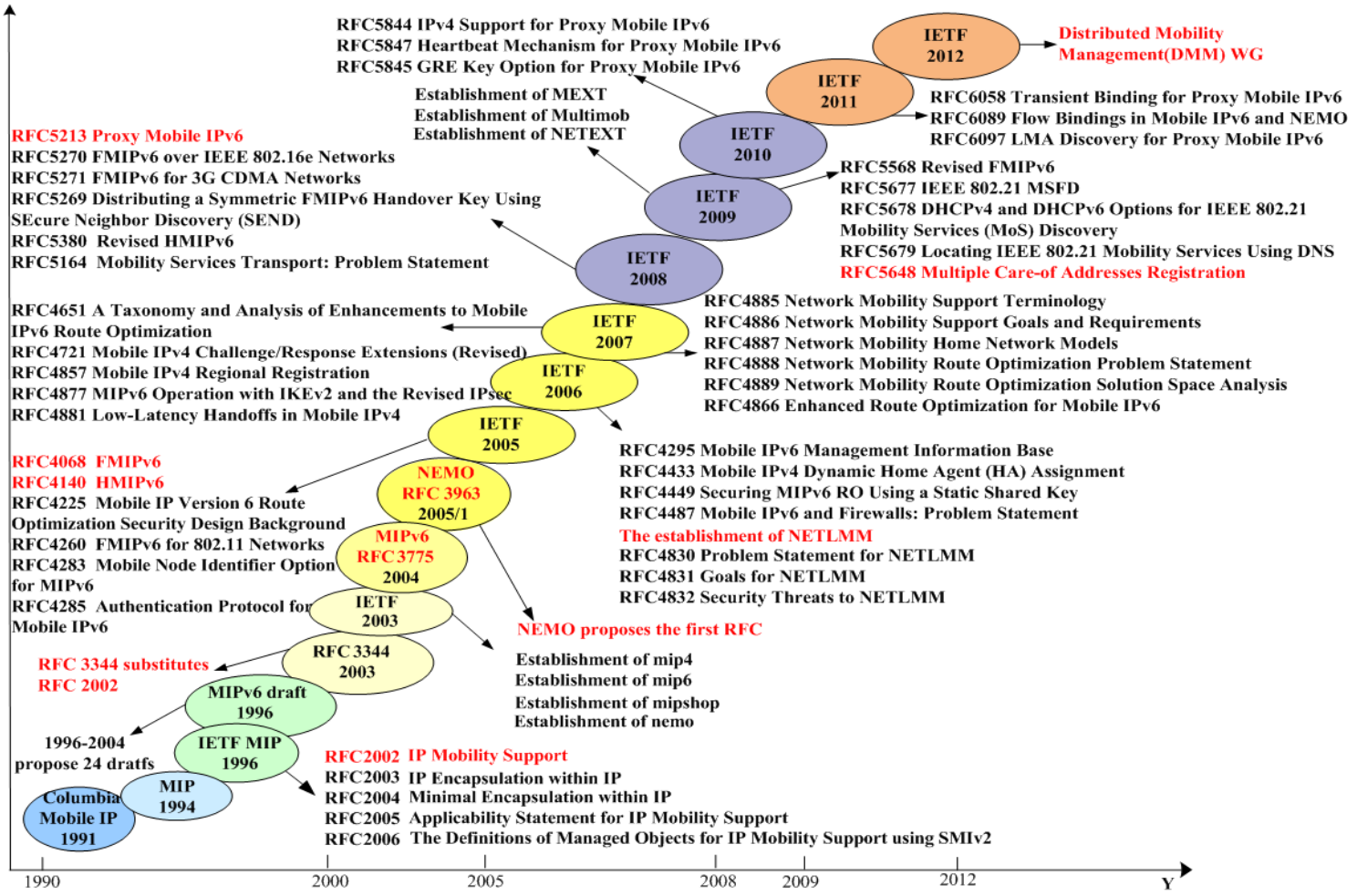
Mobility Ability Negotiation

draft-yan-dmm-man-00

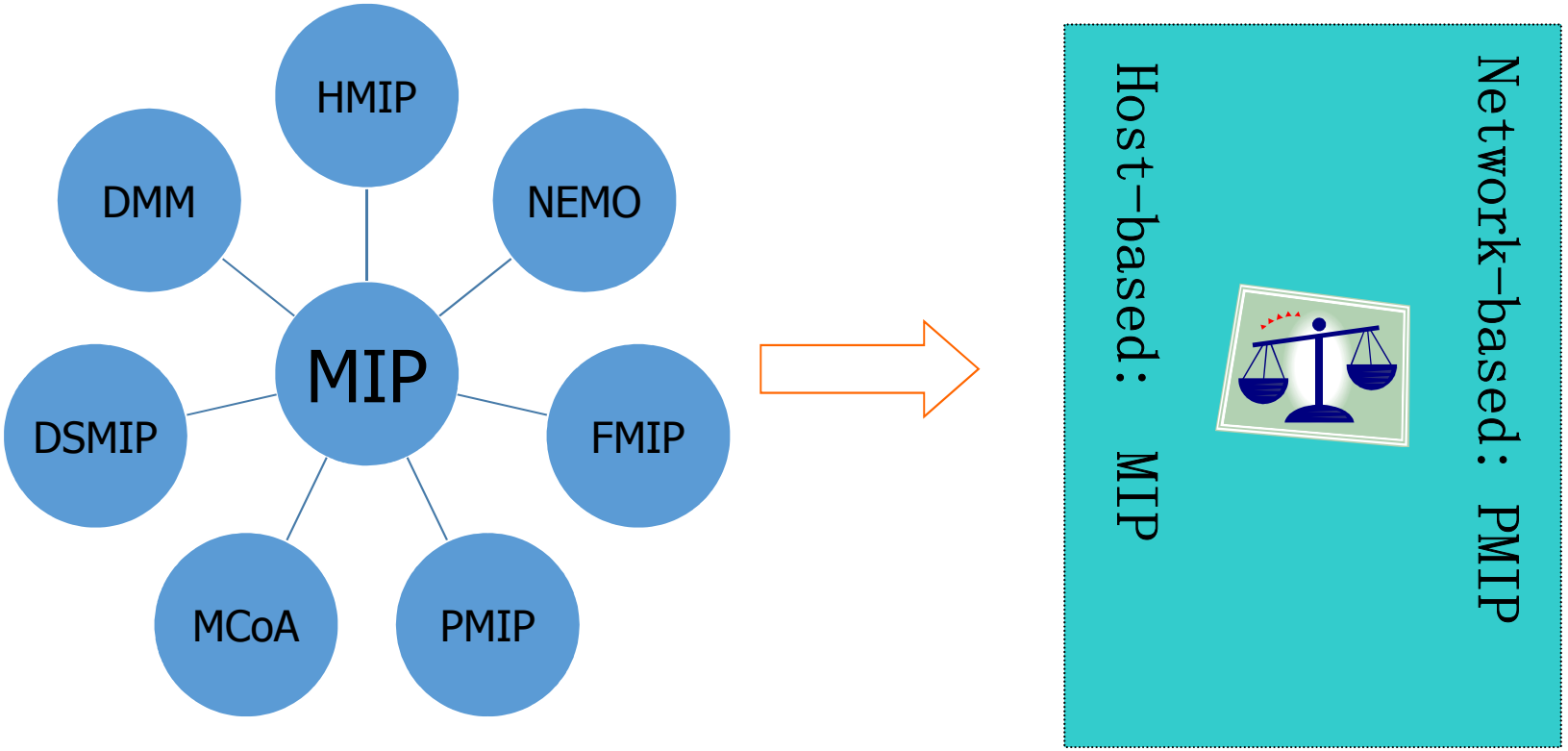
Z. Yan and J. Lee

@IETF 98

IP mobility management related~



Two categories



Problems

- Protocols will co-exist
- Multiple protocol daemons have to be managed

- Negotiation and selection of mobility management protocol
  - when the terminal accesses a new network for the first time
  - or when handover happens

More…

- **Protocol co-existence**
  - What is the co-existence architecture?
    - How to manage the binding tables?
    - How to handle different signaling messages for different protocols?
    - How to manage the routing table and tunnels?

- **Protocol negotiation**
    - Which entity will initiate the procedure?
    - What principles should be followed?

Example scenarios

- Network supports MIPv6, host only works with PMIPv6 ☹
- Network supports both MIPv6 and PMIPv6, host only works with PMIPv6 ☺
- Network supports both MIPv6 and PMIPv6, host only works with PMIPv6 😐
- Network and host support multiple extended protocols 😐
- ……

MAN-Mobility Ability Negotiation

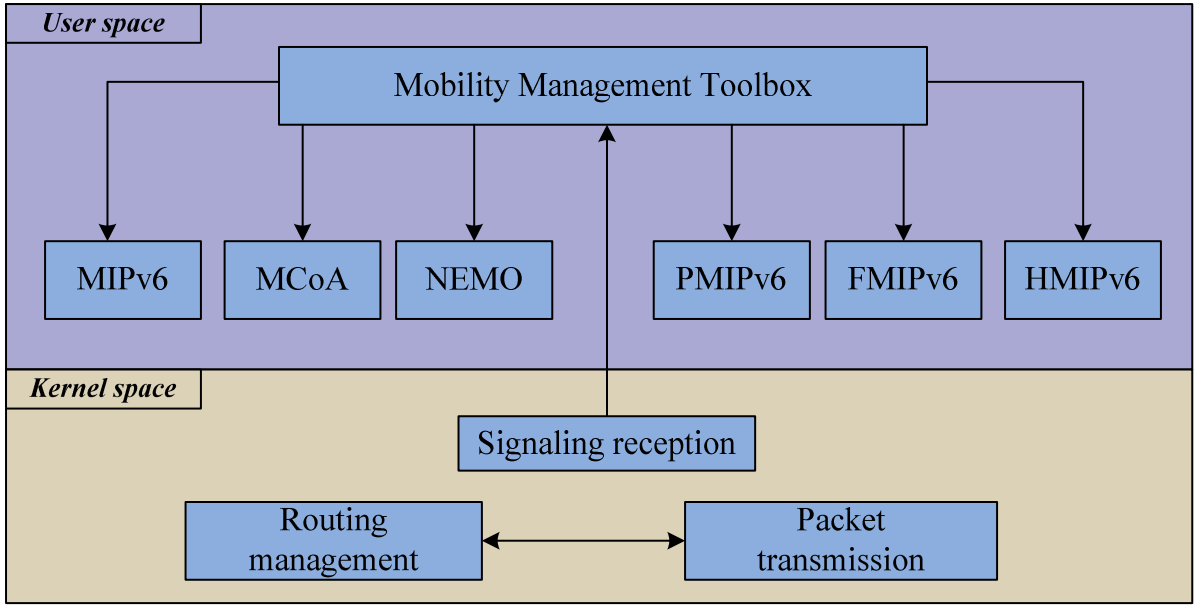
- **Principles:**
  - During initiation, PMIPv6 may be used as a default mobility management protocol once the network supports it.
  - If the host prefers host-based scheme, a negotiation is executed to handover from PMIPv6 to MIPv6 style.
  - After initial attachment, a profile will be generated in the management store to record the selected protocol of this host.
  - When the handover happens, the network will check the selected protocol during the access/authentication process.
  - But the network also needs to notify the host if the selected protocol cannot be supported herein.

MAN-Mobility Ability Negotiation

- **Solutions:**
  - ICMPv6 based
  - Diameter/RADIUS based
  - IEEE 802.21 based
  - ……

Other issues

- Protocol co-coexistence architecture



Thank you for your attention~

Next Step?