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<th>Session Title</th>
<th>No. 38: Security, Privacy and the Ethical Dimensions of ICTs in 2030</th>
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<td>Date</td>
<td>Tuesday, 6 December 2016</td>
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<td>Time</td>
<td>9:00 – 10:30</td>
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<tr>
<td>Session Organizers</td>
<td>Justin Caso, IEEE and Karen McCabe, IEEE</td>
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<td>Chair/Moderator</td>
<td>Justin Caso, IEEE</td>
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<tr>
<td>Rapporteur/Notetaker</td>
<td>Christopher Januzzi, IEEE</td>
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**List of Speakers and their institutional affiliations**

- Meher Bnouni, Secretary General IEEE SIGHT Tunisia
- Louise Marie Dias, Researcher Center for Technology and Society; ISOC Youth Observatory
- John C. Havens, Executive Director of the IEEE Global Initiative for Ethical Considerations in Artificial Intelligence and Autonomous Systems
- Dr. Greg Shannon, Carnegie Mellon University, Chief Scientist CERT Division

**Key Issues raised (1 sentence per issue):**

1) Considering the extensive impact that ICTs will have on the achievement of the SDGs, what actions need to be taken now to ensure the implementation and impact of ICTs will be beneficial to all of humanity?

2) There is a need to infuse ICTs with an ethical component that focuses on the role of humans and the preservation of human values in these systems.

3) The issue is evolving away from purely examining privacy to looking at the identity of individuals as new technologies, such as Artificial Intelligence, Virtual and Mixed Reality and others, become ubiquitous.

4) In order to achieve the SDGs and a beneficial future for all humanity in 2030, it is important to consider at this time the roles accountability, transparency and education in an open multistakeholder process.

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

Not applicable

**Please describe the Discussions that took place during the workshop session: (3 paragraphs)**

The Internet challenges not only our existing definitions of privacy, but also the concept of personal space. How can privacy exist in a world of billions of connected people, devices, and systems? How does this interconnectedness impact not only privacy, but concepts of personal space, physical borders, and how we govern access across traditional boundaries? While there is no single answer for everyone to the questions above, what is common is that in order for
the Internet to enable people to define what privacy means for them, and control how they interact online, trust is a crucial underpinning for all users.

Establishing trust on, and of, the Internet has many dependencies. There must be security, privacy, resiliency in the ability to withstand attacks, and accountability. We also know that the Internet is an ever-evolving system. As this evolution progresses, and technology becomes even more entwined with all forms of human interactions, accountability across all aspects of the connected world will enable us to establish the other components of trustworthy Internet. This is particularly important when connecting the unconnected where there is a strong need to provide impactful education beyond merely providing a connection in order to ensure beneficial and productive use of these ICTs to help achieve the SDGs.

At the same time, we must ensure these systems allow for ethical, value-based design. Therefore, understanding the values and needs of societies in their respective regions, and designing for that, will help align systems with the values of those that utilize these technologies in further humanity in a beneficial manner for all.

As privacy becomes more difficult to define and provide, there is a need to develop tools to help end-users define their digital identities and control what information and personal data they will share and how they will share across the variety of online venues in which they will interact. Therefore, it will be crucial for all stakeholders to work together in an open and transparent manner to develop and implement standards for establishing a “digital passport” recognized across a broad range of applications, networks / systems, and governments.

Beyond privacy, we need to ensure that the systems we develop consider our values and ethics by design, and reflect those same values and ethics in their implementations. One challenge here is that it is difficult to assess “value” as a measure of societal well-being. Common economic indicators such as GDP are effective at assessing quantitative results, but they cannot measure value in a true holistic sense. Therefore, new assessment tools and indicators will be needed to be developed to help drive innovation in technology development.

Achieving the above goals, will take a broad-based multi-stakeholder approach, for there will not likely be a single, silver-bullet answer to the question of how to maintain and foster trust of the Internet. And while there is no single answer, there are some common elements to establishing trust discussed in this session: the security, privacy, resiliency, and accountability of the Internet are all necessary for
Internet trust to exist. The dialogue begun in this session is step forward in terms of bringing together the stakeholder organizations and individuals who can take action to drive the discussion forward and help provide a road map to the next wave of Internet innovation.