LPWAN WG

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Interim, February 18th, 2021  Webex
Note Well

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)

https://www.ietf.org/privacy-policy/ (Privacy Policy)
Reminder:

Minutes are taken *
This meeting might be recorded **
Presence is logged ***

* Please contribute to the minutes at: https://codimd.ietf.org/notes-ietf-interim-2021-lpwan-04-lpwan
** Recordings and Minutes are public and may be subject to discovery in the event of litigation.
*** From the Webex login
Agenda bashing

[16:00] Administrivia [10min]
  o Note-Well, Scribes, Agenda Bashing
  o WG Status, IETF 110 Agenda

[16:10] SCHC Architecture [15min]
[16:25] Data Model for SCHC [20min]
[16:45] AOB [QS]
# WG Status

<table>
<thead>
<tr>
<th>Month</th>
<th>Task</th>
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</thead>
<tbody>
<tr>
<td>May 2020</td>
<td>Perform SCHC Maintenance, including enabling SCHC mechanisms for Upper layer Protocols</td>
</tr>
<tr>
<td>Dec 2020</td>
<td>Produce Standard Track documents to apply SCHC IPv6/UDP over the baseline technologies</td>
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<tr>
<td>Feb 2021</td>
<td>Produce a Standards Track document to define the generic data models to formalize the compression and fragmentation contexts for LPWANs</td>
</tr>
<tr>
<td>Jul 2021</td>
<td>Produce a Standards Track document to enable operations, administration and maintenance (OAM) to the LPWAN device, including support for delayed or proxied liveness verification (Ping)</td>
</tr>
<tr>
<td>Oct 2021</td>
<td>SCHC o SigFox - Waiting accept</td>
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<tr>
<td>Feb 2022</td>
<td>SCHC o NBIOT - Waiting accept</td>
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## Document advancement

### Active Internet-Drafts (5 hits)

<table>
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<th>Draft</th>
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<tr>
<td>draft-ietf-lpwan-ecoap-static-context-hc-18</td>
<td>LPWAN Static Context Header Compression (SCHC) for CoAP</td>
<td>2021-01-21</td>
<td>54 pages</td>
<td>IESG Evaluation::AD Followup, Submitted to IESG for Publication: Proposed Standard Reviews: genart, iodir, opsdir, secdir, tsvart</td>
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<tr>
<td>draft-ietf-lpwan-schc-over-lorawan-14</td>
<td>Static Context Header Compression (SCHC) over LoRaWAN</td>
<td>2021-01-25</td>
<td>28 pages</td>
<td>RFC Ed Queue: EDIT for 22 days, Submitted to IESG for Publication: Proposed Standard Reviews: genart, iodir, opsdir, tsvart</td>
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<td>draft-ietf-lpwan-schc-over-nbiot-04</td>
<td>SCHC over NB-IoT</td>
<td>2021-01-19</td>
<td>22 pages</td>
<td>I-D Exists, WG Document Feb 2022</td>
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<td>draft-ietf-lpwan-schc-over-sigfox-04</td>
<td>SCHC over Sigfox LPWAN</td>
<td>2020-11-02</td>
<td>14 pages</td>
<td>I-D Exists, WG Document Oct 2021</td>
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<td>draft-ietf-lpwan-schc-yang-data-model-04</td>
<td>Data Model for Static Context Header Compression (SCHC)</td>
<td>2021-02-02</td>
<td>42 pages</td>
<td>I-D Exists, WG Document Reviews: yangdoctors</td>
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### RFCs (2 hits)

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<tr>
<td>8576</td>
<td>Low-Power Wide Area Network (LPWAN) Overview</td>
<td>2018-05</td>
<td>45 pages</td>
<td>Informational RFC</td>
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### Related Internet-Drafts (2 hits)

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<tr>
<td>draft-barthel-lpwan-oam-schc-02</td>
<td>OAM for LPWAN using Static Context Header Compression (SCHC)</td>
<td>2020-11-02</td>
<td>14 pages</td>
<td>I-D Exists</td>
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<tr>
<td>draft-pelow-lpwan-architecture-00</td>
<td>Static Context Header Compression (SCHC) Architecture</td>
<td>2021-01-19</td>
<td>6 pages</td>
<td>I-D Exists</td>
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Action items

• Change the NBIOT target date to early 2022 => Done
• Find 3GPP assistance for Ana on NBIOT (Eric + Pascal) on hold => Edgar is back
• Laurent to refresh the model draft and the chairs to ask to an early review by YANG Doctors via datatracker => done
• Laurent to send a doodle on the ML to choose a time for a session on YANG -> doodle created https://doodle.com/poll/tz69qbvk2eqnmyam?utm_source=poll&utm_medium=link
IETF 110

• Call for agenda items

• We have one hour
  – 15:30-16:30 CET / Wednesday 10th, Session II

• Usual suspects
  – Architecture, OAM, Data Model
draft-pelov-lpwan-architecture

Alexnader Pelov
Pascal Thubert
Ana Minaburo

Interim, February 18th 2021
# Table of Contents

1. Introduction .................................................. 2  
2. Definitions ..................................................... 3  
3. Global architecture ............................. 3  
   - Define device / NGW vs. Peer routers (for PPPoE)  
   - References RFC 8376 and discusses constraints  
   - References RFC 8724 Positions SCHC C/D endpoints (layers)  
4. Data management ................................. 4  
   - Introduces Yang data model  
   - Discusses rule creation and update  
   - Discusses rule installation and discovery
• Thanks, Olivier, for the comments!
SCHC Architecture

Device
Application

End-Device

Network
Application

Application
Server
SCHC Architecture

Radio Gateways (RGW)
SCHC Architecture

Network Gateway (NGW)
SCHC Architecture

RGW

NGW

IP

SCHC Gateway

AAA
Perf
Mgmt
SCHC Architecture

RGW

NGW

IP/UDP/CoAP

IP

SCHC Gateway

AAA Perf Mgmt
SCHC Architecture

SCHC Gateway

Rule Manager
SCHC CDFR
Rules

IP

CORECONF

AAA  Perf  Mgmt
SCHC Architecture

- Rule Manager
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- Rules

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Perf
Mgmt

CORECONF

SCHC Gateway
AOB ?