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Source:	ITU-T Study Group 15
Title:	Response to BBF liaison statement regarding Packet and DWDM/Optical integration

LIAISON STATEMENT

For action to:	-
For comment to:	-
For information to:	IETF ccamp WG
Approval:	Agreed to by Q12/15 and Q14/15 (by correspondence, 25 March 2013)
Deadline:	-

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This liaison statement was sent to the BBF, during the IETF 86 meeting it was noted that CCAMP are considering some drafts that address some of the same topics, we are therefore sending this to IETF ccamp for information.

Text of liaison statement to BBF:

Thank you for your liaison statement indicating that you have initiated a project to addresses intra-domain architectures, requirements and use cases for Packet and DWDM/Optical integration.

We are pleased to note that you plan to reference the appropriate ITU-T Recommendations in your work. To assist you in this effort we have listed the key architecture, rates and formats, equipment and management Recommendations below and have provided some guidance on the scope of these OTN Recommendations.

The Optical Transport Network (OTN) Recommendations (and the optical layer Recommendations that they reference) specify the WDM interfaces and the frame structure which includes the overhead necessary for the operation and maintenance of an optical network. The OTN Recommendations also provide a set of standard mappings that allow TDM or packet traffic (e.g. IP) to be encapsulated and carried over OTN WDM interfaces.

The OTN Recommendations describe a wide range of functionality. The ODU, OTU and OCh overhead is required to maintain the OTN network and must be supported. The support of other

functions such as ODU multiplexing; ODUk switching; OCh switching; depends on the network application and is optional.

G.874.1 (2012) provides a protocol neutral equipment management information model for OTN network elements. The TM Forum MTOSI provides a network level management information model for the multi-technologies, including OTN. We hope that you will be able to reuse these management information models in your work.

We have initiated work to describe the physical layer S and R reference points defined in G.698.1 and G.698.2 as an OTN Intra Domain Interface (IaDI). This work includes the use of the DCN to carry the OCh out of band overhead (OCh-O) across this new IaDI. This will allow the coloured end point to be managed using G.874.1 and will support the alarm suppression and fault localization described in G.872.

G.698.1 and G.698.2 make use of the "black link" approach to define a (single-channel) transmitter and receiver together with the transfer function of the media path between them using a set of application codes. The use of a common application code provides compatibility of the transmitter, media path and receiver.

If you require any assistance in the use of these Recommendations please contact us.

Key OTN Recommendations:

G.870 "Terms and definitions for optical transport networks (OTN)"

G.872 "Architecture of optical transport networks"

G.709 "Interfaces for the optical transport network"

G.798 "Characteristics of optical transport network hierarchy equipment functional blocks"

G.798.1 "Types and characteristics of optical transport network equipment"G.874 "Management aspects of optical transport network elements"

G.873.1 "Optical Transport Network (OTN): Linear protection"

G.873.2 "ODUk Shared Ring Protection (SRP)"

G.874 "Management aspects of optical transport network elements"

G.874.1 "Optical transport network (OTN): Protocol-neutral management information model for the network element view"

G.7712 "Architecture and specification of data communication network"

G.7714.1 "Protocol for automatic discovery in SDH and OTN networks"

G.8201 "Error performance parameters and objectives for multi-operator international paths within the Optical Transport Network (OTN)"