No Harm To Network Verification **Testing Adapted to Use Case**

- Verification of Telekom requirements "No Harm to Network for IoT Device Applications" for devices not implementing RPM as described in GSMA document TS.34 "IoT Device Connection Efficiency Guidelines"
- Requires 6 samples plus access to IoT service application platform
- Requirements tested:
- Avoidance of Synchronized behaviour
- Use of Always on connectivity
- Handling of "Keep Alive" messages on Home network
- Handling of "Keep Alive" messages on Roaming network
- IOT service coordination
- Data Aggregation, Compression and Transcoding
- Frequency and prioritization of data Transmissions
- Off-peak communication
- Localized communication
- Adaptation to Mobile network capabilities, data speed and Latency
- Low Power mode
- Behavior when IoT Service Platform is temporarily Unreachable or Offline

- Behavior when Coverage Lost (GPS, GLONASS, LAN, WAN)
- Behavior when Sensors / Actuators Malfunction
- Behavior when Sensor Alarms / Actuators Triggered
- Behavior when Battery Power is Low or Power Failure Occurs
- Behavior when Device Memory Full
- Behavior when Communication Requests Fail
- Behavior when Device-Originated SMS are Barred
- Reselection of Radio Access Technology Bearers
- Mass Deployments of IoT Devices
- Handling Loss of Service on Roaming Network
- IPv4/v6 Dual Stack Support
- Device Reset to Factory Settings
- Device Time Resynchronization



