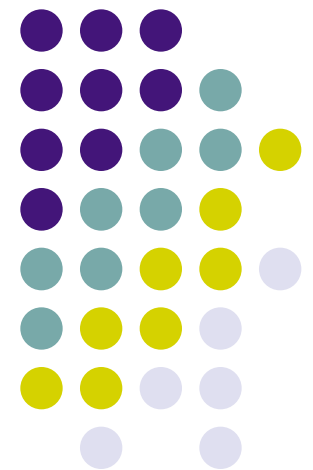


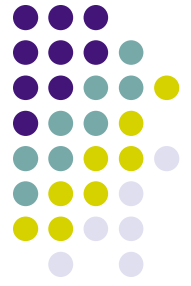
# IPv6 RA Options for Translation Multicast Prefixes

Behcet Sarikaya([sarikaya@ieee.org](mailto:sarikaya@ieee.org))

IETF 85



draft-sarikaya-softwire-6man-raoptions-00



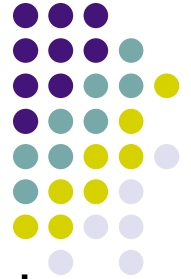
# Multicast Prefix Option

## Motivation

- IPv6 transition technologies such as NAT64, MAP or 4rd are unicast
- Multicast support approaches for NAT64, MAP or 4rd involve translation from IPv4 (IGMP) to IPv6 (MLD)
- **draft-ietf-mboned-64-multicast-address-format-04** defines two reserved /96 prefixes, SSM\_MPREFIX64 & ASM\_MPREFIX64 such as ff3x:0:8000/96 in source specific and any source multicast range
- **These prefixes need to be configured, using RA**

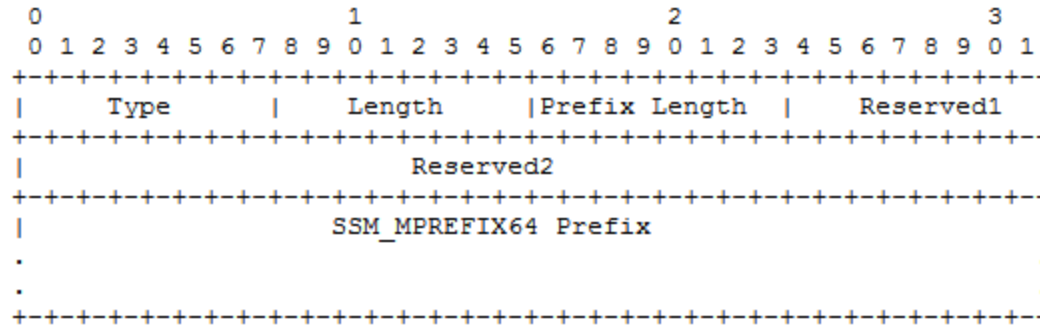
# Multicast Prefix Option

## Motivation - Continued

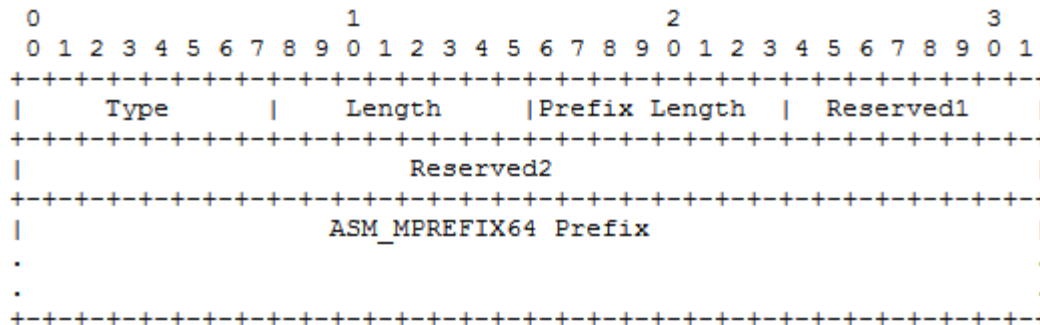


- For multicast data, SSM sources need to use reserved unicast prefix called network specific prefix in RFC 6052 or the well known prefix of 64:ff9b::/96, this is called U\_PREFIX64
- Nodes configured with U\_PREFIX64 can translate IPv6 multicast data to IPv4 multicast data using U\_PREFIX64

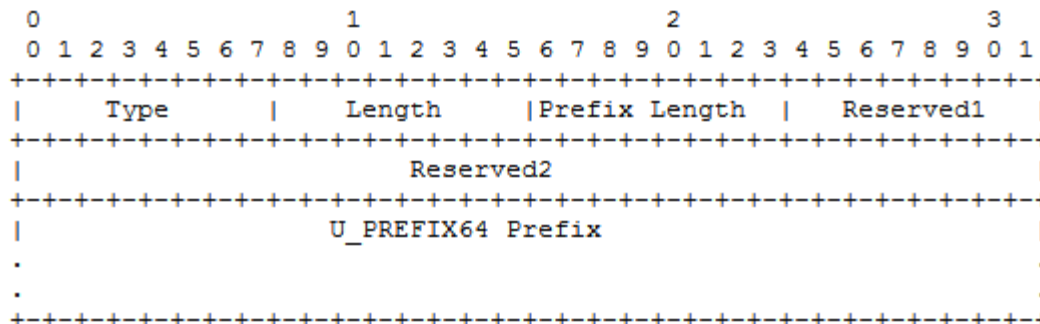
# Proposed RA Options



Source Specific  
Multicast translation  
prefix option



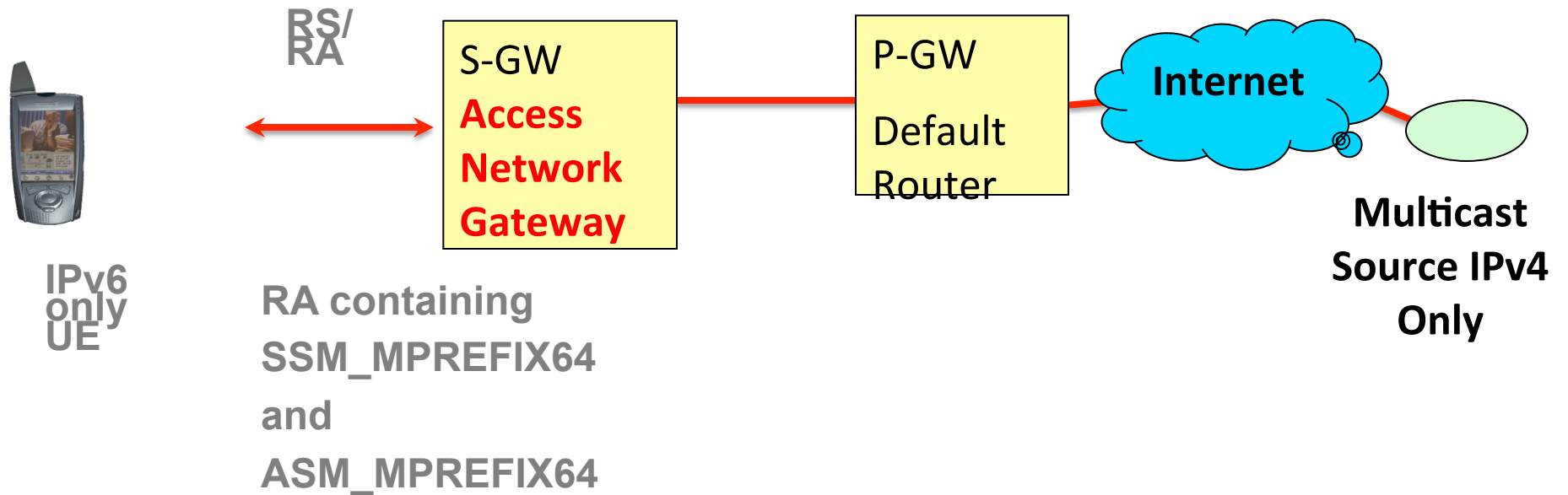
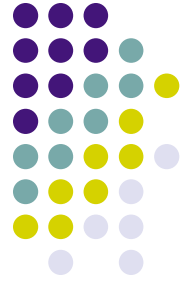
Any Source Multicast  
Translation prefix  
Option



Multicast Translation  
Unicast prefix  
option

# Architectures – NAT64

- Use multicast NAT64 in LTE network



# Next Steps

- Is 6man interested in this work?

