

# Broad Market Potential for 200Gb/s over 1-pair MM fiber

**Flavio R. Marques**

Furukawa Electric LatAm SA

NGMMF Study Group Ad Hoc Web-Conference

Draft Input Feb 8 - 2018

# Purpose

- To gather the opinion of Data Center experts in Brazil about market adoption of a future interface for a single pair of MMF working at 200Gb/s
- Three of four large enterprise datacenter operators contacted in January 2018 took calls on this topic
- Questions asked to the Professionals:
  - “- As an expert in Data Center, do you believe a 200Gb/s over 1 pair MM fiber interface will be adopted by the market? Would you consider to use this interface in the future, if available?”;
  - “- In which way this could be helpful?”

# Expert Testimonial #1

- Telecomm Systems Engineer
- Industry: Utility / ISP
- Affiliated with an electric power utility that also runs an ISP service. Ranked as the best ISP in a large state in Brazil

## Important points

- He is very excited about the possibility to use WDM technology over 2 MM fiber as they already take advantage of similar technology in SM links at many different speeds;
- According to him, even if they need to replace OM4 fiber by other MM fiber in order to run WDM it will be cost effective, as there's no more room to grow in the current site;
- Today they use the same physical space allotted in the past for lower speed duplex connections, so an increased rate using same space is very welcome.
- He believes that this alternative will solve the lack of space in some cases and will increase infrastructure lifespan;
- He also offers his company's infrastructure for future tests

# Expert Testimonial #2

- Team Manager – Datacenter Management
- Industry: Financial
- Affiliated with one of the top three banks by assets in Brazil and all of Latin America

## Important points

- He believes that the 2-fiber MM 200Gb/s interface will be widely adopted as it will increase operational efficiency due to reduction in required area and raceway occupancy;
- He **notes** that redundancy is still required as a huge amount of information is being transported by one single channel – (topology matter).

# Expert Testimonial #3

- IT Analyst – IT Infrastructure & Support
- Industry: Defense / Aerospace
- Affiliated with a large global manufacturer based in Brazil

## Important points

- In his view of future Datacenter, uplinks of 200Gb/s will be very useful while it will increase functionality;
- More advantages of **single-pair cabling** are reduction of internal infrastructure like raceways, ODFs and etc;
- He also offers his company's infrastructure for future tests.

# Conclusions

- Experts affiliated with three large enterprise Data Center operators from different industry segments, all leaders in their segments in Brazil, were enthusiastic about the prospects for 200 Gb/s over single pair MMF and supportive of its standardization.
- More detail can be presented in Chicago plenary