Geneva Internet Platform



You receive hundreds of pieces of information on digital policy. We receive them, too. We decode, contextualise, and analyse them. Then we summarise them for you.

DIGITAL POLICY TRENDS: IN JULY & AUGUST

1. Reflections on a digital future accelerate; initiative on digital co-operation timely

Summer provides more time for reflection. World leaders, entrepreneurs, philosophers, and increasingly, citizens around the world, are joining the discussion on the future of humanity. Digital developments provide context, but the discussion is now much broader and more philosophical.

Will we have economic and political choices to make, or will machines eventually start choosing for us? Will there still be a place for ethics and values? What does the future of work look like? Many articles today ask these questions and comments by users are taking the discussions even further. In particular, there are mixed feelings on artificial intelligence (AI): from a blue-sky approach in which we are promised technological progress that overcomes most societal issues, to doomsday narratives that see humanity ending in a battle with robots.

While discussions pick up, new policy initiatives are also developing. The latest initiative by the UN - the High-Level Panel on Digital Cooperation – is built on the premise that the trans-boundary nature of the Internet requires solutions beyond national borders. Its focus is on international co-operation which can realise the potential of digital technologies - including frontier technologies, such as AI and blockchain - while minimising the risks they pose.

The panel, led by Melinda Gates (Bill and Melinda Gates Foundation) and Jack Ma (Alibaba Group), and supported by a Secretariat headed by Amb. Amandeep Gill and Prof. Jovan Kurbalija, has already started its consultations with stakeholders. It is expected to deliver its final report in early 2019. The first face-to-face meeting will take place in September.

2. Sustainable development: 2020 targets looming

The sustainable development goals (SDGs) are one area which was particularly prominent in the past few weeks. Although the agreed timeline for fulfilling the goals is the year 2030, for some targets the deadline is actually 2020 just 18 months from now.

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to central Kenya by 2019. More infrastructure-related

updates on page 5.Ľ

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BAROMETER



Sustainable development and infrastructure were prominent issues, our barometer shows. Other issues which are typically prominent were less so in July and August.

LETHAL AUTONOMOUS WEAPONS



Building on the work of its previous two meetings, the Group of Governmental Experts (GGE) continued the search for a common understanding of basic

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DATA CENTRES



As the volume of data traffic increases, so does the scale of development of data centres. The contribution of data centres to national economies is

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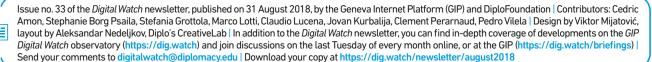
OBSERVATORY



Our taxonomy of digital policy has undergone a revision. Read more about the main challenges surrounding this regular exercise.

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Credit: iLighter



DIGITAL DEVELOPMENTS IN GENEVA

Many policy discussions take place in Geneva every month. The following updates cover the main events. For event reports, visit the Past Events⊡ section on the GIP Digital Watch observatory.

CFD-WB Series: Harnessing Data for Development The event, on 9 July, organised by the Graduate Institute's Centre for Finance and Development and the World Bank Group Geneva, focused on possible ways of collecting and accurately analysing data to achieve the SDGs. The conference was organised as part of a series of events entitled Financing for Development in Action. After a presentation of the World Bank Atlas of SDGs 2018, the panellists spoke about the need for good statistics and data in order to act effectively in achieving the SDGs. The importance of being able to analyse the information obtained was highlighted as a key challenge for the near future. Finally, discussions revolved around the link between the shortcomings in the performance of the SDGs and potential crisis situations, and the need to obtain localised rather than national data. Read our report from the event.

Global Symposium for Regulators (GSR18) The 18th Global Symposium for Regulators (GSR), organised on 9–12 July 2018¹² by the International Telecommunication Union (ITU), featured discussions on the impact of digital transformation on consumers, businesses, and citizens, as well as the expansion of regulatory frontiers beyond traditional ICTs.Under the overarching theme of New Regulatory Frontiers, many discussions referred to the Internet of Things (IoT) and AI and focused on the interplay between regulations and the digital economy. Panellists acknowledged that emerging technologies are expanding regulatory frontiers to new horizons. Some speakers argued in favour of a framework that merges bottom-up with top-down approaches, noting that micro-regulatory frameworks for technology could be dangerous. Such a framework can also be elaborated by market actors. Further issues involved the concept of trust and the interoperability of devices. The Geneva Internet Platform (GIP) provided reports from several sessions at the symposium; read our reports.

Digital Dangers – Responding to the illicit wildlife trade online: What do we know? The event, on 19 July. marked the launch of the policy paper *Digital Danger* by the Global Initiative Against Transnational Organized Crime. The project, funded by the Norwegian government, focuses on cyber wildlife crime and addresses the increasing use of digital platforms to advertise, purchase, and create new markets for illegal wildlife trade. The policy paper stresses the need to understand better the nature and dynamics of online marketplaces, including marketing and sales, the actors involved in transactions, and their role in the value chain. The initiative aims to strengthen networks by supporting investigative journalists to report on online illegal wildlife trafficking, and bring the media and civil society together to develop best practices on using the digital space for investigations and mobilisation. *Read our report*.

GGE on Lethal Autonomous Weapons Systems – 2nd meeting of 2018 The second meeting of the GGE, which took place on 27–31 August, built on the work of the two previous meetings (see reports from the first and the second meeting). On the agenda were several issues, including: the 'characterisation of the systems under consideration', that is, definitions of concepts; the nature of the human element in the use of lethal force; a review of potential military applications of related technologies; and possible options for addressing the humanitarian and international security challenges. *More on page 6.12*



Never miss an event with DeadlineR

The global digital policy calendar is packed with meetings, conferences, and related deadlines. DeadlineR, the *Digital Watch* observatory's notification system, addresses the concrete and pressing needs of the digital policy community in a practical and functional way. It alerts users before the start of any event, and notifies them of deadlines to register or to submit workshop proposals, or other deadlines related to each event. Visit our *Upcoming Events* section and follow the links.

ANALYSIS

DIGITAL POLICY TRENDS: IN JULY & AUGUST

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The sense of urgency was felt during the High-Level Political Forum on SDGs, the annual meeting in New York which reviews specific SDGs and monitors progress. The forum noted that progress is not advancing fast enough, especially for these targets.

Leaders from BRICS countries – Brazil, Russia, India, China, and South Africa – who met for the group's 10th annual summit, also emphasised their support for the UN's 2030 Agenda, but called on developed countries to meet their foreign aid commitments and provide further support to developing countries.

The G20 Digital Economy Ministers referred to universal connectivity as a powerful enabler of inclusive growth and sustainable development. In their Ministerial Declaration, they agreed to support national, regional, and global initiatives that promote connectivity, put together guidelines to inform public policies, and facilitate their adoption, according to individual countries' conditions.

In all of the efforts to fulfill the goals, the private sector will need to play a prominent role. As the High-Level Political Forum noted, the private sector is 'a critical development partner and as a leading enabler of SDG achievement'. This is because it can create jobs, promote innovative solutions, improve the skills of labour market, and provide affordable goods and services for infrastructure and energy problems.

3. Data governance issues at the fore

The coming into effect of the EU's General Data Protection Regulation (GDPR), on 25 May, immediately triggered the first court cases. While the cases proceed, discussions on issues related to privacy, data protection, and the effects of the regulation continued to unfold.

Among these are ICANN's WHOIS policy and the handling of personal data of domain name registrants (in particular, data concerning technical and administrative contacts). In the latest court case, in Cologne, the German Appellate Court ruled that ICANN cannot oblige a registrar to collect such data when offering or registering a domain name, despite the contractual obligations of the registrars towards ICANN. Meanwhile, an ICANN working group is working to propose a more permanent access model for the data. The current model can be used until May 2019.

In the USA, the feedback to this year's Department of Commerce's call for inputs on international Internet policy priorities referred prominently to data governance issues. Some companies are concerned with the right to be forgotten being extended to jurisdictions beyond Europe, and the Privacy Shield and its adequacy evaluation approach as not being the best approach for every jurisdiction. Instead, the Asia-Pacific Economic Cooperation (APEC) Privacy Framework has been proposed as an alternative model. Others are concerned with data localisation policies, which limit flexibility and impose more compliance costs.

In India, the draft data privacy law was met with a heated debate on data localisation provisions. The legislation, if passed, will require that a copy of all personal data be stored in India, and will create broad permissions for the government's use of data.

Despite new legislation around the world, many countries are still searching for a formula for data governance which will protect the rights of users, while preserving the interests of industry, and the needs of law enforcement.



In its ministerial declaration, the High-Level Political Forum on SDGs (9–18 July 2018) acknowledged that while progress is being made with some goals and targets, it is not advancing fast enough to achieve the SDGs, in particular, those with a timeframe of 2020 © Credit: UN DESA



DIGITAL POLICY: DEVELOPMENTS IN JULY & AUGUST

The monthly Internet Governance Barometer tracks specific Internet governance (IG) issues in the public policy debate, and reveals focal trends by comparing issues every month. The barometer determines the presence of specific IG issues in comparison to the previous month. Read more about each update.

Global IG architecture



UN Secretary-General Antonio Guterres set up a High-Level Panel on Digital Cooperation. The aim of the panel is to identify gaps in digital policy mechanisms, and to make proposals on strengthening international co-operation.

G20 leaders convened in Salta, Argentina, agreed on proposals to help governments in their digital transformation, measure the contribution of the digital economy to the overall economy, and narrow the digital gender divide, among others.

Sustainable development



Officials meeting for the annual High-Level Political Forum on Sustainable Development (HLPF) at the UN headquarters in New York called for an escalation in progress in meeting the SDGs and their respective targets.

Leaders from the BRICS countries affirmed their support for the UN's 2030 Agenda for Sustainable Development, while calling on developed countries to meet their foreign aid commitments and provide further support to developing country partners.

Security



increasing relevance

Heads of State participating in the meeting of the North Atlantic Council in Brussels on 11–12 July 2018, issued the Brussels Summit Declaration, (a) emphasising that the Alliance will continue to implement cyberspace as a domain of operations; (b) reaffirming that international law applies in cyberspace; (c) expressing their determination to deliver strong national cyber defenses by fully implementing the Cyber Defense Pledge; (d) giving Allies the right to consider, when appropriate, attributing malicious cyber activity and responding in a co-ordinated manner; (e) and reiterating the establishment of the Cyberspace Operations Centre in Brussels, announced in November 2017, which will allow the Alliance to integrate cyber measures with conventional military capabilities.

Russia plans to present two new draft resolutions on cybersecurity to the UN General Assembly in the autumn, Kommersant reports. The first will introduce a new Code of Conduct for states, prohibiting the use of ICT to interfere in the internal affairs of other states and to undermine their stability. The second is envisioned as an alternative to the Council of Europe's Convention on Cybercrime, of which Russia is not a signatory. The draft resolution will also provide for data exchange, but 'on a different, purely legal basis'.

E-commerce & Internet economy



same relevance

Apple became the world's first trillion-dollar public company when a rise in its share price pushed it past the landmark valuation. Meanwhile, the European Commission fined Google €4.34 billion for illegal practices which harmed competition. The practices related to Android mobile devices which were aimed at strengthening the dominance of Google's search engine; the company will appeal.

European Commission President Jean-Claude Juncker and US President Donald Trump announced that they will take a series of steps to mitigate the trade tensions between the EU and the USA.

The EU and Japan signed a trade deal in Tokyo, Japan, known as the EU-Japan Economic Partnership Agreement (EPA), which has been under formal negotiation since 2013. The two parties also concluded talks on data protection, agreeing to recognise each other's frameworks as 'equivalent'.

The Indian government has unveiled a draft e-commerce policy which imposes restrictions on e-commerce marketplaces to prevent them influencing the price of the sale of goods and services which puts local businesses at a disadvantage.

Digital rights



same relevance

Google is planning to launch a censored version of its search engine in China, leaked documents revealed. The censored version will blacklist websites and a number of search terms related to human rights, religion, and peaceful protest.

In Strasbourg, the European Court of Human Rights has upheld the decision of Germany's Federal Court of Justice, allowing three media outlets to continue offering access to information relating to the murder convictions of two individuals. In this case, the public's right to be informed outweighed the applicants' right to privacy. A German Appellate Court ruled that ICANN cannot stop a registrar from offering and/or registering domain names without additionally collecting the data of a technical and administrative contact for the WHOIS service.



Jurisdiction & legal issues



Russia is proposing a new bill to counter the spread of domestic fake news. The bill would specifically target social media companies, requiring them to remove factually inaccurate posts and comments made by users within 24 hours of the content's discovery, or face a fine of USD\$800 000.

The Court of Justice of the European Union ruled that copyrighted content posted on a website, which was previously available on another website, requires a fresh authorisation from the copyright holder.

Infrastructure



increasing relevance

Two new undersea cables – the SACS cable that connects Brazil to Angola, and the SAIL cable that connects Brazil to Cameroon – entered the final stage of completion. Google also announced plans to launch its latest private subsea cable project called Dunant. The cable will cross the Atlantic Ocean from Virginia Beach in the USA to the French Atlantic coast.

Google's parent company, Alphabet, announced the first commercial deal of project Loon with Telkom Kenya. High-altitude balloons will provide 4G/LTE cellular access to central Kenya by 2019. Google Station, the company's public wi-fi service, launched wi-fi hotspots in Nigeria.

Meanwhile, leaked e-mails revealed that Facebook plans to provide broadband access to remote areas from a constellation of satellites sent into a low orbit, called Athena.

Net neutrality



same relevance

The Telecom Commission of India approved the regulator's net neutrality recommendations, which prevent service providers from discriminating against Internet content and services. Some critical services, such as remote surgery and autonomous cars, will be kept out of the purview of the framework.

New technologies (IoT, AI, etc.)



same relevance

In the USA, the Uniform Law Commission presented a draft law that attempts to clarify property and privacy rights in response to the growing use of drones. The draft was met with criticism from business and industry associations for interfering with the federal government's authority to regulate the airspace.

Maven, the US Department of Defense's programme to use machine learning to analyse drone imagery, received an increase in funding. The Department of Defense will be looking for a new private sector partner to replace Google, which announced that it would not renew its contract once it expired.

The World Bank's new bond, which is managed entirely using blockchain technology, has raised AUD \$110 million. The bond is managed by the Commonwealth Bank of Australia.

AHEAD IN SEPTEMBER 10-13 SEP 19-20 SFP 24 SFP ITU Telecom World 2018 Global Forum on Cyber Expertise High-level Meeting on Financing the 2030 Annual Meeting Agenda (New York, USA) (Durban, South Africa) (Singapore City, Singapore) ra. PTEMBE OCTOBER 10-28 SEP 24 SEP 27-29 SEP UN Human Rights UN High-level Cybersecurity and Council - 39th Panel on Digital Session of the Art Research Cooperation: First (Geneva, Switzerland) Conference (Zurich, Switzerland) Meeting (New York, USA) Γđ 17 For more information on upcoming events, visit https://dig.watch/events

_ANALYSIS

LETHAL AUTONOMOUS WEAPONS SYSTEMS: DEBATES CONTINUE IN GENEVA

The Group of Governmental Experts (GGE), established by the Convention on Certain Conventional Weapons (CCW) to discuss emerging technologies in the area of lethal autonomous weapons systems (LAWS), met August 27–31 in Geneva. We summarise the proceedings.

Building on the work of the two previous meetings (see reports from the first and the second meeting), the GGE has reinforced points of consensus among High-Contracting Parties to the Convention.

Along the meeting, group members, states, and other participants reaffirmed, for instance, the understanding that the development of any new weapons system, regardless of the degree of autonomy they might embed, remains under full applicability of International Law and International Humanitarian Law. Furthermore, some delegations recalled that Human Rights Law should be included in the wording of the report. The GGE also expressed the general and common concern that a regulatory response does not hinder innovation or prevent legitimate civilian deployment of any technology.

Divergence remained from the past meetings around some aspects that were brought to the table again as agenda points. To be addressed. The GGE continued the search for a common understanding of the basic concepts and characteristics that are relevant to the objectives and purposes of the Convention, including the very concept of LAWS. Working definitions were proposed by Russia and Ireland.

The group also focused on the human element, in efforts to clarify the idea of meaningful human control and what its nature and extent in the use of lethal force should comprise. Furthermore, the GGE reviewed potential military applications of such technologies in contexts which are relevant for their work. Sweden and the United States offered presentations describing weapons systems that could potentially fall within the scope of, and attract the interest of the parties to the discussion.

The GGE went further to present and discuss possible options for addressing the humanitarian and international security challenges, in the light of the objectives and purposes of the Convention. Codes of conduct and best practices, enhanced and standardised review measures of the implementation of Article 36 (which mandates that in the study or development of new weapons, a High Contracting Party must check whether its employment would be prohibited by law), a political declaration, and a legally binding



Credit: U.S. Air Force, Lt Col Leslie Pratt

instrument were the options more concretely considered during the meeting.

During the debates there was a common view that a key obstacle for the work of the GGE is the absence of working examples of LAWS. To this point no concrete weapons systems that embed the characteristics, mirror the degree of autonomy, and are not subject to human control in performing their critical functions have been presented. Further difficulties arose as states moved forward to consider autonomy not as a binary aspect in the sense that it either exists or it does not, but rather as a spectrum, with its general levels ranging across the system: It can exist in different parts of the life cycle of a weapons system, and while machines which are highly automated may present no autonomy when it comes to their critical functions, other machines which do not present such a high degree of automation may perform their critical functions in a highly automated fashion.

Delegations suggested characteristics and attributes that could be used in the attempt to formulate a general concept of LAWS, which included human replacement, absence of control after activation, choice of a course of action regardless of human oversight, self-adaptation through the redefinition of scenarios and approaches, self-initiation of an attack, and others.

The discussions around the relevance of the human-machine interface aspects benefitted from a slide (the 'sunrise' slide) which was offered by the chair, indicating a number of areas (pre-development, research, testing, training, command, control, use, abortion, and post-use assessment) where it is relevant to observe how this interaction between individuals and weapons unfolds.

A number of possible guiding principles to assess legal compliance and ethical admissibility of of emerging technologies in the area of LAWS surfaced from this meeting. The GGE is moving away from a definition of LAWS that purely regards the technical characteristics of the weapons and towards approaching the issue from the human element perspective , examining aspects of control, responsibility, decision, and accountability. Both physical and cybersecurity measures to prevent the proliferation or acquisition of such technologies by terrorist groups also emerged as a common concern. The GGE highlighted the importance of incorporating risk assessment and mitigation measures in the design, development, testing, and deployment life cycle of emerging technologies in any weapons system.

Support for the continuation of the work of the GGE was broad, with some delegations proposing a stronger mandate. The GGE will meet again in Geneva for 10 days in 2019.

A more in-depth analysis of the proceedings and outcomes of the August 2018 meeting will be available soon at dig.watch/ laws

Digital Watch

IN FOCUS

THE ECONOMIC IMPACT OF DATA CENTRES

Developments in AI, IoT and smart devices, and other data-heavy applications have led to a major increase in data traffic. It is estimated that global data centre traffic will triple by 2020. The increase in volume of data has increased the scale of development of data centres worldwide.

In the past few years, 'data is the new oil' has become a catchphrase used to highlight the immense value acquired by this twenty-first-century commodity. Although there are several important differences between the two resources (for instance, unlike oil, data generates more data), the analogy remains useful to describe the way information is used to power many modern technological applications.

Data centres, used by almost all tech companies – from small startups to Silicon Valley giants – are modern-day factories for data. Due to the increase in data volume, they have become economic assets important to local, national, and regional economies.

A report by the US Department of Commerce shows that large data centres bring in millions of dollars in initial investment directly to local communities, which in turn contribute to the surrounding areas. The initial investment directly creates construction jobs for the building of the data centres themselves, as well as public infrastructure, including roads, water services, and electrical and network infrastructures. Once built, data centres operating around the clock need to be manned by IT personnel, and security and operations staff.

Similar reports on the economic impact of data centres in countries like Norway, Finland, Netherlands, and the United Kingdom all confirm the same trend. According to Gartner, global investment in data centres reached \$181 million in 2017, and is expected to surpass the \$188 million mark this year. In the USA alone, investment in data centres was more than \$20 billion. Data centres have also caught the eye of real-estate investors, who consider them important alternatives to traditional real estate.

Data localisation rules and the economic factor

New data localisation requirements emerge regularly in different countries around the world. Although privacy protection, security, and law enforcement are among the main reasons behind data localisation regulations, the potential for economic growth and development is also why some governments are obliging companies to store their data within the borders of national jurisdictions, as well as to limit their ability to transfer locally collected data to other countries.

The question is whether data localisation measures and incentives are an efficient way of achieving economic growth or, reversely, a regime of data liberalism would be the better option. Where defenders of data liberalism might argue huge discrepancies in efficiency and costs, in a similar way to David Ricardo's theory of *Comparative Advantage* (countries still engage in international trade even when the local labour force is more efficient at producing goods than workers in other countries), data protectionists might argue through Hamiltonian and List *infant industry* lines (an emerging industry needs extra protection from international competition). Both arguments have strong supporters.

Economic factors cannot be ignored, especially in regions which benefit from direct investment. Knowing the impact of data localisation rules, or that of other legal measures, on the deployment of data centres, can allow governments and the private sector to better prepare for the surge in global data centre traffic in the years to come.

By 2020, the volume of big data is predicted to increase from 4.4 zettabytes to roughly 44 zettabytes (1 zettabyte equals 1 billion terabytes). Originally, it was thought that the volume of data would double every two years, but the impact of the IoT has triggered larger volumes. All is expected to further increase the volume of data. The rate at which data is being created is also increasing exponentially. For instance, Google processes over 60 000 search queries every second, i.e., more than 5 billion searches every day.

Credit: BalticServers.com



BRAVE NEW WORLD: A REVISED TAXONOMY OF DIGITAL POLICY

Digital policy is constantly in flux. What was prominent two or three years ago may not necessarily be so today. At the same time, issues can also become topical very quickly. All rapidly became a topic of interest (and concern); blockchain took longer to mature, and is still largely surrounded by hype; inclusive finance is one of the most important issues this year.

Our taxonomy of digital policy — a classification of over 40 issues grouped into 7 baskets, which is at the basis of the *GIP Digital Watch* observatory. — has been evolving for the past 20 years. Designed initially in 1998 by DiploFoundation's founding director, Prof. Jovan Kurbalija, the taxonomy is updated regularly to reflect the fast evolution of the digital field. This summer, it has undergone another revision.

Organising a growing number of complex developments

Due to the fast digitalisation of many aspects of society, what was once a predominantly technical area is now linked to practically every sector. We can no longer effectively discuss issues related to health, development, migration, or security – to mention a few – without focusing on the digital aspects.

Digital policy has expanded in both breadth and depth. The number of areas captured by this umbrella term has increased. Some broad areas – such as cybersecurity – have developed to the extent that their 'niches' are now broad policy areas in their own right. In terms of depth, emerging technologies such as AI and virtual reality, trigger deeper reflections.

Changes happened more quickly in the last five years. The shift from mostly technical issues to economic and regulatory areas was a response to several developments, including more widespread use of technology, the growth of the tech industry, and landmark judgements by courts (which solidified their role as de facto policymakers).

Classifying cross-cutting issues

Since many digital policy issues are cross-cutting, one of the main challenges is how to classify (or reclassify) a

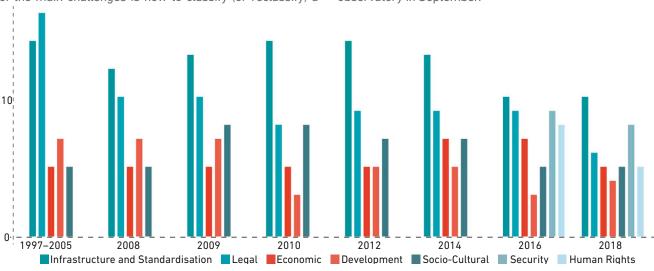
specific issue within a basket. For instance, *Digital Identities* involves many technological aspects, but is also linked to security (the protection of individuals and the security of the Internet), development (assigning a legal identity to billions of citizens), economic (enabling the use of identities for financial inclusion), legal (allowing citizens to own property), human rights (the protection of citizens' rights, including privacy), and sociocultural (helping citizens become an integral part of society through their civil status). Ultimately, an analysis of the coverage of this issue through text-mining, in consultation with experts on each topic, led to the classification of the issue in the sociocultural basket, with links to the other baskets.

What are the changes?

Our revision of the taxonomy features the following updates:

- An increase of issues: from 43 to 49 issues, grouped under the same 7 baskets.
- New issues, including: AI, Blockchain, Digital Identities, Inclusive Finance, the Right to be Forgotten, Data Governance, Digital Business Models, Digital Legacies, and Freedom of the Press.
- Reclassification of issues, including: Convergence, now under the Legal basket, and Future of Work (previously Labour Law), now under the Economic basket.
- Merged issues, including: Web Standards and Technical Standards, to include mobile standards; Copyright and Trademarks, to include patents; and IP Numbers, Domain Name System, and Root Zone.

The new taxonomy will be rolled out on the GIP Digital Watch observatory in September.



The evolution of the taxonomy over a timespan of 20 years.

Credit: DiploFoundation



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