draft-ietf-lpwan-schc-over-sigfox-03

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PySCHC Implementation

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Updates

• Hackathon: Off-line coding between UChile and UPC
  • ACK-on-Error, No-ACK...

• Last draft updates (rev 02, 03)
  • Added more details about **ACK-on-Error data fragmentation and integrity mode** implementation
  • Update references and terminology to match RFC 8724
  • Usage of [Sigfox Sequence #] on SCHC Receiver to optimize SCHC ACK transmissions in ACK-on-Error (e.g. All-1 fragment)
  • Added recommendation for No-ACK usage (see next slides)
Testing Network Architecture

- PySCHC SW
- Pycom (LoPy4)
- Sigfox Network
- Google Cloud *

* [https://cloud.google.com/community/tutorials/sigfox-gw](https://cloud.google.com/community/tutorials/sigfox-gw)
No-ACK

- Recommendation to use FCN to indicate size of packet:
  - In combination with [Sigfox Sequence #], this allows implicit indication about expected # of fragments and/or size of packet
  - Network can induce whether all fragments have been received or not
Next Steps

• Interoperability tests between PySCHC and other implementations should also help defining protocol parameters
  • Planned for upcoming IETF Hackathons:
  • IETF Bangkok? – TBD at the moment

• Continue fine-tuning of:
  • Timers
  • SCHC Header fields (Rules, DTag, etc.)