Broadband Regulatory Challenges and Opportunities

Gérald Santucci

Head of Unit

European Commission

Directorate General Information Society and Media

GLOBAL FORUM Shaping the Future 2011

European Commission Information Society and Media

Content

- **Why is governance for discussion?**
- **What is IoT governance?**
- **Identified governance topics**
  - Gov 1: Identification
  - Gov 2: Privacy
  - Gov 3: Ethical principles
  - Gov 4: Decentralised architectures
  - Gov 5: Towards an IoT European Norm (EN)
- **Roadmap**

Why is governance for discussion?

- **In the EU**, ‘governance’ refers to the rules, processes and behaviour that affect the way in which powers are exercised, particularly as regards openness, participation, accountability, effectiveness and coherence.
- IoT is a set of enabling technologies that will give every*thing* on Earth the capacity to report on the Internet.

It is not just another ICT development !

What is IoT Governance?

- IoT governance refers to the development and application by governments, the private sector and civil society of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet of Things in a direction that addresses policy concerns and ensures that the maximum benefits are reaped.
- The goal is:
  - to guarantee the uniqueness of identifiers which are linked to objects,
  - To ensure the security and stability of the networks which link objects,
  - to avoid monopolisation of data control and support competition among service providers, and
  - to avoid the misuse of data that may emerge as a result of communication between individuals and objects.

Gov 1: Identification

Object mobility leads to a dual identification need: the network address of the object and the identification of the object whenever it connects to the network.

The type of unique identifiers on the market creates two additional challenges for the IoT:

(1) identifiers are costly; and

(2) each family of identifiers today creates "tunnels" in the Internet of Things that are not interoperable. **Interoperability is needed to create a true Internet of Things** (and not just a number of 'intranets of things' or 'intranets of goods').

Gov 2: Privacy & security

- Intelligent objects surrounding citizens will be able to move data and information to the Internet continuously without control of the data "owners".
- Regulatory approach
  - ‘Privacy by default’
  - ‘Right to be forgotten’
- Technological approach
  - ‘Silent chip’
  - ‘Privacy by design’

Gov 3: Ethics

- ICT implants
  - EGE opinion (2005)
- If intelligent objects are to be used extensively in the home they may create a **home** environment without privacy (and similarly, a **body** without privacy)
- Issues for consideration:
  - Right of individuals to privacy; right for people to make autonomous decisions and control their networked environment; accountability and liability for the actions undertaken by objects…

Gov 4: Decentralised architecture

For IoT applications that can be considered extensions of physical infrastructures* the quest for decentralised solutions offering more autonomy and security is stronger.

In 2008, the Council Conclusions invited Member States and the Commission "*with respect to the IoT, [to] deepen the reflection on the development of decentralised architectures and promoting a shared and decentralised network governance*".

* *e.g. smart grids, smart cities, smart logistics, smart transport, smart road infrastructure.*

Gov 5: The European IoT Norm

By mandating European Standard Organisations (ESOs) to develop a **European Norm (EN) for IoT applications**, in combination with self- or co-regulation, EU IoT applications will be compliant with…

- the (future) IoT Recommendation (2013),
- the EU Norm (2014), and
- the legislative framework (revised Data Protection Directive)

… without the need for a specific IoT Directive or EU legislation.

IoT Governance Policy Options

- Binding law
- Self-regulation
- Co-regulation
- Standards
- 'Do nothing'

Likely outcome of the Impact Assessment:

An **EC Recommendation** based on a mix of self regulation (identification, architecture), co-regulation (e.g. privacy, ethics), and standardisation

Roadmap IoT recommendation

- **STEP 1 PUBLIC CONSULTATION AND IMPACT ASSESSMENT**
  - Today – 11/2011: Complete a draft paper
  - 1/12/2011 – 26/01/2012: Public consultation ('Your Voice in Europe')
  - 26/01/2012 – 26/07/2012: Impact assessment
- **STEP 2 FINALISE DRAFT VERSION**
  - 26/07/2012 - 4/10/2012:Consult the social partners
- **STEP 3 SUBMIT TO THE IMPACT ASSESSMENT BOARD**
  - 4/10/2012 – 29/11/2012: The IAB validates the impact assessment.
- **STEP 4 CONSULT THE COMMISSIONER**
  - 29/11/2012 – 27/12/2012: Agenda topic on official cabinet agenda
- **STEP 5 LAUNCH INTER-SERVICE CONSULTATION**
  - 27/12/2012 – 24/01/2013: Obtain agreement of DGs, EDPS, Art 29WP…
- **STEP 6 TRANSLATION**
  - 24/01/2013 – 21/02/2013: Translate in official EU languages
- **STEP 7 LAUNCH ADOPTION PROCEDURE**
  - 21/02/2013 – 7/03/2013: Written or Oral adoption procedure

EXPECTED DATE FOR ADOPTION: MARCH 3 2013

European Commission
Information Society and Media

Thank you

For more information on IoT and RFID visit the policy pages of the European Commission:

http://ec.europa.eu/information_society/policy/rfid/index_en.htm

Access to an extensive library, events, links and news section