



AMS-IX New Services

*Membership Discussions, Surveys and Technology lead to
new services*

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Agenda

- ▶ *Discussions and Surveys*



Agenda

- ▶ *Discussions and Surveys*
- ▶ *New Services*
 - ▶ Customers instead of members
 - ▶ I-IPX
 - ▶ SLAs
 - ▶ 100GE

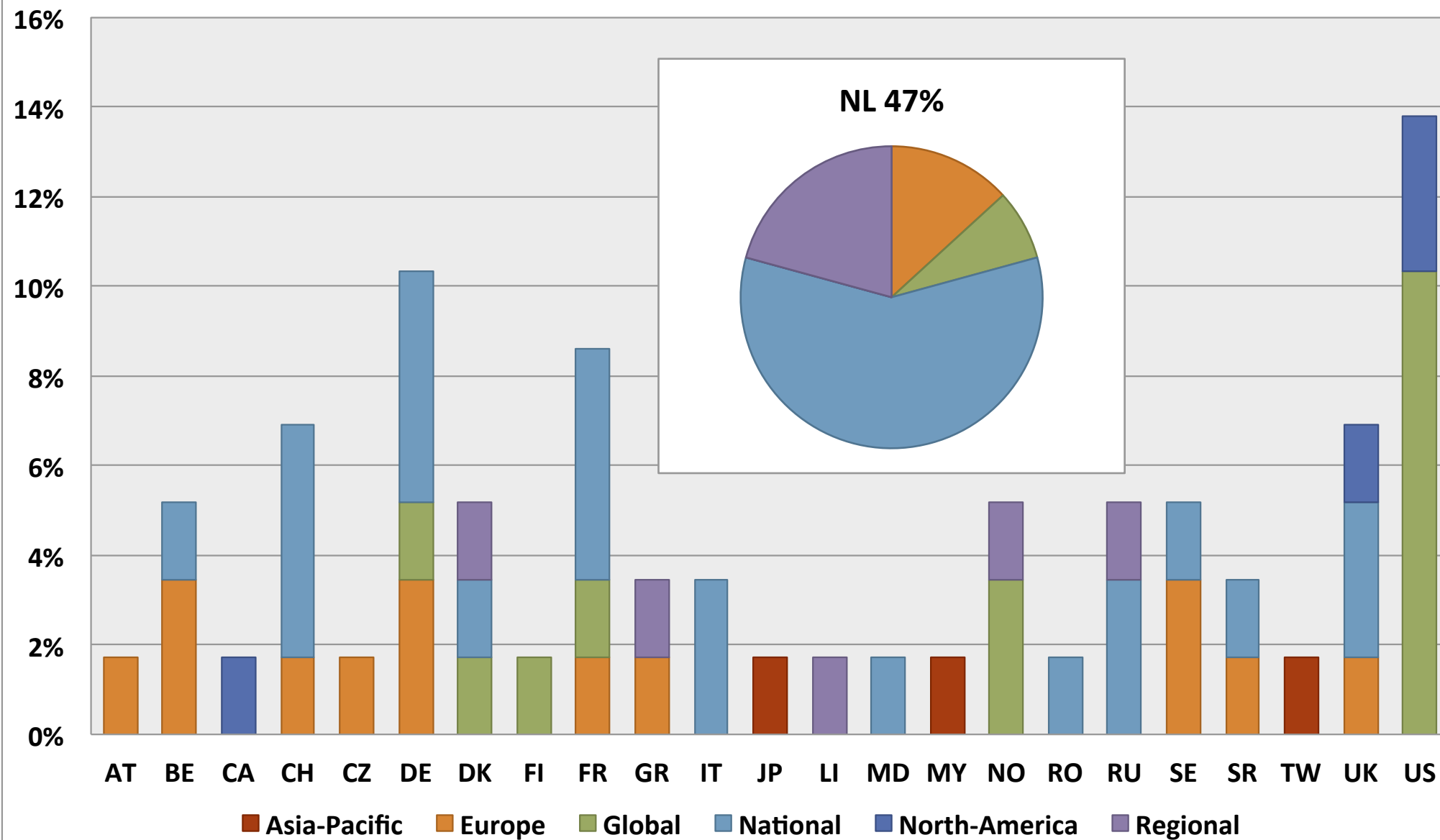


Member Input

Discussions and Surveys

- ▶ 2010: Four AMS-IX general assembly meetings (instead of the usual two)
- ▶ November 2010 Survey to Organizational and Admin representatives of membership
- ▶ Februari 2011 survey to technical representatives of membership
- ▶ Both surveys over 25% response

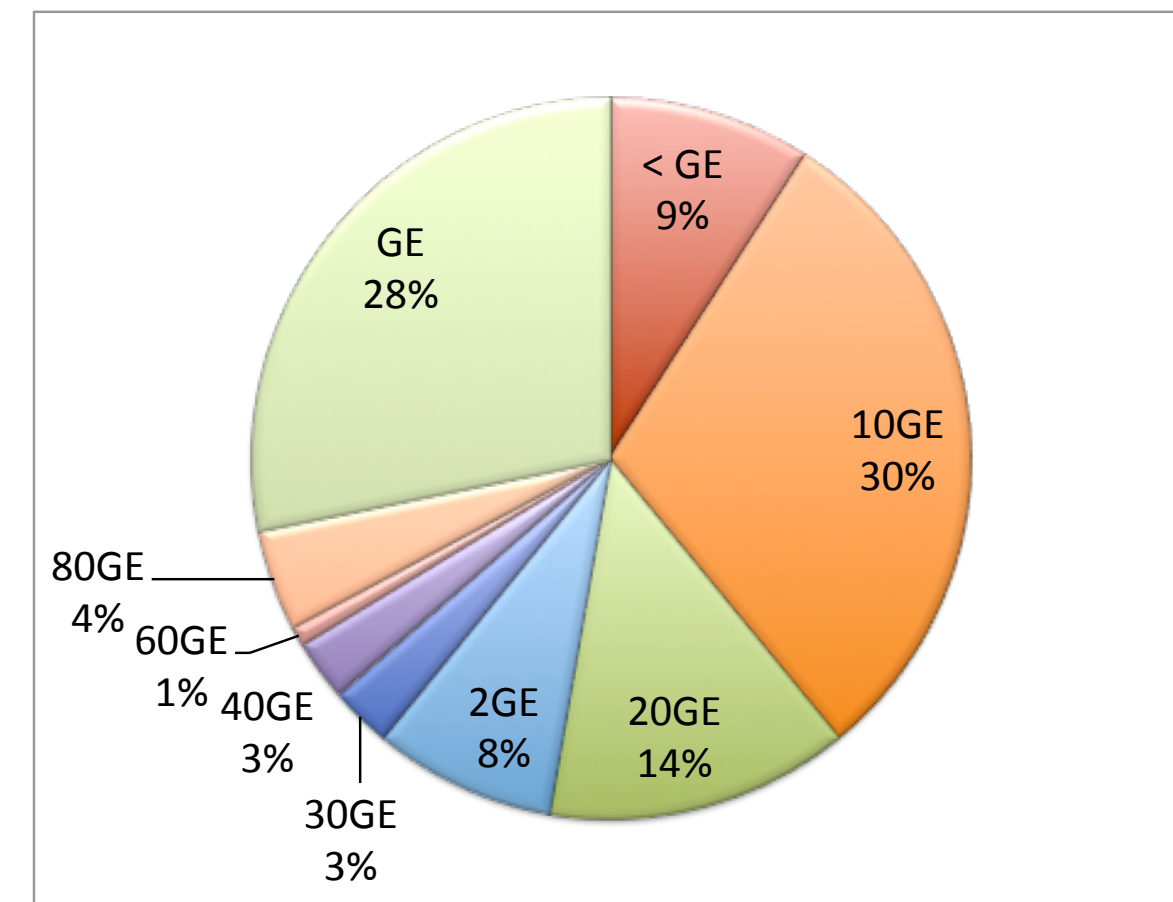
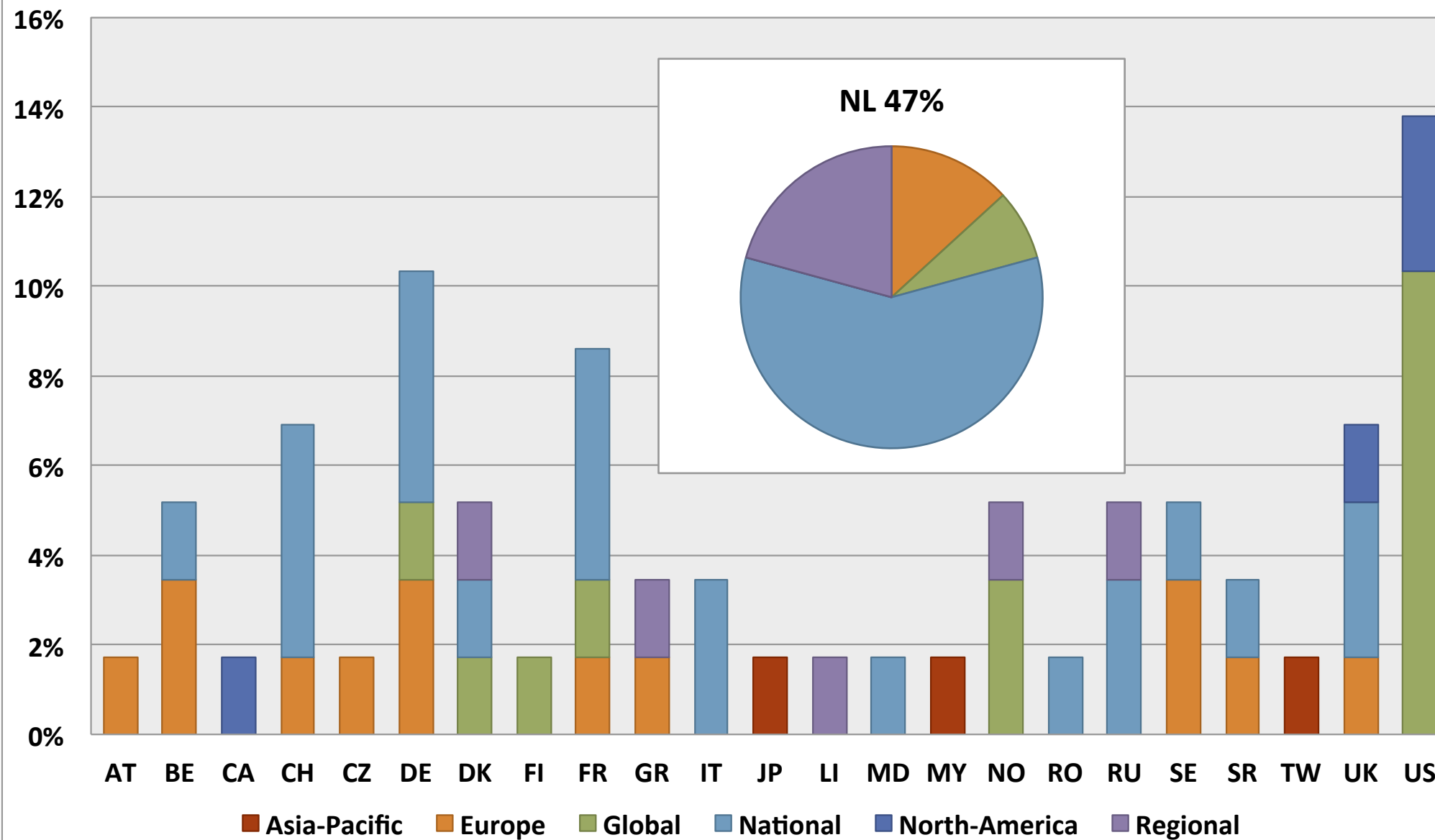
Country of Origin versus Operational Region



Survey Participants: 115
Technical Survey



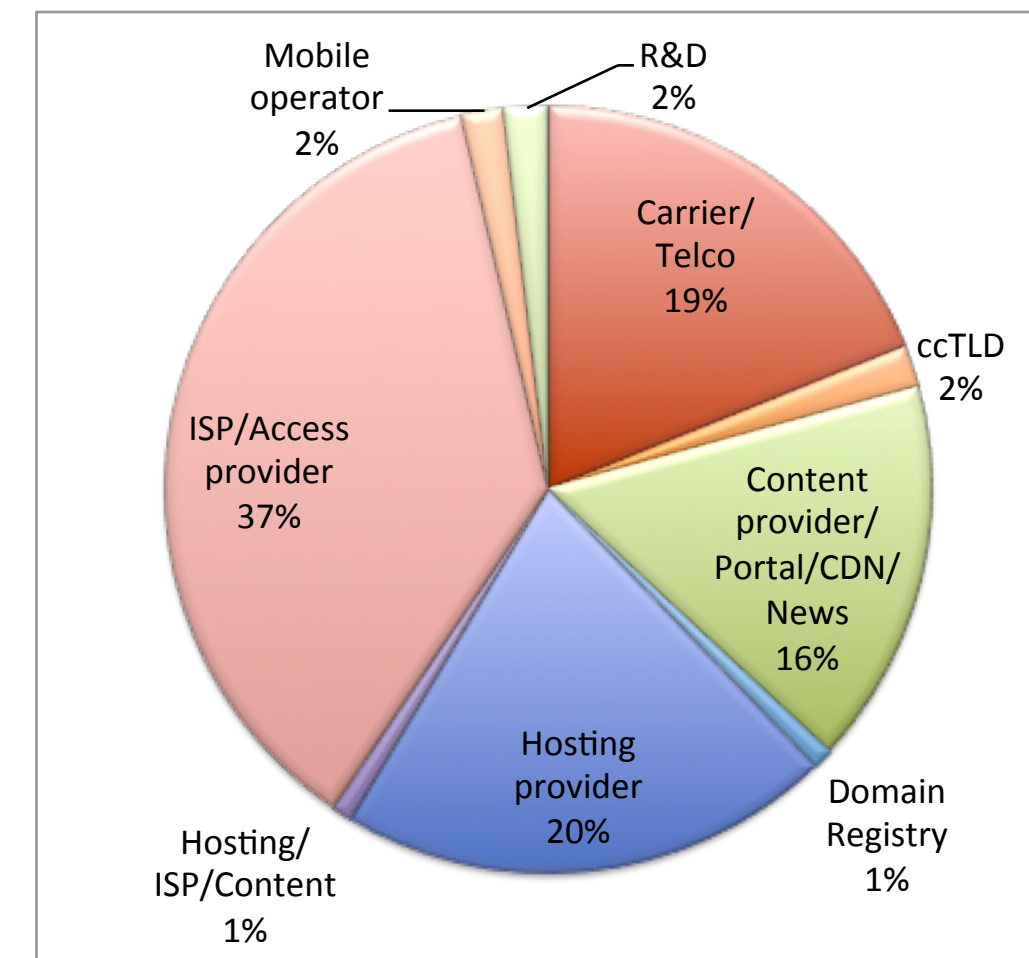
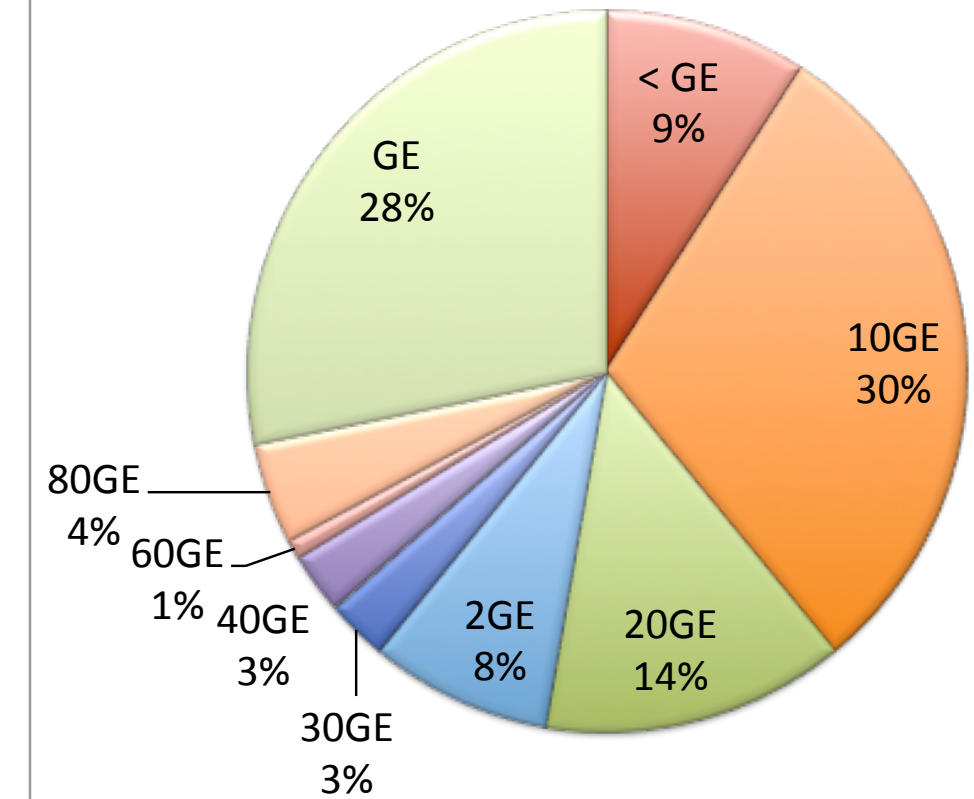
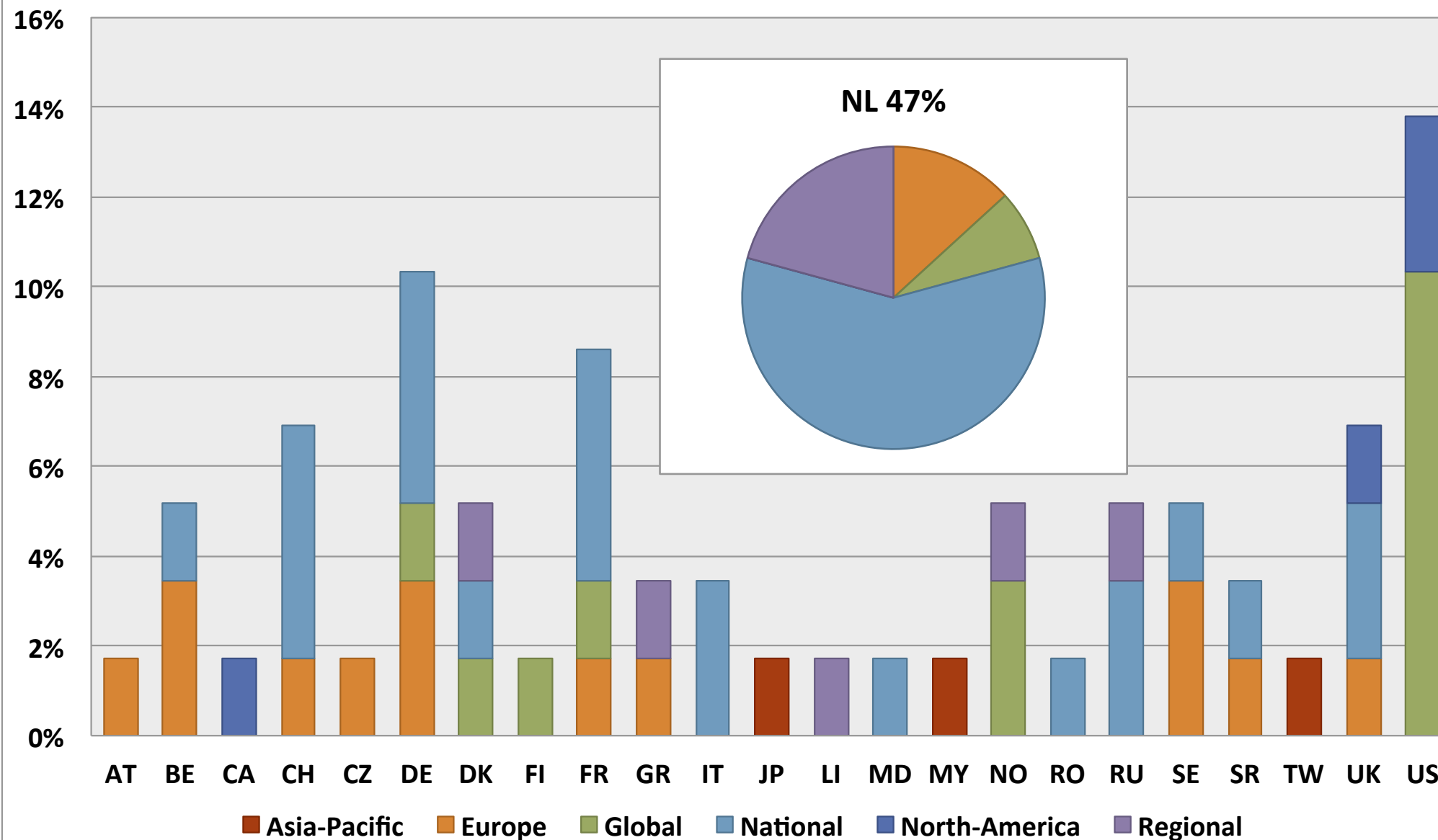
Country of Origin versus Operational Region



Survey Participants: 1 / 5
Technical Survey



Country of Origin versus Operational Region



Survey Participants: 1 / 5
Technical Survey

Members and or Customers

Result from discussion in GA

- ▶ *Feedback from existing and potential members show that “membership” of association can be big hurdle to connect*
- ▶ After discussion in GA meetings membership agreed to allow connections to the exchange by non association members
- ▶ Contract based on same terms and conditions
 - ▶ Customers contract does not include membership

SLAs

Initially addressed during GA to support I-IPX

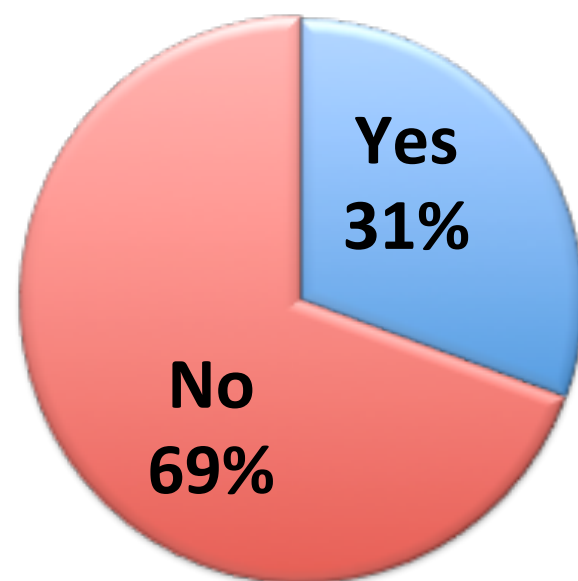
Suggestion from Members: why not also support SLA on Internet Peering VLAN

Interest tested in members surveys

- ▶ *An SLA is part of the I-IPX offer*
- ▶ *Discussion at GA showed general interest in SLA on AMS-IX connection*

Interest
SLAs





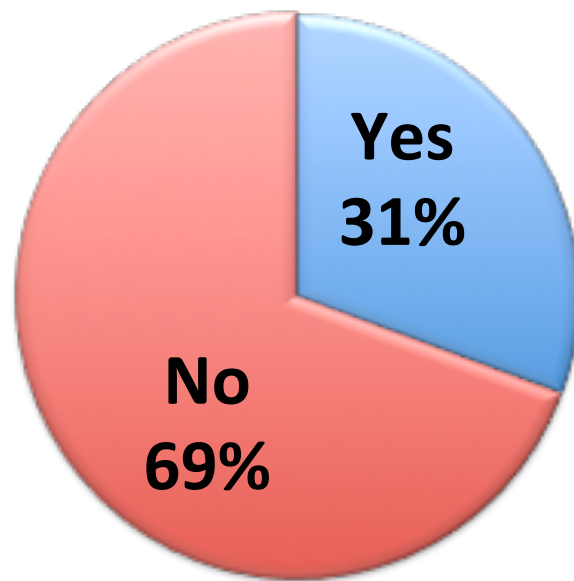
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Interest
SLAs

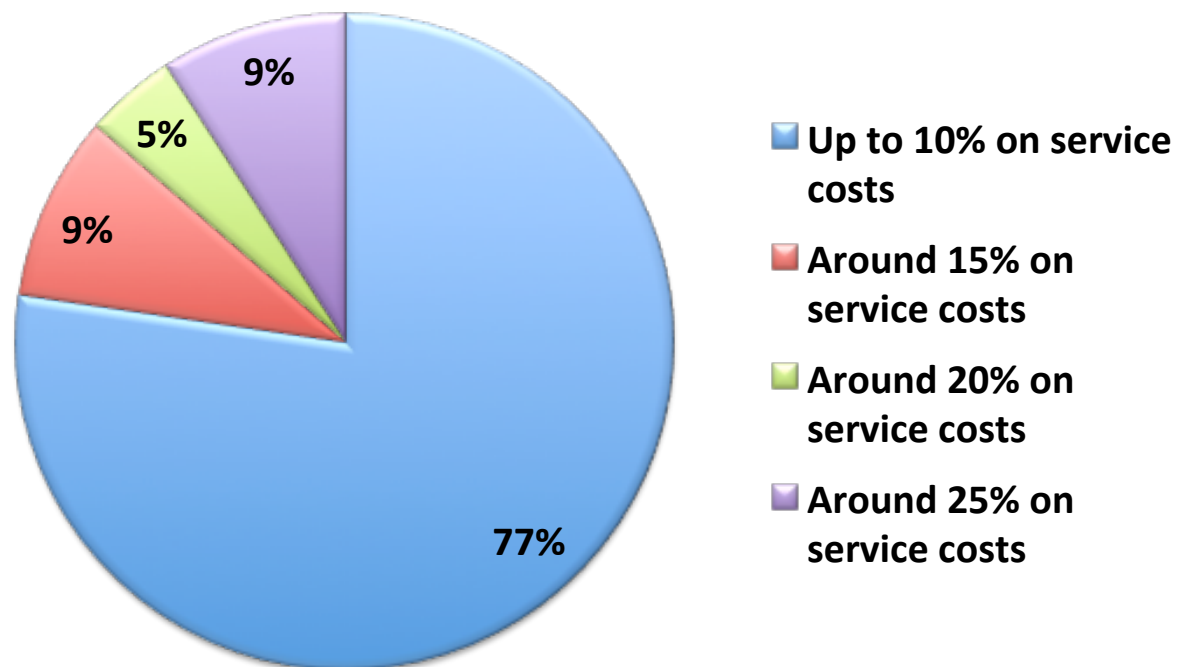


General November 2010 Survey

Are you interested in an SLA?



- ▶ *An SLA is part of the I-IPX offer*
- ▶ *Discussion at GA showed general interest in SLA on AMS-IX connection*

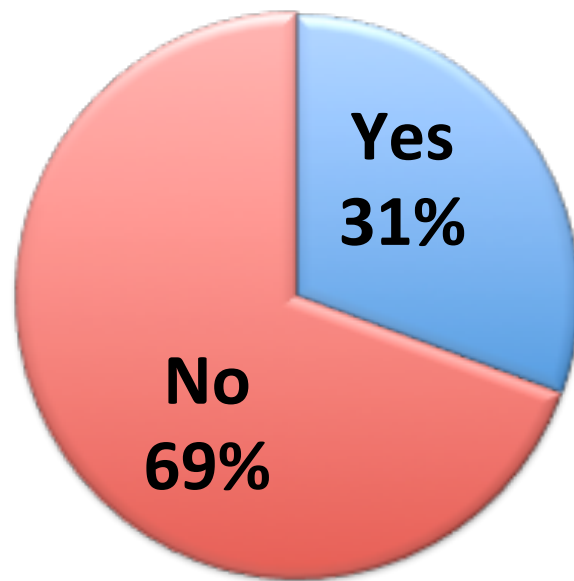


Interest SLAs

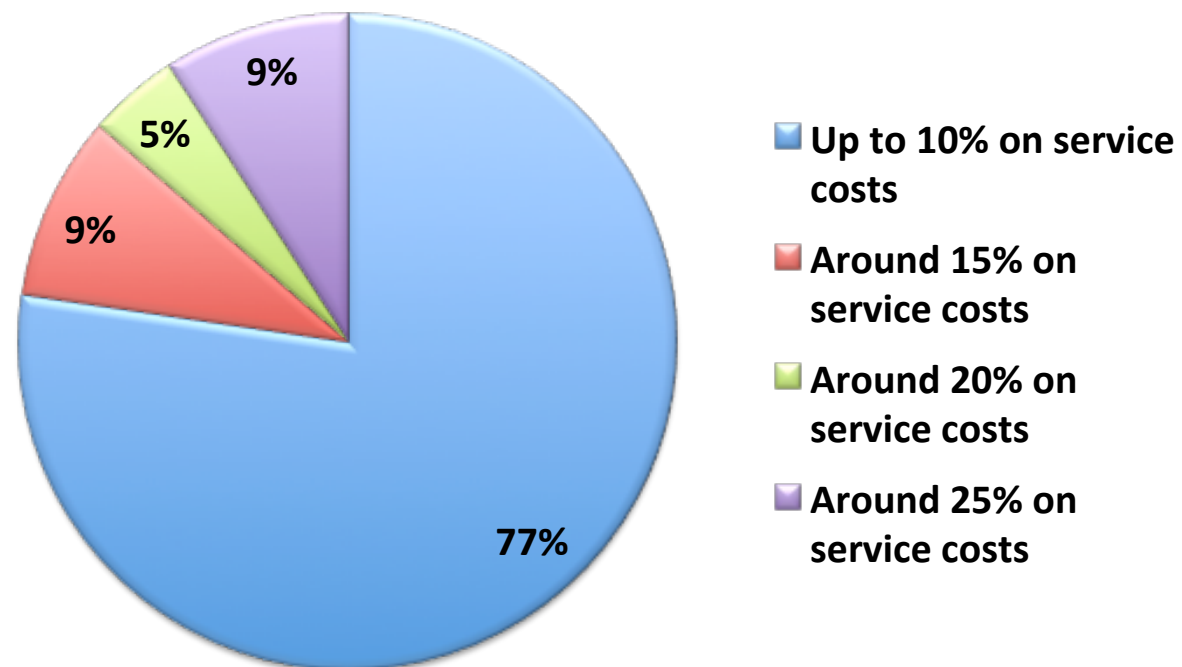


General November 2010 Survey

Are you interested in an SLA?



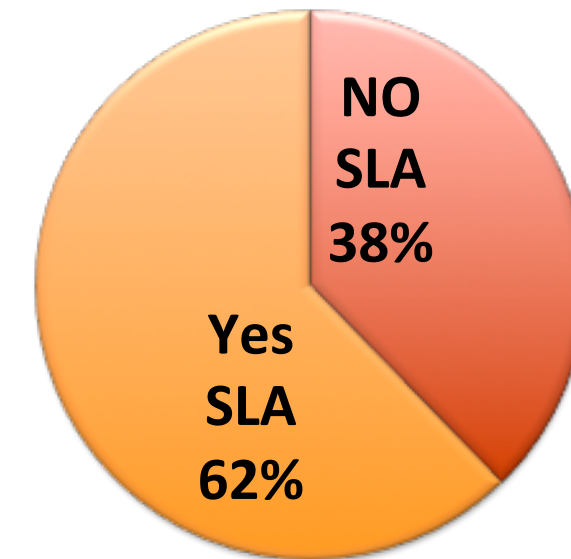
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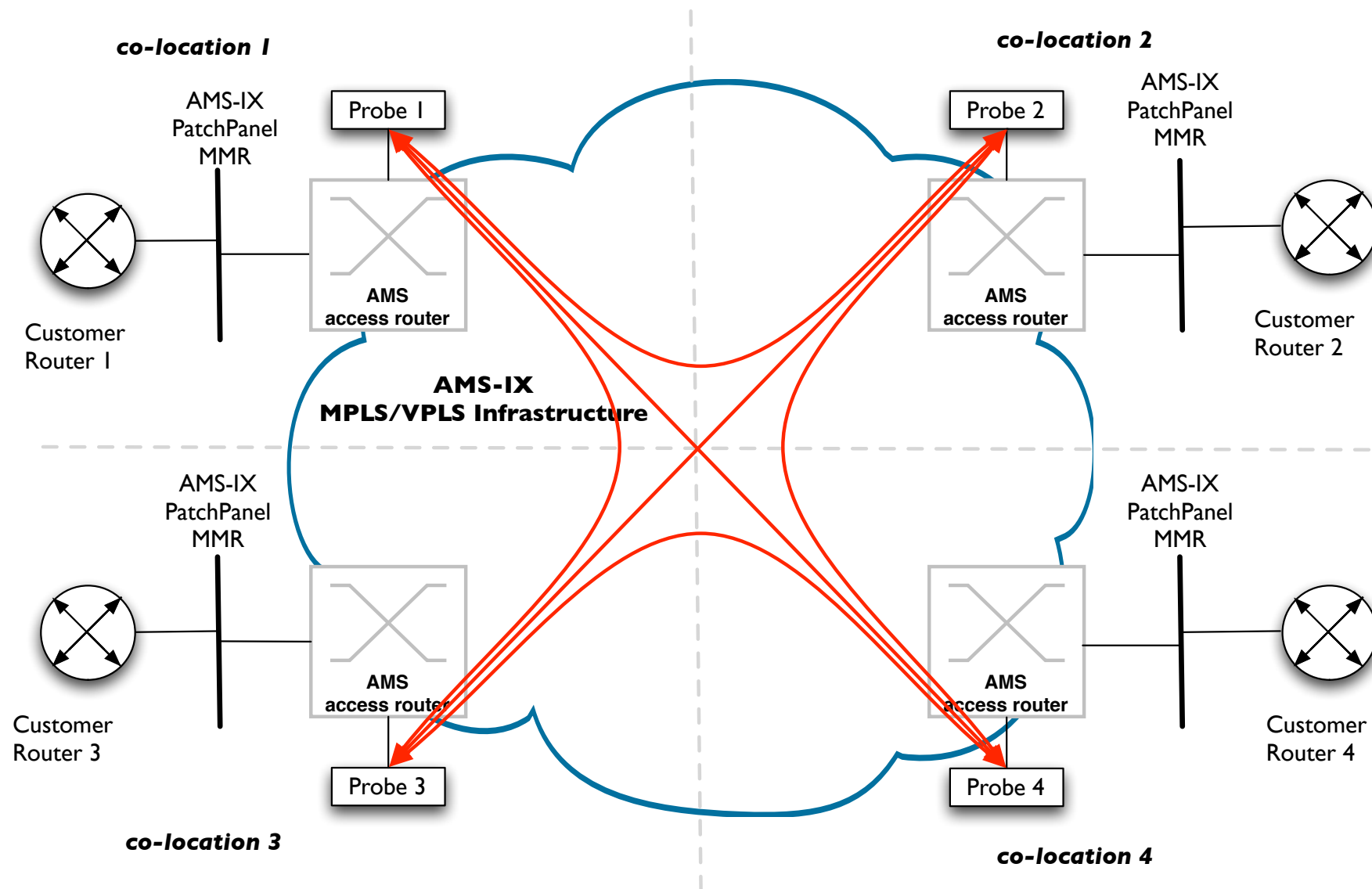


Interest
SLAs

Technical Februari 2011 Survey

Are you interested in an SLA?





Standard SLA

- Availability: 99.99% per month
- Excludes announced maintenance
- Packet Loss: < 0.05%
- One way delay: < 500 micro seconds
- One way delay variation < 100 micro second

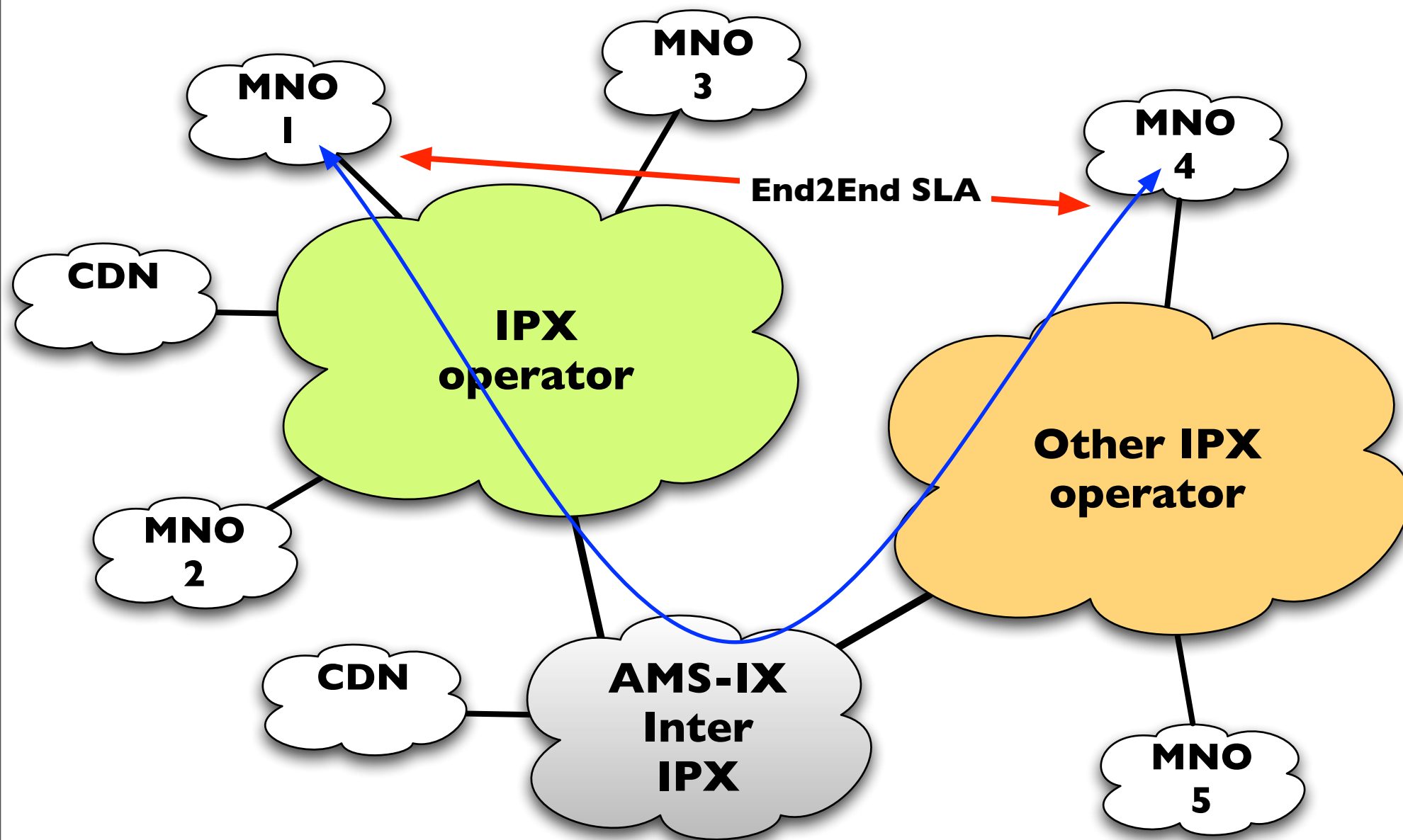
The three performance parameters are: average per hour in a 24 hour period

Implementation SLAs



Inter IPX





- ▶ GSM standard (IR.34) for IP based services by MNO
- ▶ GRX model as a basis
 - ▶ Will be one of the services within the IPX environment
- ▶ General IP services, not only MNOs but also fixed line operators, CDNs etc.
- ▶ End to End SLA
 - ▶ Need to be supported by AMS-IX

MNO to MNO IP traffic, End to End SLAs
Inter-IPX



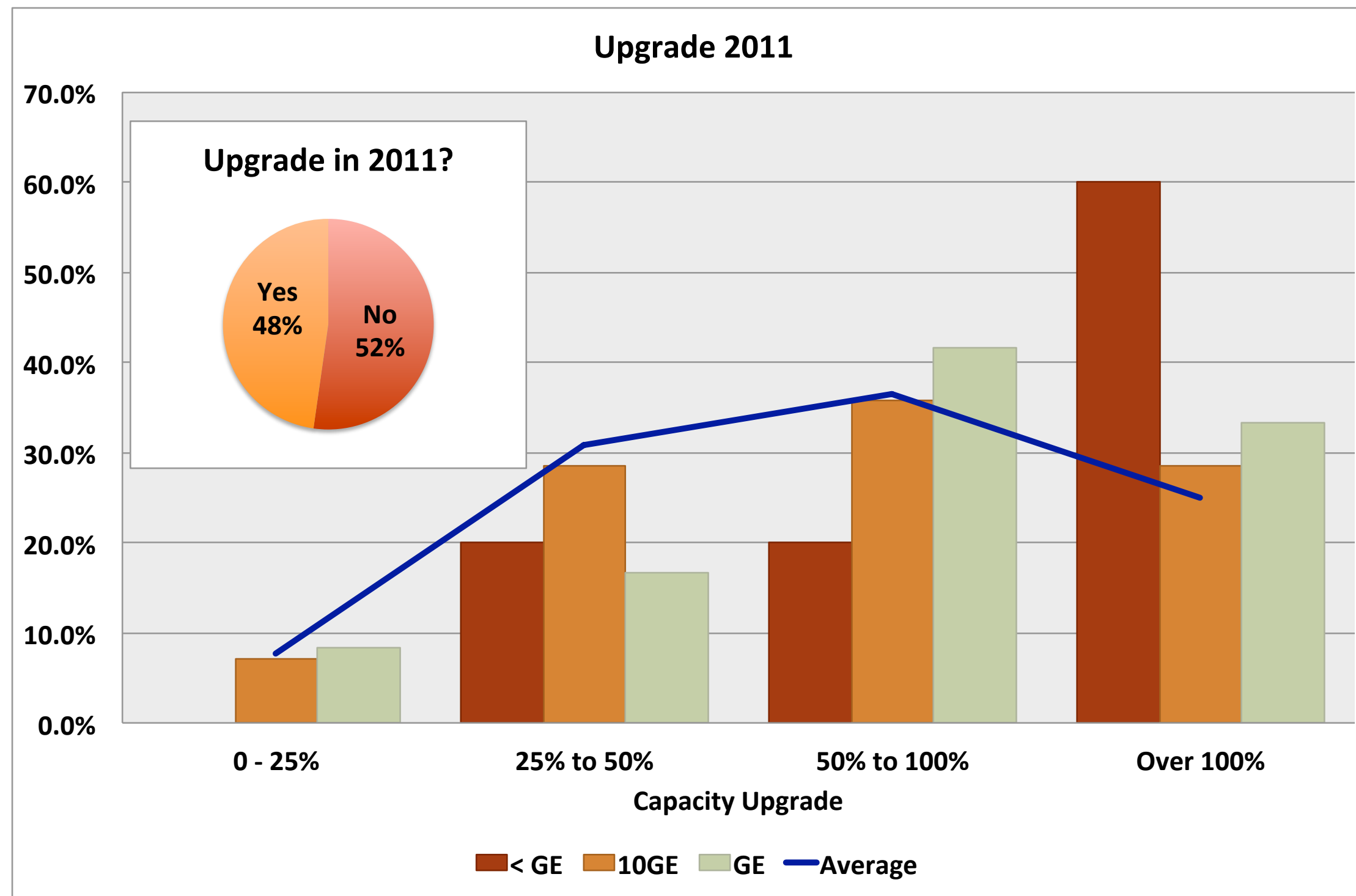
Inter IPX service

Timeframe

- ▶ AMS-IX implementation
 - ▶ Two connections on two different locations
 - ▶ Separate VPLS instance
 - ▶ SLA guarantees 99.995% availability (different from standard SLA)
 - ▶ SLA guarantee on performance as defined in IR.34 for service class with highest parameters
 - ▶ As defined in IR.34 as “Conversational Class of Service”
- ▶ Customer beta service May, fully operational July 2011

100GE

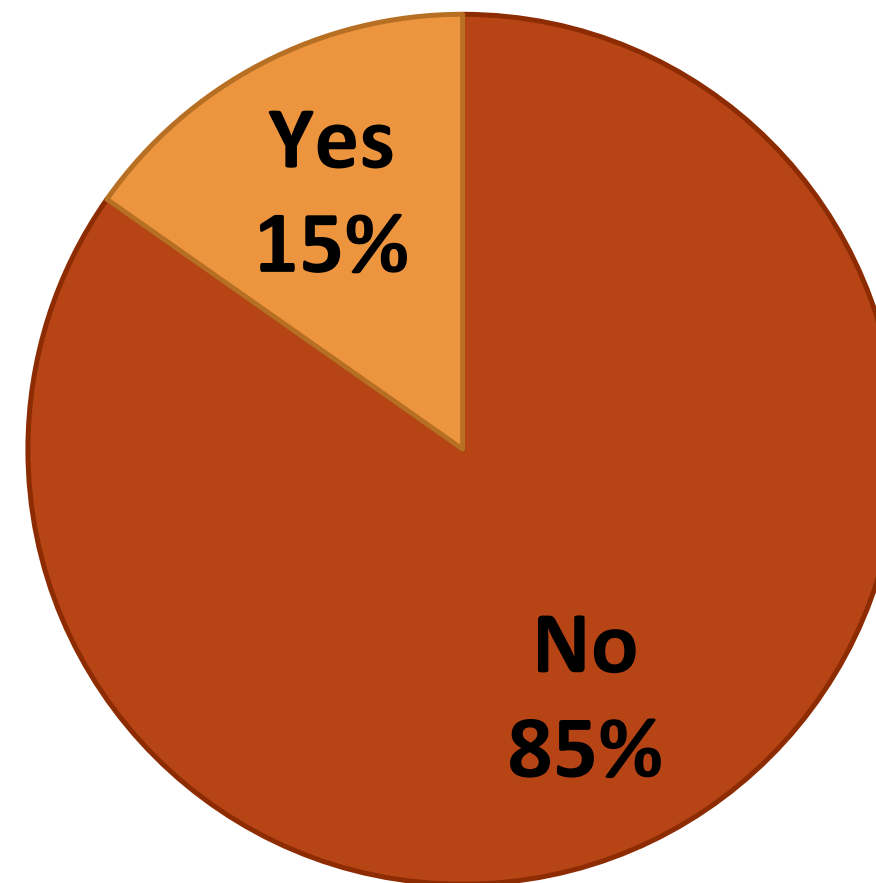
*If you currently connect with at least 10GE
do you plan to upgrade to 100GE in the
2011/2012 timeframe?*



General Upgrade Plans



Upgrade from at least 10GE to 100GE in 2011/2012



Optic preference LR / 0

Upgrade or Implement 100GE



100GE service

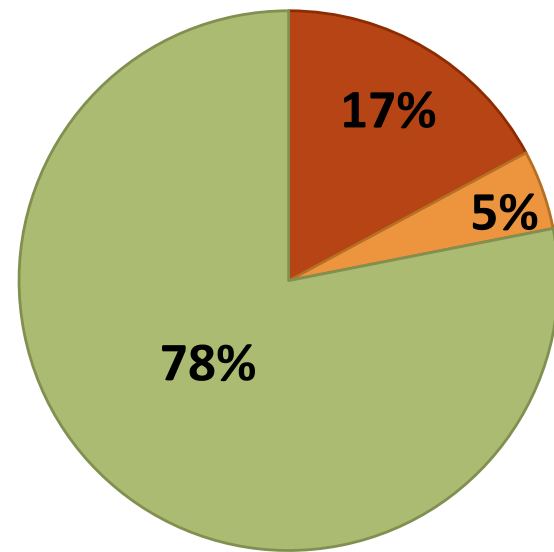
Timeframe and pricing

- ▶ Lab testing in AMS-IX lab early April
- ▶ First customer testing (pre-production hard and software) half May
- ▶ General customer service June 2011
- ▶ Two optic types supported
 - ▶ 100GE-LR10 at 7*10GE price
 - ▶ 100GE-LR4 at 10*10GE price



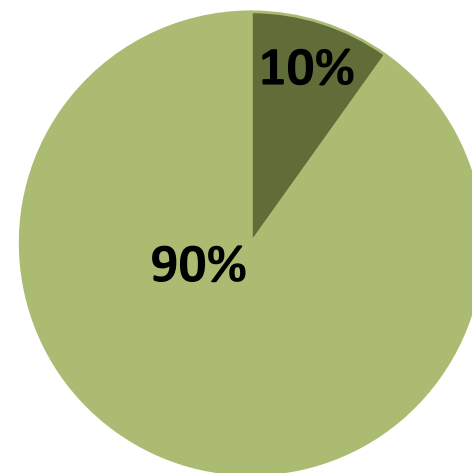
Do you peer with the Route Server?

■ No ■ No but will ■ Yes



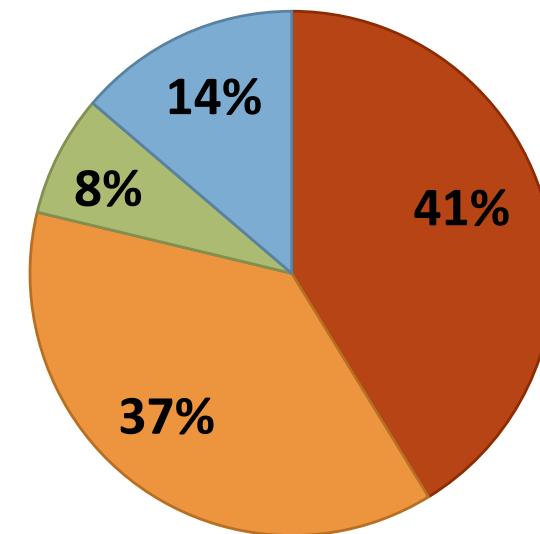
Will you peer with an extra pair of RS with different implementation?

■ No ■ Yes



Route Server Performance

■ Adequate ■ Good
■ Outstanding ■ Poor



Will implement another pair of route servers based on Bird
AMS-IX route servers



More-IP event

<http://www.more-ip-event.net>



June 8 and 9 2011

- ▶ Formal announcements of new services
- ▶ Co-operation with world IPv6 day
- ▶ AMS-IX technical and general meetings

