

**Agenda Item:** 8.3

**Source:** Ericsson

**Title:** AAL2/AAL5 and Handling of AAL2 Connections on Iu

**Document for:**

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## 1. INTRODUCTION

It was agreed at SMG2-ARC EG meeting #9 Dec. 7-9 in Sophia Antipolis, France, that the Iu interface shall support both AAL2 and AAL5, but that the usage of AAL2 and AAL5 is FFS [5].

This contribution motivates and proposes that the new protocol under development by ITU-SG11 is selected for establishment and release of AAL2 connections over Iu.

It is also proposed that the output documentation is updated to state that AAL2 and AAL5 are used as transport bearers over Iu according to the minutes [5].

## 2. HANDLING AAL TYPE 2 CONNECTIONS ON IU

In a split CN scenario two alternatives should be considered according to the minutes [8]:

1. AAL2/RAB established with q.aal2
2. AAL2/RAB with semi-permanent connections selected by RANAP

In an integrated CN scenario AAL2 or AAL5 is selected depending on the service.  
Regardless of whether the CN is split or integrated AAL2 connections need to be established.

Advantages of q.aal2:

- Standardised method (off the shelf) for AAL2 connection handling.
- Plug and play; no operator intervention required to manage the AAL2 connections.
- AAL2 resource handling hidden from the AP.
- Flexibility; support to switch Iur traffic through the CN (MSC) without the need for cross connected PVCs between all RNCs. The Iur transport bearers may instead utilise the Iu PVCs. Hence, less PVCs to configure and manage.

## 3. PROPOSAL

The following is proposed:

1. The new AAL type 2 signalling protocol (Q.aal2) which is currently under development in ITU SG11 is selected as the standard protocol for establishing and releasing AAL type 2 connections across the Iu interface.
2. Refer to the Q.aal2 protocol under development in ITU SG11 as the signalling protocol to be used by UTRAN in sub-chapter 10.2.2 'ALCAP' in the Description of Iu Interface [4].
3. State in chapter 13.1 'Userdata Bearers' in the UTRAN Architecture Description [3] that Q.aal2 is used as the signalling protocol in the Transport Network Control Plane.
4. State in ch. 11.3 'Transport Layer' in the Description of Iu Interface [6] that AAL2 and AAL5 is used according to the minutes of SMG2-ARC EG meeting #9 [5].

## **4. REFERENCES**

1. ITU-T Draft TRQ.2015.1.01, Signalling Requirements for AAL Type 2 Capability Set 1 (CS1), November 1998
2. ITU-T Draft new ITU-T Recommendation Q.aal2 AAL Type 2 Signalling Protocol (Capability Set 1), January 1999
3. UMTS ZZ.01 - UTRAN Architecture Description, v.0.1.0
4. UMTS ZZ.11 - Description of Iu Interface, v.0.1.0
5. Tdoc SMG2 UMTS-ARC 002/99, Draft Minutes of ETSI SMG2 UTRAN Architecture Expert Group Meeting #9, December 7-9, 1998, Sophia Antipolis, France