

Düsseldorf, 7 April 2017

A ROADMAP for Digitalisation: Policies for a Digital Future

Annex paper 1 to the Declaration of the Ministers responsible for the Digital Economy

Two years ago, in Antalya, G20 Leaders took note that we are living in a digital age and the effective use of digital technologies is an important driver for efficiency-enhancing and economic structural optimisation. In 2016, in Hangzhou, G20 countries agreed to the G20 Digital Economy Development and Cooperation Initiative which proposed some common understanding, principles and key areas of development and cooperation for the digital economy. In Düsseldorf, the G20 Task Force on the digital Economy has furthered the G20 Blueprint on Innovative Growth, Ministers responsible for the digital economy welcome and discussed this work plan for the G20 on digitalisation. A ROADMAP for Digitalisation: Policies for a Digital Future will build on the great work already done and deliver on areas G20 countries have identified as key areas. A study of the OECD “Key Issues for Digital Transformation in the G20” has been presented in the Ministerial Meeting.

1. Improve world-wide access, adoption and effective use of digital technologies for all

The growth of the digital economy has enabled the rapid spread and uptake of digital technologies, however adoption and use varies among G20 countries by demographic categories, level of economic development, industry and firm size.

The G20 Ministers responsible for the digital economy intend to:

- Share information and experiences to support improving access, adoption and effective use of digital technologies, including emerging technologies for new telecommunications services and applications, to boost digital economy development and digitally include underrepresented or disadvantaged groups.
- Share information and experiences with a view to identify good practices for digital strategies and learn from implementation challenges and outcomes.
- Discuss ways on how to use digital technologies to overcome wealth gaps and income disparities.
- Encourage G20 countries to develop digital strategies that support the Connect 2020 Agenda’s goals and strive to connect domestically all people by 2025.
- Encourage G20 countries to foster the incubation, development and adoption of various digital economy business models as enablers for sharing economy, workforce digitalisation and financial inclusion for addressing the need for reducing wealth and income disparity.

2. Expand digital infrastructure

G20 countries encourage continual investment in the development of digital infrastructures to meet existing and future demand, and help bridge digital divides.

The G20 Ministers responsible for the digital economy intend to:

- Promote a competitive environment and pro-investment policies that stimulate investment in digital infrastructure and welcome public private partnerships and commercial equity investment funds as well as social funds to invest in digital infrastructure and ICT applications.
- Work constructively together to extend coverage to underserved communities or individuals.
- Take action on the Global Infrastructure Connectivity Alliance Initiative endorsed last year by G20 Leaders.¹

3. Adapting policies in an increasingly digital and information and knowledge driven global economy

Digitalisation affects many aspects of the economy and society. Policy formulation will require coordination across government ministries and among different levels of government as well as participation of all interested parties and stakeholders.

The G20 Ministers responsible for the digital economy intend to:

- Share best practices and lessons learned regarding the impacts of digitalisation and policy approaches to adapt to a knowledge driven global economy.
- Encourage investment in the digital economy that enables new scalable and replicable business models.
- Further discuss on innovative digital economy business models and frameworks as enablers for the sharing economy, workforce digitalisation and financial inclusion.
- Cooperate to improve global digital economic development to help bridge the digital divides in the fields of infrastructure, data security and digital skills and capacity building.
- Follow the debate on taxation taking place in the Finance Minister's track.

4. Foster competition in the digital economy

Digitalisation creates new opportunities to increase consumer choice and provide innovative new products and services. The lines between offline and online business models are becoming increasingly blurred, and there are new competitive dynamics.

The G20 Ministers responsible for the digital economy intend to:

- Encourage the exchange of best practices to foster competition including to expand innovation, and prevent anti-competitive restrictions.

¹ **G20 Leaders' Communique Hangzhou Summit** – Para 39... “We endorse the Global Infrastructure Connectivity Alliance launched this year to enhance the synergy and cooperation among various infrastructure connectivity programs in a holistic way. We ask the WBG to serve as the Secretariat of the Alliance, working closely with the Global Infrastructure Hub (GIH), OECD, other MDBs, and interested G20 members to support its activities.”...

- Note the ongoing work by the OECD in the area of competition, to consider reviewing the OECD Competition Assessment Toolkit in light of digitalisation.

5. Support MSMEs in reaping the benefits of digitalisation and addressing the challenges

It is important to foster the use of advanced digital technologies among MSMEs, however their ability to swiftly adopt new technologies, to learn by doing, to innovate, and to optimise their production can be constrained by their small scale, and lack of resources limiting their ability to reap the benefits of the digital economy.

The G20 Ministers responsible for the digital economy intend to:

- Promote a more entrepreneurial friendly environment by encouraging programmes such as angel investor networks and matchmaking services to foster existing and innovative new business models and tap into existing and new sources of financing.
- Exchange experiences and good practices on national initiatives with a view to facilitating connections between these programmes across G20 countries, including through the Entrepreneurship Research Centre on G20 Economies.
- Encourage digital start-ups through a more entrepreneurial friendly environment as vehicles for innovation, entrepreneurship, employment opportunities and inclusive economic growth. Availability of technology and capacity building by these MSMEs is a critical element for the development of the start-up ecosystem, alongside the availability of adequate sources of financing, and further cooperation between industry and academia.

6. Encourage continued development of the IoT and the digitalisation of production

G20 countries can share good practices and identify areas of further cooperation on how to encourage the development of IoT and an efficient digitalisation of production.

The G20 Ministers responsible for the digital economy intend to:

- Work together in the areas of digitalisation of production as well as smart cities, smart mobility, IT security and smart farming.
- Share best practices on the digitalisation of production to facilitate digital transformation on a global level and to benefit all G20 countries.
- Encourage centres of excellence, digital hubs (for Start-ups), and clusters to inform and support MSMEs, as well as to explore synergies with various partners, including large companies.
- Encourage learning partnerships e. g. between national initiatives and different interested parties and stakeholders.

7. Enable all people to adapt to and excel in the digital economy and society

Digital skills are increasingly a precondition for participating in modern economic, social, cultural, political and civic life. In order to better prepare our citizens for the opportunities and challenges of globalisation and the digital revolution we need to ensure that everyone can benefit and adapt to new occupations and skills needs.

The G20 Ministers responsible for the digital economy intend to:

- Encourage and promote effective strategies on digital literacy and skills development for the digital economy enabling citizens, especially underrepresented or disadvantaged groups, to successfully adapt to the requirements of the digital economy and society.
- Work with the Employment Working Group to build on Annex 2 recommendations including the G20 Initiative to Promote Quality Apprenticeships and the G20 Skills Strategy, to help address the challenges brought on by digitalisation. This could require targeted actions and capacity building reflecting the different stages of development of G20 countries.
- Work with the Development Working Group to build synergies with the G20 initiative on promoting skills development for the digital economy and employment prospects for women and girls, particularly in developing and emerging countries.
- Foster digitalisation in order to strive towards meeting the goals agreed upon in the 2030 Agenda and the Sustainable Development Goals to end poverty, protect the planet and ensure prosperity for all.²

8. Strengthen trust in the digital economy

Trust and security are fundamental to the functioning of the digital economy; without them, uptake of digital technologies may be limited, undermining an important source of potential growth and social progress.

The G20 Ministers responsible for the digital economy intend to:

- Exchange experiences on how to build trust and encourage the use of risk-based technical standards, guidelines and best practices to identify assess and manage security risks by both the public and private sectors, especially for MSMEs.
- Encourage the development of national privacy strategies while taking into account the different needs in countries. We recognise the importance of promoting interoperability between privacy frameworks of different countries.
- Within the Argentinian Presidency of the G20 we will discuss international public policy issues related to privacy and security in the digital economy.

9. Promote consumer protection online

Despite the steady increase of business-to-consumer e-commerce, there remains considerable untapped potential. Consumer protection is of great importance to promote inclusive growth built on adequate and effective intellectual property rights protection and enforcement are essential to building the trust needed to further develop these markets for the benefit of consumers and businesses alike.

² The end of the sentence was taken from the UN's website on the SDGs

The G20 Ministers responsible for the digital economy intend to:

- Further study new business models in relation to consumer trust.
- Discuss under the Argentinian Presidency how to protect consumers in the digital economy including and inviting international organisations for example UNCTAD, the OECD and Consumers International.

10. Measuring the digital economy

Underpinning our success is the ability to know what progress we have made which also means improving measurement of the digital economy, because robust statistics are the foundation on which good, evidence-based policy advice is based.

The G20 Ministers responsible for the digital economy intend to:

- Welcome the work of the G20 Trade and Investment Working Group on Measuring Digital Trade, which is an important part of the broader issue of measuring the digital economy.
- Note the “OECD-IMF Interim report on the impact of digitalisation on measures of GDP” and look forward to the G20 Action Plan to Improve Measurement of the digital economy in Macroeconomic Statistics, to be delivered by the OECD and IMF working in collaboration with other international organisations and national statistical organisations later this year.
- Encourage international organisations, such as the IMF, ITU, OECD, UNCTAD, World Bank and the WTO, in collaboration with national statistical compilers, to elaborate on frameworks for analysing key issues in digitalisation at the country level taking into account the structure of the local economy and statistical capacity.
- Endeavour to define a set of metrics that all economies can consider collecting with a view to developing a list of core, cross-country comparable ICT indicators to better support the evidence base and policy making by countries.

11. Bridging the Digital Gender Divide

Digitalisation has created new avenues for the economic empowerment of women. However, G20 countries are concerned that the benefits of digitalisation are not being equitably shared by women.

Depending on geographic and social conditions, women experience higher access barriers to technologies and digital financial services. Women also face skills, participation and leadership gaps which prevent them from fully participating in the digital economy.

To support the equitable participation of women in the digital economy, G20 Ministers responsible for the digital economy intend to:

- Share national practices on efforts to bridge the digital gender divide.
- Consider taking action across a range of key policy areas, subject to national circumstances, including developing national action plans to achieve Target 2.5.A of the Connect 2020 Agenda: “Gender equality among Internet users should be reached by 2020”.

- Support initiatives to develop digital financial services that are accessible and appropriate for women.
- Encourage the review of existing digital strategies to ensure they incorporate a gender perspective that addresses women's needs, circumstances, capabilities and preferences; and mainstream gender impact analysis.
- Increase female participation in STEM education and employment.
- Explore opportunities for developing metrics that capture gender disaggregated data where possible on the level of access, use and benefits.