$ITU-Telecommunication\ Standardization\ Sector$

STUDY GROUP 17

Working Document 01 -E (**Q.7/17**) Original: English

Atlanta (Marriott Atlanta Midtown), Georgia, USA

13-17, January 2003

Question: Q7/17 and IEEE 802.17

SOURCE: RAPPORTEUR Q.7/17 and Chair of IEEE802.17
TITLE: Joint IEEE 802.17 WG and Q7/17 Meeting Report on

X.msr-rpr related issues

1. Introduction

A joint IEEE 802.17 WG and Q7/17 Meeting was held on 13-17/01/2003 at Atlanta, USA and hosted by Scientific Atlanta. The meeting was chaired by Mike Takefman (IEEE 802.17 WG Chair). Mr. Yu presented a 50 minute presentation to report the status, highlights, scope and functions of X.msr-rpr at the opening plenary meeting, and the milestone, feature list and application of ITU-T Recommendation X.85/Y.1321 and X.86/Y.1323 are also included. The participants from Q.7/17 would like to thank the host organization, Scientific Atlanta, and in particular Mr. Mike Takefman, Mr. Robert D. Love, Chief editor Mr. Tom Alexander, Section editors and technical editors of 802.17 for their excellent support and hospitality, also would like to thank Dr. David James for his kindly helping to assign Ether-type code from the IEEE 802 RAC. The list of the meeting participants is given in Annex I.

The purpose of the meeting was to agree to the way forward on ITU-T Draft Recommendation X.msr-rpr and P802.17 to support X,msr-rpr. Annex II lists the SG17 related documents for this Jan. 2003 802.17 meeting and agenda. All documents are available on TIES informal area starting with the URL:

http://ties.itu.int/u/tsg17/sg17/wp2/q7/0007/index.html

2. Meeting results

The following list details technical areas within the 802.17 Draft that were explored for support requirements for X.msr-rpr:

- (1) Tributary Multicast can use group addresses for multicast and broadcast. 802.17 to determine if the standard has to define a primitive to support the setting/delete of a GA in the MAC or whether this is an implementation detail.
- (2) Topology Database Interaction MA_CONTROL.indicate is a sufficient protection trigger to X.msr as it delivers a new database on topology changes. Request for a method to get the database from the MAC on client demand. 802.17 to determine best method for achieving this (MA_CONTOL.request or some other method)
- (3) Tributatry Based Protection requires MAC to inform X.msr of a protection events on a period basis.

The draft assumes that all indications are reliable and sent once. The issue of creating a periodotic indication (that repeats until acknowledged) is an implementation detail. This may require a recommendation added to the draft that the MAC periodically sends the current protection status and database until the client has sent back a confirm.

(4) Broadcast Network - single fiber uni-directional may be supported by 802.17 depending on topology/protection mechanisms being disabled. MA_DATA.request is currently specified to allow a packet to be sent with Wrap Disable, Protection Disable, and Steering Disable by explicitly requesting a particular ringlet with no protection.

Requires further study to determine if other MAC mechanisms would prevent this request from being fulfilled..

- (5) Need to provide specification for Manual Protection Switch invocation
- (6) Plug and Play versus Pre-planned. RPR actually does both, Plug and play operation guarantees that topology / protection works automatically. The LME system allows the provisioning of bandwidths to be done.
- (7) Need Fairness Algorithm (FA) of MAC to support services of Class B and C.
- (8) Support for both local address and OUI MAC addresses. (*MAC address will be sent from MAC layer*.)
- (9) Client needs the following additional opcodes: the supported floodingForm (FF) (bi-directional or uni-directional), pastSource (PS), strictOrder (SO), remote forwarding, single-queue / dual-queue (primary or secondary), various shaper opcodes and chosen center wrap / edge wrap for the data path.

The supported fairness algorithm, including each station in proportion to its relative weight, unused bandwidth, single-choke, multi-choke, basic status, variables and parameters of FA. A sub-clause in section 9 (FA) is needed to describe interface to client.

The supported topology database and the related opcodes.

The supported wrapping status opcodes, path indicator (PI), opcodes of protection message request type (PMRT), basic status, variables and parameters in section 11.

- (10) Annex added to current draft of P802.17.
- (11) Add X.85/Y.1321 (IP over SDH using LAPS) as a SONET/SDH Physical Layer and Reconciliation layer. Requires a liason letter to ITU SG17 TSB for a new SAPI value for RPR.
- (12) Dr. David James to contact IEEE 802 RAC and provide some helps for Ether-type public codes assignment of X.msr-rpr. After checking IEEE web page, 0x88b5 and 0x88b6 may be two candidates.
- 3. Further communication, liaison and work items.

Mr. Shaohua Yu should try to make update contribution (TD2132 Rev.5) reflecting above comments to the next IEEE802.17 meeting (IEEE 802 plenary meeting, 9-14 March 2003, Hyatt Regency Dallas Fort Worth at the Dallas Fort Worth Airport). Any comments for this ITU-T draft Recommendation X.msr-rpr are welcome.

IEEE 802.17 WG to form an adhoc to close on open items and determine the appropriate method for supporting X.msr within P802.17. Adhoc to report to 802.17 WG during the March 2003 IEEE 802 Plenary meeting and a decision to be taken. Dr. Yu will be informed on all adhoc progress as it meets. If possible, he is invited to attend the conference calls.

4. Closing of the meeting

The meeting report was reviewed and agreed. The meeting was closed at 19:00.

Annex I

Attendance list

If need to contact IEEE802.17WG people from Q.7/, transfer to Mr. Mike Takefman.

Mike Takefman, Chair of IEEE802.17WG, Cisco Systems tak@cisco.com

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Jin Yu, Scientific Atlanta, jinyu@sciatl.com

Link Verstegen linkv@verstegen.com

Annex II

IEEE802.17WG and Q7/17 experts meeting, Atlanta, January 2003, WDs

WD_001--TD2132 Rev.4 pdf, Multiple services ring based on RPR
WD_002--802-17 presentation for X.msr-rpr pdf (3), X.msr-rpr in TD 2132 Rev.4 from ITU-T Question.7,
Presentation to IEEE 802.17 Interim meeting (Atlanta, Jan. 13-17, 2003)
WD_003--X86 vs GFP flow (2) 030112 pdf, Ethernet Flow Mapping to RPR (fields and timing),
Comments to 802.17 Atlanta Jan. 2003 meeting
WD_004-- mlt_msrah_01 pdf, Moving Forward on X.msr
WD_005-- mlt_xmsr_01 pdf, Notes from X.msr Meeting

The meeting Agenda

RPRWG Interim Meeting Agenda Monday Jan. 13, 2003

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Time
                Title
                         Name RefLocator
                                                  Filename
        Len
8:00 Registration Desk Open Everyone
8:00 0:30 Welcome Slides and Meeting Goal Mike Takefman 802-17-03-01000 mlt_admin_01.pdf
8:30 0:03 Approval of Agenda Mike Takefman
8:33 0:02 Review of November Meeting Minutes Mike Takefman
8:35 0:25 Editor's Report Tom Alexander
9:00 0:23 Unbalanced Traffic and RPR Fairness Algorithm Violeta Gambiroza 802-17-03-01002
va sim 01.pdf
9:23 0:37 Proposal for Improvements to the Conservative Algorithm K.K. Ramakrishnan 802-17-03-01001
kkr_fair_01.pdf
10:00 0:20 Break
10:20 0:14 Dynamic RTT Measurement John Lemon 802-17-03-01015 jl_rtt_01.pdf
10:34 0:25 Ring Configuration and Provisioning Anoop Ghanwani 802-17-03-01003 ag_config_01.pdf
10:59 0:30 RPR Frame Format and Tx/R x Simplifications Robert Castellano 802-17-03-01004
frame_adhoc01.pdf
11:29 0:15 Carleton University Simulator Yan Robichaud 802-17-03-01014 yr_sim_01.pdf
11:44 0:15 PAH Report Jim Kao 802-17-03-01007 jk_pah_01.pdf
11:59 0:55 Lunch
12:54 0:10 Simple Model of Context Containment Robustness Mike Takefman 802-17-03-01005
mlt_model_01.pdf
13:04 0:15 Time Synchronization David James 802-17-03-01008 dvi tsvnc 01.pdf
13:19 0:20 Multichoke refinements of single-choke fairness David James 802-17-03-01010
dvi mchoke 01.pdf
13:39 0:50 X.msr-rpr Shaohua Yu 802-17-03-01006 sv xmsr 01.pdf
14:29 0:20 Robust model for simple context containment David James 802-17-03-01011 dvi_protect_01.pdf
14:49 0:40 PICS and Conformence Tom Alexander 802-17-03-01013 ta_pics_01.pdf
15:29 0:10 A few thoughts on .1D compliance Mike Takefman 802-17-03-01012 mlt _1d_01.pdf
15:39 0:20 Break and Set Room for CR
Comment Resolution Session 0A
4:00 2:00
6:00
Comment Resolution Session 0B
4:00 2:00
6:00
Comment Resolution Session 0C
4:00 2:00
6:00
20:00 2:00 More Comment Resolution? OR
20:00 2:00 Adhoc Meeting Time - X.msr
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RPRWG Interim Meeting Agenda Tuesday Jan. 14, 2003

Time Len Title Name RefLocator Filename

Comment Resolution Session 1A

8:00 3:50

11:50

Comment Resolution Session 1B

8:00 3:50

11:50

Comment Resolution Session 1C

8:00 3:50

11:50

11:55 1:05 Lunch

Comment Resolution Session 2A

13:05 4:30

17:35

Comment Resolution Session 2B

13:05 4:30

17:35

Comment Resolution Session 2C

13:05 4:30

17:35

20:00 2:00 Comment Resolution?

22:00

RPRWG Interim Meeting Agenda Wednesday Jan. 15, 2003

Time Len Title Name

Comment Resolution Session 3A

8:00 3:50

11:50

Comment Resolution Session 3B

8:00 3:50

11:50

Comment Resolution Session 3C

8:00 3:50

11:50

13:00 1:45 Mid Week Plenary!!! Considering Comment Resolution

14:45 0:15 Break / Reset Rooms

15:00

Comment Resolution Session 4A

15:00 2:45

17:45

Comment Resolution Session 4B

15:00 2:45

17:45

Comment Resolution Session 4C

15:00 2:45

17:45

18:00 1:00 Social Event

20:00 2:00 Comment Resolution

22:00

RPRWG Interim Meeting Agenda Thursday Jan. 16, 2003

Time Len Title Name

8:00 0:30 Seating

8:30 0:05 Agenda Scrub Mike Takefman

8:35 1:25 Editor's Report and Motions Tom Alexander

10:00 0:15 Break

10:15 1:45 Editor's Report and Motions Tom Alexander ns_hec_01.pdf

12:00 1:15 Lunch

13:15 0:05 Seating

13:20 2:00 Editor's Report and Motions Tom Alexander

15:20 0:15 Break

15:35 1:30 Editor's Report and Motions Tom Alexander

17:05 1:00 Other Motions Mike Takefman

18:05 1:00 Editor's Report and Motions Tom Alexander

19:05 0:00 Adjourn

19:05

19:05 NOTE: Adjournment is not guaranteed at 6pm - we will continue as long as

19:05 we can close all motions

RPRWG Interim Meeting Agenda Friday Jan17, 2003

Go HOME THE MEETING ENDED YESTERDAY