5.13

P802.1 recommends that the US response to the following ballots in ISO/IEC JTC1/SC6 on bridge-related topics should be as indicated:

PDTR 11802-5 (.1H)	YES
10038/PDAM 1 (.6k)	YES
10038/PDAM 2 (.1j)	YWC*
15802-5/PDAM 1 (.6I)	YWC#

* Comments: P802.1-95/009

Comments: P802.1-95/010

Moved:	Chambers	
Seconded:	Yondav	
FOR 11	AGAINST 0	ABSTAIN 2

5.14

P802.1 instructs the editor for P802.1j, Mr Alan Chambers, to produce a revised draft in accordance with the instructions in P802.1-95/008. The resulting draft is to be circulated to P802.1 for confirmation ballot, the text is to be submitted for LMSC for Sponsor Ballot.

Moved:	Hart	
Seconded:	Keen	
FOR 11	AGAINST 0	ABSTAIN 1

5.15 Instructions to the Editor for the revision of Overview and Architecture (P802.1-95/007)

12 July 1995

1. In 1.2, replace the definition of 802 LAN with a more readily accessible description; retain the present more technical definition, but move to an appropriate place in section 4.
2. Also in 1.2, introduce bridges / switches as key concepts.
3. Also in 1.2, add an indication of typical performance expectations (speed, latency).
4. Add a statement about the internationalization intended for most IEEE 802 work items.
5. In 1.3, update the list of applications and devices supported, in accordance with the discussions at the July 1995 meeting of P802.1.
6. Modify the introductory text in section 2, to have a less strictly normative sense (more appropriate to the overview role).
7. Modify the text on LAN/MAN management to reflect the revised 802 position agreed at the July 1995 meeting.
8. In 4.2.2.1, add a note on the interpretation of the words "object" and "agent" in the management context.
9. In 3, delete from "or IEEE 802y compatible" (page 8 line 44) to end of sentence.
10. Delete second paragraph of 4.2.2.2.
11. Delete last paragraph of 4.2.3.
12. Add a mention of LLC addresses, with references to TR 11802-1 and 8802-2, at the end of 4.2.4.
13. In 4.2.6, add text on isochronous operation (to be supplied by Mr John Boal).

5.16 Instructions to the Editor for P802.1j, and Ballot Summary (P802.1-95/008)

12 July 1995

1.Summary of Voting on P802.1j/D4 Working Group Ballot

Returned: 13 Voting Members out of 21 = 62%

Also 5 Voting Liaisons and one Contributing Member

Total 19, including 3 abstentions

Approval: 14 VM, CM and VL out of 16 = 88% (before comment resolution)

16 out of 16 = 100% (after resolution of accompanying comments)

2.Disposition of Comments on P802.1j/D4 Ballot

Comments were received accompanying the disapproval votes from Hal Keen and Dave Carlson, and accompanying approval votes from Alan Chambers, Paul Cowell, Rosemary Slager and Robin Tasker.

2.1 Comments from Hal Keen

Items 1, 3, 4, 6, 7, 8, 10, 14 and 15: Accepted as proposed.

Item 2: Accepted with modification. The attributes are not misplaced, see the comment on the first one, but they do need to be introduced by the keywords "GROUP ELEMENTS" (and there is a comma missing between the attributes).

Item 5: Superseded. The Entry Index attribute was deleted at an earlier stage, but that decision appears to have been flawed since the mapping of the Read Filtering Database Entry Range operation (ISO/IEC 10038, 6.7.5.4) requires the attribute, or an equivalent. The attribute is to be reinstated, and the allocation for the arc should therefore remain.

Item 9: Not accepted. There is something amiss in the grammar of the proposed replacement, and not in the existing text (although it does read a little awkwardly).

Item 11: Concern accepted, but a more radical rewording is proposed in order to describe the correspondence in question more accurately.

Item 12: There is in fact a subtle distinction between the use of "Not required", in the Read operations, and "Not used", in the Set operations: no change proposed.

Item 13: Superseded by reinstatement of the Entry Index attribute (see item 5), which will be described in 7.8.4, thus making the references to 7.8.5 correct.

2..2 Comments from Dave Carlson

(These comments all concerned editorial consistency of capitalization, spacing and punctuation. The need for such consistency is fully accepted, but some of the specific changes proposed need a different detailed disposition in order to achieve the required consistency.)

Item 1: Pagination will be corrected (word-processor artefact)

Items 2, 3: Capitalization of titles in the References clause will follow that of the actual documents, where a broadly lower-case policy is modified by a number of specific exceptions (including "Data Link Layer" for ISO/IEC 10742, item 3).

Item 4: ISO and IEEE publications use periods at the ends of references, so no change.

Item 5; Accepted.

Item 6: Accepted with modification: "Data Link Subsytem" also needs capitals, for consistency with ISO/IEC 10742.

Item 7: Accepted.

Item 8: Accepted, plus capitalization of "Data Link", per OSI layer-name usage.

Item 9: Accepted.

Items 10, 11, 12 (ARC column):Not accepted, the existing capitalization is that used in ISO/IEC 10742.

Item 12 (PURPOSE column):Same as item 6.

2.3 Comments from Alan Chambers, Paul Cowell and Robin Tasker

Accepted: the references will be updated, in particular replacing IEEE Std 802.1B by ISO/IEC 15802-2.

2.4 Comment from Rosemary Slager

Accepted: the usual IEEE 802 Foreword and full Participants Lists will be provided, but perhaps not in the next draft.

3.Instructions to Editor for Revision of P802.1j/D4

1. Reinstate the Entry Index attribute: provide suitable additions in table 7-21; 7.8 (page 46 lines 31-32); new 7.8.4 and renumber existing subclause as 7.8.5; 7.9 (page 50 lines 3-4). (HDK.5)
2. Update references, particularly to take account of ISO/IEC 10038 and ISO/IEC 15802-2, both in the References clause and in citations in the text. (DEC.2, AMC, PJC, RST)
3. Change order of subclauses 1.2, 1.3, 1.4 to match order in ISO/IEC 10038. (HDK.8)
4. Introduction, page 7 line 9: delete text from "documentation of" to end of line. (HDK.7)
5. Page 9 line 48, "wich" -> "which". (HDK.15)
6. Page 10 line 3, "documentation is" -> "documentation are". (HDK.10)
7. Page 10 lines 20-21, replace sentence by: "Tables 7-1 through 7-4 specify how the management operations (defined in clause 6) correspond to LMMS service primitives (defined in ISO/IEC 15802-2) and managed object classes (defined in 7.3 through 7.9)." (HDK.11)
8. Page 13 lines 5 and 6, "Datalink" -> "Data Link". (DEC..5)
9. Page 24 lines 28-29, correct capitalization and spacing in "Data Link Subsystem". (DEC.6, 7)
10. Page 25 line 15, "link" -> "Data Link". (DEC.8)
11. Page 26 figure 7-1, "DATALINK" -> DATA LINK". (DEC.9)
12. Page 34 line 44, "acSetPortState" -> "acForcePortState". (HDK.1)
13. Page 45 line 28, insert "GROUP ELEMENTS" before "aNumberOfDynamicEntries" and comma after. (HDK.2)
14. Page 47 line 16, insert additional reference "6.7.5.3.2 (2), ". (HDK.3)
15. Page 49 lines 22-31, delete "Arc" from each Object Identifier definition, for consistency with the preferred convention as per annex C. (HDK.4)
16. Page 51, delete the instructions to insert the copyright-release footnote for annex A (already present in ISO/IEC 10038). (HDK.14)
17. Page 52 line 17, "shosw" -> "shows". (HDK.15)
18. Page 53 line 12, "(o)" -> "(0)". (HDK.15)
19. Page 54 line 2, "Datalink" -> "Data Link ". (DEC.12)

5.17 Proposed comments on ISO/IEC 10038/PDAM 2 (P802.1-95/009)

12 July 1995

Comment item 1 is minor technical; other items are editorial corrections.

1. In order to map the Read Filtering Database Entry Range operation (ISO/IEC 10038, 6.7.5.4), an Entry Index attribute needs to be defined. Suitable additions are needed in table 7-21; 7.8 (page 46 lines 31-32); new 7.8.4 with existing subclause renumbered as 7.8.5; 7.9 (page 50 lines 3-4).
2. Update references, particularly to take account of ISO/IEC 10038 and ISO/IEC 15802-2, both in the References clause and in citations in the text
3. Change order of subclauses 1.2, 1.3, 1.4 to match order in ISO/IEC 10038
4. Introduction, page 7 line 9: delete text from "documentation of" to end of line.
5. Page 9 line 48, "wich" -> "which"
6. Page 10 line 3, "documentation is" -> "documentation are"
7. Page 10 lines 20-21, replace sentence by: "Tables 7-1 through 7-4 specify how the management operations (defined in clause 6) correspond to LMMS service primitives (defined in ISO/IEC 15802-2) and managed object classes (defined in 7.3 through 7.9).
8. Page 13 lines 5 and 6, "Datalink" -> "Data Link"
9. Page 24 lines 28-29, correct capitalization and spacing in "Data Link Subsystem".
10. Page 25 line 15, "link" -> "Data Link".
11. Page 26 figure 7-1, "DATALINK" -> DATA LINK".
12. Page 34 line 44, "acSetPortState" -> "acForcePortState".
13. Page 45 line 28, insert "GROUP ELEMENTS" before "aNumberOfDynamicEntries" and comma after.
14. Page 47 line 16, insert additional reference "6.7.5.3.2 (2), ".
15. Page 49 lines 22-31, delete "Arc" from each Object Identifier definition, for consistency with the preferred convention as per annex C.
16. Page 51, delete the instructions to insert the copyright-release footnote for annex A (already present in ISO/IEC 10038).

17. Page 52 line 17, "shosw" -> "shows".
18. Page 53 line 12, "(o)" -> "(0)"
19. Page 54 line 12, "Datalink" -> "Data Link ".

5.18 Proposed comments on ISO/IEC 15802-5/PDAM 1 (P802.1-95/010)

12 July 1995

1. The text proposed would be more appropriate as a normative annex than as a new subclause of 2.
2. The description of the protocol identifiers used in the encapsulation needs to be aligned with the definitions in IEEE Std 802-1990. The protocol identifier is the full five octets, in each case, not just the two octets following the OUI.

5.19 Summary of actions required to be carried out following the maui meeting

5.19.1 Actions on Bill Lidinsky

1. Ensure that the 802.1p PAR documentation is provided to Don Loughry in the correct format for forwarding to the Standards Board (by end July)
2. Take the actions outlined in Kathy Doty's Email (see 5.2), by end July, namely:
   * Contact Rosemary Tennis to ask her to form a new balloting group for 802.1E;
   * Write a cover letter to go out with the ballot document (15802-4:1994), identifying the ballot as a reaffirmation & emphasizing the responsibility to respond (see item 5.2 above). Forward the letter to Kathy Doty.
3. Write to the IEEE Standards Board (by end July) requesting that the life of 802.1D be extended until March 1997 pending revision under the 802.1d PAR (see item 5.3 above).

5.19.2 Actions on Alan Chambers

1. Revise Overview & Architecture & issue it for ballot among 802.1 plus liaisons, prior to November meeting.

2. Communicate 802 recommendations on US ballot responses & comments to the appropriate US representatives (Dave Carlson etc), by end July. (see items 5.11, 5.12, 5.13).
3. Produce revised draft of P802.1j & circulate for confirmation ballot/sponsor ballot, by ??.

5.19.3 Actions on Tony Jeffree

1. Respond to the upcoming Overview & Architecture ballot in line with the 802.1 resolution on CMIS/CMIP
2. Reply to Kathy Doty's Email message (see 5.2) regarding 802.1E re-affirmation, indicating that Bill Lidinsky will be formally requesting the formation of a balloting group, by end July.
3. Prepare and circulate a first draft of P802.1p, by September 25th. (see item 5.7).

5.19.4 Actions on Mick Seaman

1. Announce details of the Denver Interim Meeting via the 802.1 exploder, by end of August. (see item 5.6)
2. Announce details of the 802.1 Pre-Meeting (Monday morning at the November 802 plenary meeting) via the 802.1 exploder, by end of September. (see item 5.5)
3. Prepare and circulate via the exploder a further draft of P802.1d, by 20th Sept. (see item 5.9)

6. Worldwide arena for Multimedia Standards - Wayne Zakowski

[Editor's Note: This material was originally presented to me as a diagram, showing the interrelationships between the various fora involved in MM standards. I have attempted to retain the same information content in a form that is EMAIL-able.

The diagram showed the ITU-SG15 as central to worldwide MM standards, and indicated the existence of formal relationships/liaisons between ITU-SG15 and ITU-SG2/12, and between ITU-SG2/12 and the MMCF. It also showed informal/desired relationships/liaison between ITU-SG15 and all the other organisations listed below. The bulleted items indicate the areas of relevant activity.]

ITU-SG15

System Application Architecture For Teleconferencing

* QOS parameters
* Reservation
* Synchronization

ITU-SG2/12

* QOS Framework & performance objectives.

MMCF

* QOS Profiles
* QOS parameters
* (Technology independent)

IETF

* Reservation
* Synchronization
* Network Mgmt

IEEE 802

* Bridging
* Level 1 & 2 of transport
* Legacy LAN QOS

WINSOCK Forum

* QOS parameters (for virtual transport)

ATM Forum

* QOS parameters (for ATM)

7. VLAN ad hoc meeting slides (provided by Karl Shimada)

VLAN ISSUES/SCOPE

* What is/is not a VLAN
* What are the real-world problems to be addressed - Goals/non-goals
  - simplify adds/moves/changes
  - spans multiple technologies
  - security
  - mobility
  - workgroup/broadcast domain
  - individuals in multiple workgroups
  - shared resources in multiple VLANs
  - works with existing desktops
  - interoperable with existing desktops
  - interoperable with existing interworking devices
  - compatibility with existing & de-facto standards
* Symmetry & transitivity
* How to set up a VLAN / VLAN Creation
  - End station participation
  - join, leave, merge, partition
* VLAN Framework
  - user (end station)
  - network
  - NM
* Mobility/security
* Switch to switch communications - trunk
  - Spanning Tree/Source Routing
  - Distribution of VLAN Information/Topology
  - Frame Tagging
* Target net topologies
* VLAN identification
* Service interfaces
* Management model/architecture/reachability
* Addressing
* Auto-configuration
* Liaisons to/from
  - ATM Forum/LAN emulation
  - IETF

* VLAN operation over routed infrastructures

BENEFITS OF VLANs

* Easier adds, moves, changes
* Groupcast management
* Security
* Traffic management
* Efficient use of Network hardware & resources
* Groupings of stations for administrative purposes

8. Some VLAN Requirements & Considerations - Yang & Rijsinghani, Maui, 11 July 1995

Some proposed VLAN requirements for discussions at 802.1.

1. It support logical grouping of stations that can communicate as if they were on the same LAN, even though they are physically spread out on different LANs or segments within the physical boundary of a Bridged LAN. Note: Communications on a given LAN is a broader term to cover unicast and multicast (or broadcast domain) services.
2. It allows networked devices (e.g., stations, bridges and switches) to be logically connected (some what) independent of their physical connectivity & constraints.
3. It supports all 802 LAN technologies. Note: Should have liaison to ATM Forum for LAN Emul.
4. Inter-VLANs communications should be provided by layer 3 or higher.
5. Standard 802 LANs provide ease of moves, adds and changes. VLAN shall maintain the same level of moves, adds and changes while allowing additional logical grouping. There shall be a defined set of rules and guidelines for end systems to join, leave, be added, and be removed from a VLAN.
6. VLAN shall provide traffic firewall between different instances (and type?) of VLANs.
7. Once created, VLANs shall be auto configurable and operate without dependence on network management interventions.
8. VLAN shall adopt automatically to topology changes (e.g., spanning tree changes).
9. Topology changes in a VLAN should not affect connectivity in other VLANs.
10. There shall be a method to ensure coherency of VLAN configuration data base.
11. IS to IS links shall support point-to-point link as well as a shared LAN connection. For a shared LAN connection, there may be multiple end systems on one shared LAN.
12. For native LAN communication services, VLAN shall be transparent to end systems (e.g., PCs, workstations, servers), once it is correctly set up.
13. There may be support of enhanced LAN services such as multicast grouping, priority service class, etc.
14. VLAN shall interoperate with existing standard compliance sections.

15. Backward compatibility mode with existing 802.1D bridges.
16. There shall be a network management method to create and delete VLAN, add, change and remove end systems and Intermediate Systems (ISs), and management of VLANs.
17. Network management shall have reachability to all VLANs for management functions.
18. Management observability, accounting, and monitoring.
19. VLAN configuration protocol, performance enhancement and scalability, robustness & availability. (for further study).

9. Notes on 802.1 Meeting Session on Overview and Architecture (Alan Chambers)

Wednesday 11 July 1995

The meeting considered the first draft revision of IEEE Std 802-1990, P802/D20, which was introduced by the editor, Alan Chambers.

The meeting agreed (without dissent) on a number of revisions to the input text: these are documented in the Instructions to Editor, P802.1-95/007.