

Agenda Item: 8: Outputs to other groups

Source: Rapporteur for R00 Work task: QoS optimization for AAL type 2 connections over lub and lur interfaces (Japan Telecom)

Title: Proposed liaison statement to ITU-T asks for the understanding of Q.2630.1

Document for: Approval

Abstract

This contribution proposes to send a liaison statement to ITU-T to have clear TSG RAN WG3 understanding of capabilities given by Q.2630.1 (Q.aal2 CS1) to proceed the R00 work task.

1. Introduction

Reference to Q.2630.2 (Q.aal2 CS2) is probable solution to achieve the R00 work task as in the approved work task description at the last TSG RAN#7 meeting.

However, different understandings of Q.2630.1 (Q.aal2 CS1) referred in R99 were revealed in the last May TSG RAN WG3#13 meeting and it prevented the proceeding of the expected study for the R00 work task.

2. Discussion

Critical points on the understanding of Q.2630.1 at TSG RAN WG3 are:

- Purpose of main body and ANNEX A “Support for non-switched scenario”, and
- Whether it has a capability to select succeeding AAL type 2 path according to requested QoS for the AAL type 2 path or does not.

Those are detailed in Annex of this contribution.

3. Conclusion and Proposal

Exact understanding of Q.2630.1 is required to wipe out the confusion regarding Q.2630.1 in TSG RAN WG3. Understanding of ITU-T recommendation is under the responsibility of ITU-T and it should not be manipulated in TSG RAN WG3.

So it is proposed to send a liaison statement to ITU-T to get exact understanding of the issue. Then we can focus on TSG RAN WG3 responsible study and can proceed the R00 work task in time.

Proposed liaison statement is attached as Annex of this contribution. Responsible question for Q.2630.1 in ITU-T is Joint Questions 13 and 20/11 (AAL type 2 signalling protocol). Special rapporteur is Mr. Ian Rytina (ian.rytina@ericsson.com) and Editor is Mr. Pietro Schicker (schicker@scicon.ch). The joint questions will convene at 4th – 7th July 2000 for its own work.

Annex of this contribution

ITU - Telecommunication Standardization Sector

Sophia Antipolis, 4th – 7th July 2000

QUESTIONS: Qs. 13&20/11 (AAL2)
SOURCE: Japan Telecom on behalf of 3GPP TSG RAN
TITLE: Liaison statement from 3GPP TSG RAN asks for the understanding of Q.2630.1

LIAISON STATEMENT

TO: Qs. 13&20/11 (AAL2)
APPROVAL: Agreed at 3GPP TSG RAN#8 meeting, 21st – 23rd June 2000
FOR: Action
DEADLINE: 7th July 2000 for 3GPP TSG RAN WG3, 14th September 2000 for 3GPP TSG RAN

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Abstract

This liaison statement requests ITU-T to intervene the understanding of ITU-T recommendation Q.2630.1 in 3GPP TSG RAN WG3 which refers the Q.2630.1 for its Release 99 version radio access network.

Introduction

ITU-T recommendation Q.2630.1 has already been referred by 3GPP technical specifications Release 99 version to establish/release AAL type 2 connection in its radio access network. And QoS optimization of AAL type 2 connection was approved as a Release 00 work task in order to reduce required instantaneous bit rate for radio access network transmission at 3GPP TSG RAN#7 meeting, 13th – 15th March 2000 and path type capability of draft Q.2630.2 is probable solution to realize the work task.

Request

During the study of the work task in the last May 3GPP TSG RAN WG3#13 meeting, different understandings of Q.2630.1 (Q.aal2 CS1) referred in Release 99 were revealed and it prevented the proceeding of the expected study for the R00 work task. Exact understanding of Q.2630.1 is required to wipe out the confusion regarding Q.2630.1 in 3GPP TSG RAN WG3.

Understanding of ITU-T recommendation is under the responsibility of ITU-T and it should not be manipulated at 3GPP TSG RAN WG3. So ITU-T would be appreciated if it could kindly intervene the understanding of Q.2630.1 on the points below;

1. Purpose of main body and ANNEX A “Support for non-switched scenario of Q.2630.1”:

A party of readers (party 1) regards that main body is for a section with AAL type 2 service endpoint – AAL type 2 switch – AAL type 2 service endpoint configuration (FIGURE 5-1/Q.2630.1 AAL type 2 signalling protocol reference architecture) and ANNEX A is for a section with AAL type 2 service endpoint – AAL type 2 service endpoint configuration (FIGURE A-5.1/Q.2630.1 AAL type 2 signalling

protocol reference architecture for the non-switched scenario). It questions what is the purpose of ANNEX A if main body is superset for both the section with AAL type 2 service endpoint – AAL type 2 switch – AAL type 2 service endpoint configuration and the section with AAL type 2 service endpoint – AAL type 2 service endpoint configuration.

Other party of readers (party 2) regards that main body is superset which is for both the two configurations with and without AAL type 2 switch. Main body consists of roughly three parts for originating AAL type 2 service endpoint, AAL type 2 switch, and terminating AAL type 2 service endpoint in its nodal function description. The originating and terminating AAL type 2 service endpoint parts are applied also to the configuration without AAL type 2 switch. Difference between the originating and terminating AAL type 2 service endpoint parts of the main body and ANNEX A is, in general, ANNEX A does not have/use AAL type 2 service endpoint address to select succeeding AAL type 2 path. It understands purpose of ANNEX A is for particular implementation just focuses on configuration without AAL type 2 switch and without AAL type 2 service endpoint address to select succeeding AAL type 2 path.

2. Whether it has a capability to select succeeding AAL type 2 path according to requested QoS for the AAL type 2 path or does not, especially in ANNEX A “Support for non-switched scenario”:

A party of readers (party 1) reads that ANNEX A has a capability to select succeeding AAL type 2 path according to requested QoS for the AAL type 2 path. Reasoning of it is unknown.

Other party of readers (party 2) reads that both main body and ANNEX A have no capability to select succeeding AAL type 2 path according to requested QoS for the AAL type 2 path. Reasoning of it is selection of succeeding AAL type 2 path is based on parameters given by ESTABLISH.request primitive parameters. And both main body and ANNEX A has no parameter to indicate requested QoS for AAL type 2 path and no procedural text to treat it in their originating AAL type 2 service endpoint descriptions.

The party 2 does not deny the possibility that party 1 makes an enhancement to Q.2630.1 to realize the capability in their implementation. However, it is not that Q.2630.1 has the capability, but is party 1's equipment refers Q.2630.1 may have the capability with their possible proprietary enhancement to the recommendation.

3. Whether it has a capability to select succeeding AAL type 2 path according to requested QoS for the AAL type 2 path or does not:

A party of readers (party 3) reads that Q.2630.1 (main body and may be ANNEX A) have a capability to select succeeding AAL type 2 path according to requested QoS for the AAL type 2 path. The basis of it is the paragraph in Q.2630.1 “Note that primitives over A2SU-SAP, GST-SAP, and LM-SAP are used for descriptive purpose only. They do not imply a specific implementation.”. The party regards this means that primitives are not standardized in Q.2630.1. Only messages are standardized. Thus you can add any of primitives or primitive parameters as you would.

Other party of readers (party 2) regards the paragraph is a general note that means Q.2630.1 specifies name and meaning of primitives/primitive parameters only and does not specify format and coding of them, not to be restrictive for implementation inside a node. And it also results in a specific note in Q.2630.1 that “NOTE - When sending a primitive between the signalling protocol and its user, the primitive needs to be associated with a particular AAL type 2 connection instance. The mechanism used for this binding is considered to be an implementation detail and therefore is outside the scope of this Recommendation.”. However, the primitives and primitive parameters are premise of capabilities realized by procedural description with the primitives/primitive parameters and signalling messages. The required capabilities for Q.2630.1 is specified in ITU-T requirement technical report TRQ.2400 and are common for main body and ANNEX A. Signalling protocol (Q.2630.1) does not beyond the capabilities required or approved in its requirement technical report (TRQ.2400). Otherwise ITU-T did not need to define path type capability in TRQ.2401, and did not need to add path type primitive parameter and related procedural text in Q.2630.2 those are needed in both the two configurations with and without AAL type 2 switch. Path type parameter in ERQ message is added to make it possible to apply the capability also to the section with AAL type 2 switch. Thus both main body and ANNEX A have no capability to select succeeding AAL type 2 path according to requested QoS for the AAL type 2 path.

The party 2 does not deny the possibility that party 3 makes an enhancement to Q.2630.1 to realize the capability in their implementation. However, it is not that Q.2630.1 has the capability, but is party 3's equipment refers Q.2630.1 may have the capability with their possible proprietary enhancement to the recommendation.

4. Other questions:

- What is the expected application of ANNEX A "Support for non-switched scenario"?
 - What is the probable outstanding logic for ANNEX A to select a route for terminating AAL type 2 service endpoint in case of 1:n network configuration and how the logic interworks with ANNEX A description?
 - Why path type capability is not included in ANNEX A of draft Q.2630.2?
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