Building Global Trust in the Internet of Things

THE IGF DYNAMIC COALITION ON IOT BRINGS TOGETHER STAKEHOLDERS FROM ALL OVER THE WORLD TO ENGAGE IN A DIALOGUE ON “GOOD PRACTICE” IN IOT, WITH THE INTENT TO FIND A REALISTIC AND ETHICAL WAY FORWARD
New technologies bring us ways to respond to today’s challenges that never existed before ... and come with new challenges.

Technologies are not good or bad in themselves – it is how we use them.

Societal challenges
- Healthcare;
- Independent living;
- Secure society;
- Sustainable society

Economic challenges
- Innovation; growth; profit

Environmental challenges
- Scarcity of resources; waste reduction; environmental monitoring

Governance
- Global standards, open standards, multistakeholder involvement, ethical IoT

Privacy and data collection
- Big data issues, cloud issues (location, jurisdiction, accountability), digital literacy

Security
- Access, Autonomous systems, cyber attacks on new endpoints

Source: GNKS 2014
Address specific societal issues

- Connected technologies are a necessity to addressing multiple societal challenges in a doable way.

- It requires sharing global knowledge about solutions, and local knowledge and action to make things happen.
Many applications...

- Ranging from:
  - industrial IoT to Consumer IoT;
  - connected emergency warning systems to traffic management systems;
  - Health monitoring and enhancing systems to agriculture applications;
  - Wildlife tracking to security enhancing;
  - Autonomous systems to tools that enhance our human abilities;
  - and much more ....
Global approach towards IoT

IGF AND THE DYNAMIC COALITION ON IOT
IoT is part of Internet

1. IoT is merely a specific aspect of the Internet, just like social media, communication and access to information, and links to AI, Big Data

2. IoT has specific characteristics that will co-determine the development of future networks. This includes;
   - Collecting, storing and providing access to many data related on observations by sensors;
   - Autonomous networks with actuators that take action following receipt of specific data according to pre-programmed decision models, learning, or external interventions;
   - The possibility to “weaponize” IoT devices to attack third parties.
Dynamic Coalition on IoT

- Set up in Hyderabad (IGF, 2008) and active ever since during IGF and regional meetings

- Aim is to develop a shared understanding
  - on Global Good Practice
  - with regards to the Internet of Things

- most IoT dialogues take place in silos with single stakeholders – in DC IoT multi-stakeholders meet on equal terms at global level
Internet of Things **Good Practice Principle**

- Internet of Things Good Practice aims at developing IoT systems, products, and services **taking ethical considerations into account from the outset**, both in the development, deployment and use phases of the life cycle, **thus, to find an ethical, sustainable way ahead** using IoT to help to **create a free, secure and enabling rights-based** environment: a future we want.

(IGF Dynamic Coalition on IoT: “IoT Good Practice policies”)
IGF DC IoT thinking in summary

**Embrace IoT to address societal challenges in an ethical way**
- We need IoT to keep this world manageable
- Inclusivity: deployment needs to be possible where necessary

**Create an IoT environment that encourages investments**
- Involve all stakeholders (as no single stakeholder holds the key)
- Create ecosystem (for sustainable and inclusive deployment)
- Stimulate awareness and feedback (innovation moving fast)
- Provide legal clarity and review the legal mechanisms (sandboxes)

**Ensure emergence of a trusted IoT environment**
- Meaningful transparency (understandable, certifiable labels)
- Clear accountability (for every step in the delivery chain)
- Real choice (no lock-in)
WHAT'S NEXT?

IoT towards the future
First speaker today
Agenda for Today @IGF 2023

- Impact of AI on IoT – Orly Lobel
- IoT deployment and security – Hiroshi Esaki
- Co-designing IoT with local users – Sarah Kiden
- Core Internet values x IoT – Alejandro Pisanti
- Labeling and certification – Dan Caprio
- Identity management and encryption in LoRa – Sandoche Balakrichenan
- Current policy and legislator initiatives – Wout de Natris
- IoT, data protection and privacy – Jonathan Cave

Moderated by Maarten Botterman and Avri Doria, report by Jonathan Cave
We create the world of tomorrow with the choices and actions of today ...
More information

- Read on the IGF DC IoT pages: https://www.intgovforum.org/en/content/dynamic-coalition-on-the-internet-of-things-dc-iot

- Read more about the previous work of DC IoT: https://medienstadt-leipzig.org/dciot/

- Sign up for the DC IoT mailing list: http://mail.intgovforum.org/mailman/listinfo/dc_IoT_intgovforum.org
IoT Global Good Practice
About
Maarten Botterman

• More than 25 years experience with work “in the public interest”, with a keen eye on sustainability, and a focus on where connected technologies touch society – around the world

• Independent analyst, strategic advisor, moderator and Board Director (www.gnksconsult.com)

• ICANN Board Member (www.icann.org)

• GFCE Triple I capacity building workshops facilitator (https://thegfce.org/initiatives/gfce-triple-i-initiative/)

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