

# draft-ietf-lpwan-coap-static-context- hc-15

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# Status

- IESG State: 1 Discussion. Enough positions to pass once DISCUSS position is resolved
- Reviews:
  - SECDIR: Discuss + Nits
  - genart, iotdir, opsdir, tsvalt: No Objection
- Thank you to the reviewers for their valuable inputs

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# Changes from v13 to v15

- Section 2. Applying SCHC to CoAP headers
  - Figure 1 has been divided in 3 different scenarios.

Figure1. C/D at the LPWAN boundaries

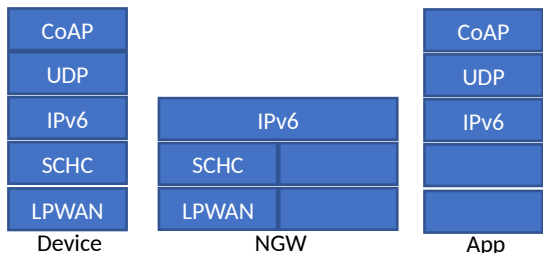


Figure2. Standalone CoAP End-to-End C/D

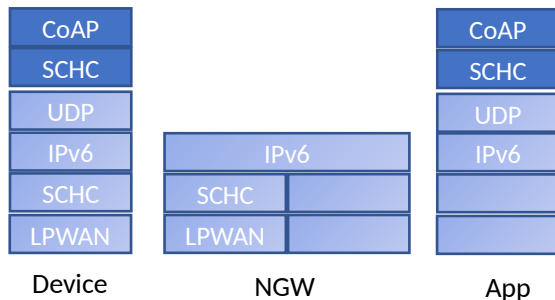
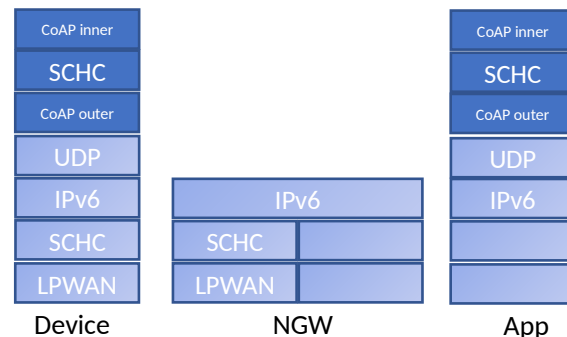


Figure3. OSCORE C/D



# Changes from v13 to v15

- Section 4. Compression of CoAP header fields
  - Eliminate the unidirectional/bidirectional confusion

Rule 8724

FID	FL	FP	DI	TV	MO	CDA	Sent bits
CoAP version	2	1	bi	01	equal	Not-sent	
CoAP Type	2	1	up	0	equal	Not-sent	
...							
CoAP URI-Path	var	1	up	temperature	equal	Not-sent	
CoAP Uri-Path	var	1	dwn	0: update 1: inventory 2: password	Match-mapping	Mapping-sent	2

# Changes from v13 to v15

- Section 5. Options

- Defined the solution for the any option
  - Options are defined with the D-T L V format
  - Any option with this format definition could be compress with SCHC
    - D-T => Field ID
    - L => Field length
    - V => Target value

- Section 9. Security

- Improvements on this section
  - Security of RFC8724 applies when LPWAN is used
  - Security of RFC8613 applies when using OSCORE
  - DoS attacks are possible causing excessive resource consumption
  - SCHC may avoid some of those attacks because the length sent is the one of the compressed header and not the one of the original header.
  - The size of the IV for OSCORE has been rewritten. The size has an impact on the frequency the key is renewed.

# To solve: Discussion – v16

- Section 2. Applying SCHC to CoAP headers
  - Difficult to follow, more explanation
  - Put the difference between dashed and dot lines
- Section 3.1 Remain talking about unidirectional and bidirectional
  - Update this section and explain how SCHC works on defining the description of each field
- Section 5. CoAP Options
  - Reflect the Options compression and How to address future options? (explained before)
- Section 9. Security Considerations
  - Add the inputs from Benjamin DISCUSSION

# Thank you

- Questions?