



## Notes from X.msr Meeting

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## Purpose of Meeting



• Look at requirements and requests from ITU-T SG 7/17 for use of RPR as the MAC for X.msr



#### Fairness



- X.msr allocates bandwidth on a nonreclaimable basis
  - Effectively A0 class only
    - if it provisioned around the ring and the node does not go above that provisioned amount and no class B or C traffic is added, then class A is effectively A0
- Question what if any FCU functions are needed?
  - Fairness message is currently a keep alive
  - Fairness messages must be passed to downstream neighbours
- Fairness Disable should there be a "switch" to turn off fairness
  - if you request only service class A then there is no fairness



### Tributary Multicast Support



- Use of Group Addresses.
  - Do we have specify a primitive to support the setting/delete of a Group Address in the MAC?



## Topology Database Interaction



- MA\_CONTROL.indicate is sufficient as it delivers a new database on topology/protection changes
- Request that MA\_CONTOL.request have an opcode to return the database on demand through MA\_CONTROL.indicate

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## **Tributary Based Protection**



- Requires MAC to inform X.msr of a protection events.
  - This is supported, the issue of how the data is passed up to the client is an implementation detail.
    - May require a recommendation that the MAC periodically sends the current protection status and database until the client has sent back a confirm.
    - The confirm is a new MA\_CONTROL.request primitive



#### Broadcast Network



- X.msr supports single fiber uni-directional broadcast ring
  - RPR \*might\* support this depending on protection mechanisms disables and forwarding rules if no topology exists
    - MA\_DATA.request is currently specified to allow a packet to be sent with Wrap Disable, Protection Disable, and Steering Disable by explicitly requesting a particular ringlet with no protection.



#### Manual Switch Protection



• Need to provide specification for Manual Protection Switch invocation

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# Plug and Play versus Pre-planned (802.17)

- RPR actually does both
  - the plug and play guarantees that topology / protection works immediately.
  - The LME system allows the provisioning of bandwidth for pre-planning

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#### Use of X.85 as a PHY



- Add X.85 as a PHY / reconciliation layer in the SONET PHY section
  - In addition to Byte Synchronous Flag
    Delineated PHY

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## Next Steps



- Check validity of assumptions
  - Both 802.17 and ITU-T SG 7/17
- Process / Mechanism for changes
  - Are these changes part of this PAR?
    - New Annex X.msr profile and PICS for same
    - Changes to existing draft?
- Make decisions on requested changes
  - Motions made to WG and draft text to be ready by March Plenary meeting