## Numbering, Naming, Addressing and Identification

Session 4: Numbering, Addressing and Identification

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### Numbering, Naming, Addressing and Identification – The subjects

- Naming, Numbering, Addressing and Identification
  - Naming, Numbering, Addressing and Identification of IoT (SGs 2 and 20)
  - Future of numbering and identification (SGs 2, 13, 17, 20)
  - Countering and Combatting Naming, Numbering, Addressing and Identification misuse
  - Future requirements of the governance of directly assigned global numbering, naming, addressing and identification resources by ITU TSB
  - continue to discuss potential telecom finance and anti-fraud topics, in collaboration with other SG's, organizations, and SDO's
- IMT-2020/5G systems:
  - Network management and operational aspects (SG2)
  - E.212 MNC evaluation and need for IMT-2020/5G systems
  - E.118 IIN/GSMA EID evaluation and need for IMT-2020/5G systems



### Naming, Numbering, Addressing and Identification of IoT

- Current Activity
  - Work Item on E.NNAI IoT in progress (e.g. re-allocate CC 878 for IoT/M2M purpose)
  - NCT seeing demand for directly assigned global resources
    - Increase in associates membership
  - Evolving NNAI Recs as required to meet demand for global resources
    - Requests are currently basis for use cases
  - Liaising with SG20 awaiting use cases
- Strategy
  - General Authorisation regime to allocate global (direct) resources for IoT?
  - ISO, GSMA as well as ITU-T SG20



#### Future of numbering and identification

- Current Status
  - Agreed new work items on OTT
  - Clarifying work on impermissible traffic
  - Agreed new uses of IMSI (E.212 MNCs)
    - Product's
    - SDO's
- Strategy
  - Respond to members' requirements
  - Reflect in questions
  - Define relevant services
  - Liaise with other SG's (11, 13, 16, 17 and 20) and SDO's (ISO, IETF and GSMA)



### Countering and Combatting Naming, Numbering, Addressing and Identification misuse

- Current activity
  - Progressing E.156 Reports of Misuse
    - Separating direct and indirect allocation of resources
  - Progressing work on Calling Party Number Delivery (E.157)
  - Reflect unilateral action taken by Members
    - Uganda regulatory
    - UK numbering
    - US FCC actions
  - NWI on Spoofing
- Strategy
  - Report and actions to reflect direct and indirect reporting
  - Maintain links with GSMA and other organisations
  - Member states to be directly contactable for indirect resources
  - Raise awareness of the Operational Bulletin



# Future requirements of the governance of directly assigned numbering, naming, addressing and identification resources by ITU TSB

- Current Status
  - Specific assignment criteria for global assignments of E.118
  - eSIM
  - Current focus on known identifiers are all identifiers covered?
- Strategy
  - General principles?
  - Cost recovery?
  - NNAI independent?



#### Telecom finance and anti-fraud management

- Current status
  - Common requirement to define fraud
    - Operational management
    - Used in Numbers
    - Make combatting Fraud central to Telecom Finance
  - Use in ITU-T E.157
  - Still a hot issue running into millions
- Strategy
  - continue to discuss potential telecom finance and anti-fraud aspects, in collaboration with other SG's, organizations, and SDO's
  - Continue to define telecom fraud use cases
  - Outreach to other organisations and SDO's

