



Team of Specialists on Innovation and Competitiveness Policies

Eleventh Session

Geneva, Palais des Nations, Room XI

1 - 2 November 2018

Substantive Segment

The Fourth Industrial Revolution – reshaping innovation policies for sustainable and inclusive growth

The United Nations 2030 agenda for sustainable development calls on Member States to pursue socially inclusive and ecologically sustainable growth. This requires structural transformation of the economy, enabled by technologies, knowledge and investment in human capital, effective and flexible institutions, and modern and efficient infrastructures.

Innovation will be central to this transformation, forging new business models that make use of on-going and forthcoming technological developments and shifts. Particularly, it can drive progress towards Sustainable Development Goal 8 on decent work and economic growth.

The Fourth Industrial Revolution (Industry 4.0) is characterized by technologies that are blurring the divide among the physical, digital and biological spheres, such as artificial intelligence, robotics, the Internet of Things, 3D printing, nanotechnology, biotechnology¹. It has the potential to create green, clean, equitable and sustainable production systems. The benefits that the Fourth Industrial Revolution can bring at the global level and to countries ready to harness its opportunities are tremendous. Economies in transition could leapfrog to the latest technologies and standards, bypassing intermediate stages.

Yet, ECE countries face several challenges to capture these benefits – potentially differing widely on level of development, location, and skills. The speed of change of Industry 4.0 sparks concerns among developed and developing economies on how to create new jobs and reduce inequality within and among countries. Industry 4.0 presents numerous perils that need to be managed and steered towards the achievement of Agenda 2030.

The conference gathers policy makers, business, civil society and academia to share experiences from the ECE region on how to harness the benefits of the Fourth Industrial Revolution and on the role that innovation policies can play for the Sustainable Development Goals. It will discuss and assess the public policies needed to manage the effects of Industry 4.0 to the benefit of the achievement of agenda 2030.

The conclusions from the discussion will be presented at the 2019 session of the ECE Committee on Innovation, Competitiveness and Public – Private Partnerships and they will inform ECE future policy advisory work in this area.

¹ The World Economic Forum, “The Fourth Industrial Revolution: what it means, how to respond”, 2016.

Thursday 1 November 2018

10:30 – 11:00 Keynote speech – Robert Wade, Professor, London School of Economics

11:00 – 12:30 Session 1 – The Fourth Industrial Revolution: perils and opportunities

Industry 4.0 will force the change of entire systems of production, management and governance.

The benefits that Industry 4.0 can bring at the global and national level are numerous, portending increased welfare through new opportunities. However, critical voices correctly point that not every country and every segment of society will benefit in the same way. In particular, questions arise whether the changes will be able to provide employment and economic growth for all, especially for those that do not have the appropriate skills.

This session presents the Fourth Industrial Revolution and addresses the opportunities and challenges that it can raise in the ECE region.

Moderator: Angel González Sanz, Chief, Science, Technology and ICT Branch, Division on Technology and Logistics, United Nations Conference on Trade and Development

Speakers

- **Ludovico Alcorta**, Director, United Nations Industrial Development Organization
- **Samuel Holmes** and **Carl Hickson**, Accenture
- **Nicholas Davis**, Head of Society and Innovation, World Economic Forum
- **Göran Marklund**, Deputy Director General, Vinnova – Swedish Governmental Agency for Innovation Systems
- **Yelena Kalyuzhnova**, Director, The Centre for Euro-Asian Studies, The University of Reading, United Kingdom

15:00 – 16:30 Session 2 – Industrial Policy and Innovation policies for sustainable growth

The Fourth Industrial Revolution has the potential to increase energy and resource efficiency and hence protect the environment and reduce carbon emissions. For example, it can be an enabler for the transition to a circular economy, to more sustainable consumption and production patterns, through new and better ways to use resources and waste. If consumption is sustainable, manufacturing goods could be less environmentally harmful for example by replacing fossil fuel inputs with renewable energy, by using energy more efficiently and by reusing and recycling goods². Innovation is already driving the move to more sustainable production and consumption.

This session explores how Industry 4.0 can enable more sustainable production patterns and discusses the role of industrial policy and innovation policy in supporting sustainable growth.

² Industrial Development Report 2018, UNIDO

Moderator: Ivonne Higuero, Director, Economic Cooperation and Trade Division, United Nations Economic Commission for Europe

Speakers

- **Brendan Edgerton**, Acting Director for Circular Economy, World Business Council for Sustainable Development
- **Greg Falconer, Deputy Director**, Innovation Policy, Department of Business, Energy and Industrial Strategy, United Kingdom
- **Stefano Firpo**, Director General for industrial policy, competitiveness and SMEs, Ministry of Economic Development, Italy
- **Magnus P. Karlsson**, Professor, KTH Royal Institute of Technology, Stockholm, Sweden

16:30 – 18:00 Session 3 – Innovation Policies for inclusive growth

Not every country will benefit from the Fourth Industrial Revolution in the same way. The new technologies will enable competitive production of previously labour-intensive products in high-income locations, cutting opportunities for emerging and developing economies to grow by engaging first in labour-intensive manufacturing. Economies with the most flexible labour markets, educational systems, infrastructure, and legal systems are likely to benefit from Industry 4.0 the most.

However, the ultimate effect on labour markets and the potential increase in inequality is much debated. Challenges for transition economies might include a widening of technology and knowledge gaps and its implication on skills and rising inequalities.

This session discusses the effects of Industry 4.0 on equality within and among countries and explores the role of innovation policies and government intervention to ensure inclusive growth.

Moderator: Ani Vashakmadze, Donor Relations and Resource Mobilization Coordinator, Innovation and Technology Agency, Georgia

Speakers

- **Jörg Mayer**, Senior Economic Affairs Officer, United Nations Conference on Trade and Development
- **Irmgard Nübler**, Senior Economist, International Labour Organization
- **Pedro Ginjeira do Nascimento**, Head of External Affairs Strategy, External Affairs, Vodafone Group
- **Matthieu Méaulle**, Senior Advisor, International Trade Union Confederation

End of Conference

Registration

Participation is free of charge. To register online, please click [here](#).

The conference is the substantive segment of the ninth session of the United Nations Economic Commission for Europe Team of Specialists on Innovation and Competitiveness Policies (UNECE TOS-ICP). TOS-ICP is an intergovernmental group promoting knowledge sharing, network-building and good practices leading to better innovation policies. Please visit our [website](#) to find out more about our activities and publications.

Entrance and accreditation (see map overleaf)

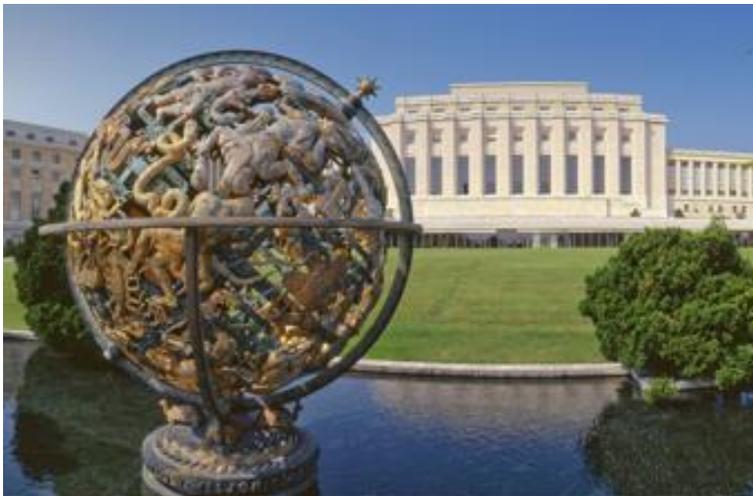
Meeting participants need to pick up their security badges at the Pregny Gate. Please bring the registration form with you. With a valid piece of identity and the security badge you will receive at the Pregny Gate, entry will also be possible subsequently through the Place of Nations Gate.

Interpretation

Simultaneous interpretation English-French-Russian will be provided throughout the conference.

Conference Venue

The [Palais des Nations](#) is an outstanding testimony to twentieth century architecture, situated in a beautiful park overlooking Lake Geneva, with a splendid view of the Alps.



Accommodation

Geneva is the world's leading international conference center. There is a large choice of hotels of all categories. However, hotels can fill up quickly during peak times, so it is a good idea to book early. The Geneva Tourist Office maintains a [search engine](#).

Geneva

Birthplace of the Red Cross movement and seat of the European headquarters of the United Nations, Geneva's exceptional history and international vocation make it a cosmopolitan and lively city. Geneva is uniquely set on the shores of Western Europe's largest lake with a magnificent view of Mont Blanc, the tallest peak in Western Europe.



Getting there

Geneva International Airport is located about 6 km from the Palais des Nations. Taxis are readily available. There are also free public transport tickets available from a machine in the luggage collection area (on the left hand side just before passing customs). Bus 28 goes from the airport to the Pregny Gate entrance (“Appia” stop), which is the point of entry for conference participants.

Moving around

Details on public transport links can be found in the website of Transports Publics Genevois, which includes a useful route planner in English.

For further information, please contact:

Katia Adamo

E-mail: katia.adamo@unece.org **Telephone:** +41 22 917 1834

