IGF 2017 Reporting

- Session Title: Data Governance and Policy: Developing a Curriculum (WS186)

- Date: 18 Dec 2017

- Time: 09:00 to 10:30

- Session Organizer: Roxana Radu, Geneva Internet Platform and DiploFoundation

- Chair/Moderator: Katharina Höne, DiploFoundation

- Rapporteur/Notetaker: Barbara Rosen Jacobson, DiploFoundation

- List of Speakers and their institutional affiliations:
Mr Alberto Pace, Head of Storage at CERN
Ms Philippa Biggs, Coordinator, Broadband Commission for Digital Development, ITU
Ms Heather Leson, Data Literacy Lead, Policy, Strategy and Knowledge at the International Federation of the Red Cross and Red Crescent Society (IFRC)
Mr Pierre Mirlesse, Vice president for Hewlett Packard Enterprise's Public Sector business in the EMEA region
Ms **Sophie Huber**, Director of the Center for continuing distance education, University of Geneva (UNIGE)

- Key Issues raised (1 sentence per issue):

- while the perfect data scientist needs to know the technicalities of collecting and analysing data, this person would also need to understand how such analyses are governed by legal framework, how they relate to the policy areas or business fields in question, and how to effectively communicate their outcomes.
- There is a need to develop a guidebook that maps all the organisations in civil society that are dealing with data analysis, so that there is a greater know-how about the practices in different sectors and the possibilities for collaboration
- the first requirement is to build a 'data culture' across the organisation, and to use the knowledge and skills that people often already possess.

- If there were presentations during the session, please provide a 1-paragraph summary for each presentation

Dr **Katharina Höne**, Research Associate Diplomacy and Global Governance, DiploFoundation, introduced the topic and key questions to be addressed by the panel. What kind of curriculum

is needed to effectively prepare for the data-driven era, what are the kind of skills that need to be taught, and whose capacity will have to be developed?

Mr Alberto Pace, Head of Storage at CERN, explained that there is a need for increased awareness of the growing possibilities of data and technology. Even with imperfect, unstructured data – often a characteristic of big data – computers are now able to conduct in-depth analyses and extract conclusions that are increasingly reliable. To be able to benefit from these opportunities, it is important for everyone to have a general understanding of what is and is not possible, and this understanding needs to be nurtured through continued education, considering the fast pace of technological development.

Ms Philippa Biggs, Coordinator, Broadband Commission for Digital Development, ITU, added that capturing the potential of data requires managers and policy-makers to know which questions are best to be asked, based on the data that is available. Yet, she warned that there needs to be an equal awareness of the biases in the data to avoid misinterpreted analyses. She echoed Pace's focus on the importance of lifelong learning, especially as people will have to be re-trained in the age of automation.

Ms Heather Leson, Data Literacy Lead, Policy, Strategy and Knowledge at the International Federation of the Red Cross and Red Crescent Society (IFRC), explained how data awareness and skills can be improved within an organisation, using examples from the IFRC. She stressed that the first requirement is to build a 'data culture' across the organisation, and to use the knowledge and skills that people often already possess. This can be developed by building organisational confidence and trust and by promoting the sharing of data skills between departments, identifying leaders with data know-how, who are willing to share their knowledge and skills. In addition, it is important to look outside of the organisation and work with partners. She concluded that while data analysis might appear as a technical topic at first glance, it is in fact an activity rooted in human behaviour and culture: 'a curriculum is only as good as the people around it.'

Mr Pierre Mirlesse, Vice president for Hewlett Packard Enterprise's Public Sector business in the EMEA region, provided an overview of some of the processes that are at the basis of today's data revolution, most notably the move towards industry 4.0, throughout which data is exponentially generated, not only by individuals, but also through the interaction between machines. While this provides opportunities for more immediate response to problems, it also generates new challenges related to privacy, data sovereignty, and data security that could put the economy and citizens at risk

Finally, Ms **Sophie Huber**, Director of the Center for continuing distance education, University of Geneva (UNIGE), explained how the UNIGE is working towards identifying the skills and knowledge that are needed to create the perfect data scientist, which turns out to be a truly interdisciplinary effort. While the perfect data scientist needs to know the technicalities of collecting and analysing data, this person would also need to understand how such analyses are governed by legal framework, how they relate to the policy areas or business fields in question,

and how to effectively communicate their outcomes. As it might be difficult to find such 'Vitruvian men and women' who could be turned into data scientists, organisations could consider to have different staff members with knowledge of some of the elements of data science: a Vitruvian team rather than a Vitruvian person.

- Please describe the Discussions that took place during the workshop session and the key take-aways (3 paragraphs)

The discussion that followed the introductory remarks addressed a number of issues, including the challenges of working with new forms of data, and Mirlesse explained that despite hopes and aspirations, data science will never predict something with 100% certainty. It is therefore important to educate on data quality, so that there is an awareness of the limitations of data. In addition, the question was raised to what extent every policy-maker needs to undergo compulsory data training, for example to be aware of the risks of data security, and Leson proposed that it might be productive to view data awareness as a 'first aid kit' or safety check that everyone working with data needs to be aware of.

The discussion then moved to address the promotion of data awareness and data sharing, in particular among civil society, with the necessary privacy provisions in place. Leson added that there could be a need to develop a guidebook that maps all the organisations in civil society that are dealing with data analysis, so that there is a greater know-how about the practices in different sectors and the possibilities for collaboration. Finally, Biggs argued that there needs to be a change of mind-set in relation to learning: training is not boring, obligatory and irrelevant, but necessary to reskill the workforce in order to be able to respond to the needs of automation and robotisation.

In their final reflections, Huber emphasised the relevance of flexible, lifelong learning, not just for individual benefit, but also for the benefit of society at large. Biggs highlighted the potential for collaboration in capacity development. Pace reiterated the importance of education in today's quickly changing environment, and the need to understand when data or its analysis is unreliable. Mirlesse encouraged the participants to become leaders and drive innovation within their organisations and beyond, and Leson pointed at the need to bear in mind that any effort to improve data skills needs to consider the digital divide.

Gender Reporting

- Estimate the overall number of the participants present at the session: 60-70

- Estimate the overall number of women present at the session: 30-35

- To what extent did the session discuss gender equality and/or women's empowerment?
The session did not focus on gender issues.