Transmission of IPv6 Packets over Near Field Communication

draft-ietf-6lo-nfc-09

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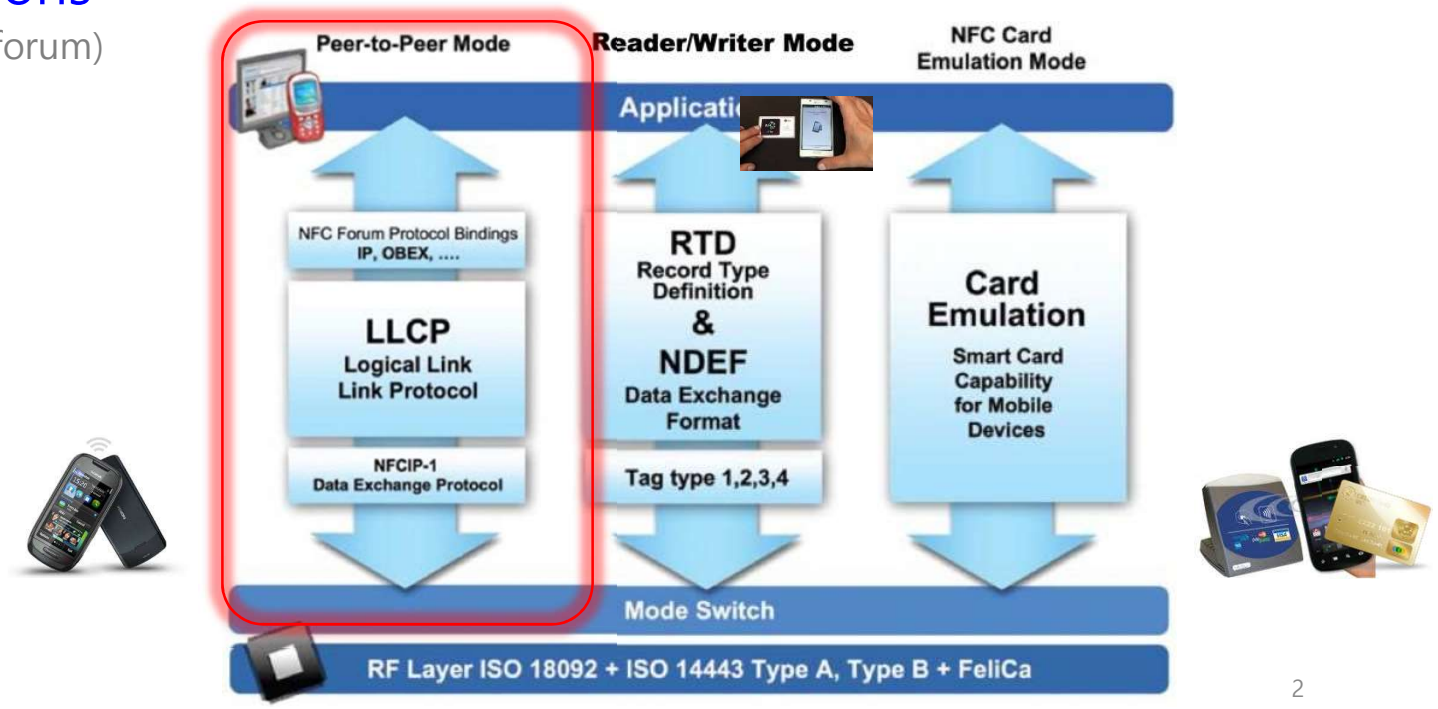
What is Near Field Communication (NFC) ?

- NFC technology enables (Source: NFC Forum)
  - simple and safe two-way interactions between electronic devices, allowing consumers to perform contactless transactions, access digital content, and connect electronic devices with a single touch.
- NFC Functions

(Source: NFC forum)



History and Status

- **WG document: draft-ietf-6lo-nfc-00** (Mar 03, 2015)
  - Update Stateless address autoconfiguration (RFC7136)

- **1st ~ 8th Revision**
  - **draft-ietf-6lo-nfc-01** (July 05, 2015)
    - MAC PDU size and MTU
    - SLAAC and IPv6 link local address
    - Fragmentation and Reassembly
  - **draft-ietf-6lo-nfc-02** (Oct. 17, 2015) @Buenos Aires, AR
    - Dispatch Header (added)
    - Header Compression (modified for GHC)
  - **draft-ietf-6lo-nfc-03** (Apr. 07, 2016) @Berlin, DE
    - Some typos fixed
    - Section 7. Security Considerations
  - **draft-ietf-6lo-nfc-04** (Jul. 08, 2016)
    - NFC FAR-related sentence updated
    - Related to "multi-hop topologies"
  - **draft-ietf-6lo-nfc-05** (Oct. 11, 2016) @Seoul, KR
    - Feedback from NFC forum
    - IID generation (feedback from Dave)
  - **draft-ietf-6lo-nfc-06** (Mar. 7, 2017) @Chicago, US
    - IID generation (2nd rev.)
  - **draft-ietf-6lo-nfc-07, -08** (Nov. 11, 2017) @Singapore, SG
    - IID generation (4th rev.) ->RFC7217
    - Neighbor Discovery -> Reworded

- 9th Rev.: **draft-ietf-6lo-nfc-09** (published in Jan. 2018)
  - About ND issue ..

- In WG Last Call (Mar. 6, 2018~)

Update since the IETF100

- Neighbor Discovery (Sec. 4.5)
  (additional feedback from Pascal Thubert, @IETF100)

o When two or more NFC 6LNs meet, there MAY be two cases. One is that they meet with multi-hop connections, and the other is that they meet within a sigle hop range (e.g., isolated network). In a case of multi-hops, all of 6LNs, which have two or more connections with different neighbors, MAY be a router for 6LR/6LBR. In a case that they meet within a single hop and they have the same properties, any of them can be a router. Unless they are the same (e.g., different MTU, level of remaining energy, connectivity, etc.), a performance-outstanding device can become a router. Also, they MAY deliver their own information (e.g., MTU and energy level, etc.) to neighbors with NFC LLCP protocols during connection initialization.

Next Step

- History of Document Review for WGLC
  - 1st review (by Dave Thaler, Sep. 2016)
    - Editorial updates for the whole document
    - Security issue for IID generation of NFC

  → Resolved by ver. (-06)
  - 2nd review (by James Woodyett & Pascal Thubert, Jun. 2017)
    - issue of F( ) for NFC IID generation (RFC7217)
    - ND issue

  → Resolved by ver. (-07) & (-08)
  - 3rd review (by Pascal Thubert, Nov. 2017)
    - ND issue

  → Resolved by ver. (-09)

- In WG Last Call (Mar. 6, 2018 ~)