



Inter-Parliamentary Union
For democracy. For everyone.

World e-Parliament Report 2022

Parliaments after the pandemic



© Inter-Parliamentary Union, 2022

For personal and non-commercial use, all or parts of this publication may be reproduced on condition that copyright and source indications are also copied and no modifications are made. Please inform the Inter-Parliamentary Union on the usage of the publication content.

ISBN 978-92-9142-856-4

Cover picture: Secretary-General of the Parliament of Fiji, Ms. Jeanette Emberson, during a virtual hybrid sitting of Parliament in June 2021. © Parliament of Fiji

Design and layout by Philippe Boisson, Graphisme

Printed in France by Imprimerie Courand et Associés

Contents

Foreword	3
Acknowledgements	4
Executive summary	5
Introduction	10
The parliamentary response to the pandemic	12
The virtual parliament	13
New ways of working	14
Strengthening resilience	15
Public participation	16
The new strategic landscape	19
Modernization and digital transformation	20
Digital strategy	20
The rise of “Parliament as a Service”	21
Cybersecurity	21
Lasting change in parliamentary processes	23
Changing procedure to enable virtual sittings	23
Voting methods	25
Remote working for parliamentary staff	26
Staffing	26
Future priorities for parliaments	28
Learning from the pandemic	29
Ensuring the continuity of parliament	29
Strengthening digital capabilities	29
Sustaining innovation	30
Recommendations	30
Appendices	32
Appendix A – Parliaments holding remote sessions	32
Appendix B – Parliaments taking part in the research	34

Appendix C – Research design	35
Survey of parliaments	35
Focus groups	37
Appendix D – The World e-Parliament Report series	37

Foreword

The publication of the 2022 World e-Parliament Report follows a period of great disruption caused by the Covid-19 pandemic. Whereas the previous 2020 report captured parliaments' immediate responses, this edition reflects on where parliaments are now and what lessons have been learned for the future.

The report shows a rapid acceleration in the use of digital tools over the last two years and paints a picture of parliaments changed by the pandemic. They are more innovative and resilient, and there is greater recognition of the importance of a digital strategy. Parliaments have become more virtual; many can now sit remotely, staff are able to work from home, and data and applications are hosted in the cloud. Digital tools are now deeply embedded in the fabric of parliaments and are more accepted and trusted by members.

A strong message from previous reports has been the importance of inter-parliamentary collaboration and support. This report shows how the IPU's Centre for Innovation in Parliament (CIP) has been a vital connector and catalyst for supporting digital transformation over the course of the crisis.

This report recommends that parliaments learn from their own and others' experiences of the pandemic through a formal inquiry and proposes that legal frameworks are made ready for any future crises. It is time for parliaments to grasp the opportunities of digital transformation by ensuring that this is a focus for senior leadership and members.



Martin Chungong
Secretary General
Inter-Parliamentary Union

Acknowledgements

This report has been produced by the IPU's CIP. It was written by Dr. Andy Williamson with the considerable support and assistance of Andy Richardson and Avinash Bikha. The CIP is grateful to the hosts and members of the CIP hubs for their support, and in particular to Fabiola Barahona of the Chamber of Deputies of Chile for moderating our Spanish-language focus group.

We are, as always, grateful for the support and assistance of the Association of Secretaries General of Parliaments (ASGP). We are indebted to the many parliamentary staff who completed the survey, who took part in the focus groups and who have shared their knowledge and experiences with the CIP over the course of the last two years. We would also like to acknowledge the parliamentarians, parliamentary staff, academics and civil society organizations who contributed to the World e-Parliament Conference, held virtually in June 2021.



INTER PARES
Parliaments in Partnership
EU Global Project to Strengthen the Capacity of Parliaments



This publication has been produced with the financial support of the European Union, in partnership with the International Institute for Democracy and Electoral Assistance (International IDEA), as part of INTER PARES–Parliaments in Partnership, the European Union's Global Project to Strengthen the Capacity of Parliaments. Its contents are the sole responsibility of the Inter-Parliamentary Union and do not necessarily reflect the views of the European Union.

Executive summary

The 2020 World e-Parliament Report captured a picture of parliaments going through a phase of enforced innovation and learning to rapidly embed new ways of working supported by information and communications technologies (ICT). The research behind this 2022 report set out to understand if – and, if so, how – parliaments have been changed by the Covid-19 pandemic, and to identify ways in which they are continuing to modernize and build resilience. It highlights the strategic gains already realized and reinforces the earlier finding that the pandemic was a catalyst for new and transformational digital practices. As parliaments return to more familiar, less crisis-driven ways of operating, many remain changed by their experiences. On a more negative note, the pandemic has also exposed the challenges faced by parliaments that lack the resources to deploy new methods of working or to invest in complex digital platforms and services.

Parliaments have been changed by their experiences of the pandemic.

The research, conducted during 2022, was based on a survey of 123 parliaments and focus groups with staff from 37 parliaments. It found that, far from being temporary, the impact of the Covid-19 pandemic has been a catalyst for change, leading to the potential for ongoing and incremental improvements in parliamentary functioning. Innovation, strong leadership and a forward-focused vision are essential to sustaining this change.

Digital tools have shown themselves to be vital for parliaments that want to become more responsive to the conditions around them. Those parliaments that chose to innovate have dramatically changed how they function, embracing new technologies and remote working. This has helped them to keep functioning through the crisis, becoming more efficient and effective, and realizing rapid gains in terms of their use of digital tools. Innovation has gone hand in hand with peer exchanges and connections with other parliaments during this time.

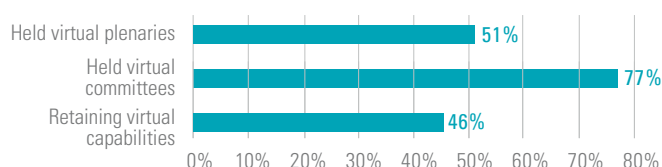
Parliaments have become more flexible, more resilient and more innovative.

Eighty-seven per cent of the parliaments surveyed say that they have increased their resilience and that digital technologies have gained in importance and are seen as strategic to the future of parliament. Eighty per cent of parliaments say digital tools are now more trusted by members and 88% agree that members are increasingly receptive to new ways of working. Parliamentary culture and ways of working have, for many, changed permanently. Flexible working options have remained and innovation has a stronger focus, with 84% of parliaments becoming more innovative. For those parliaments that did not respond to the pandemic, little if anything has changed. They are at risk of being left behind and of failing to learn lessons for their future resilience.

Over half of parliaments have held a virtual plenary and more than three quarters a remote committee meeting.

ICT had already been making steady and significant inroads but the pandemic has accelerated this trend, more strongly embedding digital technologies in the fabric of parliaments. Since March 2020, over half of parliaments (51%) have held a virtual plenary and more than three quarters (77%) a virtual committee meeting. Forty-six per cent intend to retain at least some virtual capabilities and the virtual parliament will continue to evolve, particularly for committees.

Figure 1. Virtual parliaments since March 2020 (n=123)



Parliaments want to return to physical meetings, and this is happening as the pandemic subsides. But even here parliaments have changed, not least in the sense that they can respond to a crisis far more quickly than before. The use of remote tools for committees was evident before the pandemic and this has accelerated dramatically. This trend is likely to continue to evolve, since these technologies offer benefits to parliaments with fewer of the downsides seen with virtual plenaries.

Remote working for staff has become more accepted and is seen as beneficial and part of a stronger focus on work/life balance and efficiency. Looking ahead, the virtual parliament, modernizing ICT, and digital transformation are the top priorities. This is highlighted by greater use of the cloud and Software as a Service (SaaS), as well as by changing patterns of ICT management, procurement and support. According to the participants in the research, these strategic objectives are supported by the need for remote working, strong cybersecurity, greater public participation, more user training and digital workflows (such as those supporting legislative management and remote voting).

Reflecting on these findings, the report offers five recommendations for parliaments to act on at the highest level. These require political consensus and the leadership of senior management.

1. **Carry out a formal inquiry to learn lessons** from the pandemic and to prepare the parliament for the future:
 - 1.1 Assess the parliamentary response to the pandemic.
 - 1.2 Review procedures, including how the work of members has changed and the impact on public participation.
 - 1.3 Review project procurement and systems development practices.
 - 1.4 Review remote working practices.
 - 1.5 Gather evidence from a wide range of sources, including other parliaments.
 - 1.6 Share the findings of the inquiry with other parliaments.
2. **Ensure that the legal framework, including the constitution, legislation and rules of procedure, is reviewed and, where necessary, amended** with a focus on building the parliament's resilience to future emergencies.
3. **Undertake a digital capability assessment** and a review of business continuity planning.
4. **Review and update the parliament's digital strategy/strategic plan** to take account of the need for a more holistic and high-level approach to ICT, considering the overall trends in parliamentary ICT and the need to be prepared for future emergencies.
5. **Delegate senior staff to participate in parliamentary knowledge exchanges**, such as through the CIP, to learn from fellow parliaments and share experiences with peers.



Plenary hall of the Stortinget.
© Parliament of Norway

Figures

Figure 1.	Virtual parliaments since March 2020 (n=123)	6
Figure 2.	Parliament has become more innovative (n=108)	12
Figure 3.	Remote plenary and committee meetings (n=123 [2022], 116 [2020], 64 [June 2020])	13
Figure 4.	Members more receptive to new ways of working and more trusting of ICT (n=112)	14
Figure 5.	Public engagement with parliament (n=117)	16
Figure 6.	Interest in vs. opportunities for public participation (n=116)	17
Figure 7.	The importance of public engagement for parliaments (n=116)	18
Figure 8.	How modernization has been affected by the pandemic (n=114)	20
Figure 9.	Voting methods (n=121)	25
Figure 10.	Top priorities for parliaments by thematic area (n=337)	28
Figure 11.	Survey responses by type of parliamentary chamber (n=123)	36
Figure 12.	Geographic distribution of survey respondents (n=123)	36
Figure 13.	Income levels of survey respondents (n=123)	36

Tables

Table 1.	Type of virtual sitting (n=123)	13
Table 2.	Virtual sittings by region (n=123)	14
Table 3.	Business continuity and resilience (n=113)	15
Table 4.	Members' contact with the public (n=117)	17
Table 5.	Changes required to introduce remote working (WEPR 2020; n=73)	23
Table 6.	Parliamentary rules have been modified (n=122)	24



Introduction

Welcome to the seventh edition of the World e-Parliament Report, which looks at the Covid-19 pandemic's lasting impact on parliaments and builds on the early lessons from the pandemic that formed part of the 2020 report. Rather than giving the traditionally broad assessment of parliamentary ICT, this report has an intentionally narrower focus. It seeks to capture the impact of the significant disruption that parliaments have experienced in recent times – which has led to exceptional levels of rapid innovation and modernization. The 2020 report, published in mid-2021, noted that, one year on from the beginning of the pandemic, parliaments had started adapting and adopting some of the strategic gains that had arisen. It suggested that, as challenging as the situation was, the pandemic could act as a catalyst for new and transformational digital practices to emerge. The challenge, the report stated, would be to consolidate this new baseline and build from there.

This 2022 report explores whether this has occurred and, if so, how parliaments have been changed by the Covid-19 pandemic, and whether they are more resilient and more innovative¹ as a result. It considers the impact of digital technologies on the way parliaments work, not only in terms of its benefits but also how modernization can challenge tradition, transform procedure and impact on resources. This report is aimed at all parliaments: those that have embraced digital innovation, those that are taking tentative steps along the road to a more digital future and those that are yet to do so.

The first World e-Parliament Report was published in 2008 and, barring a brief break in 2014, a new report has been released every two years since. The series has always focused on the relationship between parliaments and ICT although, by the time the fifth edition was published in 2018, it had become clear that the e-Parliament concept was as much about governance and strategy as technology and communications.

An indigenous woman connecting remotely via video conference to a public hearing in 2021. © Brazilian Chamber of Deputies

¹ Innovation refers to the capacity to do things differently and introduce new ways of working. It does not necessarily imply being at the "leading edge", but rather taking steps forward so that innovation happens in context.

When it was launched, the World e-Parliament Report was a pioneering attempt to identify and describe parliamentary efforts to utilize ICT. The 2008 report established an authoritative baseline and, since then, the series has generated a narrative for parliaments around their use of digital tools and technologies. Then, as now, the research was undertaken to not just understand what was happening, but also to advance the state of knowledge among parliaments, and to promote international debate and cooperation. As a result, parliaments can now evaluate their own use of ICT against an international set of data, identifying strengths and opportunities for improvement.

This report is based on research by the IPU's CIP, including a survey of 123 parliaments and focus groups involving senior staff from 37 parliaments. It draws on a range of secondary data sources, including the virtual World e-Parliament Conference in June 2021, as well as findings from a range of webinars held by the CIP in 2021 and 2022, and from informal exchanges between the CIP project team and parliamentary staff. Details of the survey design and sample, along with a list of participating parliaments, can be found in the appendices.

The parliamentary response to the pandemic

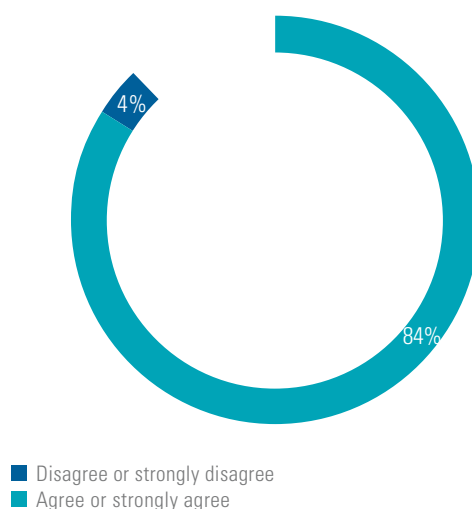
Digital tools are more important, more trusted and viewed more strategically.

Few parliaments were prepared for the scale or duration of the disruption caused by the Covid-19 pandemic, and many found that their planning for such eventualities did not go far enough. As parliaments responded to the unfolding crisis, ICT became more critical, enabling flexible and remote working in ways that had never previously been envisaged. This changed not only the technologies being used and the requirements for managing them, but also the working practices of parliaments. Those institutions that had already embarked on modernization and transformation through digital methods were at an advantage during the early stages of the pandemic.

The research for this report shows how parliaments have realized rapid gains in terms of their use of digital tools. It also underscores how they have evolved in their approach to parliamentary sittings, resilience and strategic planning: during the pandemic, 84% of parliaments introduced new systems that were previously unplanned. Parliaments have become more flexible in the way they work, more resilient in their procedures and more innovative in the way they think about the future. While some parliaments suspended business until in-person sittings became possible again,

others dramatically changed how they worked, embracing new technologies and remote sittings in order to keep functioning through the crisis. For these parliaments, the pandemic has left a legacy of innovation. However, for those that did not respond, little if anything has changed. They are at risk of being left behind in the e-Parliament movement, and of failing to learn lessons for their future resilience.

Figure 2. Parliament has become more innovative (n=108)



Parliamentarians during a plenary session in 2022. © Chamber of Deputies of Chile



There is clear evidence that initial gains are being consolidated and, in many cases, built upon. For most parliaments taking part in this research, resilience has improved, and digital tools are now more important, more trusted and viewed more strategically. Processes have changed permanently, flexible working options remain and innovation has a stronger focus. Parliaments report that peer exchanges have been vital during this time.

Eighty-four per cent of parliaments have become more innovative.

Although the pace of change has been rapid, not all of these changes are surprising: ICT was already making serious inroads into the operational capabilities of parliaments via legislative management systems, voting systems, back-office support, and public-facing open data, web content and social media.

The virtual parliament

Productive meetings and parliamentary proceedings can take place with members attending remotely. Providing select committees with more opportunities to directly question ministers improves scrutiny. Remote working and remote proceedings are a valuable tool for business continuity, and remote proceedings can enable select committees to meet more often.

New Zealand Parliament

With parliaments at times unable to meet physically during the crisis, some suspended sittings altogether. Others, however, found alternative ways of working by reducing numbers and introducing physical distancing measures (Ghana and Ireland), by suspending parliament and creating a special virtual committee (New Zealand) or by using virtual tools to create fully remote or hybrid chambers (Bhutan, Brazil, Mauritius, the United Kingdom and others). Over half of the parliaments surveyed (51%) have held a virtual plenary and more than three quarters (77%) a virtual committee meeting.

We were mostly able to use the systems, rules and facilities we already had to adjust to the measures taken by the government to protect public health during the pandemic. For example, we expanded the parliamentary chamber to the rooms on both sides of the main chamber so members of parliament could keep some distance from each other, and we decreased the number of votes in chamber as much as was allowed by the standing orders of the Althingi.

The Althingi, Iceland

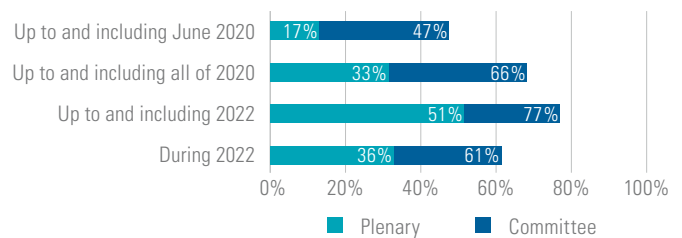
We were mostly working from home, [starting with] committee meetings and then we have also carried out a few plenary sessions online using Zoom.

National Assembly, Bhutan

The previous World e-Parliament Report noted that, between March and June 2020, 14% of parliaments were not sitting and 36% were holding reduced meetings. At this point in

time, 17% had adopted virtual plenaries and 47% were holding virtual committee meetings. By the end of 2020, these figures had risen to 33% and 66% respectively. Hybrid sittings, where some members were present but the majority attended virtually, were the most common method used at this time.

Figure 3. Remote plenary and committee meetings (n=123 [2022], 116 [2020], 64 [June 2020])



As Figure 3 shows, these numbers have now increased even further, with 51% of parliaments having held a virtual plenary sitting and 77% virtual committee meetings since March 2020 (a list of these parliaments can be found in Appendix A).

Fifty-one per cent of parliaments have held a virtual plenary sitting and 77% a remote committee meeting.

Parliaments have expressed a desire to return to face-to-face plenaries, with remote tools being more suited to exceptional cases. This is reflected in fewer parliaments holding virtual sittings in 2022, although the numbers remain high, with 36% of parliaments holding a virtual plenary sitting and 61% virtual committee meetings. Forty-six per cent of respondents nevertheless report that they will retain some form of virtual functionality into the future. The majority of parliaments holding virtual sessions used a hybrid model, but one third held both fully remote and hybrid committee meetings and 12% held both types of remote plenary (see Table 1).

When I'm looking when MPs are connecting every week, the connections are 96, 97, 98 MPs, and that's quite normal from 100 [members of parliament].

Parliament of Latvia

Table 1. Type of virtual sitting (n=123)

Virtual mode	Plenary	Committee
Hybrid	40%	67%
Remote	17%	39%
Both	12%	33%

Looking at geographical trends (Table 2), parliaments in the Americas are most likely to have become virtual: 72% of respondents from this region have held virtual plenaries and all have held virtual committee meetings. Fewer parliaments from Asia have held virtual plenaries (26%), most often because of constitutional or legal restrictions preventing them from doing so. In contrast, almost three quarters of Asian parliaments report having held virtual committee meetings. The use of virtual methods shows little variation based on income, with 64% of parliaments in low-income countries having done so versus 53% of those in high-income countries.

Likewise, the size of the parliament was not a major factor in determining whether virtual methods were used.

Table 2. Virtual sittings by region (n=123)

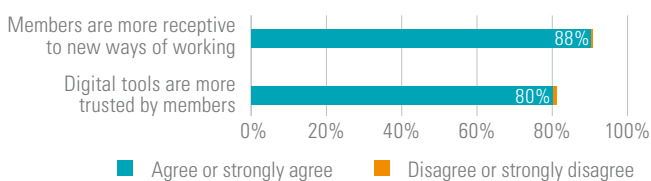
Region	Plenary	Committee
Americas	72%	100%
Asia	26%	74%
Europe	45%	79%
Middle East and North Africa	58%	67%
Pacific	50%	50%
Sub-Saharan Africa	61%	71%

New ways of working

In committees, the use of remote tools was becoming evident before the pandemic, with some parliaments allowing witnesses to appear remotely. This has accelerated dramatically and expanded to members sitting remotely too. This trend is likely to continue to evolve, since these technologies offer many benefits to parliaments with fewer of the downsides seen with virtual plenaries. Importantly, the pandemic and parliaments' responses to it have raised the profile of digital tools and increased trust and acceptance, with 88% of parliaments agreeing that members are more receptive to new ways of working and 80% saying that digital tools are now more trusted by members.

The use of remote technologies in committee hearings is likely to continue to evolve, since they offer many benefits to parliaments.

Figure 4. Members more receptive to new ways of working and more trusting of ICT (n=112)



Remote working for staff has become more accepted and is now seen as beneficial and part of a stronger focus on work/life balance and efficiency. This trend is reflected in greater use of cloud technologies and SaaS, as well as in changing patterns of ICT procurement and support.

The research shows parliaments going through a phase of embedding innovations emerging from the Covid-19 pandemic and institutionalizing new ways of working. They do not see the impact of the pandemic as temporary; rather, it has been a catalyst for change that will lead to ongoing and incremental improvements in parliamentary functioning. Innovation and strong leadership are vital to sustaining this change.

At a technical level, the systems that support parliaments are now more virtual and more likely to be cloud-based, and recognition for innovation has increased. Adaptation has been fast and iterative, with parliaments turning to more agile

ways of working. This rapid transformation through enforced innovation has helped to make participation in parliaments more flexible and created opportunities for flexible working for staff and members.

The systems that support parliaments are more virtual and more likely to be cloud-based.

Above all, most parliaments are now more forward-looking and the level of innovation witnessed has been possible because ICT is at the heart of the modern parliament, large or small.

ICT is no longer a support service but rather a part of core business.

National Assembly, Malawi

The primary consideration at the start of any crisis is to keep functioning as closely as possible to normal. The National Assembly of Bahrain is typical of parliaments that saw the value of ICT as a way to continue working:

In order to guarantee business continuity during times of crisis, the best strategy and proper planning involved using digital transformation and artificial intelligence applications to achieve the digital parliament.

National Assembly, Bahrain

The experiences of the pandemic have inherently changed the working culture of many of the parliaments that participated in this research. On a more negative note, the pandemic has also exposed the challenges faced by parliaments that lack the resources to deploy new methods of working:

The pandemic has handicapped the activities of parliament, and since our chamber did not have equipment to work remotely, we encountered several delays in passing laws.

National Assembly, Burundi

Parliaments want to return to physical meetings and this will increasingly happen as the pandemic subsides. But even here, parliaments have changed, not least in the sense that they can respond to a challenging situation far more quickly than before. Alongside the growth of remote working, the pandemic has reinforced the importance of meeting in person and, in particular, the need for members to be physically present in parliament. Digital tools can supplement and enhance traditional parliamentary functions but not replace them entirely.

Even though modern remote-session solutions can do their job, they are not a real substitute for human contact.

Parliament of Estonia

The rate of change has accelerated, and digital transformation requires significant investment in systems and the skills to manage and use such things as cloud-based systems and

SaaS solutions. The Chamber of Deputies of Italy observes that ICT “is an essential resource in parliament” and the Chamber of Deputies of Paraguay claims that ICT has emerged from the pandemic playing “a leading role never imagined before”.

Technology is now enmeshed in all work processes; change is constant and needs to be part of long-term parliamentary planning.

Houses of the Oireachtas, Ireland

The typical parliament of 2022 looks and works differently to the parliament of 2019. While the research for this report suggests that the initial pace of innovation has slowed, the advances are significant and lasting. Many parliaments – from Cambodia and Chile to Kenya and the Philippines – report that the pandemic was a catalyst for rapid and accelerated digital transformation. These waves of change have swept through parliaments large and small, with Bhutan, Mauritius and Seychelles responding as rapidly and dynamically as Brazil, the European Parliament and South Africa. This innovation and transformation has led to the virtualization of parliamentary proceedings at an unprecedented rate. And even where procedural changes have been temporary, significant lessons have been learned for the future and lasting changes in system functionality remain, creating opportunities for parliaments.

The typical parliament of 2022 looks and works differently to the parliament of 2019.

Strengthening resilience

The sense of our own vulnerability was increased by the pandemic ... so resilience has come to the top of the agenda.

Austrian Parliament

Resilience is the ability of an organization to withstand and recover from disruption and to be able to continue to function. This is something that has been put to the test over the last two years, not least in terms of the effectiveness of parliaments’ business continuity plans (BCPs). While this planning is a key aspect of resilience, one parliament noted that its BCP was “not fit for purpose”. Fifty-nine per cent of respondents say that their existing BCP supported their pandemic response, but 73% report that they had to go beyond this to continue to function. As a result, 72% say that their BCP has improved and only 6% that it has not. This suggests that parliaments are now more resilient than before the pandemic – and 78% of respondents agree that this is case.

Seventy-eight per cent of parliaments are now more resilient because of the pandemic.

Parliaments in low-income countries were more likely to feel that their existing BCPs supported their pandemic response (73%), whereas only 49% of those in high-income countries agreed with this statement. Conversely, parliaments in high-income countries were more likely to say that their BCPs had improved since the pandemic (78%) than those in

low-income countries (45%). More concerning is the finding that 27% of parliaments in low-income countries disagreed that they had seen improvements in their BCPs, whereas no parliaments in high-income countries disagreed on this point. This figure should act as a warning to ensure that less well-resourced parliaments are supported to improve their resilience.

Table 3. Business continuity and resilience (n=113)

	Agree	Disagree
Parliament’s BCP supported the pandemic response	59%	18%
A response beyond parliament’s existing BCP was required	73%	12%
Parliament has improved its BCP since the pandemic	72%	6%
Parliament is now more resilient than before the pandemic	78%	4%

The modern parliament needs redundancy and agility to support more complex technologies in a variety of settings.

The modern parliament requires systems and network redundancy. It must have the agility to support more complex, distributed and modular technologies in a variety of settings, and the ability to manage outages and crises. Parliaments agreed that resilience must be the cornerstone of the digital-first parliament.

Resilience is the ultimate measure of an organization’s ability to manage risk proactively, in order to protect and recover operation in the wake of disruption. To achieve resiliency, our organization must implement coordinated enterprise systems of processes and information, effective decision-making, priority-setting of risks, risk reporting and execution in time of crisis.

House of Commons, Canada

The UK Parliament felt that its BCP was already strong and that it did not necessarily change because of the pandemic. It did feel, however, that the technical solutions it adopted gave it new opportunities and potential solutions for future crises.

We invested a lot in the infrastructure to support hybrid settings, and we have decided to retain that infrastructure. And one of the things we are looking at is whether that gives us new resilience options. So, in the event of losing one of our chambers, how we could bring in hybrid sittings to respond to that kind of scenario. So I think what we’ve ended up with is a bit more flexibility and some extra tools in the toolbox.

UK Parliament

The European Parliament sees resilience in much the same way: as “continuous innovation rather than radical transformation”. This reflects the institution’s strategy of preparedness, as well as the fact that it has the resources to be responsive. While some parliaments found their BCPs to be less effective than they hoped, others felt more prepared.

Both groups agreed that, once the pandemic was under way, sharing challenges and solutions with other parliaments was critical to building resilience.

Our preparedness through a well developed contingency plan and pandemic plan assisted the parliament to better face the pandemic. Knowledge-sharing with other parliaments was the key factor for better crisis management in a never-before-seen situation.

National Assembly, Mauritius

The Parliament of South Africa had cause to test the lessons learned from the pandemic when a fire damaged part of the parliamentary estate in January 2022. The parliament stressed that resilience was at the heart of its response:

“Resilience” was the word that our Speaker used ... even though the investigation is still going on, she wanted to show the resilience of parliament. The business of parliament can still continue.

Parliament of South Africa

Knowledge-sharing with other parliaments was a key factor for better crisis management in an unforeseen situation.

Building resilience is about more than the pandemic: sharing knowledge with other parliaments was a key factor for better crisis management in an unforeseen and rapidly changing situation. The Parliament of Ukraine notes that its business continuity planning during the pandemic, coupled with the experiences shared through knowledge networks, have been instrumental in preparing it to continue functioning during wartime:

The experience of parliaments in a pandemic proved extremely useful for the parliament of a country at war.

Verkhovna Rada, Ukraine

Public participation

Interest in measures adopted for fighting the Covid-19 pandemic has increased, and so have the ways citizens contacted parliament with their questions and wishes.

Bundestag, Germany

The pandemic closed many things down. Movement was severely restricted for many and access to public buildings, including parliaments, was curtailed. The Global Parliamentary Report 2022, which focused on public engagement with parliaments, notes the risk that a crisis can narrow democratic opportunities and limit public access and, with it, accountability.² The research for this 2022 World e-Parliament Report shows that many parliaments chose to enhance their

digital engagement strategies to ensure that members of the public were still able to connect with parliamentary business. In some cases, this was in response to increased public interest.

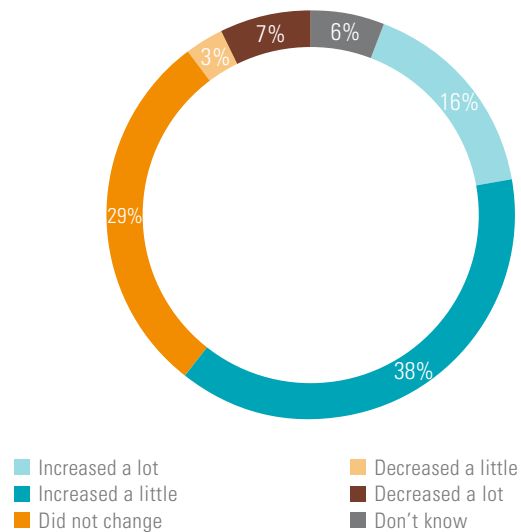
Interest in parliament increased during the pandemic, leading to more opportunities to enhance public participation.

Greater interest in parliamentary documentation published on the site. More listening to parliamentary debates on web TV.

Chamber of Deputies, Italy

Overall, interest in parliament increased during the pandemic, and this has led to more opportunities to enhance public participation. Most parliaments (54%) report that the public’s interest in, and demand for, engagement has increased. As Figure 5 shows, 38% of parliaments say that public engagement has increased a little and 16% say that it has increased a lot, compared with 10% reporting that it has decreased.

Figure 5. Public engagement with parliament (n=117)



It is still too early to tell what lasting impact this will have on public participation. But one suggestion comes from the Scottish Parliament’s Standards, Procedures and Public Appointments Committee inquiry into future parliamentary procedures and practices,³ which was one of the first formal evaluations of learning from the pandemic from within a parliament. The inquiry found benefits for public participation and for broader representation in parliament:

[T]here are strong arguments about the potential for hybrid arrangements to make the Parliament more inclusive and accessible: developments which accord with the founding principles of the Parliament. This is a further reason for continuing hybrid arrangements as a means of encouraging a more diverse range of people

² Inter-Parliamentary Union (IPU) and United Nations Development programme (UNDP), *Global Parliamentary Report 2022: Public engagement in the work of parliament* (Geneva: IPU/UNDP, 2022): <https://www.ipu.org/our-impact/strong-parliaments/setting-standards/global-parliamentary-report/global-parliamentary-report-2022-public-engagement-in-work-parliament>.

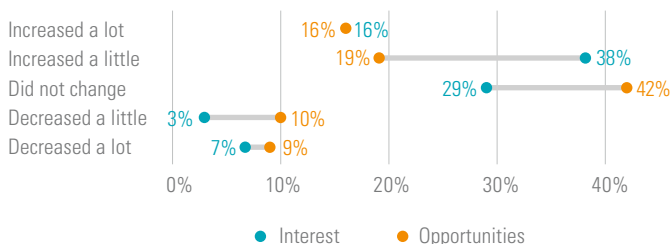
³ The Scottish Parliament, Standards, Procedures and Public Appointments Committee, *Report on inquiry into Future Parliamentary procedures and practices*, 6th Report 2022 (Edinburgh: Scottish Parliament, 2022): <https://digitalpublications.parliament.scot/Committees/Report/SPPAC/2022/7/6/e5cd2e5a-9b82-41e1-b787-d5d3f169b22e-2#0b9ba056-9396-43d3-869d-001ae1e0d9ac.dita>.

to stand for election to the Parliament. It will provide the Parliament with the flexibility in the future to offer alternative means of participating in parliamentary business, rather than requiring elected members to fit into established methods of working notwithstanding their personal circumstances.

The Scottish Parliament

At this stage, perceived public demand for engagement, as monitored by parliaments themselves, is not matched by the increase in opportunities for participation from those parliaments. As Figure 6 shows, such opportunities did not change in 42% of parliaments and decreased in a further 19%. Opportunities for public participation only increased in 35% of parliaments, although 16% report that they increased a lot.

Figure 6. Interest in vs. opportunities for public participation (n=116)



Research by the New Zealand Parliament shows that the pandemic has not only increased interest in what parliament does, but also led to increased public participation. With this, the adoption of remote participation is something that will most likely continue to be strengthened in the future:

The 2021 Kantar survey of the New Zealand public stated that New Zealanders are more engaged with politics and the parliamentary process. Respondents said they are speaking about politics with their peers more than ever before, and more respondents have done things like sign a petition or submit to select committees ... Witnesses could make submissions to select committees by tele and video conference prior to the pandemic. However, the incidence of them doing so increased dramatically during the pandemic. For example, during certain lockdowns, all committee meetings were held remotely by video conference; during these times, witnesses appeared only by tele or videoconference. Committees are returning to in-person proceedings now, but submissions by video conference are likely to continue at volumes higher than before the pandemic.

New Zealand Parliament

The Parliament of Fiji has strengthened the use of digital tools for its community engagement and outreach programmes, which has had a tangible impact:

There has been an increase in the use of virtual instead of in-person submissions to committees.

Parliament of Fiji

Restrictions on physical access presented a challenge to in-person participation. Even after restrictions began to be lifted, social distancing continued to impact participation:

The formal measures taken to eradicate the pandemic have caused the number of people attending the sessions to be reduced.

Parliament of Burundi

For some, by necessity, public access to parliament had to become remote:

Public participation in parliament changed from physical contact to more digital contact. High-quality digital video transmission of the session became very important.

Parliament of Estonia

There are signs, too, that parliaments emerging from the pandemic are willing to invest in better methods for public engagement:

Parliament has put an application on the website that allows the public to propose ideas and amendments on the bills and proposed laws discussed before the committees, as well as to submit questions to parliamentarians.

Parliament of Lebanon

Parliament [is] now working more on increasing public participation using remote means. [It is] also providing opportunities for interaction via social media platforms such as Facebook and Twitter [and it has] upgraded its website to make it more visible and interactive.

Parliament of Zimbabwe

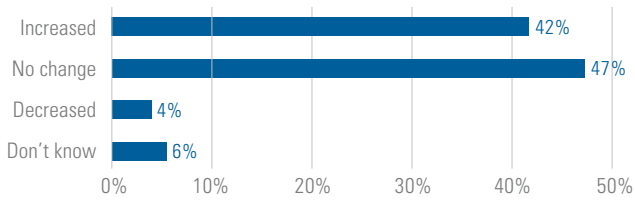
As Table 4 shows, survey respondents report that members' contact with the public did not change in just under one third of parliaments (30%) but increased in just over one third (36%). Members' contact with the public decreased in 20% of parliaments.

Table 4. Members' contact with the public (n=117)

Direction of change	%
Increased a lot	16%
Increased a little	20%
Did not change	30%
Decreased a little	14%
Decreased a lot	6%
Don't know	15%

Most parliaments saw either no change (47%) or some increase (42%) in their perceived importance of public engagement, with this importance reportedly increasing a lot in 21% of parliaments but decreasing in only 4%. These responses suggest that there is a strong culture of public engagement and that it has increased in importance as a result of the pandemic.

Figure 7. The importance of public engagement for parliaments (n=116)



To put this in context, the 2020 World e-Parliament Report reported that 63% of parliaments had systems in place for outreach and engagement and that the same number were collaborating with civil society organizations. It noted that 76% of parliaments and 56% of members used social media, that 39% of parliaments used instant messaging (which was continuing to grow quickly among both parliaments and members), and that 30% of parliaments had mobile apps providing access to parliamentary business and information. However, engagement is a continuum ranging from publishing and broadcasting (a commonly used method of information-sharing) to deliberation and direct engagement (which are less common). On this point, the 2020 report observed that public engagement is seen as a good thing, which leads to stronger ties between parliament and citizens. It is an effective way to increase awareness and understanding of how parliaments work.

The new strategic landscape

I can say that Covid-19 is a strength and an opportunity for us. Mostly, when we talk about ICT, it is a good opportunity. Because of Covid-19, we adapted ICT faster than we were thinking about and we have moved faster than we ever seen.

Senate, Cambodia

The 2020 report captured a picture of parliaments going through a phase of enforced innovation and learning to rapidly embed new ways of working supported by ICT. This picture is brought up to date in the previous section of this report, which underscores the strategic gains that are already being realized and how the pandemic was a catalyst for new and transformational digital practices. The research for this report shows that many parliaments were able to respond quickly and radically, adopting new working practices for the delivery of parliamentary services by accelerating modernization programmes.

Digital tools have shown themselves to be vital for parliaments that want to become more resilient and responsive to the conditions around them.

Digital tools have shown themselves to be vital for parliaments that want to become more resilient and responsive to the conditions around them. They have become critical to the mission of parliaments and, as the 2020 report observed, they

have moved from the back office to the front, requiring a more strategic focus with the close attention and support of senior parliamentary leaders.

The pandemic has underscored the major importance of [investing in] a strong and cyber-safe IT infrastructure, IT governance and IT policies that are always up-to-date.

House of Representatives, Belgium

Parliament continually invests in ICT in terms of capacity and infrastructure. There is a need to strengthen training and capacity-building for parliamentarians in the use of ICT for their parliamentary work.

Parliament of Fiji

With this enhanced role comes the need for better integration of digital strategies at the highest level of parliament. Above all, most parliaments are now more forward-looking, 87% see a digital strategy as more important than before and 63% indicate that their business processes have permanently changed because of the pandemic.

In this environment, strong parliamentary leadership must underpin the new landscape and support opportunities for further innovation. According to the National Assembly of Costa Rica, the priorities going forward are as follows:

[Training for parliamentarians by parliamentary ICT staff on the eChamber app for remote plenary participation and voting.](#)
© National Assembly of Zambia



Resilience, openness to change, adaptation to the prevailing conditions of the moment, and timely action to apply the necessary changes required to maintain the continuity of parliamentary operations.

National Assembly, Costa Rica

This section discusses how the accelerated modernization of systems and the transformation of parliamentary culture and process can lead to a more effective and efficient parliament. It will highlight why a holistic, high-level digital strategy has become even more important and why this requires leadership at the highest levels of parliament. It will also reflect on how parliaments have moved to a more virtual way of functioning, and how this shift brings with it increased risks and a need for strong cybersecurity.

Modernization and digital transformation

The Chamber of Deputies has changed a lot during these two years and it is a sustainable change.

Chamber of Deputies, Brazil

As previous World e-Parliament Reports observed, parliamentary modernization has been an ongoing process. Yet it is unsurprising that, as Figure 8 shows, 80% of parliaments feel that the rate of modernization has accelerated over the course of the pandemic (with only 5% disagreeing). Moreover, the fact that 63% agree that their business processes have permanently changed because of the pandemic underscores how modernization is not just about new technology, and how transformation affects all areas of an institution.

We came up with these systems in the shortest time possible. But it's time now to try and innovate and improve on these systems and make them better because, right now, there's nothing that is pushing us to make sure that the systems are valuable for the business of the house. The systems are there, but we need to improve them. We need to make them more resilient. We need to make sure that security is taken care of.

National Assembly, Zambia

Parliaments that had already invested in digital transformation – and particularly in systems for remote functioning – were at an advantage. The National Assembly of Hungary, for instance, reflected on how its document management system could be extended to encompass more of the legislative process:

This innovation has greatly contributed to reducing personal contacts and has enabled office staff to work from home on an individual and temporary basis.

National Assembly, Hungary

Financial constraints and limited digital infrastructure remain among the barriers to modernization and the e-Parliament, particularly in countries with large rural areas:

Despite new developments, issues of connectivity, especially in remote areas, still crop up and compromise member participation.

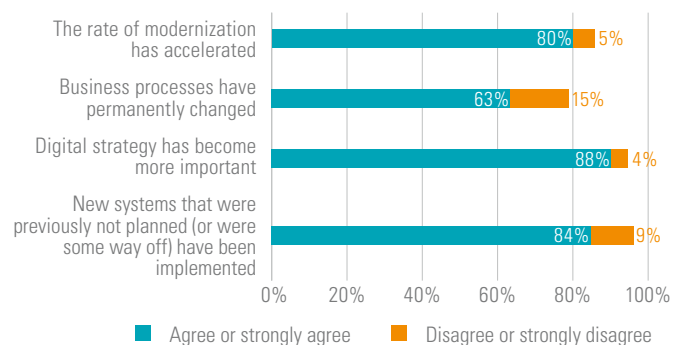
National Assembly, Botswana

The internet network is not very efficient in the Central African Republic. This is why our parliament functions in an ordinary way. Everything is done face to face.

National Assembly, Central African Republic

As Figure 8 shows, modernization and digital transformation have become more strategically important to parliaments during the pandemic. This attitude survives as parliaments recover.

Figure 8. How modernization has been affected by the pandemic (n=114)



Digital strategy

The Parliament of Kenya has reallocated budgets to promote and support more rapid digital transformation. This move reflects the increased importance of digital strategy underpinning transformation in the modern parliament: digital strategy has become more important for 88% of parliaments since the pandemic started.

Digital strategy has become more important for almost 9 out of 10 parliaments.

This greater focus on digital strategy is reflected across parliaments regardless of size or location, although parliaments in the Middle East and North Africa were the least likely to agree (67%), while 15% of parliaments in sub-Saharan Africa disagreed. Income was the most significant differentiator in terms of views on this subject, with only 55% of parliaments in low-income countries agreeing that digital strategy has become more important and 27% disagreeing. While there is no explicit evidence for this divergence, there is anecdotal evidence – and a strong inference from earlier World e-Parliament Reports – that the challenge for parliaments in low-income countries lies in ICT access, funding and resourcing, and in securing the technical staff needed to manage and maintain these systems. This situation is becoming more pronounced as the complexity and impact

of the e-Parliament increases (a trend reported in previous reports) and it has been further exacerbated by the pandemic.

I think the main barrier to modernizing is having a comprehensive IT infrastructure. This is very important because, if we introduce something, we have to consider our infrastructure and support.

Senate, Cambodia

The rise of “Parliament as a Service”

Where modernization is occurring, there are some clear trends. For instance, there is an obvious shift towards moving data and applications to the cloud and reducing the use of locally hosted hardware and systems. These concepts are known, respectively, as SaaS and “Infrastructure as a Service” (IaaS). Taken together in the parliamentary context, they describe a move towards the virtualization of parliamentary data and systems that can be referred to as “Parliament as a Service”. As this becomes more of a reality, different architectures and strategies are needed to manage it.

“Parliament as a Service” is a reality, but different architectures and strategies are needed to manage it.

Cloud computing – storage, SaaS and IaaS built in the cloud – has become vital for parliaments wanting to function remotely. This more virtual way of working requires more bandwidth and a reconsideration of internal networks, as well as the potential use of virtual private networks (VPN) and a greater focus on cybersecurity.

We had to change our policy to accommodate online cloud services. We can now host our applications and safeguard data, in that once you have gone to the cloud, security becomes really something that you have to take care of ... In the first instance, we had to change our policy from purchasing desktops to laptops to support a remote working environment in our parliament. It is important to note that once you are actually in a virtual space, internet capacity has to be addressed [to] be able to support online applications. We had to quickly put in place the service level agreements with the cloud services so that our services could be secure [and] could be provided without any downtime. Finally, we had to look into the best way to secure our data with them.

Parliament of Kenya

There are challenges for parliaments in terms of their supply chains and how these are managed, and in the management of new business continuity and cybersecurity risks. For example, demand for bandwidth has not only increased – it is now “mission-critical”, especially for parliaments holding any form of virtual sitting. This means that network redundancy is a much more important issue and parliaments need not just more bandwidth and greater reliability, but also redundancy in those networks. This can be challenging to achieve unless

there are multiple providers running independently (i.e., not sharing parts of the same backhaul network – that part of the network that connects parliament to the internet beyond its own internal networks).

Cybersecurity

Security is a bigger priority than expected ... Systems will need to be more secure as they are more open and accessed in new places. [Beyond the pandemic] the Russia-Ukraine war is also visibly yielding more security issues.

Congress of Deputies, Spain

Cybersecurity was identified as one of the major issues facing parliaments during the focus groups for this research. The pandemic has been a factor in increasing the need for strong cybersecurity. Other factors include global conflicts and the rise of State- and non-State-sponsored cyberattacks on public institutions. As more systems go online and remote working increases, the complexity, internal management requirements and risk profile of parliaments changes, requiring a new and more stringent approach to cybersecurity.

The digital complexity and risk profile of parliaments is increasing.

Several cyberattacks on parliamentary digital assets have been recorded over the last two years, and these appear to be increasing. However, recruiting and retaining qualified cybersecurity staff is challenging, since these are people very much in demand in the commercial sector. Fully qualified cybersecurity experts can command salaries far beyond what most parliaments are able to offer.

Cybersecurity training for members and staff is important for parliaments.

Internally, parliaments are working on strategies to increase user awareness and to develop training and support packages for members and staff, as well as proactively monitoring activity to identify security risks and potential breaches. They are also developing processes and protocols for managing the onboarding and exiting of users, which not only helps to protect the parliamentary digital estate but can also help familiarize members with the risks and challenges of social media. The National Assembly of Zambia mentioned several priorities in this regard:

Training for both members of parliament and members of staff on the effective and secure use of ICT tools and services, and enhancement of security measures for online collaboration.

National Assembly, Zambia

Parliaments need to review internal support provisions and update service-level agreements with service providers. One tangible recommendation is for parliaments to look at their own national cybersecurity guidelines and to work with government agencies in this field to better manage and

mitigate risks. Another strategy is to make cybersecurity a higher priority within the institution. The Parliament of Estonia, for instance, now deals with this matter at board level.

The Parliament of Denmark notes that “when increasing the number of digital meetings, security must follow”, while different parliaments report various other priorities:

Enhance protection against cyber threats and establish [an] information security policy.

House of Representatives, Belgium

Increase security requirements in all systems, especially those related to deliberative meetings and the law-making process.

Chamber of Deputies, Brazil

Increase IT security measures and have effective recovery measures for data, applications, services and connectivity.

Chamber of Deputies, Italy

Increase user awareness regarding IT security.

Parliament of Portugal

Some of the strategies being used by parliaments today are listed below:

- Reviewing and overhauling security policies and the management of cybersecurity, which can include working with national security agencies to implement public-sector cybersecurity standards
- Ensuring that cybersecurity is dealt with at a senior level and viewed as a strategic priority for parliament
- Auditing existing systems to understand whether greater openness to the internet changes the risk profile of these systems
- Using artificial intelligence solutions to monitor for risks and patterns of risk as they develop
- Training staff and members to become more safety-conscious and to be able to identify and report threats



Parliamentary reporters at work in the Dutch House of Representatives, using Automatic Speech Recognition tools. © House of Representatives, the Netherlands

Lasting change in parliamentary processes

The previous section describes a strategic landscape that enables parliament to be “digital-first”, supported by strong leadership, innovation and a focus on resilience. What this means in reality is discussed below, focusing on how parliamentary proceedings have adapted to hybrid ways of working, on opportunities for more flexible working practices, and on the implications for resourcing ICT departments.

As they emerge from the pandemic, parliaments are at a crucial juncture. The research for this report shows that there has been a partial return to pre-pandemic functioning, particularly in the plenary, where face-to-face communication is highly valued by members. Equally, it reveals that some practices have changed permanently: committees have become more flexible and open to remote participation, and remote working for the parliamentary administration has increased significantly. It also shows that attitudes have changed: there is greater openness to innovation and greater awareness of the significance of a digital strategy across parliaments. And, importantly, MPs now have higher expectations of what digital technology can do.

Changing procedure to enable virtual sittings

Parliament has really focused most of its operations on IT systems because we realized that it was the only way we could actually continue doing business during the Covid-19 pandemic.

Parliament of Kenya

[The] rush to be online and then to meet online is undeniable.

Parliament of Thailand

The 2020 report discussed how parliaments needed to change their procedures, the law or even the constitution to enable virtual sittings. While many parliaments (44%) were able to make changes through a variation in procedure, 16% required legislative or constitutional changes to proceed (and 8% required changes to allow committees to operate remotely as well).

Table 5. Changes required to introduce remote working (WEPR 2020; n=73)

	Plenary	Committee
Constitutional/legal changes were required	16%	8%
Parliamentary procedure was updated	44%	32%
No formal changes were required	30%	48%

By 2022, the figures show that almost half of parliaments (47%) had made changes to procedures or laws to enable plenary meetings to continue, and 51% had made changes to enable committee meetings (see Table 6).

Table 6. Parliamentary rules have been modified (n=122)

Rule changes	
For plenary meetings	47%
For committee meetings	51%

Many parliaments introduced temporary changes that would expire if not renewed by MPs. This highlights not just the technical competency and the functionality of the virtual platforms, but also the human and political dimensions of parliamentary debate and, in particular, issues of scrutiny. For example, the Chamber of Deputies of Mexico observed that politics played a part in how its virtual solutions were implemented and in how they impacted on what could be done. In the United Kingdom, initial political consensus allowed for the introduction of a hybrid chamber for the House of Commons:

Yet these arrangements began to unravel shortly before the late-May Whitsun recess, barely a week after the first online vote. Despite significant anger from backbench and opposition MPs, ministers refused to facilitate a decision to extend the time-limited orders that had enabled virtual participation in the chamber, and as a result the rules simply lapsed.⁴

UK Parliament

Some members felt the importance of being present meant that virtual proceedings devalued parliamentary debate:

There are still members who value physical interactions and view virtual settings as taking away the value of face-to-face parliamentary debate.

National Assembly, Botswana

Other parliaments saw an evolving model of retaining virtual tools for committees but a desire also to return to face-to-face plenary sittings, reserving the digital hybrid model for emergencies:

The House and select committees have significantly diverged. While remote and hybrid select committee meetings have become part of the normal operation of the parliament, whether hybrid meetings of the House continue beyond this parliamentary term is uncertain, though they are likely to be available in exceptional situations.

New Zealand Parliament

In June 2022, the official opposition in the House of Commons of Canada objected to the continuation of hybrid sittings because it felt that this had made it harder to hold ministers to account. A similar view has also been expressed in other parliaments. Canadian MPs have argued that there have been instances where committee meetings were disrupted by technical problems. As a counterpoint, one Canadian MP “praised the value of allowing MPs the chance to work from their constituencies instead of spending the time commuting back and forth to Ottawa on a weekly basis”, stating that it was

a priority “to have flexibility for so many MPs with young kids and families; I think we’ll get even better people if we can offer some flexibility.”⁵

Solutions have been developed to allow for both virtual sittings and physical distancing in the chamber. In Mauritius, seating in the chamber has been modified to accommodate all MPs but the restricted space means that members must remain seated while addressing the house. Bhutan’s pre-existing cloud-based e-Parliament solution came to the fore during the pandemic, along with the introduction of remote sittings. In the House of Representatives of Belgium, the procedural changes were permanent but conditional:

[The amended rules of procedure only apply] in the event of a serious and exceptional situation threatening public health which prevents House members from being physically present.

House of Representatives, Belgium

The situation is much the same in Seychelles, where hybrid plenary and committee meetings are permitted in emergencies. In Thailand, difficulties changing rules of procedure have been a barrier to virtualization. Meanwhile in Ireland, where the Constitution prevented the holding of virtual sittings, the Houses of the Oireachtas moved to a conference centre so that all members could be accommodated with physical distancing. In a unique move, the Dáil Éireann (the lower house) was also used as a committee room during the early stages of the pandemic. There is a proposal to amend the Constitution through a future referendum to allow for virtual sittings in any future emergency.

Conversely, several parliaments have developed credible virtual solutions during the last two years and have deployed these with a view to them being either part of normal proceedings or available at short notice.

Video conferencing solutions are here to stay; they are effective and are indispensable in some situations.

Parliament of Estonia

The UK House of Commons notes that, while physical sittings have resumed, much has changed behind the scenes and that it could now return to a hybrid setting in as little as 72 hours if needed. The Parliament of Brazil continues to use its virtual tools, and MPs there have expressed a desire to maintain virtual sittings:

Most MPs are still enthusiastic about [the virtual parliament] and the remote solutions that we can provide them. And with Brazil being a huge country, it is really important for us to keep the IT solutions working properly because it is not easy to bring [everyone] all together within just a small plenary ... [MPs] are changing the legislative process to embrace the digital impact on the process.

Chamber of Deputies, Brazil

⁴ The Constitution Unit, “The hybrid House of Commons: the problems of government control”, 17 January 2021: <https://constitution-unit.com/2021/01/17/the-hybrid-house-of-commons-the-problems-of-government-control/>.

⁵ CBC, “Liberals want another year of hybrid Parliament, which Tories reject as needless”, 20 June 2022: <https://www.cbc.ca/news/politics/hybrid-parliament-another-year-1.6494853>.

In its inquiry into future parliamentary procedures and practices, the Scottish Parliament's Standards, Procedures and Public Appointments Committee made the following observation:⁶

While the platforms used to provide hybrid meetings could not replicate in-person parliamentary business, and the informal engagement that would normally take place in the building was reduced, the Parliament was able to fulfil its core function of scrutiny of the Scottish Government.

The Scottish Parliament

The Parliament of Latvia continues to offer members remote access via its virtual parliament platform, which was developed during the pandemic. Meanwhile, the National Assembly of Zambia notes a change in the way parliament is now working post-pandemic:

It has made a lot more of our members participate in the proceedings of the house, because they're able to do it wherever they are. So there is no physical barrier anymore. [We have the] ability to manage the business of the house from the chamber, but members are everywhere in the world. They are still able to follow our parliamentary business using an application [and this] has really changed the way we conduct our business.

Can you imagine, at this stage, members not even minding whether they come to parliament or not? As long as they have access, they're able to participate without a problem. It's been such a journey for us in managing the business of the house. Besides that, I think what we've seen, in terms of building more resilience, is the ability to innovate and improve the systems.

National Assembly, Zambia

Voting methods

Remote voting was available for members of the National Council who could not attend the sessions in person in 2021 owing to Covid-19. As of today, the National Council has passed a new law allowing the parliament to work remotely in times of crisis.

Federal Assembly, Switzerland

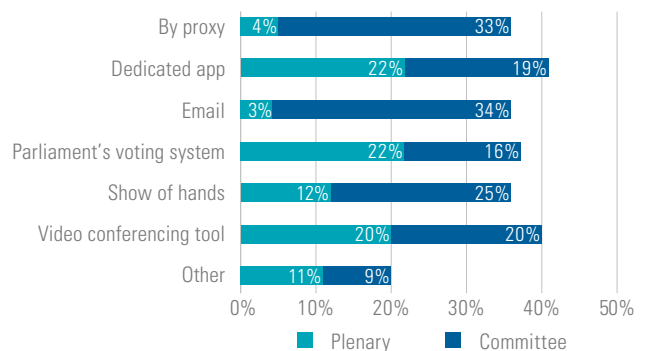
Voting is a critical function of the parliamentary chamber. Over one third of parliaments (36%) made procedural changes to enable alternative forms of voting in the plenary, and 30% did so for committees. For secure remote voting to take place, parliaments needed to implement a number of different solutions. As discussed in the 2020 report, voting in the plenary was a more significant matter for parliaments than committee voting. This is reflected in the 4% of parliaments allowing proxy votes in the plenary, compared with the 33% that have done so for committees.

Votes are entered by each voter using a specific application. The app generates a PDF document – listing the votes expressed – that the voter has to print, sign and send from their institutional email address to a specific functional email confirming that their votes were cast on an individual and personal basis. The votes are counted electronically by the system.

European Parliament

Twenty-two per cent of parliaments used a dedicated app for voting in the plenary and the same percentage continued to use parliament's standard voting system (although this was modified in some cases). While only 3% of parliaments allowed plenary voting by email, one in five (20%) used the voting functionality in their video conferencing platform at some point.

Figure 9. Voting methods (n=121)



The survey asked parliaments about the conditions for using remote voting in exceptional circumstances. Although the data was inconclusive, the findings suggest that some parliaments consider maternity or paternity leave, or leave for health reasons, to be a potential reason.

One parliament that does allow remote voting under these circumstances is Chamber of Deputies of Spain, which described how electronic voting, first introduced under limited circumstances in 2012, became mainstream for its members. Spain was unique in allowing remote voting for specific MPs who were not able to be present in the chamber, such as those who were on maternity leave. As a result, the parliament saw the response to the pandemic as evolutionary rather than revolutionary, even though use of the voting app increased from three or four MPs to the majority of members during the Covid-19 lockdowns. The Chamber emphasizes the importance of transparency and auditability in the remote voting process:

We need transparency around how we will make sure it works. That's very important to parliament and to the person who votes. It's like somebody signing a document: they relax because they know what they've signed. That trust grows on the basis of transparency and on the basis of previous results. We have ... a good track record with electronic voting, which increased trust.

Chamber of Deputies, Spain

The Chamber of Deputies is now upgrading the voting system to better handle the mixture of in-person and remote voting.

⁶ The Scottish Parliament, Standards, Procedures and Public Appointments Committee, *Report on inquiry into Future Parliamentary procedures and practices*, 6th Report 2022 (Edinburgh: Scottish Parliament, 2022): <https://digitalpublications.parliament.scot/Committees/Report/SPPAC/2022/7/6/e5cd2e5a-9b82-41e1-b787-d5d3f169b22e-2#0b9ba056-9396-43d3-869d-001ae1e0d9ac.dita>.

In Costa Rica, the National Assembly invested in a remote voting system but observed that this was met with initial resistance from members. Conversely, in Brazil, the system has been very strongly supported and widely adopted. The UK House of Commons introduced a remote voting app during the first lockdown, which was used by members in the chamber or attending virtually. Although the resumption of in-person plenary sittings has meant a return to traditional lobby voting, the pandemic presented an opportunity to modernize this process: voting is now done by scanning a member's pass, which allows physical distancing to be maintained when needed and makes the voting process more efficient.

Remote working for parliamentary staff

Remote work proved to be both effective and efficient, not just in terms of operational continuity, but also in terms of optimizing administrative, legislative and communication processes.

Senate, Chile

Less visible has been the cultural shift in ways of working that has happened because of the pandemic. Remote working is now seen as one of the top priorities for the future. For the parliaments that had already invested in remote capabilities, the benefits were obvious:

Our VPN infrastructure, work-from-home facilities and internal applications were already set up, so that helped us to adapt to working from home faster, in the most secure and reliable manner.

Parliament of Sri Lanka

Prior to the pandemic, most parliaments expected people to be working within the parliamentary estate and were generally slow, even unwilling, to embrace remote working for members and staff. At the onset of the pandemic, parliaments had to quickly change from staff working on site to, often, around 80% working remotely. The previous report showed that, in 2020, 69% of parliaments offered remote access for staff. Those parliaments that already had cloud-based technologies were at an advantage, but others also had to act quickly. The New Zealand Parliament accelerated a move to cloud-based systems and, in Ireland, parliament already had Microsoft Office 365 but was not using its remote working and collaboration features.

With large numbers of staff working away from parliament, there is often a need to access both new and legacy systems remotely. As a result, training and support requirements change and the security profile is dramatically altered. In a crisis, this presents a significant challenge when ICT staff are also forced to be off-site, with only skeleton staff available in parliament buildings. Parliaments had to overcome limitations in their existing ICT infrastructure, which was often not designed to support such significant remote working and ICT staff providing support remotely.

Equipment has been an issue. Video conferencing rooms have been set up, but you still need remote users to have appropriate equipment. MPs have used personal devices but that's not ideal for the institution.

National Assembly, Ecuador

Unsurprisingly, key issues to emerge have been around access to suitable hardware, user training, bandwidth and security (of systems and data). For parliaments making the move to cloud-based systems, offering remote working makes sense, so long as systems can be secured and user equipment managed.

With the devices being remote, we have to manage them in a different way. So when they were all in the office and we could reach them, we knew they were getting their updates and all of the security patches. Now it's a challenge because, though we have remote software, they're a little harder to reach because they're not always turned on. And they might be turned on at weird hours because people might work at different times. So scheduling Windows updates is a challenge for us. Also, with people who are working remotely, not everybody can carry their laptop into the office. So, in a hybrid environment where they're in the office or working from home, some use another device; they've a device at home and [a] device in the office.

Houses of the Oireachtas, Ireland

Parliaments must adapt to support new working practices through training and network capacity.

Upgrading the backbone infrastructure, including expanding broadband capability and introducing new VPNs, has been a consideration in Ireland and for other parliaments. If remote working is to become a permanent feature of the parliamentary environment – for members and staff – then network capacity and redundancy are vital:

The National Assembly adopted work-from-home after the pandemic and established [a] system for developing a digital working environment. [This system is a] Virtual Desktop Infrastructure that supports many digital systems, which have been used in limited (secured) environments – at home, in cafes or in any other places – in order to provide a digital workplace for work-from-home workers.

National Assembly, Republic of Korea

Staffing

We're definitely seeing a very hot IT market and recruitment market and salaries going up. And that is just creating more problems in terms of recruiting people.

UK Parliament

The shift to digital impacts not just processes but also the support requirements for managing parliamentary systems.

The transformational changes discussed in this report have an impact not just on processes but also on the support requirements for managing parliamentary systems. The 2020 report observed that ICT was a significant resource in parliaments and that, on average, parliaments employed one ICT staff person for every three members. It also noted that parliaments faced challenges in recruiting and retaining key ICT staff. In smaller parliaments, the market for appropriately trained staff can be small while, in larger ones, demand for these skills in the wider economy often outstrips supply. This is not a new problem: the 2018 report noted that “[r]ecruitment and retention of technical staff remains a challenge for parliaments,” while the very first edition of the report, published in 2008, observed that “[t]hose [parliaments] in the early stages of introducing informatics to their legislatures may face challenges in obtaining adequate resources of funding and experienced staff to innovate”.

If we allow remote teleworking, we can get people from the countryside who [are] fully qualified software developers. [Because they don't speak English] it is hard for them to choose to get remote work with an American, Canadian or European company. But it would be easy for us to hire them because they are able to speak Portuguese.

Chamber of Deputies, Brazil

Staff recruitment was a challenge that came up time and again in the research for this 2022 report. Parliaments highlighted general difficulties in sourcing technical staff and reported that, for budget reasons, they found it especially hard to recruit specialists in areas such as cybersecurity. This has led some parliaments to offer ICT staff remote working opportunities, or to outsource application development to lower-cost countries.

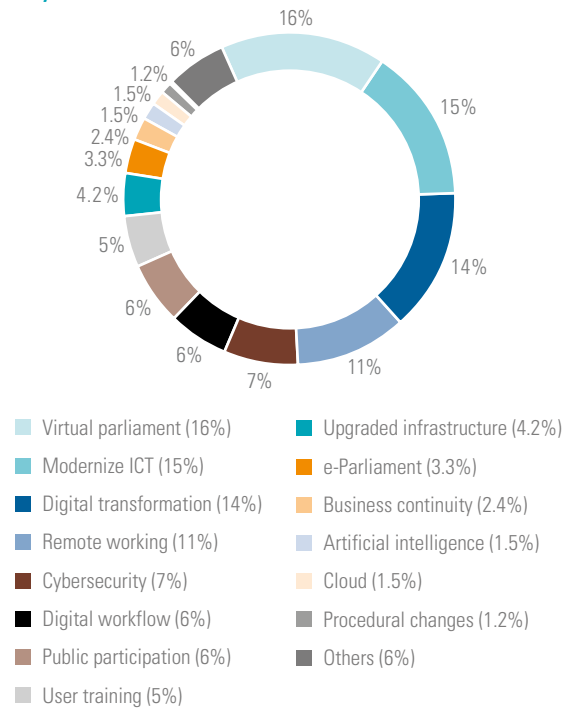
Future priorities for parliaments

The pandemic has accelerated transformation towards a digital parliament and increased parliamentary appetite for innovation.

In order to build a solid platform for modernization, parliaments must learn from the events of the last two years – a unique time that has both exposed weaknesses in planning and preparedness, and presented opportunities in terms of new ways of working. This research shows that parliaments are now looking to consolidate the learning of the last two years by building resilience and capabilities for remote functioning, underpinned by the increased use of digital tools, and cloud-based technologies in particular. Strategic areas of importance for the short to medium term are shown in Figure 10 and they include the virtual parliament, modernizing ICT, and digital transformation. These are followed by more operational considerations – such as remote working, cybersecurity, digital workflows, public participation and user training – that support broader strategic aims.

To realize the future priorities identified above, parliaments need to learn from the pandemic, plan to ensure the continuity of parliament (particularly in the case of a future crisis), focus on strengthening digital capabilities in a transformative, institutional-level way, and sustain innovation and inter-parliamentary collaboration. These areas are discussed below.

Figure 10. Top priorities for parliaments by thematic area (n=337)



Senators during a deliberative session of the Federal Senate of Brazil. © Waldemir Barreto. Brazilian Senate Press



Learning from the pandemic

Leadership is essential to carry out digital transformation ... Digital transformation is not about technology, but about attitudes and skills.

Senate, Brazil

Parliaments have learned many lessons and are now, on the whole, better positioned to respond to a new crisis. However, planning for resilience must be ongoing and must become part of wider strategic thinking in parliaments. It is equally important to learn the lessons from the pandemic; to understand where an institution responded effectively and where it was compromised by the events that took place. This will support reflection on what benefits process change and digital transformation offer for the future functioning of parliament, and on how resilience can be better embedded into the fabric of the institution. Modern parliaments – those that use cloud technologies, can operate independently of physical location, and employ modern IT systems to support and enhance their processes and procedures – can be more robust in their everyday operations and more resilient in the face of adversity.

Ensuring the continuity of parliament

Members must be able to pass laws and hold government to account during a crisis. The research for this report shows that digital tools support this aim, pointing to a need for parliaments to ensure that the procedures and laws governing the sitting of parliament are up to date and that they allow for the latest innovations to be put in place. Digital tools enable cultural and process change: they have been elevated from their past operational and support roles to become strategic enablers of the modern parliament. This shifts the focus from the ICT strategy, which tactically enables aspects of a parliament's overall strategy, to a more holistic digital strategy – one that is owned by and led at the highest levels of parliament, both senior staff and members.

Change has been required to allow for remote sittings and operations and to permit the use of new technologies. The virtual parliament is a prime example of this: the enabling technology itself is relatively straightforward but the shift in procedure, process and, importantly, culture required to embrace remote functioning, even during a crisis, is more substantive. There are considerations for security and trust, and these new ways of working change the nature of ICT management and support. Projects like this should not be the sole domain of the ICT department: they require institution-wide involvement, buy-in and, above all, leadership. This implies a change in the role of senior ICT staff in parliaments because, if they are to be effective, strategic ICT skills need to be available at a senior level. As such, individuals in these roles must influence and inform future thinking at the highest levels of the institution.

I think, from what we've seen, that building more resilience, strengthening our ability to innovate and

making improvements to systems are our main focus at the moment. You know, we came up with these systems in the shortest time possible, but it's time now to try and innovate and improve on these systems and make them better because, right now, there's nothing that is pushing us to make sure that the systems are valuable for the business of the house. The systems are there, but we need to improve them. We need to make them more resilient.

National Assembly, Zambia

Strengthening digital capabilities

The last two years have seen some significant advances in the way parliaments work, cementing in place the central role of ICT. As parliaments have transformed and modernized rapidly, this shift has underscored the importance of consolidation and effective planning, elevated the relative importance of ICT, and made digital tools more pervasive and mission-critical.

What so far has really changed is the attitude of the institution towards ICT ... [It has been] elevated to a directorate level, so that we can implement a digital transformation strategy.

Parliament of Kenya

Parliaments mentioned specific plans for modernization ranging from the strategic to the specific. For example, the Parliament of Ireland plans to develop a new BCP and the Chamber of Deputies of Chile recognizes that it must change its strategic plan to embrace the increased use of digital and virtual tools. At a more operational level, the Parliament of Ethiopia wants to deploy a mobile application, a new website and a new call centre (for technical support), while the Democratic Republic of the Congo is looking to roll out a new system for remote working. Some other plans mentioned by parliaments are detailed below:

[To] put in place a transcription service for parliamentary debates.

National Assembly, Djibouti

Modernization of the data centre for parliamentary and administrative-financial operations.

National Assembly, Nicaragua

[Introduce] cloud computing to better facilitate remote, online and mobile operations, real-time document editing and collaborations on bill amendments in joint select committee meetings, and the digitization of parliamentary procedures and information.

Parliament of Trinidad and Tobago

As the example below shows, there is an opportunity to make parliament more future-proof:

During the pandemic, demand for ICT services has increased rapidly [and, with it,] internal demand on parliament. The old infrastructure was not equipped for this demand. Our first priority is to reconstruct and harden our existing ICT infrastructure. [In addition, we want] to ensure that internal operation processes are tracked properly, as well as [manage] online services introduced to the parliament and successfully adopted by internal users such as cloud, Zoom, private email and instant messaging.

Senate, Cambodia

Others identified aspects of the virtual parliament that are to be developed or enhanced:

[Implement a] paperless e-Parliament secretariat.

National Assembly, Pakistan

Building a system enabling hybrid meetings, including remote voting.

Sejm, Poland

The priorities of the larger, more advanced parliaments highlight where institutions at the leading edge of technology innovation are heading:

Implementation of the entire digital legislative process, so that information and actions that depend exclusively on the parliamentarian can also be accessed and carried out through the [Infolog] app.

Chamber of Deputies, Brazil

The development of a strategy for cloud-based systems and services to support future needs, [the] definition and implementation of [a] digital transformation strategy, including supportive tools and systems to increase public participation, and a Smart Committee Room project. [This is] based on the experience gained during the pandemic. We will initiate a project to upgrade all committee rooms, in order to support present and future needs. This includes changes in hardware, software, communication infrastructure and multimedia infrastructure, and integration of the various parts for a large number of rooms.

Knesset, Israel

[We will] consolidate changes made to support remote and hybrid working by members and admin staff, mature [P]arliament's approach to digital services to improve the customer experience, [thereby] providing members with faster, more efficient services, and develop our ability to support hybrid meetings across the buildings of the parliamentary estate.

UK Parliament

As the National Assembly of Bhutan explains, the e-Parliament was a focus before the pandemic. Envisioned as a way to reduce paper, it has since taken on more significance. The

same is true for the Shura Council of Bahrain, which had already started to deploy cloud-based applications before the pandemic but now plans to move to a SaaS, cloud-based model for all its applications. Both parliaments recognize that demand for cloud solutions and remote working has significantly increased and must be planned for in their future thinking.

Sustaining innovation

Innovation supports parliaments in becoming more efficient and effective and helps them build resilience. Eighty-four per cent of parliaments say that they are now more innovative than before the pandemic, and that they are more open to digital solutions and more trusting of them. Despite this positive sentiment, it is easy to see how parliaments could also slip back into complacency, failing to capitalize on the lessons learned over the course of the pandemic. There is a window of opportunity to realize the benefits of new digital technologies to make parliament more effective and to support a better work/life balance for members and staff. But this can only happen if parliaments look to new ways of working, embrace agile and other new project methodologies, and remain open to innovation emerging from all sectors of the institution.

Connecting and collaborating with other parliaments has been transformative.

The pandemic has highlighted how important it is to be able to share knowledge with, and seek answers from, similar people and organizations. The CIP and its partners have set up several instant messaging channels for parliaments. This has helped to build a strong community of practice among senior ICT staff, who have been able to collaborate with and support each other. This network supported the CIP and its hubs in hosting a virtual World e-Parliament Conference, which attracted the largest attendance of any such conference, as well as a series of webinars for parliamentary staff. Parliaments working with the CIP, and those taking part in the research for this report, have repeatedly stressed how connecting and collaborating with other parliaments has been transformative and made them more responsive. Parliaments can and should consult a wide range of sources to support their modernization, and learn and grow by working together.

Recommendations

The research for this 2022 World e-Parliament Report has confirmed earlier findings that, despite the significant challenges, the Covid-19 pandemic was a catalyst for innovation and transformation in parliaments. It is important that what happened is captured and used as a baseline for further modernization. Where parliaments have made limited or no progress over the last two years, it is equally important for them to see what has changed elsewhere and to seek out opportunities to improve their practices.

Strategic plans created before the pandemic need to be reviewed and, in many cases, reset. Lessons for business continuity and resilience need to be learned and embedded in practice. Moving beyond individual parliaments, the pandemic

has demonstrated the significant value that can be gained from connecting and sharing with other parliaments.

This report presents five recommendations for parliaments to action at the highest level. These require political consensus and the leadership of senior management.

1. **Carry out a formal inquiry to learn lessons** from the pandemic and to prepare parliament for the future.
 - 1.1. **Assess the parliamentary response to the pandemic**, looking at the institution's readiness as well as how it responded.
 - What worked well?
 - What limitations or challenges were experienced?
 - What changes should become permanent?
 - What changes should be retained for future disruptive events?
 - What changes were not effective and should not be retained, and what are the alternatives?
 - 1.2. **Review procedures** considering the pandemic response to ensure that they are appropriate and that suitable contingencies are in place for any future disruptive event. This review should consider how the work of members has changed and the impact on public participation.
 - 1.3. **Review project procurement and systems development practices** to ensure that these are fit for purpose in a transformed parliament and do not restrict innovation.
 - 1.4. **Review remote working practices** for members and staff, including the infrastructure and support functions needed for these.
 - 1.5. **Gather evidence from a wide range of sources**, including members, senior management, experts and academics in the field, other parliaments and the public.
 - 1.6. **Share the findings of the inquiry** widely, including with other parliaments.
2. **Ensure that the legal framework, including the constitution, legislation and rules of procedure, is reviewed and, where necessary amended** with a focus on building parliament's resilience to future emergencies. This can be done by permanently enabling (or removing barriers to) remote sittings, or by providing scope within procedure for special circumstances to be declared by parliament.
3. **Undertake a digital capability assessment** and a review of business continuity planning.
 - 3.1. At a simple level, assess whether parliament has:
 - a digital strategy – determine who owns it, at what level in the organization, and whether it covers the following aspects:
 - project planning methodologies (check whether these support more agile/responsive ways of working)
 - key performance indicators for managing internal and external performance
 - a cloud strategy
 - a cybersecurity strategy
 - a user training and support strategy
 - remote working capabilities for members and/or staff
 - a business continuity plan
 - 3.2. At a more advanced level, the CIP IT Governance Hub⁷, hosted by the European Parliament, provides a tool for parliaments to assess their digital maturity and develop a pathway for modernization. By assessing its own maturity, each parliament will be better placed to identify the strategic dimensions that need to be developed.
4. Based on the outcome of the above, **review and update parliament's digital strategy/strategic plan** to take account of the need for a more holistic and high-level approach to ICT, considering the overall trends in parliamentary ICT and the need to be resilient and prepared for future emergencies.
5. **Delegate senior staff to participate in parliamentary knowledge exchanges**, such as through the CIP, to learn from fellow parliaments and share experiences with peers.

⁷ IPU and European Parliament, "IT Governance Hub: Framing the development of IT governance for parliaments": <https://ipu.europarl.europa.eu/home.html>.

Appendices

Appendix A – Parliaments holding remote sessions

Below is a list of parliaments that reported holding remote or hybrid sessions during the pandemic. Just over half (51%) of respondents held some form of virtual plenary sitting and over three quarters (77%) held at least one virtual committee meeting.

Country/parliament	Chamber	Held at least one remote or hybrid plenary session		Held at least one remote or hybrid committee meeting	
		Since start of pandemic	In 2022	Since start of pandemic	In 2022
Andorra	Unicameral	●	●	●	●
Argentina	Upper house	●		●	●
Azerbaijan	Unicameral			●	
Bahrain	Upper house	●	●	●	●
	Lower house	●		●	
Belarus	Lower house			●	●
	Upper house			●	
Belgium	Lower house	●	●	●	●
Bhutan	Lower house			●	●
Botswana	Unicameral	●	●	●	●
Brazil	Lower house	●	●	●	●
	Upper house	●	●	●	●
Cambodia	Upper house			●	●
Canada	Lower house	●	●	●	●
Chile	Upper house	●		●	●
	Lower house	●	●	●	●
China	Unicameral	●		●	
Colombia	Lower house	●	●	●	
Costa Rica	Unicameral			●	●
Czech Republic	Lower house			●	●
DR Congo	Upper house	●			
Denmark	Unicameral			●	●
Dominican Republic	Lower house			●	
Estonia	Unicameral	●		●	●
European Parliament	Unicameral	●	●	●	●

Country/parliament	Chamber	Held at least one remote or hybrid plenary session		Held at least one remote or hybrid committee meeting	
		Since start of pandemic	In 2022	Since start of pandemic	In 2022
Fiji	Unicameral	●	●	●	●
France	Upper house			●	●
Germany	Unicameral			●	●
Ghana	Unicameral			●	
Iceland	Unicameral			●	●
Iraq	Unicameral	●	●	●	●
Ireland	Lower house	●		●	●
	Upper house	●		●	●
Israel	Unicameral			●	●
Italy	Lower house			●	●
	Upper house			●	●
Kenya	Lower house	●	●	●	●
	Upper house	●	●	●	●
Latvia	Unicameral	●	●	●	●
Lebanon	Unicameral	●		●	●
Lesotho	Lower house	●	●	●	●
Lithuania	Unicameral	●		●	●
Luxembourg	Unicameral			●	●
Madagascar	Lower house	●		●	
	Upper house	●		●	
Malawi	Unicameral	●			
Maldives	Unicameral	●		●	●
Malta	Unicameral			●	
Mauritius	Unicameral	●			
Mexico	Upper house	●	●	●	●
	Lower house	●	●	●	●

Country/parliament	Chamber	Held at least one remote or hybrid plenary session		Held at least one remote or hybrid committee meeting	
		Since start of pandemic	In 2022	Since start of pandemic	In 2022
Mongolia	Unicameral	●	●	●	●
Morocco	Lower house			●	
Mozambique	Unicameral	●		●	
Nepal	Lower house			●	●
	Upper house			●	●
Netherlands	Upper house			●	●
	Lower house	●	●	●	●
New Zealand	Unicameral	●	●	●	●
Nicaragua	Unicameral			●	
Nigeria	Lower house			●	
	Upper house			●	
Norway	Unicameral			●	
Oman	Lower house	●	●	●	●
	Upper house	●	●	●	●
Pakistan	Lower house			●	
Pan-African Parliament	Unicameral			●	
Paraguay	Lower house	●	●	●	●
Peru	Unicameral	●	●	●	●
Philippines	Lower house	●	●	●	●
Poland	Lower house	●	●	●	●
Portugal	Unicameral	●	●	●	●
Qatar	Unicameral	●		●	●
Republic of Korea	Unicameral			●	
Romania	Upper house	●	●	●	●
	Lower house	●	●	●	●
Rwanda	Lower house	●	●	●	●
	Upper house	●	●	●	●
São Tomé and Príncipe	Unicameral			●	●
Seychelles	Unicameral			●	●
Slovak Republic	Unicameral			●	
Slovenia	Upper house	●		●	
	Lower house	●			
South Africa	Lower house	●	●	●	●
	Upper house	●	●	●	●
Sri Lanka	Unicameral			●	●

Country/parliament	Chamber	Held at least one remote or hybrid plenary session		Held at least one remote or hybrid committee meeting	
		Since start of pandemic	In 2022	Since start of pandemic	In 2022
Suriname	Unicameral			●	●
Switzerland	Lower house	●	●	●	●
	Upper house	●	●	●	●
Thailand	Lower house			●	●
	Upper house	●	●	●	●
Trinidad and Tobago	Lower house	●	●	●	●
	Upper house	●	●	●	●
Ukraine	Unicameral			●	●
United Kingdom	Lower house	●	●	●	●
	Upper house	●	●	●	●
Uruguay	Lower house			●	
Zambia	Unicameral	●	●	●	●
Zimbabwe	Lower house	●	●	●	●
	Upper house	●	●	●	●

Appendix B – Parliaments taking part in the research

	Survey			Focus groups & other events		
	Unicameral	Lower house	Upper house	Unicameral	Lower house	Upper house
AMERICAS						
Argentina			●		●	
Brazil		●	●		●	
Canada		●			●	
Chile		●	●		●	
Colombia		●			●	
Costa Rica	●				●	
Dominican Republic		●				
Ecuador					●	
Mexico		●	●		●	
Nicaragua	●					
Paraguay		●			●	
Peru	●					
Suriname	●					
Trinidad and Tobago		●	●			
Uruguay		●			●	
ASIA						
Azerbaijan	●					
Bangladesh	●					
Bhutan		●			●	
Cambodia			●			●
China	●					
Japan		●	●			
Malaysia		●	●			
Maldives	●					
Mongolia	●					
Nepal		●	●			
Pakistan		●				
Philippines		●			●	●
Republic of Korea	●					
Sri Lanka	●				●	
Thailand		●	●		●	●
EUROPE						
Andorra	●					
Armenia	●					
Austria		●	●		●	

	Survey			Focus groups & other events		
	Unicameral	Lower house	Upper house	Unicameral	Lower house	Upper house
Belarus		●	●			
Belgium		●				
Czech Republic		●				
Denmark	●					
Estonia	●				●	
European Parliament	●				●	
France			●			
Germany		●	●			
Hungary	●					
Iceland	●					
Ireland		●	●		●	●
Italy		●	●			
Latvia	●				●	
Lithuania	●					
Luxembourg	●					
Malta	●					
Netherlands		●	●			
North Macedonia	●					
Norway	●				●	
Poland		●				
Portugal	●					
Romania		●	●			
Slovak Republic	●					
Slovenia		●	●			
Spain		●	●		●	●
Sweden					●	
Switzerland		●	●		●	●
Ukraine	●				●	
United Kingdom		●	●		●	●
MIDDLE EAST AND NORTH AFRICA						
Algeria		●			●	
Bahrain		●	●			
Chad					●	
Djibouti	●					
Iraq	●					

	Survey			Focus groups & other events		
	Unicameral	Lower house	Upper house	Unicameral	Lower house	Upper house
Israel	●					
Lebanon	●					
Libya	●					
Morocco		●		●		
Oman		●	●			
Pan-African Parliament	●					
Qatar	●					
PACIFIC						
Fiji	●					
New Zealand	●					
Tonga	●					
Vanuatu	●					
SUB-SAHARAN AFRICA						
Botswana	●					
Burundi		●	●			
Central African Republic	●					
Côte d'Ivoire		●				
Democratic Republic of the Congo			●			
Ethiopia		●				
Ghana	●					
Kenya		●	●	●	●	
Lesotho		●				
Madagascar		●	●			
Malawi	●					
Mauritius	●			●		
Mozambique	●					
Nigeria		●	●			
Pan-African Parliament	●					
Rwanda		●	●			
São Tomé and Príncipe	●					
Seychelles	●					
South Africa		●	●	●	●	
Zambia	●			●		
Zimbabwe		●	●			

Appendix C – Research design

This research was based on a survey and several focus groups. Additional data came from a series of webinars on parliamentary modernization organized by the CIP hubs. Unlike previous editions, this 2022 report is not exhaustive and focuses solely on the impact of Covid-19 and the state of parliaments two years after the start of the pandemic.

Survey of parliaments

The survey for the 2022 report was brief. It featured questions about parliaments’ capacity to function post-pandemic, how the pandemic had affected their use of ICT, parliamentary attitudes and approaches to modernization, and innovation. The survey questions were as follows:

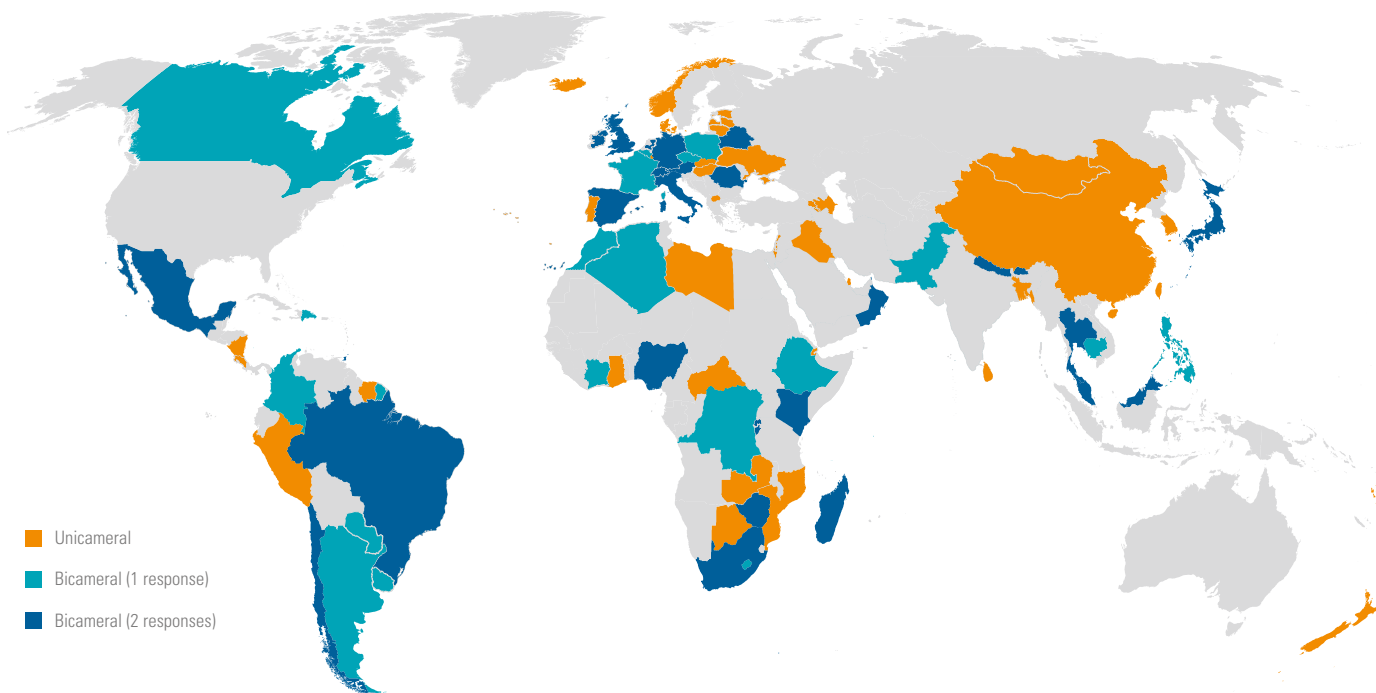
- Has parliament held at least one remote or hybrid PLENARY session...
 - since the START of the pandemic?
 - in 2022?
- Has parliament held at least one remote or hybrid COMMITTEE session...
 - since the START of the pandemic?
 - in 2022?
- Do you expect parliament to hold (or be able to hold if needed) remote or hybrid sessions in the future?
- Have the parliamentary rules of procedure been modified to allow parliament to function during the Covid-19 pandemic?
 - If so, what changes were made?
- Are members permitted to vote remotely?
 - How do they cast their vote?
- Are members able to take part in votes REMOTELY in exceptional circumstances?
- How has the pandemic impacted attitudes to new ways of working in parliament?
- How has the modernization of parliament been affected by the pandemic?
- How has parliament’s resilience been impacted by the pandemic?
- How has public participation in parliament changed during the pandemic?
- What are the top three digital priorities for parliament as it emerges from the pandemic?
- Please share any lessons parliament has learned from the pandemic.

The survey was distributed to all IPU Member Parliaments and via the CIP’s networks. The data was collected between April and June 2022. Traditionally, the survey is only completed by national parliaments. However, in this instance, responses were accepted from the European Parliament and the Pan-African Parliament as they are active participants in the CIP.

Responses were received from **123 parliamentary chambers** in **93 countries** and **2 regional parliaments**. Some bicameral parliaments completed a single survey covering both chambers, while others provided separate responses from both the lower and upper houses. Given that the population (of parliaments in the world) is small, the sample is not considered

to be statistically significant; rather, it is representative. This means that the results cannot be extrapolated to speak for all parliaments – they answer for the respondents alone. Where qualitative data is presented, it has been interrogated using a process of thematic analysis to identify emergent patterns.

Figure 11. Survey responses by type of parliamentary chamber (n=123)



Of the 123 responses received, 47 came from unicameral parliaments, 44 from lower houses in bicameral parliaments and 32 from upper houses (see Figure 11). Forty per cent of parliaments are defined as “small”; 40% as “medium” and 20% “large”.⁸ Respondents were located in all regions of the world, with 34% in the Americas and 23% in the Middle East and North Africa (see Figure 12).

This report includes an analysis of responses by income level, based on the World Bank’s classifications.⁹ As Figure 13 shows, 41% of respondents were from high-income countries and only 9% from low-income ones. This is a familiar pattern in the report series. The two regional parliaments included in the research for this report are excluded from the income-based analysis.

Figure 12. Geographic distribution of survey respondents (n=123)

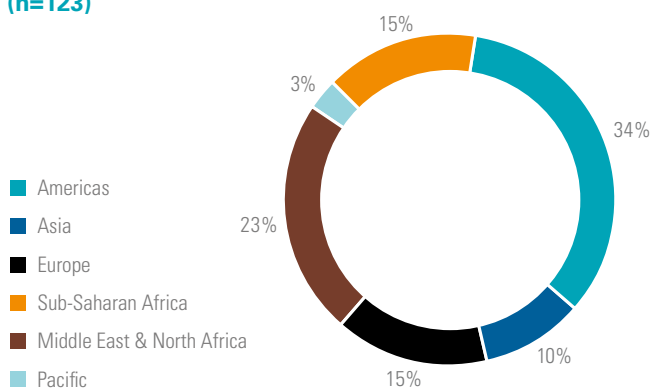
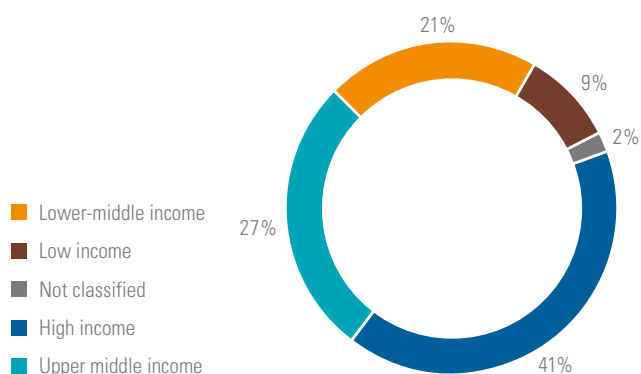


Figure 13. Income levels of survey respondents (n=123)



⁸ A “small” parliament has fewer than 100 members, a “medium” parliament has between 100 and 299 members and a “large” parliament has 300 or more members.

⁹ World Bank, “New World Bank country classifications by income level: 2021-2022”, 1 July 2021: blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2021-2022.

Focus groups

The second phase of primary research for this report was a set of focus groups organized by the CIP in conjunction with the CIP hubs and the ASGP. The focus groups, held in the first quarter of 2022, explored how parliaments had been changed by their experiences of the pandemic. The discussions focused on the approaches taken and how this had translated into the modernization and transformation of parliamentary procedures, systems and services, the barriers and challenges faced, attitudes within parliaments to innovation, modernization, and the use of ICT. Direct quotations from these focus groups may have been edited for consistency and grammar.

Participants in the focus groups were secretaries-general, senior ICT or communications staff, and parliamentary clerks. Six focus groups were held, drawing on participants from:

- the ASGP
- the CIP East African Hub
- the CIP Hispanophone Hub
- the CIP IT Governance Hub
- the CIP Open Data Hub
- the CIP Southern African Hub

Additional background material was drawn from:

- an ASGP informal meeting
- the CIP Open Data Hub network
- the CIP Transforming Parliaments webinar series
- the virtual World e-Parliament Conference 2021

In total, **37 parliamentary chambers were represented in the focus groups**. A full list of participants is provided in Appendix B.

Appendix D – The World e-Parliament Report series

This report is unique in that it does not follow the traditional in-depth survey format of previous editions. Though the series that began in 2008 will give this report context, it can be read alone or in conjunction with the special “Lessons from the pandemic” section of the 2020 report.

The series of World e-Parliament Reports, published in 2008, 2010, 2012, 2016, 2018, 2020 and 2022, helps the parliamentary community ensure its use of digital tools follows good practices. It highlights emerging trends and areas for strategic focus and improvement. The series is useful for academics and civil society organizations wishing to build working relationships with parliaments and to better understand what parliaments around the world are doing in terms of public participation.

The 2008 report was based on a survey carried out in 2007. A second survey in 2009 led to the second report in the series, published in 2010. That second report mirrored the 2008 edition, allowing the parliamentary community to map changes and the growth in the use of ICT. It also allowed parliaments to identify emerging trends in a sector that has seen rapid change and increasing significance in recent years. As the series has become established it has generated data and analysis that have helped parliaments evidence the challenges and complexities of new technology in a parliamentary setting, and has offered suggestions to overcome some of the obstacles to the effective use of ICT. Material and direction for these reports came from presentations and discussion at the World e-Parliament Conferences held in 2007, in Geneva, and 2009, in Brussels.

The third report in this series, the World e-Parliament Report in 2012, continued the process, revising the survey to obtain more up-to-date data and highlight emerging trends. That was when parliaments began to realize the opportunities offered by social media, open data and open-source systems. That third edition drew also from the World e-Parliament Conference in 2010 (Midrand, South Africa) and from various other forums and meetings addressing issues around the digital parliament. These included technical assistance projects in Africa and the Caribbean and for various conferences (such as the libraries and research conference held in Chile in 2011). A key focus for the 2012 report was to identify new and emerging technologies and to determine ways that parliaments could harness them for their own use and that of the wider public.

There was a four-year gap between the third and fourth reports in the series. As part of the design of the 2016 report, the IPU considered the key emerging trends (such as social media and online tools) and decided that it was an opportunity to vary the format. The main parliamentary report was made smaller but key data were kept, permitting the continued monitoring of previously reported trends. A second survey was added, with the intention of changing the topic for each new report. The 2016 survey of parliamentary monitoring organizations (PMOs) proved to be an important and timely addition to the series, giving parliaments, PMOs and others a clear idea about the depth, strength and nature of the relationships between parliaments and citizens.

The understanding of what an e-Parliament consists of has evolved since the expression was coined for the 2008 report. The 2018 report revisited the definition, making it broader than originally envisaged, to encompass technology but also governance, transformation and efficiency. It incorporates a flexible understanding of people, process, architecture, data and good governance, and a strategic sense of how digital tools and services can improve the openness, accessibility and accountability of work in parliament:

An e-Parliament places technologies, knowledge and standards at the heart of its business processes and embodies the values of collaboration, inclusiveness, participation and openness to the people.

The 2018 report paints a positive picture of parliaments being improved through the technologies they have adopted. It shows openness and collaboration continuing between parliaments and increasing with civil society and the public at large, with parliaments publishing and broadcasting more actively and using more accessible and reusable media. Internally, parliaments were working more effectively and efficiently.

The trend towards parliamentary openness continued in 2018. More parliaments used open data and more turned to the communication platforms people used most. In the planning and management of ICT, the trends seen in previous reports persisted that year. Strategic planning was the norm but was not always guided by a larger vision of what ICT could achieve, or followed by processes to monitor, measure and review progress. The gaps between parliaments in high-and low-income countries, as well as difficulties in available funding, staffing and cultural adaptation, were persistent, continuing challenges, as were the knowledge and skills of staff and members, and their confidence in technology.

As they had made clear in 2016, parliaments still required support across the full spectrum of digital applications, from planning and back-end systems to open data and citizen engagement. The IPU's CIP was in part a response to that demand.

Members of parliament, surveyed directly for the first time in 2018, revealed their increasing reliance on mobile technologies as a normal part of their work, considering themselves as competent communicators comfortable with digital publishing. Despite the uptake of social media, however, the broadcast model of communication was still prevalent. Another first in 2018 was an examination of parliamentary innovation. Parliaments had historically been seen as risk-averse and resistant to innovative practices. Pressure for openness and transparency from the public and political commitment were helping to change such perceptions, but with centralization often hampering progress. After the dramatic events of 2020, and the rapid innovation forced on many parliaments, the 2018 report's conclusion appears prescient indeed:

New ways of working require changes in culture as well as technology and a commitment from all parts of parliament and beyond.

The 2020 report – the sixth in the series – was, like many things at the time, overtaken by Covid-19. The delay in its publication did, however, give the research team time to explore the immediate impact of the pandemic on parliaments in detail. The report offered signs that, as challenging as the situation was, it would act as a catalyst for new and transformational digital practices to emerge. Beyond the pandemic, it painted a picture of parliaments continuing to mature, becoming more digitally connected and increasingly reliant on ICT to support their core functions.

Parliaments, the 2020 report found, were challenged and changed by the sudden, disruptive shock of the pandemic. ICT had become more visible, moving from a “back-office” function to centre stage in the daily operations of parliaments. A surge in the innovative use of new technologies had transformed both their culture and places of work, with such additional benefits as less printing and more flexible working arrangements. Digital technologies embraced in the response to Covid-19 facilitated remote work and remote sittings of parliament. And the innovation came at a pace rarely witnessed in parliaments.

Parliaments were encouraged to embrace the opportunity to modernize, and to review their strategic and business continuity planning in the light of their experiences and those of others.



Inter-Parliamentary Union

For democracy. For everyone.

T +41 22 919 41 50

F +41 22 919 41 60

E postbox@ipu.org

Chemin du Pommier 5
Case postale 330
1218 Le Grand-Saconnex
Geneva – Switzerland
www.ipu.org