

# **Report on ad hoc call on Figure 154-3 and associated text**

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# Introduction

During a further ad hoc call on 2 March the authors developed this presentation with recommendations to the Task Force to use it as a basis for creating (revised) responses to comments and proposed remedies to P802.3ct D3.1, especially related to Figure 154-3 and associated text.

The following consensus proposals relate to 2 groups of comments:

- R1-2, R1-14, R1-29, R1-37, R1-53, and R1-54.
- R1-30, R1-41, R1-52, and R1-55.

## Comments R1-2, R1-14, R1-29, R1-37, R1-53, and R1-54

During the interim teleconference call on 18 February it was already agreed to take comment R1-2 as “lead” comment and refer to it for responses to comments R1-14, R1-29, R1-37, R1-53, and R1-54.

For the response to comment R1-2 the ad hoc proposes to label it as “accept in principle”.

Then adopt the consensus figure from slide 6 of [stassar\\_3ct\\_01a\\_210218](#) as a replacement for Figure 154-3 in draft D3.1. This figure is reproduced on slide 5 of this presentation.

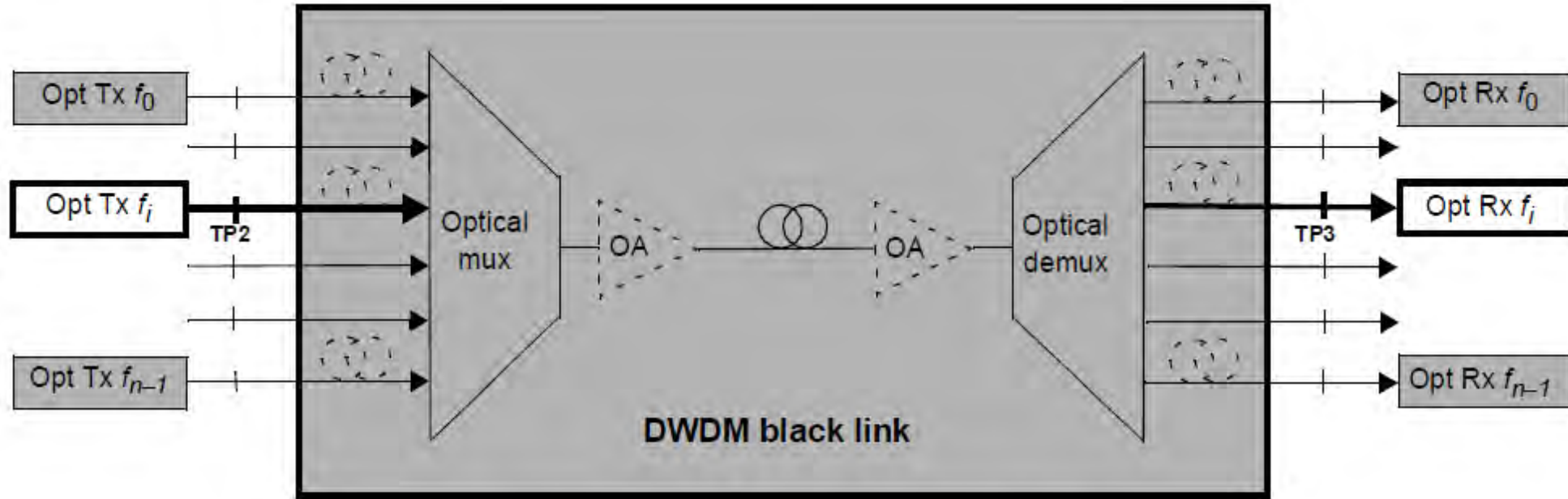
Furthermore during the ad hoc call replacement text was agreed for the 3<sup>rd</sup> and 4<sup>th</sup> paragraph in 154.6, shown on slide 6 of this presentation.

# **Comments R1-2, R1-14, R1-29, R1-37, R1-53, and R1-54, continued**

Further consensus was reached to create 2 new figures for inclusion in Annex 154A, shown on slides 7 and 8 and associated revised text for Annex 154A, shown on slide 9.

# Result of ad hoc discussions on Figure 154-3

It was the consensus of the ad hoc to modify Figure 154-3 to:



For clarity, only one direction of transmission is shown

Figure 154-3—DWDM black link example configuration for specifying  $n$  DWDM channels

## Consensus replacement text for 3rd and 4th paragraph of 154.6

Figure 154–3 shows a generic example of a DWDM black link. Functions carried out by the DWDM black link may include:

- Optical wavelength division multiplexing and demultiplexing.
- Simultaneous transport of a number of DWDM channels on a single fiber, where the channels supporting the full duplex links may be implemented on one fiber per direction, as illustrated in Figure 154A-1, or implemented on one fiber for both directions, as illustrated in Figure 154A-2.
- Optical amplification.

The arrangement of (DWDM) elements within the DWDM black link example shown in Figure 154–3 is not intended to place constraints on the construction of the DWDM black link, but simply to define the location of the single channel interfaces at TP2 and TP3. The DWDM black link in Figure 154–3 is an example of a DWDM black link, where the grey shaded box is used to illustrate that the details of the DWDM black link are not specified.

# New Figure 154A-1

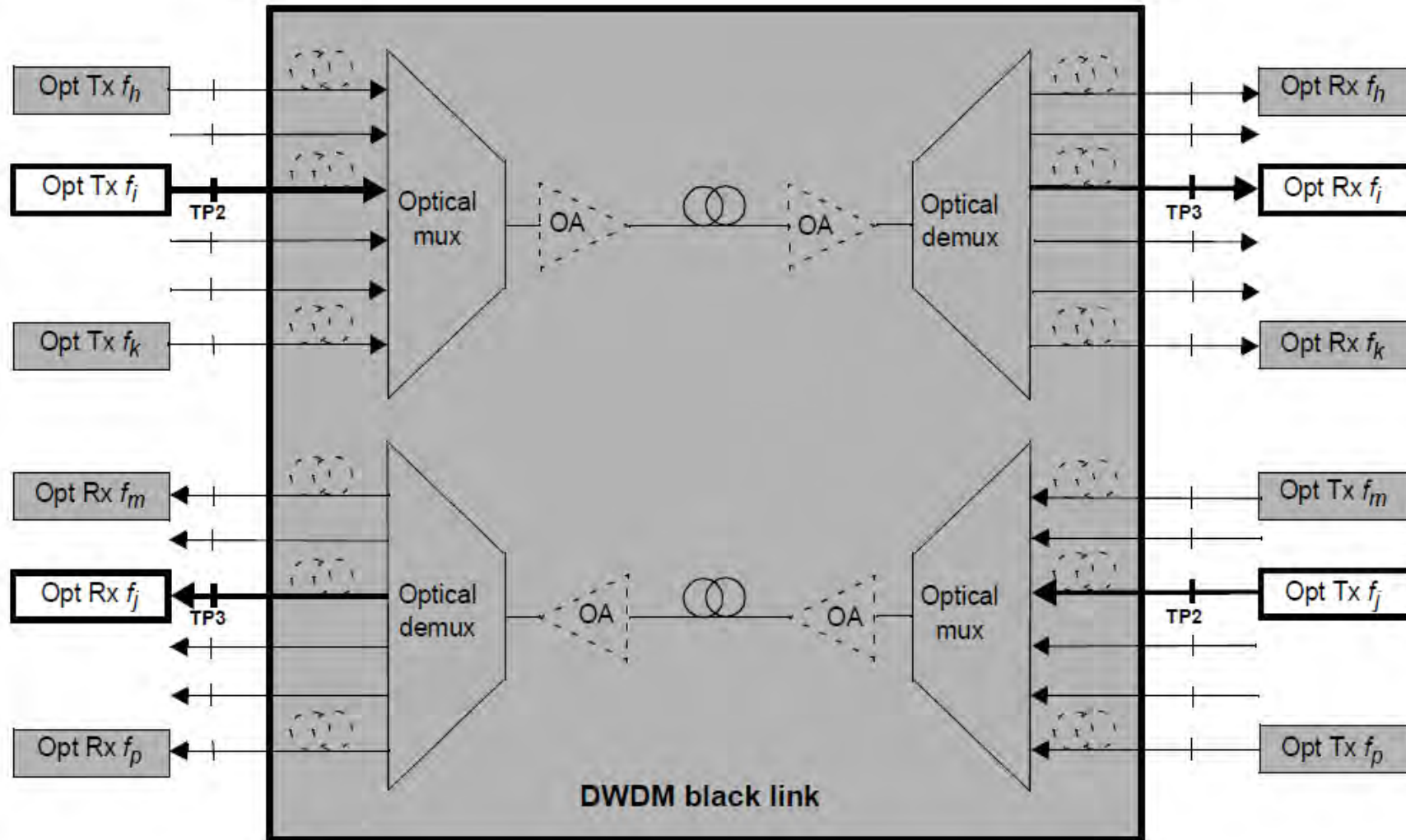


Figure 154A-1—DWDM black link example with one fiber per direction

# New Figure 154A-2

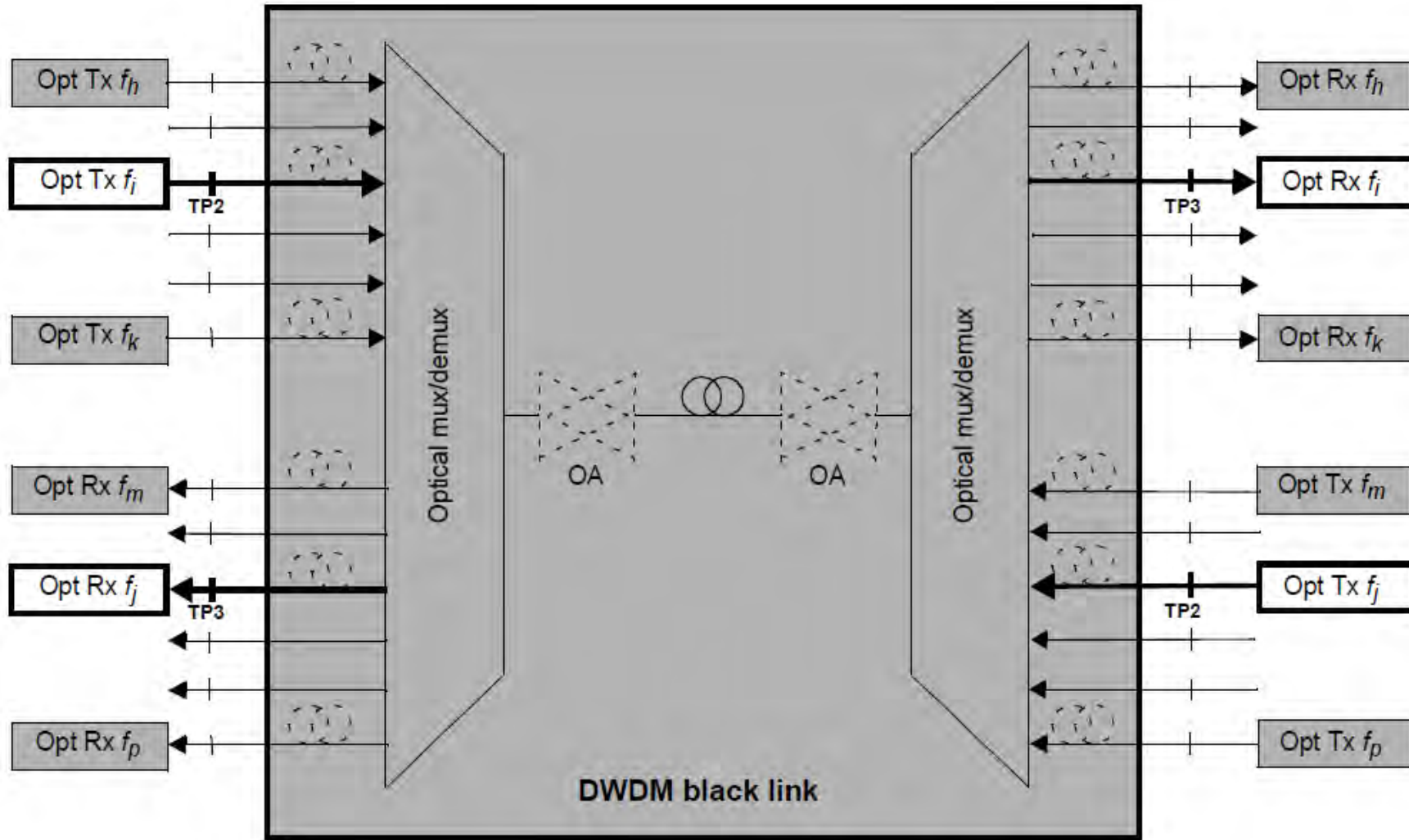


Figure 154A-2—DWDM black link example with one fiber for both directions



## Consensus revised text for Annex 154A

- Move the current text under “154A.1 Introduction” to a new subclause 154A.2 with heading “Relationship between OSNR and average optical power”.
- Renumber existing Figure 154A-1 to Figure 154A-3.
- Put the following text under “154A.1 Introduction”:

In implementations of the DWDM black link for 100GBASE-ZR, the channels supporting the full duplex links may be implemented on one fiber per direction, as illustrated in Figure 154A–1, or implemented on one fiber for both directions, as illustrated in Figure 154A–2.
- Renumber subclauses 154A.2 and 154A.3 to respectively 154A.3 and 154A.4.

## **Proposed response for comment R1-2**

### **Proposed Accept In Principle**

For the relevant text in 154.6 and Figure 154-3 implement slides 5 and 6 of stassar\_3ct\_01a\_210304 (or updated if modified), with editorial license.

For Annex 154A implement slides 7 to 9, with editorial license.

## **Comments R1-30, R1-41, R1-52, and R1-55**

During the interim teleconference call on 18 February responses to comments R1-30 and R1-41 were agreed.

Both comments relate to the second to last paragraph of 154.6.

Comments R1-52 and R1-55 however also relate to the same paragraph.

It is better reopen comments R1-30 and R1-41 and to look at the whole paragraph.

During the ad hoc call on 2 March consensus was reached to modify the text of the second to last paragraph of 154.6 to the text on the following slide, taking comment R1-55 as lead comment.

## Modified text for second to last paragraph of 154.6

The 100GBASE ZR PMD is specified on the basis that it can be connected to a DWDM black link that contains a portion where multiple DWDM optical channels are present, each connected to a separate 100GBASE ZR transmitter. These multiple DWDM channels have optical channel center frequencies that are part of a DWDM frequency grid defined in Recommendation ITU-T G.694.1. Table 154–5 shows the mapping of the 100GBASE-ZR channel index numbers to the optical channel center frequencies. The 100GBASE-ZR PMD specification covers a maximum of 48 channels over a DWDM black link that supports between 1 and 48 channels with center frequencies defined in Table 154–5. In a working 100GBASE-ZR link the PMD operates on one of 48 frequencies in each direction of transmission over a pair of DWDM channels. The 100GBASE-ZR near end Tx, the associated DWDM channel, and the 100GBASE-ZR far end Rx are all selected to have the same channel center frequency.

# **Proposed response for comment R1-55, with comments R1-30, R1-41 and R1-52 referring to R1-55**

## **Proposed Accept In Principle**

In the second to last paragraph of 154.6 change existing text to the text shown on slide 12 of stassar\_3ct\_01a\_210304 (or updated if modified), with editorial license.

Thanks!