

**12th Annual Meeting of the Internet Governance Forum (IGF)
18-21 December 2017, Palais des Nations, Geneva, Switzerland**

Main Session on Digital Economy

Digital Transformation:

How Do We Shape Its Socio-Economic and Labor Impacts for Good?

21 December 2017; 10:00-13:00 p.m. in Room XVII, UNOG

- SUMMARY REPORT -

Note: *This report reflects the organizational process of the main session on digital economy, as well as the main points raised during the session. For complete content of remarks, please consult the official transcript of the session, available [here](#).*

1. Description of the Organizational Process

During the 11th annual meeting of the IGF in Mexico, International Chamber of Commerce, Business Action to Support the Information Society (ICC BASIS) organized and hosted a workshop titled "[Digital Economy and the Future of Work](#)". Following the workshop, the business community agreed that holding a main session on ICT and employment to follow up the workshop would be an excellent opportunity to further foster engagement among multistakeholders and have in-depth discussions over various digital economy issues, while exploring how for many of the developing countries, technology is creating new jobs and for others with declining demographics, technology is helping with productivity.

When a formal request to hold a main session titled "Creating Inclusive Workforce in the Digital Economy" was submitted to the IGF Multistakeholder Advisory Group (MAG), at the same time, an IGF host country, Switzerland, together with Netherlands, also submitted a formal request to hold a main session titled "Digital transformation: how do we shape its socio-economic and labor impacts for good?". Because of similarity between 2 main session

proposals, each organizer started to discuss the possibility of merging the 2 proposals to make an even stronger collective one, inspired by the convergence of ideas made by some MAG members. As a result of their intensive discussion, they reached a conclusion to incorporate the former proposal into the latter proposal and propose to hold one main session titled “Digital Transformation: How Do We Shape Its Socio-Economic and Labor Impacts for Good?”. After several rounds of consultations, the main session was approved by the MAG.

Shortly after the approval, several MAG members were invited to serve as supporting organizers, while a MAG member, Mr. Kenta Mochizuki took the lead of organizing the session (afterwards, Ms. Renata Aquino Ribeiro became a co-organizer with Mr. Mochizuki due to unforeseen circumstances). Then, the overall structure of the session was scrutinized and candidates for moderators as well as speakers were reached out. Because of the timing of this year’s IGF, it became more difficult to confirm all moderators and speakers. Especially, the MAG decided to place the session on Day 4, 21 December, at 10:00 - 13:00 at the last minute although organizers of the session continuously, repeatedly, and seriously asked to place either on Day 1 or Day 2 through successive virtual MAG meetings as well as a MAG mailing list, so it became extremely difficult to confirm all moderators and speakers and it was the evening of 20 December (1 day before the session) when all moderators and speakers were finally confirmed¹.

2. Organizers

- **Kenta Mochizuki (Mr.)**, IGF/MAG Member, Principal / Attorney at Law (New York), Public Policy, Corporate Intelligence, Yahoo Japan Corporation
- **Renata Aquino Ribeiro (Ms.)**, IGF/MAG Member, Researcher and Teacher, E.I. Consulting
- **Jorge Cancio (Mr.)**, IGF 2017 Host Country Representative, Federal Office of Communications (OFCOM), Government of Switzerland

¹ According to a main session grid shared by the IGF Secretariat on 5 July 2017 (https://www.intgovforum.org/multilingual/index.php?q=filedepot_download/3813/675), a main session on digital economy was placed on Day 4. Although the grid was a “straw chair proposal” and organizers of the session continued to explicitly oppose the scheduling (means did not join a consensus or rough consensus) after that, the proposed schedule in which the session was placed on Day 4 was finally adopted. This year, there were 3 critical difficulties for the session, i.e., (i) Day 4, (ii) year’s end (holiday season), and (iii) [WTO Ministerial Conference \(MC11\)](#) just before the IGF.

- **Livia Walpen (Ms.)**, IGF 2017 Host Country Representative, Federal Office of Communications (OFCOM), Government of Switzerland
- **Marilia Maciel (Ms.)**, Digital Policy Senior Researcher, DiploFoundation
- **Arnold van Rhijn (Mr.)**, IGF/MAG Member, Senior Policy Advisor, Directorate-General for Energy, Telecom and Competition, Netherlands Ministry of Economic Affairs
- **Elizabeth Thomas-Raynaud (Ms.)**, IGF/MAG Member, Senior Policy Executive, Digital Economy and Project Director at International Chamber of Commerce (ICC)
- **Timea Suto (Ms.)**, Project Coordinator, Commission on the Digital Economy / BASIS, International Chamber of Commerce (ICC)
- **Carolyn Nguyen (Ms.)**, IGF/MAG Member, Director, Technology Policy, Microsoft Corporation
- **Miguel Ignacio Estrada (Mr.)**, IGF/MAG Member, Internet Policy Consultant

3. Session Format and Structure

In a bottom up, open and inclusive process, organizers agreed to have a main session on digital economy structured with the following details. For more detailed information, please refer to the relevant interactive schedule of IGF Geneva 2017, available [here](#).

1) Participants

a) Moderators

Part 1: Digitization, Global Production, and Flows of Digital Commerce

- Dr. Makoto Yokozawa, Nomura Research Institute/Kyoto University
(*Co-chair of OECD/BIAAC Committee on Digital Economic Policy)

Part 2: Digitization, Automation, and Employment Issues

- Ms. Paola Pérez, Vice-President of the ISOC Venezuelan Chapter / Chair of the LACNIC Public Policy Forum
- Dr. Nathalia Foditsch, Cornell College of Business

b) Speakers

Part 1: Digitization, Global Production, and Flows of Digital Commerce

- Mr. Oscar Gonzalez, Government of Argentina
- Mr. Torbjörn Fredriksson, UNCTAD
- Ms. Ankhi Das, Facebook
- Ms. Farzaneh Badiei, Georgia Institute of Technology
- Dr. Walid Al-Saqaf, Södertörn University

Part 2: Digitization, Automation, and Employment Issues

- Ms. Ana Cristina Amoroso das Neves, Government of Portugal
- H.E. Eng. Hossam El Gamal, Government of Egypt
- Ms. Valentina Scialpi, EU
- Mr. Philip Jennings, UNI Global Union
- Mr. Edmon Chung, DotAsia Organization
- Ms. Karen McCabe, IEEE

c) VIP Intervention from the Audience

Part 2: Digitization, Automation, and Employment Issues

- Mr. Ndicho Bambo, Samuel, Yaoundé, Foreign Service Officer, Ministry of External Relation, Cameroon

d) Online Moderator (*See below for details)

- Mr. Auke Pals, Student Information Science at the University of Amsterdam, innovation consultant, entrepreneur and chair of the Dutch Digital Youth Counsel

2) Annotated session structure

10:00-10:10	Welcome: Introductory Remarks 7 MIN	Kenta Mochizuki, MAG member (Yahoo Japan Corporation) <ul style="list-style-type: none"> • Brief overview of topic and relevance to IGF • Agenda for main session: <ol style="list-style-type: none"> 1) Part 1: Digitization, Global Production, and Flows of Digital Commerce 2) Part 2: Digitization, Automation, and Employment Issues
Part 1: Digitization, Global Production, and Flows of Digital Commerce (80 min.) [Moderated by Dr. Makoto Yokozawa, Nomura Research Institute/Kyoto University]		
10:10-10:30	Short Initial Remarks from Panelists 4 MIN EACH	<ol style="list-style-type: none"> 1) Mr. Oscar Gonzalez, Government of Argentina 2) Mr. Torbjörn Fredriksson, UNCTAD 3) Ms. Ankhi Das, Facebook 4) Ms. Farzaneh Badiei, Georgia Institute of Technology 5) Dr. Walid Al-Saqaf, Södertörn University
10:30-11:20	Discussion on 5 Questions 50 MIN	Participants will discuss on the following 5 questions (* expected to prepare their own answers in advance): <ol style="list-style-type: none"> 1) How is the new digital ecosystem different than the traditional ecosystem? What are considerations for enabling the development of healthy digital ecosystems? What are the main policy issues

		<p>related to global production value chains in the digital environment?</p> <p>2) What are the contributions of different types of e-commerce (B2B, B2C, B2G) to the global economy and how is e-commerce distributed worldwide? What is the role of e-commerce marketplaces for the inclusion of SMEs and developing market contenders in global trade chains?</p> <p>3) How do emerging technologies, such as big data, IoT, and AI affect e-commerce? What are the main policy options that facilitate or create obstacles to global trade flows?</p> <p>4) How does digitization enable new business models and encourage entrepreneurship?</p> <p>5) What roles do international organizations play in facilitating the discussion of these policies and how can they work with other actors to promote better coordination in the field of ecommerce?</p>
11:20-11:30	<p>Reactions from Floor and Remote</p> <p>10 MIN</p>	<p>Moderator will ask several questions and comments from floor and remote; then close the part 1 with brief concluding remarks.</p>

<p>Part 2: Digitization, Automation, and Employment Issues (85 min.) [Moderated by Ms. Paola Pérez, ISOC Venezuelan Chapter (*Introductory Part) / Dr. Nathalia Foditsch, Cornell College of Business (*Closing Remarks)]</p>		
11:30-11:50	<p>Short Initial Remarks from Panelists</p> <p>4 MIN EACH</p>	<p>1) Ms. Ana Cristina Amoroso das Neves, Government of Portugal</p> <p>2) H.E. Eng. Hossam El Gamal, Government of Egypt</p> <ul style="list-style-type: none"> • The Impact of Digital Revolution on the Socio-Economic Aspect in the Middle East • Using Digital Transformation to Leverage the Workforce and Job Creation • Government of Egypt Efforts in Promoting Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for All. <p>3) Ms. Valentina Scialpi, EU</p> <p>4) Mr. Philip Jennings, UNI Global Union</p> <p>5) Mr. Edmon Chung, DotAsia Organization</p> <p>6) Ms. Karen McCabe, IEEE</p>

11:50-12:40	<p>Discussion on 5 Questions</p> <p>50 MIN</p>	<p>Participants will discuss on the following 5 questions (* expected to prepare their own answers in advance):</p> <p>1) What are some of the lessons learned from past market transformations, e.g., agricultural to industrial, and how does digitization assist in making the most of the lessons (taking also into account the context of sharing economy)?</p> <p>2) Are there tools that can better measure and predict the impact of ICT on the labor market? Are there tools that can predict what skills are needed going forward?</p> <p>3) What are the ways in which the labor market will most likely be affected by digitization and automation? What policies should be considered in an environment of increasing demographics in developing countries? Do ICTs actually assist developed countries in addressing understaffing situation while maintaining the diversity of a career choice as well as mitigating risks to the well-being of the labor force?</p> <p>4) What will be the necessary professional skills to take advantage of the jobs created in a highly digital society and what are examples of innovative approaches to training by which workers can be more effectively connected to more opportunities? Should different approaches be considered for people at different stages in their career?</p> <p>5) How can education and capacity development play a role in this new scenario and what kind of efforts would be necessary for public / private stakeholders to promote the education and capacity development in both developed and developing countries?</p>
12:40-12:50	<p>Reactions from Floor and Remote</p> <p>10 MIN</p>	<p>1) VIP Intervention from Mr. Ndicho Bambo, Samuel, Yaoundé</p> <p>2) Moderator will ask several questions and comments from floor and remote; then close the part 2 with brief concluding remarks (Dr. Nathalia Foditsch).</p>
12:50-13:00	<p>Closing Remarks</p> <p>8 MIN</p>	<p>Ms. Renata Aquino Ribeiro, MAG Member (E.I. Consulting)</p>

4. Summary of Raised Key Points

*(*This summary is based on a UNOG press release titled "[INTERNET GOVERNANCE FORUM EXPLORES SOCIO-ECONOMIC AND LABOUR IMPACTS OF DIGITAL TRANSFORMATION](#)", with some minor additions and changes.)*

Introductory Remarks

Mr. Mochizuki, in his introductory remarks, noted that digital economy is economy as such, and has unprecedented potential for innovation and economic growth in both developing and developed countries, as well as for changing the traditional ecosystem of the world economy. On the other hand, he also cautioned that it also presents challenges regarding skills, social protection, and job quality, and significantly changed the future of work. In this context, he mentioned 2 points, i.e., (i) on 8 December, in relation to the 11th WTO Ministerial Conference (MC11) held in Argentina, Minister for Foreign Affairs of Japan, Taro Kono announced that the Government of Japan is prepared to provide approximately 370 million dollars² (in the current exchange rate from Japanese yen to US dollars) over the next three years as support for the ICT field, including E-commerce³, and (ii) on 13 December, also in relation to the WTO MC11, 70 WTO member states reaffirmed the importance of global E-commerce and the opportunities it creates for inclusive trade and development, and stated that they will initiate exploratory work together for future WTO negotiations on trade-related aspects of E-commerce⁴.

Part I: Digitization, Global Production, and Flows of Digital Commerce

Dr. Yokozawa (Nomura Research Institute / Kyoto University) moderated this discussion in which the speakers were Mr. Gonzalez (Government of Argentina); Mr. Fredriksson (UNCTAD); Ms. Das (Facebook); Ms. Badiei (Georgia Institute of Technology); and Dr. Al-Saqaf (Södertörn University).

On the **new digital ecosystem**, Mr. Fredriksson noted a huge global e-commerce gap: 60 to 80% of the population in most developed countries bought goods or services online, and

² 33 billion yen.

³ Ministry of Foreign Affairs of Japan, Announcement of Pledge in the ICT Field, including E-Commerce at the Eleventh World Trade Organization Ministerial Conference (8 December 2017), http://www.mofa.go.jp/press/release/press4e_001832.html [as of 21 December 2017].

⁴ WTO, Joint statement on Electronic Commerce, WT/MIN(17)/60, https://www.wto.org/english/thewto_e/minist_e/mc11_e/documents_e.htm [as of 21 December 2017].

less than 10% in developing countries. He cautioned that those best equipped to take advantage of the new digital environment would see the greatest gains, which would lead to widening income inequalities; a key challenge then was to ensure that enterprises in developing countries had the required skills and capabilities to take part in evolving global value chains. It was necessary to ensure that the digital economy did not replicate problems seen in other industrial revolutions, agreed Mr. Gonzales, adding that a modern regulatory framework and policies that incentivized development and addressed the issue of connectivity were needed. Dr. Al-Saqaf noted the crucial role of connectivity in informing the world about the ongoing violence in his country Yemen, and in enabling some businesses to thrive despite the war. He was concerned that many did not leverage data positively – using the data they collected and analyzed for development, prosperity and freedom, and stressed that the focus must be first on connecting the people and ensuring they had the required digital skills.

Ms. Das noted that in India and South Asia, the major beneficiaries of digitization and e-trade were women, and small and medium enterprises (SMEs) - the backbone of the national economies, and it had increased the number of start-ups which catered to local markets. The majority of connections in the region were 2G, so the private sector had made the application economy for this connectivity a priority. Ms. Badieli agreed that access to the Internet was essential and then emphasized the importance of ensuring access to other digital infrastructures, such as mobile payments. The progress in the cross-border online trade of goods was lagging behind, she said, and noted that in order to enable platforms to flourish, better digital infrastructure must be in place without imposing archaic laws and regulations. Mr. Fredriksson concurred that access to global digital platforms could help SMEs to access markets, and went on to underline that e-commerce should not do away with trade barriers because companies still needed to produce competitive products. While affordable connectivity access was fundamental for participating in the digital economy, it was far from sufficient, he said and called for more assistance to developing countries in various areas in order to achieve the Sustainable Development Goals (SDGs).

With regard to the **contributions of different types of e-commerce**, Mr. Fredriksson noted that the value of global e-commerce amounted to 25 trillion in 2015, out of which 90% was business to business (B2B); the top 10 markets included China and the Organization for Economic Co-operation and Development (OECD) economies, and most of e-commerce was domestic in nature. Ms. Das said that over the next 2 or 3 years, there would be more mature

investments in digital companies; the focus in the first phase would be on domestic markets, and on cross-border trade later on. Ms. Badiei noted that customs procedures had not been updated to accommodate the flow of goods traded online and said that if the customs procedure was difficult, it was not worth having cross-border e-commerce. Mr. Gonzalez highlighted inequalities in accessing the digital economy and stressed the importance of including SMEs into new production processes as they had a great contribution to make. Dr. Al-Saqaf pointed to a possible monopoly of information and data by companies to understand where deals were made; for others, this inability to access data or have the required skills to access the data, posed a risk of always being the last in the race.

Concerning the **impact of emerging technologies, such as big data, the Internet of Things, and artificial intelligence**, Dr. Al-Saqaf, noted that blockchain technology could be used in countries like Somalia, for example, to increase transparency and accountability for the huge sums of money received in international aid to rebuild the country after decades of conflict. Mr. Fredriksson stressed the need to increase the role of data in the digital economy, and to focus on analyzing and translating those analyses in business opportunities. “The ability to use data is the key factor in productivity”, he said and noted that, in the context of the growing importance of data, the challenge was how to bring developing countries in the process. “To equate artificial intelligence to a form of automation that would lead to unemployment was perhaps a very high form of fear-mongering,” said Ms. Badiei, stressing that societies must engage in a massive re-skilling agenda: create the right environment and develop the right policies to impart new skills. Technology alone was not a silver bullet. Mr. Gonzalez said that it was important that public policies be aimed at the development of new technologies and to target the universalization of their use, including through eliminating the artificial barriers to new endeavors that the countries had put in place. Ms. Badiei highlighted the value of the cross-border flow of data and said that trade agreements could lead to better protection of privacy if countries agreed on the minimum standards of privacy protection.

Discussing **how digitization enabled new business models and the roles of international organizations in this context**, Dr. Al-Saqaf stressed that international organizations should ensure equal treatment for all companies and limit monopolies, otherwise the gap between the rich and poor would widen. He urged international organizations to increase transparency, facilitate accessing data about their work, and ensure their accountability to the international community. For Mr. Fredriksson, one of the key roles of international

organizations was to address the digital economy gap, but their efforts so far were too small and too fragmented. Mr. Gonzalez underlined the cross-border and cross-cutting impact of the digital economy, in which there were multiple stakeholders who could play a role as important as international organizations.

“Digitization helped entrepreneurship and development of markets”, noted Ms. Das and said that international organizations had an important role in addressing the outstanding question of harmonization, in particular through strengthening regional processes to ensure that people from the global south had more voice. Ms. Badiei called for more cooperation between civil society and international organizations.

Part II: Digitization, Automation, and Employment Issues

Ms. Pérez (ISOC Venezuelan Chapter) and Dr. Foditsch (Cornell College of Business) co-moderated this discussion in which the speakers were Ms. Amoroso das Neves (Government of Portugal); Mr. El Gamal (Government of Egypt); Ms. Scialpi (EU); Mr. Jennings (UNI Global Union); Mr. Chung (DotAsia organization); Ms. McCabe (IEEE); and Mr. Ndicho Bambo (Government of Cameroon).

In opening remarks, Mr. El Gamal reminded that technology was at level 4.0 and many laws were at level 2.0, while Ms. Scialpi stressed that digitization and automation had a very real effect on the labor force. Since Europe was an important player in the fourth industrial revolution, it should work to make it available to all and to reduce inequalities, she said. Mr. Jennings advocated for policies that placed people at front and center, and that promoted social cohesion and peace. “There will be no lasting peace without social justice,” he stressed, especially in the world which was experiencing the largest transfer of wealth from working people to the 1% and where 40 million people worked in conditions of modern slavery. Ms. McCabe agreed that politics should be human-centric and that techno-scientific communities should participate in debates in an open and honest way in order to elevate the trust between people and new technologies. There was an ongoing narrative about affordable and universally accessible Internet, she noted and stressed that its outcomes should be fair and inclusive. It was imperative that all humans were considered in the general development and application of digitization and automation to avoid the risk of bias and excessive imbalances.

Mr. Chung spoke of the impact of digitization on youth and said that their study on youth mobility in Asia had found that the youth's biggest concern was employment: as a result of automation, artificial intelligence and other emerging technologies, jobs were becoming obsolete, and their nature changed. Mr. Chung stressed 2 components of youth empowerment: first, to give them knowledge and skills for the future; and second, often overlooked, to provide a supportive environment to facilitate co-learning with machines which would be the key challenge for the future. A part of that environment was the protection for people to challenge the machines. Ms. Amoroso das Neves said that the challenge for the future was not the employment but how to get paid. Humans had an amazing ability to adapt to new technology; the current generation was born with smartphones, but what would the next generation be born with? The current enthusiasm for technology also depended on how humans were able to influence that technology, therefore digital competencies were needed more than ever. Mr. Bambo said that he wanted to leave this session with some answers to the question "Where was Africa in the fourth industrial revolution?"

Speaking about the **lessons learned from past market transformations**, Mr. Jennings said that all must learn about successes and failures of transitions – one of the lessons learned was the "just transition" which stressed the need to accompany people in the process of change, including through active labor market policy, skills policy and social protection and social safety nets. "We must not leave it to the invisible hand of the market to deal with the social transformation required," he stressed, warning that otherwise, the political costs would be severe, including a threat to global peace and cohesion. Mr. Chung agreed on the importance of workers' welfare for a healthy society, and noted that today, there was a different type of transition, from machines to the network paradigm. It was important to understand the biases of algorithms and how machines worked before workers' rights could be protected. "Algorithms must be ethical," stressed Ms. Scialpi who underlined the fundamental importance of digital skills since machines were now intelligent.

There were many aspects of the socio-economic impact of digitization that must be appreciated, said Mr. El Gamal, citing the example of Egypt which used technology to identify those most excluded and marginalized individuals and communities and create and deliver on personalized plans. Another positive socio-economic impact was on women's empowerment, particularly in rural areas, as well as financial inclusion through a cashless economy which was instrumental in fighting corruption.

Examining the tolls to **better measure and predict the impact of information and communication technologies on the labor market**, Mr. El Gamal said that it was possible to develop clear country development maps and to identify skills gaps in the labor market and address them through adequate education programs. Ms. Amoroso das Neves noted that people had to be aware of digital transformation and said that Portugal had launched an initiative on digital inclusion and digital literacy. Mr. Chung said that youth's mobility online was a good predictor of the digital future.

Mr. Jennings drew attention to the chronic underinvestment in people, from the transition from school to work, and during the active working life. Also, there was an underinvestment in active labor market policies: the United States spent only 0.1% of its gross domestic product (GDP), while those higher up on the competitive scale spent almost 2%. In the face of the fourth industrial revolution, the world was grossly unprepared as it failed to invest in human capital. Ms. McCabe said that while they knew which tasks would be affected by automation, it was difficult to imagine the new jobs that would be created; in addition, the change would happen in a greater number of industries and sectors than before because of the pervasive nature of digital technologies. But this also provided an opportunity, including through shifting the yardstick of progress from GDP to wellbeing, which could open up markets for new jobs in health care, civic engagement and environmental protection.

Commenting on **how labor markets would be most affected by automation and digitization and which professional skills would be needed for jobs in highly digitalized economies**, Mr. Chung emphasized a different format of education for youth – information-dense learning which would demand from students to actively learn, and also empower them to challenge artificial intelligence. Mr. El Gamal said that digitization would not hurt the “classic labor”, for example technology opened new jobs for thousands of people; what needed to be done was to put in place a curriculum which would build the skills for the fourth industrial revolution.

Final Remarks

Mr. Jennings called on governments to establish future of work commissions, which was a critical mission for the good governance of the nation. The world today was witnessing the commoditization of labor, he said, noting that certain issues should not be left to the market and

to the big 6 data companies to regulate, as the invisible hand of the market would not bring social cohesion. Mr. Bambo called for a harmonized legal system on digitization in order to avoid gaps in development among countries and, noting that technological changes were far ahead of people, wondered in which direction the youth should be trained. Humans should not become inhuman in the quest for development, he warned. Ms. McCabe reminded that the great promise of technologies intersected with trust and said that the Forum provided a great opportunity to take a deeper dive into those issues.

Mr. Chung noted that they should not throw away what was learned from the previous industrial revolution, and said that the big six data companies should be rolled back to protect workers and people. Ms. Amoroso das Neves stressed the importance of digital knowledge and skills in the nearest future, while Mr. El Gamal highlighted the importance of proper identification of challenges, all the while keeping the SDGs as a priority.

5. Summary of Main Session Messages Produced by the IGF 2017 Organizing Team

The IGF organizing team has produced a set of key Geneva-messages from each of the main sessions. For this particular session, [these messages](#) are:

- The underlying message of the session was that digitization brings benefits to society and advance growth and development, but also comes with challenges. To reap these benefits and ensure that no one is left behind, actions are needed in multiple areas: ensuring access to digital infrastructures and technologies, developing the capacities of individuals and companies to use digital technologies, and putting policies in place to support innovation and growth.
- E-commerce was seen as an enabler of global trade, empowering enterprises to reach international markets. But barriers still exist. Some pointed that this specific time is a historically important turning point in many meanings, then also touched upon a need to update cross-border trade rules and procedures, to better cater for the digital era. Others cautioned that time is needed to reach consensus between countries on how to best address the challenges of the digital trade. There were also calls for tackling issues such as limitations in cross-border data flows, as well as data privacy and security concerns.

- Some discussants noted that automation and artificial intelligence offer new avenues for development, and it is important to ensure that societies are able to adapt and take advantage of the opportunities. Other focused on the need to address risks associated with such technologies, from bias and imbalances in algorithmic decision making, to disruptions on the labor market and workforce.
- Some argued that societies and individuals will be able to adapt to the changes brought by new technologies, as was the case with previous industrial revolutions. While some jobs may become obsolete, technologies could develop new services, and create new markets and jobs. Others warned that the digital revolution risks leading to profound occupational changes, gaps in social protections, and workers' rights abuses. Among the proposed solutions were: digital inclusion, active market labor policies, social protection and social safety nets, and adequate legislation to regulate the behavior of companies.
- There was general support for the view that education and capacity development especially for children, youth, and women are key to ensure that the future workforce has the skills required by the new economy. Calls were made for changes in the overall curricula and learning process, to allow individuals not only to make use of new technologies, but also to be able to challenge them.
- While it cannot be predicted how our digital future will look like, it was said that we should take a human-centric and ethics-based approach to digital development.

- ANNEX -

IGF 2017 Main Session Information Template: Digital Economy

DATE & TIME: Thursday December 21, 2017 10:00 - 13:00 (Day 4) VENUE: Main Hall - Room XVII - E United Nations Office at Geneva (UNOG)
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1. Title/ Length of the Session + Format and Room-Setup/Audio Requests (if applicable)

Digital Transformation: How Do We Shape Its Socio-Economic and Labor Impacts for Good? (3 hours; Debate-Style)

2. Brief Description/Objective *[in 200 words or less - this should be a high-level 'marketing' pitch to participants - i.e. why should they join the session and what should they expect to get from it?]*

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

Cross-border data flow has accelerated economic globalization while the flows of international trade and finance have flattened since 2008. The increase in digital flows is underpinned by a process of statistically-evidenced vertiginous digitization⁵. The digitization of products that were traditionally delivered physically but can also be transmitted electronically over the Internet, plays an important role in this process, opens new possibilities for e-commerce, and is an essential part of achieving the UN Sustainable Development Goals (SDG).

The increased use of data will be required to realize the potential of the digital transformation. In the near future, data flows will increase under the pervasive Internet of Things (IoT). Data analytics, machine learning, and artificial intelligence (AI) are perceived to be fundamental to the transformation of both developed and developing economics⁶. Under the 'sharing economy', digital platforms enable direct exchanges between service providers and potential customers. They also reshape organizations and the future of the work, necessitating a dialogue about how to enable an inclusive digital transformation which benefits everyone.

[199 words]

⁵ It is estimated that in the year 2000, a quarter of the information available in the world was digital. In 2010, the situation had drastically changed: only 2% of the available information was non-digital.

⁶ Recent research estimates that AI can double annual economic growth rates by 2035 for 12 developed countries that generate more than 50% of the world's economic output, and boost labor productivity by up to 40% (See, Accenture, *Why Artificial Intelligence is the Future of Growth*, September 28, 2016, url: <https://www.accenture.com/us-en/insight-artificial-intelligence-future-growth> [as of August 2017]). In developing countries, UN agencies have embraced AI as an accelerator for realizing the SDGs.

3. Agenda

This session will be divided into two parts:

- The first part will be dedicated to understanding how digitization is affecting global digital production and commerce, and impacting development.
- The second part will discuss the impact of the digital economy on the workforce in both developed and developing countries, especially examining a relationship between the consequences of the sharing economy and automation and job creation / destruction, productivity, and labor rights, taking into account the distinct contexts of declining / increasing demographics.

【 Agenda 】

I. Introduction (7 min.)

II. Part 1: Digitization, Global Production, and Flows of Digital Commerce (80 min.)

- Short initial remarks from discussants (20 min.)
- Discussions (50 min.)
- Q&A session, closing remarks (10 min.)
- The discussion will seamlessly combine initial remarks with interactive reactions from the audience/participants

III. Part 2: Digitization, Automation, and Employment Issues (85 min.)

- Short initial remarks from key discussants (25 min.)
- Discussions (50 min.)
- Q&A session, closing remarks (10 min.)
- The discussion will seamlessly combine initial remarks with interactive reactions from the audience/participants

IV: Conclusions and Wrap-up (8 min.)

- An organizer will distill the conclusions of the discussion in a set of short key “messages” which will be presented to the participants at the end of the session

4. Policy Questions *[up to 5]*

Part 1: Digitization, Global Production, and Flows of Digital Commerce (80 min.)

1) How is the new digital ecosystem different than the traditional ecosystem? What are considerations for enabling the development of healthy digital ecosystems? What are the main policy issues related to global production value chains in the digital environment?

2) What are the contributions of different types of e-commerce (B2B, B2C, B2G) to the global economy and how is e-commerce distributed worldwide? What is the role of e-commerce marketplaces for the inclusion of SMEs and developing market contenders in global trade chains?

3) How do emerging technologies, such as big data, IoT, and AI affect e-commerce? What are the main policy options that facilitate or create obstacles to global trade flows?

4) How does digitization enable new business models and encourage entrepreneurship?

5) What roles do international organizations play in facilitating the discussion of these policies and how can they work with other actors to promote better coordination in the field of e-commerce?

Part 2: Digitization, Automation, and Employment Issues (85 min.)

1) What are some of the lessons learned from past market transformations, e.g., agricultural to industrial, and how does digitization assist in making the most of the lessons (taking also into account the context of sharing economy)?

2) Are there tools that can better measure and predict the impact of ICT on the labor market? Are there tools that can predict what skills are needed going forward?

3) What are the ways in which the labor market will most likely be affected by digitization and automation? What policies should be considered in an environment of increasing demographics in developing countries? Do ICTs actually assist developed countries in addressing understaffing situation while maintaining the diversity of a career choice as well as mitigating risks to the well-being of the labor force?

4) What will be the necessary professional skills to take advantage of the jobs created in a highly digital society and what are examples of innovative approaches to training by which workers can be more effectively connected to more opportunities? Should different approaches be considered for people at different stages in their career?

5) How can education and capacity development play a role in this new scenario and what kind of efforts would be necessary for public / private stakeholders to promote the education and capacity development in both developed and developing countries?

5. Chair(s) and/or Moderator(s)

(1) Number of Moderators

We will have 3 moderators (one for Part 1, two for Part 2) since moderation should be dynamic, proposing questions and making sure that the “debate-style” flows smoothly, and that the

audience has the chance to participate. Because of the importance of this role, we will continue to brainstorm on who the moderators should be based on a pool of names below.

(2) List of Proposed Moderators

【Part I】

- 1) Dr. Makoto Yokozawa, Senior Consultant and Professor, Joint Research Unit at Kyoto University with Nomura Research Institute, Ltd., Japan / Co-Chair, BIAC/CDEP, Business and Industry Advisory Committee to the OECD, Committee on Digital Economy Policy

【Part II】

- 2) Ms. Paola Pérez, Vice-President of the ISOC Venezuelan Chapter / Chair of the LACNIC Public Policy Forum
- 3) Dr. Nathalia Foditsch, Consultant, Foditsch & Associates / Research Fellow, Cornell College of Business, Emerging Markets Institute

6. Panelists/Speakers

(1) Number of Panelists/Speakers

In order to ensure more dynamism and have sufficient time for discussions while making sure that we have a sufficiently diverse group of panelists/speakers, we will have at least 10 panelists/speakers.

In this regard, in order to facilitate interactive discussion and also leverage the expert knowledge of every panelist/speaker, we will have 2 groups of at least 5 panelists/speakers each for the 2 different parts of the session.

(2) List of Proposed Panelists/Speakers

In this regard, we will have at least 2 panelists/speakers from each 5 sector as follows:

【Government】

- 1) Mr. Oscar Gonzalez, Undersecretary of Regulation, ICT Secretariat, Ministry of Modernization, Argentina
- 2) Ms. Ana Cristina Amoroso das Neves, Director, Department for Information Society, Science & Technology Foundation I.P., Ministry of Science, Technology & HE, Portugal
- 3) H.E. Eng. Hossam El Gamal, Chairman of the Egyptian Cabinet Information and Decision Center, IDSC
- 4) Mr. Ndicho Bambo, Samuel, Yaoundé, Foreign Service Officer, Ministry of External Relation, Cameroon

【International Organization】

- 1) Mr. Torbjörn Fredriksson, Chief of the ICT Policy Section, UNCTAD
- 2) Ms. Valentina Scialpi, DG CONNECT, EU

【Business】

- 1) Mr. Philip Jennings, General Secretary, UNI Global Union

2) Ms. Ankhi Das, Public Policy Director - India, South & Central Asia, Facebook

【Civil Society/Academia】

- 1) Mr. Edmon Chung, CEO, DotAsia Organization
- 2) Ms. Farzaneh Badiei, Executive Director, Internet Governance Project / Research Associate at Georgia Institute of Technology, School of Public Policy

【Technical Community】

- 1) Dr. Walid Al-Saqaf, Member, Internet Society Board of Trustees / Senior Lecturer, School of Social Sciences, Södertörn University
- 2) Ms. Karen McCabe, Senior Director of Technology Policy and International Affairs, IEEE

*The above list is subject to change. Pending further discussion, the above list of panelists/speakers may be replaced and/or enhanced with someone.

7. Plan for in-room participant engagement/interaction?

First of all, because our session will be “debate-style”, there will be active interaction among expert speakers/panelists and the mood will be set for audience interventions and questions. To put it another way, we will make every single effort to create an atmosphere for active interaction not only among the panelists/speakers but between the panel and the audience.

Second, in order to foster interactive discussion among all participants, there will be the opportunity of an open mic. We will ask moderators for 2 sub-sessions to pay closer attention to the reaction of the audience during the sessions and involve the audience as much as possible.

8. Remote moderator/Plan for online interaction?

Interventions from online participants will be given equal priority as to those from the physical audience. Onsite and online moderator will coordinate closely. To broaden participation, online interaction will rely on the WebEx platform and will also include social media (Twitter and Facebook). Online moderators will be in charge of browsing social media using some hashtags (to be defined). We will try to have English, French, Portuguese, and Spanish online moderators, and a systematic queue.

In addition, we plan to use a “Twitter wall” which can be either a physical monitor at the session or a tag with a Storify-like interface where people can interact with before, during, and after the session. Since we have ever collaborated with Youth IGFs, we will ask Youth IGF volunteers to be part of our team and support our session on this aspect. We are confident that it will introduce dynamism and reinforce the goal of maximizing the opportunities for the involvement of the audience in situ and remote.

9. Connections with other sessions?

Our session connects with multiple workshops of IGF 2017 which deal with in some way the topic of digital economy. A workshop titled "[WS #141 Equipping populations with the skills to shape and secure their digital future](#)" is one example which directly relates to our session. Since most of us get actively involved in the multiple workshops and have ever discussed the topic of digital economy in many international conferences, we will be able to share good practices in order to hold a dynamic and interactive main session on digital economy.

10. Desired results/outputs? Possible next steps?

The results of the discussion will be distilled by the organizers in a set of short key "messages" that will be presented at the end of the wrap-up of the session.

IGF Geneva 2017 Main Session on: Digital Transformation: How Do We Shape Its Socio-Economic and Labor Impacts for Good?

Date and Time

IGF Day 4 Thursday 21 December 10:00 – 13:00

Please arrive **30 minutes early (9:30)** for the workshop so that we can prepare together.

Venue

Main Hall - Room XVII - E, Palais des Nations, Geneva, Switzerland

Organizers

- **Kenta Mochizuki (Mr.)**, IGF/MAG Member, Principal / Attorney at Law (New York), Public Policy, Corporate Intelligence, Yahoo Japan Corporation
- **Renata Aquino Ribeiro (Ms.)**, IGF/MAG Member, Researcher and Teacher, E.I. Consulting
- **Jorge Cancio (Mr.)**, IGF 2017 Host Country Representative, Federal Office of Communications (OFCOM), Government of Switzerland
- **Livia Walpen (Ms.)**, IGF 2017 Host Country Representative, Federal Office of Communications (OFCOM), Government of Switzerland
- **Marilia Maciel (Ms.)**, Digital Policy Senior Researcher, DiploFoundation
- **Arnold van Rhijn (Mr.)**, IGF/MAG Member, Senior Policy Advisor, Directorate-General for Energy, Telecom and Competition, Netherlands Ministry of Economic Affairs
- **Elizabeth Thomas-Raynaud (Ms.)**, IGF/MAG Member, Senior Policy Executive, Digital Economy and Project Director at International Chamber of Commerce (ICC)
- **Timea Suto (Ms.)**, Project Coordinator, Commission on the Digital Economy / BASIS, International Chamber of Commerce (ICC)
- **Carolyn Nguyen (Ms.)**, IGF/MAG Member, Director, Technology Policy, Microsoft Corporation
- **Miguel Ignacio Estrada (Mr.)**, IGF/MAG Member, Internet Policy Consultant

Description

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

Participants

Moderators

Part 1: Digitization, Global Production, and Flows of Digital Commerce

- Dr. Makoto Yokozawa, Nomura Research Institute/Kyoto University
(*Co-chair of OECD/BIAC Committee on Digital Economic Policy)

Part 2: Digitization, Automation, and Employment Issues

- Ms. Paola Pérez, Vice-President of the ISOC Venezuelan Chapter / Chair of the LACNIC Public Policy Forum
- Dr. Nathalia Foditsch, Cornell College of Business

Speakers

Part 1: Digitization, Global Production, and Flows of Digital Commerce

- Mr. Oscar Gonzalez, Government of Argentina
- Mr. Torbjörn Fredriksson, UNCTAD
- Ms. Ankhi Das, Facebook
- Ms. Farzaneh Badiei, Georgia Institute of Technology
- Dr. Walid Al-Saqaf, Södertörn University

Part 2: Digitization, Automation, and Employment Issues

- Ms. Ana Cristina Amoroso das Neves, Government of Portugal
- H.E. Eng. Hossam El Gamal, Government of Egypt
- Ms. Valentina Scialpi, EU
- Mr. Philip Jennings, UNI Global Union
- Mr. Edmon Chung, DotAsia Organization
- Ms. Karen McCabe, IEEE

VIP Intervention from the Audience

Part 2: Digitization, Automation, and Employment Issues

- Mr. Ndicho Bambo, Samuel, Yaoundé, Foreign Service Officer, Ministry of External Relation, Cameroon

Online Moderator (*See below for details)

- Mr. Auke Pals, Student Information Science at the University of Amsterdam, innovation consultant, entrepreneur and chair of the Dutch Digital Youth Counsel

Annotated session structure

10:00-10:10	<p>Welcome: Introductory Remarks</p> <p>7 MIN</p>	<p>Kenta Mochizuki, MAG member (Yahoo Japan Corporation)</p> <ul style="list-style-type: none"> Brief overview of topic and relevance to IGF Agenda for main session: <ol style="list-style-type: none"> Part 1: Digitization, Global Production, and Flows of Digital Commerce Part 2: Digitization, Automation, and Employment Issues
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Part 1: Digitization, Global Production, and Flows of Digital Commerce (80 min.) [Moderated by Dr. Makoto Yokozawa, Nomura Research Institute/Kyoto University]

10:10-10:30	<p>Short Initial Remarks from Panelists</p> <p>4 MIN EACH</p>	<ol style="list-style-type: none"> 1) Mr. Oscar Gonzalez, Government of Argentina 2) Mr. Torbjörn Fredriksson, UNCTAD 3) Ms. Ankhi Das, Facebook 4) Ms. Farzaneh Badiei, Georgia Institute of Technology 5) Dr. Walid Al-Saqaf, Södertörn University
10:30-11:20	<p>Discussion on 5 Questions</p> <p>50 MIN</p>	<p>Participants will discuss on the following 5 questions (* expected to prepare their own answers in advance):</p> <ol style="list-style-type: none"> 1) How is the new digital ecosystem different than the traditional ecosystem? What are considerations for enabling the development of healthy digital ecosystems? What are the main policy issues related to global production value chains in the digital environment? 2) What are the contributions of different types of e-commerce (B2B, B2C, B2G) to the global economy and how is e-commerce distributed worldwide? What is the role of e-commerce marketplaces for the inclusion of SMEs and developing market contenders in global trade chains? 3) How do emerging technologies, such as big data, IoT, and AI affect e-commerce? What are the main policy options that facilitate or create obstacles to global trade flows? 4) How does digitization enable new business models and encourage entrepreneurship? 5) What roles do international organizations play in facilitating the discussion of these policies and how can they work with other actors to promote better coordination in the field of ecommerce?

11:20-11:30	Reactions from Floor and Remote 10 MIN	Moderator will ask several questions and comments from floor and remote; then close the part 1 with brief concluding remarks.
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Part 2: Digitization, Automation, and Employment Issues (85 min.)
[Moderated by Ms. Paola Pérez, ISOC Venezuelan Chapter (*Introductory Part) / Dr. Nathalia Foditsch, Cornell College of Business (*Closing Remarks)]

11:30-11:50	Short Initial Remarks from Panelists 4 MIN EACH	1) Ms. Ana Cristina Amoroso das Neves, Government of Portugal 2) H.E. Eng. Hossam El Gamal, Government of Egypt <ul style="list-style-type: none"> • The Impact of Digital Revolution on the Socio-Economic Aspect in the Middle East • Using Digital Transformation to Leverage the Workforce and Job Creation • Government of Egypt Efforts in Promoting Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for All. 3) Ms. Valentina Scialpi, EU 4) Mr. Philip Jennings, UNI Global Union 5) Mr. Edmon Chung, DotAsia Organization 6) Ms. Karen McCabe, IEEE
11:50-12:40	Discussion on 5 Questions 50 MIN	Participants will discuss on the following 5 questions (* expected to prepare their own answers in advance): 1) What are some of the lessons learned from past market transformations, e.g., agricultural to industrial, and how does digitization assist in making the most of the lessons (taking also into account the context of sharing economy)? 2) Are there tools that can better measure and predict the impact of ICT on the labor market? Are there tools that can predict what skills are needed going forward? 3) What are the ways in which the labor market will most likely be affected by digitization and automation? What policies should be considered in an environment of increasing demographics in developing countries? Do ICTs actually assist developed countries in addressing understaffing situation while maintaining the diversity of a career choice as well as mitigating risks to the well-being of the labor force?

		<p>4) What will be the necessary professional skills to take advantage of the jobs created in a highly digital society and what are examples of innovative approaches to training by which workers can be more effectively connected to more opportunities? Should different approaches be considered for people at different stages in their career?</p> <p>5) How can education and capacity development play a role in this new scenario and what kind of efforts would be necessary for public / private stakeholders to promote the education and capacity development in both developed and developing countries?</p>
12:40-12:50	<p>Reactions from Floor and Remote</p> <p>10 MIN</p>	<p>1) VIP Intervention from Mr. Ndicho Bambo, Samuel, Yaoundé</p> <p>2) Moderator will ask several questions and comments from floor and remote; then close the part 2 with brief concluding remarks (Dr. Nathalia Foditsch).</p>
12:50-13:00	<p>Closing Remarks</p> <p>8 MIN</p>	<p>Ms. Renata Aquino Ribeiro, MAG Member (E.I. Consulting)</p>

Instructions for Online Moderator:

Online moderator will be asked to moderate the online participants. The online moderator will share one or two questions or comments from online participants at the floor (if any). Online participants will be invited to join the Q&A sessions of both parts, and onsite panelists will be asked to answer online questions or interact with online participants.

Interventions from online participants will be given equal priority as to those from the physical audience. Onsite and online moderators will coordinate closely. To broaden participation, online interaction will rely on the WebEx platform and will also include social media (Twitter and Facebook). Online moderator will be in charge of browsing social media using some hashtags (to be defined). We will try to have English, French, Portuguese, and Spanish online moderators, and a systematic queue. In addition, we plan to use a “Twitter wall” which can be either a physical monitor at the session or a tag with a Storify-like interface where people can interact with before, during, and after the session. Since we have ever collaborated with Youth IGFs, we will ask Youth IGF volunteers to be part of our team and support our session on this aspect. We are confident that it will introduce dynamism and reinforce the goal of maximizing the opportunities for the involvement of the audience in situ and remote.

IGF Geneva 2017 Main Session on:
**Digital Transformation: How Do We Shape Its
Socio-Economic and Labor Impacts for Good?**

Date and Time

IGF Day 4 Thursday 21 December 10:00 – 13:00

Venue

Main Hall - Room XVII - E, Palais des Nations, Geneva, Switzerland

List of Moderators/Speakers

Moderators

Part 1: Digitization, Global Production, and Flows of Digital Commerce



Dr. Makoto (Mac) Yokozawa
Senior Consultant and Professor, Joint
Research Unit at Kyoto University with Nomura
Research Institute, Ltd., Japan

Co-Chair, BIAC/CDEP, Business and Industry
Advisory Committee to the OECD, Committee
on Digital Economy Policy

Dr. Yokozawa is the head professor of the Market and Organisation Informatics Systems Laboratory at the Graduate School of Informatics, Kyoto University. which is a Joint Research Unit with a private IT service company, Nomura Research Institute, Ltd. He has been participating in many study groups for regulatory and policy issues in Japanese government and private sector associations, including broadband policy, spectrum management, Internet governance, personal data protection, digital trade, innovation and Ubiquitous Network Society policies.

He is leading global policy discussions as the chairperson and vice chairperson in many global fora including APEC TEL, OECD's business advisory committee (co-chair of BIAC/Digital Economy) and Data Flow Policy WG in WITSA, the World IT Service Association. He has been leading domestic policy strategy in Japan as the chairperson of Personal Data Protection Task

Force in JISA, the Japan IT Service Industry Association, and vice chairperson of the Internet Economy WG in Keidanren, the Japan Business Federation.

He has been also actively involved in the Internet Public Policy Fora, including Working Group for Enhanced Cooperation in 2014 and 2016 (Private Sector Rep.), IGFs and WSIS+10 review process in 2015.

Moderators

Part 2: Digitization, Automation, and Employment Issues



Ms. Paola Pérez
Vice-President of the ISOC Venezuelan Chapter
Chair of the LACNIC Public Policy Forum

Paola Pérez (Venezuela) is the Vice-President of the ISOC Venezuelan Chapter and the Chair of the LACNIC Public Policy Forum. She is also a human rights activist for the Network of Citizen Activists (REDAC), Chief Executive Officer of the non-profit foundation 'Lids for Life', and a member of the IT Women Working Group in LACNIC. Her interests are online censorship, mass surveillance, net neutrality, access, infrastructure, IoT, freedom of expression and association, gender issues and the Internet, and sexual exploitation online. Paola is a former Google Fellow and a Returning IGF Ambassador.

Moderators

Part 2: Digitization, Automation, and Employment Issues



Ms. Nathalia Foditsch
Consultant, Foditsch & Associates
Research Fellow, Cornell College of Business
Emerging Markets Institute

Nathalia Foditsch (LLM/MPP) is a Washington D.C. based licensed attorney specialized in communications policy and regulation. She has worked for different think tanks, international organizations and for the Brazilian Federal Government. Among her publications is a book she has co-edited and co-authored called "Broadband in Brazil: Past, Present, Future" (Novo Século / Google), which was published in 2016 in English and Portuguese.

Speakers

Part 1: Digitization, Global Production, and Flows of Digital Commerce



Mr. Oscar M. Gonzalez
Undersecretary of Regulation / ICT Secretariat
Ministry of Modernization
Argentina

Mr. Oscar Gonzalez graduated with a Law degree from the Universidad Nacional de Córdoba (Argentina). He has a Master of Laws degree from the University of Maastricht (Netherlands).

His career in the ICT sector spans more than 20 years, with experience in both the private and public sectors.

Since February 2016, he serves as Undersecretary of Regulation, at the ICT Secretariat in the Ministry of Modernization of Argentina (www.argentina.gob.ar/modernizacion), being responsible for elaborating and proposing ICT, telecom and postal services regulations.

He coordinates the Working Group on Internet Services at the ICT Secretariat, with the mission to propose policies and regulations regarding Internet services. The Working Group has focused its efforts on the so-called OTT services, IoT and Big Data, promoting consultation with and participation of civil society, academia, technical community and private sector with a multi stakeholder approach.

Previously, he served as member of the Board of ARSAT (www.arsat.com.ar). He also served as Advisor in the Media and Communications Committee at the Senate of Argentina, during the debate of the Law “Argentina Digital”.

He participates regularly in different regional and international meetings at OAS CITELE and the ITU. He is Vice President of the Radiocommunication Advisory Group at the ITU-R and was Chairman of ITU-WTDC 2017, held in Buenos Aires in October this year.

He is member of the Board and former President of the Telecommunications Law Association of Argentina.

Speakers

Part 1: Digitization, Global Production, and Flows of Digital Commerce



Mr. Torbjörn Fredriksson
Chief of the ICT Policy Section
UNCTAD

Mr. Torbjörn Fredriksson is the Chief of the ICT Policy Section at the UN Conference on Trade and Development (UNCTAD). He is responsible for UNCTAD's work on ICT, e-commerce and the digital economy. That includes the *Information Economy Report*, eTrade for all, the E-commerce Week and the Intergovernmental Group of Experts on E-commerce and the Digital Economy. He joined the UN in 2000. Before joining UNCTAD, he held positions at the Invest in Sweden Agency and the Swedish Ministry of Industry and Commerce. He has an MSc in International Economics from the Stockholm School of Economics.

Speakers

Part 1: Digitization, Global Production, and Flows of Digital Commerce



Ms. Ankhi Das
Director of Public Policy (India, South and Central Asia)
Facebook

Ms. Ankhi Das is the Director of Public Policy for Facebook in India and South & Central Asia. With over 18 years of public policy and regulatory affairs experience in the technology sector, Ankhi's primary responsibilities are to lead Facebook's efforts on connectivity, Internet governance, promoting access and Open Internet, privacy, data security, safety issues and political risk management for the company. In this role, Ankhi oversees the company's relationships with policymakers, elected officials, government agencies and NGOs in India, South & Central Asian countries and directs the company's programs in these areas. Her key goals are to promote the use of facebook for civic engagement, community organizing for elections, social causes, use of facebook family of apps for fueling economic growth and opportunities for start ups, small and medium businesses and promoting entrepreneurship development in the region.

Ankhi was a member of the Multi-stakeholder Advisory (MAG) of the UN Internet Governance Forum (IGF) as a private sector representative and an active participant in the global multi-stakeholder dialog.

She has participated in several global internet policy negotiations of the ITU and represented industry. This includes UN led inter-governmental negotiations, at the World Conference on International Telecommunications (WCIT), hosted by ITU, in Dubai in Dec 2012 and the Busan Round or the Plenipotentiary 2014 meeting. She is an active voice on Internet Governance issues at the IGF and groups like ICC-BASIS, FICCI, COAI, USIBC, IAMAI and participated in the NetMundial text negotiations and the meeting in Sao Paulo on the future of the internet. Ankhi is also the Vice-Chair of the USIBC Digital Economy Committee.

Prior to joining Facebook in 2011, Ankhi was at Microsoft, where as the Public Policy Director she was responsible for strategic public policy projects and managing regulatory issues for Microsoft in India.

Ankhi Das is a graduate of Loreto College, University of Calcutta, and has done post-graduate studies specializing in international relations and political science at Jawaharlal Nehru University. Ankhi is based in New Delhi.

Speakers

Part 1: Digitization, Global Production, and Flows of Digital Commerce



Dr. Farzaneh Badiei
Research Associate
Georgia Institute of Technology, School of
Public Policy
Executive Director
Internet Governance Project (IGP)

Dr. Farzaneh Badiei is a research associate at the Georgia Institute of Technology, School of Public Policy, and the Executive Director of [Internet Governance Project \(IGP\)](#).

For the past 6 years, Farzaneh has been a part of Internet governance research and professional community where she has carried out research projects at the Humboldt Institute for Internet and Society (HIIG) and the Syracuse School of Information Studies. She received her Ph.D. in Law from the University of Hamburg, Institute of Law and Economics. Her dissertation focused on online private justice systems institutional design and online market intermediaries. Farzaneh also worked at the United Nations Internet Governance Forum Secretariat. Currently, she is the chair of Noncommercial Stakeholder Group (NCSG) at ICANN which focuses on noncommercial rights in domain names.

Farzaneh's current research interests revolve around online private justice systems, Internet governance and accountability of Internet governance institutions, Internet and jurisdiction, online intermediaries and dispute resolution as well as cybersecurity and digital trade.

Speakers

Part 1: Digitization, Global Production, and Flows of Digital Commerce



Dr. Walid Al-Saqaf
Senior Lecturer
Södertörn University - Stockholm

Dr. Walid Al-Saqaf is a Senior Lecturer in Journalism and Media Technology at Södertörn University in Stockholm, Sweden. He is also a software developer and Internet rights advocate with a passion for promoting a strong and open internet that netizens can use to promote democratisation and free speech.

As a computer engineering undergraduate student in the mid-1990s at the Middle East Technical University in Turkey, Walid designed YemenTimes.com as the first news website in his home country Yemen. In 2007, he launched YemenPortal.net as the first news aggregator and search engine of its kind in the Arab world to provide Internet users with the ability to get a wide spectrum of perspectives from various news sources on Yemen in Arabic and English. When the website was blocked by the Yemeni government in 2008 due to its open platform that allowed dissident voices to be heard, he developed Alkasir website censorship mapping circumvention solution, which was initially used to access YemenPortal.net, but which soon became widely used by Internet users in many states such as Iran, Syria, China and Saudi Arabia to bypass website filtering in those countries.

Featured by CNN, the Guardian, the Huffington Post and other media, Walid's work was particularly useful during the Arab Spring when some authoritarian Arab regimes practised pervasive Internet filtering of news and social media websites. He has also been active in supporting open Internet access and online free speech in developing countries through non-technical means such as advocacy campaigns and training. His efforts have earned him recognition through several awards including a TED 2012 senior fellowship and Örebro University's 2010 Democracy Award.

Walid is also engaged in several initiatives to promote innovation and creativity in technology among the youth as he organised TEDxSanaa 2012 and 2013, founded Sanaa Hub as part of the Global Shapers Community of the World Economic Forum and co-founded and led Yemen's Internet Society Chapter for which he built a robust core team that was able to make ISOC-Yemen one of the most active chapters in the Middle East. Walid's unique position as a scholar based in Sweden as well as a pro-free speech cyber activist and software developer of Arab

background have jointly helped him develop a wide a range of skills and expertise to contribute to technical and policy discussions around Internet-related issues on several platforms such as ICANN, RIPE, IGF and the World Wide Web Foundation. This helped him build bridges between developing and developed countries when it comes to addressing key issues that concern Internet users around the world.

Speakers

Part 2: Digitization, Automation, and Employment Issues



Ms. Ana Cristina Amoroso das Neves
Director, Department for Information Society,
Science & Technology Foundation I.P., Ministry
of Science, Technology & HE, Portugal

Since 1st of March 2012, Director of Department Information Society at the *Fundação para a Ciência e a Tecnologia* (FCT), the National Research Council and Funding Agency, Ministry of Education and Science in Portugal. This Department is responsible for the coordination and mobilization of Information Society Policies in Portugal. From 1st September 2008 to 29 February 2012, Ana was Head of International Affairs at the UMIC-Knowledge Society Agency, Ministry of Science, Technology and Higher Education in Portugal, the Portuguese Public Agency with the mission of coordinating Information Society policy and its mobilization. UMIC was merged with FCT on 1st March 2012.

She is the Portuguese delegate in several working parties related to Research & Innovation, Information Society, ICT and Sustainability in the European Union (EU), OECD, United Nations, ITU, and at the GAC at ICANN. She was appointed in March 2013 to the Meeting Strategy Working Group at ICANN. She is delegate to the ITU Council Working Group on International Internet-related public policy issues and to the "WSIS+10 High-Level Event: Open Consultation Process" Multistakeholder Preparatory Platform".

She also participates in the Internet Governance Forum ([IGF](#)) on behalf of the Portuguese Government. She was appointed in April 2012 Member of the Multistakeholder Advisory Group ([MAG](#)) to the Secretary-General of the United Nations for the IGF. She was a governmental representative to the Working Group on IGF Improvements, UN Commission on Science and Technology for Development (CSTD). She also covers the World Summit on the Information Society Forum co-organized annually by International Telecommunications Union, UNESCO, UNCTAD and UNDP.

She has been closely involved in the organization of the yearly EuroDig (European IGF Initiative) and co-organizer of the Portuguese IGF Initiative. She is also member of ISOC Chapter Portugal and member of its Board of Auditors.

She is also member of the CODATA Task Group on Preservation of and Access to Scientific and Technical Data in/for/with Developing Countries (PASTD) since November 2012.

From 2002-2008 she was the Senior Counselor responsible for Science and Technology, Information Society, Space and Education at the Permanent Representation of Portugal to the EU in Brussels.

During that time, she negotiated the European Union's 6th and the 7th Framework-Programmes for Research, Technology and Development and the European Action Plan for Space. She negotiated the first Action Plan for the Information Society in Europe – the eEurope 2002, the eEurope 2005, the Initiative i2010–European Information Society 2010 and she is now fully engaged in A Digital Agenda for Europe DAE, as national delegate to the Preparatory HLG DAE. During the Portuguese Presidency of the Council of the European Union in 2007 she had the opportunity to develop outreach capacities on public policy issues. She chaired various working groups thereby negotiating and finding solutions to numerous complex and sensitive policy issues. She chaired the Research Working Party, the Ad-hoc Working Party on EIT (European Institute of Innovation and Technology), the Telecom/Information Society Working Party (Information Society), the Joint Atomic Questions-Research Working Party, and the Education Committee (Higher Education).

She was the Senior Advisor on International Affairs to the Minister of Science and Technology (who was responsible for the national coordination of Information Society Policy as well) from 1997-2002. During that time she was involved with the Mission Unit that developed and then launched one of the first national innovative action plans on Information Society Policy at worldwide level, the Green Paper on the Information Society in Portugal (Livre Verde para a Sociedade da Informação em Portugal), in 1997.

She was also actively involved at the Portuguese Presidency of the EU in 2000, which launched the Lisbon Strategy, as the Minister's representative at the Executive Group set-up at the Prime-Minister's Office for the preparation of the Lisbon Strategy which was chaired by Prof. Maria João Rodrigues.

Joined the Public Administration at the Ministry of Foreign Affairs in September 1991, at the Technological and Industry Directorate, where she covered, among so many other issues, the European policies for Small and Medium-Enterprises and the negotiations of the former GATT and after WTO in the Textiles sector.

She is currently completing her PhD Thesis in European Studies – Public Policies at the Universidade Católica in Lisbon. Her thesis is on The Impact of the Multistakeholder Model of Information Society on Competition and Consumer Public Policies in Europe - The ICANN and IGF case studies.

She holds a MSc. in International Economics from Universidade Técnica de Lisboa, a post-graduation in Economics and Management from ISCTE - University Institute of Lisbon, a post-graduation in European Studies – Economics from the Universidade Católica Portuguesa and a University Degree in History from the Universidade de Lisboa (1989).

She speaks English and has a working knowledge of Italian, French and Spanish. Her mother tongue is Portuguese.

Speakers

Part 2: Digitization, Automation, and Employment Issues



H.E. Eng. Hossam El Gamal
Chairman of the Egyptian Cabinet Information
and Decision Center, IDSC

Eng. Elgamal is the chairman of the Egyptian Cabinet's Information and Decision Support Center (IDSC) stands as one of the distinguished Think Tanks in Egypt, particularly for the Cabinet. Its main task is to support decision makers with regard to economic, social and political issues, while placing emphasis on priority issues to foster the reform efforts that push the development march forward.

Moreover, IDSC strives to enhance relations with different ministries and government authorities, and to open communication channels with the public to measure the society's attitudes towards national issues. IDSC also works on disseminating data and information, focusing on electronic dissemination.

IDSC has significantly contributed to crystallizing the opinions and concepts that have an impact on the Egyptian government's foreign and national policies through publishing various research, covering diversified themes, as well as books and working papers. Besides, periodicals and public opinion polls are prepared. It also organizes seminars, conferences, workshops and training programs. www.idsc.gov.eg

Eng. Elgamal is a board member and treasurer of AFICTA, contributing in making synergy between African nations ICT industries, bringing stronger ties and higher maturity by sharing knowledge, challenges and successes, while also bridging between African ICT industry and International ICT cloud and governing policies.

Eng. Hossam was the Vice-Chairman of Eitesal Association www.eitesal.org, the leading ICT industry NGO in Egypt and head of its executive office, while for previous years he was a board member and chairing its Software Division with 150 members catering them and all the SW industry with required activities advocating for them and boosting their business development, technical and entrepreneurship capabilities. He is among others, member of several committees in MCIT, ICT chamber, the AMCHAM and the CANCHAM. Eng. El Gamal had participated in formulating the ICT industry in Egypt and related strategic projects with the government. Hossam is actively participating as a leading member of the e-security and e-knowledge transfer community in Egypt, contributing in formulating related awareness and maturity strategy.

He is a member of the National Child Internet Safety Committee, led by the Senior Advisor of MCIT for information Security, contributing in better legislations, awareness, training and technology implement-station to assure safer internet use for children.

Eng. El Gamal was a serial entrepreneur and partner in GNSE Group www.gnsegroup.com, Edrac www.edrac.com, Agora www.forsa.com.eg, Telemed international www.telemedint.net with a professional experience covering ICT Technical, International Business Development, General and strategic Management.

Speakers

Part 2: Digitization, Automation, and Employment Issues



Ms. Valentina Scialpi
Policy Officer
Next-Generation Internet, DG-CONNECT
European Commission

Valentina Scialpi is a policy officer at the European Commission, DG CONNECT, Next-Generation Internet. Prior to joining the European Commission, she was a researcher in ICT for Development and digital policies. She has been research fellow in several research centres and a contributor to scientific publications. She has also worked for the United Nations Department of Management.

Speakers

Part 2: Digitization, Automation, and Employment Issues



Mr. Philip J. Jennings
General Secretary
UNI Global Union

Philip J. Jennings has been General Secretary of UNI Global Union since its creation on 1 January 2000 and has been described as the labour movement's "Global Warrior". Today membership and influence continue to grow and the organization which represents the services sector, counts 20 million members in 150 nations and 900 unions. UNI is a force in Europe, Africa, the Americas and Asia and the Pacific. To date UNI has negotiated more than 50 global agreements with leading multinationals.

During UNI Global Union's 2010 World Congress in Nagasaki, members endorsed UNI's Breaking Through strategy for Union Growth. The aim of Breaking Through is to grow and strengthen affiliated unions and UNI Global Union to improve the working conditions and lives of workers in the services and allied sectors. Jennings said Breaking Through has become part of the DNA of the organisation and will continue through our 4th UNI World Congress in Cape Town in December 2014 towards the 5th UNI World Congress in Liverpool in 2018.

In a globalization process gone wrong, Philip sees unions as part of the solution to build a sustainable and fairer global economy. He says economic inclusivity is the key and that is why "Including You" has been chosen as the theme of the next World Congress in Cape Town.

He firmly believes that it is time for big business to work together with global unions to 'change the rules of the game' and create a more responsible world. He has taken this message to the G20, IMF, World Bank, OECD and the World Economic Forum – tireless in his pursuit of a 'seat at the table' for working people. Philip was instrumental in ensuring that the labour movement finally achieved a seat at the G20 table with the establishment of the Labour 20 (L20) which is now an integral part of the G20. Philip also chaired the Commission on the Future of the Irish Trade Union Movement.

Philip is proud of the role UNI played in working with its sister global union IndustriALL in creating the Bangladesh Safety Accord in response to the Rana Plaza factory collapse in 2013 which claimed the lives of more than 1,100 garment workers in Bangladesh. The Accord is a

legally binding agreement and has been signed by over 160 global brands from 20 countries in Europe, North America, Asia and Australia. It has also garnered support from numerous Bangladeshi unions and various NGOs such as the Clean Clothes Campaign, Workers' Rights Consortium, International Labor Rights Forum and Maquila Solidarity Network. The International Labour Organisation acts as the independent chair.

Philip Jennings grew up in Cardiff, South Wales, "in a labour environment filled with labour voters and union families". His father, who was a toolmaker at a Rover car factory, successfully went on strike for better pay and conditions in the 1950s and 60s, and his mother worked at Marks and Spencer. He graduated from Bristol Polytechnic with a business studies degree, followed by a M.Sc. in Industrial Relations from the London School of Economics. He is married with two children and lives in Cheserex, Switzerland. From 1976-1979 Philip worked with the National Union of Bank Employees. In 1980 he joined the International Federation of Employees (FIET), where he became executive secretary in 1986 and was general secretary from 1989-1999.

Speakers

Part 2: Digitization, Automation, and Employment Issues



Mr. Edmon Chung
CEO, DotAsia Organisation
Secretariat, Asia Pacific Regional Internet Governance Forum
Director, Internet Governance Forum Support Association
Co-Chair, ICANN Universal Acceptance Steering Group
Co-Chair, ICANN IDN Guidelines Working Group

Edmon Chung is serving as the CEO for DotAsia Organisation and heads the secretariat for the Asia Pacific Regional Internet Governance Forum (APRIGF). Edmon serves also on the board of the Internet Governance Forum Support Association (IGFSA), and on the Executive Committee of Internet Society Hong Kong, which serves as the secretariat for the Asia Pacific Regional At-Large Organisation (APRALO) and participates extensively on Internet governance issues.

Since 2002, Edmon played a leadership role in the region-wide .Asia initiative. DotAsia is a not-for-profit organization with a mandate to promote Internet development and adoption in Asia. Since its launch in 2008, DotAsia has contributed significantly to a variety of community projects in Asia, including for example: Go.Asia, ISIF.Asia, NetMission.Asia, MaD.Asia and others.

Edmon is an inventor of patents underlying technologies for internationalized domain names (IDN) and email addresses on the Internet. Edmon has served on many global IDN related committees, including technical and policy groups, that made it possible for the introduction of multilingual domain names and email addresses on the Internet. Edmon won the Most Innovative Award in the Chinese Canadian Entrepreneurship Award in 2001. In 2000, Edmon was selected by The Globe and Mail as one of the Young Canadian Leaders. Between 2006 and 2010, Edmon served as an elected member on the ICANN GNSO Council. Between 2010 and 2012, Edmon served as an elected member on the ICANN At-Large Advisory Committee (ALAC) from the Asia Pacific Region. Between 2006 and 2011, Edmon served as an elected member of the Elections Committee of the Hong Kong Special Administrative Region in the Information Technology Subsector.

Edmon has a Bachelor of Applied Science and Master of Engineering from the University of Toronto.-

Speakers

Part 2: Digitization, Automation, and Employment Issues



Ms. Karen McCabe
Senior Director of Technology Policy and
International Affairs
IEEE

Ms. Karen McCabe is a Senior Director of Technology Policy and International Affairs at IEEE, where she leads efforts to build and connect communities working in the technology policy ecosystem and where her focus is on the development and promotion of collaborative strategies that produce impactful outcomes among multi-stakeholders to help advance technology for humanity benefit.

Karen has over 25 years experience working at the nexus of mission-driven organizations, industry, NGOs and government bodies to raise awareness, to educate and build capacity among stakeholders in the technology sphere. Through her career, Karen has focused on projects and initiatives to expand global footprint, build communities, develop and execute integrated communications and global outreach programs and build and nurture relationships.

Karen has held various leadership and senior management positions in the technology sector, with a specific focus in the global standards and technology development domain that is rooted in openness, transparency and inclusiveness. Today, Karen is engaged in efforts in Internet governance, ethics and technology and global standards in trade and policy. She leads the organization's engagement with the UN (SDGs, WSIS etc.) and other international bodies with a focus on engagement of technical community and a focus on the intersection of policy and technology in ICTs.

Karen is a member of the OECD Internet Technical Advisory and WEF's Internet for All Steering Committee, and works with many organizations to connect technologists, industry leaders and policy makers where she develops partnerships and builds alliances across stakeholder communities.

Online Moderator



Mr. Auke Pals
Student, Information Science at the University
of Amsterdam
Innovation Consultant
Entrepreneur and Chair of the Dutch Digital
Youth Counsel

IGF Geneva 2017
Main Session on Digital Economy
(Thursday, December 21, 10:00-13:00)
[Main Hall - Room XVII - E United Nations Office at Geneva]

【Opening Remarks: Kenta Mochizuki】

Good morning. I'm Kenta Mochizuki, a Japanese representative member of the IGF/MAG in Yahoo Japan Corporation⁷. Today, we would like to hold a main session on digital economy, titled "Digital Transformation: How Do We Shape Its Socio-Economic and Labor Impacts for Good?". This is a joint session of the host country and business sector community, and as written in our main session template, this session aims to facilitate a thoughtful dialogue on the process of digitization and digital transformation, while examining its effect on the global value chain, new business models, and the future workforce.

Digital economy has been growing and flourishing drastically with the pervasiveness of ICTs such as AI, IoT, big-data analytics, or any other emerging technologies. Now that digital economy is economy as such, and has unprecedented potential for innovation and economic growth in both developing and developed countries, as well as for changing the traditional ecosystem of the world economy. Under such situation, the value of data has been reassessed, and no one can deny a cliché, "data is the new oil" . Here, we have to think about how we can bloom digital economy further so that it positively and effectively affects global digital production, commerce, and development.

On the other hand, as the Leaders of both G7 and G20 recognized accurately, while digitization contributes to innovation and economic growth, at the same time it presents us with challenges regarding skills, social protection, and job quality, and significantly changes the future of work⁸. For the further development of digital economy, we, together with multi-

⁷ See, <https://www.intgovforum.org/multilingual/content/mochizuki-kenta> [as of 21 December 2017].

⁸ G7 Taormina Leaders' Communiqué (27 May 2017, Taormina, Italy), http://www.g7italy.it/sites/default/files/documents/G7%20Taormina%20Leaders%27%20Communique_27052017_0.pdf; G7 People-Centered Action Plan on Innovation, Skills and Labor (27 May 2017, Taormina, Italy),

stakeholders from all over the world, have to face these challenges and deliberate how we can address these challenges to strike an optimal balance between human capital and ICTs-based digitization and automation, while taking into account the political, social, economic, and cultural situation of each country.

In this time slot, we hold 2 separate but closely-related debate-style sessions for the total 3 hours with distinguished high-level speakers as well as prominent moderators. Because we have uploaded a list of moderators/speakers in which you can see everyone's short bio to our interactive schedule, I would like to skip moderators' and speakers' introduction. The title of Part I is "Digitization, Global Production, and Flows of Digital Commerce", and Part II is "Digitization, Automation, and Employment Issues". We definitely have Q&A session in each part, so we hope you will enjoy both panel discussion as well as the Q&A session during each part.

Finally, I would like to mention 2 points. First, on 8 December, in relation to the 11th WTO Ministerial Conference (MC11) held in Argentina, Minister for Foreign Affairs of Japan, Taro Kono announced that the Government of Japan is prepared to provide approximately 370 million dollars⁹ (in the current exchange rate from Japanese yen to US dollars) over the next three years as support for the ICT field, including E-commerce. His announcement is two-fold, i.e., **first**, Japan has been leading the E-commerce-related discussions in the WTO, based on the policy that Japan, as a champion of free trade, must take on the emerging challenges of international trade; and **second**, it is expected that the Japan's support will assist developing countries in improving the relevant infrastructure, and also expected that the developing countries, while recognizing the effective utilization of E-commerce, will proactively engage in

http://www.g7italy.it/sites/default/files/documents/Action%20Plan_0.pdf; G20 Leaders' Declaration: Shaping an interconnected world (8 July 2017, Hamburg, Germany), https://www.g20.org/profiles/g20/modules/custom/g20_beverly/img/timeline/Germany/G20-leaders-declaration.pdf; G20 Hamburg Action Plan (8 July 2017, Hamburg, Germany), https://www.g20.org/profiles/g20/modules/custom/g20_beverly/img/timeline/Germany/2017-g20-hamburg-action-plan-en.pdf [as of 21 December 2017].

⁹ 33 billion yen.

rule-making in the field of E-commerce¹⁰. As Japan was the chair of G7 in 2016¹¹ and will be the chair of G20 in 2019 after Argentina's G20 presidency in 2018¹², I welcome this announcement and look forward to public-private cooperation and collaboration between Japan and other countries in the future, taking into account OECD's Going Digital Project launched in this January in Germany too¹³.

Second, on 13 December, also in relation to the WTO MC11, 70 WTO member states reaffirmed the importance of global E-commerce and the opportunities it creates for inclusive trade and development, and stated that they will initiate exploratory work together for future WTO negotiations on trade-related aspects of E-commerce¹⁴. While I also welcome this joint statement, I strongly hope that E-commerce work in the WTO will be conducted in an open, transparent, and inclusive manner.

So, because we have limited time, I would like to leave this opening remarks and move to the Part I of this main session. The first moderator, Dr. Yokozawa, please start your session, thank you.

¹⁰ Ministry of Foreign Affairs of Japan, Announcement of Pledge in the ICT Field, including E-Commerce at the Eleventh World Trade Organization Ministerial Conference (8 December 2017), http://www.mofa.go.jp/press/release/press4e_001832.html [as of 21 December 2017].

¹¹ Ministry of Foreign Affairs of Japan, G7 Ise-Shima Summit (26-27 May 2016), http://www.mofa.go.jp/ecm/ec/page24e_000148.html [as of 21 December 2017].

¹² G20 Argentina 2018, <https://www.g20.org/en> [as of 21 December 2017].

¹³ OECD, Going Digital: Making the Transformation Work for Growth and Well-being: The opportunities and challenges of the digital transformation (November 2017), <http://www.oecd.org/going-digital/project/going-digital-information-note.pdf> [as of 21 December 2017].

¹⁴ WTO, Joint statement on Electronic Commerce, WT/MIN(17)/60, https://www.wto.org/english/thewto_e/minist_e/mc11_e/documents_e.htm [as of 21 December 2017].