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

IPv6 only UE

RS/RA

S-GW
Access
Network
Gateway

P-GW
Default
Router

Internet

Multicast
Source IPv4
Only

RA containing SSM_MPREFIX64 and ASM_MPREFIX64
Next Steps

- Is 6man interested in this work?