Modify this Draft PAR

Submit this Draft PAR to NesCom

Delete this Draft PAR

Draft PAR Confirmation Number: 184378072.3654

Submittal Email: tak@cisco.com

Change Submitter Email

Type of Project: Modification to a Previously Approved PAR P802.17b on 08 Dec 2004

1.1 Project Number: P802.17b

1.2 Type of Document: Standard for

1.3 Life Cycle: Full

1.4 Is this project in ballot now? Yes

2.1 Title of Standard: Information Technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements Part 17: Resilient packet ring (RPR) access method & physical layer specifications - Amendment 1 - Spatially aware sublayer

Old Title: Information Technology Telecommunications and information exchange
between systems - Local and metropolitan area
networks - Specific requirements - Resilient
Packet Ring Access Method & Physical Layer
Specifications – Amendment 1 - Spatially Aware
Sublayer

3.1 Name of Working Group: Resilient Packet Ring Working Group

Add/Change Working Group

Contact information for Working Group Chair

Michael Takefman Email: tak@cisco.com Phone: 613-254-3399

Contact Information for Working Group Vice Chair

Email:

Phone:

3.2 Sponsoring Society and Committee:IEEE Computer Society/Local and Metropolitan Area Networks (C/LM)

Contact information for Sponsor Chair:

Paul Nikolich

Email: p.nikolich@ieee.org Phone: 857-205-0050

Contact information for Standards Representative:

Email: Phone:

3.3 Joint Sponsor:/()

Contact information for Sponsor Chair:

Email:

Phone:

Contact information for Standards Representative:

Email: Phone:

- 4.1 Type of Ballot: Individual
- 4.2 Expected Date of Submission for Initial Sponsor Ballot: 2006-07
- 4.3 Projected Completion Date for Submittal to RevCom: 2006-12
- 5.1 Approximate number of people expected to work on this project: 12
- **5.2 Scope of Proposed Standard:** This project amends 802.17-2004 adding one or more new clauses defining optional extensions to support increased spatial reuse on the media. 802.17-2004 allows spatial reuse for ring local unicast transmissions, this amendment adds support for spatial reuse of other frame transmissions (e.g. remote bridging as seen in 802.1 D/Q). Changes to existing clauses of 802.17-2004 are permitted if required to support the new clauses.
- 5.3 Is the completion of this standard is dependent upon the completion of another standard: No

If yes, please explain:

- **5.4 Purpose of Proposed Standard:** 802.17-2004 provides spatial reuse for ring-local unicast transmissions. This limits spatial reuse to host stations (e.g. routers) attached to the ring and precludes other devices that(eg. bridges). The amendment will extend the class of frame types and device types that can achieve spatial reuse to significantly improve bandwidth efficiency on Resilient Packet Rings.
- **5.5** Need for the Project: Spatial Reuse is achieved by stations stripping a frame from the media once it has reached its destination. This differs from previous 802 ring technologies where the frame was required to circulate around the entire ring. Destination stripping increases overall ring efficiency as bandwidth is not wasted with continued circulation of the frame.
- 802.17 is being used on a variety of networking equipment including, ethernet switches, IP routers, MPLS switches and Add-Drop-Multiplexors. Internet Service providers, Network Service providers, Cable MSOs, PTTs, ITTs and large enterprises are deploying RPR technology and require the benefits of spatial reuse to be extended to the other frame transmission types being used in their networks.

5.6 Stakeholders for the Standard:

Intellectual Property

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes If yes, state date: 2006-07-15

If no, please explain:

- **6.1.b.** Is the Sponsor aware of any copyright permissions needed for this project? No If yes, please explain:
- **6.1.c.** Is the Sponsor aware of possible registration activity related to this project? Yes If yes, please explain: A 48-bit multicast address to be used for control may be required from the IEEE 802.1 WG.

7.1 Are there other standards or projects with a similar scope? No

If yes, please explain:

and answer the following: Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

7.2 Future Adoptions

Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? Do not know at this time

If Yes, the following questions must be answered:

Technical Committee Name and Number:

Other Organization Contact Information:

Contact person:

Contact Email address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No

If yes, please explain:

7.4 Additional Explanatory Notes: (Item Number and Explanation)

During sponsor ballot a comment was received that the title of the draft did not match the title of the PAR. In

reviewing the title of the base standard and the original PAR form we discovered an error in the title. The

purpose of this modification to the PAR to to align the title of the PAR, draft and base standard.

8.1 Sponsor Information:

Is the scope of this project within the approved scope/definition of the Sponsor's Charter? Yes If no, please explain:

Contact the NesCom Administrator