

SCHC over LoRaWAN

Authors:

Ivaylo PETROV ivaylo@ackl.io

Alper YEGIN alper.yegin@actility.com

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

