IPDVB WG Meeting (IETF-66) - Montreal

draft-cruickshank-ipdvb-sec-02.txt

Security Extension for ULE

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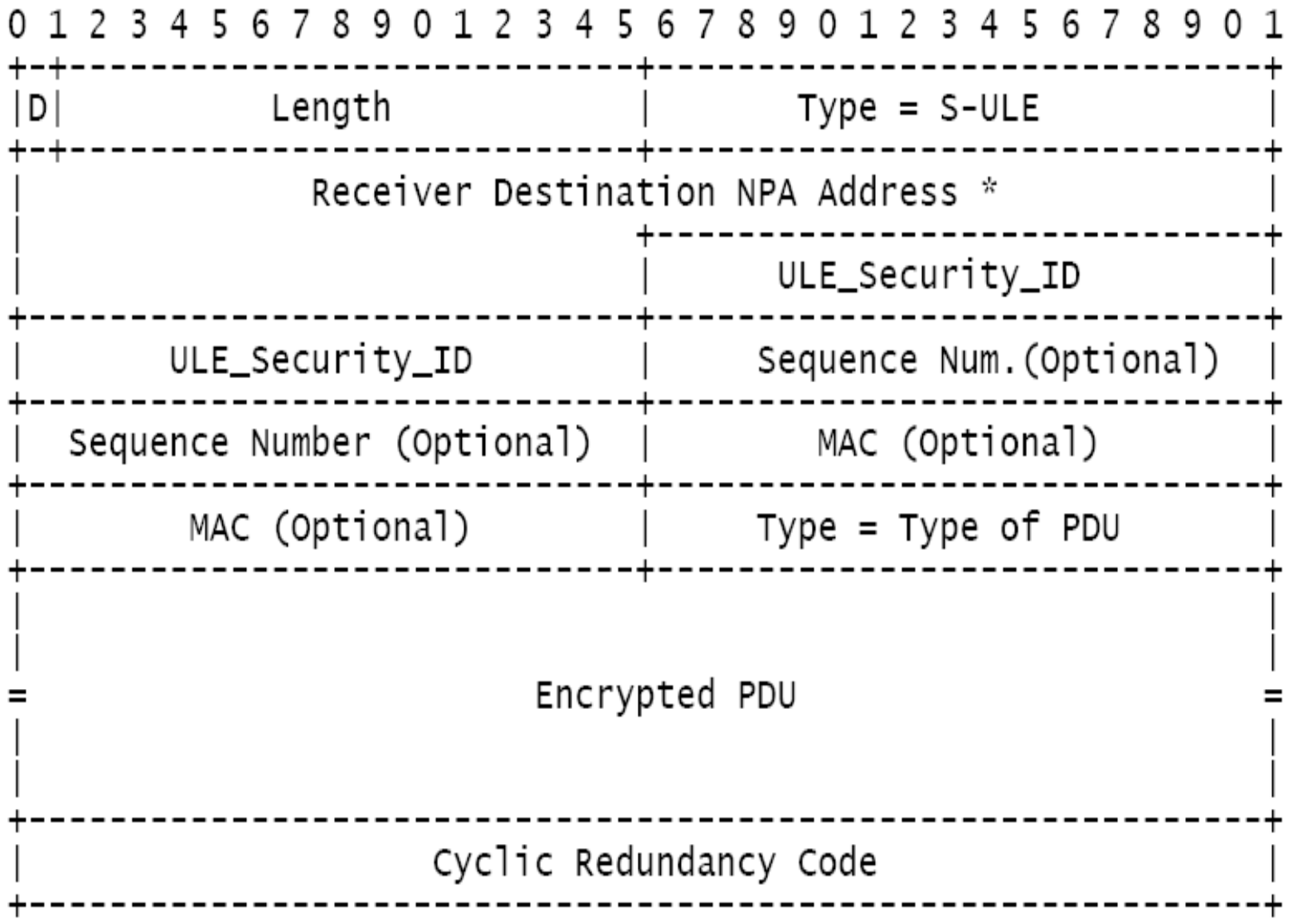
Draft status - 1

- Document describes the extension format for ULE that secures the IP traffic/Bridged Ethernet frames transported using ULE
- Based on the security requirements ID
  - draft-cruickshank-ipdvb-sec-req-02.txt
- Describes processing of security extension header at ULE Encapsulator and Receiver.

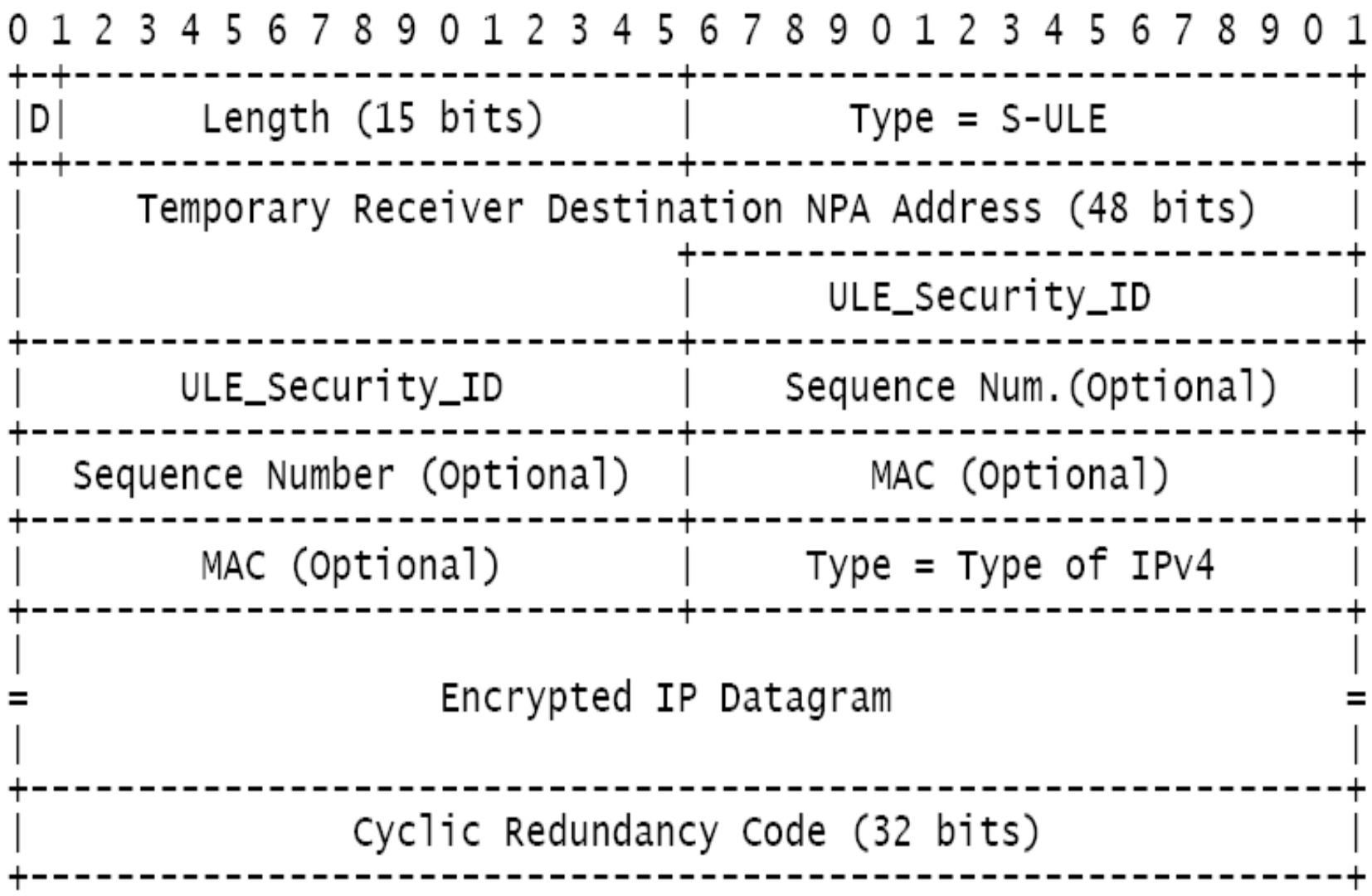
Draft status - 2

- It uses a subset of standard IPsec databases entities (SPD and SAD). A new entry is needed:
  - Network Point of Attachment (NPA): An address may identify individual Receivers or groups of Receivers
- Key management alternatives:
  - Network layer: Existing key management systems can be used such as the MSEC key exchange protocols, GDOI and GSAKMP. The format of the ULE-SID will be identical to the security association as defined in GDOI or GSAKMP.
  - Other key management systems such as link layer systems (e.g. DVB-RCS)

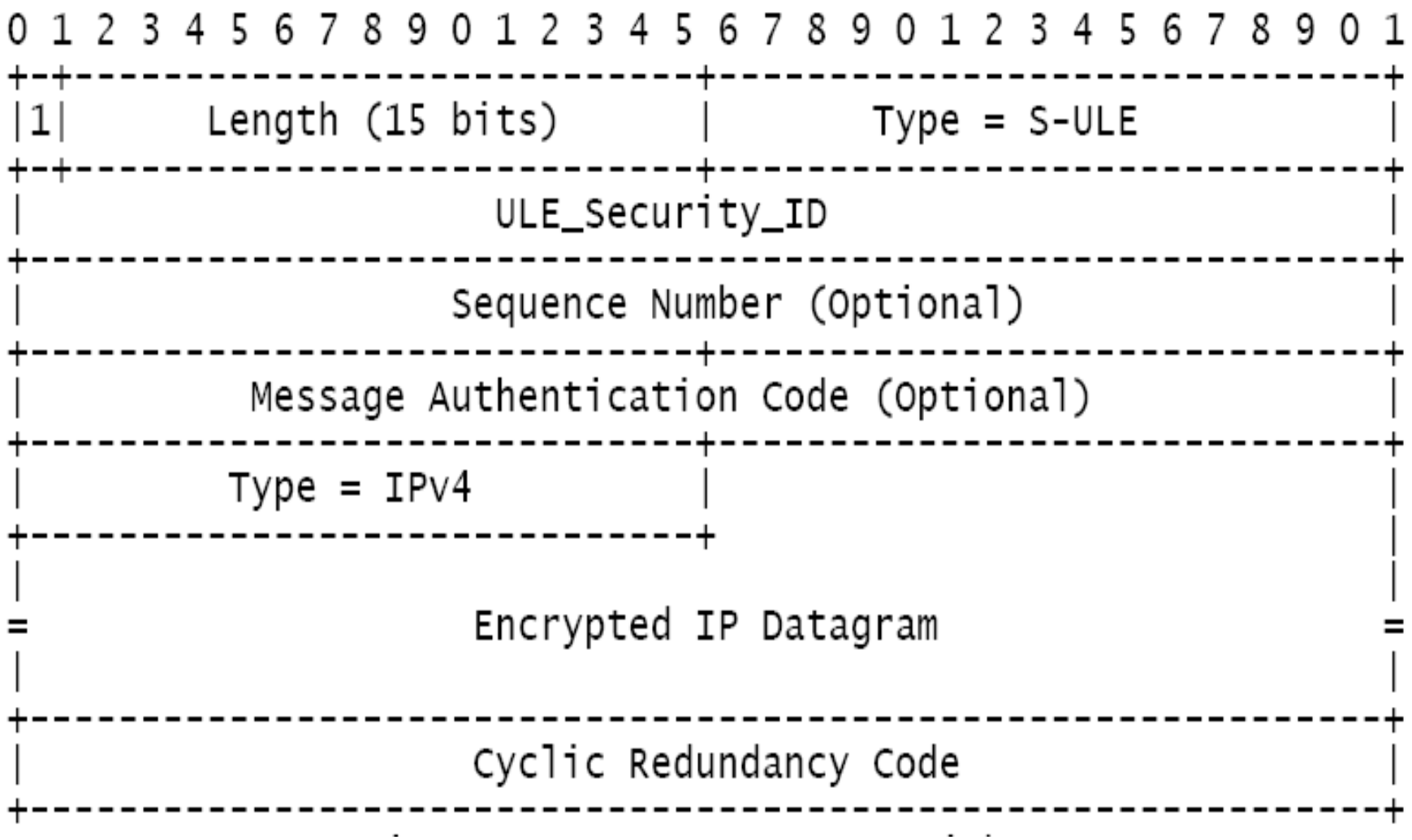
General SNDU format with Security



Detailed Secure ULE SNDU format with D=0



Detailed Secure ULE SNDU format with D=1



Discussions on the ipdvb mailing list

- George Gross:
  - It fits the requirements ID
  - More detailed description of ULE-SPD
  - Security protections for the inverse SNDU traffic flow
  - Multiple sender issues
  - Tesla for source authentication

Future plans

- Incorporate all comments to a new draft:
  - Hopefully this work will be adopted as work item for ipdvb WG
  - Produce new draft within a month.
- Implement this work by the end of year by:
  - The authors
  - Collaboration with other ipdvb WG members