



BEREC Workshop on “Enabling the Internet of Things”

Panel 3 – Scarce resources –

Stefano Nicoletti

GSMA IoT regulation expert

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MOBILE CONNECTIONS
WORLDWIDE



GSMA Connected Living main initiatives

Mobile IoT

Accelerate availability of LPWA solutions in licensed spectrum (EC-GSM-IoT, LTE M, NB-IoT)



Remote SIM Provisioning

Implement a single, robust and interoperable global remote SIM specification for M2M devices



IoT Big Data

Establish harmonised data sets to simplify the development and encourage growth of IoT big data solutions



IoT Security

Help IoT Ecosystem providers to protect themselves from cybersecurity threats



Industry engagement

Drive adoption in Smart cities, health and automotive

IoT Business Enablers

Enable operators to capture the Internet of Things opportunity, by fostering relevant, flexible and technology-neutral policies and regulation





IOT has a global dimension: GSMA engagements

US

- NTIA Consultation
- Dep. of commerce

Europe

- BEREC consultation
- CEPT on Numbering / and Embedded SIM
- EU commission – Electronic comms. code
- EU commission - eCall

Asia

- IDA Singapore
- Korea, Malaysia capacity building

CITEL

- Ongoing engagement
- IoT principles

India

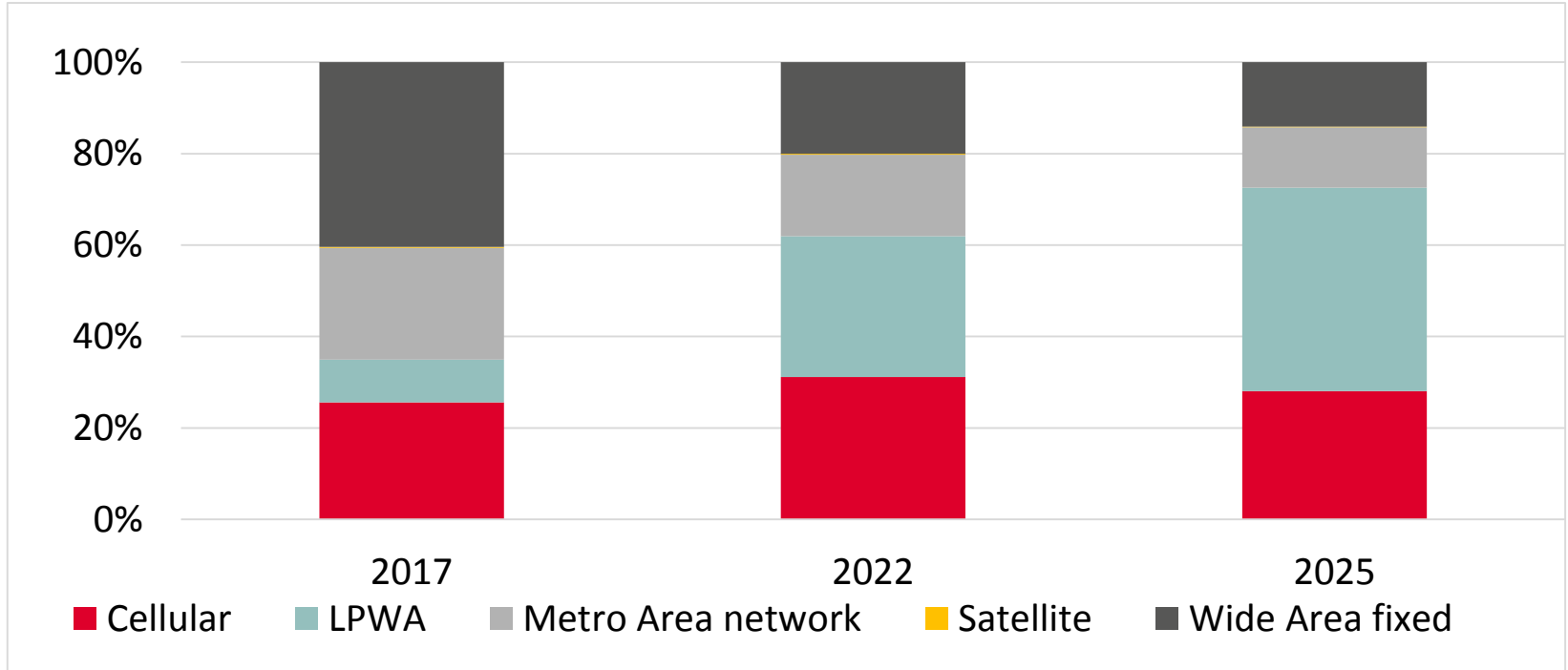
- Ministry M2M registration guidelines
- Regulator consultation

Brazil

- Ministry consultation on IoT
- M2M chamber



Wide Area IoT by network connectivity technology in EU 28 - Forecasts





BEREC's "Enabling the IoT" consultation

✓ BEREC recognizes fundamental differences between IoT and traditional telco

- | | | |
|-------------|---|---|
| ▪ Numbering | → | Flexibility: global & extra-territorial resources are key |
| ▪ Roaming | → | Viable model supporting IoT growth |
| ▪ Switching | → | Takes into account specific IoT context |
| ▪ Privacy | → | Promote consistent approach across IoT players |



□ Numbering

1. **EU specific numbers for IoT:** Remember M2M/IoT is global
2. **MNC policy:** assigning MNCs to non- telco presents many complexities,
 - GSMA remote SIM provisioning offers same advantages



Mobile IoT : 3GPP standard technology for LPWA



Choice of Technologies	Key Features	Key Benefits
LTE M	Low Cost Module	3GPP Standards
NB-IoT	Better Coverage	Global Coverage
EC-GSM-IoT	Long Battery Life	Secure
	Low data needs	Scalable
	2-ways communication	



23 Mobile IoT Pilot → Showcases at MWC 2017 → Already commercially available



Spectrum for IoT – four key points

1. **Licensed spectrum:** higher QoS and long term investment
2. Adopt **service/technology neutral** frameworks
3. Current and future mobile licensed bands can be employed to **support IoT as well as personal mobile services**
4. Promote international **spectrum harmonisation**. This is vital for a global, affordable cellular IoT market





Thank you !





Appendix





Remote SIM Provisioning for IoT

REMOTE SIM PROVISIONING FOR M2M READY FOR COMMERCIAL DEPLOYMENT

- Technical specification v3.1 released in May 2016.
- Compliance specification released in May 2016.
- Compliance program with GlobalPlatform launched in June 2016.
- Secure Accreditation Scheme specification available
- eUICC Protection Profile available and approved by BSI

GSMA PROVIDES TOOLS AND SUPPORT TO ENSURE INTEROPERABILITY AND CONFIDENCE TO THE ECOSYSTEM

- Embedded SIM Portability Proof of Concept and Business processes.
- Embedded SIM Compliance Scheme

