



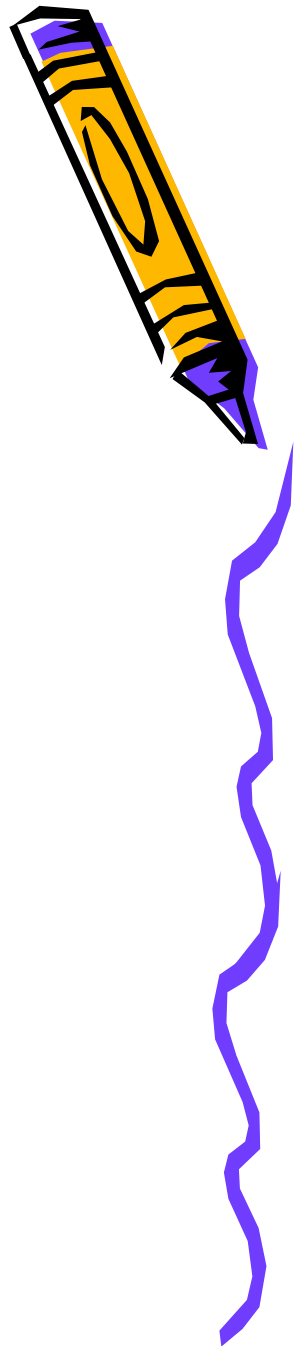
Binding Revocation for IPv6 Mobility

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MEXT @ IETF70

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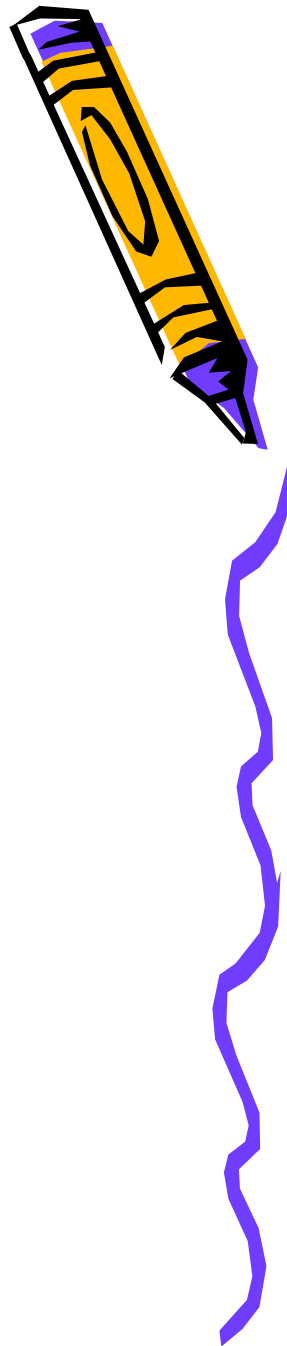
OUTLINE

- IPv6 Mobility Session Identification
- Binding Revocation Entities
- Revocation Message Flow
- Use Cases, Entities Actions
- ML Discussion
- Next - Recommendation



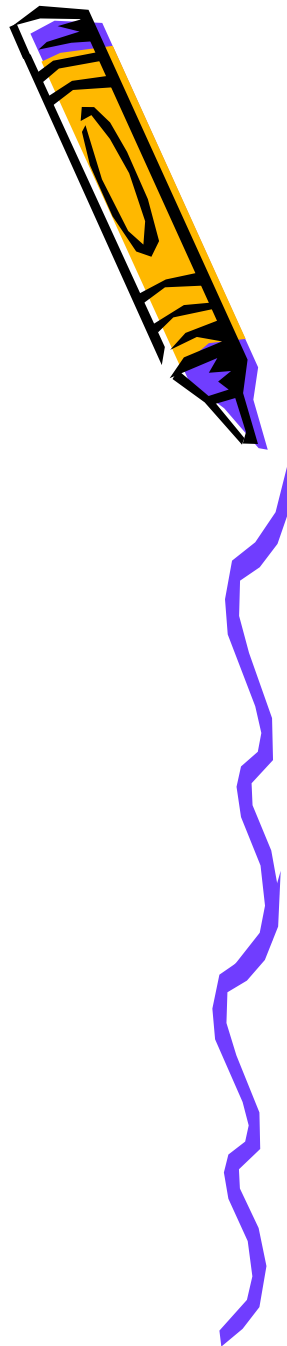
IPv6 Mobility Session ID.

- Mobile IPv6:
 - HoA,
 - MNP
- Proxy MIPv6:
 - NAI + HNP
- Multiple CoA:
 - HoA + (*) BID
 - HNP + BID
- Bulk Revocation:
 - NAI with realm *@abc.com, or HNP
 - LMA Identity, LMA Address
 - MAG Identity, MAG Address

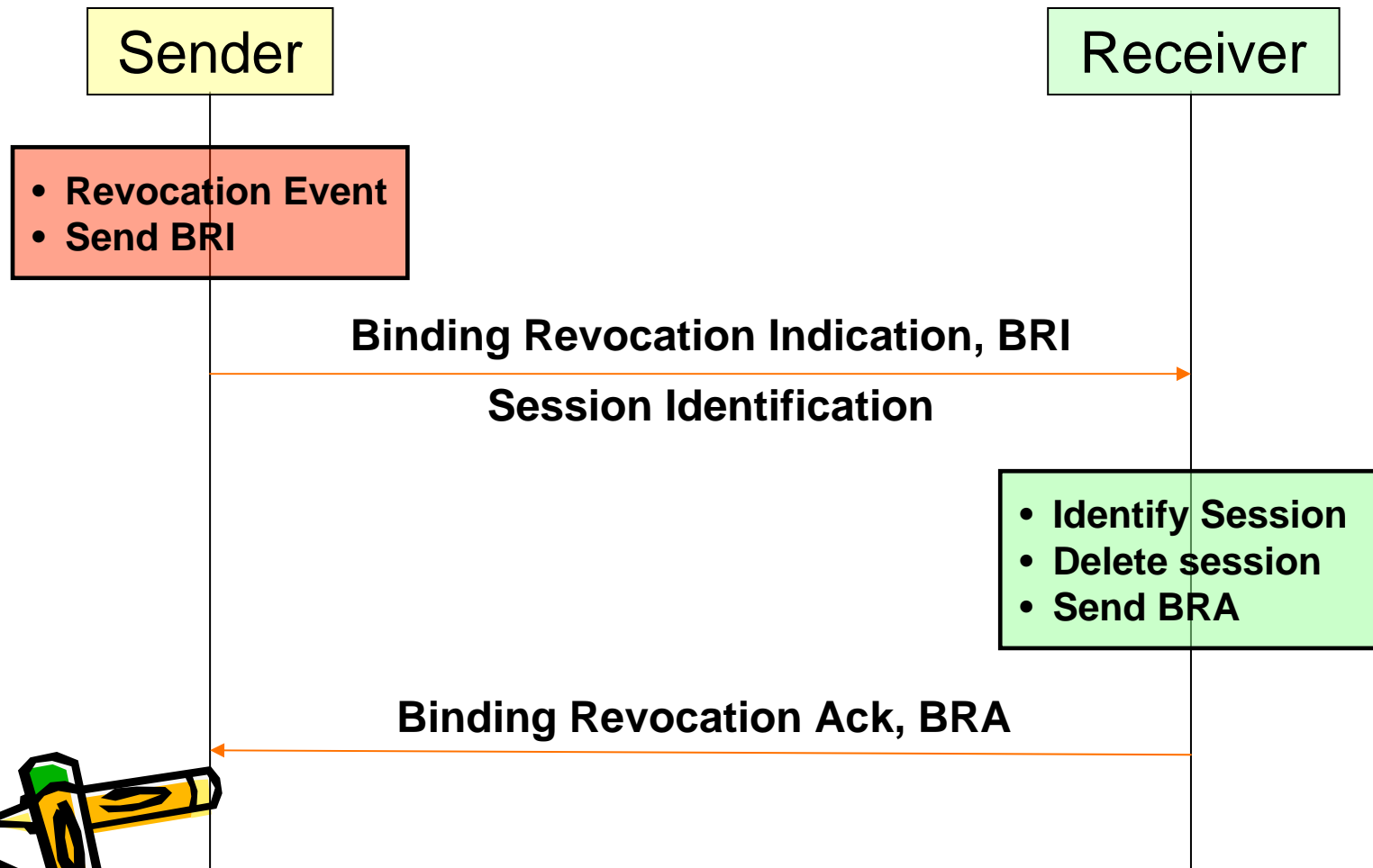


Binding Revocation Entities

- $HA \rightarrow MN/MR$
- $LMA \leftrightarrow MAG$
- $MAP \rightarrow MN$

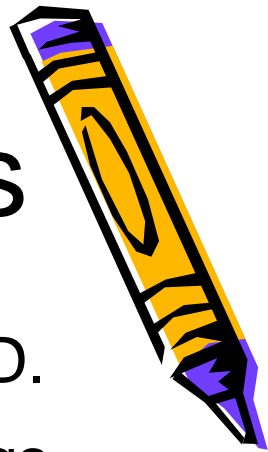


Revocation Message Flow



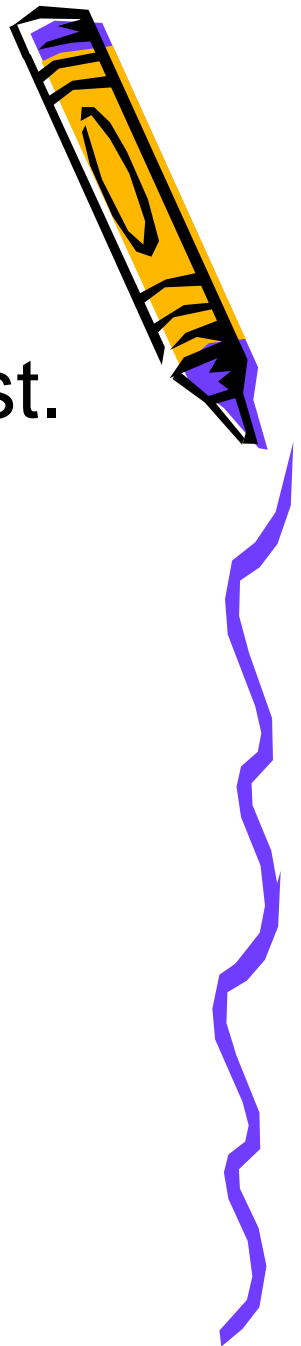
Use Cases, Entities Actions

- HA revokes a MN session using MIPv6 session ID.
- HA revokes one or more of MN Multi-CoA Bindings.
- MAP revokes a MN session using MEXT session ID.
- HA Inform a MR of a MNP sessions Revocation.
- LMA inform MAG of a MN session termination.
- Bulk Revocation:
 - **LMA** Inform MAG of termination of all associated sessions.
 - **LMA** Inform MAG of termination of certain realm sessions.
 - **MAG** inform LMA of termination of all associated sessions.



ML Discussion

- Good Discussion on MIP6 Mailing List.
- Consensus on Adopting Binding Revocation as MIP6 Work Item.
- At the time, Chairs and AD agreed to add Revocation to the Charter few months later.
- Now is the TIME!



Next - Recommendation

- Adopt Chairs Proposed Charter Update for Binding Revocation Mechanism for IPv6 Mobility Item.
 - Define a generic binding revocation mechanism for Mobile IPv6 and its extensions (e.g. NEMO, Monami6, NETLMM). The mechanism can be used by any mobility entity that provides Mobile IP services to a MN (e.g. aMIPv6 HA, a NETLMM LMA) to inform the MN itself or another mobility entity that is involved in providing Mobile IP services to the MN (e.g. a NETLMM MAG) of the termination of either one, multiple or all bindings for a mobile node. The mechanism should also allow any mobility entity (e.g. NETLMM MAG or LMA) to signal the termination of bindings for multiple mobile nodes via use of a single revocation message.
- Adopt **draft-muhanna-mip6-binding-revocation-02** as a base MEXT wg document



Thank You!

