2021 Call-for-Contributions of the International Institute of Administrative Sciences: "Public Administration and Industry 4.0"

Keyword	Responsible	Title	Research question	Requests/ Requirements
Revolutions	Owen Podger & Anais Valiquette L'Heureux	Using 4IR To Correct Mistakes of Earlier IRs	How can 4IR help addressing contemporary challenges?	Indicate how the policy problem was created by past IRs
Skills	The European Training Foundation	Governing Skills Development for Industry 4.0	What governance reforms are needed to build skills needed to seize 4IR opportunities?	Authors are professionals, focusing on 29 ETF countries
Education	Adel Ben Youssef	Building the Skills for Industry 4.0: Challenges and Opportunities	What are the challenges and opportunities related to building the skills needed for Industry 4.0?	
Procurement	Raquel Carvalho	Public Administration and Industry 4.0: Is there a Role in and for Public Procurement?	What public procurement best practices have emerged during the Covid-19 crisis?	Deals with public procurement
Ageing	Lichia Saner-Yiu, Raymond Saner, Yifan Yang & Hiroko Kudo	Adopting 4IR to Support Healthy, Active and Just Ageing	How can ICT contribute to maintenance of individual capacities?	Examines ICT from ageing perspective
Africa	Ukertor Gabriel Moti & Steve Troupin	Harnessing the Transformative Potentials of Industry 4.0: What Role for African Public Administration?	How to enable Africa seizing the opportunities opened by Industry 4.0?	Contributions focus on African countries
Open	Steve Troupin	Public Administration and Industry 4.0	How does Industry 4.0 enable reengineering PA workflows and sets new priorities	Consider direct submissions to tracks first

Using 4IR To Correct Mistakes of Earlier IRs

Owen Podger, Institute for Governance and Policy Analysis, University of Canberra,

owenpodger@gmail.com

Anaïs Valiquette L'Heureux, California State University Northridge,

anais.valiquettelheureux@csun.edu

So many of our problems are because our use of technologies of past industrial reforms have created the crises that humanity now faces. This Call for Papers focuses on how we can **use the Fourth Industrial Revolution to correct the errors of the past.** Our concern is not for the technologies themselves. Other forums can discuss carbon neutral technologies, climate change adaptation, and so on. We call for papers that relate to the public administration of new technologies that is needed for these new technologies to work for mankind.

Each paper should address some global problem that has been **created by past and present technologies**, propose or anticipate **what 4IR can do** to address that problem and what are **the policy issues to be considered** for success.

The research question may respond with abstracts for papers that **address questions like** the following:

1. We already witness the **move away from petroleum-based energy.** What are we to do with the oil and coal industry, the mines, the drilling fields, the refineries, the transportation infrastructure? Can 4IR contribute to make it easier, and how should governments regulate to assure that it does?

2. We already witness both the swing away from single use plastic, and new technologies for alternatives. How can 4IR help with the **dealing with plastic in the environment**, and what should we regulate to deal with it?

3. Our **cities** have grown because of transport technology. Over the past two decades and more we have seen a response to urban sprawl with promotion of high density. Covid-19 now has hit **public transport** hard. What can 4IR do to restrict expanding cities and make our transport safe? And what should governments do to guide it?

4. Transport has inherently been dangerous. What can 4IR do to **make travel safer** and how should governments respond?

5. Behind past industrial revolutions has been a framework of belief that has supported the technologies. Whether it is replacing current capitalism, or changing ideas about the relationship between Man and Nature, how can 4IR help change those perceptions and **build a different foundation for society**? And what are the public administration consequences?

6. Key religions, Christian, Islam and Hindu, are all undergoing crises related to human rights, democracy, and attitudes towards technology. For instance, **religious and political radicalization** in North America has caught the world off guard, with important policy and intelligence community related impacts. Religious fundamentalists are continuously using social media to expand their influence and recruit followers aided and abetted with the algorithms of the social media platforms. There are major issues in regulating such media. How can we **regulate social media** so that it serves the greater public interest?

7. We will recommend **other topics**, provided they focus on the need for 4IR to be distinct from past industrial revolutions, and overcome our problems created by them.

IASIA-IIAS 2021 Conference "Public Administration and Industry 4.0", Bela Bela, South Africa, 26-30 July
https://www.conftool.org/iasia-iias-conference2021/; https://www.iasia-iias-conference2021.org/; info@iasia-iias-conference2021.org
https://www.facebook.com/IIAS.IISA; https://twitter.com/IIAS_IISA; https://www.youtube.com/iiaschannel

Governing Skills Development for Industry 4.0

Background: the European Training Foundation

The European Training Foundation (ETF) is a decentralized, specialist agency of the European Union. With a core **mission of helping transition and developing countries harness the potential of their human capital through the reform** of education, training, and labor market systems, in the context of EU external relations policies.

The **ETF works with 29 countries bordering the EU** to improve their human capital development systems, analyze emerging skills needs, and improve their labor markets. The ETF supports them to improve social cohesion and achieve more sustainable economic growth, which in turn benefits Member States and their citizens by improving economic relations.

As part of its work the ETF support seeks to strengthen system governance through coordination mechanisms, with an emphasis on legislation, institutional settings – including coordination between national, local and sectoral levels – and financing.

In 2021, the ETF is cooperating with the International Institute of Administrative Sciences (IIAS) in its Annual Conference.

The ETF will host dedicated sessions at the IIAS's annual conference. This year the conference will focus on the governance of Industry 4.0, the challenges that may arise and emerging solutions.

Industry 4.0

Over the last decade, trends in **technology, digitalization, climate change, migration and globalization** have emerged as **drivers of change** in societies and economies.

Many observers believe that **underpinning these changes is a new industrial revolution**, considered to be the fourth such leap forward and frequently referred to as Industry 4.0.

The ubiquitous use of technology, communication and networks, the deployment of increasingly intelligent robots and machines – as well as increased computing power at lower cost and the development of 'big data' analytics – has the **potential to transform the way goods are manufactured.**

The ETF will contribute to the conference by supporting a **discussion focused on emerging economies and economies in transition on the implications of Industry 4.0 for the governance of human capital.**

Call-for-papers

The ETF is interested in papers and contributions **from experienced professionals** who would like to participate in the ETF session.

This proposed digital industrial revolution envisaged as Industry 4.0 holds the promise of increased flexibility in manufacturing, mass customization, increased speed, better quality and improved productivity. However, to capture these benefits, economies will need to invest in equipment, information and communication

technologies (ICTs) and data analysis as well as the integration of data flows throughout the global value chain.

For member states of the EU, the **shift to Industry 4.0** is expected to have a major impact, with the transition being estimated to deliver annual **efficiency gains** in manufacturing of between 6% and 8%.

The transition to Industry 4.0 will impact not only developed economies but also **developing and emerging economies** where there is a need for investment, new business models, data issues, legal questions of liability and intellectual property, standards. These countries are facing significant **challenges in human capital** to be met if benefits are to be gained from new manufacturing and industrial technologies.

A key policy issue surrounding **Industry 4.0 is how it might affect the labor market**. In recent years, technology that supports on automation, remote working has become more advanced, and its application is increasing across a range of different business settings. Does it pose a threat to business and the labor market and what are the wider implications for society?

To consider these issues, the following call for papers has a specific **focus on the human capital dimensions** of making a transition to industry 4.0 and its implications for governance of the policies in skills, lifelong learning and job creation.

The transition will accelerate the need for adaptation of education and training systems. Whereas a consensus has emerged about the **need for a paradigm shift towards lifelong learning**, the **structures and institutions** that support human capital development in many societies appear slower to change. Although the baseline for public policies is changing, and the necessary directions are clear and the challenges

IASIA-IIAS 2021 Conference "Public Administration and Industry 4.0", Bela Bela, South Africa, 26-30 July
https://www.conftool.org/iasia-iias-conference2021/; https://www.iasia-iias-conference2021.org/; info@iasia-iias-conference2021.org
https://www.facebook.com/IIAS.IISA; https://twitter.com/IIAS_IISA; https://www.youtube.com/iiaschannel

are increasingly evident, many of the practices essential for the transition have yet to be created.

That more connected economy will need new skills has been extensively researched with many studies highlighting the new types of skills that are expected in the future. However, less clear are the **changes required in how Governments organize and manage their skills development systems**. Moreover, the context for Industry 4.0 is changing with the **Covid-19 pandemic** and the need to move towards a **circular economic** has introduced new perspectives into the discussion on industry 4.0. Is the original conception of Industry 4.0 still a valid basis for thinking about public policy and the world of the future?

Topics and Themes in the ETF call for papers.

The ETF is therefore making a call for papers from interested experts, practitioners and researchers on the topic of **"Governing Human Capital Development in the context of Industry 4.0"**. Given its mandate the ETF has an interest in contributions that address challenges and opportunities in the countries of South Eastern Europe, Eastern Europe, the Middle East and North Africa, and Central Asia. However, the ETF would also welcome relevant contributions to the session from other regions of the world.

The expected contributions for authors to participate in the ETF session are following 5 areas:

- **Institutional Subsidiarity:** research and practices on how information networks are changing relationships between national, regional and community processes,

including the private, the public and community sector, in advancing the delivery of inclusive human capital development policies and services. Experiences on the impact of changes to existing stakeholders and the emergence of new influencers, including the impact of digital governance.

- **Sustainability and Inclusion in the context of Industry 4.0**: How can we expect technology, communication and networks, to impact on inclusion, including experience of workers, women and adult learners and sustainable development How can governance support inclusive lifelong learning in the time of industry 4.0? What advantages does the "Fourth Industrial Revolution" present for women?

- **Widening the dialogue between stakeholders** to connect spatial and business strategies for the benefit of people and create skilled communities with sustainable economies. How to promote shared outcomes?

- **Public-Private Partnerships for skills development**, including financial and non-financial arrangements for employer and community engagement. What are the different types of public and private cooperation at all possible levels (international, national, local, schools, company etc.), and how can the increasing use of technology support trust-building processes and other issues such as capacities of different actors and institutions involved?

- **Co-managing the transitions**: Interacting strategies for Businesses, People and Places. What are the differences between supporting the growth of industry 4.0 in rural and urban environments?

- The changing role of stakeholders in human capital development in the context of Industry 4.0

Building the Skills for Industry 4.0: Challenges and Opportunities

Adel Ben Youssef, GREDEG-CNRS & University Côte d'Azur,

adel.ben-youssef@gredeg.cnrs.fr

The dynamics of the rapid technological developments and increased pace of innovation have caused paradigm shifts which have been accompanied by consecutive waves of new technologies. The most recent paradigm shift of the Fourth Industrial Revolution (Industry 4.0) is transforming most industries and leading to smart manufacturing, smart homes, smart cities and smart ways of living. Digitalization of the economy and society is generating ever-increasing amounts of data and requirement the implementation of new technologies.

The term Industry 4.0 was first coined in 2011 at the Hanover Fair (Drath and Horch, 2014). Industry 4.0 is being driven by cyber physical systems (CPS) and integration of the real and digital worlds to achieve industrial development. It can be **defined as "recent technological advances where the internet and supporting technologies serve as a backbone to integrate physical objects, human actors, intelligent machines, production lines and processes across organizational boundaries to form a new kind of intelligent, networked and agile value chain"** Schumacher et al. (2016, p. 162).

Industry 4.0 technologies can be considered general purpose technologies (GPT) (Bresnahan and Trajtenberg, 1995; Helpman and Trajtenberg, 1998, Basu and Fernald, 2007). Interconnection among Industry 4.0 technologies is achieved through the deployment along the value chain of horizontal, vertical and end-to-end system integration tools (Ben Youssef, 2020) and is based on several principles including

IASIA-IIAS 2021 Conference "Public Administration and Industry 4.0", Bela Bela, South Africa, 26-30 July
https://www.conftool.org/iasia-iias-conference2021/; https://www.iasia-iias-conference2021.org/; info@iasia-iias-conference2021.org
https://www.facebook.com/IIAS.IISA; https://twitter.com/IIAS_IISA; https://www.youtube.com/iiaschannel

interoperability, virtualization, decentralization, real-time capacity, service orientation, and modularity.

Industry 4.0 technologies cause radical transformations to jobs and economic activities and these transformations have been accelerated by the conditions surrounding and the measures put in place prevent the spread of the COVID-19 pandemic. However, business performance does not depend only on the implementation of the new technologies; it also **requires specific workforce skills** (Chaibi et al., 2015). Workforces need to be trained to ensure that their skills match the requirements of Industry 4.0 technologies. Increased automation and use of the artificial intelligence, robots, augmented reality, virtual reality, 3D printing, etc., continue to change both future jobs and the workforce skills required. This is leading to a **transition in employment from lower-skilled to more highly-skilled jobs** (Sousa and Rocha, 2018; Smith and Talent, 2018).

Education plays a critical role in the accumulation of the skills required to apply Industry 4.0 technologies. Higher education institutions especially **universities should ensure their curricula provide students with the appropriate skills for entry to the labor market** (Ben Youssef et al., 2012). Industry 4.0 requires transversal skills and competences adapted to digitization of production and the use of large volumes of data. However, a mix of both technical and soft skills is also required to provide the essential capabilities to enable success in the labor market.

To contribute to the ongoing debate on the skills required for Industry 4.0, this call for paper focuses on the following question: **"What are the challenges and opportunities related to building the skills needed for Industry 4.0?"**. We welcome theoretical and practical analyses of the different levels of the capabilities needed for

IASIA-IIAS 2021 Conference "Public Administration and Industry 4.0", Bela Bela, South Africa, 26-30 July
https://www.conftool.org/iasia-iias-conference2021/; https://www.iasia-iias-conference2021.org/; info@iasia-iias-conference2021.org
https://www.facebook.com/IIAS.IISA; https://twitter.com/IIAS_IISA; https://www.youtube.com/iiaschannel

Industry 4.0 skills by different actors (individuals, workers, firms, regions, countries, etc.

Potential subtopics could include, but are not limited to:

- Skills for Industry 4.0;

- Ways to build the skills for Industry 4.0;

- Skills and Jobs 4.0;

- Health 4.0 and the skills required;

- Education and Industry 4.0;

- Tourism 4.0 and the skills required;

- Industry 4.0 and COVID-19;

- Cyber criminality and Industry 4.0;

- Organizational change and the skills required for Industry 4.0;

- Soft skills and digital skills;

- Artificial intelligence and Skills 4.0;

- The Internet of Things and Skills 4.0;

- Virtual reality and Skills 4.0.

References

Basu, S. et Fernald, J. (2007), "Information and communications technology as a general-purpose technology: Evidence from us industry data". *German Economic Review, Verein für Socialpolitik*, n° 8 pp.146-173.

Ben Youssef, A. (2020), "How Industry 4.0 can contribute to combatting Climate Change?", Revue d'Economie Industrielle (French Industrial Economics Review), June 2020, vol.169.

Ben Youssef, A., Dahmani, M., and Omrani, N. (2012). Students' E-Skills, Organizational Change and Diversity of Learning Process: Evidence from French Universities in 2010. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.2065366

Chaibi, A., Ben Youssef, A. and Ben Aoun, L. (2015). "E-Skills, Brains And Performance Of The Firms: ICT And Ability Of Firms To Conduct Successful Projects In Luxembourg".

Bresnahan, T., et Trajtenberg, M. (1995). "General purpose technologies: Engines of Growth?" *Journal of Econometrics*, Vol 65, n°1, pp. 83-108.

Drath, R., Horch, A. (2014). Industrie 4.0: Hit or hype? [Industry Forum]. *IEEE Industrial Electronics Magazine*. https://doi.org/10.1109/MIE.2014.2312079.

Helpman, E. (Ed.). (1998), General Purpose Technologies and Economic Growth. MIT Press, Cambridge.

Schumacher, A., Erol, S., and Sihn, W. (2016). A Maturity Model for Assessing Industry 4.0 Readiness and Maturity of Manufacturing Enterprises. Procedia CIRP. https://doi.org/10.1016/j.procir.2016.07.040

Smith, G. and Talent, C. (2018) "The intelligent solution: automation, the skills shortage and cyber-security," Computer Fraud & Security, vol. 2018, no. 8, pp. 6–9, 2018.

Public Administration and Industry 4.0:
Is there a Role in and for Public Procurement?

Raquel Carvalho, Associate Professor, Faculdade de Direito,

Universidade Católica Portuguesa, rmcarvalho@porto.ucp.pt

The **Covid-19 pandemic** has been a challenge for legislators around the world. In order to face the sanitarian crisis, governments have been enacting **exceptional regulatory and legislative measures to speed up the public purchase** of individual protection kits for civilians and sanitarian products and medical services for health care institutions and professionals. It is a fact that, due to the emergency, the absence of a necessary reflection upon normative solutions regarding exceptional public procurement regimes has been the cause of many legislative problems. Still, the pandemic can be an **opportunity for legislators to learn how to address similar crises in the future by making use of flexible, yet steady rules in public procurement**.

In **SDG 12 Target 7,** Public Procurement has been identified as an instrument to be promoted "in accordance with national policies and priorities" through sustainable practices. Many countries, benefiting from previous experiences carried out in so-called normal times may, therefore, have implemented some of those practices in this crisis. In **public contracts regarding the vaccines,** the European Union has been taking the lead in collective buy – in other words, in joint public procurement. This option has been a success regarding the "equal access" to vaccines from all Member

States. Still, contract execution has been showing some unexpected or unforeseen difficulties regarding the compliance with deadline delivery.

Furthermore, the general lockdown has shown the potential **of dematerialized procedures** and the importance of IoT, Big Data and analytics to monitor the sanitarian crises.

We want to discuss the **best practices regarding public procurement procedures related to the Covid-19 sanitarian crises both inside and outside the European Union.** Papers, presentations or posters are called-for, answering the following questions:

- What have we learned from the Covid-19 crisis in terms of public procurement?

- Is **joint public procurement** an instrument to be developed and consistently used from now on?

- Do public procurement rules need to be softened to meet crises like this one?

- Can mandatory e-**procurement** help achieve flexible rules more efficiently?

- Is it even possible to have **flexible but sustainable public procurement** or do sustainability concerns hinder automatization procedures and require human decision at all times?

- Does Industry 4.0 have a place in sustainable and circular procurement?

- Can it be considered an added value in public procurement procedures in time of crises, both in the buying process and in the contract execution?

- Is **Blockchain** an IT instrument relevant to public procurement procedures and monitor the public contracts execution?

- Is Industry 4.0 a new dimension of sustainable procurement for and beyond times of crises?

Sousa, M. J. and Rocha, Á. (2018), "Skills for disruptive digital business," Journal of Business Research, vol. 94, pp. 257–263, 2018.

Adopting 4IR to Support Healthy, Active and Just Ageing: 2021 Call-for-Papers of the IIAS Study Group on Governance and Ageing Society

Lichia Saner-Yiu, Centre for Socio-Eco-Nomic Development, yiu@csend.org

Raymond Saner, Diplomacy Dialogue & University of Basle, saner@diplomacydialogue.org

Yifan Yang, National Interdisciplinary Institute of Ageing, yangswjtu@126.com (Chair)

Hiroko Kudo, Chuo University, hirokokd@tamacc.chuo-u.ac.jp

The aim of this call is to broaden our understanding regarding **the impact of digital technology on ageing** in the context of the fourth industrial revolution (4IR) which accelerated the coverage and depth of digitalization in both public and private domains. Increasing number of concerns have been raised regarding the dark side of ICT in perpetuating stereotypes and discrimination against the older and poor population. In other words, human rights of the older persons are at risk if such development continues without being checked.

This year's Study Group Meeting will focus on the less visible aspect of the ageing process where **maintenance of individual capacities for an independent, purposeful and engaging life** have either been enhanced by ICT or have had a **discriminatory effect due to ICT**, unfair algorithms and other decision support applications. These challenges are present in the workplaces, such as e-HRM, in the consumer products development, such as providing clothing with low esthetic values for the older persons, or with style exclusively suited for the younger population.

The major focus is put on both the emerging age-based digital divides that are increasingly detectable in the workplace, labour market, urban design, public transport, health services, due to COVID-19 pandemic. But also the call to focus on the **positive and enabling effect of ICT** such as measures to reduce risk and empower older persons so that they can also reap the benefits of 4IR and maintain their autonomy and meaningful participation in their communities. At the final end, for healthy ageing, improved resilience of older persons is a key determinate where technology could make vital contributions.

Here is a list of suggested questions:

- What could be the future of population ageing in the digital economy?
- What policy instruments empower disadvantaged and vulnerable groups amongst older populations to participate in economic and social activities thanks to ICT?
- What policy measures are available and practiced to promote equitable digitalization and transition?
- What impact is there by digital technology on the progress of SDG 3 Good health and wellbeing for the older persons?
- What could be the interactional effect of Active Ageing Policy and 4IR-related industrial policies at different levels: organizational, local and national?
- What are the drivers and barriers for global, national, local digital technologies adoption for aging societies?
- How does 4IR impact intergenerational interactions in ageing societies?
- How does 4IR Impact the employability of older workforce, resilience and their job satisfaction in different countries?

600 words-maximum abstracts contributing to address this theme through these or other aspects, are called-for.

IASIA-IIAS 2021 Conference "Public Administration and Industry 4.0", Bela Bela, South Africa, 26-30 July
https://www.conftool.org/iasia-iias-conference2021/; https://www.iasia-iias-conference2021.org/; info@iasia-iias-conference2021.org
https://www.facebook.com/IIAS.IISA; https://twitter.com/IIAS_IISA; https://www.youtube.com/iiaschannel

Harnessing the Transformative Potentials of Industry 4.0:
What Role for African Public Administration?

Professor Ukertor Gabriel Moti, Professor of Public Sector Management and Governance,

University of Abuja, Nigeria,

Dr. Steve Troupin, Executive Secretary, International Institute of Administrative Sciences,

s.troupin@iias-iisa.org

Beyond an undoubtedly disruptive impact, **Industry 4.0** or the Fourth Industrial Revolution **can**, according to Ndung'u & Signe (2020) also **rebalance value creation in Africa**: it could usher in solutions to challenges like low quality education, climate change, vulnerability and poor service delivery, and groundbreaking technology-such as artificial intelligence (AI) could, alongside with enabling empowerment policies, improve business, health care and livelihoods of all and bring about the inclusivity envisaged by the 2030 SDGs. The authors however cautioned that Africa's **large digital infrastructure and skills gap** mean those who have otherwise been at the forefront of 4IR are left behind. Africa indeed still lags behind both developed and other developing countries in several indicators for the Fourth Industrial Revolution, especially in infrastructure, technology, access, and education.

The transformative potentials of Industry 4.0 in Africa include: encouraging economic growth and structural transformation; fighting poverty and inequality; increasing financial services; reinventing labor, skills and production; modernizing agriculture and agro-industries as well as improving health care and human capital. Yet, Africa cannot wish away the challenges facing the continent. It is seriously

IASIA-IIAS 2021 Conference "Public Administration and Industry 4.0", Bela Bela, South Africa, 26-30 July
https://www.conftool.org/iasia-iias-conference2021/; https://www.iasia-iias-conference2021.org/; info@iasia-iias-conference2021.org
https://www.facebook.com/IIAS.IISA; https://twitter.com/IIAS_IISA; https://www.youtube.com/iiaschannel

lagging on the digital front. Even though Hafez Ghanem suggests that with its large number of imaginative and creative youth, Africa should become the start-up continent, these potentials may not be fulfilled unless Africa addresses the sizeable deficits in the digital front.

The above scenario has impact on Public administration in Africa especially as evidenced in the ongoing efforts to employ technology to keep public institutions working in the face of the challenges of COVID-19. Providing answers to the following questions become pertinent:

- How can African governments and Public Administration overcome the challenges of infrastructure, technology, access and education?

- **How can Public Administration in Africa take advantage of the transformative potentials of the 4IR** in the tasks of fighting poverty and inequality; increasing financial services; reinventing labor, skills and production; modernizing agriculture and agro-industries and improving health care and human capital?

Authors are invited to send in abstracts addressing how the sizeable digital and technological deficits can be overcome and secondly how African governments and Public Administration can take advantage of the transformative potentials of Industry 4.0.

References

Foresight Africa 2020 Report: Brookings, https://www.brookings.edu/multi-chapter-report/foresight-africa-top-priorities-for-the-continent-in-2020/.

Hafz Ghanem (2020). "Shooting for the Moon: An Agenda to bridge Africa's digital divide", in Foresight Africa 2020 Report. https://www.brookings.edu/blog/africa-in-focus/2020/02/07/shooting-for-the-moon-an-agenda-to-bridge-africas-digital-divide/.

Njuguma Ndung'u & Laudry Signe (2020). "The Fourth Industrial Revolution and digitization will transform Africa into a global powerhouse", in Foresight Africa Report 2020. https://www.brookings.edu/research/the-fourth-industrial-revolution-and-digitization-will-transform-africa-into-a-global-powerhouse

Public Administration and Industry 4.0: Open Call

Dr. Steve Troupin, IIAS Executive Secretary, s.troupin@iias-iisa.org

Industry 4.0 or the Fourth Industrial Revolution **(4IR) or refers to significant changes in the economic and social structures enabled by the new technologies**, including: the Internet of things (IoT), Big data and analytics, Robotics, and 3-D printing (Strange & Zucchella 2017). Overall, Industry 4.0 is concerned with the automation of human work

The **measures taken to address the Covid-19 pandemic have been speeding up the ongoing transition** (APEC 2020): they demonstrated that retail, education, entertainment, and white-collar work don't require the simultaneous physical presence of individuals. They might have lasted long enough for a point of no return to be reached.

Industry 4.0 has a **potentially disruptive impact on the 2030 SDGs Agenda.** It could rebalance value creation and economic growth towards technology and R&D-intensive sectors, regions and individuals; transform how public goods such as education or security are produced and consumed; provide opportunities and risks for addressing wicked issues such as climate change, global security, pandemics and other disasters; achieve societal transformation.

Industry 4.0 is impacting Public Administration on two ways. Firstly, it provides a new array of **tools enabling to transform or re-engineer** public administrations workflows away from jurisdictional silos towards greater interaction, while at the

same time significantly increasing the steering capacity of governments over other actors of society.

Secondly, **it creates new priorities or rebalance existing ones**, including: the regulation of tech giants regarding antitrust and other aspects, the fiscal consolidation, the management of growing social inequalities, of evolving forms of political expression and participation, and the globalization of public governance.

In the Open Call, panel and paper submissions addressing the Conference theme in general are collected.

The review is performed by the IIAS Scientific Secretariat. Accepted panel proposals are scheduled to the program. Accepted paper proposals are forwarded to chairpersons of other tracks, including IASIA ones, to complete their own program, or clustered together in ad hoc sessions. Authors are invited to consider direct abstract submissions to Conference tracks first.