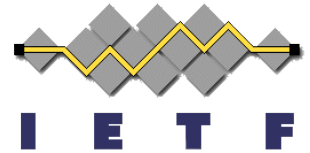


# V6OPS WG – IETF #85

## IPv6 for 3GPP Cellular Hosts

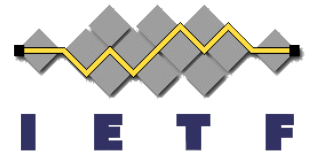
**draft-korhonen-v6ops-rfc3316bis-00**

Jouni Korhonen, Jari Arkko,  
Teemu Savolainen, Suresh Krishnan



# Outline

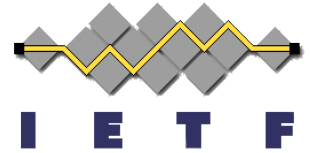
- Motivation for RFC 3316bis
- What has been changed
  - Removed from RFC 3316
  - Clarifications on the existing text
  - New additions to RFC 3316
- Next steps



# Motivation for RFC 3316bis

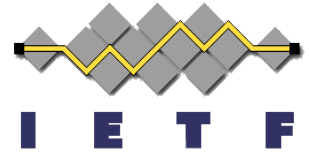
- RFC 3316 was done ~9 years ago, prior IPv6 Node Requirements; No need to repeat RFC 6434 (was RFC 4294) Node Requirements content.
- Reflect recent 3GPP developments and experience.
- Some IPv6 RFCs are not mandated by 3GPP but make sense e.g., in hosts with multiple interfaces.
- Keep it simple and conservative. This is not a 3GPP document or a tool for driving deployment specific requirements!

# What has been changed – removed parts



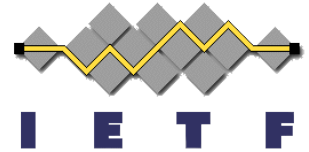
- Removal of all sections that can be directly found from RFC 6434 and do not require specific attention in 3GPP system:
  - IPv6 “basics”, PMTUD, IKE/IPsec, default address selection to name few..

# What has been changed – clarifications

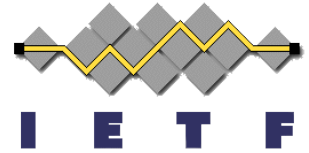


- Clarifications to 3GPP link model and how Neighbor Discovery works on it.
  - Previous text in RFC 3316 was sometimes misinterpreted..
  - And there have been too many broken cellular host implementations and too strict GGSNs.
  - Already documented in RFC 6459 – endorsed here.
- Clarification on the primary 3GPP IPv6 transition mechanism..
  - ..which still is dual-stack. The rest are up to specific deployments.
- Made the PPP IPV6CP support text conditional.

# What has been changed – new additions



- Addition of 3GPP EPS text i.e., Release-8 and onwards.
- Addition of RFC 4191 (router preferences) recommendations.
- Addition of DHCPv6-based Prefix Delegation recommendations, which is new to 3GPP Release-10.
- Addition of RFC 6106 (RDNSS) recommendations.
- Addition of RFC 5555 (DSMIPv6) regarding client based mobility, which is new to 3GPP Release-8.
- Addition of Router Advertisement MTU option handling.
- Addition of RFC 5095 that deprecates the RH0.
- Addition of RFC 5722 and draft-ietf-6man-nd-extension-headers regarding the IPv6 fragmentation handling.
- Addition of RFC 6583 for Neighbor Discovery denial-of-service attack considerations.



# Next steps

- Is there interest working on RFC 3316bis?
- Adopt as a working group document..?