



IGF Internet
Governance
Forum

IGF
GENEVA  2017

**The 12th Internet Governance Forum (IGF)
Chair's Summary**

• 18-21 December 2017, Geneva, Switzerland •

All interested stakeholders are encouraged to visit the IGF website for full transcripts of all the main sessions and workshops that took place throughout the week at the 12th IGF. The IGF YouTube channel also contains videos of all the sessions.

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<http://www.intgovforum.org>

• <http://www.youtube.com/user/igf> • <https://twitter.com/intgovforum> •

Executive Summary:

The 12th Internet Governance Forum (IGF) was hosted by the Government of Switzerland, from 18 to 21 of December 2017, at the United Nations Office in Geneva (UNOG). The meeting marked the second gathering of the global multistakeholder IGF community since the renewal of the IGF's mandate for 10 years by the UN General Assembly¹. With the overarching meeting theme: '*Shape Your Digital Future!*', the IGF provided a substantive platform for engaged and informed discussions about policy issues pertaining to the Internet, and how the Internet can support and help to achieve the [UN Sustainable Development Goals](#) (SDGs). On December 17 the traditional Day Zero, hosting many diverse events, was held on the premises of the Centre international de Conférences Genève (CICG) in Geneva.

In the course of four days, more than 2000² delegates from over 142 countries participated in over 200 sessions at the IGF, with thousands more participating online. The overall programme was developed in a bottom-up and inclusive manner in consultation with the growing IGF community; with a view to enhance wide-ranging and diverse multistakeholder participation. The busy and productive meeting featured interactive dialogue and debate, and addressed a broad range of themes and issues including, but not limited to, the future of global cooperation on Digital Governance; the impact of digitization on democracy, public trust and public opinion; Internet and the Sustainable Development Goals; access and diversity; the digital transformation and its socio-economic and labour impacts; youth and gender challenges pertaining to the Internet; the protection and promotion of human rights online; cybersecurity; intended and unintended global impacts of local interventions; the need to enhance multistakeholder cooperation; critical Internet resources; Internet governance capacity-building; and other emerging issues that enhance and affect the future of the open Internet.

The IGF is unique in that it is [convened by the United Nations Secretary-General](#) as an open, multistakeholder forum bringing all stakeholders together as equals. Its UN mandate gives it convening power and the authority to serve as a neutral space for all stakeholders. Exchanges throughout the week recognized the important contribution of the Internet - in promoting social inclusion and economic growth, and its potential to contribute to achieving - SDGs. The importance of the Internet and its governance as a powerful tool to promote social inclusion and economic growth, using transparent and inclusive multistakeholder approaches, is clear.

To promote extensive stakeholder inclusion, [transcripts](#) and [webcasts](#) from all of the sessions were made instantly available throughout the meeting, in the coming days, workshop reports and summaries of all the sessions will also be published on the IGF's website. To complement these outputs, the IGF 2017 Host Country, in cooperation with the IGF Secretariat, IGF MAG Chair and the main session co-organizers, delivered sets of key messages, called '**Geneva Messages**', from each of the main sessions, which were [published online](#) and included in this summary (see below for each session the corresponding "session messages"). Once again the daily summaries of the deliberations by the Geneva Internet Platform proved to be a valuable resource for delegates on site and remote, including journalists. Providing even further opportunity to participate and enhancing institutional memory of the dialogue that took place, all sessions were also [livestreamed](#), and [session videos](#) were instantly uploaded for online viewing. IGF social media channels such as [Twitter #IGF2017](#) and [Facebook](#) were also particularly active during the busy week, and facilitated additional platforms for dialogue. [UN press](#)

¹ <http://workspace.unpan.org/sites/Internet/Documents/UNPAN96078.pdf>

² A comprehensive statistical breakdown of participants both on-site and online will be compiled and presented on the IGF website.

[releases](#) were furthermore produced and made instantly available to the global media to further the IGF's outreach. Daily press conferences with special guest speakers, including Göran Marby, CEO of

ICANN; David Kaye, UN Special Rapporteur on Freedom of Opinion and Expression; and Vint Cerf, Vice President and 'Chief Internet Evangelist' at Google; were held as opportunities for accredited media to get in-depth perspectives from some of the IGF's high-level participants.

Highlights:

- **Current and emerging digital policy issues of broad public interest** were prominent at the 12th IGF. Developments around the world related to artificial intelligence, the role of artificial intelligence in disinformation, big data, the Internet of Things and virtual reality, put these issues at the forefront of the IGF agenda. As measured in number of dedicated sessions, they constituted the most popular sub-theme in the programme. Similarly, net neutrality and blockchain technologies, two topics which made headlines in the weeks leading up to the IGF, proved to be some of the best-attended sessions. The room for the DC on Blockchain Technologies' session overflowed; the NRIs Collaborative Session on Digital Currency and Blockchain Technology broke the IGF's YouTube record, with more than 4000 views registered as the session streamed live.
- **Thematic high-level sessions**, hosted by the Government of Switzerland on the opening day and as a main session on Day 2, were held for the first time at the IGF in a fully inclusive, public and participatory way. They put high-level leaders in conversation with one another and with the IGF's participants, bringing into focus views on the future of global Internet governance and the much-discussed issue of the impacts of digitization on public trust and democracy. Among the participants were the President of the Swiss Confederation, Mrs. Doris Leuthard; UN Under-Secretary-General for Economic and Social Affairs, Mr. Liu Zhenmin; ITU Secretary-General Mr. Houlin Zhao; Ms. Mariya Gabriel, E.U. Commissioner for Digital Economy and Society; Mr. Hasanul Haq Inu, Minister of Information of Bangladesh; Mr. Masahiko Tominaga, Vice-Minister for Policy Coordination in the Ministry of Internal Affairs and Communications of Japan; Ms. Lakshmi Puri, Deputy Executive Director of UN Women; Mr. Vinton G. Cerf, Vice President and Chief Internet Evangelist at Google; Mr. Eric Loeb, Senior Vice President International External and Regulatory Affairs, AT&T; Ms. Kathy Brown, President and Chief Executive Officer, ISOC; and Ms. Anriette Esterhuysen, Director of Global Policy and Strategy, APC.
- Two sessions, one on Day 0 and the other held as a workshop on Day 2, moved forward discussions on a proposal from Microsoft for a **'Digital Geneva Convention' on cybersecurity**. The proposal aims to address the need for "new rules to protect and defend civilians against nation-sponsored attacks".
- A **'Digital Geneva Track'** within the IGF programme gathered 14 different open forums organized by international and intergovernmental bodies based in Geneva. They underscored on one hand, the rapidly growing relevance of digital issues in the work of organizations with diverse policy interests and mandates, including humanitarian mandates, and on the other, the development of Geneva as a 'digital policy hub'. UN Women, OHCHR, UNCTAD, the World Meteorological Organization (WMO), the World Intellectual Property Organization (WIPO), the International Trade Centre and the International Committee of the Red Cross were among the participating IGOs, based in or with a presence in Geneva.

- The African Union, the Council of Europe, the European Commission and European Parliament, the OECD, the Organization of American States, and UNICEF, also held sessions in this year's programme, making it by far the IGF with the **strongest participation from international organizations**. 2017 was moreover, a record-breaking year for IGF sessions

organized by Governments, which included Afghanistan, Brazil, Cameroon, China, Cuba, Egypt, Germany, Indonesia, Israel, Latvia, Lebanon, Mexico, the Netherlands, Paraguay and the United States.

- **Cybersecurity** was once-again a notable and highly visible topic. The many related sessions from Day 0 onward focused in particular this year, on cybersecurity capacity-building, including in the context of the SDGs; exploring enhanced and more effective avenues for cooperation; and on preliminary steps for developing cybersecurity norms. Cybersecurity also saw a growing intersectionality, especially with Internet of Things-related issues.

- The recent '**Call to Protect the Public Core of the Internet**' by the Global Commission on the Stability of Cyber Space was cited at different security-related sessions on Day 0 and throughout the IGF.

- The 2017 programme continued to feature **diverse human rights issues** such as privacy, data protection and blocking. This year also saw a specific focus on freedom of expression online in relation to the predominance of 'fake news'. A vibrant digital rights session organized by National and Regional Initiatives emphasized the importance of access as a precondition to enjoying rights online and the equivalence of fundamental human rights with digital rights.

- **National, Regional and Youth IGFs (NRIs)** have been emerging spontaneously ever since the IGF was convened. They are independent in their work, and organized in accordance with the core IGF principles of being multistakeholder, bottom-up, inclusive, open, transparent and non-commercial. Since the 10th IGF, the number of NRIs has grown tremendously and the total number of officially recognized initiatives has more than doubled from 43 NRIs at the end of 2015 to a current record of [97 recognised NRIs](#). The NRIs are active and immensely useful contributors to the IGF community's intersessional activities. The linkages between the NRIs and the IGF have increased significantly, due to many joint work activities such as the organization of sessions held during the 11th and now 12th IGF; work on organizing collaborative sessions; developing publications containing guidelines and best practices on how to establish and run a successful NRI; as well as a publication that reflects the value of existing Youth engagement at the IGF supported by the NRIs. Records from the [NRIs regular fortnightly meetings](#) also serve as valuable and tangible inputs to the global IGF; providing more local and issue -perspectives to policy challenges.

- In 2017, the IGF furthered its work on [Policy Options for Connecting and Enabling the Next Billion\(s\)](#). The intersessional initiative aimed at supplementing the recommendations made in Phase I and II with concrete case studies to highlight how projects on the ground help to make progress in key sustainable development goals. CENB Phase II focused on three SDGs: Goal 4: Ensure inclusive and quality education for all and promote lifelong learning; Goal 5: Achieve gender equality and empower all women and girls; and Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation. Meanwhile, the policy recommendations that came out of the CENB Phase I and II served as a starting point for this year's Best Practice Forum on Cybersecurity.

- [The IGF Best Practice Forums \(BPFs\)](#) continue to offer unique platforms to investigate topical Internet policy challenges by collecting community input and experiences in a flexible and bottom-up manner. The BPFs gather knowledge that exist with different groups, organizations, experts and individuals, made available as a useful resource for the broader community in the form of tangible Best Practice outcome documents. The BPF processes create temporary platforms for

people to discuss, interact and collaborate on one specific Internet governance issue. They foster interaction between existing stakeholders and stakeholder groups and community members from all geographic regions.

- Through their substantive outreach efforts and continued calls for input and contributions, the **BPFs** enabled more diverse and varied participation in IGF processes, including from a richer variety of regions and stakeholder groups. By continuously involving new people in their work, the various BPFs also contributed to enlarging the global footprint of the IGF. As a part of the 2017 community intersessional activities, the fourth cycle of BPFs focused on [Cybersecurity](#), [Gender and Access](#), and [Local Content](#). BPFs worked throughout the year in an open and inclusive way via open mailing lists, regular virtual meetings and BPF workshops during the 12th IGF meeting.

- **17 IGF Dynamic Coalitions (DCs)**, two more than in 2016, worked throughout the year, independently, as multistakeholder expert discussion groups on a variety of topics. A majority of DCs presented [substantive issue-specific papers](#) for review to the IGF Community. While DCs date back to the first IGF meeting in Athens, their ongoing coordination effort since 2015 has continued to show significant progress toward synchronising DC work and adapting to fundamental [common standards of transparency and inclusiveness](#) (open archives, open membership, open mailing lists), culminating in a new DCs main session.

- In order to help orient first-time participants to the IGF and to help them understand the organizational processes, as well as to foster their integration into the IGF community, the [Youth and Newcomers Track](#) launched on Day 0 and ran through the meeting with informal sessions focused on putting newcomers in conversation with Internet policy leaders from all stakeholder groups.

- During the IGF workshop proposal process, proposers were invited to define their workshops with **thematic tags**, including write-in tags of their own choosing. As part of an approach to structuring the programme in a bottom-up way, the most popular tags were used to determine the programme of the 2017 meeting. Cybersecurity emerged as the most popular standalone tag. The Internet of Things, Artificial Intelligence and 'Fake news' were also frequently used.

- After being successfully introduced last year as new session formats, **24 lightning sessions** were selected for open-air talks. Taking place in a 'boundary-less' space in the IGF Village, the 20-minute talks allowed presenters to have up-close and informal engagement with the participants. They were held every day of the meeting during lunch breaks and covered a wide variety of topics, among which algorithms, data transparency, smart cities and community networks.

- [The IGF Village](#) included a record number of booths, with 55 exhibitors presenting their work; and gave exhibitors from across the stakeholder spectrum the opportunity to advance their work, network and create partnerships among the IGF's participants.
- **Art@IGF**, an interdisciplinary exhibition of digital art, was set up during the Forum in order to illustrate the interconnections between digital policy, digital art, media theory and technology.

Opening Ceremony

The President of the Swiss Confederation, Mrs. Doris Leuthard, noted the importance of the IGF, as “it represents one of the major platforms allowing for a dialogue between all stakeholders which are inclusive, interactive and open”. Remarking that the digital world is one which profoundly changes our environment, the President underlined the importance of multistakeholder cooperation and dialogue for creating an information society with people at the heart of it.

Through a video message, the United Nations Secretary-General António Guterres called for a people-centred Internet which must serve to improve the human condition, by “breaking divides based on locality, means, and gender”.

The United Nations Under-Secretary-General, Mr. Liu Zhenmin, underlined present importance and relevance of the IGF. It was noted that the IGF has made crucial contributions to public policy on Internet. “I believe the outcomes of the IGF community’s work will be a valuable contribution toward the SDGs and a more inclusive and sustainable digital future for all”.

The Director General of the United Nations Office in Geneva, Mr. Michael Møller, spoke about how an integration of all stakeholders is necessary. “New digital world will need to be people centered and inclusive, combining all stakeholders making it the place to develop the regulatory frameworks needed; flexible enough to information to prosper, but protective enough to protect the social cohesion of our society. This is the value of the Internet Governance Forum and it is also your challenge the next couple of days”.

“ICT's have transformed people's live around the world, and they have a critical role to play in helping to achieve the 20th century Agenda for Sustainable Development”, said Mr. Houlin Zhao while expressing his support to the open and inclusive discussion platform like the IGF.

The Assistant Director-General of the United Nations Educational, Scientific, and Cultural Organization (UNESCO), Mr. Frank La Rue, noted that “full access to information means a free Internet, an open Internet an accessible Internet, an Internet that serves the building of knowledge societies for everyone, and it does not represent the danger for anyone. This is our challenge: how to make Internet an instrument of development and an instrument of peace.”

Mr. Pierre Maudet, Geneva State Councilor noted that the Internet needs to be based on solidarity. “In order to shape our digital future, we not only need to master the tools, but we also need to have confidence in our tools and in the partners that we are going to work with to build our future.”

The mayor of Geneva, Mr. Rémy Paganini note that the existing digital divide between the developed and developing countries has to be closed, and we need to guarantee equal access to the Internet for all.

Main Sessions

• DAY One •

High-Level Thematic Session - Shaping our Future Digital Global Governance

Digitisation provides unique opportunities for innovation, growth and development. But in recent times, the Internet has also been associated with growing challenges that call for a better coordinated global

digital governance system. Pooling the strengths of different stakeholders – governments, private sector, technical community and civil society – is essential in any such effort.

The session covered pressing matters relating to digitisation and the future evolution of the global digital governance framework. Potential gaps in the current digital governance system would be part of the conversation and suggestions for improving global cooperation among all stakeholders can be developed. High-level panelists shared their visions for global digital governance in 10 years, discussed challenges to be addressed, identified opportunities to be seized, and reflected on roles and responsibilities of different users.

Session Messages

- *There was broad support for the notion that as the Internet and digital technologies continue to evolve, better coordinated digital governance systems are needed to maximise the opportunities offered by these technologies, and address the challenges they bring. How such systems could or should look like, and what they should focus on, remains however an issue for further discussion.*
- *That effective digital governance adapts and responds to the needs of the global citizens, was shared by all participants. But what are those needs? Some highlighted as priority areas bridging the digital divide (in its multiple dimensions), fostering digital literacy, and supporting the development of the digital economy. Others stressed that governance structures need to focus on enhancing confidence and trust in digital technologies, ensuring security, and creating stability and predictability in cyberspace.*
- *The notion that the ideal future digital global governance should be value-based, inclusive, open, and transparent gained traction along the debate. While it is challenging to determine values that can be shared by all stakeholder groups, and at a global level, there was common ground in the thought that core Internet values are and need to stay human-centred.*
- *When it comes to the governance model, there was broad support for the multistakeholder approach, and a more active involvement of all stakeholders in identifying and implementing consensus-based solutions for digital policy issues. It was underlined that the challenges of the digital world also need to be addressed by governments and intergovernmental organisations, through laws and regulation.*
- *On the suitability of an international treaty or convention to address challenges such as cybercrime and cybersecurity, some expressed the view that it might be too early to consider such an option – without excluding it as an option for the future - while others considered that an intergovernmental treaty is not an adequate solution to tackle challenges that affect all stakeholders, and for which all stakeholders should have roles and responsibilities.*
- *The IGF, as a multistakeholder and inclusive process, was broadly supported as an important platform that allows stakeholders to reflect critically on existing digital governance processes, and contribute to the shaping of future processes.*

Local Interventions, Local Impacts: How can International, Multistakeholder cooperation address Internet Shutdowns, Encryption and Data Flows?

The rapid growth and pace of innovation of new technologies have outpaced traditional regulatory models and may prompt unilateral local actions that threaten the open, stable and interconnected nature of the Internet. Multistakeholder dialogue can help find the least intrusive methods of safeguarding recognised local interest, while maintaining a safe, secure and resilient global network that fosters social-economic development and innovation.

The session discussed the impacts that national policy initiatives may have on the global Internet environment and the jurisdictional issues still to be solved. The discussion with experts focused on three different but interrelated topics: Internet disruptions, encryption and data flows. The main session provided an opportunity to workshops organised at the 2017 IGF on these and related issues to feed into the debate.

The constructive discussion with all stakeholders was able to provide key insight on the global cooperation that is necessary for the Internet to improve human rights, peace and well-being; and on the aggregate effects that Internet disruptions, encryption and data flows might have on the achievement of the SDGs.

Session Messages

- *While there is increasing awareness of potential unintended impacts of Internet shutdowns, they continue to happen around the world. Shutdowns may affect the exercise of human rights, have economic implications, and may lead to the fragmentation of the Internet (as they often have cross-border effects).*
- *The motivations behind Internet shutdowns vary, they may be legitimate, but sometimes blocking is used to address problems that could be solved by using the Internet. It is important to have a process in place that ensures: transparency, adequate oversight, and redress mechanisms.*
- *Encryption helps promote public security, and allows a better protection of human rights (such as those of activists, journalists, and minorities). It should not be seen as a by-default security threat. Countries that consider bans on encryption should understand the limitations and impacts of such a ban (e.g. cross-border effects, undermining the security of citizens, challenging the human rights of groups or minorities, and determining companies to move to other jurisdictions where such bans are not in place). Tools developed or employed to undermine encryption can come into the hands of those with illegal or criminal purposes. Governments and industry should cooperate and identify vulnerabilities in encryption/encrypted products and should be reported to the vendors.*
- *Stakeholders should work together on achieving an appropriate balance between the interests of citizens and entities to secure their data and the needs of law enforcement agencies, while not undermining the fundamentals of the technology.*
- *Data is an important asset in the digital era, due to its multiple uses. As governments and private companies collect and process large amounts of data, there is a need for more transparency and accountability in these processes. Users should be educated on how their data may be used and how to protect it.*
- *The digital economy depends on the free flow of data, but this should be balanced with data protection. Governments, private companies, and civil society should work together on basic sets of rules that allow data aggregation and data flows, while also protecting the integrity of data and the privacy of individuals.*

• DAY Two •

High-Level Thematic Session - Impact of Digitization on Politics, Public Trust and Democracy

The digital space, as a cornerstone of the public policy space, can be a great enabler for democratic discourse and participation, as well as inclusive policy-making. At the same time, the misuse of the digital public policy space can lead to the distortion of truth, mistrust in public information, and misrepresentation of public opinion.

The High-level session discussed the opportunities and challenges that digitisation brings to the digital policy sphere, the public trust and democracy, addressed the roles and responsibilities of the different stakeholders, and covered a wide range of issues such as the use of digital tools for more inclusive policy-making; fake and false news to influence political processes and the responsibilities of internet intermediaries as disseminators; and rebuilding trust among users. It further looked into whether and how digital literacy, education, and awareness-raising could be the key towards empowering citizens not only to take advantage of digital tools, but also to deal with the challenges related to the misuse of the digital public space.

Session Messages

- *Digitisation can empower citizens, strengthen institutions, and promote more inclusive democratic participation and policy making. But it can also lead to information disorder, public mistrust, and the manipulation of public opinion. There was broad support for the idea that we should avoid over-focusing on the risks, and rather put emphasis on maximising the positive aspects of digitisation.*
- *Trust in public institutions and policy making processes remains a matter of concern, and digitisation can act both as a solution and as a threat. Many emphasised that core principles – such as accountability, transparency, legitimacy, and openness – are needed to consolidate or restore trust. Digital technologies can help put these principles into practice.*
- *'Fake news' continues to be in focus, but many noted that the term is confusing, and 'disinformation' or 'misinformation' could be used instead. While the phenomenon is not new, it now has a wider effect due to digital technologies. There were diverse views on the roles and responsibilities of stakeholders. Some noted that governments are mainly responsible, and should invest in education and media literacy, instead of building new institutions and policies. Governments were called upon to abstain from content regulation and censorship. Some were in favour of intermediary responsibility and the need for regulation in this regard, while others argued that platforms cannot be solely responsible for countering misinformation.*
- *There was general agreement on the crucial role that education and literacy have in equipping individuals with a critical mind, and the ability to make informed choices and distinguish trustworthy information from misinformation and/or manipulation.*
- *While acknowledging the importance of education, several other remedies were proposed for addressing the challenges of misinformation in the digital space: strengthening quality journalism, rebalancing the relation between traditional and new media, fact checking, and providing alternative positive stories.*
- *Finally, it was broadly agreed that multistakeholder cooperation is key in making sure that we, as a society, use the digital space to the best of our abilities. While the digital future is characterised by uncertainties, and facing the unknown is a challenge, relying on long-term principles (such as accountability and transparency) combined with having flexibility in implementing and finding tailor-made solutions to face new challenges would be the most appropriate way forward.*

Empowering Global Cooperation on Cybersecurity for Sustainable Development and Peace

The existence of critical global cybersecurity issues have underscored the urgent need for a renewed multi-stakeholder dialogue on the security of cyberspace for peace and sustainable development. Achievement of the UN 2030 Agenda for Sustainable development and its SDGs would be under threat if actors decline to shape into global actions, commitments and ideas on global cooperation on cybersecurity and preservation of the stability of the Internet.

The session contributed to establishing a global multistakeholder dialogue on cybersecurity. Various institutional frameworks for dealing with cooperation on cybersecurity are in place, but tend to operate in silos, missing the opportunity of a global course of action. Building upon the outcomes of the IGF2015 and 2016 main sessions on cybersecurity, and on the work of the IGF 2017 Best Practice Forum on cybersecurity, this session proposed concrete actions to empower the global cooperation on cybersecurity for sustainable development and peace.

Session Messages

- *Cybersecurity and the preservation of a secure and reliable cyberspace are essential elements in the road towards sustainable development. However, countries have different levels of preparedness to deal with cyber threats and cyber risks, and more efforts need to be focused on capacity building measures. It is important for countries to have institutions, strategies, and policies in place to tackle cybersecurity issues, but capacity development should also focus on individuals.*
- *Cybersecurity cannot be achieved by one stakeholder group on its own, and all stakeholders have roles and responsibilities. As siloed approaches can lead to ineffective and counterproductive measures, multistakeholder cooperation needs to be reinforced. Such cooperation carries challenges, one of them being related to the fact that there is no universally agreed definition on the notion of cybersecurity. Hence, a global culture of cybersecurity is needed, to enhance mutual understanding among stakeholders on what, when, how can be done to ensure an open, secure, stable, and accessible cyberspace.*
- *While there is broad agreement that international law applies to cyberspace, calls were made for more efforts to clarify how it applies, and to identify whether there are areas where there might be gaps that international law does not cover.*
- *Cyberspace needs to be a place for peace, stability, and prosperity. Avoiding the militarisation of cyberspace and ensuring that states do not engage in a cyber arms race were seen as important elements in this regard. For some, this can best be achieved through international cooperation among states, in the framework of the UN.*
- *Many agreed that existing norms related to responsible state behaviour in cyberspace – although not binding – can significantly contribute to enhancing cybersecurity and stability. Calls were made for more awareness raising about these norms, and more efforts to enhance their voluntary implementation.*
- *While some called for new international treaties or convention to encode rules, norms, and principles for cybersecurity and responsible state behaviour, others suggested an intermediary step to identify what could be the mechanisms that would allow meaningful engagement of all stakeholders in the development of rules. Moreover, if a treaty is adopted, the question remains on how to make sure that it is actually implemented, considering that it is not even clear how existing international law applies to the use of digital technologies by states.*

Special Session - Data for Sustainable Development Roadmaps

The adoption of the SDGs by the UN renewed the understanding of how the major challenges that the world is facing are interdependent. The SDGs offer the world the potential guidelines to move toward a sustainable future. Data helps experts to weigh the feasibility of goals, provides clarity on the nature of the problem and facilitates statistic-based supervision and evaluation of development progress.

The session discussed how the lack of data: A little under 30 of the world's poorest countries have extremely limited data to measure the trend of SDGs indicators. It has become one of the most pressing challenges of the 2030 Agenda. It highlighted the need for exploring possible approaches for addressing data gaps, encouraging data use, strengthening the 'Data Ecosystem', and improving data systems. It further focused on policy initiatives in relation to data production, sharing and use, as well as the enabling environment to ensure data quality, interoperability, security and protection.

• DAY Three •

Dynamic Coalitions - Contribute to the Digital Future!

Dynamic Coalitions (DCs) are the IGF's longest-standing community groups that do continuous work around a chosen theme in Internet Governance, during and between the IGFs. They were first formed at the IGF in Athens in 2006 with the aim of organizing discussion groups around Internet governance themes, both of particular interest to members and with a wider public significance. Starting out with a small number, there are now 17 active DCs whose work has evolved to encompass a range of activities and outputs.

Building on their successful main session held in 2016, DCs have agreed to come together again at IGF 2017 to discuss the topics they cover – from Accessibility and Disability, Internet of Things and Blockchain Technologies, to Child Online Safety, Community Connectivity and Gender and Internet Governance, Publicness and Core Internet Values.

Session Messages

The following were points raised by Dynamic Coalitions presenting their work, and reflect their views.

- *The digital divide remains a concern around the world and it requires actions in multiple areas, from building infrastructures, to empowering individuals and communities to make meaningful use of the Internet. Community networks are an example of such a multidisciplinary approach: the building of physical infrastructures is complemented by empowering communities to benefit from digital opportunities. Public libraries also have an important role to play in improving access, especially in developing countries.*
- *The principle of universal design in the development of technologies should be seen as a requirement for enhancing accessibility, including for persons with disabilities. Measures are implemented around the world, and it is important to collect data about what works and what does not, to inform policy making.*
- *Internet rights, principles, and values span across multiple dimensions. Core Internet values are of a technical nature and refer to the Internet as a global, interoperable, open, decentralised, user-centric, robust, and reliable network. Beyond these values, human rights need to be protected online. For example, privacy and data protection rights remain a major concern, and principles such as privacy-by-design and consent-by-design could contribute to better preserving them. Children and gender rights are also important, and their implementation requires both digital literacy and protection from online harm and violence.*
- *Content control policies that platforms implement at the request of governments could challenge human rights. To avoid platforms becoming regulators, solutions could include co-regulation and self-regulation, with governments maintaining an adequate supervision of the processes. With regard to net neutrality*

and zero-rating, it was pointed out that different practices and policies exist around the world, and it seems as if zero-rating plans are more common in countries without net neutrality regulations, while other services seem to be zero-rated at a global level.

- As technologies continue to develop, new challenges need to be addressed. Blockchain can improve the security of data and the stability of systems, but it also raises questions of jurisdiction and governance. In the case of the Internet of Things, developing an accountability and transparency framework is needed to guide its evolution in a responsible manner. Transparency is also important in the context of international trade negotiations, as governments need to keep citizens informed and allow them to contribute comments in the drafting processes.

NRIs Perspectives - Rights in the Digital World

Throughout the year, at their own annual meetings, a number of the National, Regional and Youth IGFs (NRIs) have been extensively discussing the notion of rights in the digital world. These exchanges produced a rich variety of views and practices from different national and regional contexts, as well as different observations on the impact and potential impact of global digital rights policies and practices on the national, regional or subregional communities. The NRIs main session served as a global platform to identify commonalities, discuss differences, exchange experiences and showcase best practices, fed by multistakeholder discussions on rights in the digital world.

Session Messages

- *There was broad support for the view that the rights - people have offline should also be protected online. Rights such as privacy, data protection and freedom of expression are equally important in the digital space as they are in the physical world. Some pointed out that there might not be an uniform understanding of these rights and that the application of rights might vary from country to country.*
- *While for some access to the Internet should be considered as a human right, others noted that access is more a need than a right. It was generally supported that access to the Internet is an important enabler of development and growth. For this reason, many noted that more should be done to bridge the digital divide.*
- *Many indicated that the Internet enables them to exercise their digital rights, and called for more education, digital literacy, and for raising awareness about digital rights, and ways to exercise and protect them.*
- *Some recommended that the protection of digital rights should be embedded in an inclusive approach that also considers the needs and rights of vulnerable groups and communities – such as children, women, gender minorities, people with disabilities.*
- *Other challenges and limitations mentioned during the session were: Internet shutdowns; limited transparency in how some Internet intermediaries process personal data or deal with content control policies; individual self-censorship caused by activities such as surveillance; tendencies to trade off rights against each other; and the lack of effective legal frameworks at national level, or insufficient resources to implement them.*
- *New data-driven technologies such as the Internet of things and artificial intelligence were expected to have both positive and negative impacts on human rights. Suggested solutions to maximise the opportunities and minimise the risks included the adoption of standards and principles on issues such as security and privacy, ethics, and accountability.*
- *There was a broad confidence that multistakeholder processes could be effective in addressing challenges related to digital rights. It was noted that more efforts should be made to strengthen the engagement of stakeholders, and empower them to make meaningful contributions.*

Gender Inclusion and the Future of the Internet

The SDG Goal 5 that looks at a range of targets related to gender equality and empowerment of women and girls specifically cites ICTs as an important area for policy development, and provides an opportunity as well as a clear impetus to seriously consider gender in current developments that will impact on the future of the Internet.

The main session on gender inclusion and the future of the Internet focussed on key issues related to gender and Internet policy, and facilitated a discussion on recommended improvements to Internet governance processes, mechanisms and structures to better integrate gender equality.

Session Messages

- *There was strong recognition on the significance of the first main session on gender at the IGF, and its importance in addressing this as an integral and cross-cutting issue. Gender should be understood through the lens of intersectionality, which integrates diversity, including on rural/urban locations, economic power, and sexual orientation and gender identities, and that special attention should be given to gender-related issues of subgroups (e.g. rural women, girls, women in refugee camps, LGBTQI).*
- *There was general support that gender digital divide is still a reality manifesting itself in multiple dimensions. Efforts to enable women and girls to access the infrastructures and digital technologies need to be complemented with creating digital literacy, enabling meaningful use of technologies, encouraging them to prepare for jobs in technology fields, enabling them to create content that is relevant and valuable to their lives and contexts, as well as empowering them to contribute to Internet governance and digital policy processes. Some pointed out that gender equality is also a matter of culture and norms, and that stereotypes should be fought against through education and awareness. Context was stressed as an important factor that impacts this issue.*
- *The digital divide facilitates discrimination of women and girls and as such, is a human rights issue that states should address in line with international human rights frameworks. Cooperation is key, and also other stakeholders have critical roles to play.*
- *Several discussants stated that technology is not neutral, and that gender diversity should be taken into account when technologies are designed. They warned for the potential impact of data-driven technologies on gender digital rights, and called for multistakeholder action to avoid that opaque algorithms and machine learning systems make gender-biased decisions.*
- *The issue of online gender-based abuse and violence was highlighted as a continued challenge to be addressed. Some warned that states and Internet intermediaries, when tackling online gender-based abuse and violence should not do so through a protectionist framework, but through the framework of human rights. This includes the need to potentially balance different rights, and that the principles of necessity, proportionality, and transparency should be respected in so far as they limit the freedom of expression.*
- *The important role played by civil society actors in developing research and coordinating collaboration to understand key and emerging gender-related issues were acknowledged, and policymakers were encouraged to engage and be part of honest conversations to develop not only policies but coordinated plans together to achieve concrete results. Many acknowledged the progress made in recent years to integrate women rights and the gender issues into Internet governance processes, mechanisms, and structures (including the IGF). Yet, it was felt that gender*

equality and inclusion should remain a priority area. A multistakeholder approach was underlined as an important model and approach in this.

• **DAY Four** •

Digital Transformation: How do we Shape its Socio-economic and Labor impacts for Good?

Cross-border data flow has accelerated economic globalization while the flows of international trade and finance have flattened since 2018. The digitization of products that were traditionally delivered physically but can also be transmitted electronically over the Internet plays an important role in this process, opens new possibilities for e-commerce, and is an essential part of achieving the SDGs.

The session provided a thoughtful dialogue on the process of digitization and digital transformation, examining its effect on the global value chain, new business models, and the future workforce.

The increased use of data will be required to realize the potential of the digital transformation. In the near future, data flows will increase under the pervasive Internet of Things (IoT). Data analytics, machine learning, and artificial intelligence (AI) are perceived to be fundamental to the transformation of both developed and developing economies. Under 'sharing economy', digital platforms enable direct exchanges between service providers and potential customers, and reshape organisations and the future of the work, necessitating a dialogue about how to enable an inclusive digital transformation which benefits everyone.

Session Messages

- *The underlying message of the session was that digitisation brings benefits to society and advance growth and development, but also comes with challenges. To reap these benefits and ensure that no one is left behind, actions are needed in multiple areas: ensuring access to digital infrastructures and technologies, developing the capacities of individuals and companies to use digital technologies, and putting policies in place to support innovation and growth.*
- *E-commerce was seen as an enabler of global trade, empowering enterprises to reach international markets. But barriers still exist. Some pointed that this specific time is a historically important turning point in many meanings, then also touched upon a need to update cross-border trade rules and procedures, to better cater for the digital era. Others cautioned that time is needed to reach consensus between countries on how to best address the challenges of the digital trade. There were also calls for tackling issues such as limitations in cross-border data flows, as well as data privacy and security concerns.*
- *Some discussants noted that automation and artificial intelligence offer new avenues for development, and it is important to ensure that societies are able to adapt and take advantage of the opportunities. Other focused on the need to address risks associated with such technologies, from bias and imbalances in algorithmic decision making, to disruptions on the labour market and workforce.*
- *Some argued that societies and individuals will be able to adapt to the changes brought by new technologies, as was the case with previous industrial revolutions. While some jobs may become obsolete, technologies could develop new services, and create new markets and jobs. Others warned that the digital revolution risks leading to profound occupational changes, gaps in social protections, and workers' rights abuses. Among the proposed solutions were: digital inclusion, active market labour policies, social protection and social safety nets, and adequate legislation to regulate the behaviour of companies.*
- *There was general support for the view that education and capacity development especially for children, youth, and women are key to ensure that the future workforce has the skills required by the new*

economy. Calls were made for changes in the overall curricula and learning process, to allow individuals not only to make use of new technologies, but also to be able to challenge them.

- *While it cannot be predicted how our digital future will look like, it was said that we should take a human-centric and ethics-based approach to digital development.*

Taking Stock: Review of the IGF 2017 annual meeting

The traditional 'Taking Stock' session held in the afternoon of the last day made possible for all IGF participants, present online and onsite, to take the floor and deliver remarks in regard to their experience at the 12th annual meeting.