

Data Governance

About the Theme

At IGF 2019, discussions on this theme considered:

- The role of data governance in fostering economic growth (including for SMEs), innovation, social progress and sustainable development
- Issues on which there is perceived a need for, but as yet no global consensus, such as the lack of a common framework for data protection and related issues around managing cross-border data flows and questions of jurisdiction
- How to best ensure the development of people-centric frameworks at national, regional and international levels, as well as in related cross border issues, that respects human rights, empowers individuals and promotes sustainable development
- The conditions and ethical frameworks needed to facilitate data-driven innovation while also ensuring fair competition, and fostering trust in the Internet and digital technologies

Related Sustainable Development Goals (SDGs)



Issues Associated with Data Governance

- Accountability
- Algorithms/Artificial Intelligence/Machine Learning
- Big Data
- Cross-border Data
- Data-driven Economy
- Data Fairness
- Data Privacy & Protection
- Data Services
- Data Sovereignty
- Digital Identity
- Digital Sovereignty
- Economic Development
- Human Rights
- Internet Ethics
- Internet Ethics & Regulations
- Innovation
- Surveillance Capitalism

A New Framework for Organizing Discussions Introduced at IGF 2019

In a new approach to shaping the programme in 2019, the MAG used the submissions received in response to the annual public call for issues to develop a more thematic, focused and non-duplicative design of the schedule. The three main themes that emerged out of this process helped shape many of the preparatory and intersessional work processes for IGF 2019:

- Data governance
- Digital inclusion
- Security, safety, stability and resilience

In the March 2019 calls for workshop proposals, open forums, Dynamic Coalition and National, Regional and Youth IGF collaborative sessions were issued, organizers were invited to identify under which main theme their sessions would fall. Members of the Multistakeholder Advisory Group (MAG) put together the following information to assist IGF participants frame their sessions according to the main themes:

<https://www.intgovforum.org/multilingual/content/igf-2019-themes>

Workshop proposers were also given the option of selecting from a range of more specific associated issues/tags. In the leadup to the meeting in Berlin, each of the sessions associated with the main themes was coordinated by a small set of volunteers from the Multistakeholder Advisory Group (MAG).

How the Discussions in the Data Governance Track Were Coordinated at IGF 2019

There was an introductory session to set the scene for the discussions throughout the week:

<https://www.intgovforum.org/multilingual/content/introductory-breakout-session-data-governance>

On Day 4, there was a concluding breakout session to reflect on the discussions that had been held throughout the week:

<https://www.intgovforum.org/multilingual/content/concluding-breakout-session-data-governance>

A brief summary of the reports presented during the concluding breakout session was included in the “Bringing It All Together” session on the afternoon of Day 4:

<https://igf2019.sched.com/event/SU6X/bringing-it-all-together>

In addition, on the mornings of Days 3 and 4 of the IGF 2019, living documents, containing cumulative thematic messages drawn from the discussions of the previous days were published on the IGF website for the consideration and input of participants.

<https://www.intgovforum.org/multilingual/content/berlin-igf-messages>

Below is the final set of messages on Data Governance.

Berlin IGF Messages on Data Governance

To provide a high-level overview for decision-makers of the most current thinking on key Internet governance issues, discussions from IGF 2019 sessions on the theme of data governance have been distilled into the following Berlin IGF Messages.

Cross-border data flows and development

- Flows of data and information link up communities, cities, countries and continents, bringing people together beyond traditional barriers established through politics, through religion or social status.
- As data crosses borders, multiple legal and regulatory frameworks, such as personal data protection regulations, data disclosure requirements and judicial redress processes often apply, with the potential to produce uncertainty in global data-driven supply chains, with the potential to adversely affect economic and social development, innovation, and as well as place constraints on freedom of expression and freedom of assembly, and introduce security risks.
- Working collaboratively in a global context on developing commonly agreed values and principles for data frameworks could assist in building confidence in cross-border data flows, with resultant economic and social benefits. Small to Medium Enterprises (SMEs) lacking the resources to map differing national legal regimes would particularly benefit from increased confidence in their ability to reach out to customers in other national market.

Data: the key resource of our economy and society

- Evidence shows that Artificial Intelligence (AI) and open data can assist in achieving the 2030 Sustainable Development Goals by contributing to the establishment of inclusive and empowered knowledge societies. Already, today, our everyday lives are being supported and influenced by digital applications that rely on big data and algorithms.
- The global trend towards urbanization has brought about challenges in urban mobility, public health, and equitable access to public services and equal opportunities. Increasing uptake of Internet of Things (IoT) in urban infrastructure also inevitably results in more data being produced, collected and shared. It is essential to ensure public services are people-centric and data-driven, with participation and transparency in the design of services. Sustainable development and the protection of fundamental rights of all people, including marginalized groups, should be the overarching goals for policymaking, that also allows for integrated services and innovation to drive efficiency and equality.
- A lack of adequate global and national human-centric data governance limits data's potential as a key resource for sustainable development. Current data governance models support the concentration of access to data to only a few very large technology companies. Meanwhile, the human sources of data, as well as smaller businesses and developing countries, are excluded from sharing and benefitting from the value of their own data, while simultaneously being vulnerable to data breaches and attacks on their privacy rights.
- Data governance challenges are also increasingly seen through the lens of human rights risks and not just as ethical dilemmas. This lens has widened to bring into context issues related to corporate environmental and social responsibility, and the sufficiency and accountability of the current global

governance and public policies related to the Internet.

- Effective data governance is essential in building smart cities that foster the creation and delivery of effective, innovative and

sustainable public services. Data-driven public services, including mobility services, should be governed in a manner that is consistent with the Sustainable Development Goals through a holistic and integrated approach.

Data governance, ethics and fundamental rights

- Data governance challenges are increasingly seen through the lens of human rights risks.
- Artificial Intelligence and algorithms, if not governed effectively, can be used to monitor and manipulate behaviour, to besiege us with ever more targeted and intrusive advertising, to manipulate voters and stifle freedom of expression. Algorithmic discrimination affects labour market, the criminal justice system and access to public services.
- There needs to be a balance between the need to protect children's data and children's ability to participate online in meaningful ways. In particular, parental control - both too much and too little - can limit children's ability to benefit from digitalization with both the data protection rights and active permission of children to use their data often

overlooked. Integrated digital literacy programmes at school are essential to improving children's digital literacy at both the national and local levels.

- Use of AI on anonymized big data sets can de-anonymize and identify specific individuals within the data sets.
- When developing algorithms there should be a policy balance between being able to extract knowledge that can be used for good and knowledge that can be used to infringe on the fundamental rights of people whose data has been collected.
- Appropriate protocols for data interoperability need to be part of data governance models.

Best Practice Forum on Internet of Things (IoT), Big Data and Artificial Intelligence (AI)

In addition to community-proposed sessions that were explicitly included under the work track of Data Governance, IGF 2019's intersessional activities included the Best Practice Forum (BPF) on Internet of Things (IoT), Big Data and Artificial Intelligence (AI), which was also of relevance to the theme of Data Governance:

<https://www.intgovforum.org/multilingual/content/bpf-internet-of-things-iot-big-data-and-artificial-intelligence-ai>

A draft version of the BPF's outcome document for 2019 is now available:

Internet of Things, Big Data, Artificial Intelligence

https://www.intgovforum.org/multilingual/filedepot_download/8398/1778

Annex A: IGF 2019 Sessions on the Theme of Data Governance

In total, there were 34 sessions on the theme of data governance.

Main Sessions

Applying Human Rights and Ethics in Responsible Data Governance and Artificial Intelligence	https://www.intgovforum.org/multilingual/content/%E2%80%8BApplying-human-rights-and-ethics-in-responsible-data-governance-and-ai
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Promoting Data Free Flow with Trust in a Digitally Connected World ~ Osaka Track, Biarritz Strategy, and the Future ~	https://igf2019.sched.com/event/Y9Jo/promoting-data-free-flow-with-trust-in-a-digitally-connected-worldosaka-track-biarritz-strategy-and-the-future
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Best Practice Forums

Internet of Things (IoT), Big Data and Artificial Intelligence (AI)	https://www.intgovforum.org/multilingual/content/bpf-internet-of-things-iot-big-data-and-artificial-intelligence-ai-0
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Dynamic Coalition (DC) sessions

Accountable development, purchase and use of IoT (DC on The Internet of Things towards the future, building on inherent Core Internet Values)	https://www.intgovforum.org/multilingual/content/igf-2019-accountable-development-purchase-and-use-of-iot
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Conflicting Rights, AI and Tax Avoidance (DC on Platform Responsibility: Platform Values)	https://www.intgovforum.org/multilingual/content/igf-2019-platform-values-conflicting-rights-ai-and-tax-avoidance
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ICT accessibility for people with disability (DC on Accessibility and Disability)	https://www.intgovforum.org/multilingual/content/igf-2019-ict-accessibility-for-people-with-disability
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National and Regional and Youth IGF (NRI) sessions

Collaborative Session on Human Rights	https://www.intgovforum.org/multilingual/content/nris-collaborative-session-on-human-rights-0
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Collaborative Session on Data Protection	https://www.intgovforum.org/multilingual/content/nris-collaborative-session-on-data-protection-0
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Open Forums

Business and Human Rights in Technology Project: Applying the UN Guiding Principles on Business and Human Rights to digital technologies (OHCHR)	https://www.intgovforum.org/multilingual/content/igf-2019-of-24-business-and-human-rights-in-technology-project-applying-the-un-guiding
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Data Governance and Competition (Federal Ministry of Economics and Energy (Germany))	https://www.intgovforum.org/multilingual/content/igf-2019-of-11-data-governance-and-competition
Developing policy guidelines for AI and child rights (UNICEF & Berkman Klein Center for Internet & Society, Harvard University)	https://www.intgovforum.org/multilingual/content/igf-2019-of-33-developing-policy-guidelines-for-ai-and-child-rights
Formulating Policy Options for Big Data and AI Development (UNESCO)	https://www.intgovforum.org/multilingual/content/igf-2019-of-17-formulating-policy-options-for-big-data-and-ai-development
Future Internet Governance Strategy for the European Union (European Commission)	https://www.intgovforum.org/multilingual/content/igf-2019-of-37-future-internet-governance-strategy-for-the-european-union
Human Rights & AI Wrongs: Who Is Responsible? (Council of Europe & EU Agency for Fundamental Rights)	https://www.intgovforum.org/multilingual/content/igf-2019-of-13-human-rights-ai-wrongs-who-is-responsible
Personal Information Protection (Bureau of Policy and Regulations, Cyberspace Administration of China)	https://www.intgovforum.org/multilingual/content/igf-2019-of-18-personal-information-protection
Technological Innovation and Challenges to Data Governance (Cyberspace Administration of China & Chinese Academy of Cyberspace Studies)	https://www.intgovforum.org/multilingual/content/igf-2019-of-25-technological-innovation-and-challenges-to-data-governance
The Future of Artificial Intelligence and Sustainable Development (Deutsche Gesellschaft für Internationale Zusammenarbeit and German Federal Ministry for Economic Cooperation and Development)	https://www.intgovforum.org/multilingual/content/igf-2019-of-27-the-future-of-artificial-intelligence-and-sustainable-development
Workshops	
A universal personal data protection framework? How to make it work?	https://www.intgovforum.org/multilingual/content/igf-2019-ws-236-a-universal-personal-data-protection-framework-how-to-make-it-work
Assessing the role of algorithms in electoral processes	https://www.intgovforum.org/multilingual/content/igf-2019-ws-112-assessing-the-role-of-algorithms-in-electoral-processes
Beyond Ethics Councils: How to really do AI governance	https://www.intgovforum.org/multilingual/content/igf-2019-ws-175-beyond-ethics-councils-how-to-really-do-ai-governance

Children's Privacy and data protection in digital contexts	https://www.intgovforum.org/multilingual/content/igf-2019-ws-170-childrens-privacy-and-data-protection-in-digital-contexts
Crossborder data: connecting SMEs in the global supply chain	https://www.intgovforum.org/multilingual/content/igf-2019-ws-184-crossborder-data-connecting-smes-in-the-global-supply-chain
Data-Driven Democracy: Ensuring Values in the Internet Age	https://www.intgovforum.org/multilingual/content/igf-2019-ws-36-data-driven-democracy-ensuring-values-in-the-internet-age
Data Governance by AI: Putting Human Rights at Risk?	https://www.intgovforum.org/multilingual/content/igf-2019-ws-282-data-governance-by-ai-putting-human-rights-at-risk
Data Governance for Smarter City Mobility	https://www.intgovforum.org/multilingual/content/igf-2019-ws-182-data-governance-for-smarter-city-mobility
Different Parties' Role in PI Protection: AP's Practices	https://www.intgovforum.org/multilingual/content/igf-2019-ws-83-different-parties-role-in-pi-protection-aps-practices
Enhancing Partnership on Big data for SDGs	https://www.intgovforum.org/multilingual/content/igf-2019-ws-277-enhancing-partnership-on-big-data-for-sdgs
Human-centric Digital Identities	https://www.intgovforum.org/multilingual/content/igf-2019-ws-178-human-centric-digital-identities
Making global data governance work for developing countries	https://www.intgovforum.org/multilingual/content/igf-2019-ws-271-making-global-data-governance-work-for-developing-countries
Public Interest Data: Where Are We? To Do What?	https://www.intgovforum.org/multilingual/content/igf-2019-ws-191-public-interest-data-where-are-we-to-do-what
Solutions for law enforcement to access data across borders	https://www.intgovforum.org/multilingual/content/igf-2019-ws-288-solutions-for-law-enforcement-to-access-data-across-borders
Splinternet: What Happens if "Network Sovereignty" Prevails	https://www.intgovforum.org/multilingual/content/igf-2019-ws-180-splinternet-what-happens-if-network-sovereignty-prevails
Unpacking Digital Trade Impacts: Calling all Stakeholders	https://www.intgovforum.org/multilingual/content/igf-2019-ws-381-unpacking-digital-trade-impacts-calling-all-stakeholders
Value and Regulation of Personal Data in the BRICS	https://www.intgovforum.org/multilingual/content/igf-2019-ws-211-value-and-regulation-of-personal-data-in-the-brics

Annex B: Illustrative Policy Questions Developed by the IGF MAG to Assist Participants Develop Session Proposals

Users rights and responsibilities:

- What are/should be the rights and responsibilities for individuals in determining the use of their personal data, and what right do individuals have to determine their own digital identity?

Ethical, legal and regulatory dimensions for new technologies:

- What is the relationship between ethical considerations and legal and regulatory frameworks in data driven technologies?
- And which is the better approach for approaching and resolving issues related to the use of data in emerging technologies?
- What societal and economic benefits are enabled by the trustworthy use of data to develop new technologies, e.g. through machine learning and the development of AI?
- How should these benefits be weighed against the need to protect fundamental rights?
- To what extent can the development of international norms and principles facilitate common approaches and interoperability of data protection frameworks, and also facilitate international trade and cooperation?

Algorithms and accountability:

- To what extent, and how, should accountability, fairness, explainability, suitability and representativity apply to the use of data and algorithms, and how can governance frameworks address these issues in a way that enhances increases inclusion?

Transborder data flows:

- What policy considerations and legal frameworks should be developed for data transfers across national borders for various purposes, including but not limited to the legitimate need to access digital evidence, use cloud services and other technologies, and to carry out digital commerce, always ensuring the protection of fundamental rights?
- How the proposed regulatory framework hold accountable the different stakeholders (e.g. governments, users, private sector both large and small businesses) in the transnational use of data

Consequences of Data Concentration:

- What are the competitive, developmental, ethical, legal and technical issues raised by increasing concentration of data and how can we ensure equitable access to data?

Digital Inclusion

About the Theme

At IGF 2019, discussions on this theme considered:

- How digital inclusion sits at the heart of the IGF, reflecting the World Summit on the Information Society (WSIS) goal to build “a people-centred, inclusive and development-oriented Information Society where everyone can create, access, utilize and share information and knowledge”.
- The pledge of the 2030 Agenda on Sustainable Development to leave no one behind.

Related Sustainable Development Goals (SDGs)



Issues Associated with Digital Inclusion

- Access
- Accessibility
- Affordability
- Infrastructure
- Internet Security
- Digital Literacy
- Digital Divide
- Outreach
- Poverty Eradication
- Economic Development
- Emerging Technologies
- Social Inclusion
- Multilingual
- Meaningful Connectivity
- Design for Inclusion
- Community Networks

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How the Discussions in the Digital Inclusion Track Were Coordinated at IGF 2019

There was an introductory session to set the scene for the discussions throughout the week:

<https://igf2019.sched.com/event/SU0d/digital-inclusion-introductory-session>

On Day 4, there was a concluding breakout session to reflect on the discussions that had been held throughout the week:

<https://igf2019.sched.com/event/SU6s/digital-inclusion-concluding-session>

A brief summary of the reports presented during the concluding breakout session was included in the “Bringing It All Together” session on the afternoon of Day 4:

<https://igf2019.sched.com/event/SU6X/bringing-it-all-together>

In addition, on the mornings of Days 3 and 4 of the IGF 2019, living documents, containing cumulative thematic messages drawn from the discussions of the previous days were published on the IGF website for the consideration and input of participants.

<https://www.intgovforum.org/multilingual/content/berlin-igf-messages>

Below is the final set of messages on Digital Inclusion.

Berlin IGF Messages on Digital Inclusion

Inclusive Access to the Internet and Its Infrastructure

- For developing and least developed countries to truly benefit from the potential of the Internet for development, it is important to build a culture of trust and knowledge exchange among governments and other stakeholders at national level.
- Digital infrastructure development should not come at the expense of the development of other physical infrastructure.
- Internet user growth has slowed down and connecting the unconnected remains a huge challenge. At the same time, attacks against Internet connectivity have become a dangerous instrument of politics. Sustainable Development Goal (SDG) target 9.c on access is unlikely to be reached, with only 60-70% of the world's population projected to be connected by 2025.
- Mobile phone penetration is not a good way to measure progress towards achieving digital inclusion. Instead, assessment of digital inclusion is more usefully framed as assessing how many people are connected to a safe and secure Internet, and how many of people have “meaningful connectivity” – that is, connectivity to do what people find useful online, delivered at the right speed with sufficient data.
- Community networks, where infrastructure is locally owned and managed, not only help connect the unconnected, but also create social bonds, strengthen local economies, increase access to knowledge and help achieve the SDGs, such as empowering women in getting online.
- To be open to and supportive of community networks, regulators and policy makers should consider simplifying licensing regimes, providing dynamic spectrum access, and sometimes recognizing that the regulatory rules that apply in an urban environment might not necessarily work for remote and rural communities.
- To achieve digital inclusion, there is a need to understand the differences between access and accessibility and to recognize and cater for their different requirements when engaging in policy dialogues. Access comes first, then comes the harder work of accessibility.
- To improve the experience of persons with disabilities – the world's largest minority, making up around 15% of the world's population or one billion people – there is a need to agree upon and use universal design principles for accessibility across countries and regions. ICTs, including specially-developed technologies for persons with disabilities, to help break through communication and access barriers, enhance mobility and foster independent living and societal integration.

Capacity and Skills for Digital Inclusion and Innovation

- Digital skills and literacy are as integral to digital inclusion as the ability to read and write are to social inclusion. Access to education and training are essential for people to gain employment. Schools and tertiary education institutions are well positioned to deliver on digital literacy needs, but educators may need help to better prepare for their increasingly important role in transferring digital skills to those who need them. Internet governance schools have also emerged as a targeted and effective platform for building knowledge and leadership across the diverse and growing field of Internet development, policy and regulation.
- More resources are needed for capacity building across stakeholder groups. People

must be empowered to articulate their own capacity building needs and be actively involved in efforts to respond to these needs. Effective governance is crucial to anticipating and meeting these needs, as building skills and social welfare systems requires time and creativity.

- AI is creating new social challenges and affecting the labour market. Jobs of the future require skills that many people – particularly those who are already marginalized and those who live in the Global South – do not have. Policy and regulation needs to be developed inclusively to ensure that the jobs of the future offer decent and

sustainable livelihoods for women and populations at the margins.

- With employment opportunities are increasingly falling into the categories of “micro-work” or the “gig economy” and platform work replicating existing exclusions and gender divides, fair work principles for platform work are being developed and should be taken on board by policy-makers. Policies need to balance the ability of workers to do well with the ‘freedom’ many gig-workers enjoy while also providing an appropriate safety net to ensure these jobs are able to provide a decent and appropriate standard of living.

Social and Economic Inclusion, Gender Equality and Human Rights

- Taxing social media use creates new barriers and restricts people’s day-to-day communications as well as their use of ICTs to generate income and is not an effective way for states to gain revenue.
- Digital technologies have transformed the economy, creating extraordinary opportunities for economic development and commercial success across all sectors. As connectivity increases in low- and middle-income countries, remote and platform-mediated work provides an opportunity to overcome pervasive unemployment and provide new sources of income for qualified populations.
- Technical innovations are there to serve people and not the other way around. We need to better understand the relationship between digital advances and inequality: inequality and exclusion drive social unrest and conflict; digital technologies can either widen digital, social and economic divides, or be a force to help reduce them.
- Least developed and developing countries should be able to benefit from an equitable share of the digital wealth that the Internet

enables. To achieve this, regulators and policy makers can support conducive environments that can incubates, develop, and grow local technology companies that can grow into large domestic, regional, and continental tech giants – the so-called “new Silicon Valleys of the Global South”.

- Bias and exclusion continue to be deeply imbedded in digital spaces. Discussion about inclusion of marginalized people should be at the centre of Internet governance and public policy conversations and not in the margins.
- Securing work remains challenging for many, particularly for women, and working conditions are often dire. Everywhere, women, gender-diverse people, people from the global South and people of colour do not have the same opportunities, presence or influence in digital spaces as men, and people from the global North. Solutions have to be value based and practical. Infrastructure and connectivity issues must, therefore, be viewed from a gender perspective to understand and respond to the specific inclusion of women and gender-diverse people.

Local content and language diversity

- Unconnected citizens of the Global South should be viewed as more than potential digital consumers of the tech giants of the north. Instead, it is important that as more people have access to the Internet from least developed and developing countries, that they are active contributors to the digital environment and not just consumers.
- The adoption of Internationalised Domain Names (IDNs) needs further encouragement and support by all stakeholders to increase the benefits made possible by having Internet domains in local languages and scripts but.
- Universal acceptance of IDNs and internationalized email addresses is not just a technical issue, it is also a policy issue. Governments and public entities should promote universal acceptance and lead by example through using IDNs themselves.
- Copyright can be both an enabler of local content production as well a barrier to content creation and distribution. Creative Commons licences give content creators control over how their content is shared and re-used.
- Digitization of local content and cultural heritage that does not take place with the active involvement of local communities generates a form of “extractivism” and exploitation.
- Preserving heritage and promoting local content needs sustainable local production infrastructures and markets so that people can make a living out of creating content.

Related Best Practice Forums

In addition to community-proposed sessions that were explicitly included under the work track of Digital Inclusion, IGF 2019’s intersessional activities included two Best Practice Forums (BPF) of relevance to the theme:

- BPF Gender and Access
<https://www.intgovforum.org/multilingual/content/bpf-gender-and-access>

A draft version of the BPF’s outcome document for 2019 is now available:

Beyond access: Women, transgender and gender non-conforming people's participation in the digital economy
https://www.intgovforum.org/multilingual/filedepot_download/5004/1787

- BPF on Local Content
<https://www.intgovforum.org/multilingual/content/bpf-on-local-content>

Version 3 of the BPF’s outcome document for 2019 is now available:

Lost and gained in digitisation: Responding to the impact of political and social upheaval on local content, language and culture
https://www.intgovforum.org/multilingual/filedepot_download/5005/1791

Annex A: IGF 2019 Sessions on the Theme of Digital Inclusion

In total, there were 37 sessions on the theme of digital inclusion.

Dynamic Coalition (DC) sessions

5G, IoT and Zero Rating Challenges for Net Neutrality (DC on Network Neutrality)	https://www.intgovforum.org/multilingual/content/igf-2019-5g-iot-and-zero-rating-challenges-for-net-neutrality
A taxonomy for Internet Governance Schools (DC on Schools on Internet Governance)	https://www.intgovforum.org/multilingual/content/igf-2019-a-taxonomy-for-internet-governance-schools
Capacity Building for Better Blockchain Governance (DC on Blockchain Technologies)	https://www.intgovforum.org/multilingual/content/igf-2019-capacity-building-for-better-blockchain-governance
Connecting the Dots from Data to Policy Takeaways (DC on Innovative Approaches to Connecting the Unconnected)	https://www.intgovforum.org/multilingual/content/igf-2019-connecting-the-dots-from-data-to-policy-takeaways
DC on Gender and Internet Governance	https://www.intgovforum.org/multilingual/content/igf-2019-dynamic-coalition-on-gender-and-internet-governance-main-ses
Policy and Regulations (DC on Community Connectivity: Community Networks)	https://www.intgovforum.org/multilingual/content/igf-2019-community-networks-policy-and-regulations
Public Access Contributions to Public Policy Success (DC on Public Access in Libraries)	https://www.intgovforum.org/multilingual/content/igf-2019-public-access-contributions-to-public-policy-success
Sustainable Futures II (DC on Internet Rights and Principles)	https://www.intgovforum.org/multilingual/content/igf-2019-irpc-meeting-sustainable-futures-ii
Strengthening the Future for Small Island Developing States (DC on Small Island Developing States in the Internet Economy)	https://www.intgovforum.org/multilingual/content/igf-2019-strengthening-the-future-for-small-island-developing-states
The not-so-free market (DC on the Sustainability of Journalism and News Media)	https://www.intgovforum.org/multilingual/content/igf-2019-the-not-so-free-market
Youth Participation at the IGF (Youth Coalition on Internet Governance)	https://www.intgovforum.org/multilingual/content/igf-2019-youth-participation-at-the-igf

National and Regional and Youth IGF (NRI) sessions

Collaborative Session on Access	https://www.intgovforum.org/multilingual/content/nris-collaborative-session-on-access-0
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Open Forums

African Union	https://www.intgovforum.org/multilingual/content/igf-2019-of-3-african-union-open-forum
Arab perspectives on Digital Cooperation and Internet Governance Process (League of Arab States and UNESCWA)	https://www.intgovforum.org/multilingual/content/igf-2019-of-21-arab-perspectives-on-digital-cooperation-and-internet-governance-process
Artificial Intelligence – from Principles to Practice (OECD)	https://www.intgovforum.org/multilingual/content/igf-2019-of-39-artificial-intelligence-%E2%80%93-from-principles-to-practice
Bridging digital in a large humanitarian organization (International Federation of Red Cross Red Crescent Societies)	https://www.intgovforum.org/multilingual/content/igf-2019-of-31-bridging-digital-in-a-large-humanitarian-organization
EQUALS Research Open Forum on Gender Digital Equality (UN University Institute on Computing and Society)	https://www.intgovforum.org/multilingual/content/igf-2019-of-32-equals-research-open-forum-on-gender-digital-equality
Freedom Online Coalition	https://www.intgovforum.org/multilingual/content/igf-2019-of-26-foc-open-forum
Internet Governance with and for the Citizens (Missions Publiques)	https://www.intgovforum.org/multilingual/content/igf-2019-of-28-internet-governance-with-and-for-the-citizens
Looking beyond the isolation - The LLDCs and the World (Ministerio de Relaciones Exteriores de la República del Paraguay)	https://www.intgovforum.org/multilingual/content/igf-2019-of-5-looking-beyond-the-isolation-the-lldc%20B4s-and-the-world
Partnership for Inclusion in Lebanon (Ogero Telecom)	https://www.intgovforum.org/multilingual/content/igf-2019-of-7-partnership-for-inclusion-in-lebanon
Public Service Internet, how media could fix the cyberspace (European Broadcasting Union, UNESCO and WIPO)	https://www.intgovforum.org/multilingual/content/igf-2019-of-29-public-service-internet-how-media-could-fix-the-cyberspace

Workshops

Business Innovations Foster Digital Inclusion, Bridge Gaps	https://www.intgovforum.org/multilingual/content/igf-2019-ws-111-business-innovations-foster-digital-inclusion-bridge-gaps
Digitally Skilling our Youth: Varied Global Approaches	https://www.intgovforum.org/multilingual/content/igf-2019-ws-342-digitally-skilling-our-youth-varied-global-approaches
Do Internet services deserve a sin tax?	https://www.intgovforum.org/multilingual/content/igf-2019-ws-246-do-internet-services-deserve-a-sin-tax
Inclusion & Representation: Enabling Local Content growth	https://www.intgovforum.org/multilingual/content/igf-2019-ws-244-inclusion-representation-enabling-local-content-growth

Inclusion and Legitimacy in Multistakeholderism at ICANN	https://www.intgovforum.org/multilingual/content/igf-2019-ws-72-inclusion-and-legitimacy-in-multistakeholderism-at-icann
Integrated Policy Framework Key to Realize Digital Inclusion	https://www.intgovforum.org/multilingual/content/igf-2019-ws-104-integrated-policy-framework-key-to-realize-digital-inclusion
Internet Accessibility Empowering Persons with Disabilities	https://www.intgovforum.org/multilingual/content/igf-2019-ws-64-internet-accessibility-empowering-persons-with-disabilities
IPv6: Why should I care?	https://www.intgovforum.org/multilingual/content/igf-2019-ws-421-ipv6-why-should-i-care
Let there be data – Exploring data as a public good	https://www.intgovforum.org/multilingual/content/igf-2019-ws-30-let-there-be-data-%E2%80%93-exploring-data-as-a-public-good
Online Identity in the Multilingual Domain Name Space	https://www.intgovforum.org/multilingual/content/igf-2019-ws-216-online-identity-in-the-multilingual-domain-name-space
Rethinking the Jobs of the Future for Vulnerable Populations and Women at the Margins	https://www.intgovforum.org/multilingual/content/igf-2019-ws-200-rethinking-the-jobs-of-the-future-for-vulnerable-populations-and-women-at
Towards equitable and sustainable community-led networks	https://www.intgovforum.org/multilingual/content/igf-2019-ws-248-towards-equitable-and-sustainable-community-led-networks
Unlocking the Digital Potential of the DLDC Countries	https://www.intgovforum.org/multilingual/content/igf-2019-ws-293-unlocking-the-digital-potential-of-the-dlhc-countries
What operator model(s) for digital inclusion?	https://www.intgovforum.org/multilingual/content/igf-2019-ws-101-what-operator-models-for-digital-inclusion
Youth in IG for Internet ethics & digital inclusion	https://www.intgovforum.org/multilingual/content/igf-2019-ws-315-youth-in-ig-for-internet-ethics-digital-inclusion

Annex B: Illustrative Policy Questions Developed by the IGF MAG to Assist Participants Develop Session Proposals

- What factors should be considered when seeking to understand and tackle affordability issues, and how might improvements be made?
- How can we better utilize primary and secondary schools and tertiary educational facilities to promote and to deliver on digital literacy to their communities and should digital literacy be a fourth pillar of education, alongside reading, writing and maths?
- How do we ensure that Internet governance processes are truly inclusive?
- What needs to be done to enhance the capacity of different actors (and especially those in developing and least-developed countries) to actively contribute to such processes and whose responsibility is it?
- What tools could be developed to promote (better) Internet access for women and girls, older people, people living with disabilities, refugees and other disadvantaged groups?
- How do we best equip the workforce of the 21st century with the necessary skills to take advantage of the new employment opportunities that will result from digital transformation?
- How do we ensure that these skills and employment opportunities are equitable to all and that the global south is equipped to participate on an equal footing?

Security, Safety, Stability and Resilience

About the Theme

At IGF 2019, discussions on this theme considered:

- The vital role of cybersecurity and online safety as prerequisites to economic growth and a healthy digital environment beneficial to all.
- Stability and resilience of the infrastructure.
- Safety of the users of digital technologies and applications.
- Multidisciplinary perspectives to protect both systems and users.
- Through multistakeholder and multidisciplinary cooperation gaining a better insight in the multidimensional aspects, risks, threats and different ways to address them.
- The importance of stakeholder collaboration in responding effectively to the growing range of threats to the global Internet and its users, while preserving the benefits we enjoy.

Related Sustainable Development Goals (SDGs)



Issues Associated with Security, Safety, Stability and Resilience

- Child Online Safety
- Child Sexual Abuse Material (CSAM)
- Cyber Attacks
- Domain Name System
- Internet Protocols
- Trust and Accountability
- Internet Resources
- Cyber Crime
- Encryption
- Fake News
- Freedom of Expression Online
- Deep Fake Videos
- Hate Speech

A New Framework for Organizing Discussions Introduced at IGF 2019

In a new approach to shaping the programme in 2019, the MAG used the submissions received in response to the annual public call for issues to develop a more thematic, focused and non-duplicative design of the schedule. The three main themes that emerged out of this process helped shape many of the preparatory and intersessional work processes for IGF 2019:

- Data governance
- Digital inclusion
- Security, safety, stability and resilience

In the March 2019 calls for workshop proposals, open forums, Dynamic Coalition and National, Regional and Youth IGF collaborative sessions were issued, organizers were invited to identify under which main theme their sessions would fall. Members of the Multistakeholder Advisory Group (MAG) put together the following information to assist IGF participants frame their sessions according to the main themes:

<https://www.intgovforum.org/multilingual/content/igf-2019-themes>

Workshop proposers were also given the option of selecting from a range of more specific associated issues/tags. In the leadup to the meeting in Berlin, each of the sessions associated with the main themes was coordinated by a small set of volunteers from the Multistakeholder Advisory Group (MAG).

How the Discussions on Security, Safety, Stability and Resilience Track Were Coordinated at IGF 2019

There was an introductory session to set the scene for the discussions throughout the week:

<https://www.intgovforum.org/multilingual/content/introductory-breakout-session%C2%A0security-safety-stability-resilience>

On Day 4, there was a concluding breakout session to reflect on the discussions that had been held throughout the week:

<https://www.intgovforum.org/multilingual/content/concluding-breakout-session%C2%A0security-safety-stability-resilience>

A brief summary of the reports presented during the concluding breakout session was included in the “Bringing It All Together” session on the afternoon of Day 4:

<https://igf2019.sched.com/event/SU6X/bringing-it-all-together>

In addition, on the mornings of Days 3 and 4 of the IGF 2019, living documents, containing cumulative thematic messages drawn from the discussions of the previous days were published on the IGF website for the consideration and input of participants.

<https://www.intgovforum.org/multilingual/content/berlin-igf-messages>

Below is the final set of messages on Security, Safety, Stability and Resilience.

Berlin IGF Messages on Security, Safety, Stability and Resilience

Safety and Security Online

- The Internet will only achieve its potential as a channel of free speech and an engine for economic growth if it remains a safe place where people feel secure. Any cybersecurity approach must seek to preserve the benefits people enjoy while tackling the risks. This calls for holistic approaches to protect online users while building or keeping their trust in using the Internet.
 - Tackling hate speech is a shared responsibility of stakeholders. Different opinions on mechanisms or instruments should not stand in the way of working together towards a clearer and shared understanding of hateful content.
 - Security and people's fundamental freedoms and rights can coexist, but sometimes there need to be trade-offs. However, prioritizing security over people's freedoms and rights, including freedom of expression and privacy, must be legitimate, proportionate, and based on the rule of law.
 - Discussions on online safety need to rely on robust data.
 - Children's rights are no different in the online or offline world – in particular their rights to play and their rights to protection from inappropriate, illegal and bullying behaviours as well as their rights to be protected from sexual abuse and commercial exploitation.
- Making the Internet a safer environment for children can only be achieved by a diversity of measures and through collective responsibility, including recommendations for parents and caretakers to guide their children cope with potential risks and harms.
- The international multistakeholder community needs to accurately define scope and terminology of issues on disinformation and interference of electoral processes, and to have a common understanding of what is considered acceptable and responsible behaviour and to make progress on capturing and raising awareness of accepted norms.
 - Achieving safety online requires involvement of stakeholders at different levels. Industry players and stakeholders should explore what is tangible and achievable when it comes to gathering and sharing information to prevent online abuse. A shared understanding amongst all players can lead to agreement on ways to act and cooperate.
 - Strengthening digital and media literacy is key to combatting the online and real world harms of the distribution of online misinformation. Strengthening people's capacity to protect themselves, adapt and become resilient is key to minimizing the harmful effects of cyberbullying.

Security of the Infrastructure

- While the current trend to tackle illicit or abusive content is to cancel, transfer, delete or suspend domain names via the Domain Name System seems like a quick and easy solution, it does not provide an effective and sustainable way to remove malicious content.
- Online platforms and providers, while taking appropriate measures to delete or block illegal content, should also reach out to and cooperate with law enforcement agencies to provide information for preventive measures. Policy makers and responsible parties should gain more insight in the possibilities and limitations of technical measures solutions through collaborative multistakeholder partnerships.

- More than a quarter of the Internet's traffic now runs on IPv6. Stakeholders need to continue engaging and collaborating, so that

Policy and Cooperation

- The future of the Internet is a shared responsibility. Multistakeholder and multidisciplinary dialogues are the most appropriate ways to find policy solutions and to identify physical world implications of behaviour and policy decisions in the online space.
- For multistakeholder dialogue to evolve into effective consensus building and, finally, effective and predictable policy implementation, it would be helpful to standardize definitions and terms.
- A safe space in dialogue and policy-making to disagree, to dissent and to protest should be preserved as it provides a valuable opportunity to achieve better outcomes, to correct course and to learn from each another.
- Norms become embedded in behaviour over time. When actors feel the need to hide their behaviour from others, it is an indication that a norm has become established. Every effort

Capacity building

- We need to foster a more informed dialogue between stakeholders, based on a better understanding of the technical, legal and economic feasibility of the various digital sovereignty models being considered or implemented around the world as well as their implications for Internet governance.
- Internet users have an obligation to contribute to their personal security online. However, they can only be expected to act as responsible users if they understand what is at stake, are aware of the risks, know their rights, and have learned how to act. Users, in particular children, need to be empowered. Cybersecurity training and capacity building should enable all users, including the more

this important transition continues to happen.

to pursue what is considered proper behaviour contributes to establishing community-wide supported cybersecurity norms. This process benefits from the creativity of a multistakeholder and multidisciplinary approach.

- The pace of technology development is outpacing traditional processes to put in place policy and regulatory processes to address security issues in a timely way. It is necessary to enhance collaboration to develop and implement policy solutions, and for norm development processes to be inclusive and respecting human rights.
 - Amidst the current atmosphere of escalating tensions between countries in cyberspace, resulting in the development of increasingly sophisticated cyberweapons, both defensive and offensive, it is ever more important to pursue effective confidence building measures (CBMs) to establish trust and promote global stability online.
- vulnerable groups and minorities, to become more secure online and able to demand and defend their human rights safely.
- Significant opportunities exist to improve the global ecosystem security through meaningful actions that promote trust and increase capacity among nation states, and between states and other stakeholders. There are various forums, including the IGF, and initiatives for multilateral, regional and bilateral engagement, where states can build up relationships, exchange experiences and learn from innovative new approaches.
 - There is a need for curated, accurate information on security and safety best practices to be localized in many languages.

Best Practice Forum on Cybersecurity

In addition to community-proposed sessions that were explicitly included under the work track of Security, Safety, Stability and Resilience, IGF 2019's intersessional activities included a Best Practice Forum (BPF) on Cybersecurity:

<https://www.intgovforum.org/multilingual/content/bpf-cybersecurity>

The work of the BPF was presented to the intersessional consultative meeting of the United Nations Open-Ended Working Group on developments in the field of information and telecommunications in the context of international security in December 2019. A number of participants at the meeting mentioned the BPF as an example of how multistakeholder dialogue is of value to helping a peaceful and stable cyberspace.

<https://www.intgovforum.org/multilingual/content/igf-2019-bpf-on-cybersecurity-contributes-to-un-oweg>

A draft version of the BPF's outcome document for 2019 is now available:

Cybersecurity Agreements

https://www.intgovforum.org/multilingual/filedepot_download/8395/1754

Annex A: IGF 2019 Sessions on the Theme of Security, Safety, Stability and Resilience

In total, there were 32 sessions on the theme of Security, Safety, Stability and Resilience.

Dynamic Coalition (DC) sessions

Data Governance on the Internet Space, by the Internet Model (DC on Core Internet Values and DC on IoT)	https://www.intgovforum.org/multilingual/content/igf-2019-data-governance-on-the-internet-space-by-the-internet-model
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How to balance children's right to play and to be protected (DC on Child Online Safety)	https://www.intgovforum.org/multilingual/content/igf-2019-how-to-balance-childrens-right-to-play-and-to-be-protected
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National and Regional and Youth IGF (NRI) sessions

Collaborative Session on Cybersecurity	https://www.intgovforum.org/multilingual/content/nris-collaborative-session-on-cybersecurity-0
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Collaborative Session on Harmful Content Online	https://www.intgovforum.org/multilingual/content/nris-collaborative-session-on-harmful-content-online-0
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Collaborative Session on Privacy Online	https://www.intgovforum.org/multilingual/content/nris-collaborative-session-on-privacy-online-0
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Open Forums

Collaborative Multistakeholder Approaches in Cybersecurity (Commonwealth Telecommunications Organisation)	https://www.intgovforum.org/multilingual/content/igf-2019-of-16-collaborative-multistakeholder-approaches-in-cybersecurity
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Disinformation Online: Reducing Harm, Protecting Rights (Department for Digital, Culture, Media and Sport, UK Government, and Atlantic Council's Digital Forensic Research Lab)	https://www.intgovforum.org/multilingual/content/igf-2019-of-44-disinformation-online-reducing-harm-protecting-rights
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DNS, Threats and Opportunities (ICANN)	https://www.intgovforum.org/multilingual/content/igf-2019-of-6-icann-dns-threats-and-opportunities
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Exceptional Access and the Future of the Internet Security (Internet Society)	https://www.intgovforum.org/multilingual/content/igf-2019-of-38-exceptional-access-and-the-future-of-the-internet-security
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Human rights and digital platforms – contradiction in terms? (Council of Europe)	https://www.intgovforum.org/multilingual/content/igf-2019-of-19-human-rights-and-digital-platforms-%E2%80%93-contradiction-in-terms
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Information Sharing 2.0: privacy and cybersecurity (Israel National Cyber Directorate)	https://www.intgovforum.org/multilingual/content/igf-2019-of-45-information-sharing-20-privacy-and-cybersecurity
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Online Protection of Underage Users (Cyberspace Administration of China)	https://www.intgovforum.org/multilingual/content/igf-2019-of-14-online-protection-of-underage-users
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Trust, Norms and Freedom in Cyberspace (Estonian Ministry of Foreign Affairs)	https://www.intgovforum.org/multilingual/content/igf-2019-of-22-trust-norms-and-freedom-in-cyberspace
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Workshops

Cybersecurity concerns everyone - Responsibility and education throughout the digital supply chain	https://www.intgovforum.org/multilingual/content/igf-2019-ws-195-cybersecurity-concerns-everyone-responsibility-and-education-throughout-the
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Digital Sovereignty and Internet Fragmentation	https://www.intgovforum.org/multilingual/content/igf-2019-ws-59-digital-sovereignty-and-internet-fragmentation
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How and why to involve perspectives of children effectively	https://www.intgovforum.org/multilingual/content/igf-2019-ws-23-how-and-why-to-involve-perspectives-of-children-effectively
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Internet de-tox: A fail-proof regimen to end online sexism	https://www.intgovforum.org/multilingual/content/igf-2019-ws-247-internet-de-tox-a-fail-proof-regimen-to-end-online-sexism
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IPv6 Independence Day: Rest in peace IPv4	https://www.intgovforum.org/multilingual/content/igf-2019-ws-403-ipv6-independence-day-rest-in-peace-ipv4
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Kids online: what we know and can do to keep them safe	https://www.intgovforum.org/multilingual/content/igf-2019-ws-137-kids-online-what-we-know-and-can-do-to-keep-them-safe
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Misinformation, Responsibilities & Trust	https://www.intgovforum.org/multilingual/content/igf-2019-ws-85-ws-268-misinformation-responsibilities-trust-%E2%80%8E
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Public Diplomacy v. Disinformation: Are There Red Lines?	https://www.intgovforum.org/multilingual/content/igf-2019-ws-295-public-diplomacy-v-disinformation-are-there-red-lines
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Public Health Online: Shadow Regulation-Access to Medicines	https://www.intgovforum.org/multilingual/content/igf-2019-ws-92-public-health-online-shadow-regulation-access-to-medicines
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Quantifying Peace and Conflict in Cyberspace	https://www.intgovforum.org/multilingual/content/igf-2019-ws-131-quantifying-peace-and-conflict-in-cyberspace
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Roadmap for confidence building measures (CBM) in cyberspace	https://www.intgovforum.org/multilingual/content/igf-2019-ws-341-roadmap-for-confidence-building-measures-cbm-in-cyberspace
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Should we tackle illicit content through the DNS?	https://www.intgovforum.org/multilingual/content/igf-2019-ws-331-should-we-tackle-illicit-content-through-the-dns
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Tackling Cyberbullying on Children with Digital Literacy	https://www.intgovforum.org/multilingual/content/igf-2019-ws-95-tackling-cyberbullying-on-children-with-digital-literacy
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Tackling Hate Speech: A Multi- Stakeholder Responsibility	https://www.intgovforum.org/multilingual/content/igf-2019-ws-150-tackling-hate-speech-a-multi-stakeholder-responsibility
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Tackling Hate Speech Online: Ensuring Human Rights For All	https://www.intgovforum.org/multilingual/content/igf-2019-ws-177-tackling-hate-speech-online-ensuring-human-rights-for-all
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Tech Nationalism: 5G, Cybersecurity and Trade	https://www.intgovforum.org/multilingual/content/igf-2019-ws-41-tech-nationalism-5g-cybersecurity-and-trade
Towards a Human Rights-Centered Cybersecurity Training	https://www.intgovforum.org/multilingual/content/igf-2019-ws-159-towards-a-human-rights-centered-cybersecurity-training
Transparency and Control for the Internet of Things	https://www.intgovforum.org/multilingual/content/igf-2019-ws-307-transparency-and-control-for-the-internet-of-things
Usual Suspects: Questioning the Cybernorm-making Boundaries	https://www.intgovforum.org/multilingual/content/igf-2019-ws-63-usual-suspects-questioning-the-cybernorm-making-boundaries

Annex B: Illustrative Policy Questions Developed by the IGF MAG to Assist Participants Develop Session Proposals

Co-operation and collaboration in Cybersecurity / Response to Cyberattacks:

- How can cooperation and collaboration on national, regional and global levels help to increase cybersecurity?
- What should govern the response of different stakeholders to state-sponsored cyber attacks?
- What legal regulations are already in place but potentially need to be enforced and what new legal regulations should be created to address upcoming threats? What role do Internet protocols play in the fight against cyber attacks?
- What role can institutional arrangements such as CERTs etc. play?
- What role should different stakeholders play in cybersecurity capacity building approaches?
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Regulatory and technical approaches for safety:

- How can risks of contact and content (including violence against women, children and all vulnerable groups be addressed successfully by legal and regulatory approaches as well as by technical instruments and how can digital civility be increased?
- How can children's rights to participation, access to information, and freedom of speech be preserved and balanced with their right to be protected from violence, exploitation and sexual abuse in the online environment?
- How can their resilience be increased by means of capacity building, media literacy, support and guidance in the digital environment?
- How can all forms of inappropriate sexualisation of childhood in digital areas be addressed by effective means?
- Which technical and regulatory instruments can reinforce the fight against CSAM?
- What are adequate techniques or technologies to fight all forms of online harassment including sexual harassment?

Trust and Accountability:

- How can trust and accountability be restored?
- What role should Internet platforms play in defining the standards for acceptable content in light of freedom of speech?
- How can globally accepted standards be developed?
- What kind of collaboration could be created among Internet platforms and media outlets to fight disinformation and fake news?
- Where is the middle ground between increasing demands for proactive content policing by digital platforms and the necessary neutrality and legal certainty for platforms?

Safety, data protection, and consumer rights:

- What role can the implementation of the principles of safety by design, privacy by design and by default as a principle play to secure human rights and achieve increased safety?
- How can consumer rights and their capacity to protect themselves and their data be reinforced?