SCHC over LoRaWAN

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Where to contribute

- Github: https://github.com/Acklio/schc-over-lorawan
SCHC

• Header compression and fragmentation mechanism for LPWANs
• Uses a static context known in advance to both sender and receiver
• Includes fragmentation mechanisms
• Misses technology specific parameters
LoRaWAN

• One of the technologies identified in the WG charter
• Variable payload size
• Three device classes
Draft goal

• Provides the missing information from the generic SCHC definition
  – timers and max retries count
  – ruleID size and placement
  – fragmentation parameters
  – MIC algorithm
  – others
Draft structure

- Introduction
- Terminology and terminology mapping
- SCHC short overview
- LoRaWAN short overview
Draft structure cont'd

• SCHC
  – ruleID
  – IID computation

• Fragmentation
  – Reliability options
  – Supporting multiple window sizes
  – Downlink fragment transmission
  – Devices in class A, B and C
Draft structure cont'd

• Fragmentation cont'd
  – Variable payload size implications
  – Timers and max retries count
  – MIC computation algorithm
Implementations

• **Acklio** proprietary implementation
• **IMT Atlantique** open source implementation
• Others?
Is this the right WG?

• Discussion
Questions and Answers