

# MEXT WG IETF-72

## GRE Key Option for Proxy MIPv6

draft-muhanna-netlmm-gre-key-option-04

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# GRE Key Option for PMIPv6

- A new name was proposed as “GRE Encapsulation Option”
- Allow GRE Encapsulation Negotiation independent of GRE Keys exchange
- Allow GRE Keys Exchange between MAG and the LMA

**Added to NetImm wg Charter**



# ML Discussion

# GRE Encapsulation & Symmetric Keys



- Issue was raised to allow GRE encapsulation mode negotiation separately from GRE keys exchange.
  - Rename the Option as GRE Encapsulation Option.
  - When GRE Encapsulation Option is included without any keys, i.e. length field value is 2, It means that MAG requesting GRE encapsulation without GRE Keys exchange.
  - When GRE keys exchange is needed, the MAG must include the uplink GRE key in the GRE Encapsulation option.
- Symmetric GRE Key Exchange Negotiation:
  - Several people indicated that there is no need for Symmetric GRE keys exchange negotiation.
  - The draft was updated and the explicit text was removed.



# Forward & Reverse Traffic Terms

- Issue was raised that the terms Forward and Reverse Traffic is confusing?
  - Renamed the terms as **Downlink** and **Uplink** Traffic, respectively.
  - Introduced the terms Downlink and Uplink GRE keys.
  - Draft text was updated accordingly.
- If GRE encapsulation is **NOT** required, LMA returns a successful PBA without GRE Encapsulation option. Text was accidentally removed from rev. 04.
  - Text will be added back and the draft will be updated accordingly.



## MAG Does NOT support GRE Encap.

- Issue was raised on what Happened if MAG does not support GRE encapsulation and LMA rejects the PBU with “GRE-Encapsulation-Required”?
  - If MAG sends a PBU and LMA requires GRE encapsulation for the session, LMA rejects the PBU by sending a PBA with code “GRE-Encapsulation-Required”
  - If MAG does not support GRE encapsulation for PMIPv6, MAG does not recognize the new code and what happened!
  - If MAG retries, the LMA MAY reject the PBU another time.
- This is a generic backward compatibility issue.
- Correct deployment configuration avoids such error scenario mis-configuration.
- If LMA receives another PBU for the same MN from the MAG, LMA should log the event or raise an alarm.



**What is Next?**



**We request adopting the draft-muhanna as a wg document.**

# Questions & Comments?

