WSIS FORUM
12-16 June 2017

SUMMARY REPORT
A report of the Geneva Internet Platform

Springing into action

It's long been said that ICTs and the Internet can contribute substantially to achieving the ambitious SDGs – the set of 17 goals that will rid the world of poverty and inequalities, and make it prosperous and sustainable. We know that ICTs can bring quality education to children, and help farmers in rural areas manage their crops, and help disseminate vital medical information to underserved communities. We know that the Internet is an underlying lifeline.

The question is: Can the SDGs be achieved by 2030? A 15-year plan may seem long, but we're already on the doorstep of the second anniversary.

The good news is that many projects have taken off since, and are doing remarkable work in bringing the Internet closer to the unconnected, in developing capacities, and in working on the so-called action lines – broad areas where governments, businesses, and civil society can work together to achieve the goals.

WSIS Forum 2017 showcased many projects that are helping communities achieve their potential. For example, Bridge Africa is a platform that helps companies in Africa market their products, patent their work, and create trademarks.

Through e-commerce platforms, the Association Marocaine de l'Indication Géographique de l'Huile d'Argane supports the women producers of Argan tea oil to market their products.

Project Connect is mapping schools across many developing countries, and measuring the quality of their Internet connectivity. The a2i Programme in Bangladesh has set up 5000 digital centres across the country. The list goes on. The WSIS Prizes, awarded every year, shone a bright light on even more projects.

Recognition encourages us to push even further.

Winners of WSIS Prizes 2017. The prizes are in recognition of efforts to implement the WSIS outcomes.   *Credit: ITU/R.Farrell*

Geneva Internet Platform
DigitalWatch

ICANN

Internet Society

DiPLO
www.diplomacy.edu

Reading the signposts

The signposts on our road to achieving the SDGs are crystal clear: we need robust infrastructures, measures that support innovation, a good climate for e-commerce and trade, and a strong set of laws. The spread of Internet usage does not come without its fair share of risks.

But are the signposts clear enough? Perhaps not. ICTs and the Internet help us navigate new terrain. And while risks pop up at major turns, new tools (such as artificial intelligence) provide a good compass.

During WSIS Forum week, the Geneva Internet Platform's 30-strong team of rapporteurs prepared timely reports from most sessions for the *Digital Watch* observatory, highlighting the messages signposted. This summary report builds on these session reports and the daily round-ups, providing a thematic digest of the discussions, using DiploFoundation's taxonomy of Internet governance issues.

We wrap up our just-in-time reporting initiative from WSIS Forum 2017 on a high note, giving a shoutout to all rapporteurs who contributed to the initiative, and to many others who provided support.

As the WSIS Forum evolves...

We hear the term 'digital society' quite a lot these days. But back in the early 2000s, the buzz word was 'information society'. At that time, the UN General Assembly agreed, at the ITU's suggestion, that the world needed to come together and discuss how to make this information society truly inclusive. And so WSIS was born. Held in 2003 and 2005, and attended by governments, private companies, and civil society organisations, WSIS came up with concrete suggestions for speeding up the evolution of the information society and bridging the digital divide. These suggestions were called action lines. They covered areas such as access to information, capacity building, security and trust in the use of ICTs, and cultural diversity.

To follow up on the implementation of these action lines and other WSIS outcomes, the WSIS Forum came to life. The Forum has been held in Geneva since 2009 and is co-organised by the ITU, UNESCO, UNDP, and UNCTAD, in collaboration with many other UN entities. For an entire week each year, the so-called ICT for Development community comes together to look at how the world is progressing on its way to sustainable development, and what still needs to be done.

This year's Forum had *Information and knowledge societies for the SDGs* as its main theme. During the 250+ sessions held throughout the week, participants discussed the role of ICTs in achieving the SDGs, looking at the past, the present, and the future. We summarise these discussions here.

A THEMATIC SUMMARY

Which issues were discussed during WSIS Forum week? What were the main messages sign-posted? What follows is a thematic summary, which uses DiploFoundation's Internet governance taxonomy[↗] to group issues together.

DEVELOPMENT

ICTs and the Internet hold the key to sustainable development. They contribute to every area of development – from education, agriculture, health, and good infrastructure to government services. But how do they work in practice?

The WSIS action lines are central areas of activity, but identifying the areas is not enough. There need to be closer links between the action lines and the SDGs[↗] – not only in theory, but also in practice.[↗]

We still need to overcome the digital divide. The question is how. A starting point is to put the necessary infrastructure in place. ICTs need to be affordable, and people need to know how and why to use them.[↗]

Access to information is a fundamental pillar for creating a knowledge society.[↗] It's a main area in which many stakeholders are working.[↗]

In today's data-driven age, international organisations can implement open access policies to facilitate the distribution and reuse of the large amount of data and content they produce.[↗]

And while we work towards a truly inclusive digital society, we also need to assess the progress we're making. For this, we need indicators.[↗] Several organisations have been working on developing such indicators, with one example being UNESCO's project on Internet universality indicators.[↗]
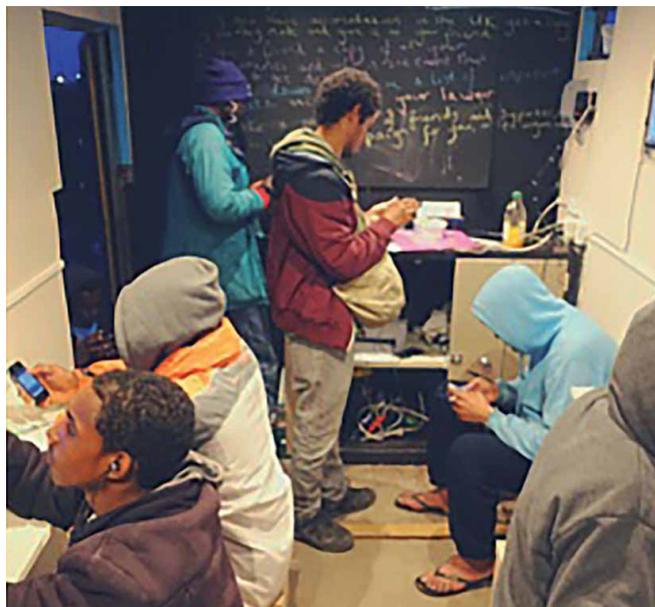

Through its ICT Literacy Project, NASCO Foundation has helped thousands of students in Ghana gain knowledge and self-development skills. The project was recognised during WSIS Forum 2017 as a champion project for information and communication infrastructure.[↗]
Credit: NASCO Foundation

Digital inclusion also means capacity development. Here we talk about two issues. First, awareness raising and education for people, but also for businesses and public authorities, to be able to use ICTs in a meaningful and safe way. Traditional education and e-learning can be successfully combined to achieve this goal.

Second, capacity development also means empowering actors, especially those in developing or underdeveloped countries, to actively participate in Internet governance and digital policy processes. Several organisations around the world are working on this – such as DiploFoundation, ICANN, the ITU, the Internet Society, the IGF, APC, and regional schools on Internet governance. On our road to sustainable development, we need to keep a few principles in mind: inclusiveness, equal opportunities, openness, transparency, and diversity.

INFRASTRUCTURE

Having telecommunications infrastructures in place is essential for bridging the digital divide and boosting inclusive socio-economic development.

So, what can countries do to support this? Having a dedicated universal service fund for financing infrastructure, adopting national broadband plans, and entering into public public-private partnerships are some of the measures highlighted in the WSIS Forum discussions.

Enabling regulatory and policy environments, and incentives for companies to invest in infrastructure are yet other measures, not to mention national backbone networks and IXPs – which allow Internet providers to exchange traffic locally, rather than through international networks (thus reducing costs).

One viable solution is the introduction of community networks, bringing connectivity to local communities. But why are they successful? One of the reasons is because engaged communities build them, and then not only use the network but become content providers

Refugees Info Bus brings Internet connection to refugee camps.

as well. Policymakers and operators should consider supporting such models.

As the digital economy grows, and more services become available online, we need fast and reliable connections. For this, investments are needed in the rollout of high-speed broadband networks.

Spectrum – i.e., radio frequencies – can be used more efficiently. One way to do this is to take advantage of the TV white spaces – those frequencies broadcasters don't use. The deployment of IPv6 also needs to be more actively encouraged.

The DNS is also contributing to more inclusion in the digital society. IDNs, for example, promote multilingualism by allowing users to access and set up domain names in their own languages and scripts.

The Internet of Things (IoT), artificial intelligence (AI), and robotics are increasingly becoming part of our society. And they, too, can help empower societies and support sustainable growth.

Take the example of smart cities, which use ICTs to improve the provision of public services, energy consumption, mobility, and the life of citizens. AI can also bring social good: the ability to process massive amounts of data (big data) can help bring solutions to crucial issues such as health, education, poverty, and the environment. But there are also challenges with these technologies; their impact on the job market is one example.

We need to carefully consider these challenges, and pay particular attention to transparency, accountability, and ethics in the use of automated systems.

And there's another thing we should be concerned about: a 'second digital divide' may appear, caused by the absence of such new technologies in developing countries.

How to avoid this? International public-private partnerships, collaboration across sectors, policies for supporting digitisation and innovation, and technology transfers are some of the solutions.

Click on the icon in the digital version to access the related session report.

STUCK ON AN ACRONYM?

This glossary will help you navigate the often-confusing digital policy parlance.

APC	Association for Progressive Communications
AI	Artificial intelligence
DNS	Domain Name System
ICANN	Internet Corporation for Assigned Names and Numbers
ICTs	Information and communications technologies
IDN	Internationalised Domain Name
IGF	Internet Governance Forum
IPv6	Internet protocol version 6
IoT	Internet of Things
ITU	International Telecommunication Union
IXP	Internet Exchange Point
SDGs	Sustainable development goals
SMEs	Small and medium enterprises
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
WSIS	World Summit on the Information Society
WTO	World Trade Organization

ECONOMIC

We often say that online businesses can increase access to global markets and facilitate the achievement of some SDGs, such as poverty reduction and empowerment of women. For this to happen, we first need an enabling environment, one where innovation and businesses can flourish, particularly in developing regions of the world.

Some challenges exist, such as the persisting digital divide and the need for investment policies, and initiatives have been put in place to overcome them. One example is UNCTAD's eTrade for All platform, which aims to help developing countries to benefit from e-commerce.

Other measures to support the digital economy include policy reforms, sector regulations, licensing, and open markets. Digital financial services can contribute to digital inclusion, but improvements are needed in areas such as competition, consumer protection, security and privacy, and electronic payment acceptance. Platforms that facilitate e-government, healthcare, and nutrition show the positive social impact of technology and innovation.

What can be done to strengthen online businesses, in particular SMEs? Policies and market incentives to support start-ups, such as investment, incubators, accelerators, and plans to enhance connectivity, are important. But the real impact - both positive and negative - of the digital economy on job and wealth creation needs to be better understood.

Connectivity projects, the deployment of IXPs, legal frameworks on e-commerce, education, and literacy are other elements that can support the digital economy. International standardisation in areas such as digital signatures and e-identities, and the adoption of encryption (which makes consumers feel more secure about online shopping) and new technologies such as blockchain can help, too.

The free flow of data is also important for the growth of the global digital economy. Data localisation policies need to be rethought, irrespective of the motivation behind them (be it restrictions on the transfer of personal data, online censorship, or digital protectionism).

All these measures pay back, because a strengthened digital economy helps in achieving the SDGs.

Once SMEs successfully establish their online presence, other challenges appear, such as the need to build their online reputation. An online brand presence for SMEs – through, for example, the registration of domain names representing the brand – is one way to achieve visibility and recognition. Small companies and cooperatives also use geographic indications to increase the value of their products, and ensure they are recognised when sold online.

While we look at measures to support the role of technology in empowering small businesses, let's not forget about consumers. They, too, can become producers of good and services, contributing to poverty reduction.

> **'Consumers can also become producers of good and services, contributing to poverty reduction'**

WSIS ACTION LINES

| ACTION LINE C1 | ACTION LINE C2 | ACTION LINE C3 | ACTION LINE C4 | ACTION LINE C5 | ACTION LINE C6 | ACTION LINE C7 E-GOVERNMENT | ACTION LINE C7 E-BUSINESS | ACTION LINE C7 E-LEARNING |

SECURITY

Along with privacy, cyber-attacks are among our major concerns today.

The darknet is no exception, but so are the emerging security and privacy risks which new technologies and applications bring with them.
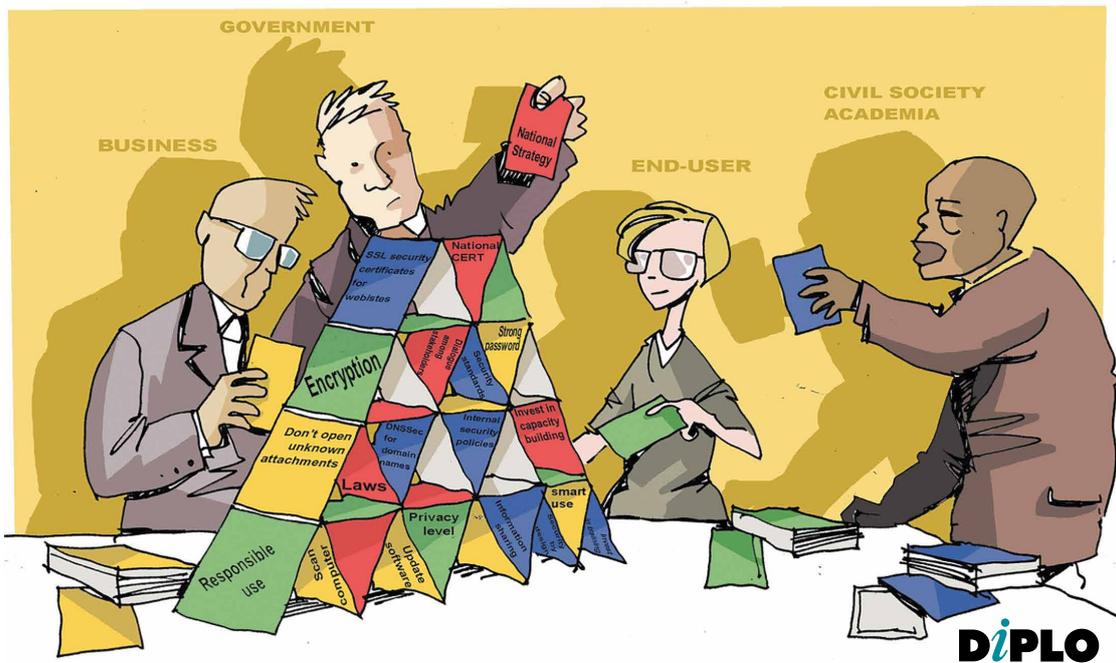
Security is one of the main areas where action is needed. It's an essential element of building confidence and trust – a precondition to achieving sustainable development through ICTs, and especially e-government and e-commerce services. The pace of emergence of new cybersecurity risks and threats, however, makes building confidence a difficult task.

A multistakeholder approach to cybersecurity is an underlying message of most discussions. Since breaches can target anyone – from individuals, to businesses, to governments – there should be shared responsibility and cooperation to address the risks. In practice, this includes governments appointing cyber-security authorities and national Computer Security Incident Response Teams (CSIRTs, or CERTs) to provide a coordinated response to incidents.

It also includes the corporate sector embracing information security across its business practices, online platforms better securing users' data, and users becoming more aware that their data is not completely secure once it is online, and taking measures to secure them and their systems. Users also need to be more aware of digital hygiene (e.g. updates, upgrades, and back-ups).
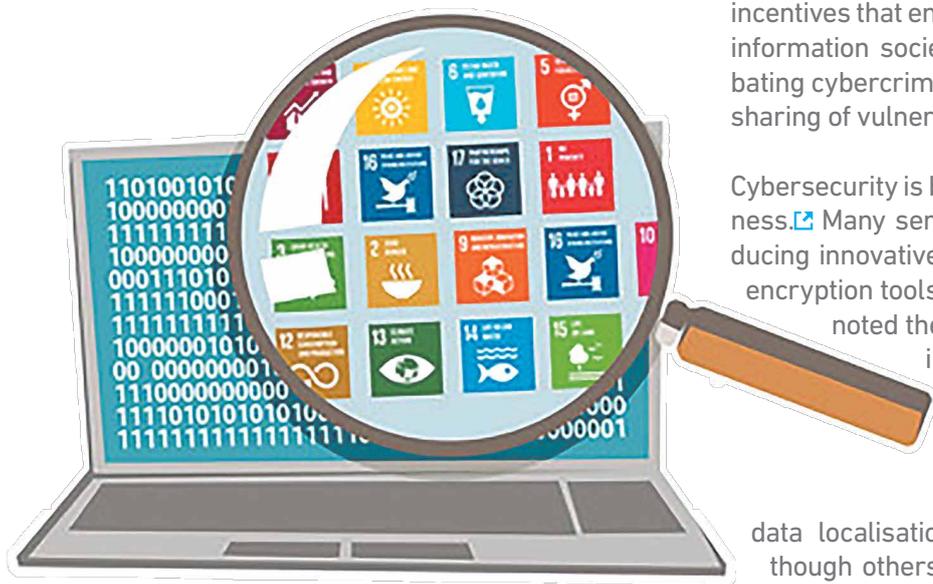
When it comes to policy responses to cybersecurity risks, looking at universally agreed indicators for assessing cybersecurity, and finding global solutions to global problems, are critical approaches.

incentives that enable an environment for a sustainable information society, including frameworks for combating cybercrime, national capacity building, and the sharing of vulnerabilities.

Cybersecurity is becoming a new requirement for business. Many service providers are considering introducing innovative approaches such as blockchain and encryption tools to increase trust. Open discussions noted the possibility of governments introducing policies to hold the ICT industry liable for the safety of their products.

Some countries have turned to data localisation in response to national security, though others consider such measures as protectionist. Policymakers are encouraged to look into a broad context of security, and ensure Internet openness, respect of human rights, and freedoms, as well as encourage solutions that incorporate both security and privacy.

In the absence of internationally accepted cybersecurity instruments, many countries have turned to bilateral and multilateral agreements. They've also made significant progress with creating laws, policies, and

SOCIOCULTURAL

Cultural diversity, relevant local content, and multilingualism in the digital space are key for meaningful access. Without local language in technology, it's impossible to participate in communication, knowledge sharing, and knowledge creation, making 'language as essential for our being as water.'

But the road to multilingualism is not an easy one. And the challenges come not only from the technology side (i.e., how to best incorporate language diversity in technologies), but also from the complexities of including dialects and language varieties, and the costs of translation. Although technological innovation could provide a solution to these challenges, a minimum degree of human intervention remains vital.

In an attempt to address issues such as the spread of hate speech and extremist content online, as well as fake news, governments tend to turn to solutions such as content blocking and censorship. But these are hardly efficient in tackling the problems at their core. They can also negatively impact human rights.

Instead, solutions can be found in the transparency and accountability of social media platforms, as well as in legal clarity of terms such as 'radicalising content'.

When it comes to fake news and misinformation, solutions include media literacy (educating the audience), verification and fact checking, and changing the algorithms used by online platforms when promoting news. These
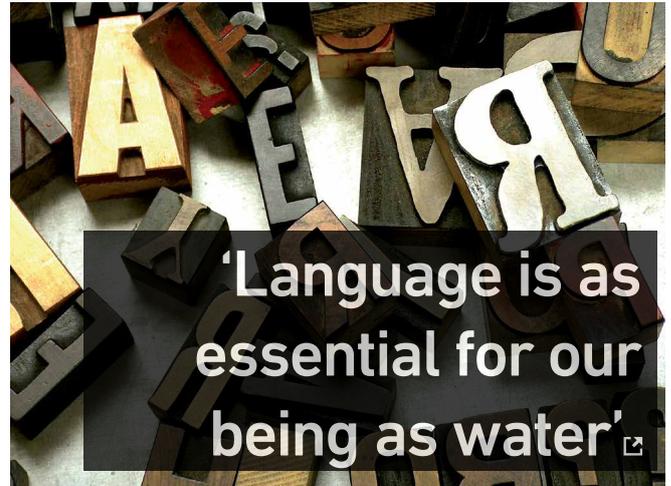
SUSTAINABLE DEVELOPMENT GOALS

measures will be paramount in changing the culture of communications and restoring 'ethical journalism'.

Ethics are relevant not only when discussing journalism or the protection of human rights, but also in the context of new technologies such as AI. If we let algorithms make decisions, we need to make sure that the engineers creating those algorithms take ethical values into account. Ultimately, ethics need to be integrated in the design stage of technological innovation.

One of the areas where ICTs can best show their potential for social change is in education, both when it comes to using technology as an aid in traditional education (such as using computers in classrooms), but also going one step further, through e-learning. The advantages are numerous, from improving quality and reducing costs, to reaching out to more people. And speaking about e-learning, while its potential to contribute to achieving the SDGs is recognised, there are still challenges to be

> '**Language is as essential for our being as water'**

addressed if we're to transform this potential into reality. And they mainly relate to access to ICTs and digital skills. Finally, ensuring open access to educational resources is another way to achieve broader and equal access to education.

HUMAN RIGHTS

The relation between ICTs and human rights is two-fold. On the one hand, ICTs can significantly help to advance human rights. On the other hand, there are threats to human rights in the digital space. It's no longer a matter of whether offline human rights apply online, but rather how their protection evolves and is integrated into the development of standards and services.

It's also important to ensure that individuals are aware of and educated, not only about what their rights are in the digital space, but also about how to protect them.

The significant amount of data generated by the next billion users and commercialised by big business raises serious concerns related to privacy, protection of other digital rights, and the use of big data. But big data also brings opportunities: open data, for example, facilitates

access to information and empowers end-users and start-ups to develop new information society services as well.

There are strong connections between e-science and sustainable development. Data is a powerful tool for analysis. Big data analytics contribute to the implementation of the SDGs, not only in monitoring progress, but also by supporting evidence-based policy-making. But the use of big data needs to be aligned with human rights.

Privacy rights are too often pitted against security, yet there's no inherent tension between them. Companies, governments, and users should look for solutions that incorporate both. And we must all promote privacy literacy, good online hygiene, the use of encryption tools, and simplicity in privacy notions.

While governmental policies are important, they might not matter if end-users are willing to make trade-offs and 'sell' their data for currency-free services. When developing applications that benefit end-users, the tech industry must take privacy and data protection into account.

Gender equality and women's empowerment are both human rights issues and indispensable elements in achieving the SDGs. But the gender digital gap continues to be a primary concern. And this is true even if governments, international organisations, and companies are now including gender mainstreaming on their agendas and prioritising initiatives that better integrate women into our digital society, not only as users of ICTs, but also as entrepreneurs and policymakers.

Gender equality and better inclusion of women and persons with disabilities in the information society are key human rights-related issues that deserve more attention. There's no doubt that girls and women would benefit from having access to ICTs, digital skills, and the opportunity to become creators of technologies, in addition to their role as users.

Children's rights must be protected in the digital age. These include not only the right to freedom of expression and privacy, but also children's' rights to be consulted by governments and other actors when designing policies affecting them. And when it comes to child online safety, all measures aimed at making the Internet a safer place for children must have a children's rights perspective.

Protecting journalists and their sources is also important in the digital age, and measures include awareness raising, education and training in digital safety, and limitations to mass surveillance, targeted surveillance, and data retention.

More efforts are needed to provide girls and women with access to ICTs, digital skills, and the opportunity to become creators of technologies, in addition to being mere users.

LEGAL

Laws and regulations are at the basis of many digital issues. If we want a secure Internet, we need adequate laws. If we want to promote e-commerce and trade, we need to create a supportive legal framework. If we want to safeguard digital rights, we need to respect the norms and tackle any breaches.

Rules need to be enforceable, and enforced. They need to be clear and transparent. And they need to quickly reflect and react to the changes that happen in society, especially with technology's fast progress.

'Law often struggles to keep up with technology'

These elements appeared in many conversations during WSIS Forum week, from those on national plans to expand telecommunications coverage,⬀ to respect for human rights,⬀ and everything in between.

The conversations reminded us that law often struggles to keep up with technology. The lag between the evolution of technology and the adoption of new regulation has probably never been as significant as it is today. AI, the IoT, and technological convergence present serious challenges for policymakers.

While advancements cannot stop, there are things we can do to keep up with them. Companies can adopt a privacy-by-design approach when developing products and services. Users can be more mindful of their online safety. Governments can make capacity development a bigger priority. Global challenges can be addressed on a more global scale.⬀

'New technologies, like artificial intelligence and robotics, need to incorporate ethics and human rights considerations in their design.'

WSIS IN NUMBERS

1.1m | online votes cast for 345 nominated projects

3900+ | Twitter followers

2500+ | stakeholders participating in the Forum

500+ | high-level participants (ministers, ambassadors, heads of international organisations, CEOs, and civil society leaders)

467 | ICT projects submitted for the WSIS Prize

200+ | thematic workshops organised

200+ | submissions during the Open Consultation Process

150+ | countries represented

14 | high-level policy sessions included in the programme

Source: WSIS Forum 2017 Outcome Document ⬀

SPOTLIGHT ON: A CURRICULUM FOR TRAINING IN DATA GOVERNANCE

Data-driven changes require new skills and professions. One of them is data governance for international organisations. What should be the curriculum of courses for future data governance experts? How can such courses combine technical and policy inputs?

Discussions on these and other questions have been conducted at the Geneva Internet Platform since the start of the year with experts from the University of Geneva and international organisations. At WSIS Forum 2017, the panel session focused on defining data skills for international organisations. So far, this process addressed the following issues for a data governance curriculum: privacy protection, data security, organisational data policies, data visualisation, big data analysis, etc.

Development of a data governance curriculum will continue till IGF 2017 (Geneva, December 2017), when the GIP and the University of Geneva will host the workshop 'Data governance and policy: Developing a curriculum'.

WHAT'S NEXT?

Now that WSIS Forum 2017 is behind us for another year, what's next? From the G20 in Hamburg next month, to the 12th IGF in Geneva at the end of the year, many events will touch on the issues we have mentioned here. Mark the following main events on your schedule.

7-8 JULY
G20 Leaders'
Summit
(Hamburg, Germany)

10-19 JULY
High-Level Political
Forum on Sustainable
Development
(New York, USA)

3-5 SEPTEMBER
9th BRICS Summit
(Xiamen, China)

9-20 OCTOBER
World Telecommunication
Development Conference
(Buenos Aires, Argentina)

11-14 DECEMBER
WTO Ministerial
Conference
(Buenos Aires,
Argentina)

18-21 DECEMBER
12th Internet
Governance Forum
(Geneva,
Switzerland)

Into digital policy? Tens of events every month discuss the broad digital policy issues. Some zoom into specific themes. Take a look at all the events, and sign up for reminders: **http://dig.watch/events**