

Notes from the TC Fibre meeting

8.1.2010 10:00 - 11:00 (CY - last revised 8.1.2010)

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1 Attendance list

DESY-IT: K.Ohrenberg, T.Witt (Network group)

WP76: C.Youngman (for photon: DAQ and control, beam line optics and diagnostics)

2 Points discussed and assumed

The fibre routing concept in the XTD and XHEXP1 areas remains: racks (called balcony end point racks) in XHEXP1 balcony rooms UG01/28, 29, 30 and 38 acts as central connection points for all fibres:

- From and to DESY site.
- From and to XTD tunnel equipment.
- From and to XHEXP1 experiments, offices, etc.

The “from and to” DESY site connection will use “orange” blow tube. If more bandwidth is required the throughput of the 100 fibres can be increased by multiplexing multiple wavelengths onto fibres. The en- and decoding multiplexer hardware would be located in the balcony endpoint racks and on the corresponding DESY side.

Note that the WP71 undulator room book requirements specify fibre connections of the undulators in the XTD tunnels to the following areas/rooms in XHEXP1:

- Field1 thru 5 – these are the experimental hutch areas
- an undulator control room – this will be a room in the upper floors (offices and labs) of XHEXP1

These connections will be made via the balcony end point racks.

Fibre cable, containing many pairs of LWL, will be laid as is in XTD cable trays – a blow tube is not required. XTD tunnel network equipment (switches, etc.) are connected by single fibre cables – as many pairs (12, 24...) are contained in the cable the questions of spares, etc. is not an issue.

3 Open questions – and who looks

Shaft building fibre routing issues:

- Fibre routing to equipment in shaft buildings (e.g. XS3) - are connections made to the balcony end point racks or back to DESY?
- Fibre routing tunnel to tunnel without going up into the shaft building.

These should be discussed at Monday’s CAD meeting – TW will look.

Details concerning the timing fibre connectivity need understanding – CY will look into this. How many fibres are needed, where is the fanout repeater located, etc.

Fibre routing XTL to XTDs – again an update should be made during the next CAD meeting – TW will look.

In CY's room book specifications 1 LWL is specified = this means 2 fibres. Maybe this mistake has been made by other people?

The specification of the fibres used by the timing group (H.Schlarb) was going to be updated and checked for consistency with other users' requirements. Ideally only one fibre type should be used.

We need diagrams which show cable trays, routing paths, etc (?)

4 Disclaimer

Details will change, but the concept should not.