RIPE NCC Update

Legislative and Political Developments that Affect the IoT Space

Marco Hogewoning | 23 November 2021 | RIPE 83 IoT WG

Happy Birthday!

"This list was created to facilitate the exchange of information concerning the Internet of Things, particularly as it may have impact on RIPE NCC, RIPE or our stakeholders' operations. The list is also a platform to inform each other about proceedings in other relevant standards bodies or governance structures, and may be used to discuss and formulate common positions amongst participants on IoT related topics."

IoT-Discussion list - 3 November 2016

RIPE 73
24 - 28 OCT 2016
MADRID, SPAIN

The RIPE NCC's Role in IoT?

- This talk is referred to as "Update from the RIPE NCC"

- A large part of the IoT can be seen as being on the "application layer"

  - Network and transport are only a very small part of the larger picture

- That doesn't mean we don't have a stake

  - IoT is often used in examples when arguing for changes in technology and governance

  - Security concerns are reflected in legislative proposals that also touch our space

  - IoT standardisation is done in various forms and venues

ITU Study Group 20

A Very Broad View of IoT

- ITU-T SG20 has focus on IoT and smart cities

  - Lots of ongoing work to specify requirements and architectural frameworks

    - Vehicles, buildings, VR control systems, UAVs and "Smart <X>"

    - Supporting technologies such as blockchain

  - Less talk about network and transport layers (IPv6 is gone)

    - Exception is LoraWAN, re-issued standard as ITU Recommendation Y.4480

- Main concern remains overlap and duplication

  - There is a need to harmonise, but often solutions are already deployed in the market

EU Legislation

Update: Radio Equipment Directive (RED)

- The Radio Equipment Directive (RED) applies to everything that has a radio on board and allows for further security requirements

  - EU Commission can add details via delegated acts and it just did…

- Expanding the security requirements to include:

  - "[…] any radio equipment that can communicate itself over the internet, whether it communicates directly or via any other equipment ('internet-connected radio equipment')."

  - "radio equipment designed or intended exclusively for childcare"

  - "designed or intended […] to be worn on, strapped to, or hung from any of the following: any part of the human body […] any clothing, including headwear, hand wear and footwear, which is worn by human beings"

RED: Recommended Next Steps

- It is a "delegated act", comes into force in two months unless there are major objections ("subject to scrutiny")

  - Date stamp: 29 October 2021

- The amended text will apply 30 months after its publication

- If you build things that have a radio and connect to the Internet:

  - Take a good look at C(2021)7672 final

  - Talk to your compliance experts about your obligations under RED

  - Keep in mind that importers or even retailers can also have obligations under RED

    - The entire value-chain is responsible

The Bigger Picture: Security

- The main political drivers are based on security (and privacy)

  - The solutions remain fairly broad and might not mention IoT

  - That doesn't mean it doesn't apply to you

- DSA/DMA/DGA all have implications for the IoT space

  - Definitions of platforms and service providers can cover IoT applications

  - IoT components like cloud infrastructure are an important subject

- Geopolitical security concerns

  - A lot of the focus is on where data is stored and who can access it

  - Concerns around backdoors and supply-chain reliability of components

DGA: Sharing and Interoperability

- A large part of the Data Governance Act (DGA) is about ensuring data can and will be shared

  - "[a] vision of a common European data space, a Single Market for data in which data could be used irrespective of its physical location of storage in the Union in compliance with applicable law."

- Mentions the need to re-use data that exists in the public domain or is kept by public sector bodies

  - Establishes a framework for sharing (commercially) confidential datasets

  - GDPR still applies, frameworks covers anonymising and pseudonymising data

- Proposal leaves room for third countries to join the framework

ePrivacy

- Update to current ePrivacy Directive

- Complements GDPR by defining which data is covered

- Points being debated:

  - Legal bases for processing content, metadata and data related to communications (e.g. metadata processing only with consent or other reasons)

  - Access to terminal equipment under certain circumstances

- Current status:

  - Negotiations between all three EU institutions finally taking place

  - Aim for agreement in first half of 2022

  - Grace period before coming into effect (two years proposed by the European Council)

BEREC

EU Regulatory Regimes

Network Termination Point

- "Who owns the modem?"

    - Is the end user allowed to bring their own?

- The legislation is a bit ambiguous on it

    - Individual member states have different implementations

- BEREC produced guidelines in 2020 to support alignment

- BEREC planning to evaluate "end user rights" in Q4 2022

Adequate Broadband Access?

- The European Electronic Communications Code (EECC) has provisions that require member states to set and monitor minimum standards for Internet access (bandwidth, price)

  - "[…] a view to ensuring the bandwidth necessary for social and economic participation in society."

- Planning a report on best practices and suitability of the criteria

- Maybe question if bandwidth should be the only requirement?

The Internet Ecosystem (Value Chain)

- Traditionally BEREC focusses on the network layer and access

  - In reality the user depends on a lot more, e.g. applications and app stores

- BEREC planning a report to map out the bigger picture:

  - "The aim of this Report is to provide a comprehensive view of the internet ecosystem beyond the network layers and the ECSs supporting internet access. More specifically, BEREC will identify the type of actors representing a relevant gateway to information and services (e.g. potential gatekeepers), the bottlenecks and barriers to entry on specific elements, as well as the interactions between different elements within the internet ecosystem and how they economically and technically affect each other, as well as other users and actors. BEREC will take a general, holistic approach in this exercise."

- "Gatekeeper" is the word to watch, also in relation to DSA/DMA

Other Countries?

Aligning In a Scattered landscape

- A lot of focus is on EU-27 and their legal frameworks

  - A large and significant part of the global market

  - EU also sees a role to set global standards and enforce their norms

- Other countries cooperate but to a lesser extent

  - It becomes incredibly hard to keep track of 190+ countries

- Many countries seeking international standards

  - A lot of focus is on ITU to bring alignment via policy and standards

- Is there a role for this community?

  - Act as a point to collect information and experiences?

  - Potentially steering alignment via publications, e.g. best practice

Questions ?

marcoh@ripe.net