

# Internet Multicast Requirements

65th IETF, Dallas

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# Motivation

- Large scale IP-Multicast deployment not seen at ISPs during the last years **BUT**:
- IPTV (TriplePlay) is one of the main drivers for upcoming IP-Multicast deployment scenarios
- Special requirements
  - (End-to-End) QoS
  - Accounting
  - Service Availability, etc
  - New Technology - Multicast L3VPNs, Multicast MPLS, etc.

# Goal

- Identify and collect requirements for Internet Multicast from service providers
  - Based on the L3VPN multicast requirements survey..
  - Mainly focused (but not limited) on Triple Play (LiveTV) requirements
- Identify open issues for further standardization
- Output going to be used to write a requirements draft for internet Multicast or in the re-chartering of Mboned.

# Requirements (1 of 3)

- General Requirements
  - E.g. Number of sources, number of receivers, number of streams, total bandwidth, bandwidth per stream, etc.
  - Dynamic or static multicast, channel changing times, channels/customer
  - External multicast required (peering, etc.)

# Requirements (2 of 3)

- Multicast and QoS
  - What kind of QoS is necessary, does it differ from Unicast QoS requirements?
  - Different QoS solutions for backbone, access networks?
  - Peering with QoS?
- Multicast Service Model
  - ASM, SSM, BiDir (or combination)?
  - IPv4/IPv6?
  - MLDv2, Embedded RP, SSM ?

# Requirements (3 of 3)

- Backbone Requirements
  - What kind of transport?
    - Native IP, MPLS based backbone transport, etc.
  - Additional services on top of or integrated with IP-Multicast enabled backbone?
    - L2VPN, L3VPN, RMC
  - Interdomain Multicast (with QoS)?

# Next Steps

- Provide first version of survey for comments on Mboned mailing list
- Detailed discussion until 66th IETF
- Results at 66th IETF