## IGF 2016 Workshop Report Template

Session Title	Internet of Things for Sustainable Growth
Date	8 December 2016
Time	15:00 - 16:30
Session Organizer	Guilherme de Paula Corrêa and Maik Deive Rabelo (Ministry of Science, Technology, Innovations and Communications, Brazil) Caroline Burle (NIC.br, Brazil)
Chair/Moderator	Vagner Diniz (NIC.br, Brazil)
Rapporteur/Notetaker	Lorrayne Porciuncula (OECD)
List of Speakers and their institutional affiliations	Thales Marçal (Project Manager, Ministry of Science, Technology, Innovations and Communications, Brazil) Marcia Ogawa Matsubayashi (Lead Partner for Telecommunications, Media and Technology, Deloitte Brazil) Pedro Malo (Professor at the University of Lisbon) Sam Paltridge (Senior Economist, OECD)
	Serge Myongo (Qualcomm)
Vor Iggues	Shadi Abou-Zahra (W3C Web Accessibility Initiative)
Key Issues raised (1 sentence per issue):	<ul> <li>Internet of Things for Sustainable Growth</li> <li>Web of Things, the interface used for connected devices and sensors</li> <li>Accessibility for people with disabilities</li> </ul>
	Open platforms and solutions
	Standardization
	Experimental infrastructures
	Roaming
	Privacy and security (trust)
	Connected transport systems and volume of data produced
YC.1	Role of the private sector
If there were presentations during the session, please provide a 1-paragraph summary for each Presentation	Sam Paltridge did a powerpoint presentation to illustrate a few applications of IoT for sustainable growth and especially on the data volume produced by IoT applications to transport.
Please describe the Discussions that took place during the workshop session: (3 paragraphs)	First the panelists discussed about how IoT could be harnessed for sustainable growth and the requirements for making sure business models are sustainable and that IoT can generate wealth. <b>Shadi Abou-Zahra</b> stated that IoT has the potential to further enhance accessibility for people with disabilities, if these platforms and devices are designed to be accessible and interoperable. <b>Thales Marçal</b> shared the Brazilian experience with the National IoT Chamber and the National IoT Plan. <b>Marcia Ogawa</b> said that IoT strategies need to be broken down in smaller pieces to adapt to the changing nature of supply chains, which are not linear anymore due to transformations in the technology and consumer behavior, and that governments can play a strong role in helping to find opportunities and bringing actors together to build local ecosystems. <b>Pedro Malo</b> talked about trends in IoT, the European Plan for IoT

and its pilot IoT projects and identified that the main challenges regarding IoT lay on where the resources needed to invest in smart cities would come from and how IoT could be monetised nationally. **Sam Paltridge** provided several examples of IoT applications, but focused on transport ones, in order to take the perspective of sustainability and to shed light on the vast amount of data there will be produced by connected transport systems, which presents a challenge to the current infrastructure as well as for pricing models. **Serge Mvongo** talked about the role of the private sector in partnering with the public sector to solve demands in an innovative way and the need of using different use cases, broken down in different ones, to come up with the best solutions.

The floor was then open to the audience and a discussion then followed about how data could be kept within local area networks or private networks and then shared selectively; on the mislead assumption that governments will have the financial capacity to build the necessary capacity to harness IoT and how different sectors need to come together to make this a reality; on the need for edge computing/robotics in the edge to deal with the data from IoT; on the imbalance between the pace of technical solutions and solutions for political or societal issues, such as digital divides, affordability and lack of skills.

**Amos Vutsa**, from FarmerLine Ltd. in Ghana, shared remotely his contribution regarding solutions to bridge communications and data collection gaps in rural communities. He said projects that focus on longer range, low cost and low energy consumption to enable sustainable business models and to allow farmers in Africa to benefit from simple predictive and information delivery systems. Panelists finalized their participation with closing remarks on the need for spectrum, business models, interoperability, accountability, trust and transparency.

Please describe any Participant suggestions regarding the way forward/ potential next steps /key takeaways: (3 paragraphs)

- To meet future demands for transit of vast amounts of data produced by IoT (especially in transport), more infrastructure will be needed, as well as exchange points.
- IoT solutions must meet use cases being resolved
- Need of user-centric IoT solutions, which can be for the consumer, enterprise, city or government, each actor having different demands.
- Part of the solution to the tsunami of data that IoT will produce will come from making sure traffic is kept local.
- Private networks need to continue to play an important role to deal with the increasing traffic, which does not necessarily will pass through the open Internet (such as data from sensors).
- Standardization of solutions will continue to be important to make sure systems are interoperable.
- Processing in the edge where data indeed needs to go off the Internet will be crucial to implement sustainable business models.