who mentioned *departments of the parliament* (2012=59 per cent; 2009=52 per cent) and *members* (2012=43 per cent; 2009=39 per cent). As noted above, the percentage of parliaments that mentioned *senior political leaders* also increased[4].

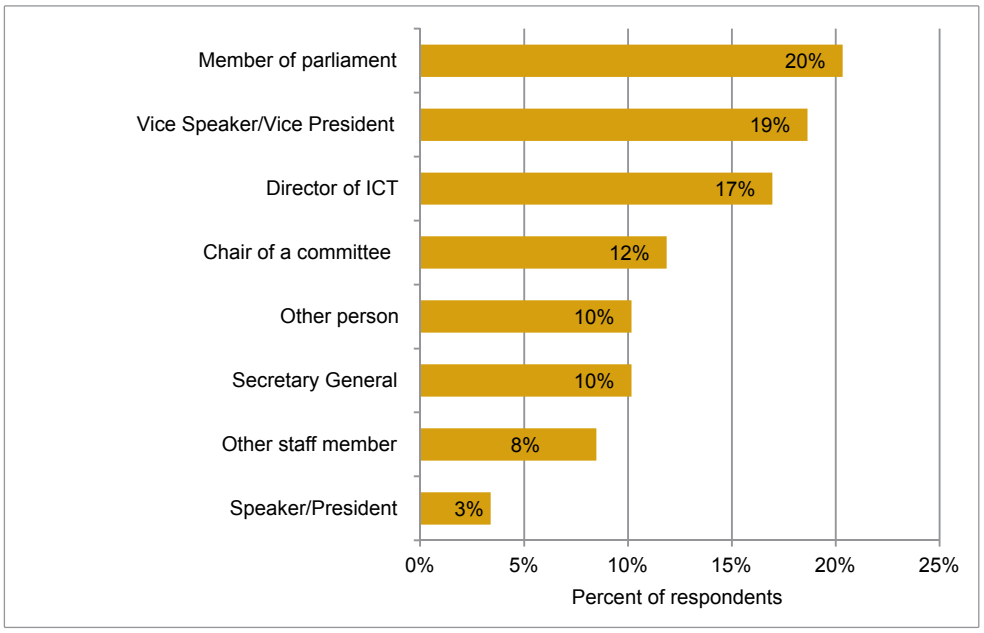
Figure 8.4: Parliaments that have a specially designated committee or group to provide direction and oversight for the use of ICT in parliament



(Source: Survey 2012, Section 1, Question 6; 155 respondents)

Some parliaments have established special committees consisting primarily of staff and / or members, to provide direction and oversight in the use of ICT. The percentage having such a committee, shown in Figure 8.4, is essentially the same as the 2009 survey[5]. The 2012 results, however, show some interesting changes in who chairs this group (see Figure 8.5). Members serving as chair went from last in 2009 (7 per cent)[6] to first in 2012 (20 per cent). The Director of ICT went from first to third on the list. The combination of a member, the Speaker or Vice Speaker, or the Chair of a committee now leads this group in just over half of all parliaments.

Figure 8.5: Chair of the specially designated committee or group on ICT



(Source: Survey 2012, Section 1, Question 8; 59 respondents)

4 See *World e-Parliament Report 2010*, p. 79, Figure 4.3.
5 See *World e-Parliament Report 2010*, p. 79, Figure 4.5.
6 See *World e-Parliament Report 2010*, p. 80, Figure 4.6

The findings above regarding the engagement of political leaders and the involvement of stakeholders suggest that the percentage of parliaments in which members and political leaders are taking a larger role in decision making regarding ICT is increasing. If this trend continues it would be a positive development.

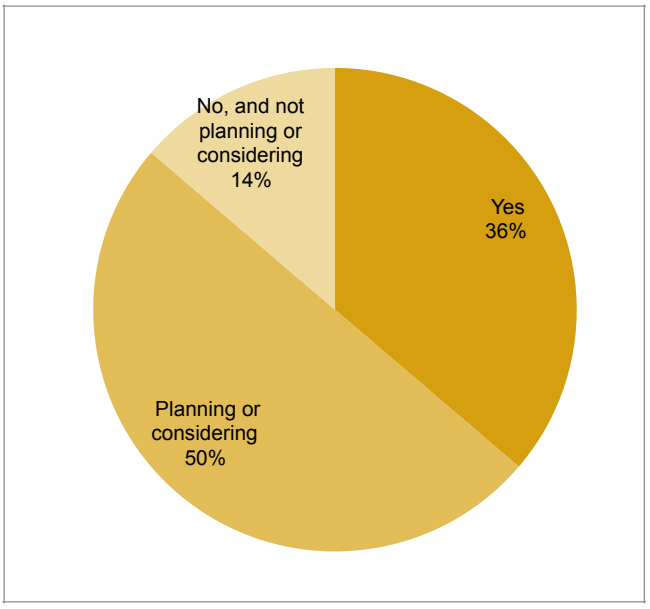
Strategic planning and implementation

Vision statements

A vision for ICT is a critical first requirement for strategic planning. To be most effective, it needs to be a *written* policy statement so that all those who are involved in the execution of the plan can understand the long-term commitment of the legislature in this regard. As mentioned in the introduction, ideally the vision for ICT should be contextualized within the broader framework of the vision and development plan established for the whole legislature.

The percentage of parliaments having written statements is shown in Figure 8.6. Although their number decreased compared to the 2009 survey (2012=36 per cent; 2009=43 per cent), the percentage of those *planning or considering* a written statement increased (2012=50 per cent; 2009=40 per cent)[7].

Figure 8.6: Parliaments that have a written vision statement for ICT



(Source: Survey 2012, Section 1, Question 9; 80 respondents)

Many parliaments do feel they have a vision for ICT, but that it has simply not been written down. The concerns raised in the 2010 Report about this issue are still valid in 2012. While some may argue that a policy statement articulated by the senior political or administrative leaders is sufficient to delineate the vision of the institution, the reality is that interpretations of verbal statements can shift over time and be understood in different ways by different individuals. The mandate of a senior leader, such as the President or the Speaker, is usually limited to the parliament term (sometimes even shorter) and some may be reluctant to commit to a vision that could be short lived. However, this constraint does not obviate the importance of an agreed and written vision; in some cases it makes it even more important. Visions that can change in a short period of time make it difficult to manage the long term investment that ICT require.

In other cases, an unwritten vision statement may be seen as politically more flexible and therefore useful when there is disagreement over goals and priorities. Nevertheless, such disagreements must be resolved before there can be adequate planning and allocation of resources for technology.

7 See *World e-Parliament Report 2010*, p. 81.

Goals and objectives

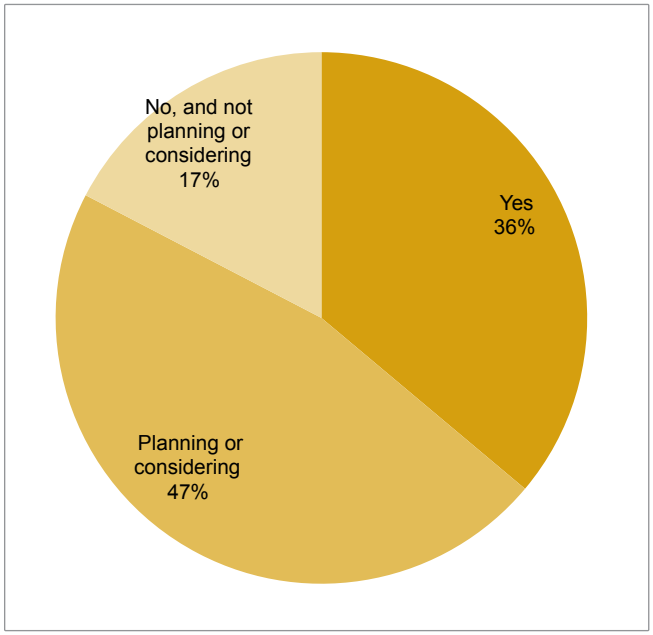
In 2012 approximately three fifths of parliaments reported that they have a strategic plan with goals, objectives, and timetables for ICT[8], the same number as in 2009[9]. However, the percentage that regularly updates the plan increased to almost 90 per cent in 2012[10] from just over 80 per cent in 2009. In addition, 68 per cent reported that they have established criteria and indicators to measure the success of its plan[11], up from 61 per cent in 2009.

As noted in the 2010 Report, these findings, taken together, suggest that in parliaments in which strategic planning is utilized (approximately 60 per cent), it is increasingly well managed by most. However, for the reasons cited in the introduction to this Chapter, it needs to be implemented on an urgent basis in many more parliaments.

Implementation

A strategic plan is a statement about where a parliament wants to go and why. An action plan is required to ensure that the parliament gets there. Such a plan, sometimes referred to as an implementation roadmap, provides the details of who, what, when, and how much. For each objective it lays out the tasks required to accomplish that objective. For each task it gives the time frame within which it will be completed; the key performance indicators that will be used to determine whether a task is on schedule; the person or office that will have lead responsibility for the task, along with the internal and external participants and stakeholders who will work on or contribute to it; and, the estimated costs, including staff time, contracts, hardware and software, and other ICT services such as communications facilities.

Figure 8.7: Parliaments that use project management methodology



(Source: Survey 2012, Section 1, Question 13; 144 respondents)

Many tasks in the action plan involving multiple stakeholders, significant funding, and substantial technical development are sufficiently complex to require the use of formal project management methodology. The percentage of parliaments using some form of project management in 2012 (see Figure 8.7) is slightly lower than in 2009 (2012=36 per cent; 2009=40 per cent)[12], although the percentage of those *planning or considering* using it increased from 40 per cent in 2009 to 47 per cent in 2012. The combined percentage of parliaments that use project management or are considering it in both survey years (80 per cent or more) is a positive indication of interest in this valuable tool. Project management can be a challenging and demanding discipline and it can take time to master some of its techniques. However, there are various levels of expertise and different ways of obtaining the necessary understanding of the methodology, including online training courses.

8 Survey 2012, Section 1, Question 10.
9 See *World e-Parliament Report 2010*, p.82.
10 Survey 2012, Section 1, Question 11.
11 Survey 2012, Section 1, Question 12.
12 See *World e-Parliament Report 2010*, p. 82.

Box 8.4

Example: Project Priority Matrix

Priority Business Drivers	WT	A	B	C	D	Score
Return on Investment	6.0	> 30 % ( ) 6.0	> 20 % ( ) 4.5	> 15 % ( ) 3.0	> 10 % ( ) 1.0	
Efficiency Gains - One-Time Savings - Annual Savings	4.0 6.0	> $500K ( ) ( ) 6.0	> $250K ( ) ( ) 4.0	> $100K ( ) ( ) 2.0	< $100K ( ) ( ) 0.0	
Marketing Impact - Improves Customer Service - Provides New Service	3.0 4.0	High ( ) ( ) 5.0	Medium ( ) ( ) 4.0	Low ( ) ( ) 2.0	Indirect ( ) ( ) 1.0	
Scope of Impact - Multi-Department - Single Department	4.0 2.0	> or = 6 ( ) ( ) 6.0	> or = 4 ( ) ( ) 4.0	> or = 2 ( ) ( ) 2.0	= 1 ( ) ( ) 1.0	
Business Risk: - Key IT Resources - Implementation Timeline	-2.0 -1.5	Hi/Long ( ) ( ) 5.0	Lo/Long ( ) ( ) 4.0	Hi/Short ( ) ( ) 3.0	Lo/Short ( ) ( ) 1.0	

Project Design/Implementation

- Ensure disciplined, effective project methodology
- Engage all key stakeholders early and often
- Provide expertise on process design
- Provide oversight and/or support of change management

Key tools, processes and roles

- Project methodology
- Post-implementation assessment
- IT program managers role
- Business leadership of project teams
- Architects on project teams
- Architecture exception process
- Senior executive oversight
- Process owners involvement

Project success factors

- Stakeholder involvement
- Executive management support
- Clear statement of requirements
- Proper planning
- Realistic expectations
- Smaller project milestones
- Competent staff (internal and external)
- Ownership
- Clear vision and objectives
- Hard working and focused staff

Soufiane Ben Moussa, Chief Technology Officer, House of Commons of Canada. Extracts from "The ICT Strategic Plan execution toolbox", presentation at the Regional Workshop "The Impact of New Technologies in the Transformation of the Legislative Branch", Bridgetown, Barbados, 1 June 2012.

See http://www.ictparliament.org/sites/default/files/panel12_soufiane_benmoussa_tools_for_execution.pdf

Funding

Financial resources are always an issue. When asked to list the three biggest challenges in using ICT effectively, the response of *inadequate financial resources* was selected by the largest percentage of parliaments (59 per cent)[13]. Even many in the high income level listed it among their top three (41 per cent), second only to *inadequate staff capacity* for this income group.

Box 8.5

Good practices:
- Benefit ICT with a budget that can help realize the planned activities;
- Make sure that members of parliament have a strong motivation towards ICT in parliament;
- Realize workshops so to spread knowledge of ICT in the parliament.

Comment by a respondent to the 2012 Survey

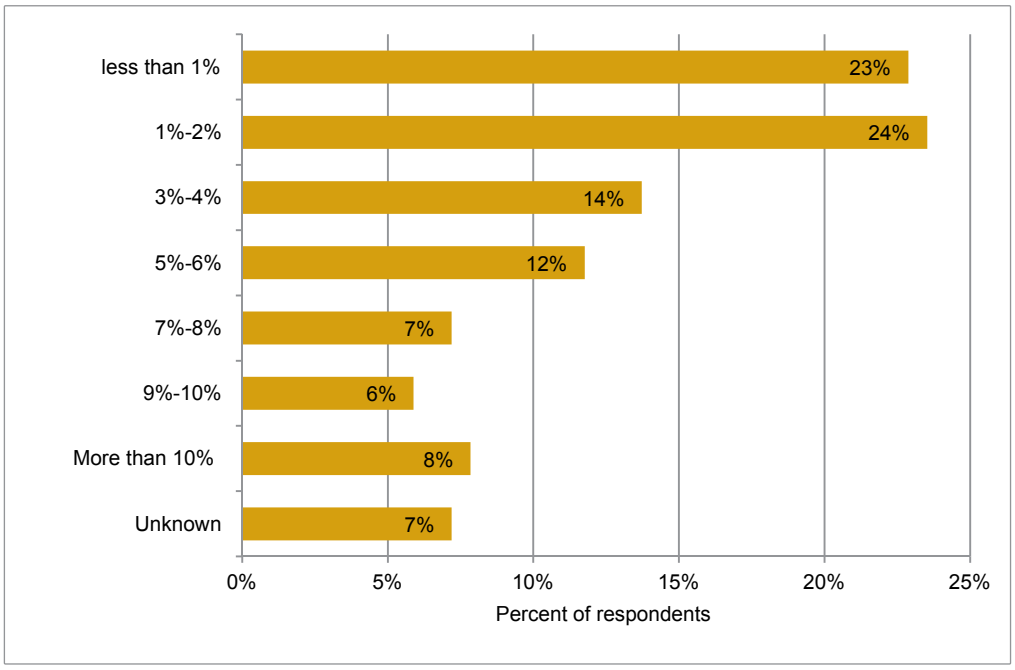
As the 2008 and 2010 Reports suggested, it is difficult to obtain valid and accurate data on parliament budgets for ICT. Complete estimates would have to include other possible sources of funds. For example, there might be a government-wide Internet access service or software license that the parliament uses at no direct cost. Departments in the parliament might also use some of their own funds for technology that is allocated exclusively by them. And for many, donor agencies provide valuable support.

Figure 8.8 shows the ICT budget as a percentage of the parliament's entire budget. The 2012 survey was more specific on this question than previous surveys; it asked parliaments to pick from a range of percentages as shown in Figure 8.8. Earlier surveys left the question open and asked respondents to calculate the percentage themselves. The 2012 survey also had more usable responses to this question than the previous surveys (2012=142; 2009=112; 2007=56). For these reasons, the 2012 results can be considered more reliable than those from previous years, although the results were not significantly different.

As can be seen in Figure 8.8, nearly half of all parliaments reported that their ICT budgets, as a percentage of the total parliamentary budget, was 2 per cent or less (less than 1 per cent=23 per cent; 1-2 per cent=24 per cent). 26 per cent reported ICT budgets that were between 3 per cent and 6 per cent; 21 per cent had budgets over 7 per cent of the total parliamentary budget. There is a wide disparity between the highs and lows in these results. For example 23 per cent of parliaments have ICT budgets that are less than 1 per cent of the parliament's total budget while 25 per cent have budgets that are 5 per cent or more of the total parliamentary budget.

13 Survey 2012, Section 1, Question 22.

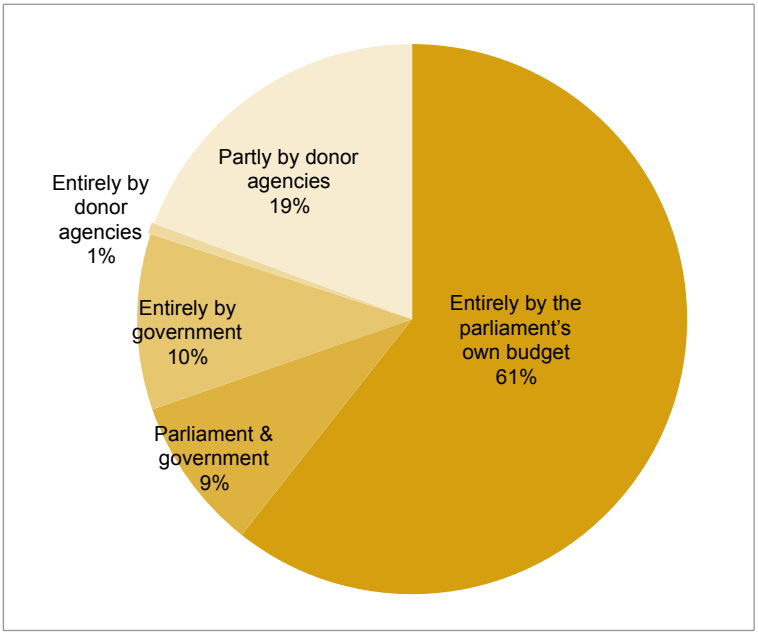
Figure 8.8: ICT budget as a percentage of the entire budget of the parliament



(Source: Survey 2012, Section 1, Question 18; 153 respondents)

The 2010 Report showed a relationship between total e-parliament scores (see Chapter 9) and the income level of the country of the parliament. This was not an unexpected finding. The results in Figure 8.8, however, go beyond this general relationship, and point out that there are significant differences among parliaments in the percentage of their entire budget that is spent on ICT. This inevitably affects the capacity of some parliaments to achieve their goals for ICT, regardless of their income level.

Figure 8.9: How ICT is funded



(Source: Survey 2012, Section 1, Question 17; 155 respondents)

Figure 8.9 shows how ICT is funded. The options were *funded entirely by the parliament's own budget* or funded by some *combination of parliament, government, and donor agencies*. It is a reflection of the issue raised earlier in this Chapter regarding the independence of the parliament, that only 61 per cent of parliaments fund ICT entirely through their own budgets. It is also striking that almost one fifth of parliaments need help from donor agencies.

INTER-PARLIAMENTARY COOPERATION ON ICT STRATEGIC PLANNING

Since the release of the *World e-Parliament Report 2010* inter-parliamentary cooperation in the field of ICT strategic planning has intensified. This was mainly due to two projects[14] funded by the European Commission through the Secretariat of the African, Caribbean and Pacific Group of States, targeting respectively the Caribbean and the Southern Africa Development Community regions. They were implemented by the Division for Public Administration and Development Management of the United Nations Department of Economic and Social Affairs, through the Global Centre for ICT in Parliament, in partnership with the Caribbean Centre for Development Administration (CARICAD) and the Southern African Development Community Parliamentary Forum (SADCPF).

Both projects foresaw the provision of advisory services to requesting parliaments for assessing their state of ICT and for devising ICT strategic plans through technical advisory missions and expert support. Key to the success of these activities were: the ownership of the process by each legislature with the involvement of their political leaders, senior management and staff; the exchange with, and the provision of, expertise by other parliaments through the release of their staff; and, an initial and final benchmarking of the state of ICT planning in parliaments through two regional workshops.

Box 8.6

> The Parliament developed a Strategic Plan for 2010-2015, which outlines the Parliament's desire to increase use of ICT in its operations. This Plan, together with the ICT Strategic Plan 2011-2015 developed with assistance from the Global Centre for ICT in Parliament in conjunction with the SADC Parliamentary Forum, has set clear goals and objectives for ICT in the institution.
>
> Several projects are under implementation, completed or nearing completion, such as: redesigning of the Parliament website using the IPU Guidelines; implementation of a Parliamentary and Legislative Management Information System; and, distribution of laptops to and ICT training for all Members of Parliament.
>
> *Comment by a respondent to the 2012 Survey*

Overall, 14 chambers[15] in the SADC region received 27 technical advisory missions and 16 chambers[16] in the Caribbean received 30 technical advisory missions. Four workshops attended by these parliaments allowed initial regional assessments, the explanation of the process, consensus building on the ICT assessment and planning methodologies - based on an adaptation of the balanced scorecard (BSC) approach - and a final regional peer review of the outcomes of the strategic plans[17].

14 The projects *Support to ICT Strategic Planning in Parliaments of the Caribbean* and *Support to ICT Strategic Planning in Parliaments of the SADC region* were presented in 2009 by the Global Centre for ICT in Parliament to the ACP Secretariat in response to a call for proposal and later approved.

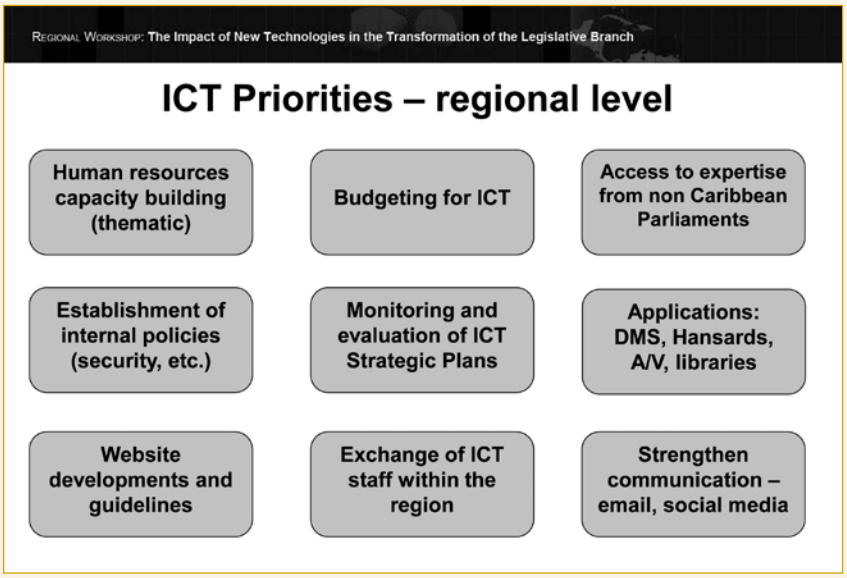
15 National Assembly of Angola, National Assembly of Botswana, Senate of the Democratic Republic of the Congo, National Assembly of the Democratic Republic of the Congo, National Assembly of Lesotho, National Assembly of Malawi, Parliament of Mauritius, National Assembly of Mozambique, National Assembly of Namibia, National Assembly of Seychelles, Parliament of Swaziland, National Assembly of Tanzania, National Assembly of Zambia, and National Assembly of Zimbabwe.

16 Parliament of Antigua and Barbuda, Parliament of Barbados, National Assembly of Belize, House of Assembly of Dominica, Senate of Dominican Republic, Chamber of Deputies of the Dominican Republic, Parliament of Grenada, National Assembly of Guyana, Senate of Haiti, National Assembly of Haiti, Parliament of Jamaica, Parliament of Saint Lucia, Parliament of Saint Kitts and Nevis, House of Assembly of St. Vincent and the Grenadines, National Assembly of Suriname, Parliament of Trinidad and Tobago.

17 The second and final workshop for parliaments of the Caribbean was organized with the additional support of the technical cooperation programme "Connected Parliaments", led by the Institutional Capacity of the State Division of the Inter-American development Bank (IDB), and supported by the Italian Trust Fund for Information and Communication Technology for Development.

The peer reviews were particularly useful as they served to identify what parliaments could collaborate on and share for the implementation of their ICT plans, as well as to identify priorities at the regional level to consolidate their cooperation. Box 8.7, for example, describes the broad regional ICT priorities for parliaments of the Caribbean and the areas of possible cooperation.

Box 8.7



ICT priorities at the regional level identified by participants attending the Regional Workshop "The Impact of New Technologies in the Transformation of the Legislative Branch: From Awareness, to Planning, to Action", Bridgetown, Barbados, 30 May to 1 June 2012. See http://www.ictparliament.org/node/4648

A more specific list of topics for inter-parliamentary sharing discussed at the same final workshop included the following themes:

- ICT strategic plans
- ICT Steering Committee model and structures
- shared ICT business services
- common information structure standards
- information management policies and practices
- parliamentary shared private clouds
- shared record keeping applications
- enterprise guiding principles
- business cases
- technology research and adoption process
- formal compliance process

- centralized standards team
- project methodology
- post-implementation assessment
- infrastructure renewal process

When possible, the Global Centre worked closely with additional partners to provide expertise in the ICT strategic planning domain, either directly or by calling on partnering legislatures. These partners included the technical cooperation department of the Inter-Parliamentary Union, various country offices of the United Nations Development Programme (UNDP), the OECD Sigma programme, the North-South Dialogue initiative of the Parliament of Austria and parliamentary strengthening projects funded by the United States Agency for International Development (USAID). Through these arrangements, 9 chambers[18] received 13 technical advisory mission missions in the past two years.

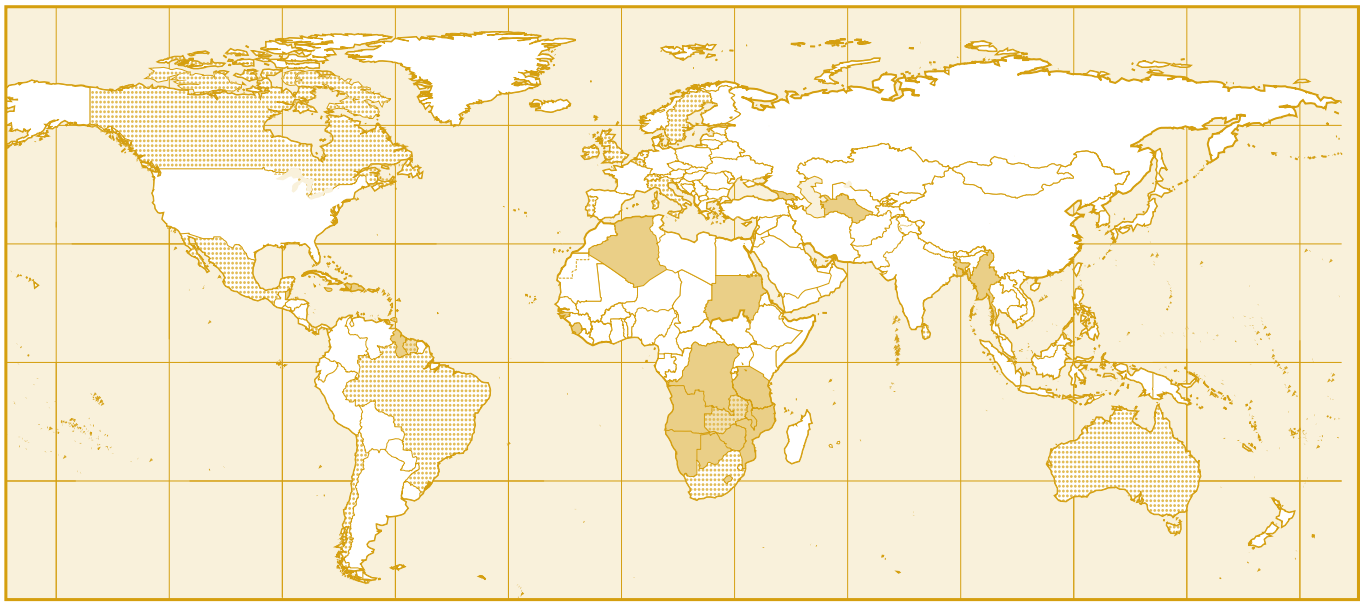
As mentioned above, one of the key objectives of the Global Centre for ICT in Parliament is the facilitation of inter-parliamentary exchanges at the technical level through the mobilization of staff with particular expertise from parliaments that are willing to support such initiatives. This ensures better peer-to-peer understanding between those receiving and those providing the expertise, as well as the consolidation of relationships that can last beyond the specific time allocated for the missions. When possible, south-south inter-parliamentary cooperation was also promoted.

It is therefore worth mentioning that overall, in the past two years, high-quality technical expertise for all the advisory missions mentioned above was generously provided by 20 parliaments, with some of them releasing professional staff multiple times. They were: the Parliament of Australia, the Senate of Belgium, the House of Representatives of Belgium, the Chamber of Deputies of Brazil, the House of Commons of Canada, the Senate of Chile, the Parliament of Estonia, the Parliament of Finland, the Knesset of Israel, the Senate of Italy, the Chamber of Deputies of Italy, the Chamber of Deputies of Mexico, the National Assembly of Panama, the Assembly of the Republic of Portugal, the Parliament of South Africa, the Parliament of Sri Lanka, the Parliament of Suriname, the Parliament of Switzerland, the Parliament of Trinidad and Tobago, the National Assembly of Zambia and the Parliament of the United Kingdom of Great Britain and Northern Ireland.

Box 8.8 attempts to describe visually the level of inter-parliamentary cooperation which occurred since the release of the *World e-Parliament Report 2010*. While it may be missing similar activities that have taken place on a bilateral basis or through different multilateral channels, it clearly depicts a growing field for technical cooperation among parliaments.

18 Council of the Nation of Algeria, National Assembly of Algeria, Parliament of Bangladesh, Parliament of Georgia, National Assembly of Guinea Bissau, Parliament of Myanmar, Parliament of Sierra Leone, Parliament of Sudan, Parliament of Turkmenistan.

Box 8.8



Source: Global Centre for ICT in Parliament.
Legend:

- parliaments that have received advisory services;
- parliaments that have provided expertise;
- parliaments that have both received and provided expertise.

In total, 70 technical advisory missions were received by 39 parliaments with the assistance of parliamentary experts from 20 chambers, some of them multiple times

PART 3

ADVANCING THE STATE OF E-PARLIAMENT

Chapter 9
The State of e-Parliament in 2012

INTRODUCTION

In 2007 the survey launched by the Global Centre for ICT in Parliament assessed the state of e-parliament in the world's legislatures. Based on the survey results, the *World e-Parliament Report 2008* identified three levels of adoption of technology. At the high end some legislatures were very successful in their use of ICT to support their goals, including having developed systems and using open standards for managing most of their critical documents. They also had websites that presented current activities of the parliament in multiple formats, including real time video, and were creating archives of this information. They were building a wide ranging policy and legislative knowledge base available to members and the public. Legislators had computers in their offices and a laptop that provided remote access to parliament and its information. Many were exploring new ICT-based methods for communicating with citizens and for engaging them in constructive discussions of policy options. However, the survey estimated that less than 10 per cent of respondents fell into this category, and these parliaments were all from either the high or upper middle income groups.

At the lower end, at least 10 per cent of chambers were so constrained by resources that possibly they could not provide even the most basic ICT services. And, based on responses to a variety of survey questions, the percentage of those that could provide only basic ICT services could have been as high as 30 per cent. On the positive side, many of these parliaments responded that they had developed plans for building their ICT capacities to enhance the effectiveness of their operations. Some had established strategies that could be implemented as the resources became available.

In the middle were parliaments whose ICT systems and services would have to be described as uneven at best. Many of them had implemented ICT applications that served some of their most important functions. But many of these applications appeared to be operating at the lowest level of utility and had not been enhanced in a way that took advantage of technology to improve efficiency and effectiveness, or offered additional services. They had, for example, developed websites that had the text of bills, but did not have information about committee activities or links to related information or documents. Committees may have had websites, but they lacked standards for what should appear on their sites or be retained. Many of these websites still needed a search engine for finding bills and related documents. In effect, many of these chambers had introduced some of the important ICT tools, but the implementation and adoption was limited to the most essential services.

Overall the 2008 analysis made evident that there was a substantial gap in most parliaments between what was possible to achieve by using ICT as a means to support the values and goals

of parliaments and what had been accomplished. This gap was especially pronounced among legislatures from countries with lower income levels.

Two years later, the *World e-Parliament Report 2010* proposed a statistical methodology for assessing ICT maturity in legislatures which resulted in a more detailed description of their e-parliament state compared to the 2008 Report. The methodology assigned a numeric score to six categories related to the management and implementation of technology covered by each section of the 2009 survey:

- Oversight and management of ICT;
- Infrastructure, services, applications and training;
- Systems and standards for creating legislative documents and information;
- Library and research services;
- Parliamentary websites; and,
- Communication between citizens and parliaments.

These numeric values were added together to provide an overall score that described the state of e-parliament worldwide, according to the 134 respondents to the 2009 survey.

The e-parliament elements included in the methodology took into account the most important aspects of technology identified and described by parliamentary leaders, officials, members and experts in presentations at previous World e-Parliament Conferences. They also took into account the results of the 2007 and 2009 surveys and the findings of independent studies and research carried out on this subject.

Scores resulting from the methodology were derived from responses to survey questions linked to each of the six sections used in the survey. To ensure a clear relationship with the key elements of e-parliament, only a selected number of questions were used. Some questions were excluded because they were informative but did not lend themselves to a comparative assessment. Others were deemed not as relevant as the questions that were included or were judged to be insufficiently accurate or valid to warrant being part of the methodology at this time. A total of 44 of the 138 questions were used to calculate the global scores, with many of them containing multiple parts.

SUMMARY OF FINDINGS FROM THE 2009 SURVEY

On the basis of 100 per cent as the highest possible score, total overall scores from the 2009 survey for individual parliaments ranged from 14 per cent to 83 per cent. The average total score for all chambers was 45 per cent. Only 20 per cent of parliaments achieved a total score of at least 66 per cent; 30 per cent had a total score of 33 per cent or lower. As expected, scores were directly related to income level. Those at the highest income level had an average score of 60 per cent, well above those at all other levels. Those in the lowest income group had an average score of 28 per cent.

Among the six categories, *infrastructure, services, applications and training* attained the highest average score (66 per cent). It was clear from this finding that many parliaments were achieving some success in implementing a more a robust and responsive ICT infrastructure. Building an infrastructure may be initially costly, but it is often a critical first step before undertaking more complex applications. The score for infrastructure also reflected the finding that more parliaments were providing training programmes for ICT staff and for members.

Oversight and management of ICT achieved the second highest average score (51.3 per cent). This was a positive finding but it still reached only slightly over half of the mark, suggesting that there was considerable room for improvement. In particular, this score indicated that there were still not enough parliaments whose senior leadership was engaged in ICT issues, and that had *written* vision statements and regularly updated strategic plans.

The average scores for the three remaining areas were all at about the same level: *systems and standards for creating legislative documents and information* (46 per cent); *parliamentary websites* (45 per cent); and *libraries and research services* (42.7 per cent). These scores were all less than 50 per cent of the maximum possible and reflected the fact that not enough parliaments had key capabilities, such as a document management system for proposed legislation, XML for any type of documents, and a website that met most of the IPU recommended guidelines. The relatively low score for libraries and research services was an indication of lack of support for this vital resource.

Communication between citizens and parliaments had the lowest average score (27.5 per cent). There were a number of challenges that parliaments, committees, and members faced in 2009 in using new ICT-supported methods of communication, including the lack of knowledge about which of the new media were the most useful. It was, however, promising that a large percentage of parliaments were using interactive technologies to communicate with young people.

This methodology made it possible to determine which parliaments were at the highest and lowest levels of e-parliament and to describe their characteristics more specifically. It is important to note that there was not a specific score that marks a particular level; there was instead a *continuum* along which all parliaments were arrayed. The specificity of the scoring criteria provides a fuller understanding of strengths and weaknesses at the global, regional, and national level.

Based on their scores, the parliaments at the top level were more likely to have sound management, a solid yet flexible infrastructure, systems for managing all parliamentary documents, library and research services well supported by ICT, a website offering a great deal of timely and complete information with multiple channels to access it, and a variety of methods for engaging with citizens through traditional communication means as well as new and more interactive media. Those at the lowest level of adoption did not have an appropriate management structure in place (although a surprising number did better than expected in this area). They lacked an adequate infrastructure (a few did not have reliable electrical power), often had no systems for managing documents, had very weak libraries, and websites with the least amount of information (some did not have websites at all). Many had no capabilities for using ICT-supported methods to communicate with citizens. Those in the middle varied in their strengths and weaknesses. While they sometimes had good scores in one or two areas (this was particularly true for management), they usually had not achieved a high level of adoption in most categories. There was a continued unevenness in implementation similar to what was first observed in the 2008 report.

As noted above, further analysis of the scoring factors showed a direct relationship between a country's level of income and the parliament's level of adoption of ICT. However, the pattern varied among areas of ICT. For example, the extent of the differences in *envisioning and managing ICT* and in *infrastructure applications, services and training* was much less between parliaments in low and high income countries than the differences in other areas. The size of the difference between parliaments in high income countries and all other income levels was also very large for document management systems, libraries, and websites, suggesting a substantial gap in these three areas. At

the regional level, the parliaments in Latin America achieved a total average score that was above the total average score for all parliaments and the mean score of the upper middle income group, which suggested an encouraging path of e-parliament development in the region.

DISCUSSION OF THE RANKING METHODOLOGY

This methodology serves as a useful tool for looking at the state of ICT adoption in parliaments. For this reason, it was applied again to the results of the 2012 survey. However, the methodology has certain limitations that must be acknowledged. It is based on answers provided by each parliament, which have not been independently verified. This type of self assessment is a valid approach, especially when the goal is to seek self improvement, but the completeness and accuracy of the answers are dependent on the knowledge of the individuals who fill out the questionnaire and their familiarity with the technology in the parliament. The staff completing the survey may also be different in each survey year, which can make it more difficult to compare the analysis of an individual parliament over time. In addition, not all questions apply to all parliaments due to differences in their authorities, structures, environment and circumstances. These factors tend to balance themselves out when the results from all respondents are analyzed.

Nevertheless, many parliaments have expressed a desire to know how they scored within the larger community. Understanding the results of its e-parliament scores for an individual parliament can have a number of advantages. It would allow the parliament to identify or confirm areas of strength and weakness. It could serve as a guide for allocating resources to areas that needed improvement, and it could provide a justification for allocations that had resulted in satisfactory scores. For these reasons, by using the methodology provided in Annex 1, Table 1, the Report provides the possibility to parliaments to calculate their own scores from their responses to the survey. A sample of such a report is shown in Annex 1, Table 2.

FINDINGS FROM THE 2012 SURVEY

The categories for the 2012 survey were the same as for 2009:

- Oversight and management of ICT;
- Infrastructure, services, applications and training;
- Systems and standards for creating legislative documents and information;
- Library and research services;
- Parliamentary websites;
- Communication between citizens and parliaments.

For each ICT category, points were given on the basis of the responses to the selected questions as shown in Annex 1. The points were then totaled for each category and divided by the maximum possible points for that category, thus giving a percentage score, based on 100 per cent, for each category. The total points for all categories were then combined and divided by the total points possible for the entire assessment, which resulted in a total e-parliament percentage score based on a maximum of 100 per cent. In the discussion below the term "raw score" is used to refer to the points given for each category and for all categories combined. The terms "percentage

score" or "score" alone are used to refer to the percentage that resulted from dividing the raw score by the total possible score for each category and for all categories combined. 100 per cent is the maximum possible percentage score for each category and for the total e-parliament score.

Adjustments to the methodology in 2012

While it is important that surveys that intend to identify changes and trends over time continue to use the same questions, it is equally important that they can be updated when necessary to reflect changes in the areas that are being assessed. This is particularly true for ICT, which changes rapidly. The 2012 e-parliament assessment used all of the same questions that were used in 2009, but also added three questions covering mobile devices and applications and the availability of bulk download of parliamentary documents.

The questions about mobile devices and applications were included in the section *infrastructure, services, applications and training* of the assessment. The criteria were adjusted to allow ½ point if the parliament provided members with either a tablet PC or a smart phone. An additional ½ point was given if the parliament had developed applications for delivering information to members through these devices, whether they provided the devices to members or not. See Annex 1, *infrastructure, services, applications and training* category in Table 1.

The question about the availability of bulk download of parliamentary documents was included in the section *communication between citizens and parliaments* of the assessment. The criteria were adjusted to allow one point for making parliamentary documents available via bulk download by the public. See Annex 1, *communication between citizens and parliaments* category in Table 1.

As noted above in the discussion of methodology, the assessment included in the 2010 Report had a maximum possible total score of 100 per cent, calculated as percentage of the combined raw scores for each category divided by 100. The addition of these three new questions with a total value of two points to the criteria in 2012 meant that a parliament could, in theory, score a maximum of 102 points; the total raw score was therefore divided by 102 to ensure that the 2012 percentage score was also based on a maximum of 100 per cent. The net effect of these additions to the criteria, therefore, was to "raise the bar". Parliaments had to obtain higher raw scores to equal or improve upon their previous scores. The effect was the same for global scores: that is, the combined raw scores of all parliaments had to be higher to show any improvement in the percentage scores for the categories *infrastructure, services, applications and training* and *communication between citizens and parliaments* and for the total global e-parliament percentage score.

Global scores

Total overall scores in 2012 for the 156 individual parliaments that participated in the survey ranged from 9 per cent to 88 per cent. The average total score for all chambers was 46 per cent. Only 20 per cent of parliaments achieved a total score of at least 66 per cent, the same percentage as in 2009, when 134 parliaments responded to the survey; 27 per cent had a total score of 33 per cent or lower, fewer than in 2009, which means that more parliaments in 2012 scored in the mid-range between 34 per cent-65 per cent.

Figure 9.1 shows the average e-parliament scores for all respondents to both the 2012 and 2009 surveys for each ICT area, as well as the average total e-parliament score. As seen in this figure, the scores changed relatively little between the two surveys. The score for *infrastructure, services, applications and training* actually declined, perhaps due to the fact that while a surprising number are already providing mobile devices and applications for members, it is still far from a majority of parliaments.

There was an increase of note in *systems and standards for* d*ocument and information* (4.3 per cent - see last column), perhaps due to the larger number of parliaments that are using XML for bills and the increases in the percentages of parliaments that have systems for managing other parliamentary documents.

Figure 9.1: Average total e-parliament scores in each category for all respondents by year

CATEGORY	ALL RESPONDENTS		CHANGE
	2012	2009	
Oversight and management of ICT	52.7%	51.3%	2.7%
Infrastructure, services, applications and training	61.9%	66.0%	-6.3%
Systems and standards for documents and information	48.0%	46.0%	4.3%
Library and research services	43.3%	42.7%	1.5%
Parliamentary websites	44.5%	45.0%	-1.1%
Communication between citizens and parliaments	30.5%	27.5%	10.8%
Total e-parliament percentage score	**45.9%**	**45.4%**	**1.1%**

The most significant increase was in *communication between citizens and parliaments*, which rose almost 11 per cent. As noted in Chapter 2, parliaments are doing more in a variety of ways to communicate with citizens. While the average for this category is still the lowest of the six, it showed the most improvement since 2009.

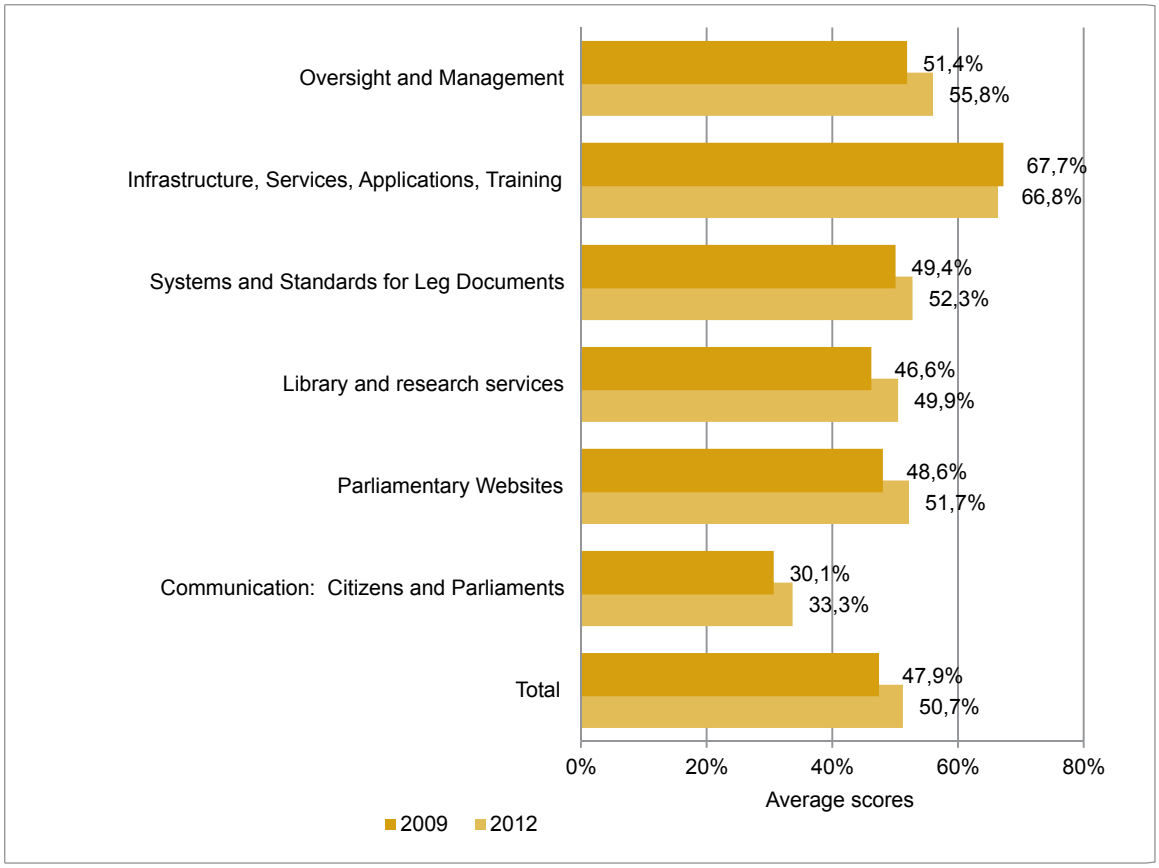
Figure 9.2 shows the same scores for the 2009:2012 comparison group. Among these 108 respondents that participated in both surveys, the average total e-parliament score rose from 47.9 per cent to 50.7 per cent, an increase of 5.8 per cent over the 2009 score. This is particularly significant because, as noted above, parliaments had to do more to achieve the same or higher scores in 2012. With exception of *infrastructure, services, applications and training* the individual categories also went up, suggesting that there was general improvement across the board. The average increases for each of these categories over their 2009 scores were:

- Communication between citizens and parliaments: +10.6 per cent
- Oversight and management of ICT: + 8.6 per cent
- Libraries and research services: + 7.1 per cent

- Parliamentary websites: + 6.4 per cent
- System and standards for documents and information + 5.9 per cent

These increases in the average total e-parliament scores along with the increases in five of the six ICT categories within the 2009:2012 comparison group are a positive indication that the state of technology in parliaments is improving. While the scores are still low and indicative of the need for much more progress, they are clearly heading in the right direction.

Figure 9.2: Average total e-parliament scores by each category for the 2009:2012 comparison group



(Source: answers from the 108 parliaments that responded in 2009 and 2012)

Global scores by income level

Figure 9.3 shows the average total e-parliament scores by income level. As seen in 2009 and again in 2012, parliaments in the high income group, as expected, are significantly ahead of the parliaments in the other groups. Figure 9.4, however, provides some positive news: the ICT gap between

Figure 9.3: Average total e-parliament scores by income groups

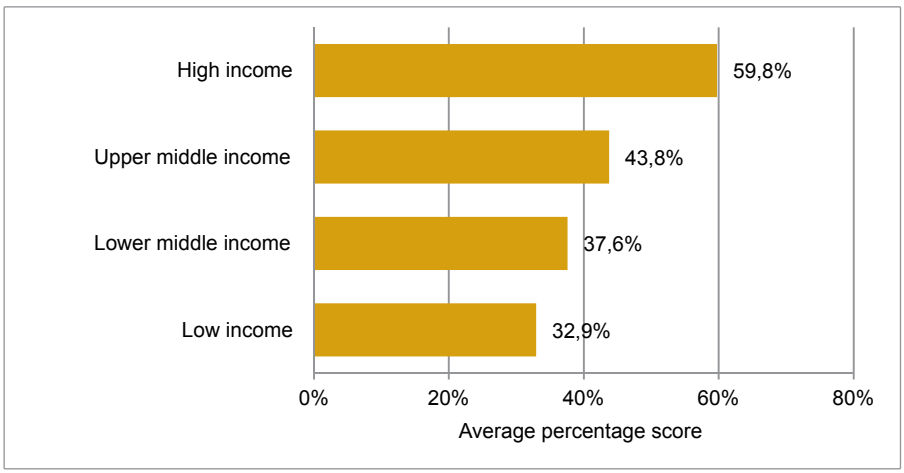


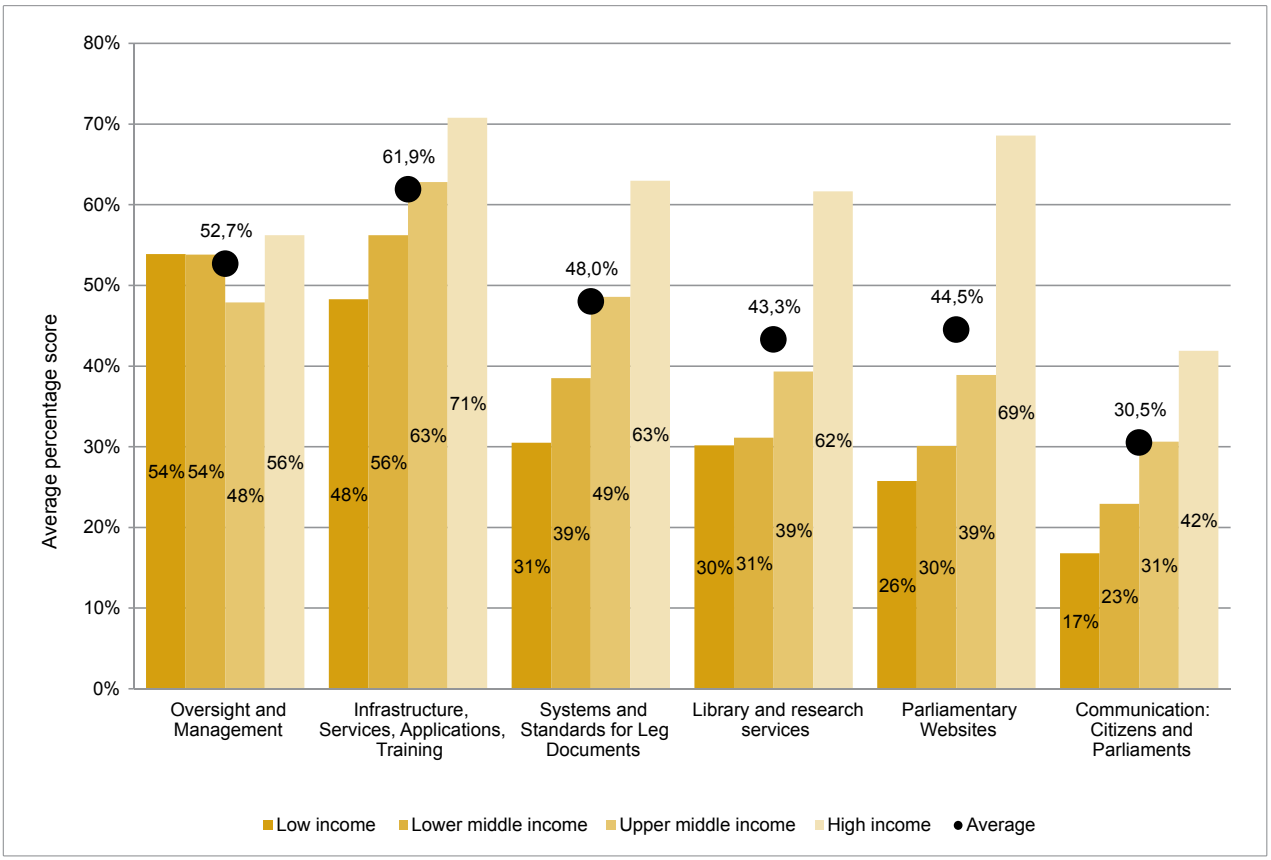
Figure 9.4: Differences in average total e-parliament scores between income groups by year

Income Levels	2012	2009
High : Upper Middle	37%	36%
Upper : Lower Middle	16%	17%
Lower Middle : Low	14%	34%
High : Low	82%	113%

parliaments in low income countries and those at the other income levels is closing. For example, Figure 9.4 shows that between 2009 and 2012 the difference in the average total e-parliament score between those in the low income group and those in the lower middle income group dropped more than 50 per cent from a difference of 34 per cent to a difference of 14 per cent. And while the difference in scores between parliaments in low income countries and high income countries was still at 82 per cent in 2012, that represented a substantial decline from 2009 when the gap was 113 per cent.

Income level has an interesting relationship to the scores for each of the categories. One might expect that the differences between income groups for each of the ICT categories would be approximately the same. Figure 9.5 suggests that this not always the case. As was true in 2009[1], there are much smaller differences by income level for *oversight and management of ICT*. And while there are still substantial differences in the other categories, the differences are not as great for *infrastructure, services, applications and training*. The 2010 Report found the same thing and noted that developing countries were doing comparatively better in these two categories than in the others.

Figure 9.5: Average e-parliament scores for each category by income groups



1 See *World e-Parliament Report 2010*, p. 136, Figure 8.3.

Communication between citizens and parliaments is also an interesting category: parliaments in the high income group have the highest percentage score, but the difference between them and the other income groups do not appear to be as large as they are for *systems and standards for documents and information, libraries and research services,* and *parliamentary websites*. It is possible that this occurs for two reasons: a) as discussed in Chapter 2, most parliaments are still trying to determine the best way to use ICT to communicate with citizens; and, b) many of the costs of using ICT for communication purposes, especially some of the newer interactive ones, are lower than are the costs in some of the other areas, such as building an XML-based document management system. This might make it easier for parliaments at all income levels to adopt new ICT-based methods of communication, once it is clearer which ones are the most effective. This is still speculative, however, and future surveys will need to examine the issue more closely.

Global scores by region

The increase in the number of parliaments responding to the 2012 survey made it possible to include more regions in the analysis. Figure 9.6 shows the total e-parliament percentage scores for Europe, Latin America, Southern and South-Eastern Asia, Africa, and the Caribbean. As seen in this figure, the overall percentage scores for Europe and Latin America are quite close and significantly higher than those of other regions.

Figure 9.6: Average total e-parliament scores by regions

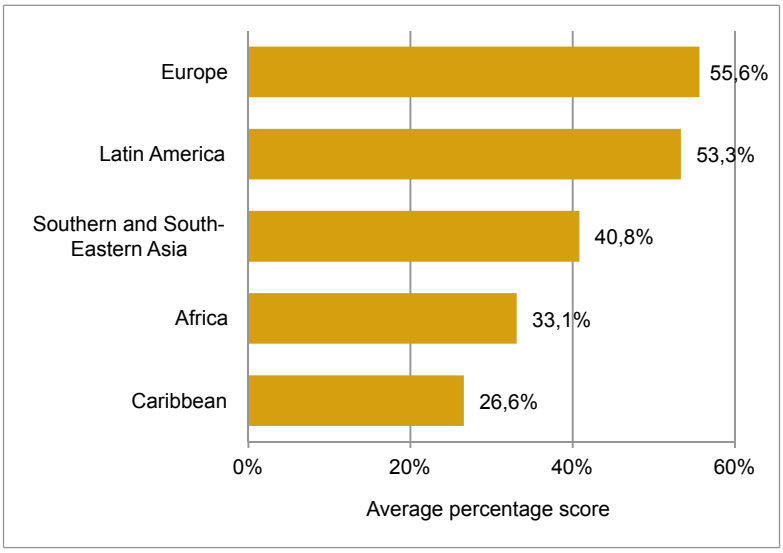


Figure 9.7 presents the sub-scores for each category by region. Each grouping of bars shows the relative strength of each region in each category. For example, the first set of bars shows the average regional e-parliament scores for *oversight and management of ICT*. While parliaments in the Southern and South-Eastern Asia region had the highest score (64 per cent) for this category, all the other regions were comparatively close to each other. European parliaments have high scores compared to other regions for *parliamentary websites* (64 per cent). Both Latin America and Europe have high scores for *infrastructure, services, applications and training* followed closely by Southern and South-Eastern Asia. Both Europe and Latin America also have the highest scores for *systems and standards for documents and information* and for *library and research services.* Latin America has the highest score for *communication between citizens and parliaments.*

Another way to look at Figure 9.7 is to follow a region across all sub-categories. This can show where a region is strongest and weakest when considering all categories. For example, the Caribbean region, shown by the first bar on the left of each grouping, is strongest in *oversight and management* of ICT (42 per cent). For each category after that, the region's scores decline in nearly a straight line from 39 per cent for *infrastructure, services, applications and training* to 17 per cent for parliamentary *websites* and *communication between citizens and parliaments*. Africa has a similar pattern.

This pattern was discussed in the 2010 Report[2], which suggested that there could be a natural progression in the implementation of ICT: first establishing a good management structure and practice and then building a responsive technical infrastructure. Developing the systems and applications to support document management, libraries, websites, and communication takes longer and therefore the scores for these categories would reasonably be lower.

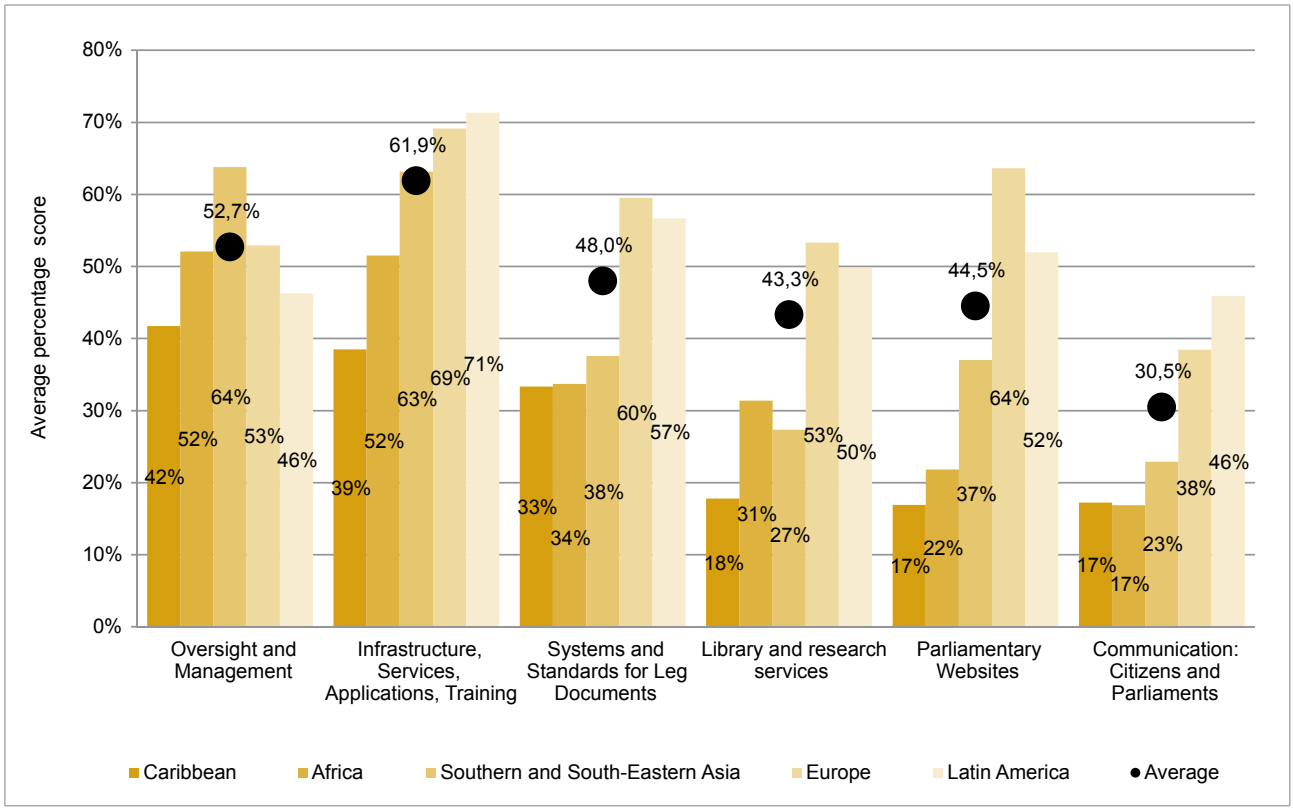
This progression can be seen again in 2012 in the scores for all respondents for each category, as represented by the position of the black dots on Figure 9.7. The major variation in the pattern is that the e-parliament score for *infrastructure, services, applications and training* for all respondents is the highest of all sub-categories. While this might be an artificial result of the methodology, it is more likely a logical result of the fact that most parliaments must build an adequate technical infrastructure before they can undertake the development of applications in other areas. The basic pattern, therefore, is to start with good management and oversight and then to build a technical infrastructure that is sufficient to support the parliament's strategic goals for ICT (scores for this category can therefore reasonably exceed those for other categories, including management). Parliaments could then undertake the systems that meet their highest priorities.

Figure 9.7 gives support to this progression, as well as highlights a few regional variations. For all regions, *infrastructure, services, applications and training* has the highest score and all other application categories – *systems and standards for documents and information, libraries and research services, parliamentary websites,* and *communication between citizens and parliaments* have lower e-parliament scores. In fact, the scores for these categories decline in relation to each other in the order just listed with two exceptions: Europe's and Southern and South-Eastern Asia's scores for *parliamentary websites*. Regional variations are expected, however, and these differences are interesting but not strategic.

The results and patterns found in Figure 9.7 can provide some ideas for parliamentary networks, such as the ECPRD, APKN, and RIPALC (see Chapter 10), about topics for regional meetings and areas of ICT in which sharing experiences could be especially beneficial.

2 *World e-Parliament Report 2010*, p.136.

Figure 9.7: Average total e-parliament scores by regions



(Percentage scores for all respondents for each category are located on the graph by a black dot ● with the score)

THE E-PARLIAMENT FRAMEWORK 2010-2020: MEASURING PROGRESS

An additional way of assessing progress in parliaments' use of technology can be shown by referring to the work of the high-level Board[3] of the Global Centre for ICT in Parliament, which developed and proposed a set of forward-looking strategic goals for improving the state of technology in legislative bodies[4]. In late 2009, the Board acknowledged the long-term challenge of using ICT as a means for strengthening parliamentary values and called "on all parliaments, international organizations and development partners to unite their efforts around these strategic goals as guiding principles for the international community to support all parliaments around the world to play a key role in shaping the society of the future and to harness modern technologies to become truly representative, transparent, accessible, accountable and effective institutions"[5].

The strategic goals identified by the Board offer a basis for mobilizing a global multilateral effort to facilitate greater coordination and collaboration among all the relevant actors - parliaments, donors, international organizations and civil society organizations – towards the achievement of common targets over a ten-year span (2010-2020).

3 The Global Centre for ICT in Parliament is guided by a high-level Board composed of Speakers and Presidents of Parliaments, the Under-Secretary-General of the United Nations for Economic and Social Affairs, the President of the Inter-Parliamentary Union and the President of the Association of Secretaries General of Parliament.
4 See *World e-Parliament Report 2010*, Chapter 10.
5 Budapest Statement, third high-level meeting of the Board of the Global Centre for ICT in Parliament, March 2009.

The goals are centered on five key areas for action, described below, that address both policy needs and technology requirements:

1. Establish national and international policies to create an Information Society that is equitable and inclusive;
2. Enhance the connection between legislatures and constituencies;
3. Improve the equality of access to the law and the lawmaking process of the country;
4. Ensure that legislatures around the world can harness ICT tools in the service of the legislative, oversight, and representative functions;
5. Develop a more robust and well coordinated programme of technical assistance.

For each strategic goal under these areas, the Board proposed specific criteria to measure the level of success reached on a worldwide basis and proposed targets for the short term (2010-2012, medium term (2013-2016) and long term (2017-2020). The results of the Global Survey of ICT in Parliaments 2012 provide one means for assessing progress to date in achieving the targets for the short term in areas 2, 3, and 4 that relate directly to the management and implementation of ICT. However, the survey does not provide data related to the goals in areas 1 and 5, and these cannot be assessed in this Report[6].

Figure 9.8 links specific findings from the survey that have been presented in the preceding chapters of this Report to the goals and measures in areas 2, 3, and 4 of the e-Parliament Framework. Although the time period for the short term as outlined in the Framework is 2010-2012, the survey was carried out during the first quarter of 2012. Some further improvement is therefore possible in meeting the targets by the end of 2012. Nevertheless it is useful to report here the current level of progress, or lack of it, as assessed by the survey.

Below each strategic goal the "Measure of Success" is listed in column1 and the "Measures or Targets" established by the Board for the short term are listed in column 2. Column 3 shows the 2012 survey results that provide some indication as to how well the targets were met. If the survey questions do not permit a complete assessment of the measure, the abbreviation "inc" is used to indicate that the assessment is "incomplete". A footnote indicates what additional information will be needed for a more thorough evaluation.

The last column in Figure 9.8 uses a series of ◈ symbols to indicate one of the following regarding the measures of success:

◈ = little progress in meeting all or even some of the measure

◈◈ = some progress in meeting all or some of the measure

◈◈◈ = measure appears to have been met or is very close to being met

◈◈◈◈ = measure appears to have been exceeded

6 Areas 1 and 5 are outside the scope of the current survey.

Figure 9.8: e-Parliament Framework 2010-2020: Short Term Measures of Success

Strategic Goal 2.1: Fostering the employment of all available tools, including new media and mobile technologies, to provide citizens with improved access to the work of parliament and means of participation in the political dialogue.			
Measures of Success	**Measures/targets for 2010-2012 (% of Parliaments)**	**2012 survey results**	**Assessment of Progress**
♦Two way e-mail communication between members and citizens with tools to assist parliaments and members in managing and responding to electronic messages from constituents.	50% of parliaments	▪E-mail: >Most members use=44% >Some members use=38% >Most members respond=41% >Some members respond=37% ▪Tools >System for managing e-mail= 17% >Policy regarding retention of communications from citizens=16% >Tools to collect citizens' comments and categorize them more efficiently=26%	Use of e-mail=◈◈ Tools=◈
♦Increased use of interactive technology tools by parliaments to connect to citizens and to offer them the means to express their opinions (e-petitions, forums, etc.).	25% of parliaments	▪Social networking sites=31% ▪Twitter=29% ▪E-Consultation on bills=24% ▪E-Consultation on issues=22% ▪E-Petitions=20% ▪Average=25% ▪Communication objectives - engage more citizens in political process=53% ▪Use of mobile technologies to communicate=25% ▪Increasing communications from citizens via ICT=79%	◈◈◈◈
♦Adoption of accessibility standards in parliamentary websites to allow access to persons with disabilities.	50% of parliaments	▪Parliaments that have adopted standards=38%	◈
♦Access to parliamentary websites in multiple languages	50% of parliaments with multiple official languages	(Percentages are for websites in full or in part in at least two languages; S5/Q10-11) ▪Two official languages/website in at least two languages=47% ▪Three official languages /website in at least two languages=40% ▪Four or more official languages/website in at least two languages=65%	◈◈
Strategic Goal 3.1: Promoting the development of parliamentary websites that convey the work of the parliament in a way that is accurate, timely, and complete.			
Measures of Success	**Measures/targets for 2010-2012 (% of Parliaments)**	**2012 Survey Results**	**Assessment of Progress**
♦Websites with complete legislation information and documentation	50% of parliaments	▪Text and status of all proposed legislation=69% ▪Information/documents re legislation=62% ▪Documents linked to legislation=36% ▪Information re budget and oversight=39% ▪Information re plenary activities= 60%	◈◈◈
♦Information and documentation available for downloading in open standard formats	25% of parliaments	▪Bulk download = 44% ▪Open standards = percentage of parliaments using XML for any document = 26%	◈◈◈◈
♦Strategy to create, in conjunction with the executive and judicial branches, national databases with all of a country's laws in force updated on a timely basis and accessible to all citizens	25% of parliaments	▪Searchable database of enacted legislation 56%	◈◈◈ Inc[7]

7. This is one of the required components of this measure, and therefore is one indication of success. Future assessments will need to be based on whether there is also in place a database of the laws of the country that are currently in force.

Strategic Goal 4.1: Fostering the active engagement of the leaders and members of parliament in establishing a vision for e-parliament			
♦Parliaments have a vision statement for ICT	75% of parliaments	▪Written vision statement=36% ▪Planning to do written vision statement=50% ▪President/Speaker engaged in establishment of goals and objectives for ICT=56%	◈◈
♦Orientation to ICT provided to all current and newly elected members	75% of parliaments	▪Training / orientation session for members = 56% ▪ Planning to provide training=31%	◈◈
Strategic Goal 4.2: Promoting the elaboration of strategic plans, updated regularly, for the use of ICT that directly improve the operational capacity of parliaments to fulfill their legislative, oversight and representational responsibilities			
♦Parliaments have strategic plans for ICT	75% of parliaments	▪Strategic plan with goals and objectives updated regularly=54%	◈◈
Strategic Goal 4.3: Promoting the development and maintenance of adequate infrastructures and systems in all parliaments to support their legislative, oversight, and representational work			
Measures of Success	**Measures/targets for 2010-2012 (% of Parliaments)**	**2012 Survey Results**	**Assessment of Progress**
♦All members have a personal computer and access to the Internet	75% of parliaments	▪Desktop or laptop PC=82% ▪Access to the Internet=86%	◈◈◈◈
♦A document management system capable of preparing and managing all parliamentary documentation is operational	50% of parliaments	▪DMS for bills=45% ▪DMS for other documents ○ Plenary votes=66% ○ Plenary speeches and debates=74% ○ Minutes of plenary sessions=73% ○ Minutes of committee meetings=60% ○ Committee reports=59% ○ Committee hearings=51%	Bills= ◈◈ Other docs= ◈◈◈◈
♦Mobile access for all members	60% of parliaments	▪Remote data access=37% ▪Mobile access to website=34%	◈
♦Information and research services supported by ICT and linked to the legislative and policy issues that confront the parliament	50% of parliaments	▪Website provides access to information sources organizes by issues of concern to the parliament=43% ▪Automated system for managing info resources=77% ▪Library connected to intranet=58% ▪ Can receive requests electronically=62% ▪Library offers alerting services=35% ▪Use of collaboration software by library staff=35% ▪Online subscriptions=49%	◈◈
Strategic Goal 4.4: Advocating for and promoting annual training programmes for at least 50% of staff engaged in the development, support, or use of ICT.			
♦Parliaments provide annual training for at least 50% of staff engaged in the development, support, or use of ICT	50% of parliaments	▪Percentage of parliaments that provide training for ICT staff=75% ▪Average percentage of ICT staff receiving training in last year=44% ▪Percentage of parliaments that provide training for non-ICT staff=67%	◈◈◈
Strategic Goal 4.5: Fostering the regular exchange of information, experiences and practices among Parliaments at the international level			
♦Responses to the global survey on ICT in Parliament	140 assemblies	▪156 responses representing 177 assemblies	◈◈◈◈

Because this is the first effort at evaluating progress in achieving the strategic goals of the e-Parliament Framework, and also because, as noted, some of the measures are incomplete, the results reported here should be interpreted with caution. Nevertheless it is worth observing that 8 of the 12 measures or targets for the 2010-2012 period appear to have been met or exceeded. While this Report has consistently pointed out the areas that continue to require significant improvement, it is equally important and encouraging to acknowledge areas of progress. The findings related to the e-Parliament Framework are consistent with those in the Chapter 4 that described the improvement in the impact on members that has resulted from more parliaments enhancing the state of their ICT systems and services. They are also consistent with the incremental but still positive increase in the global e-parliament scores discussed previously in this Chapter.

ICT AND THE VALUES OF PARLIAMENTARY DEMOCRACY

As noted by many observers, technology is not an end in itself but one of the means for supporting the work of legislative bodies throughout the world. While in today's world many legislatures have acknowledged the role of ICT in assisting parliament's most important responsibilities - representation, lawmaking and scrutiny - the link between technology adoption and parliamentary democratic values may be less evident.

An informative and useful step is to associate the results of the survey and the scoring methodology to the framework describing the parliamentary contribution to democracy defined by the Inter-Parliamentary Union[8]. This framework, discussed extensively in the *World e-Parliament Report 2008*, identifies a number of important parliamentary objectives and values. These include transparency, accessibility, accountability, and effectiveness. The definition of e-parliament used by this report reflects these values and expands on them to take into account the impact of technology:

> "An e-parliament is a legislature that is empowered to be more **open, transparent** and **accountable** through ICT. It also empowers people, in all their diversity, to be more **engaged** in public life by providing **higher quality information** and **greater access** to documents and activities of the legislative body. An e-parliament is an **efficient organization** where stakeholders use information and communication technologies to **perform their primary functions** of lawmaking, representation, and oversight **more effectively**. Through the application of modern technology and standards and the adoption of supportive policies, an e-parliament fosters the development of an equitable and inclusive information society."

The six areas of technology assessed through the scoring criteria are closely tied to the values of parliamentary democracy. Based on the discussion and findings in Chapter 3, for example, the score for parliamentary websites has a natural and close relationship to the value of transparency. This encompasses both the documents that parliaments provide to the public and the tools available to citizens to find and access them. The scoring criteria for *parliamentary websites* contained questions regarding legislative, budget, and oversight; information and documents; tools for searching them; and, standards for ensuring that websites are accessible to persons with disabilities. Making the text of proposed legislation available is clearly related to transparency, as is publishing the speeches and debate in plenary on a timely basis.

8 Inter-Parliamentary Union, *Parliament and democracy in the twenty-first century: A guide to good practice*, Geneva: Inter-Parliamentary Union, 2006.

Accessibility in the IPU framework refers to involving the public, including the associations and movements of civil society, in the work of parliament. The scoring criteria for *communication between citizens and parliaments* include survey questions on the various ways that parliaments, committees, and members engage with citizens, as well as methods available to citizens to be involved with the legislature. Although many of the communication methods surveyed are uni-directional – that is from the parliament or its members to the public – a number of them included in the criteria are more interactive and the scores for this areas reflect their use.

The IPU framework describes accountability as members of parliament being responsible to the electorate for their performance in office and the integrity of their conduct. The definition of e-parliament includes the institution itself as well as the members. Some of the questions related to transparency are also related to, and overlap with accountability. These questions, most of which are in the section of the survey dealing with *parliamentary websites*, cover three areas: a) the roles, responsibilities, and organization of parliament, its committees, and its members, thereby defining what parliaments and members should be accountable for; b) the leaders and the members and the constituencies they represent, thereby identifying who should be accountable; and, c) the actions of the parliament and its members in the current and previous years, which provide the basis for citizens to judge accountability.

Effectiveness can be assessed at the local, national, and international level in the IPU framework. At all three levels it refers to the organization and conduct of business in accordance with democratic norms and values. The e-parliament definition expands this to include efficiency. These two values of efficiency and effectiveness are reflected in the scoring criteria that relate to: a) *oversight and management of ICT*; b) *systems and standards for documents and information*; c) *libraries and research services*; and, d) *infrastructure, applications, services and training*. Taken together, these areas enable parliaments to be more efficient in their operations, for example by producing and disseminating documents more quickly, and more effective in fulfilling their responsibilities, for example through the ability to access independent sources of information and analysis when considering policy issues and proposed legislation.

A summary of these values and the types of findings from the survey that relate to them most directly are shown in Box 9.1. Although these types of findings do not fully reflect all facets of transparency, accountability, accessibility, and effectiveness and efficiency, they do demonstrate the contribution that technology can make to achieving higher standards in these areas. The survey results therefore provide some indication of the extent to which parliaments have used technology in support of these values, but cannot be interpreted as an indicator of their attainment in absolute terms, for the simple reason that ICT represents only one of the means for parliament to achieve these objectives.

By presenting this analysis the intention of this discussion is to raise awareness among parliamentary leaders, members, and staff about the nexus between ICT adoption and transparency, accountability, accessibility, and effectiveness. This could play an important role at the time of envisioning, planning and managing ICT in the parliamentary context. As more parliaments are able to provide, for example, voting records to the public, enhance their websites by adhering to standards for persons with disabilities, and connect their libraries to local area networks, their accountability, transparency, accessibility and efficiency will also improve. Tracked over time, the survey questions can also provide an indication of progress in the ICT contribution to these values.

Box 9.1: Survey findings relevant to the values of parliamentary democracy

Transparency: *being open to the nation through different media, and transparent in the conduct of its business*

Relevant findings from the survey relating to this objective:

- *Information available on websites, including:*
  - *Documents and information about actions*
  - *Quality of information*
  - *Explanations of information*
- *Tools for finding, receiving, and viewing information*
- *Standards of accessibility (for persons with disabilities)*

Accessibility: *involving the public, including the associations and movements of civil society, in the work of parliament*

Relevant findings from the survey questions relating to this objective:

- *Communication methods and channels*
- *Interactive tools*

Accountability: *members of parliament being accountable to the electorate for their performance in office and integrity of conduct*

Relevant findings from the survey questions relating to this objective:

- *Roles, responsibilities, and organization of parliament, its committees, and its members*
- *Leaders, members and the constituencies they represent*
- *Actions of the parliament and its members in the current and previous years*

Efficiency and effectiveness*: the organization of business is done in accordance with these democratic values, and the performance of parliament's legislative and oversight functions in a manner that serves the needs of the whole population*

Relevant findings from the survey relating to this objective:

- *Envisioning, planning, and managing*
- *Document systems and standards*
- *Libraries and research services*
- *Infrastructure*

Chapter 10
Advancing Inter-Parliamentary Cooperation

INTRODUCTION

While parliaments make efforts to capitalize on the advantages of information and communication technologies, there is no doubt that the next years will continue to be characterized by the growing penetration and pervasiveness of technology in all societies. Governing institutions such as legislatures will need to adapt to an evolving environment where social, economic and cultural components can be altered by the introduction of new devices, as is happening with the diffusion of tablets and smart phones; by the innovative use of technology, such as cloud computing and open data initiatives; or, by the integration of these developments by individuals and groups to generate political and social transformations.

Yet, the search for individual solutions by parliaments to respond to the global phenomenon of rapid change in technology may not be sufficient to keep ahead, or even abreast, of developments. A collective approach by legislatures could be the most effective and most efficient approach.

As discussed in the *World e-Parliament Report 2008* and the *World e-Parliament Report 2010*, parliaments have relied on a long tradition of bilateral and multilateral cooperation at many levels on a wide array of mutual interests and needs. For many years cooperation and exchanges have taken place among members and among parliamentary administrations to learn from the experiences of others. With the establishment of the Global Centre for ICT in Parliament, the United Nations and the Inter-Parliamentary Union have provided legislatures with a needed and innovative instrument through which common technology issues could be identified, analyzed and discussed at a global level among peers, both from the policy and technical perspectives.

Today, after the extensive exchanges of the past years, the use of technology as a means for fostering transparency, openness, accountability and efficiency is high on the agenda of the parliamentary community. Parliaments' interest in this subject has been growing constantly as witnessed by the increased participation of legislatures in the World e-Parliament Conferences[1], which have gradually become internationally recognized forums for addressing issues of concern. The Global Surveys of ICT in Parliaments[2] and the subsequent analyses and Reports have provided important input to these conferences. Chapters 5, 6 and 8 in this Report have already described how many parliaments have been receptive in participating in new forums for cooperation built around thematic issues, such as information management and open document standards, technology in parliamentary libraries and ICT strategic planning. These Chapters also

1 World e-Parliament Conferences were held in Geneva in 2007; Brussels in 2008; Washington D.C. in 2009; Midrand in 2010. The World e-Parliament Conference 2012 will take place in Rome.
2 105 parliaments responded to the survey in 2007, 134 in 2009 and 156 in 2012.

highlighted some of the initiatives related to technology that have been undertaken by presiding officers and political leaders.

There are, however, many untapped opportunities to promote a much higher level of cooperation and a culture of collaboration among legislative bodies. While the transfer of knowledge and exchange of good practices have value in themselves, they may not be as valuable as activities that can result in concrete collaboration for devising common tools and applications or for the provision of shared services. Rather than continuing to work in isolation, many parliaments will gain more if they can learn how to collectively mobilize their human and financial resources to achieve greater ICT benefits. And placing systems and tools, generated by this type of collaboration, at the disposal of the parliamentary community should not be an exceptional occurrence but rather the normal practice.

Collaboration does not have boundaries and the potential advantages apply equally to parliaments regardless of their country's or region's income level. Achieving these benefits, however, requires a coordinated approach. It is likely that these efforts at collaboration will prosper if they are rooted in existing regional and global inter-parliamentary networks as they strive for sustainability with the support of peers. In this regard, the assistance of the international community of donors and development agencies could play a vital role in supporting long-term efforts through predictable and coherent aid programmes directed at ensuring that parliaments with less advanced technology options have the opportunity and the means to work with others to find affordable and effective solutions to common needs.

This Chapter provides an overview of the areas and possibilities where well-structured and organized initiatives of inter-parliamentary cooperation could lead to substantive benefits.

SUMMARY OF FINDINGS FROM 2007/2009 SURVEYS

The *World e-Parliament Report 2008* and *2010* explored the nature and extent of inter-parliamentary cooperation and collaboration at the general level and at a more detailed level focused on technology. The 2010 Report noted that since 2008 there had been significant advances in parliamentary networking by groups such as the IFLA Section on Library and Research Services for Parliaments and the Africa Parliamentary Knowledge Network (APKN), as well as by legislatures in Latin America and the Caribbean. However, there had not been the same progress in the participation of parliaments in mechanisms of cooperation specifically dealing with ICT issues. While almost 60 per cent of parliaments reported that they were members of at least one parliamentary network, 22 per cent stated that they were not *planning or considering* such participation. Interestingly, legislatures in high and low income economies had the largest percentages of participation (76 per cent and 70 per cent respectively), while the participation of those in the upper and lower middle income levels was at about 40 per cent[3]. Given the demonstrated value of cooperation, the Report suggested that more needed to be done to encourage active involvement by parliaments from all income groups.

3 See *World e-Parliament Report 2010* for all these figures.

At the international level, consensus had also emerged by 2010 on the need for the international community - including the community of technologically advanced legislatures - to strongly support parliaments in developing nations through collaboration on capacity development. The 2009 survey asked a series of questions that provided some indication of the primary areas and levels of collaboration. Just over one fourth (28 per cent) of parliaments *provided support* to other legislatures for developing their use of ICT. On the other hand, 46 per cent reported that they were *receiving assistance* in the area of ICT from other parliaments and from outside organizations. This finding underlined the significant role that other development actors also play, in addition to parliaments, in helping legislatures to strengthen their capacities in ICT[4].

The 2009 survey results suggested ongoing and possibly increasing south-south inter-parliamentary cooperation or even south to north exchanges. Another interesting finding was the indication of a greater willingness to provide ICT support than expected across income groups, even from countries with lower income levels. Results underscored the opportunity for engaging more parliaments from high income countries - only 35 per cent of the legislatures from those countries were providing such support. The number of legislatures receiving support was predictably largest in low income countries (80 per cent), providing a clear indication that the combined efforts of the donor and parliament community were directed to those most in need[5].

A further analysis of data showed that more than 50 per cent of parliaments that expressed a desire for support needed help in all of the ICT areas listed in the survey. The largest gaps between the ICT areas in which parliaments provided or were willing to provide assistance and the areas in which parliaments received or would have liked to receive assistance were in open document standards (-36 per cent), library and research services (-29 per cent), document management systems (-26 per cent) and communication with citizens (-26 per cent). The ICT areas that presented the easiest opportunities for concrete collaboration among parliaments were those where the gap between the offer and demand for support was smallest: ICT services for members and for plenary meetings, websites, hardware and software, ICT planning and ICT management[6].

RECENT PROGRESS

Since the release of the *World e-Parliament Report 2010*, the expansion of mechanisms for cooperation among legislatures has been progressing at the regional and international level. These cooperative efforts have taken various forms, including the reinforcement of existing, or the establishment of new, formal networks; the creation of international working groups on different matters related to ICT in parliament; and the organization of regional and global meetings.

Formal parliamentary networks

Exchange Network of Parliaments of Latin America and the Caribbean (ENPLAC)[7]

In April 2011, the National Assembly of Panama and the Global Centre for ICT in Parliament organized and facilitated the international workshop "Leveraging ICT to establish a collaborative network among Parliaments of Latin America and the Caribbean" in Panama City. At this meeting,

4 See *World e-Parliament Report 2010*, p. 153.
5 See *World e-Parliament Report 2010*, pp.154-155.
6 *World e-Parliament Report 2010*, p. 156. Figure 9.5 shows a combined view of the areas in which support was currently provided or received or for which there was the willingness to do so.
7 See www.ripalc.org.

Secretaries General of sixteen parliaments of Latin America and the Caribbean exchanged views and held consultations on the establishment of a formal mechanism for inter-parliamentary cooperation. By the end of the workshop, the Statutes, governance and implementation modalities of the *Exchange Network of Parliaments of Latin America and the Caribbean* were approved. The network was established as a collaborative mechanism for the sharing of knowledge, documentation and experiences on the broad range of parliamentary activities and services[8]. The secretariat of the network was assigned by consensus to the Chamber of Deputies of Brazil, which, since then, has developed and maintained its website[9]. It is worth mentioning that this portal has been designed taking into consideration the experiences and practices of the European Centre for Parliamentary Research and Documentation (ECPRD) and the African Parliamentary Knowledge Network (APKN).

Since 2011 ENPLAC has made steady progress by reaching out to all parliaments in the region and by coordinating the first initiatives under its framework, including the training course on XML mentioned in Chapter 5. While it is too early to assess the impact of this network, the expectations regarding the benefits to its members are considerable, both from within and outside the Latin American and Caribbean region.

Africa Parliamentary Knowledge Network (APKN)[10]

Established in June 2008 at an International Conference attended by representatives from 37 national and regional assemblies from Africa, APKN has become instrumental in promoting common information services and high quality, continent-wide, capacity building programs for parliaments. With the agreement of a renewed council that took full ownership of the network, the secretariat of APKN was assigned to the Parliament of South Africa in 2010. Since then, meetings of the Council of Secretaries General have taken place regularly and activities of inter-parliamentary cooperation have increased steadily.

European Centre for Parliamentary Research and Documentation (ECPRD)

The European Centre for Parliamentary Research and Documentation was established in 1977 and throughout the years has been a useful means for inter-parliamentary cooperation and information exchange for its members[11]. The strengths of ECPRD are the system for comparative requests, the regular organization of seminars, the publication of studies and analyses, and a useful portal with parliamentary directories. In the framework of this network four Areas of Interest were created to allow focused discussion and knowledge sharing: Information and Communication Technology in Parliaments; Parliamentary Practice and Procedure; Parliamentary Libraries, Research and Archives; and Macro-Economic Research.

8 The Report of the meeting is available at: http://www.ictparliament.org/node/2832.

9 The Executive Committee of RIPALC is composed by the Secretary General of the Parliament of Barbados, the Director General of the Chamber of Deputies of Brazil, the Director General of the National Assembly of Nicaragua, the Secretary General of the National Assembly of Panama and the Secretary of the Chamber of Deputies of Uruguay. Correspondents were appointed by the Members of the Network.

10 See www.apkn.org.

11 The European Parliament, the Parliamentary Assembly of the Council of Europe, the Assembly of the Western European Union and all parliaments of member states or special guests at the Parliamentary Assembly of the Council of Europe are members. For parliaments with two chambers, each chamber is a member in its own right. The Centre's services may also be used by parliaments having observer status in the Parliamentary Assembly of the Council of Europe: Israel, Canada and Mexico and by the Congressional Research Service (CRS) of the United States of America.

The Area of Interest on ICT in Parliaments has been actively at work in the last two years. It has established discussion groups on themes such as ICT Governance and frameworks, Open Data, web sites, web services for mobile platforms, cloud computing, Media, Web 2.0. It has also organized seminars on themes such as parliamentary websites, mobile services, best practices for transparency and open parliament, and improvement of IT services at a time of budget constraints[12].

Inter-Parliamentary EU information eXchange (IPEX)

IPEX, the Inter-Parliamentary EU information eXchange, is a platform for the mutual exchange of information between the national Parliaments and the European Parliament concerning issues related to the European Union[13]. The main section of the IPEX website is represented by a database of draft European Union legislative proposals and related scrutiny in national parliaments; in addition, the website hosts a calendar of inter-parliamentary cooperation meetings in the European Union as well as links to national parliaments' websites. It also hosts the European Union Speakers Conference website.

Besides its ordinary activity in the framework of the EU legislation, IPEX received in 2010 a high level mandate to promote standardization and openness in EU institutions and Parliaments. The Presidency Conclusions of the Conference of Speakers of the EU Parliaments, held in Stockholm on 14 and 15 May 2010, encouraged all initiatives aimed at establishing standards for digital data and documents so as to make information on the activities of parliaments and EU institutions more easily accessible and transparent, and entrusted the IPEX Board with this task. Under this mandate, the IPEX conducted a survey revealing that the number of parliaments in the EU using open standards is still limited despite the possible gains in terms of transparency, efficiency of administration, cost reduction, cooperation.

The meeting of Secretaries General held in Warsaw on 6 February 2012, already mentioned in Chapter 5, took into account the findings of the survey and gave IPEX a further mandate to initiate a cooperation process on this issue at the European and international level - namely with the ECPRD, the Global Centre for ICT in Parliament, and the relevant EU institutions in order to establish a unique "information point" in the field of digital standardization. As mentioned before, the Presidency conclusions of the 2012 EU Speakers Conference in Warsaw noted the Conclusions of the meeting of the Secretaries General and encouraged initiatives for digital standardization, transparency and parliamentary openness.

Arab Institute for Parliamentary Training and Legislative Studies

Besides the progress evidenced by these formal networks, it is worth mentioning that in January 2012 the National Assembly of Lebanon hosted a regional workshop for Arab parliaments in Beirut on the theme "Emerging trends and challenges for ICT in Parliament" This was the first activity of the Arab Institute for Parliamentary Training and Legislative Studies, a collaborative

12 For example: Seminar "Present and future of e-parliament services, technologies and inter-parliamentary cooperation", Bucharest (17-20 November 2010); Seminar Parli@ments on the Net IX - Third generation parliamentary websites, evolution or revolution", Brussels (12-13 May 2011); Seminar 'Do more with less: tight budgets and improved IT services to MPs and Administration', Athens (11-12 November 2011); Seminar 'Parli@ments on the Net X - Mobility, transparency and open parliament: best practices in Parliaments' web pages', Madrid (31 May – 1 June 2012).

13 See www.ipex.eu. The establishment of IPEX derives from a recommendation given by the Conference of Speakers of the Parliaments of the European Union in the year 2000.

effort of the Lebanese Parliament and the Arab Inter-Parliamentary Union, supported by SUNY's legislative strengthening project in Lebanon, funded by USAID[14]. The regional workshop was attended by Secretaries General from parliaments of the region, along with IT Directors, and addressed ICT management and policy issues.

Working groups

Working Group on social media

In June 2012, the Inter-Parliamentary Union (IPU) and the Association of Secretaries General of Parliament (ASGP), in association with the Global Centre for ICT in Parliament and the IFLA Section on Library and Research Services in Parliament, set up a working group of experts to prepare a draft document that provides practical guidance to parliaments about the use of social media to enhance representation and communication. The document will be tabled for discussion during a one-day parliamentary event to be held on 26 October 2012 in Quebec City, Canada, as part of the 127th IPU Assembly. The event is jointly organized by the IPU and the ASGP[15].

Working Group on Technological Options for Capturing and Reporting Parliamentary Proceedings

During a specialized session at the World e-Parliament Conference 2009, participants called for increased inter-parliamentary cooperation in the area of capturing and reporting parliamentary proceedings, in order to share available expertise on the implementation of different technological solutions. In July 2010, the European Parliament's Office for Promotion of Parliamentary Democracy (OPPD) organized, in cooperation with the Global Centre for ICT in Parliament, the workshop "Technological Options for Recording Plenary and Committee Sessions in Parliament", which intended to build parliaments' capacity in the area of reporting proceedings. At the workshop participants recommended the establishment of a working group of parliamentary staff and experts to develop a handbook that would guide parliaments in selecting the appropriate technology to improve their preparation and publishing of parliamentary records. The working group has finalized its work and the handbook will soon be made available.

Working Group on ICT in Parliamentary Libraries

As mentioned in Chapter 6 of this report, in July 2012 the United Nations, the Inter-Parliamentary Union and the International Federation of Library Associations and Institutions published the Handbook *Information and Communication Technologies in Parliamentary Libraries*. The Handbook was prepared by the Global Centre for ICT in Parliament and the IFLA Section on Library and Research Services for Parliaments through a working group of parliamentary librarians and staff who worked collaboratively under the moderation of a senior expert.

14 More information can be found at http://www.cid.suny.edu/newsroom/news2011/newsroom_2011_Institute.cfm.
15 See http://www.ipu.org/splz-e/asgp12.htm.

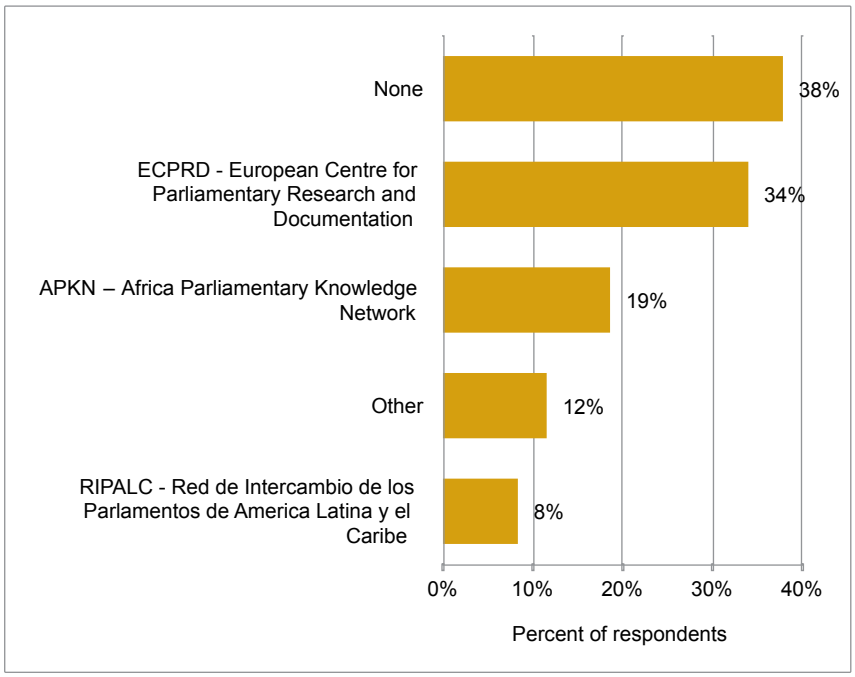
FINDINGS FROM THE 2012 SURVEY

Questions regarding cooperation among parliaments in the 2012 Survey focused on the type and extent of participation in networking and sharing, and on the areas of ICT in which parliaments were willing to provide or wanted to receive assistance[16].

Extent of cooperation and participation in parliamentary networks

The 2012 survey first asked whether, for the purpose of exchanging information and experiences regarding the use of ICT, the parliament's staff participated in any of the specific networks listed in the response choices. Figure 10.1 shows the percentage of respondents in 2012 that identified each of the choices. The 2009 survey approached this issue somewhat differently. It asked first if the parliament participated in such networks[17]; for those that responded *yes* the survey then asked them to name the network(s), using an open ended format. For the purpose of comparing the results from the two years, an analysis was done of those that did not choose any networks in 2012 (considered to be the equivalent of *none*) and those who said *planning or considering* or *no* in 2009 (also considered to be the equivalent of *none).*

Figure 10.1: Participation in parliamentary networks



(Source: Survey 2012, Section 7, Question 1; 156 respondents)

The analysis indicated that the percentage of parliaments that answered the equivalent of *none* was approximately the same in both years: 2012=38 per cent; 2009=41 per cent[18]. Put affirmatively, these results mean that in 2009 59 per cent of parliaments said *yes they do participate* and in 2012 62 per cent said *yes, they do participate*. A further analysis by income level and year (see Figure 10.2) showed that parliaments in high income countries and low income countries had the highest

16 The questions in the 2012 survey differed slightly from those in the 2009 survey, but the results from the two surveys can still be usefully compared. The variations in wording are noted either in the main text below or in the appropriate footnotes.

17 The 2009 survey asked if *the parliament* participated; the 2012 asked if *the parliament's staff* participated".

18 Survey 2012, Section 7, Question 1; *World e-Parliament Report 2010*, p. 152, Figure 9.1.

percentage of participants in 2012 (81 per cent and 70 per cent respectively) and the lowest percentage of non-participants (21 per cent and 30 per cent respectively). As shown in Figure 10.2 this was the same pattern found in the 2009 survey. Those in the middle income levels had the lowest percentages of participants in both years, although those in the lower middle group increased their participation significantly from 39 per cent in 2009 to 53 per cent in 2012.

Figure 10.2: Participation in formal networks for the exchange of information about ICT, by income level

Participation in networks for exchange of information about ICT, by income level	High	Upper middle	Lower middle	Low
2012 - Yes*	81%	49%	53%	70%
2009 -Yes	76%	45%	39%	70%
2012 - None**	21%	51%	47%	30%
2009 - None***	24%	54%	60%	30%

(*Listed at least one network; **Listed no networks; ***Reply was *planning or considering* or *no*)

(Source: Survey 2012, Section 7, Question 1; Survey 2009, Section 1, Question 18; and, *World e-Parliament Report 2010*, p. 152, Figure 9.1)[19]

Nature of inter-parliamentary cooperation and collaboration

To understand the nature of inter-parliamentary cooperation, both the 2009 and 2012 surveys asked all parliaments whether they were *providing* support to other legislatures to help them strengthen their general functional capacities or *receiving* support from others for this purpose. The surveys then posed questions concerning ICT specifically: Was the parliament providing support or receiving support in technology? Would the parliament be willing to provide or receive such support? In the case of receiving support, the survey asked if the support was received not only from other parliaments, but also from outside organizations[20].

General support/assistance

General support/assistance refers to cooperation in the legislative, oversight, representational, and administrative areas. Figure 10.3 shows the percentages of those who do *provide general support/assistance*, those *willing to* provide it, and those parliaments that said *no/not willing to provide it* for 2012 and 2009. As Figure 10.3 indicates in row 1, while the percentage of those that provide general assistance remained relatively constant, parliaments *willing to provide it* increased significantly, from 20 per cent in 2009 to 44 per cent in 2012. And as would be expected, given this increase, those parliaments that said they were *not willing to provide it* dropped almost in half from 51 per cent in 2009 to 27 per cent in 2012.

Figure 10.3: Parliaments that provide or receive support/assistance to strengthen capacities in all areas: legislation, oversight, representational, administrative

General support	Yes		Willing to		No/Not willing to	
	2009	2012	2009	2012	2009	2012
1. Provide	28%	29%	20%	44%	51%	27%
2. Receive	16%	23%	27%	42%	57%	35%

(Source: Survey 2012, Section 7, Questions 2 and 8; Survey 2009, Section 1, Questions 20, 23, 26, 28; and *World e-Parliament Report 2010*, p. 153, Figure 9.2)

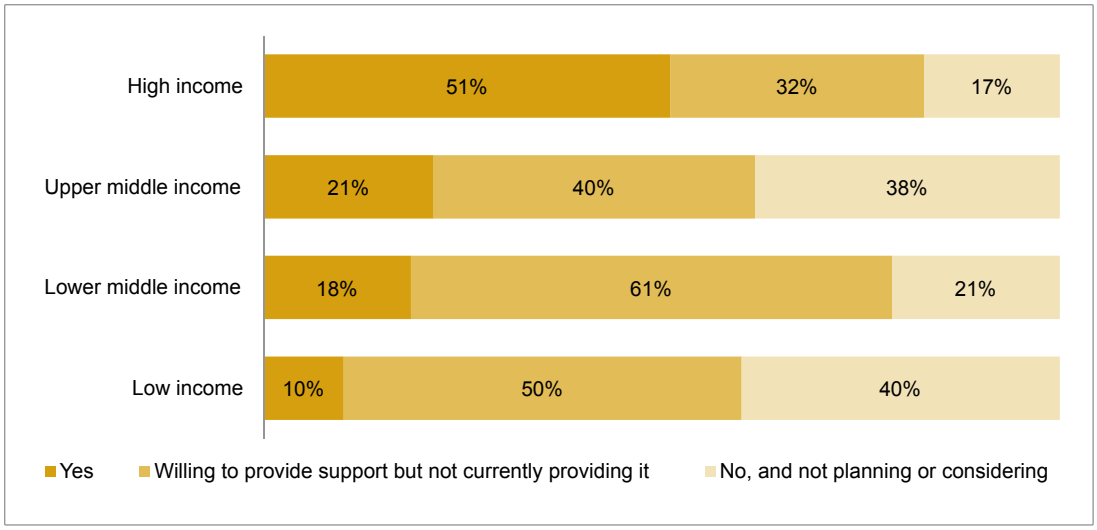
19 The combined percentages of participants and non-participants from the various income levels may sometimes total more or less than 100 per cent due to rounding.

20 The wording in the 2012 survey was modified slightly by adding the word "assistance" to questions concerning support, i.e. "support /assistance" rather than just "support". In 2009 the survey used the words "willing to" in questions about providing support; in 2012 "willing to" was a response option. The comparative analysis treated the response option "willing to" in 2012 to mean the same thing as the "planning or considering" response option in 2009. Similarly, in 2009 the expression "or would like to receive" was used in the questions regarding "receiving support"; in 2012 "No, but would like to receive" was a response option. The comparative analysis treated the response option "No but would like to receive" in 2012 to mean the same as the "planning or considering" response option in 2009.

A similar pattern can be seen among legislatures that would like to *receive general support/assistance* (see Figure 10.3, row 2). The percentage of those that receive it increased somewhat from 16 per cent in 2009 to 23 per cent in 2012. For those that would like to receive, it increased from 27 per cent to 42 per cent, and for those not willing to receive it, it fell from 57 per cent to 35 per cent.

As expected, there is a direct correlation between income level and those parliaments that *provide general support*. Figure 10.4 shows that the largest percentage of parliaments providing general support is in the high income level (51 per cent). This mirrors the findings from 2009 for this income group (48 per cent). Furthermore, there has been almost a three-fold increase of the parliaments in the high income group that are *willing* to provide this type of support (2012=32 per cent; 2009=11 per cent). In fact, increases of this significance occurred among the other three income groups as well, including those in the low income category[21]. It appears that the willingness of parliaments to assist each other to improve their capacities for legislation, oversight, and representation has increased substantially since 2009 across all income levels.

Figure 10.4: Parliament that *provide general assistance,* by income level

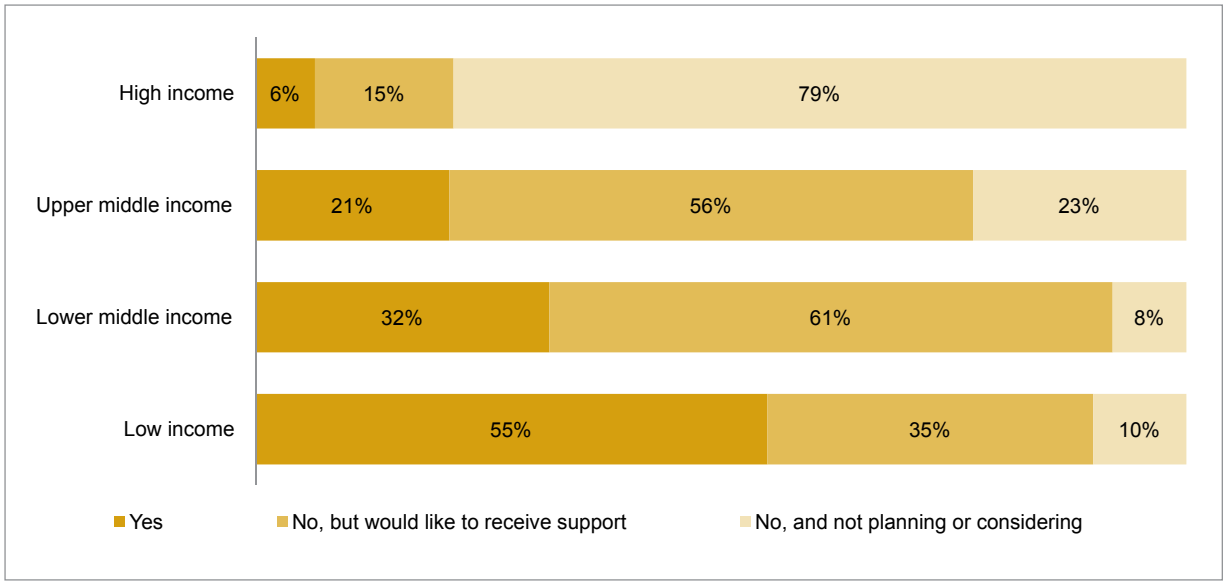


(Source: Survey 2012, Section 7, Question 2; 153 respondents)

Figure 10.5 shows the 2012 results of parliaments that *receive general assistance* by income level. In this instance, the positive finding is that there have been increases since 2009 across all income levels among legislatures that receive general assistance or would like to receive it. For example, in the low income group, the percentage of parliaments receiving general assistance increased from 35 per cent in 2009 to 55 per cent in 2012. In the lower middle income group, the percentage of those receiving general assistance went up from 18 per cent in 2009 to 32 per cent in 2012. Among those in the upper middle income group, parliaments that receive assistance grew from 12 per cent in 2009 to 21 per cent in 2012 and the percentage of those willing to receive help more than doubled from 27 per cent in 2009 to 56 per cent in 2012[22].

21 See *World e-Parliament Report 2010*, p. 154, Figure 9.3 for all 2009 percentages.
22 See *World e-Parliament Report 2010*, p. 155, Figure 9.4 for all 2009 percentages.

Figure 10.5: Parliaments that *receive general assistance*, by income level



(Source: Survey 2012, Section 7, Question 8; 154 respondents)

Box 10.1

> A main goal of our parliament is to learn from other successful parliaments and to share our success with others. We feel with the fast pace of the technological advances and the explosion of the social media presence and impact, it would be extremely beneficial for parliaments around the world to always collaborate on creative way of reaching out to citizens in the effort of moving towards an open democracy model.
>
> *Comment by a respondent to the 2012 Survey*

Support/assistance for ICT

The survey also asked specifically about support/assistance for ICT. Figure 10.6 shows in row 1 a drop in parliaments that *provide support for ICT* from 28 per cent in 2009 to 22 per cent in 2012. This is mirrored by a drop among parliaments that *receive support for ICT* from 46 per cent in 2009 to 32 per cent in 2012. However, the percentages of those *willing to provide support* doubled between 2009 and 2012 and the same degree of increase occurred among those *willing to receive assistance with ICT*. The increase among those *willing to provide support* more than offsets the decline among those that currently provide it so that the percentage of parliaments that said they were *not willing to provide* help to other parliaments with ICT decreased from over half in 2009 to 40 per cent in 2012.

Figure 10.6: Parliaments that provide or receive support to strengthen capacities in ICT, by year

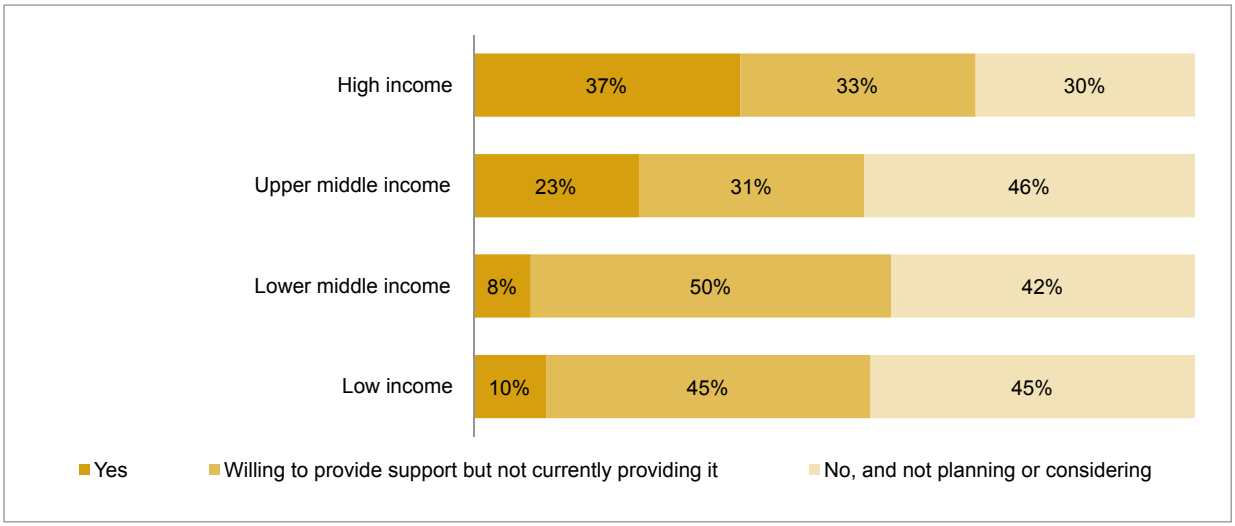
ICT support	Yes		Willing to		No/Not willing to	
	2009	2012	2009	2012	2009	2012
1. Provide	28%	22%	19%	39%	52%	40%
2. Receive	46%	32%	18%	38%	36%	31%

(Source: Survey 2012, Section 7, Questions 4 and 9; *World e-Parliament Report 2010*, p. 153, Figure 9.2)

As with general assistance, support for ICT correlates directly with income level, although the percentages reflect the decreases among the parliaments that provide or receive this support. Figure 10.7 shows that the largest number of parliaments that provide ICT help is in the high income group, although the percentage is not as great for ICT (37 per cent) as it is for general assistance (51 per cent) as showed in Figure 10.4. However, parliaments at the high income level that are willing to provide assistance with technology is the same as those willing to provide general assistance.

There were decreases among the other income groups of parliaments that provide support for technology, but again these were offset by significant increases since 2009 of those willing to provide it. For example, among those in the upper middle income group, the percentage of parliaments that provide assistance dropped from 33 per cent in 2009 to 23 per cent in 2012, but the percentage in this income group willing to help doubled from 15 per cent in 2009 to 31 per cent in 2012. There were similar shifts in the other two income groups[23].

Figure 10.7: Provide support for ICT, by income



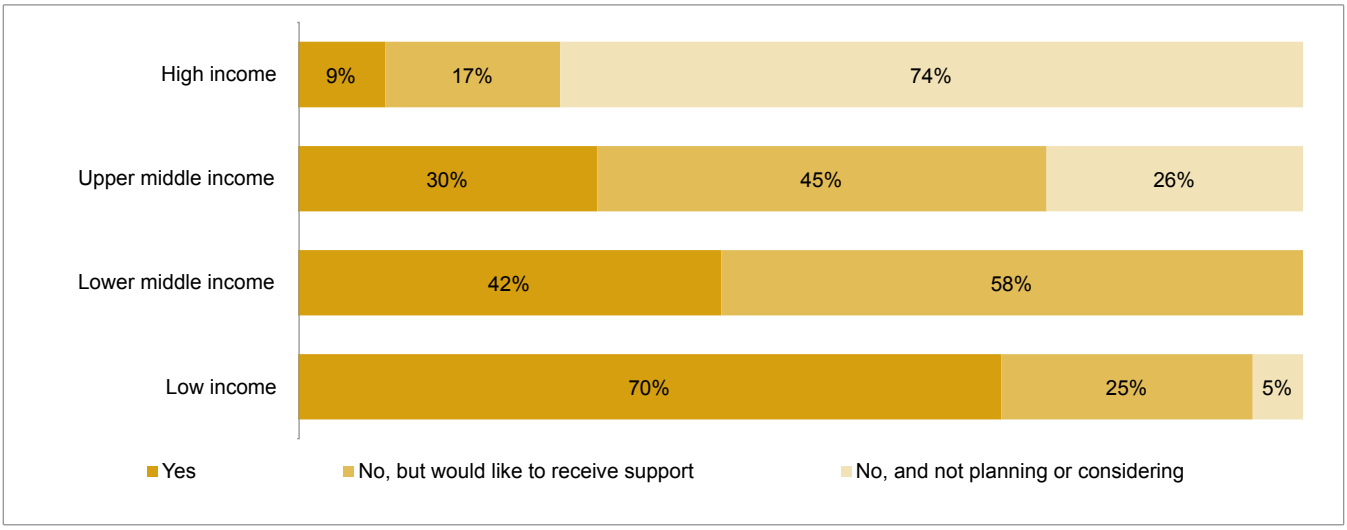
(Source: Survey 2012, Section 7, Question 4; 153 respondents)

Figure 10.8 shows the results of legislatures that receive ICT support/assistance by income level. The general decline of those that provide/receive support/assistance for technology seen in Figure 10.6 is reflected here. While 70 per cent of parliaments in the low income group receive assistance, this is less than in 2009 (80 per cent). There were similar declines for lower middle income (2009=58 per cent; 2012=42 per cent) and upper middle (2009=58 per cent; 2012=30 per cent). Need remains high, however, and there were increases in each of these income groups of those that would like to receive assistance. For example, while parliaments in the lower income group receiving assistance in 2012 went down by 16 percentage points, those that would like to receive assistance increased by 22 per cent points (2009=36 per cent; 2012=58 per cent), and no one in this group said they did not want help in 2012.

23 See *World e-Parliament Report 2010*, p.154, Figure 9.3 for all 2009 percentages.

There are a number of potential explanations for the decrease in the percentages of parliaments that are providing support for ICT or receiving it. The state of the international economy and its impact on government and parliamentary budgets is an obvious one. Most parliaments are less willing or less able to help others when their own budgets are being cut. There is also a possible reduction in the resources available from international donors. Some donors may also be shifting focus or approaches, which can affect the time needed before new projects are initiated.

Figure 10.8: Receive support for ICT, by income



(Source: Survey 2012, Section 7, Question 9; 152 respondents)

Regardless of the reasons for the decline in ICT support, the results of the 2012 survey are encouraging. The willingness of many parliaments to offer both general and ICT support has increased significantly since 2009 among all income groups. And the openness of many parliaments to receiving that support has also increased substantially. In 2012 the environment for increased cooperation and collaboration among parliaments appears to be excellent.

Specific areas and opportunities for cooperation and collaboration

Figure 10.9 summarizes the results of five survey questions regarding support/assistance to help develop or enhance the use of ICT. These were:

- In what areas does the parliament *currently provide* support/assistance?[24]
- In what areas would the parliament be *willing to provide* support/assistance?[25]
- In what areas does the parliament *receive support from other parliaments?*[26]
- In what areas does the parliament *receive support from outside organizations?*[27]
- In what areas would the parliament *like to receive support* from other parliaments or outside organizations?[28]

24 Survey 2012, Section 7, Question 5.
25 Survey 2012, Section 7, Question 7.
26 Survey 2012, Section 7, Question 10.
27 Survey 2012, Section 7, Question 10.
28 Survey 2012, Section 7, Question 11.

Figure 10.9: Specific areas of ICT support among parliaments

	Currently provides support		Willing to provide support		Receives support from other parliaments		Receives support from outside organization		Would like to receive support		Total mentions
ICT planning	20	61%	31	62%	10	40%	18	56%	33	58%	112
ICT services for members	13	39%	31	62%	5	20%	9	28%	39	68%	97
Staff development and training	13	39%	22	44%	10	40%	17	53%	35	61%	97
Hardware/software	11	33%	18	36%	15	60%	16	50%	29	51%	89
Document management systems	8	24%	23	46%	6	24%	14	44%	34	60%	85
ICT services for plenary	11	33%	27	54%	6	24%	7	22%	34	60%	85
Library and research services	10	30%	22	44%	7	28%	12	38%	34	60%	85
ICT management	12	36%	27	54%	7	28%	11	34%	27	47%	84
ICT services for committees	8	24%	25	50%	5	20%	6	19%	36	63%	80
Websites	10	30%	24	48%	10	40%	11	34%	22	39%	77
Application development	9	27%	17	34%	6	24%	10	31%	34	60%	76
Communication with citizens	9	27%	13	26%	5	20%	6	19%	37	65%	70
Network operations	8	24%	22	44%	5	20%	12	38%	20	35%	67
Document standards	6	18%	14	28%	5	20%	9	28%	31	54%	65
Other	4	12%	4	8%	1	4%	2	6%	2	4%	13
Total respondents	33		50		25		32		57		

Number and percentage over total respondents. Areas of support are ranked by total mentions.
(Source: Survey 2012, Section 7, Questions 5, 7, 10 and 11)

The first column of Figure 10.9 - *currently provides support* - shows the number and percentage of parliaments that provide each type of support. The last row shows the total number of parliaments that offer assistance in at least one of the areas listed in the column (33). The second column indicates the number and percentage of parliaments that are *willing to provide support* in each area; the total number of these parliaments willing to provide assistance in at least one area is 50 (see second column, last row), which means that even more are willing to help in specific areas of ICT than are currently doing so.

Box 10.2

> There is need for support from other parliaments and organizations especially for staff development, network operations, and document management systems, to name a few.
>
> *Comment by a respondent to the 2012 Survey*

Over 40 per cent of the parliaments willing to provide support are prepared to do so in all ICT areas except for *Hardware/software* (36 per cent), *Application Development* (34 per cent), *Communication with citizens* (26 per cent), and *Document standards* (28 per cent). The smaller percentages of parliaments willing to offer support in these areas are similar to findings from the 2009 survey[29]

29 *World e-Parliament Report 2010*, p. 156, Figure 9.5.

and are understandable for a variety of reasons. Hardware and software ultimately needs to be funded by the receiving parliament, even if startup costs are borne by outside donors. Application development can be very time consuming, although there are opportunities for shared approaches; the same is true for document standards. And communication with citizens is very culturally dependent, and not an area in which parliaments may feel prepared to provide advices.

The last column - *would like to receive* - shows the areas in greatest demand among parliaments that would like to receive assistance. As the last row indicates, 57 parliaments (over one third of the total) would like to receive help in at least one aspect of ICT. The largest percentages of parliaments would like to receive support in:

- ICT services for members (68 per cent)
- Communication with citizens (65 per cent)
- ICT services for committees (63 per cent
- Staff development and training (61 per cent)

Four other high need areas, all expressed by at least 60 per cent of parliaments are:

- Document management systems
- ICT services for plenary
- Library and research services
- Application development

Despite some of the large gaps in certain areas, such as *application development* and *communication with citizens*, between parliaments needing support and those willing to provide it, the responses in Figure 10.9 show that there is a rich opportunity for sharing knowledge and for meeting critical ICT needs among many parliaments.

Chapter 11

Major Findings, Conclusions, and Recommendations

This final chapter notes some of the major developments in ICT over the past two years that are affecting parliaments. It then draws conclusions about the overall implementation of e-parliament at the global level based on a summary of the most significant findings reported in the previous chapters. Finally it makes recommendations for how parliaments, individually and collectively, can advance the state of ICT to strengthen parliamentary democracy.

THE INTERSECTION OF TECHNOLOGY AND POLITICS

Since 2010 ICT has continued along a path of innovation and growth that is making it an indispensable tool for public bodies and private institutions, as well as for individuals. While these technologies can make work easier, they also bring greater attention and therefore more scrutiny to the public governance environment. This intersection of technology and public policy has significant implications for parliaments.

Among the most far reaching developments that affect civic life are the increasing availability of sophisticated mobile devices and applications that support communication among individuals and institutions and provide access to information at any time from nearly any place. The International Telecommunication Union (ITU) has estimated that total mobile-cellular subscriptions reached almost 6 billion by end of 2011, corresponding to a global penetration of 86 per cent. This growth was driven mainly by developing countries, which accounted for more than 80 per cent of the new mobile cellular subscriptions added in that year. And the number of worldwide users of the various social media will likely exceed 1 billion by the end of 2012.

These advances in communications technology and their rapid dissemination now make it possible for many more citizens to engage in political activities. At the same time, they have fostered the growth of parliamentary monitoring organizations (PMOs) that look closely at the work and performance of legislatures. These groups are able to harness technology to provide citizens with additional information about their parliament and its members. They also use social media to support civic engagement and encourage participation in the political process, and provide additional research services to parliaments.

Besides the advances in communication technology, there have been other important technical developments that make it possible for parliaments to conduct their work more efficiently and at lower costs, both financially and environmentally. Shared systems and services available via cloud

computing are becoming affordable for most parliaments, including those in developing countries. The advantages – lower costs and access to a ready-made infrastructure and to applications - are significant enough that even technically advanced parliaments are beginning to use them. Gaps still exist for parliaments in many developing countries, especially in terms of access to low cost computing devices and high speed Internet connections. These divides will narrow, however, as long as government policies allow mobile broadband capacity, low cost mobile devices, and cloud services to proliferate at competitive prices.

CONCLUSIONS FROM PREVIOUS SURVEYS

Based on the 2007 survey, the *World e-Parliament Report 2008* identified three levels of adoption of technology. At the high end some legislatures were very successful in their use of ICT to support their goals. However, the survey estimated that less than 10 per cent of respondents fell into this category, and these parliaments were all from either the high or upper middle income groups. At the lower end, at least 10 per cent and possibly as many as 30 per cent of chambers, were so constrained by resources that it was possible that they could not provide even the most basic ICT services. In the middle were parliaments whose ICT systems and services would have to be described as uneven at best.

Overall the 2008 Report made evident that there was a substantial gap in most parliaments between what was possible to achieve by using ICT as a means to support the values and goals of parliaments and what had been accomplished. This gap was especially pronounced among legislatures from countries with lower income levels.

The 2010 Report established a statistical methodology for assessing ICT in legislatures that provided a more detailed description of their state of e-parliament. The methodology assigned a numeric score to six categories related to the management and implementation of technology assessed by the 2009 survey. Scores resulting from the methodology were derived from responses to survey questions linked to each of the six ICT categories. These scores were then combined to provide an overall assessment of e-parliament both globally and regionally.

On the basis of 100 per cent as the highest possible score[1], total overall scores in 2010 for individual parliaments ranged from 14 per cent to 83 per cent. Within the six categories, scores ranged from a high of 66 per cent for *infrastructure* to a low of 28 per cent for *communication*. The other scores were *envisioning and managing* at 51 per cent, *document systems and standards* at 46 per cent, *parliamentary websites* at 45 per cent, and *libraries and research services* at 43 per cent.

The average total score for all chambers was 45 per cent. Only 20 per cent of parliaments achieved a total score of at least 66 per cent; 30 per cent had a total score of 33 per cent or lower. As expected, scores were directly related to income level. Those at the highest income level had an average score of 60 per cent, well above those at all other levels. Those in the lowest income group had an average score of 28 per cent.

The low state of technology reflected in some of these scores had a direct impact on a large number of the 27,249 legislators who were members of the parliaments that participated in the 2009 survey. For example, 16 per cent of the members (4,301) did not have access to the Internet;

1 Scores represent the percentage achieved of the maximum possible number of points for each category and for the total of all categories.

20 per cent (5,365) did not have a personal computer provided by the parliament; 28 per cent (7,726) could not access the text and current status of proposed legislation on their parliament's website; 31 per cent (8,508) were not offered any type of training or orientation in technology; and 47 per cent (121,840) were in parliaments whose websites lacked accessibility standards for persons with disabilities.

CONCLUSIONS FROM THE 2012 SURVEY

While many of the same challenges to the effective use of ICT continue to be experienced in 2012, the findings of the latest survey suggest that there has been limited, but nevertheless important progress in the state of e-parliament in the past two years. Data indicate that: more senior political leaders are engaged in setting the goals and objectives for ICT in the institution; mobile devices and applications are being adopted more rapidly than expected; the implementation of XML for bills has increased; more parliaments now have systems for managing plenary and committee documents; and, both the intent and the actions of parliaments to share information and to improve technology through collaborative efforts and participation in networks has risen substantially. Particularly significant is the finding that despite the challenges faced, parliaments in the lowest income level are closing the technology gap, While still very large, the difference in the average e-parliament scores for those in the highest and the lowest income groups is much lower in 2012 than it was in 2010.

Despite these signs of progress, many parliaments still face substantial obstacles in their efforts to enhance the state of their ICT to support the work of the institution. For example, many members still lack personal computers provided by the parliament and are not connected to the parliament's local area network (LAN); many libraries still lack access to technology that enables them to provide better information services; an open document standard (XML) has been implemented by only about one quarter of all chambers; and, best practices in the use of the new media for two-way communication with citizens are still not well understood. Most parliaments identified two impediments particularly challenging: lack of financial resources and lack of adequate staff. Parliaments at all income levels reported that they face financial constraints. And it is especially telling that even parliaments at the highest income level said that ICT staff capacity was the biggest challenge.

Many parliaments also face serious external problems. These include their country's limited access to high speed Internet, the citizens' lack of access to technology, and the parliament's lack of independent budget and hiring authority.

KEY FINDINGS

The conclusions presented above are based upon a list of 30 key findings from the 2012 survey described below.

Overall – the global view

1. A majority of parliaments reported that the three most important improvements in their work made possible by ICT were: 1) more information and documents on the website; 2) increased capacity to disseminate information and documents; and, 3) more timely delivery

of information and documents to members. It is important to note that these three enhancements also serve citizens and help the parliament to be more open and transparent.

2. Global e-parliament scores were up for the 2009:2012 comparison group in five of the six categories assessed, as well as the total score:
    - Total average score was up from 48 per cent to 51 per cent, a 5.8 per cent improvement
    - Communication between parliaments and citizens improved by10.6 per cent
    - Oversight and management of ICT improved by 8.6 per cent
    - Libraries and research services improved by 7.1 per cent
    - Parliamentary websites improved by 6.4 per cent
    - Systems for creating document and standards improved by 5.9 per cent
3. Parliaments in low income countries are closing the e-parliament gap; they have reduced the difference between their average total e-parliament score and that of parliaments at the high income level by over 25 per cent in the last two years.
4. Services for members have improved on 8 of 12 indices. Stated in positive terms this means that in 2012 more members could count on:
    - Reliable electrical power
    - Personal desktop or laptop computers provided by parliament
    - ICT training or orientation programs provided by parliament
    - A legislature with a strategic plan for ICT
    - Access to the Internet
    - Access to the parliament's intranet
    - Access to a database of the laws passed by parliament
    - Personal e-mail accounts provided by parliament
5. Measures assessing the short term goals (2010-2012) of the e-Parliament Framework 2010-2020[2] showed progress: 8 of 12 targets were met or exceeded by early 2012.
6. Mobile devices and applications have been adopted more quickly than the implementation of new technology normally occurs in parliaments.
    - 51 per cent provide members with a smart phone or tablet
    - 35 per cent have developed applications for mobile applications to deliver information to members
    - Some parliaments now make all documentation for plenary sessions available to members on a tablet, thereby substantially reducing printing costs
    - 37 per cent offer members remote data access
    - 34 per cent offer mobile access to the parliament's website
7. The percentages of parliaments willing to *provide support* to other parliaments to improve the state of ICT doubled between 2009 and 2012; the same degree of increase occurred among those willing to *receive assistance* with ICT.
8. The need for assistance with ICT remains high. There were increases at every income level of those parliaments that would like to receive assistance.

Openness through communication and websites

9. Webcasting is growing and will be available in most parliaments in a few years; 89 per cent of parliaments are either currently webcasting plenary sessions or are planning or considering it.
10. The use, or intended use, of social media, in a variety of forms is also growing. For the

2 Proposed by the Board of the Global Centre for ICT in Parliament; see *World e-Parliament Report 2010*, Chapter 10.

first time, two social media tools were in the top ten of those used by the most parliaments. Of the techniques that the most parliaments reported they were planning or considering implementing, three of the top four involved social media.

11. Use of e-mail to communicate with citizens by *some or most* members (82 per cent of parliaments) and committees (56 per cent of parliaments) has been steady since the 2009 survey and may have peaked; the same may be true for the use of websites by members (54 per cent) and committees (37 per cent).
12. Citizens do use technology to communicate when they can. Almost 80 per cent of parliaments reported increasing communication from citizens using ICT when it is available to them.
13. The amount and the quality of website content have improved slightly. Although the average percentages of parliaments that provide information related to core parliamentary functions remains low for three of five categories, there were increases in 2012 resulting in higher overall percentages: legislation (63 per cent); plenary activities (62 per cent); oversight and scrutiny (39 per cent); committee activities (39 per cent); budget and public financing (34 per cent). Legislative information is now more complete, as seen in the increase in the percentage of parliaments that link relevant information and documents to bills.
14. The IPU's *Guidelines for Parliamentary Websites,* available in several languages, has been widely used by parliaments since its publication. 46 per cent of parliaments are following the recommendations for designing and maintaining the website.

Support for members

15. Basic services for members are available in most parliaments. For example, 82 per cent provide members with a personal computer and 86 per cent provide them with access to the Internet.
16. Support for members in plenary sessions is good in many parliaments: nearly three quarters of parliaments allow tablets in plenary and 65 per cent permit smart phones, up from 46 per cent in 2009; 57 per cent have electronic voting systems.
17. The number of parliaments providing intranets services and content is growing and is now up to 57 per cent.
18. The commitment to provide training for members is high: 56 per cent of parliaments said they currently provide ICT training or orientations for members and 31 per cent said they were planning or considering it.

Efficiency of operations

Document Management

19. The number of parliaments with document management systems for committee and plenary documents has increased in every survey since 2007. By 2012 the average percentage of parliaments having systems for each of six types of document was up to 64 per cent.
20. Use of XML for proposed legislation increased and is now in use in 43 per cent of the parliaments that have a system for managing bills3.
21. There has been significant progress in major international efforts to advance the use of

3 It is important to note that the use of XML applies only to those that have a document management system for bills. The net result is that just under 20 per cent of all parliaments in the survey use XML for proposed legislation. See also item 8 under Major Persistent Gaps.

XML in parliaments and to move toward an international parliamentary and legislative XML standard.

Libraries

22. Libraries that have digital capacities are now able to provide a growing range of digital services for members and the public.
23. The average global digital capacities score of libraries[4] was over 50 per cent in 2012. High scores are seen in specific areas for libraries as they: have a system for managing resources (77 per cent); are connected to parliament's intranet (58 per cent); have own website (44 per cent); collaborate digitally (35 per cent); subscribe to databases and journals online (49 per cent); maintain digital archive (43 per cent). A significant increase is evident in participation in networks and associations, which is now 64 per cent (up from 45 per cent in 2009).
24. The average global digital services score for libraries was also over 50 per cent in both years, if the use of social media is excluded from the analysis. Specifically, those with a website organized by issues are now 43 per cent; 62 per cent have the ability to receive requests electronically; 35 per cent use alerting services; 59 per cent contribute to the parliamentary website; and, 58 per cent serve the public and provide access via email and website.

Infrastructure

25. Most parliaments now report that they are able to provide basic ICT services, such as personal computer support, systems administration, web publishing, and network operations. Of the nine services, six are provided by 75 per cent or more of all parliaments.
26. Internet is available in almost 100 per cent of parliaments and most legislatures provide wireless access to it. Speed and reliability are rated adequate or better by most, with the exception of those at the low income level: 35 per cent of parliaments in this group reported that reliability was not adequate, and 45 per cent reported that speed was not adequate.
27. Training for in-house ICT staff is provided in 75 per cent of parliaments; the percentage of in-house staff that received training in the last year was about 45 per cent.

Planning and managing

28. Political leadership is reported as more engaged than in previous surveys with 56 per cent of respondents identifying the President or Speaker as being involved in setting ICT goals and objectives, up from 41 per cent in 2009.
29. More members and other users are participating in planning and managing ICT; in over half of parliaments that have a special group to provide direction and oversight for ICT a member of parliament now chairs this group.
30. Of the 60 per cent of parliaments that do have a strategic plan, an increasing number manage it well through regular updates (90 per cent) and the establishment of criteria to measure success (68 per cent).

4 Score based on the average percentage of parliaments having each of the specific capabilities.

MAJOR PERSISTENT GAPS

Despite the evidence of progress cited above, the 2012 survey also showed that there were major persistent gaps in the state of ICT in many parliaments, as listed below.

1. A large number of members are not connected to the parliament's LAN: at least 35 per cent of parliaments do not connect all members.
2. The number of systems that support lawmaking and especially budget and oversight still lags.
3. Four items that directly affect support for members remained at the same level as in 2009 or got worse: a library website that organizes information based on policy issues; a website with the text and status of bills; plenary calendars and schedules online; and accessibility standards for the parliament's website that meets the needs of persons with disabilities.
4. A technology gap exists in the communication between citizens and parliaments. Almost one fifth of parliaments reported that citizens do not use ICT to communicate with them; almost one quarter said that citizens do not have access to the Internet; and more than one quarter reported that citizens were not familiar with the technology.
5. A knowledge gap for both members and citizens also exists in the area of communication. Most parliaments noted that their major challenges were *not lack of access to the technology* but *lack of a knowledge base* in critical areas. The largest number of parliaments (over half) cited *citizens' lack of understanding of the legislative process* as a primary obstacle. Just under half cited *members' lack of experience with the technology.*
6. Most parliaments have not implemented tools that help them better understand and utilize communications from citizens.
7. Many libraries still lack an adequate technical infrastructure to function at full capacity.
8. Although the use of XML in the preparation of legislation by those parliaments that have document management systems for bills has increased, the overall percentage of all parliaments using XML for any document has not grown since 2007. It has remained steady at about one quarter of all parliament; and, one third continue to say that they are not planning or considering using XML.
9. The use of XML continues to be highly correlated with the income level of the country.
10. Although webcasting is growing and will be used in most parliaments in the near future, few have done anything about developing an effective and affordable method of archiving these records and ensuring permanent and timely access to them.
11. There has been little progress in providing explanatory material to assist users better understand proposed legislation or legislative procedures.
12. Lack of standards for access to websites by persons with disabilities persists in many parliaments.
13. Nearly two thirds of parliaments do not have a written vision statement for ICT and 40 per cent do not have a strategic plan that is regularly updated.
14. The lack of reliable electrical power is still a major obstacle for 15 per cent of parliaments.
15. The percentage of parliaments that provide the means to download parliamentary documents in bulk has remained static at 44 per cent.

It is important to note that many of these gaps exist for all parliaments, and not just those in the lower income levels.

STRATEGIES FOR ADDRESSING THE GAPS

There are a number of strategies that parliaments working individually and collectively, often with the support of the international donor community, can carry out to improve the state of ICT and use it more effectively to achieve their most important purposes. Based on the experiences of those that have achieved the most advanced levels of technology implementation, there are at least seven good practices that can provide a pathway to an effective e-parliament.

Invest in people

Knowledge is the foundation of the information society and this is especially true when applying technology in parliaments. An ICT staff needs to have the knowledge required to evaluate, implement, and maintain the systems that have become essential for parliaments. This requires a commitment on the part of the leadership of the administration to provide the resources needed to meet this demand, either through an ongoing training programme for internal staff and/or by the employment of contract staff who already have the necessary skills and experience and can transfer the know-how to the organization. The ICT staff also needs to understand the nature of parliaments, how they make decisions, and how they work. Expertise in technology alone is not sufficient for the technical staff of a legislative body.

Others need knowledge as well. Members need to understand how technology can serve both the institution and themselves as representatives of the people. Providing an adequate amount of quality training in a manner that is effective for members is difficult, but crucial if technology is to progress within the institution. This is an area that could especially benefit from the exchange of successful and less successful experiences among parliaments. Other staff of the parliament, who are users of technology, also need to build knowledge about ICT. This goes beyond learning just how to operate a system designed to support their work. The more they understand the underlying systems, the more effective communicators they can be with the ICT staff to ensure that the latter are able to design and deliver the most useful applications.

Finally, as the survey has shown, many citizens need a better understanding of how parliament works. This is a recurrent need that can never be completely met, but parliaments must continually address it using multiple forms of information exchange, both technical and non-technical.

Plan strategically, work efficiently

An ICT strategic plan serves many purposes: affirming a vision, goals and priorities; identifying intended outcomes; estimating costs and schedules; assessing progress and making changes as needed; and communicating the parliament's primary objectives for technology to all internal and external stakeholders, including funders. An effective implementation plan encompasses all technology projects; maps their relationships, interdependencies, and potential synergies; and leads to a more rational allocation of time and resources. The strategic plan helps a parliament determine where it wants to go, while the implementation roadmap helps the legislature see how it will get there. A less comprehensive approach will lead to inefficiencies, piecemeal results, and a likely failure to achieve the most important goals.

If contextualized within the broad development plan of the legislature, a well-executed ICT strategic plan will contribute to a more efficient parliament that can accomplish its work more

effectively at lower costs. For example, according to the priorities defined in the plan, documents could be produced more quickly and disseminated in fewer hard copies by leveraging mobile services for members, thereby reducing printing costs. Information managed seamlessly with open standards could be reformatted for multiple devices and disseminated to members and the public on a timelier basis. Communication within the parliament could be enhanced and made easier, resulting in an improved parliamentary knowledge base. At the same time communication with the public could be delivered via multiple channels and become more responsive to the growing demands of citizens for greater accessibility and transparency.

Go mobile

The benefits of mobile technologies for parliaments are becoming increasingly evident. They are more flexible, can be fast to implement, and are able to be used for communicating with growing numbers of citizens in new ways. They are often less costly to implement than wired services and can sometimes save money for certain functions. They enable parliaments to meet the growing demands from members to receive information wherever they are located and to be able to carry out their work in a paperless and mobile environment.

However, mobile technologies carry intrinsic risks involving security that need to be addressed. This is not a problem that parliaments alone face and is shared by both the public and private sectors. Parliaments will benefit from the advances that are made by the private sector in strengthening security, but they must be alert to the challenge within the legislative setting and make it a high priority in their strategic plan.

Go to the cloud

Cloud services also offer many advantages to parliaments. They enable parliaments to acquire fairly quickly a broad range of capabilities, such as e-mail systems, storage servers, document management and sharing systems, data services, and a growing list of other functions at relatively low cost without having to build and support the hardware, operating systems, and application software themselves.

Cloud services, however, do require Internet access that is reliable and has sufficient speed. This can be an obstacle for low income parliaments in particular, since many of them currently rate the reliability and speed of their connections as less than adequate. There also may be legal issues for some parliaments if their rules or laws place limits on where parliamentary data can reside. These matters can be resolved, however, with appropriate amendments to existing regulations that preserve parliamentary control over the data thus maintaining the intent of the original restrictions, and through stringent service level agreements with providers.

Share experiences and solutions

Parliaments share many of the same needs and same goals in their use of technology. At the same time, many parliaments already have developed and implemented solutions to address these needs and meet these goals. As a public institution, it is too expensive and an inefficient use of scarce resources for each parliament to create its own unique solutions given the extensive research, extended evaluations, repeated testing, specialized development, and tailored implementation

often required. This is especially the case when effective solutions are already known and when that knowledge can be made available to others.

The findings from the 2012 survey strongly underscore the fact that the time is right for greater cooperation and sharing among parliaments. An increasing number of legislatures that have the experience and the skills have indicated that they are prepared to share their knowledge and solutions with others; and the number of parliaments that want to receive this assistance has risen even higher in the past two years. Today, in addition to long standing groups such the ECPRD, there are more regional parliamentary organizations in place that can facilitate these exchanges, such as the APKN and ENPLAC. The Inter-Parliamentary Union continues to play a key role in this area on a global basis. There are also function-specific groups such as the IFLA Section on Library and Research Services for Parliaments and various regional associations that support sharing among parliamentary libraries. Clearly there is now a rich environment, a strong willingness, and a vital opportunity for sharing knowledge to meet critical ICT needs among many parliaments.

Establish a culture of openness and transparency

There are many technology-based tools and methods described in this Report for meeting the goals of openness and transparency. None of them will be effective, however, unless a parliament begins with a strong commitment to these values and makes them high priority strategic goals. This commitment must be shared by the political leaders and members; it cannot be simply assigned to the parliamentary administration. The intelligent use of ICT tools and methods requires, first, a culture of transparency that permeates the institution and is understood to be the prevailing practice.

There are, of course, limits to transparency for reasons of national security or the privacy rights of individuals. However, a culture of transparency assumes that the basic premise is that all information and documents should be made available and that exceptions should be established on a case by case basis. This approach may be contrary to what traditionally has occurred in some parliaments. Making the transition to the principle of openness and transparency is a necessary step to achieving the desired level of gains and benefits that e-parliament can bring.

A culture of transparency is consistent with the responsibilities of parliaments as the peoples' representatives, and it is consistent with the values of the citizens who live in the information society.

Promote genuine dialogue with citizens

Technologies for communicating with citizens are becoming easier to use; they are becoming less expensive; and they offer a growing array of methods for informing citizens more effectively.

While these features and benefits are positive, they carry an inherent risk that parliaments and members will tend to overlook: focusing more on *talking to* citizens and less on *listening to* citizens. There is some evidence for this in 2012 survey. The results indicate that fewer members are responding to e-mail from the public. Furthermore, only 17 per cent of parliaments have a system for helping members manage and respond to electronic messages from citizens and only one quarter have implemented practices for retaining or managing citizen input received via

technology. Finally, while over 70 per cent of parliaments use ICT to *inform* or *explain*, just over 50 per cent use ICT to *engage* citizens.

This trend is understandable, but also raises concerns about the implementation of new communications technologies in parliaments. While it is good that parliaments are able to use technology to tell citizens about the work of the institution; it is equally important that they use technology to hear what citizens have to say. Perhaps even more so. In this way parliaments can ensure that the use of new communications tools truly engages the public in a productive dialogue that promotes citizen participation in the political process.

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ANNEXES

Annex 1
Methodology for Assessing the State of e-Parliament

PURPOSE

1. Establish criteria for assessing the level of ICT adoption globally among all parliaments
2. Provide a tool to assist an individual parliament assess the state of its own technology level

DESCRIPTION OF THE METHODOLOGY

The methodology is based on the survey questions and the six categories of technology which they assess:

3. Oversight and management of ICT;
4. Infrastructure, services, applications and training;
5. Systems and standards for creating legislative documents and information;
6. Library and research services;
7. Parliamentary websites;
8. Communication between citizens and parliaments.

Each of these categories was assigned a maximum score intended to reflect its relative value with respect to the others. Because of the importance of parliamentary websites, especially for achieving the goal of transparency, and the importance of communication between citizens and parliaments, particularly for achieving the goal of accessibility and engagement of citizens, these categories were each assigned a higher score than the other four categories.

Each category was then broken down into sub-categories that identified its key components; these sub-categories were also assigned maximum possible scores that reflected their importance relative to other sub-categories. The combined scores of the sub-categories under a given category totaled the score possible for category. In Table 1, column 1 shows the list of all categories and sub-categories; column 3 shows the maximum score for each category; and column 4 shows the maximum score for each category.

Questions from the survey were then associated with their logical sub-categories (see Table 1, column 2). In some cases a single question defined a sub-category. For example, under the category of "Oversight and management of ICT", for the sub-category "Engagement of leaders", question 5 of section 1 of the survey is used to assess that sub-category. In other cases, two or more questions were used. For example, the sub-category of "Strategic planning" is assessed by questions 10 and 11 of section 1 under the same category "Oversight and management of ICT". A maximum score for some questions was set where the total score could potentially exceed the total allowed for that question.

Because of the scope of the effort only selected questions from the survey were used. Some questions were excluded because they were informative but did not lend themselves to a comparative assessment. Others were deemed not as relevant as the questions that were selected or were judged to be insufficiently accurate or valid to warrant inclusion in the methodology at this time. A total of 46 questions (about one third of the survey) were used to calculate ranking scores; many of these questions contained multiple parts.

Once the questions were grouped in their respective categories and sub-categories, they were each assigned a maximum score and a method for determining that score based on the answer (see Table 1, column 5).

Scoring example 1:

Category: Oversight and management of ICT

Sub-category: Engagement of leaders

Section 1, question 5 (What is the engagement level of political leaders..?)

Parliaments that responded "very highly" received a score of 3; those that responded "highly" received a score of 2. No other responses to this question received points.

Scoring example 2:

Category: Infrastructure, Services, Applications, Training

Sub-category: Basic support services

Section 2, question 1 (listing 9 general services, such as Help desk, etc.)

Parliaments received a point for each service checked; the total was divided by 9, the maximum score for that question

There are obvious limits to the level of detail that can be assessed using the survey questions. For example under "Parliamentary websites", question 5(b) from Section 5 of the survey asks whether the texts of proposed legislation are available from current and previous years. It does not however, ask how far back that text is available. Similarly, question 5(b) asks if a searchable database of bills is available but not which elements of bills can be searched. Reaching this level of detail in every sub-category would require far more detailed questions than is possible in the current version of the Global Survey for ICT in Parliament.

LIMITS OF THE METHODOLOGY

The methodology is based on the answers provided by each parliament. The accuracy of the methodology therefore depends on the accuracy of those answers, which were not independently verified. In this sense the survey is a self assessment. But self assessment is a valid approach, especially when parliaments are seeking to identify their strengths and weaknesses. In addition, not all questions apply to all parliaments. The survey and methodology do try to take this into account whenever possible.

Table 1: Scoring Methodology for Assessing the State of e-Parliament

1	2	3	4	5
Primary Categories and Sub-Categories	Relevant Questions: Section#/ Question#	Maximum score for each category	Maximum score for each question	Basis for Score
Oversight and Management		**15**		
Engagement of leaders	S1/Q5		3	very=3; highly=2
Ideas, goals, objectives	S1/Q3		1	1/10 for each check
Oversight, management	S1/Q6		3	yes=3; planning=1.5
Vision statement	S1/Q9		3	yes=3; planning=1.5
Strategic planning			3	
Have a plan	S1/Q10			yes=1.5
Updated regularly	S1/Q11			yes=1.5
Project management	S1/Q13		2	yes=2; planning=1
Infrastructure, Services, Applications, Training		**16**		
Basic support services			7	
General services	S2/Q1			1/9 for each check
Specific support/services	S2/Q2			1/10 for each check[1]
LAN	S2/Q4			yes=1
Internet access	S2/Q6			yes=1
Wireless	S2/Q9			yes=1
24 hour power	S2/Q12			yes=1
Parliament functions supported	S2/Q14			1/25 for each check
Mobile services	S2/Q2-3		1	0.5 for yes for apps for tablet PC OR smart phone max for Q2/Q3; combined=1
Service levels and staffing	S2/Q10-11		1	0.5 for each “yes for all” 0.25 for each “yes for some”
Plenary support	S2/Q15,17,21		3	1 for each “yes” 16, 20, 22
Training			3	
Training program	S2/Q27			yes=2
Percentage trained	S2/Q28			1>75%; 0.5>50%; 0.25>25%
Training/orientation program for members	S2/Q30		1	yes=1
Systems and Standards for Creating Legislative Documents and Information		**15**		
Document Management System – bills			4	
Have system	S3/Q1			yes=2; planning=1
Uses XML	S3/Q3			yes=2; planning=1
Document Management System for otherdocuments	S3/Q5a-f		4	1 for each check; max=4
XML used in these documents	S3/Q6a-f		4	1 for each check; max=4
Preservation of digital documents			3	
Preservation policy for digital documents	S3/Q11			yes=2; planning=1/2
Maintain a digital archive	S3/Q12			yes=1; planning=1/2

1. Do not count “none”; do not count tablet or smart phone here. Count in mobile services.

Library and research services		**15**		
Has library	S4/Q1		1	yes=1
Digital services			10	
Connected to intranet	S4/Q6			yes=2
Webpage organized by issues	S4/Q8			yes=2
Receive requests electronically	S4/Q9			yes=2
Alerting services	S4/Q10			yes=2
Tools to support work	S4/Q11			1/2 for each check; max=2
Other services			4	
Contribute to parliamentary website	S4/Q21			1 for each check; max=4
Parliamentary Websites		**20**		
Content				
General information	S5/Q4a-k		2	(1 for each check/55)*2
Info regarding legislation, budget, oversight	S5/Q5a-f		6	(1 for each check/35)*6
Completeness (links to bills)	S5/Q6		2	(1 for each check/16)*2
Timeliness (proposed leg after action)	S5/Q7b		1	same day=1 one day after=0.75 one week after=0.5
Tools			6	
Search engine	S5/Q8a			(1 for each check)/5*3
Broadcasting/Webcasting	S5/Q8b			Live=2
Alerting services	S5/Q8c			(1 for each check)/6*1
Usability and accessibility			3	
Accessibility guidelines	S5/Q9b			yes=3
Communication: Citizens and Parliaments		**21**		
Websites				
Members use websites	S6/Q1		3	most=3; some=2
Email				
Members use email	S6/Q3		3	most=3; some=2
Other methods				
Methods used	S6/Q10		10	each method using=0.5
Communicate with young people				
Methods	S6/Q15		4	each method using=0.33
Bulk download	S3/Q8		1	1=yes to bulk download
Total questions used to compute status	**46**			
Total questions in survey	**149**			
Total category scores		**102**		
Total score possible for all questions			**102**	

Table 2. Sample e-Parliament report for an individual parliament

State of ICT - Ranking Criteria	Parliament Percent Score	Parliament Points / Max Points	2012 Question	Max Score for Question	Basis for score
Oversight and Management	**97.3%**	**14.6 /15**			
Engagement of leaders		3.0	S1/Q5	3	very=3; highly=2
Ideas, goals, objectives		0.6	S1/Q3	1	1/10 for each check
Oversight, management		3.0	S1/Q6	3	yes=3; planning=1.5
Vision statement		3.0	S1/Q9	3	yes=3; planning=1.5
Strategic planning				3	
Have a plan		1.5	S1/Q10		yes=1.5
Updated regularly		1.5	S1/Q11		yes=1.5
Project management		2.0	S1/Q13	2	yes=2; planning=1
Infrastructure, Services, Applications, Training	**77.8%**	**12.5 / 16**			
Basic support services				7	
General services		1.0	S2/Q1		1/9 for each check do not count "none"
Specific support/services		0.9	S2/Q2		1/10 for each check; do not count "none" count tablet or smart phone in mobile services
LAN		1.0	S2/Q4		yes=1
Internet access		1.0	S2/Q6		yes=1
Wireless		0.0	S2/Q9		yes=1
24 hour power		1.0	S2/Q12		yes=1
Parliamentary functions supported		0.8	S2/Q14		1/25 for each check; do not count "none"
Mobile services			S2/Q2 and S2/Q3	1	S2/Q2: 0.5 for check for tablet PC OR smart phone S2/Q3: 0.5 for yes for apps for tablet PC OR smart phone max for Q2/Q3 combined=1
Service levels and staffing		0.8	S2/Q10-11	1	0.5 for each 'yes for all'; 0.25 for each 'yes for some'
Plenary support		1.0	S2/ Q 15,17,21	3	for 15, 17 1 for each yes for 21, 1 for desktop OR laptop OR tablet. Max=1
Training				3	
Training program		2.0	S2/S27		yes=2
Percentage trained		1.0	S2/S28		1>75%; 0.5>50%; 0.25>25%;
Training / orientation program for members		1.0	S2/Q30	1	yes=1
Systems and Standards for Legislative Documents and Information	**90.0%**	**13.5 / 15**			
DMS - bills (25)				4	
Have system		2.0	S3/Q1		yes=2; planning=1
Uses XML		2.0	S3/Q3		yes=2; planning=1
DMS for other documents (26)		4.0	S3/Q5a-f	4	1 for each check; max=4
XML used in these documents (24)		4.0	S3/Q6a-f	4	1 for each check; max=4
Preservation of digital documents (15)				3	

Preservation policy for digital documents		1.0	S3/Q11		yes=2; planning=1
Maintain a digital archive		0.5	S3/Q12		yes=1; planning=1/2
Library and research services	**96.7%**	**14.5 / 15**			
Has library (10)		1.0	S4/Q1	1	
Digital services (65)				10	
Connected to intranet		2.0	S4/Q6		yes=2
Webpage organized by issues		2.0	S4/Q8		yes=2
Receive requests electronically		2.0	S4/Q9		yes=2
Alerting services		2.0	S4/Q10		yes=2
Tools to support work		1.5	S4/Q11		1/2 for each check; max=2
Other services (25)				4	
Contribute to parliamentary website		4.0	S4/Q21		1 for each check; max=4
Parliamentary Websites	**85.5%**	**17.1**			
Content					
General information-10		1.8	S5/Q4a-k	2	(1 for each chk/55)*2; do not count "none of above"
Info re leg, budget, oversight-25		5.1	S5/Q5a-f	6	(1 for each check/35)*6; do not count "none of above"
Completeness-5 (links to bills)		2.0	S5/Q6	2	(1 for each check/x)*2; for unicameral-,x=16; for bicameral, x=18
Timeliness-8 (proposed leg after action)		1.0	S5/Q7b	1	same day=1; one day after=0.75; one week after=0.5
Tools-24				6	
Search engine (3)		1.8	S5/Q8a		(1 for each check)/5*3; do not count "none of above"
Broadcasting/Webcasting (2)		2.0	S5/Q8b		live=2
Alerting services (1)		0.3	S5/Q8c		(1 for each check)/6*1; do not count "none of above"
Usability and accessibility-18				3	
Accessibility guidelines		3.0	S5/Q9b		yes=3
Communication: Citizens and Parliaments	**54.8%**	**11.5 / 21**			
Websites-10					
Members use websites		3.0	S6/Q1	3	most=3; some=2
E-mail-15					
Members use e-mail		3.0	S6/Q3	3	most=3; some=2
Other methods-45					
Methods used-20		4.5	S6/Q10	10	each method using=.5
Communicate with young people-15					
Methods-12		1.0	S6/Q15	4	each method using= /3
Bulk download		0.0	S3/Q8	1	1=yes to bulk download
MAXIMUM POINTS POSSIBLE		**102.0**			
TOTAL POINTS		**83.6**			
TOTAL PERCENTAGE SCORE		**82.0%**			

Annex 2
Geographical Groupings

Africa	Caribbean	Europe	Latin America	Southern and South-Eastern Asia
• Algeria, Council of the Nation • Angola, National Assembly • Botswana, National Assembly • Burundi, National Assembly • Cameroon, National Assembly • Central African Republic, National Assembly • Democratic Republic of the Congo, Senate • Djibouti, National Assembly • Ethiopia, House of the Federation • Gabon, National Assembly • Ghana, Parliament • Kenya, National Assembly • Lesotho, Senate • Lesotho, National Assembly • Malawi, National Assembly • Mauritius, National Assembly • Morocco, House of Councillors • Morocco, House of Representatives • Mozambique, Assembly of the Republic • Namibia, Parliament* • Niger, National Assembly • Nigeria, National Assembly* • Rwanda, Parliament*	• Antigua and Barbuda, Parliament* • Belize, National Assembly* • Dominica, House of Assembly • Dominican Republic, Senate • Dominican Republic, Chamber of Deputies • Grenada, Parliament* • Guyana, National Assembly • Haiti, Senate • Haiti, Chamber of Deputies • Jamaica, Parliament* • Saint Kitts and Nevis, National Assembly • Saint Lucia, Houses of Parliament* • Saint Vincent and the Grenadines, House of Assembly • Suriname, National Assembly • Trinidad and Tobago, Parliament*	• Andorra, General Council • Austria, Parliament* • Belarus, Council of the Republic • Belarus, House of Representatives • Belgium, Senate • Belgium, House of Representatives • Bosnia and Herzegovina, Parliamentary Assembly* • Croatia, Croatian Parliament • Cyprus, House of Representatives • Czech Republic, Senate • Czech Republic, Chamber of Deputies • Denmark, The Danish Parliament • Estonia, The Estonian Parliament • Finland, Parliament • France, Senate • France, National Assembly • Germany, Federal Council • Germany, German Bundestag • Greece, Hellenic Parliament • Hungary, National Assembly • Iceland, Parliament • Italy, Senate • Italy, Chamber of Deputies • Latvia, Parliament • Lithuania, Parliament	• Argentina, Senate • Argentina, Chamber of Deputies • Bolivia (Plurinational State of), Chamber of Senators • Bolivia (Plurinational State of), Chamber of Deputies • Brazil, Federal Senate • Brazil, Chamber of Deputies • Chile, Senate • Chile, Chamber of Deputies • Colombia, Senate • Colombia, House of Representatives • Costa Rica, Legislative Assembly • Ecuador, National Assembly • El Salvador, Legislative Assembly • Guatemala, Congress of the Republic • Mexico, Senate • Mexico, Chamber of Deputies • Nicaragua, National Assembly • Panama, National Assembly • Paraguay, Senate • Paraguay, Chamber of Deputies • Peru, Congress of the Republic • Uruguay, General Assembly*	• Afghanistan, National Assembly* • Bangladesh, Parliament • Bhutan, National Council • Bhutan, National Assembly • Cambodia, Senate • Cambodia, National Assembly • India, Council of States • India, House of the People • Japan, House of Councillors • Japan, House of Representatives • Kazakhstan, Parliament* • Malaysia, Parliament* • Mongolia, State Great Hural • Pakistan, Senate • Philippines, Senate • Philippines, House of Representatives • Republic of Korea, National Assembly • Sri Lanka, Parliament • Tajikistan, House of Representatives • Thailand, House of Representatives • Timor-Leste, National Parliament

Africa	Caribbean	Europe	Latin America	Southern and South-Eastern Asia
• Sao Tome and Principe, National Assembly • Senegal, National Assembly • Seychelles, National Assembly • South Africa, Parliament* • Sudan, Council of States • Sudan, National Assembly • Swaziland, Parliament* • Togo, National Assembly • Tunisia, National Constituent Assembly • Uganda, Parliament • United Republic of Tanzania, National Assembly • Zambia, National Assembly • Zimbabwe, Parliament*		• Luxembourg, Chamber of Deputies • Malta, House of Representatives • Montenegro, Parliament • Netherlands, Senate • Netherlands, House of Representatives • Norway, Parliament • Poland, Senate • Poland, Sejm • Portugal, Assembly of the Republic • Republic of Moldova, Parliament • Romania, Senate • Romania, Chamber of Deputies • Serbia, National Assembly • Slovakia, National Council • Slovenia, National Assembly • Slovenia, National Council • Spain, Senate • Spain, Congress of Deputies • Sweden, Parliament • Switzerland, Federal Assembly* • The former Yugoslav Republic of Macedonia, Assembly of the Republic • Ukraine, Parliament • United Kingdom of Great Britain and Northern Ireland, Parliament*		

* bicameral parliaments that answered as one entity due to their organizational structure

Annex 3
Classification of economies[1]

High Income	Upper Middle Income	Lower Middle income	Low Income
Andorra	Albania	Angola	Afghanistan
Aruba	Algeria	Armenia	Bangladesh
Australia	American Samoa	Belize	Benin
Austria	Antigua and Barbuda	Bhutan	Burkina Faso
Bahamas, The	Argentina	Bolivia	Burundi
Bahrain	Azerbaijan	Cameroon	Cambodia
Barbados	Belarus	Cape Verde	Central African Republic
Belgium	Bosnia and Herzegovina	Congo, Rep.	Chad
Bermuda	Botswana	Côte d'Ivoire	Comoros
Brunei Darussalam	Brazil	Djibouti	Congo, Dem. Rep.
Canada	Bulgaria	Egypt, Arab Rep.	Eritrea
Cayman Islands	Chile	El Salvador	Ethiopia
Channel Islands	China	Fiji	Gambia, The
Croatia	Colombia	Georgia	Guinea
Curaçao	Costa Rica	Ghana	Guinea-Bissau
Cyprus	Cuba	Guatemala	Haiti
Czech Republic	Dominica	Guyana	Kenya
Denmark	Dominican Republic	Honduras	Korea, Dem. Rep.
Equatorial Guinea	Ecuador	India	Kyrgyz Republic
Estonia	Gabon	Indonesia	Liberia
Faeroe Islands	Grenada	Iraq	Madagascar
Finland	Iran, Islamic Rep.	Kiribati	Malawi
France	Jamaica	Kosovo	Mali
French Polynesia	Jordan	Lao PDR	Mozambique
Germany	Kazakhstan	Lesotho	Myanmar
Gibraltar	Latvia	Marshall Islands	Nepal
Greece	Lebanon	Mauritania	Niger
Greenland	Libya	Micronesia, Fed. Sts.	Rwanda
Guam	Lithuania	Moldova	Sierra Leone
Hong Kong SAR, China	Macedonia, FYR	Mongolia	Somalia
Hungary	Malaysia	Morocco	Tajikistan
Iceland	Maldives	Nicaragua	Tanzania
Ireland	Mauritius	Nigeria	Togo
Isle of Man	Mayotte	Pakistan	Uganda
Israel	Mexico	Papua New Guinea	Zimbabwe
Italy	Montenegro	Paraguay	
Japan	Namibia	Philippines	
Korea, Rep.	Palau	Samoa	
Kuwait	Panama	São Tomé and Principe	
Liechtenstein	Peru	Senegal	
Luxembourg	Romania	Solomon Islands	
Macao SAR, China	Russian Federation	South Sudan	
Malta	Serbia	Sri Lanka	
Monaco	Seychelles	Sudan	
Netherlands	South Africa	Swaziland	
New Caledonia	St. Kitts and Nevis	Syrian Arab Republic	

1 Based on the *World Bank list of economies (April 2012)* http://data.worldbank.org/about/country-classifications/country-and-lending-groups

High Income	Upper Middle Income	Lower Middle income	Low Income
New Zealand	St. Lucia	Timor-Leste	
Northern Mariana Islands	St. Vincent and the	Tonga	
Norway	Grenadines	Turkmenistan	
Oman	Suriname	Tuvalu	
Poland	Thailand	Ukraine	
Portugal	Tunisia	Uzbekistan	
Puerto Rico	Turkey	Vanuatu	
Qatar	Uruguay	Vietnam	
San Marino	Venezuela, RB	West Bank and Gaza	
Saudi Arabia		Yemen, Rep.	
Singapore		Zambia	
Sint Maarten (Dutch part)			
Slovak Republic			
Slovenia			
Spain			
St. Martin (French part)			
Sweden			
Switzerland			
Trinidad and Tobago			
Turks and Caicos Islands			
United Arab Emirates			
United Kingdom			
United States			
Virgin Islands (U.S.)			

This table classifies all World Bank member economies, and all other economies with populations of more than 30,000. For operational and analytical purposes, economies are divided among income groups according to 2010 gross national income (GNI) per capita, calculated using the World Bank Atlas method. The groups are: low income, $1,005 or less; lower middle income, $1,006–3,975; upper middle income, $3,976–12,275; and high income, $12,276 or more. Other analytical groups based on geographic regions are also used.

Annex 4
Global Survey of ICT in Parliaments 2012

CONTACT AND ORGANIZATIONAL INFORMATION

Please provide the information requested below.
Parliament or chamber: .....
Country: .....

Person to contact if there are questions about the responses to the survey:
First name: .....
Last Name: .....
Title: □ Mr. □ Ms.
Function: .....
Email address: .....
Phone number: .....

Contact information of the IT Director (IT Manager, Head of IT Department/Office), if different from contact person indicated above:
First name: .....
Last name: .....
Title: □ Mr. □ Ms.
Function: .....
Email address: .....
Phone number: .....

Answers are given for:
□ Unicameral Parliament
□ Lower house
□ Upper house
□ Both houses (Lower and Upper houses)

Please note that data will not be used to single out any legislature or a specific case but rather to conduct an assessment at the macro/regional level.

SECTION 1
OVERSIGHT AND MANAGEMENT OF ICT

Purpose. This section asks how strategic direction is given for ICT, how priorities are established, and how ICT is managed. It also asks about staff and financial resources.

1. **For bicameral parliaments only. Please select the option below that best describes how ICT support is provided.**

□ Each chamber has its own ICT group, and they work independently
□ Each chamber has its own ICT group, but they work on some projects and tasks together
□ One ICT group supports both chambers
□ Other *(please describe in the comment box at the end of this section)*

2. **Who establishes the goals and objectives for ICT in the parliament or chamber?** *(Check all that apply)*

□ President/Speaker of parliament or chamber
□ Parliamentary committee
□ Members
□ Secretary General
□ Chief Information Officer
□ Director of ICT
□ Special group or committee
□ Internal IT experts
□ Contractors
□ Other *(please specify)*

3. **Where do ideas and proposals for ICT goals and projects come from?** *(Check all that apply)*

□ Senior political leadership
□ Senior ICT leadership
□ Members
□ Committees
□ Departments of the parliament
□ Formal group of stakeholders, such as an advisory group, special committee, or governing board
□ ICT staff
□ Library/research services
□ Users within the parliament
□ Public
□ Other *(please specify)*

4. **How often do the political leaders (for example, at the level of the Speaker/President, Vice Speaker/Vice President) engage with the issue of ICT in parliament?**

□ Weekly or biweekly
□ Monthly
□ Quarterly
□ Annually
□ Only when an issue arises
□ Never

5. **What is the degree of engagement of the political leaders of the parliament in ICT?**

□ Very highly engaged
□ Highly engaged
□ Somewhat engaged
□ Engaged very little

□ Not engaged at all

6. Is there a specially designated committee or group that provides direction and oversight for the use of ICT in the parliament?
□ Yes => *Go to question 7*
□ Planning or considering => *Go to question 9*
□ No, and not planning or considering =>*Go to question 9*

7. If yes, what is the composition of the group? *(Check all that apply)*
□ Chairs of committees or commissions
□ Members
□ Staff
□ Outside experts
□ Other *(please specify)*

8. Who chairs the group?
□ Speaker/President
□ Vice Speaker/Vice President
□ Chair of a committee
□ Member of parliament
□ Secretary General
□ Director of ICT
□ Other staff member
□ Other person *(please specify)*
Go to question 9

9. Does the parliament have a written vision statement for ICT?
□ Yes
□ Planning or considering
□ No, and not planning or considering

10. Does the parliament have a strategic plan with goals, objectives, and timetables for ICT?
□ Yes => *Go to question 11*
□ No => *Go to question 13*

11. If yes, is the strategic plan updated regularly?
□ Yes
□ No

12. Has the parliament established criteria and indicators to measure the success of its plan?
□ Yes
□ No
Go to question 13

13. Is a formal project management methodology used for implementing new initiatives?
□ Yes
□ Planning or considering
□ No, and not planning or considering

14. Approximately how many <u>total users</u> of ICT (actual or potential users) are there within the parliament - <u>members and staff combined</u> - but <u>excluding the public</u>?
Approximate number of users (members+staff) =

15. Approximately how many total internal parliamentary ICT staff does the parliament employ? (Please estimate *full time equivalent,* for example two staff working half time would be equivalent to one full time staff member)
Approximate number of parliamentary ICT staff =

16. Approximately how many total external contract or consultant ICT staff does the parliament employ? (Please estimate *full time equivalent*, for example two staff working half time would be equivalent to one full time staff member)
Approximate number of contract staff =

17. How is ICT in the parliament funded?
□ Entirely by the parliament's own budget
□ Partly by the parliament's own budget and partly by the government's budget
□ Entirely by the government's budget (the budget of the executive)
□ Entirely by donor agencies
□ Partly by donor agencies
□ Other (*please specify*)

18. Approximately what percentage is the ICT budget of the parliament's entire budget?
□ less than 1%
□ 1%-2%
□ 3%-4%
□ 5%-6%
□ 7%-8%
□ 9%-10%
□ More than 10%

19. What are the three most important improvements in the work of parliament that have been made possible by ICT in the past two years? *(Please select only three items)*
□ Increased capacity to disseminate information and documents
□ More timely delivery of information and documents to members
□ More interaction with citizens
□ More efficient preparation of legislation
□ More timely publication of reports of plenary proceedings
□ More timely publication of reports of committee proceedings
□ More information and documents on the website
□ Access to more information
□ Exchange of information with other parliaments
□ More information provided to citizens
□ More communication with young people
□ Better management of documents
□ Access to older documents
□ Better access to research
□ Other *(please specify)*

20. Which technologies have you introduced or begun using in new ways during the past two years that have been the most useful in helping to improve the work of the parliament? *(Please select only three items)*
□ Audio and/or video capture of proceedings
□ Systems for creating and editing documents
□ Open standards such as XML
□ Open source software
□ Social media like Facebook or Twitter

□ Document repositories
□ Systems for putting information and documents onto websites
□ Systems for managing e-mail from citizens
□ Webcasting
□ Systems for ensuring the preservation of documents in digital formats
□ Mobile communication devices
□ Mobile communication applications for members
□ Mobile communication applications for citizens
□ Radio broadcasting of plenary sessions
□ TV broadcasting of plenary sessions
□ Speech-to-text dictation software
□ Other (*please list*)

21. **What are the parliament's most important objectives for ICT in the next two years?** *(Please select only three items)*

□ Increased capacity to disseminate information and documents
□ More timely delivery of information and documents to members
□ More interaction with citizens
□ More efficient preparation of legislation
□ More timely publication of reports of plenary proceedings
□ More timely publication of reports of committee proceedings
□ More information and documents on the website
□ Access to more information
□ Exchange of information with other parliaments
□ More information provided to citizens
□ More communication with young people
□ Better management of documents
□ Access to older documents
□ Access to better research
□ Other *(please specify)*

22. **What are the parliament's three biggest challenges in using ICT effectively?** *(Please select only three items)*

□ Inadequate financial resources
□ Lack of control of financial resources
□ Inadequate staff capacity
□ Members' lack of knowledge of ICT
□ Lack of a strategic plan for ICT
□ Lack of engagement by the leaders of the parliament
□ Lack of support from international donor community
□ Lack of access to best practices
□ Access to PCs and the Internet for citizens
□ Inadequate Internet access in the parliament
□ Unreliable electrical power
□ Insufficient ICT market and vendors in the country
□ None of the above
□ Other *(please specify)*

Additional comments and good practices. In the box below, please add any **additional comments** the parliament wishes to make in response to any of the questions in this section. The parliament is also invited to describe briefly any **lessons learned or good practices** it has implemented in dealing with the topics covered in this section of the survey.

SECTION 2
INFRASTRUCTURE, SERVICES, APPLICATIONS, AND TRAINING

Purpose. This section asks about ICT services, technical infrastructure, applications, and training. The purpose is to understand the scope of ICT systems and services available within the parliament and the training provided to staff to support them. Please note that ICT services include voice and data communication services.

1. **Please indicate which of the following general ICT services are available in the parliament or chamber** *(Check all that apply)*

□ Application development and maintenance
□ Data network operations
□ Help desk
□ PC support
□ Systems administration
□ Systems programming
□ Voice communications
□ Web publishing
□ Internet access
□ None of the above

2. **Please indicate which of the following are provided by parliament to each member of parliament for his or her personal use** *(Check all that apply)*

□ Desktop computer
□ Laptop computer
□ Tablet PC
□ Printer
□ Fax
□ Intranet access
□ Access to the Internet
□ Remote data access
□ Smart phone
□ Basic Cell phone
□ Personal e-mail
□ Personal website
□ None of the above

3. **Please indicate whether the parliament provides applications, specifically designed to deliver information to members, for the following devices:**

	Yes	No
Tablet PC	□ Please specify	□
Smart phone	□ Please specify	□

4. **Does the parliament have a local area network (LAN)?** (A local area network is a computer communications network that links PCs, printers, and other pieces of hardware within a building or group of adjacent buildings.)

□ Yes => *Go to Question 5*

□ Planning or considering => *Go to Question 6*
□ No, and not planning or considering => *Go to Question 6*

5. Who is connected to the LAN?

Approximate percentage connected	**Members** (MPs or their staffs or offices)	**Committees** (Committee chairs, members, staff, or offices)	**Departments or offices** (Directors, staff, or offices)
None	□	□	□
1-25%	□	□	□
26-50%	□	□	□
51-75%	□	□	□
76-99%	□	□	□
100%	□	□	□

Go to question 6

6. Does the parliament have Internet access?
□ Yes => *Go to Question 7*
□ Planning or considering => *Go to Question 9*
□ No, and not planning or considering => *Go to Question 9*

7. What is the overall maximum bandwidth of the parliament's connection to the internet?
Overall maximum bandwidth (please indicate the value in kilobit) =

8. How adequate is the Internet connection in terms of reliability and speed for the needs of the parliament? *(Check the appropriate boxes)*

	Not adequate	Adequate	More than adequate
Reliability	□	□	□
Speed	□	□	□

Go to question 9

9. Does the parliament have wireless access to the Internet?
□ Yes
□ Planning or considering
□ No, and not planning or considering

10. Does the parliament have written service level agreements with contractors who provide it with equipment or services? A service level agreement is a contract between a service provider and a customer that details the nature, quality, timing and scope of the service to be provided.)
□ Yes with all
□ Yes with some
□ Planning or considering
□ No, and not planning or considering
□ Do not use outside contractors

11. Does the ICT office have written service level agreements with organizations within the parliament for whom it provides equipment or services?
□ Yes with all

□ Yes with some
□ Planning or considering
□ No, and not planning or considering
□ Does not provide equipment or services to organizations within the parliament

12. **Does the parliament have reliable electrical power 24 hours per day?**
□ Yes
□ No

13. **For those operations, services, and general applications which the parliament supports, please indicate if it uses commercial software or open source software?** *Check both columns if both kinds of software are used. Leave both columns blank for a specific operation, service or general application that it does not support.*

	Commercial software	Open Source Software
Operating systems for servers	□	□
Operating systems for virtual servers	□	□
Network operations	□	□
Security	□	□
Operating systems for desktop PCs	□	□
Operating systems for laptop PCs	□	□
Content management	□	□
Document management	□	□
Databases	□	□
E-mail	□	□
E-learning	□	□
Word processing	□	□
Spreadsheets	□	□
Presentations	□	□
Publishing (print)	□	□
Publishing (Web)	□	□
Cataloguing system for the library	□	□
Electronic resource management	□	□
Online library catalog	□	□
Other *(please specify)*	□	□
None of the above	□	□

14. **Please indicate for which of the following parliamentary functions, activities, or services there is a supporting ICT application** *(Check all that apply)*
□ Bill drafting
□ Amendment drafting
□ Bill status
□ Amendment status
□ Database of laws passed by parliament
□ Analysis of budget proposed by the government
□ Plenary calendars and schedules
□ Minutes of plenary sessions
□ Plenary speeches and debates
□ Plenary voting
□ Committee reports
□ Committee calendars and schedules

□ Minutes of committee meetings
□ Committee websites
□ Management and support of website for parliament
□ Management and support of member websites
□ Systems for communicating with constituents (e-mail, blogs, etc)
□ Questions to the government
□ Other scrutiny documents
□ Management of library resources
□ Online library catalog
□ Digital archive of parliamentary documents
□ Financial disclosure
□ HR system
□ Financial management system
□ None of the above

15. Is an electronic voting system used in the plenary room (floor/hemicycle)?
□ Yes => *Go to question 16*
□ Planning or considering => *Go to question 17*
□ No, and not planning or considering => *Go to question 17*

16. Please indicate what applies to your parliament's voting system? (*Check all that apply)*
□ Identification through card or token
□ Identification through biometric
□ Identification through password
□ Cast the vote through touch screen
□ Cast the vote through voting button (assigned seats)
□ Cast the vote at the voting station
□ Other *(please specify)*
Go to question 17

17. Are large display screens used in the plenary room so that everyone can see what is being presented on them?
□ Yes => *Go to question 18*
□ Planning or considering => *Go to question 19*
□ No, and not planning or considering => *Go to question 19*

18. If yes, for what purposes are large digital displays used? *(Check all that apply)*
□ Video streaming
□ Display of text
□ Display of graphics
□ Still pictures
□ Video conferences
□ Other *(please specify)*
Go to question 19

19. Are large display screens used in committees so that everyone can see what is being presented on them?
□ Yes => *Go to question 20*
□ Planning or considering => *Go to question 21*
□ No, and not planning or considering => *Go to question 21*

20. If yes, for what purposes are large digital displays used? (*Check all that apply)*

□ Video streaming
□ Display of text
□ Display of graphics
□ Still pictures
□ Video conferences
□ Other *(please specify)*

Go to question 21

21. Does the parliament equip, or is planning to equip, the plenary room with any of the following devices for use by members when they are in a plenary meeting?

	Equip	Planning to equip	Not equipped and not planning
Desktop computer	□	□	□
Laptops and netbooks	□	□	□
Touch screen devices	□	□	□
Tablet PCs	□	□	□

22. What services can members access through these technologies in the plenary room? *(Check all that apply)*

□ Wireless Internet connection
□ Wired Internet connection
□ Intranet services
□ Mobile network (3G, 4G, etc.)
□ None of the above
□ Other *(please specify)*

23. Which of the following devices, owned by the members, can be used by members in the plenary room? *(Check all that apply)*

□ Laptops and netbooks
□ Tablet PCs
□ Smart phones
□ Basic Cell phones
□ None of the above
□ Other *(please specify)*

24. What services can members access through these devices which they own when they are in a plenary meeting? *(Check all that apply)*

□ Wireless Internet connection
□ Wired Internet connection
□ Intranet services
□ Mobile network (3G, 4G, etc.)
□ None of the above
□ Other *(please specify)*

25. How are verbatim reports of plenary sessions prepared? *(Check all that apply)*

□ By hand and transcribed into digital format
□ In digital format using a PC
□ In digital format using a stenographic machine

□ In digital format by using speech recognition technology
□ None of the above
□ Other *(please specify)*

26. Please indicate which functions are performed by in-house staff and which are performed by contractors. If they are performed by both in-house staff and also by contractors, check both boxes. If the function is not performed in the parliament, do not check either box.

	Performed by in-house staff	Performed by contract staff
Application development manager	□	□
Website manager	□	□
Network operations manager	□	□
Security manager	□	□
User support manager	□	□
PC support manager	□	□
Training manager	□	□
Systems administration manager	□	□
Systems programming manager	□	□
Voice communications manager	□	□
Programmer/developer	□	□
Network operator	□	□
User support	□	□
PC installation, maintenance, and support	□	□
Trainer	□	□
Systems administrator	□	□
Systems programmer	□	□
Security staff	□	□
Voice communications operator	□	□
Other (*please specify)*	□	□

27. Does the parliament provide training, through either internal or outside services, for in-house ICT staff?

□ Yes => *Go to question 28*
□ No => *Go to question 30*

28. If yes, what percentage of in-house ICT staff received training in the last year?

Percentage of in-house ICT staff receiving training last year = ... %

29. What were the top five (5) training priorities in the last year? *(Check only five (5) or fewer)*

□ Application development and maintenance
□ Document management systems
□ Document standards
□ Data network operations
□ Help desk
□ PC support
□ Office automation (word processing, spreadsheets, presentations)
□ E-mail management

□ Systems administration
□ Systems programming
□ Voice communications
□ Website management
□ Webcasting (video and audio)
□ Internet access
□ Security
□ Parliamentary processes
Go to question 30

30. Does the parliament provide ICT training or orientation for members?
□ Yes
□ Planning or considering
□ No, and not planning or considering

31. oes the parliament provide ICT training or orientation for non-ICT staff?
□ Yes
□ Planning or considering
□ No, and not planning or considering

Additional comments and good practices. In the box below, please add any **additional comments** the parliament wishes to make in response to any of the questions in this section. The parliament is also invited to describe briefly any **lessons learned or good practices** it has implemented in dealing with the topics covered in this section of the survey.

SECTION 3
SYSTEMS AND STANDARDS FOR CREATING LEGISLATIVE DOCUMENTS AND INFORMATION

Purpose. This section asks about systems and standards for creating and managing various types of legislative documents and information. It covers bills, amendments, and committee and plenary documentation.

BILLS

1. **Does the parliament have a system for managing the texts of bills in digital format as they move through the legislative process?**

□ Yes => *Go to question 2*
□ Planning or considering => *Go to question 5*
□ No, and not planning or considering such a system => *Go to question 5*
□ Does not apply to this parliament or chamber => *Go to question 5*

2. **If yes, which of the following features does the system have?** *(Check all that apply)*

□ Authenticates users
□ Has workflow capability
□ Exchanges data with other systems outside the parliament
□ Can handle all possible versions of a bill
□ Can handle committee amendments
□ Can handle plenary amendments
□ Can show the changes in a bill that the amendment would make
□ Includes all actions taken by parliament on a bill
□ Has automated error detection capability
□ None of the above

3. **Does the system use XML for the document standard?**

□ Yes =>*Go to question 4*
□ No, but planning for or considering using XML =>*Go to question 5*
□ No, and there are no plans or consideration for XML =>*Go to question 5*

4. **If the system uses XML, what is it used for?** *(Check all that apply)*

□ Printing
□ Presentation on the web
□ Preservation
□ Exchange with other systems
□ Provide accessibility for persons with disabilities
□ Make documents available for downloading
□ Integrate documents with another system
□ Improve searching
□ Other *(please specify)*
□ None of the above

Go to question 5

OTHER DOCUMENTS

5. **For each type of committee and plenary documentation listed below check whether the parliament has a system or not for preparing and managing the text in digital format. If parliament does not produce the document, check the third column.**

	Have a system	Do not have a system	Document not produced by parliament
Minutes of committee meetings	☐	☐	☐
Committee reports	☐	☐	☐
Committee hearings	☐	☐	☐
Minutes of plenary sessions	☐	☐	☐
Plenary speeches and debates	☐	☐	☐
Plenary votes	☐	☐	☐

6. **For each type of documentation *for which there is a system in place, as indicated in question 5 above*, check below the status of XML for that system.**

	Uses XML	Planning or considering XML	Not planning to use XML
Minutes of committee meetings	☐	☐	☐
Committee reports	☐	☐	☐
Committee hearings	☐	☐	☐
Minutes of plenary sessions	☐	☐	☐
Plenary speeches and debates	☐	☐	☐
Plenary votes	☐	☐	☐

7. **If the parliament is using, or has tried to use XML as the standard for any of the types of documentation mentioned above, what challenges did it experience?** *(Check all that apply)*

☐ Difficulty in developing a DTD or Schema
☐ Difficulty in finding or developing software for authoring and editing
☐ Lack of staff knowledge and training
☐ Lack of financial resources
☐ Lack of management support
☐ Complexity of using XML
☐ User resistance
☐ Other *(please specify)*
☐ None

8. **Does the parliament make its documentation available in bulk for high speed downloading by those outside the parliament?**

☐ Yes
☐ Planning or considering
☐ No, and not planning or considering

9. **Is the parliament currently converting older paper documents into digital formats?**

☐ Yes
☐ Planning or considering
☐ No, and not planning or considering

10. For approximately how many years does the parliament have the following documents in digital format?

Document	Number of years available in DIGITAL format
Text of bills	
Plenary proceedings	

11. Has the parliament established a policy regarding the preservation of its documentation in digital format?

□ Yes
□ Planning or considering
□ No, and not planning or considering

12. Does the parliament currently maintain a digital archive for preserving parliamentary documentation in digital formats?

□ Yes
□ Planning or considering
□ No, and not planning or considering

Additional comments and good practices. In the box below, please add any **additional comments** the parliament wishes to make in response to any of the questions in this section. The parliament is also invited to describe briefly any **lessons learned or good practices** implemented in dealing with the topics covered in this section of the survey.

SECTION 4
LIBRARY AND RESEARCH SERVICES

Purpose. This section asks how ICT supports library and research services available to the parliament and its members and some of the characteristics of that support. It also asks about the availability of services to the public.

1. **Does the parliament have a library to serve its members?**

□ Yes**,** the parliament has a library => *Go to question 2*
□ Planning or considering
□ No, and not planning or considering
□ No, but one or more libraries outside the parliament are officially tasked to serve the members

If the parliament does not have its own library skip questions 2-21 and go to question 22

2. **For bicameral parliaments: Does the parliament have a library for each chamber or does one library serve both chambers?**

□ Each chamber has its own library
□ One library serves both chambers
□ Other arrangement *(please describe briefly)*

3. **Does the library have an automated system for managing library resources?**

□ Yes => *Go to question 4*
□ Planning or considering => *Go to question 5*
□ No, and not planning or considering => *Go to question 5*

4. **If yes, which of the following capabilities does the system include?** *(Check all that apply)*

□ Acquisition of monographs
□ Acquisition and claiming of serials
□ Circulation system
□ Cataloguing of acquisitions
□ Online catalog
□ Archiving of digital resources
□ e-resource management capabilities
□ Other *(please specify)*

Go to question 5

5. **Who provides ICT support for the library?** *(Check all that apply)*

□ Library technical staff
□ Librarians
□ Central ICT staff in parliament or the chamber
□ Government ICT staff outside the parliament or chamber
□ Outside contractors
□ Other *(please specify)*

6. **Is the library connected to an intranet that enables it to make its services available to members?**

□ Yes

□ Planning or considering
□ No, and not planning or considering

7. Does the library have its own website that is available to members and committees?
□ Yes
□ Planning or considering
□ No, and not planning or considering

8. Does the library's website provide access to the Internet and other resources based on issues of concern to the parliament?
□ Yes
□ Planning or considering
□ No, and not planning or considering

9. Can the library receive requests and questions from members electronically?
□ Yes
□ Planning or considering
□ No, and not planning or considering

10. Does the library use alerting services such as e-mail or RSS to send information automatically to members on their computers, cell phones, or other digital devices?
□ Yes
□ Planning or considering
□ No, and not planning or considering

11. Which of the following tools does the library use in its work to support the parliament? *(Check all that apply)*
□ Wikis
□ Blogs
□ Twitter
□ YouTube
□ Facebook or MySpace
□ Webcasts
□ None of the above

12. Does the library use any software to support collaboration among library staff? (Collaboration software allows users to share folders, documents, and other information resources with each other.)
□ Yes (please name the software)
□ Planning or considering
□ No, and not planning or considering

13. Does the library purchase subscriptions to online journals and databases that contain expert research and analysis on public policy issues such as energy, the environment, the economy, etc.?
□ Yes *=> Go to question 14*
□ Planning or considering *=> Go to question 15*
□ No, and not planning or considering *=> Go to question 15*

14. If yes, does the library participate in consortia to purchase these subscriptions?
□ Yes

□ Planning or considering
□ No, and not planning or considering
Go to question 15

15. Does the library maintain an archive of parliamentary documentation in digital formats?
□ Yes => *Go to question 16*
□ Planning or considering => *Go to question 17*
□ No, and not planning or considering => *Go to question 17*

16. If yes, which of the following documents does it archive in digital format? *(Check all that apply)*
□ Bills
□ Committee documents
□ Plenary documents
□ Background materials
□ Parliamentary research reports
□ Other *(please specify)*
Go to question 17

17. Does the mission of the library include serving the public as well as the parliament?
□ Yes => *Go to question 18*
□ Planning or considering => *Go to question 19*
□ No, and not planning or considering => *Go to question 19*

18. If yes, how are services made available to the public? *(Check all that apply)*
□ Public can visit the library in person and request assistance
□ Public can visit the library website
□ Public can ask questions of the library by phone
□ Public can ask questions of the library by e-mail
□ Other *(please specify)*
Go to question 19

19. Does the library participate in any formal networks for sharing information with other libraries or research services?
□ Yes => *Go to question 20*
□ Planning or considering => *Go to question 21*
□ No, and not planning or considering => *Go to question 21*

20. If yes, which ones? *(Check all that apply)*
□ APKN - Africa Parliamentary Knowledge Network - *Working Group on Libraries*
□ APLA - Association of Parliamentary Libraries of Australasia
□ APLAP - Association of Parliamentary Librarians of Asia and the Pacific
□ APLESA - Association of Parliamentary Libraries of Eastern and Southern Africa
□ ECPRD - European Centre for Parliamentary Research and Documentation - *Area of Interest "Parliamentary Research Services, Libraries and Archives"*
□ IFLA – International Federation of Library Associations and Institutions
□ Nordic Parliamentary Libraries
□ RIPALC - Red de Intercambio de los Parlamentos de América Latina y El Caribe - *Working Group on Libraries*
□ Other *(please specify)*
Go to question 21

21. **In what areas does the library contribute to the parliament's website?** *(Check all that apply)*
□ Design
□ Organization
□ Content
□ Update and maintenance
□ Usability testing
□ Other *(please specify)*
□ Does not contribute to the website

22. **Does the parliament have subject matter experts who provide research and/or analysis for members and committees?**
□ Yes => *Go to question 23*
□ Planning or considering => *Go to Additional comments*
□ No, and not planning or considering => *Go to Additional comments*

23. **Are the researchers or subject matter experts part of the library or part of a separate office?**
□ Part of the library
□ Part of a separate office
□ Other *(please specify)*

24. **Who provides ICT support for the research service?** *(Check all that apply)*
□ Library technical staff
□ Research service staff
□ Central ICT staff in parliament or the chamber
□ Government ICT staff outside the parliament or chamber
□ Outside contractors
□ Other *(please specify)*

25. **Can the research service receive requests and questions from members electronically?**
□ Yes
□ Planning or considering
□ No, and not planning or considering

26. **Does the research service use alerting services such as e-mail or RSS to send information automatically to members on their computers or other digital devices?**
□ Yes
□ Planning or considering
□ No, and not planning or considering

27. **Which of the following ICT-based systems or services are available to the researchers or subject matter experts?** *(Check all that apply)*
□ A Local Area Network (LAN)
□ A system for receiving, tracking, and responding to requests from members and committees
□ Access to the Internet
□ Subscriptions to online journals, newspapers, and databases
□ Software to support collaboration with other researchers or subject matter experts (Collaboration software allows users to share folders, documents, and other information resources with each other.)
□ None of the above

28. **Are the results of the research and analyses available to the public on the parliament or library website?**

□ Yes
□ Planning or considering
□ No, and not planning or considering

Go to Additional comments and good practices

Additional comments and good practices. In the box below, please add any **additional comments** the parliament wishes to make in response to any of the questions in this section. The parliament is also invited to describe briefly any **lessons learned or good practices** implemented in dealing with the topics covered in this section of the survey.

SECTION 5
PARLIAMENTARY WEBSITES

Purpose. This section asks about parliamentary websites available to members and the public. The purpose is to understand the goals, management, content, and features of these websites, and how ICT supports them. The final questions in this section ask about websites and intranet services available to members and staff only.

1. Does the parliament have a publicly available website?
□ Yes => *Go to question 2*
□ Planning or considering => *Go to question 20*
□ No, and not planning or considering => *Go to question 20*

If the parliament does not yet have a website, skip to question 20 in this section
If the parliament does have a website, continue with question 2

2. Who establishes the overall goals for the website? (*Check all that apply)*
□ The President/Speaker of the parliament or chamber
□ Parliamentary committee
□ Members
□ Specially designated committee or group
□ Secretary General
□ Director of ICT
□ Other *(please specify)*

3. Are there written policies for the website regarding the following? *(Check all that apply)*
□ Goals and objectives
□ Development plans
□ Content
□ Privacy
□ Access
□ User support
□ There are policies for these areas but they are not written
□ None of the above

4. Please check all the types of general information about parliament listed in (a) – (k) below that are included on the website of the parliament *(Check all that apply)*

a. Access to parliament
□ Information about access to the parliamentary building
□ Diagram of seating arrangements in the plenary and other official meeting rooms
□ Virtual 'Guided tour' of the parliamentary building
□ An explanation of the organization of the website
□ None of the above

b. History and role
□ Brief history of the parliament
□ Description of the role and legal responsibilities of the national legislature
□ Text of the country's Constitution and other founding documents relevant to the work of the parliament

□ None of the above

c. Functions, composition, and activities

□ Overview of the composition and functions of the national parliament
□ The budget and staffing of the parliament
□ Schedule of current and planned parliamentary activities and events
□ List of memberships in global and regional parliamentary assemblies
□ Annual report(s) of parliament, including plenary and non-plenary bodies
□ Statistics on the activities of the current and previous parliaments
□ Texts of official press releases of the parliament
□ None of the above

d. Elected leaders

□ Biodata and picture of the current and previous Presiding Officers
□ Brief description of the Presiding Officer's powers and prerogatives
□ Names of Deputy-Speakers /Vice-Presidents
□ None of the above

e. Parliamentary committees, commissions, and other non-plenary bodies

□ Complete list of non-plenary parliamentary bodies
□ Description of the mandate and terms of reference of each body
□ Description of the activities carried out by the body
□ Membership and names of Presiding Officer(s) of each body
□ Contact information (addresses, telephone and fax numbers, e-mail) of each body
□ Links to the websites of each body
□ Selection of links to websites and documents relevant to the work of the body
□ None of the above

f. Members of parliament

□ Up-to-date list of all current members of parliament
□ Publicly available biodata and photo
□ Constituency, party affiliation
□ Parliamentary committees and/or commissions
□ Link to personal website
□ Description of representative duties and functions of members
□ Contact information for each member of parliament including e-mail address
□ Activities of individual members of parliament, such as legislative proposals, questions, interpellations, motions, political declarations, voting record, etc.
□ Basic information concerning the status of a member of parliament, such as immunity, salaries and allowances, codes of conduct and ethics, etc.
□ Statistical and demographic data (current and historical) on MPs
□ List with biodata of previous members of parliament with dates served
□ None of the above

g. Political parties in parliament

□ List of all political parties represented in parliament
□ Link to each party's website
□ None of the above

h. Elections and electoral systems
□ Explanation of the election procedure for members
□ Link to the electoral commission website
□ Results of the last elections by party affiliation and constituency
□ Current composition of party groups and coalitions
□ Results of previous elections
□ None of the above

i. Administration of parliament
□ Diagram/organization chart and functions of the Secretariat of parliament
□ General descriptions of jobs in the legislature and a list of current vacancies
□ None of the above

j. Publications, documents, and information services
□ Description of the types and purposes of parliamentary publications
□ Information about how and where to obtain parliamentary publications
□ Information about parliamentary library, archive, and information services
□ None of the above

k. General links to websites
□ Presidency, government, Constitutional and Supreme Courts
□ Ministries and other national agencies
□ State/provincial legislatures
□ Inter-Parliamentary Union (IPU)
□ Other international, regional, and sub-regional parliamentary organizations
□ National parliaments of other countries
□ Other links of interest to parliament as the people's representative body
□ None of the above

5. Please check all the types of information about legislation, budget, and oversight activities listed in (a) – (f) below that are included on the website *(Check all that apply)*

a. General information
□ Today's business schedule in the parliament
□ Glossary of parliamentary terms and procedures
□ Overview of parliamentary procedure and routine order of business
□ Full text of the Standing Orders, Rules of Procedure or similar rule-setting documents
□ Chart or diagram showing how the business of parliament is conducted
□ None of the above

b. Legislation
□ Explanation of the legislative process
□ Text and status of all proposed legislation
□ Links to documentation related to proposed legislation
□ Text and final status of proposed legislation from previous years
□ Text and actions taken on all enacted legislation
□ A searchable database of current and previously proposed legislation
□ A searchable database of enacted legislation
□ None of the above

c. Budget/Public Financing

- ☐ Explanation of the budget and public financing processes
- ☐ Explanation of proposed budget/public financing for the next fiscal year
- ☐ Status of parliamentary review of the proposed budget/public financing activities
- ☐ Documentation from parliamentary bodies that review public financing activities
- ☐ Documentation regarding the budget from previous years
- ☐ A searchable database of documentation related to budget/public financing from the current and previous years
- ☐ None of the above

d. Oversight (Scrutiny) of the government by the parliament

- ☐ Explanation of oversight responsibilities and the activities of oversight bodies
- ☐ Summary and status of oversight activities
- ☐ Oversight documentation from current year
- ☐ Oversight documentation from previous years
- ☐ A searchable database of documentation related to oversight activities from the current and previous years
- ☐ None of the above

e. Activities of committees, commissions, and other non-plenary bodies

- ☐ Documentation produced by non-plenary bodies
- ☐ Documentation of non-plenary bodies from previous years
- ☐ Websites of non-plenary bodies
- ☐ Audio or video broadcast of meetings
- ☐ Audio or video webcast of meetings
- ☐ Audio or video archive of meetings
- ☐ None of the above

f. Plenary activities and documentation

- ☐ Documentation produced from plenary sessions
- ☐ Documentation from plenary sessions from previous years
- ☐ Audio or video broadcast of plenary meetings
- ☐ Audio or video webcast of plenary meetings
- ☐ Audio or video archive of plenary meetings
- ☐ None of the above

g. Please specify any other type of information available on the website:

6. Please check below the items that are hyperlinked directly to proposed legislation on the website *(Check all that apply)*

- ☐ Amendments (Plenary)
- ☐ Amendments (Committee)
- ☐ Committee actions
- ☐ Committee reports
- ☐ Committee votes
- ☐ Committee hearings
- ☐ Plenary actions
- ☐ Plenary speeches and debate
- ☐ Plenary votes
- ☐ Laws/statutes

□ Explanations of bills
□ Explanations of actions
□ Impact assessment of bills
□ Budget assessment of bills
□ News stories
□ Government positions or statements
□ All committee and plenary actions of other chamber (if bicameral parliament)
□ All committee and plenary documents of other chamber (if bicameral parliament)
□ None of the above
□ Other *(please specify)*

7. When are the following documents *usually available* on the website of the parliament after they have been prepared?

a. Agendas

	At least one week before action	At least two days before action	Same day of action	After action taken	Not applicable
Committee agenda	□	□	□	□	□
Plenary agenda	□	□	□	□	□

b. Legislation and plenary proceedings

	Same day of action	One day after action taken	One week after action taken	More than one week after action taken	Not applicable
Proposed legislation	□	□	□	□	□
Plenary proceedings	□	□	□	□	□

8. Which of the following tools for finding and viewing information are available on the website? *(Check all that apply)*

a. A search engine with the following features:

□ Can be used to find and view all parliamentary documentation and information
□ Searches for major elements, such as words in the text, status of legislation, and other components that may be required
□ Sorts results by various criteria
□ Is designed to be understandable to both novice and expert users
□ Links the results from searches of documentation to relevant audio and video records
□ None of the above

b. Broadcasting and webcasting capabilities:

□ Capacity to broadcast or webcast live meetings of any parliamentary body as well as parliamentary events and programs
□ An archive of broadcast or webcast meetings, events, and programs that permits on-demand viewing
□ None of the above

c. Alerting services for the following types of documentation:

□ Introduction of, and changes to, the status of legislation
□ Changes to the text of legislation
□ Members' activities

- ☐ Committee activities
- ☐ Oversight and scrutiny activities
- ☐ Plenary activities
- ☐ None of the above

d. Mobile services:

- ☐ Mobile services that enable members to access information and documentation as they are made available on the website
- ☐ Mobile services that enable the public to access information and documentation as they are made available on the website
- ☐ None of the above

e. Security and authentication:

- ☐ Secure services that enable MPs to receive, view, and exchange information and documentation on a confidential basis
- ☐ Authentication services, such as digital signatures that enable the authenticity of documentation and information to be verified by any user of the website
- ☐ None of the above

9. Which of the following tools and guidelines for design are used? *(Check all that apply)*

a. Usability **tools**

- ☐ Content and design are based on an understanding of needs of different user groups
- ☐ User testing and other usability methods employed to ensure that the design and use of the website is understandable by its intended audiences
- ☐ None of the above

b. Accessibility standards

- ☐ W3C standards or other applicable standards implemented to ensure that the website can be used by persons with disabilities
- ☐ No accessibility standards are used

10. How many official languages are recognized in the country?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ More than 3

11. In how many languages is the website available in full or in part?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ More than 3

12. Which of the following design elements are available to users? *(Check all that apply)*

- ☐ Frequently Asked Questions
- ☐ What's new on the website?
- ☐ Site map
- ☐ About this website (who owns it, manages it, update policy, etc.)
- ☐ Help function

- □ Whom to contact for questions about the operation of the website
- □ Guidance on how to search
- □ Support for multiple browsers
- □ None of the above
- □ Other *(please specify)*

13. Which of the following activities take place in the management of the website? *(Check all that apply)*

- □ IPU *Guidelines for Parliamentary Websites* are used in designing and maintaining the website
- □ Officials, members, officers, and staff participate in establishing goals
- □ Goals of the website are defined in writing
- □ Needs of the intended audiences are defined in writing
- □ Periodic evaluations of the website are conducted
- □ Oversight and management roles and responsibilities are defined in writing
- □ A team is established for ensuring that content is timely and accurate
- □ A high level of collaboration is established among the staff responsible for content and the staff responsible for technical systems
- □ None of the above

14. Is parliamentary documentation, such as the text of proposed legislation, committee schedules, and plenary proceedings, available to the public on the website as soon as it is available to members and officials?

- □ Always
- □ Most of the time
- □ Some of the time
- □ Rarely
- □ Never

15. Is explanatory material provided on the website to make the text of legislation and procedural steps as understandable as possible?

- □ Always
- □ Most of the time
- □ Some of the time
- □ Rarely
- □ Never

16. Is material that explains the context and assesses the possible impact of proposed legislation available on the website?

- □ Always
- □ Most of the time
- □ Some of the time
- □ Rarely
- □ Never

17. For <u>bicameral parliaments only</u>, which of the following are present? *(Check all that apply)*

- □ Each chamber has its own website
- □ A website or single page exists that introduces citizens to both chambers with links to the websites of each
- □ There is a prominent link on the websites of each individual chamber to the website of the other
- □ Information is provided that explains the legislative and oversight responsibilities and procedures of

both chambers.
- □ For functions that require action by both chambers, such as passing proposed legislation, the associated documentation reflects the activities and the decisions taken by both chambers.
- □ None of the above

18. What are the most important improvements made to the website in the last two years?

19. What are the most important improvements to the website planned for the next two years?

20. Does the parliament have a website or other intranet services for members and staff only?
- □ Yes => *Go to question 21*
- □ Planning or considering => *Go to Additional comments*
- □ No, and not planning or considering => *Go to Additional comments*

21. What information and services are available to members and staff only (and not available on the public website)? *(Check all that apply)*
- □ Proposed legislation available sooner than to public
- □ Draft documents
- □ Voting records
- □ Research and analytic reports
- □ Committee activities
- □ Explanations of bills
- □ Explanations of actions
- □ Impact assessment of bills
- □ Budget assessment of bills
- □ News stories
- □ Government positions or statements
- □ Tools to support work groups
- □ None of the above

Go to Additional comments

Additional comments and good practices. In the box below, please add any **additional comments** the parliament wishes to make in response to any of the questions in this section. The parliament is also invited to describe briefly any **lessons learned or good practices** implemented in dealing with the topics covered in this section of the survey.

SECTION 6
COMMUNICATION BETWEEN CITIZENS AND PARLIAMENT

Purpose. This section asks about the use of ICT-based systems for supporting communication between citizens and parliament. It also asks about some of the features of these systems and the experience of the parliament in using them.

1. Do Members use personal websites to communicate with citizens?
□ Yes, most do => *Go to question 2*
□ Yes, some do => *Go to question 2*
□ Planning or considering. => *Go to question 3*
□ No, and not planning or considering. => *Go to question 3*
□ Unknown => *Go to question 3*

2. If yes, for what purposes do they use them? *(Check all that apply)*
□ Communicating information about the work of parliament
□ Communicating the member's personal views
□ Seeking comments and opinions from the public
□ Unknown
□ Other *(please specify)*
Go to question 3

3. Do Members use e-mail to communicate with citizens?
□ Yes, most do => *Go to question 4*
□ Yes, some do => *Go to question 4*
□ Planning or considering => *Go to question 6*
□ No, and not planning or considering => *Go to question 6*
□ Unknown => *Go to question 6*

4. If yes, do members respond to e-mail messages from citizens?
□ Yes, most do at least some of the time
□ Yes, some do at least some of the time
□ No, but planning or considering
□ No, and not planning or considering
□ Unknown

5. Is there an automated e-mail management system in use supporting the handling and answering of incoming e-mail?
□ Yes
□ Planning or considering
□ No, and not planning or considering
Go to question 6

6. Do Committees use websites to communicate with citizens?
□ Yes, most do => *Go to question 7*
□ Yes, some do => *Go to question 7*
□ Planning or considering => *Go to question 8*
□ No, and not planning or considering => *Go to question 8*

7. If yes, for what purposes do they use them? *(Check all that apply)*

□ Communicating information about the work of parliament
□ Communicating information about the work of the committee
□ Communicating the committee's position on issues
□ Seeking comments and opinions from the public
□ Other *(please specify)*

Go to question 8

8. Do committees use e-mail to communicate with citizens?

□ Yes, most do => *Go to question 9*
□ Yes, some do => *Go to question 9*
□ Planning or considering => *Go to question 10*
□ No, and not planning or considering => *Go to question 10*

9. If yes, do committees respond to e-mail messages from citizens?

□ Yes, most do at least some of the time
□ Yes, some do at least some of the time
□ Planning or considering
□ No, and not planning or considering

Go to question 10

10. Beside personal e-mails and websites, which of the following methods for communicating with citizens is the parliament *currently using* or *planning or considering using?*

Method of communication	Currently using	Planning or considering	Not planning
e-Petition	□	□	□
e-Consultation on bills	□	□	□
e-Consultation on issues	□	□	□
Online discussion group	□	□	□
Blogs	□	□	□
Videos within e-mails	□	□	□
Webcasting of committee meetings	□	□	□
Parliament radio channel	□	□	□
Radio programs (on other radio channels)	□	□	□
Webcasting of plenary sessions	□	□	□
Webcasting of special programs	□	□	□
Satellite channel	□	□	□
Parliament Web TV	□	□	□
Parliament TV channel(s) (broadcast TV)	□	□	□
TV programs (on other TV channels)	□	□	□
YouTube or other video sharing service	□	□	□
Twitter	□	□	□
Social networking sites such as Facebook or MySpace	□	□	□
Online polls	□	□	□
Alerting services	□	□	□

11. What are the three (3) most important objectives in ICT-based methods of communication, including of e-mail and websites? *(Check **only the three most important** objectives)*

□ Engage more citizens in the political process
□ Inform citizens about policy issues and proposed legislation
□ Reach out to minorities
□ Explain what the parliament does
□ Facilitate an exchange of views
□ Enhance the legitimacy of the legislative process
□ Explain proposed legislation
□ Engage young people
□ Include citizens in the decision making process
□ Improve policy and legislation
□ Conduct a poll of citizens opinions on issues or legislation
□ Do not use or not planning to use any of these methods
□ Other *(please specify)*

12. Has the parliament conducted any formal or informal assessments of the value of any of the ICT-based methods of communication? ***(e.g. are they useful in supporting the work of parliament or in increasing communication between citizens and parliament, etc.?)***

□ Yes
□ Planning or considering
□ No, and not planning or considering

13. What challenges has the parliament encountered in using communication technologies? *(Check all that apply)*

□ Members are not familiar with these technologies
□ Citizens do not have access to the Internet
□ Citizens are not familiar with these technologies
□ Too much e-mail is received
□ Citizens are not familiar with the legislative process
□ Online discussions and consultations are dominated by a few
□ Too much effort and resources are required to implement these systems
□ Members do not have specific constituencies
□ Cannot judge how representative the responses are
□ None of the above
□ Other *(please specify)*

14. Does the parliament use any ICT-based methods to communicate specifically with young people?

□ Yes => *Go to question 15*
□ Planning or considering => *Go to question 16*
□ No, and not planning or considering => *Go to question 16*

15. If yes, what ICT-based methods does the parliament use? *(Check all that apply)*

□ A website or sections of a website oriented to young people
□ Interactive games
□ Social media (Facebook, MySpace, etc)
□ Broadcast TV channel or programs
□ Webcasts
□ WebTV

□ Radio programs or channels
□ Twitter
□ Blogs
□ Discussion groups
□ Online polls
□ Other *(please specify)*
Go to question 16

16. Is the parliament using mobile technologies to communicate with citizens?
□ Yes => *Go to question 17*
□ Planning or considering => *Go to question 20*
□ No, and not planning or considering=> *Go to question 20*

17. If yes, has the parliament developed specific applications for mobile technologies/devices to communicate with citizens?
□ Yes => *Go to question 18*
□ Planning or considering => *Go to question 20*
□ No, and not planning or considering => *Go to question 20*

18. For which devices? *(Check all that apply)*
□ Cell phones
□ Smart phones
□ Tablets
□ Laptop PCs
□ Other *(Please list)*

19. For what purposes? (*Check all that apply)*
□ Alerts
□ Documents
□ Access to information
□ Solicit views
□ News
□ Other *(Please list)*

20. Is the parliament live video streaming parliamentary debates to mobile devices?
□ Yes => *Go to question 21*
□ Planning or considering => *Go to question 22*
□ No, and not planning or considering => *Go to question 22*

21. If yes, please indicate what application is the parliament using.
Go to question 22

22. Does the parliament have a policy regarding the retention of electronic communications received from citizens?
□ Yes
□ Planning or considering
□ No, and not planning or considering

23. Does the parliament use any special tools which help to collect citizens' comments and categorize them more efficiently?

- □ Yes, always or almost always
- □ Sometimes
- □ Planning or considering
- □ No, and not planning or considering

24. **What has been the trend in usage by citizens of the various ICT-based methods for communicating with parliament since they have been introduced?**

- □ Increasing usage
- □ Decreasing usage
- □ Usage has remained steady
- □ Citizens do not use ICT-based methods to communicate with parliament
- □ Other *(please specify)*

Additional comments and good practices. In the box below, please add any **additional comments** the parliament wishes to make in response to any of the questions in this section. The parliament is also invited to describe briefly any **lessons learned or good practices** implemented in dealing with the topics covered in this section of the survey.

SECTION 7
INTER-PARLIAMENTARY COOPERATION

Purpose. This section asks about parliaments' participation in formal networks and inter-parliamentary collaboration and assistance.

1. **Does the parliament's staff participate in any of the following formal networks for the exchange of information and experiences regarding the use of ICT?** *(Check all that apply)*

□ APKN – Africa Parliamentary Knowledge Network
□ ECPRD - European Centre for Parliamentary Research and Documentation
□ RIPALC - Red de Intercambio de los Parlamentos de America Latina y el Caribe
□ Other *(please specify)*
□ None

SUPPORT PROVIDED TO OTHER PARLIAMENTS

2. **Does the parliament currently provide support/assistance to other parliaments to help them strengthen their legislative, oversight, representational, or administrative capacities?**

□ Yes => *Go to question 3*
□ Willing to provide support but not currently providing it => *Go to question 4*
□ No, and not planning or considering => *Go to question 4*

3. **Does the parliament have a committee of members that oversees this activity?**

□ Yes
□ Planning or considering
□ No, and not planning or considering

Go to question 4

4. **Does the parliament currently provide support/assistance to other parliaments to help develop or enhance their use of ICT?**

□ Yes => *Go to question 5*
□ Willing to provide support but currently not providing it => *Go to question 7*
□ No, and not planning or considering => *Go to question 8*

5. **In what areas does the parliament currently provide support/assistance to other parliaments to help develop or enhance their use of ICT?** *(Check all that apply)*

ICT planning	□
ICT management	□
Hardware/software	□
Network operations	□
Application development	□
Staff development and training	□
Document management systems	□
Document standards	□
ICT services for members	□
ICT services for committees	□
ICT services for plenary	□
Websites	□

Library and research services	☐
Communication with citizens	☐
Other *(please specify)*	☐

6. **To which parliaments or parliamentary assemblies does your parliament provide support/assistance to help develop or enhance their use of ICT?**
Go to question 8

7. **In what areas would the parliament be willing to provide support/assistance to other parliaments to help develop or enhance their use of ICT?** *(Check all that apply)*

ICT planning	☐
ICT management	☐
Hardware/software	☐
Network operations	☐
Application development	☐
Staff development and training	☐
Document management systems	☐
Document standards	☐
ICT services for members	☐
ICT services for committees	☐
ICT services for plenary	☐
Websites	☐
Library and research services	☐
Communication with citizens	☐
Other *(please specify)*	☐

Go to question 8

SUPPORT/ASSISTANCE RECEIVED FROM OTHER PARLIAMENTS OR OUTSIDE ORGANIZATIONS

8. **Does the parliament currently receive support/assistance from other parliaments to help it strengthen its legislative, oversight, representational, or administrative capacities?**

☐ Yes
☐ No, but would like to receive support
☐ No and not planning or considering

9. **Does the parliament currently receive support/assistance from other parliaments or outside organizations to help develop or enhance its use of ICT?**

☐ Yes => *Go to question 10*
☐ No, but would like to receive support => *Go to question 11*
☐ No and not planning or considering => *Go to additional comments*

10. **In what areas does the parliament currently receive support from other parliaments or outside organizations to help develop or enhance its use of ICT?**

	Currently receive support from other parliaments	Currently receive support from outside organizations
ICT planning	☐	☐
ICT management	☐	☐
Hardware/software	☐	☐
Network operations	☐	☐
Application development	☐	☐
Staff development and training	☐	☐
Document management systems	☐	☐
Document standards	☐	☐
ICT services for members	☐	☐
ICT services for committees	☐	☐
ICT services for plenary	☐	☐
Websites	☐	☐
Library and research services	☐	☐
Communication with citizens	☐	☐
Other *(please specify)*	☐	☐

Go to question additional comments

11. **In what areas would the parliament <u>like to receive support</u> from other parliaments or outside organizations to help develop or enhance its use of ICT?**

ICT planning	☐
ICT management	☐
Hardware/software	☐
Network operations	☐
Application development	☐
Staff development and training	☐
Document management systems	☐
Document standards	☐
ICT services for members	☐
ICT services for committees	☐
ICT services for plenary	☐
Websites	☐
Library and research services	☐
Communication with citizens	☐
Other *(please specify)*	☐

Go to question additional comments

Additional comments and good practices. In the box below, please add any **additional comments** the parliament wishes to make in response to any of the questions in this section. The parliament is also invited to describe briefly any **lessons learned or good practices** it has implemented in dealing with the topics covered in this section of the survey.

USD: 45.00
Sales n° E.12.II.H.5
ST/ESA/PAD/SER.E/176
ISBN: 978-92-1-123193-9