IEEE 802.1 Minutes, November 2003,

Pre-Meeting Monday, November 10, 2003

Agenda – Mick Seaman

L2 Packet Marking for Drop Precedence – Steve Haddock

Presentation is on the website

RFC 2597 – Dual rate service

All packets IP

Provider bridges have to have knowledge of IP

Drop service is not priority that is the marking is temporal

Drop precedence must maintain

Use the CFI bit

Look at the consequences of using CFI

Some bridges do higher Level parsing is disabled if the CFI bit is not set

Backwards Compatibility Comparison

Single rate service

Summary

Use the CFI bit in Provider Tags to indicate drop precedence

Relationship to MPLS

If use CFI there will be a mapping from Ethernet Traffic Class/Drop Precedence (TC/DP) to MPLS TC/DP

Discussion

The world is IP – make IP fast and don't worry about the rest But don't want to tell customer that they have to use IP and if Providers are doing Layer 2 provider network don't want to go into the packet to layer 3, too much over head.

Bit of where we are and what this discussion is about – Mick Seaman

Drop Precedent has changed context.

Right now not talking about redoing the existing Q tag

May have to redo the provider Tag

Can not be consistent across a network

Provider network are not structured networks

Consistency does not mean the whole network does not handle packets the same across the whole of the network

Do the provider network and see how the drop precedent fits do the enterprise "classic" network support for drop precedent needs to be handled as a separate problem

Discussion – Ali Sajassi

Thought process analysis

This is to see if everybody agrees on things

Everybody understands the need for drop precedent

Question is whether the drop precedent is explicit or implicit

Pros and Cons of explicit or implicit

Lest disruption to bridges and backward compatibilities Optimize for IP MPLS already has deployed this kind of functionality

IP no explicit dropped precedent IP does have DiffServ

Within a class can not have mis-ordering

Deployment scenario – MPLS and Frame Relay

Don't see any advantage to explicit

Implicit is backwards compatible

Discussion

Need a formal presentation

Encoding section of .1ad needs to be fixed

Mick would like to close on a draft of the encoding by the end of the week Steve and Ali need to create a matrix to see where the problems will occur

Need to get closer on the things we can agree on

Probably will have both and will build both

Discussion about what is the benefit of taking this back into the enterprise Ali will go over this with Steve and get a more detailed discussion going so the difference can be understood

Goal is to get a consensus

What type of classes and what type of SLAs will be supported

Mick – goal is give some benefit and do not harm

Paul Batorf—There are differences between enterprise and provider, so is the drop precedent a benefit to provider and do no harm to the enterprise

Paul B— we must find a solution for L2 drop precedent may not need to worry about the enterprise

Paul Congdon – many enterprise folks would like to have some of this functionality

Paul B – How come enterprise can not simply by provider equipment

Paul Congdon – that would require a re-architect of the enterprise network

Need some offline discussions to clear up confusion in the encoding section

Matrix of the implicit and explicit - Steve Haddock

Discussion about the interface between 802.1Q and provider networks

Consequence of packets with drop marking arriving at 802.1Q bridges

If explicit packets either dropped or treated the same as green

No risk of miss ordering

If implicit drop precedence not supported Yellow packets either treated the same as green or, if inconsistent configuration, yellow and green may be miss ordered

Opening Plenary, Monday, November 10, 2003

Agenda – Tony Jeffree

Administrative stuff – Tony Jeffree

Officers

Neil Jarvis will step down as vice chair at this meeting. Thursday a new vice chair will be elected

Website

http://www.ieee802.org/1/

Username: p8021 Password: go_wildcats

Voting membership

Review of the rules about how to gain an maintain voting membership There is a problem in the 802 rules and policy and procedures about voting membership. The 802 exec is working to fix this problem 802.1 rules will continue to be consistent with the intent of the 802 rules The 75% rule will be five meetings for this plenary

Vice Chair

Neil has indicated his wish to stand down as Vice Chair of 802.1 We will have an election Thursday

Need to appoint liaisons from 802.1 to 802.3

Is anyone interested?

802.3 folks have asked who we are going to appoint

Not for sure someone is needed.

802.1 WG and TG operation – Tony Jeffree

Some comments about how 802.1 works. 802.1 is geared toward building consensus by discussion rather than voting

We do not take votes in working group meetings

Use the document ballot procedures to establish consensus

Hence a formal WG ballot is a test of consensus, which we believe we have Anyone can comment on a document, working groups are required by IEEE to consider all comments and give those comments a fair hearing

Focus on technical progress rather than some formal process

<u>Patent Policy – Tony Jeffree</u>

Tony showed the two slides required by IEEE office to inform the committee of the IEEE patent policy

The policy is described in Clause 6 of the IEEE SA Standards Board Bylaws.

The policy includes both granted and patents that have been applied for

Tony asked if anyone knew of any patents that were relevant to 802.1

Report on Exec Committee - Tony Jeffree

July – 1370 attendees record attendance

PARS from 802.3, Handoff SG, and 802.1 will be on the Friday SEC agenda Is there any discussion – need to be completed by Tuesday 5 pm

802.1 B and E will be officially withdrawn in December GET 802

Appears to meet its budget

Currently it is pilot program the GET 802 folks are going to recommend that GET 802 become a regular program

Need "volunteer" to attend WG/TAG financial workshop, Loren volunteered There will be a tutorial for editors this evening

Operating rule changes

Precedent rules and financial operations changes are pretty much done Will go out for a vote in a couple of months

802 news bulletin

Launched March 2001

Give outside world a better view of what we are doing If anyone wants to do this Tony would appreciate it Hand off

Media Independent Handover

The scope and purpose are too much

Establish as a new working group

802 reorganization

Large group and hard to track and control

Howard Frazier will chair an "ad-hoc" Tuesday 10-12 AM

Need 802.1 presences at this meeting

Network service contract update

Have a contract for continuing network services at the meeting

Affirmation of 802.20, Wireless access for vehicles, chair and vice chair issue

Because of IEEE ruling on SEC indemnification (there is not any) several members of the SEC departed the room

The ballot was carried out as secret ballot

The original officers were allowed to become officers of 802.20

This is not a good precedent

The IEEE office is being asked to look at the indemnification issue

Future meetings - Tony Jeffree

Interim meeting, most of 802, in Vancouver week of the 12, January

March 2004 venue will be Walt Disney World Hilton, Orlando, week of 14,

March

Need to think about in May

<u>Awards – Tony Jeffree</u>

802a, Playpen Ethertypes, for Mick and Tony

<u>Task Group stuff – Mick Seaman</u>

Agenda – Mick

Monday 9 – 10:30 Provider Bridging – drop precedence encoding discussion

Monday 1 - 3802.1 WG opening Plenary

Monday 3.30 – 4.00 Interworking (P802.1ad Provider Bridging – objectives for the week

Monday 4.00 – 5.00 Interworking: Provider Bridging – Loop Detection (Muneyoshi)

Tuesday 9.00 – 10.30 Interworking: PB direction to editor for preparation of next TG ballot

Tuesday 11.00 – 12.30 Connectivity Fault Management PAR – discussion

Tuesday 2.00 – 4.30 LinkSec 802.1x Rev Recirculation ballot comments

Tuesday 4.30 – 5.00 Interworking (Liaison, NWI/FYI)

Wednesday 9.00 - 9.30 LinkSec (Response to input from other groups on Authenticated Key Agreement PAR)

Wednesday 9.30 11.30 MACsec Draft

Wednesday 11.30 – 12.30CWC John Viega

Wednesday 2.00 - 5.30 Authentication for PONS

Thursday 9.00 – 12.30 Interworking – P802.1ab LLDP ballot resolution

Thursday 2.00 – 3.30 LinkSec Security for GRID computing

Thursday 3.30 - 5.00 802.1 WG closing Plenary

Agenda – Dolores

Provider Bridging – Meeting Objectives – Mick Seaman

Facilitate preparation of P802.1ad for Task Group Ballot

Requires direction on

Current TAG format consistency

Terminology and combination of items: Provider Bridge, Provider Edge Bridge

<u>Loops Detection OAM for PB – Muneyoshi Suzuki</u>

Presentation is on the website

Problem Statement

Loops fatal in Bridge network

Users can cause loops in PB, whether the providers take precaution Customer side must not have back door connection else the PB network can be looped

Discussion

Providers should be able to have a loop detection mechanism

Review of the decomposition of the VLAN problem statements

Can a provider think of these as a single case?

Is the purpose to be a tool for the service provider or for the customer?

The customer would like to know if they are putting too much traffic onto the provider network

Need to make sure we keep the problem bounded

Loops by customer into the provider network is not as big issue because customers can generate the same amount of traffic without loops but a loop in the provider network is really bad

Customers would like to know about this (your phone has been off hook for five hours)

This is a good proposal that allows providers to add value to their networks

Don't add loop breaking – this should be loop detection only

One immediate action – need further discussion about how to fit this into the .1ad architecture

Does this help in any other environment?

Tuesday AM, November 11, 2003

Handoff PAR – David Johnston

Explanation of the Handoff PAR

Media independent handoff

802.1ad Discussion - Mick Seaman

What changes should be made before sending out for TG ballot

Since there is not a consensus on the CFI bit usage Mick will attempt to put both mechanism in the draft so folks can start commenting and a consensus can be developed

Paul B had a couple of slides that shows Provider Bridge and MEF network relations

Paul B. emailed this to the reflector this morning

It will be posted on the web

Two different worlds – Paul is attempting to show how the MEF defines the UNI

Discussion about UNI interface and Provider Bridge

Some issues with terminology - PE Bridge PB Bridge are terms that mean equipment to some folks, Paul proposed P Bridge to be an architecture term not an equipment term

MEF Layer Reference Model - Slide

VB Relay is The Service Aware Component – Slide

Calling the VB a Customer Bridge (CPE) is confusing

The VB could be called a Provider Service Bridge

The term PE should not be used for the VB since the VB is a functional element not a physical device. The VB is the UNI-N component of the provider PE device

Norm had a question about current draft – did not see anything in the draft about a new BPDU address. It is there but obscure – Mick will make it clearer.

P802.1ag - Connectivity Fault Management PAR - Mick Seaman

- Dinesh Need to address coordination between ITU and IEEE
- Mick Division of labor: IEEE concentrates 'how to implement the tools' and ITU concentrates on the requirements for the tools.
- Mick Liasons: Can try to put it in the 5 criteria but probably not in the Scope.
- Richard liason from .3 to .1 What about 802.2 tools?
- Mick We will take into account the failures of 802.2 for broad market appeal.
- Richard what about tools in EFM being developed in .3?
- Mick Concentrating on hopping through bridges, not going down into the lower level media type tools.
- Norm Xid and Test (layer 2 ping, but can be sent to broadcast address) should be discussed in PAR to quell concerns of readers who remember 802.2.

Ethernet OAM study in ITU-T Question 3. ITU-T SG13, Q.3/13 - Hiroshi Ohta

- Norm Support we need expertise found in all groups
- Dinesh Support specific example for tracert why we need all groups expertise.
- Mick Wants to put info in the 5 criteria of .1ag about the ITU document Y.17 ethreq to make the liason more concrete.

Tuesday PM, November 11, 2003

Ballot Comment Disposition IEEE 802.1X – Tony Jeffree

The complete disposition of comments is maintained in the disposition of comments document maintained by the editor; the document can be found on the website Below are notes of comments that had some level of discussion in the meeting May have to go forward with some negative comments

Discussion of Bernard's comment 17

Tony will distribute RLS version of the text

Need to look at this one off line to understand its ramifications

Comment 22

Jim Burns pointed out that accepting this comments requires .1x to analyze EAP packets. The EAP layer should handle the EAP packets and the lower layers should not filter

Comment 30

Mick raised the issue that things don't seem to be terminating

It is time to have some code running these state machines so we understand what is going

The analysis complexity is going up and we do not understand what is going on in the EAP state machines

The comment was rejected to avoid having .1x have to knowledge of the EAP state machine

Wednesday AM, November 12, 2003

Review of the Key Agreement P802.1af PAR – Dolores

Discussion of what is unchangeable in .1x and what can change in .1x

Purpose

EAPOL may change

Controlled and Uncontrolled port concept will not change

Broad market potential

No discussion

Compatibility

Distinct Id

Technical Feasibility

This should be approved by the EXEC Friday

Review of MACSec draft – Allyn Romanow

The idea is to get input on the draft so that we can ask the editor to create a draft that can go to TG ballot

Need input on the ideas not necessarily on the text

Cls 3, 6, 8, 9, and z

Mick will do 8 and 9

Allyn will do the other sections

What is left out of the definitions?

Review of the current definitions

Discussion about the use of message authentication versus message integrity

Connection versus Connectionless – Mick gave a network definition, Bob Moskwitz would like to have this definition. The definition for connectionless is in an IP world the sending packet 1, 2, 3, 4, 5 and the receiver receiving 1,3,4,5 IP is fine. But upper layers may have a problem. Discussion of what does it mean packet/frame independence

High-speed Encryption and Authentication – John Viega

This presentation is on the website

Looking at message integrity

Assume key exchange has happened securely

Want to provide message integrity in a high assurance level

Message integrity the recipient can detect whether the message is in its intended form, or whether there has been tampering

In reality, absolute assurance is not practical

Integrity is more often important than secrecy

A non-option

Encryption with redundancy

Depends on the redundancy function

Usually don't work

Attacks against many proposed schemes

Composition Approaches

Combine encryption and integrity schemes

Select a suitable encryption mode and MIC

Example SSL/TLS

How to combine

Should be easy but not

Three paradigms

Generic Composition: Cipher modes

Review of various algorithms to see there parallelizable and precalculation ability

Nonces

Data that is unique per message

Repeats must occur with very low probability

Common contents

Message counter, session id, info uniquely id client/sender

Random value

Authenticated Encryption Schemes

More Authenticated Encryption Schemes

Feature Comparison

<u>Discussion about patent issues – Tony Jeffree</u>

The criteria that an algorithm should not be used because a patent exist in not correct. If an organization gives a letter of assurance then the standard should be able to use that algorithm.

Clause 8 of the MACSec draft – Mick Seaman

Principles of MAC Security Entity operation

Overview of what is in the clause and its current state and what is needed to go forwarded

Need to understand the relationship of this to Key Agreement work

MACSec

8.1.1 Secure Transmission

Mick believes there is an issue in clause 8 with the definition of SAID? Current definition is "What key is in use?"

Mick has left the door open for group associations if it is needed in the future so existing system will not have to change their behavior

SOA – Secure Origin Authenticity

Need feedback on SOA

Discussion

In the point to point case it seems it is not needed In multipoint case may not be needed because SOA could be source MAC address but would need a bit that says the SOA is the MAC address What is here is here to force discussion and get folks to sort out what is needed where and when

Fig 8-1 Architecture and Operations

Trying to put the cipher suite in context

Do you want any choice of cipher suite? Is there more than one cipher suite?

Do need to account for the NULL cipher suite to handle the unsecured network hence at least two cipher suites are required One of the goals is to build a bridge where the data is unencrypted but the BPDU are encrypted – Norm

This will require some .1D and possible .1X work Observation the controlled port with a NULL cipher suite is different that the uncontrolled port. This needs some thinking to get this sorted out

8.1.3 Secure Reception

What is the relationship of the crypto/integrity and what is in the security header?

May have TAG fields that are not fully defined by the security requirements

Currently, the format of the header is orthogonal to the cipher suite Need to make sure we do not wreck connectivity because the security has forced a certain frame format that breaks interoperability

Another way is if a fixed format of frame then no interoperability problem if each cipher suite has a frame format then can break interoperability

Hence, if point to point everything is okay but if another switch is dropped into this network the new switch can break things or it can not communicate with the existing network

Back to Fig 8-1 Architecture and Operations

Terminology issue – verification parameter set

Reason why this has to be mention document must say change keys without disruption of the network

Must have the notion current set and the future key set Discussion about how this figure fits with EPON

Multicast would imply a NULL cipher suite - Mick

Norm – need a note in the text to point this out

Mick – layer two is not a copy of layer three

If you have different cipher suite can you seamless change between them? Nope port will go down but change parameters of existing cipher suite should not be disruptive

Observation - Management should be here rather than moved off some where else

Wednesday PM, November 12, 2003

Key Agreement Protocol for EPON - SuGil Choi

Introduction

Each ONU can listen to all downstream traffic

Goal of protocol mutual authentication between OLT and each ONU

Requirements

Key freshness

Forward Secrecy and Backward Secrecy

Message Protection

System Requirements

Must operate on the link layer

Communication Efficiency

Fast Reconnects

Key types

Master key

Used for long time

Primary key

Secondary key

Protocol to get primary and secondary key

Secondary key derived from primary key

Primary key derived from secondary

How key protocol works (math notations here)

Key Update Process

Protocol Analysis

Conclusions

Symmetric key cryptosystem

Key agreement protocol between OLT and specified ONU

Group key agreement protocol is open problem

Discussion

Need to have the requirements of various topologies so that key agreement protocol can be judged against such requirements

Observation - This protocol has the property that it assumes frames can be injected and observed by any station

What are the steps to identify what architecture and protocols that we can borrow?

Bob M - Can put media in groups such as point to point or shared Present to other groups these findings to see how the general solution maps to different media

Mick – all of the media must be looked as shared and interceptable

Requirements comes from the context that folks use stuff for example 802.1x and it relationship to EAP and Radius Look at what context we have to put key agreement

The idea there is layer 2 and layer 2 must remain within layer 2 is not correct. There are ideas or concepts from other layers that are acceptable to LinkSec

Dolores asked for everyone to help put together the ideas or identify person that can do such a thing

<u>LAN Edge Radius Attributes – Paul Congdon</u>

Considering extension to the Radius specifications Adding attributes to radius for configuring switches RFC 3580

Discussion of KEYsec

- What key agreement mechanisms can we use?

 Bob M.- see what different media need find a mechanism that can be generally used.
- Mick- from a security viewpoint all the media need to be considered shared media, i.e., vulnerable
 - Requirements come from context in which things are used, we need to look at the different deployment contexts.
 - assumptions on the media just open, shared media
- PKI requires upper layers for CRL disagreement about the importance of this for us
- Difference between using public key technology and being embedded in full PKI architecture, they are different, can use public key tech., eg SSH, light weight public key
- Customers of Linksec service providers and IT departments want presentations on how they do authentication for next meeting in January
- protocols we own, protocols above that we don't control that we need to be controlled e.g., ARP spoofing. fill in gap between where we end and IPsec begins

Largest IEEE 802.1b network – John Martell

Jonn.martell@ubc.ca

1300 APs 5000 users

Radius server is most critical part

Accounting goes into SQL databases

Would like login id map into a specific VLAN

This guy is looking at a need for "AP management"

http://Ettercap.sourceforge.net – great tool to do ARP spoofing

How to steal MAC addresses on switched networks

EAP is the problem – not deployable

How to distribute the keys

How to put in the correct VLAN

Campus wide VLAN

Clause 9 Mick

Thursday AM, November 13, 2003

P802.1ab LLDP ballot comment review – Bill Lane

162 comments

The complete disposition of comments is maintained in the disposition of comments document maintained by the editor; the document can be found on the website

Below are notes of comments that had some level of discussion in the meeting Will not review comments that are accepted

Norms comments about validation of TLVs in clause 7 will be removed from 7 and moved to clause 9

Comment 16 - MIBs and SNMP

Stating MIBs does not imply an implementation require of SNMP. MIB are a way to organize the data no transmission mechanism is implied

Comment 41 – max length of data

No arbitrary restrictions on length allow data to be 2^{**9} since that is what the length field allows

Comment 140

It was noted this suggestion is of the type "This is one of the thousands of extensions to this protocol."

The value of this is problem diagnosis. One bridge is running 802.1s and a neighbor bridge is running some other protocol. This will allow for the detection of incompatible protocol configurations

There was much discussion about what this should really be

It is not possible to enumerate all of the control protocols and states with a TLV both because of number and proprietary control protocols

Mick has a suggestion about a possible new idea

One way to describe the protocol is I am using a control protocol that is using the following Ethertype

The receiver of this can determine if it is receiving that Ethertype and if not then you can know an problem exist

Consensus check

Port state is not a good idea but advertising supported protocols is a good idea. Will go back to the commenter with this to insure it is acceptable to them

Comment 143

Discussion – we do not want to get into creating a number space.

Discussion about mapping enterprise MIB to the known LLDP extensions

Next step

Is it ready for working group ballot?

Discussion

Should the PICS be added?

Mick – In general PICS should be added earlier

How much pain will the editor go through if there are major changes?

It does not appear there will be major changes here

It should be here so there is time to make sure the mandatory and optional stuff is correctly tagged

Discussion Bernard Aboba Comment 15 802.1aa – Tony

Bob has produced a rejection text for the comment

Text on screen

Discussion of the rejection text

No signal that mutual authentication was achieved only that some authentication

There is some signaling between EAP and 802.1x that is not yet defined 802.1x level can not know if mutual authentication achieved Mutual authentication implies on side has a local database for authentication and does not require the network, which is behind the other side's network

Success can be defined by authentication or by a management action Fig 6-6

Add a Note to the effect that one of the consequences of the bi-direction auth situation is that it may be necessary for both parties to force their supplicant state to Authorized in order to ensure that both can have access to the authentication server.

Decided that the note raises more questions that it answers delete the note Much more discussion

A new proposal is relate to the old version that supplicant state can be controlled by management to keep port open

After much discussion it was decided that the solution is

If port has both authenticator and supplicant exist then the authenticator controls the port

Further variable for the supplicant that determines if the supplicant state should be consider

Thursday PM, November 13, 2003

MACsec Draft- Questions and Issues: Allyn Romanow

6.2 Preservation of the MAC service

- Is the service list complete?
 There are some things missing Mick
 MAC operational, status, features included, and point to point connectivity
- Want the service to work the way it use to What are the words to say this?

Section 9.2 and figure 9-1 SecY Architecture and Operation

What goes in the packet?
 Ethertype/SOA/SAID/Packet Number/User Data/ICV
 Ethertype, SOA, and SAID make up SecTAG

Discussion about what is input to the nonce

- Allyn thought the four fields Ethertype, SOA, SAID, and packet number
- Discussion about including Ethertype
 Since the Ethertype is fixed it is not necessary to include the Ethertype
- John V will take a look at the bits that are going into the nonce and make sure it is correct

• The data that uniquely identify the sender and receiver should be included in the nonce

Discussion about the strength of the ICV

• All of these fields will be included in the ICV

Frame expansion

What is happening with 802.3 and frame expansion?
 Nothing can not go to 802.3 until we have our frame format ready, and it should be by next meeting – Tony

6.3.6 Frame Lifetime

• What is the policy when there is a frame to transmit and there is no SA? Drop it

Should the frame be buffered and then sent? – No, just dropped

- Discussion about the startup issues with how to create the SA
- This is a hard problem and currently there is not a general solution Informal answer within the bridge is drop it Formal within the architecture "what frame?"

6.2.7 MAC Service is transitive with respect to connectivity

This section needs to be filled out more
 Allyn requests help getting this section- wants more examples
 What other protocols? GARP or IGMP has the property of observing traffic and
 concluding you have connectivity when in fact you do not because you have not
 yet established an SA

Observation - Any registration protocol will have this problem

Discussion whether it is necessary to have SA in both directions - yes

Overlapping SAs in order to deliver continuous service

Have two SAs so that the next SA can be used to maintain connectivity Replay protection - Probably get for free

Discussion Frame format - Mick

DA

SA

Ethertype

2 Bytes (for word alignment)

SOA optional

Packet Number

- The SAID is within the two Bytes and the SOA is separate
- If shared connection, then the SOA disambiguates the SAID
- Within the two bytes, possible, MSB is zero on transmit and checked on receive, if not zero discard. This will solve the version problem
 In a new version this bit would be 1 hence a different version
- Bit 1 set means SOA is present, and Bit 2 set is SOA is SA
- This leaves thirteen bits
- You could make an argument that you only need one bit for SAID old key, new key

What are the arguments for making it bigger than one bit?

If 8 bits is not enough, then use the SOA field

To start, use 8 bits and argue for less or more

Then the SOA contains the SAID if the SA is not the SAID[?]

- This is a starting point to begin the discussion
- Note that this format is not ready for folks to start putting in ASICs

China different security system - Dolores

- China has their own cipher suites
- What should we consider?
- We should stay out of this, not get involved in international issues
- What about different cipher suites?
 We already isolate the cipher suite so different ones can be plugged in

Closing Plenary, Thursday PM, November 13, 2003

<u>Agenda – Tony Jeffree</u>

Officers

Vice Chair

Need a new person

Nominations

Marcus Leech

Paul Congdon

No other nominations

Review of duties

Only requirement is vice chair can stand in for the chair

Optional work responding to email from exec, submitting docs

And other random stuff to make the committee work

Resume of Marcus and Paul given by each person

Discussion

How long is this for?

Term of office will be until end of the March meeting

Only voting members

Voting member list was displayed and read to the committee

Vote

Paul Congdon 17

Marcus Leech 6

SEC must approve

Many thanks to Neil

Many thanks to Marcus for standing

Need to appoint liaisons from 802.1 to 802.3 – Tony Jeffree

Don Pannell has volunteered

The job involves understanding what is going on in .3 and how it affects us Will have a motion a bit later for Don

Need to merge LinkSec exploder & website into the 802.1 exploder & website

Issues

Some permission issues that have were resolved this week

Merge the two lists and have one exploder

Leave pointer on the old LinkSec web site area to the 802.1 LinkSec areas

Patent Policy - Tony Jeffree

Review of the IEEE patent policy

Clause 6 in IEEE SA Standards Board Bylaws

The policy was reviewed by the Chair to insure everyone in the room understands the policy

The two slides were shown to the committee

Future meetings – Tony Jeffree

Jan 12, 2004 Vancouver (Monday through Thursday)

Mar 14, 2004 Walt Disney World Hilton Orlando

<u>Liaison letter response ITU-T Q12/15 – Paul Bottorff</u>

Discussion of the letter

Mick would like the addition of text that requests the inclusion of the ISS

"The link you provide as a whole should provide the ISS"

Word Smithing to get the above statement in the letter

Mick's picture will be added to the letter

Motion

Motion: Forward the above liaison from IEEE 802.1 to the ITU-T Q12/15

Move Bottorff Second Wright

For 17 Against 0 Abstain 1

802.1 requests that the SEC confirm the appointment of Paul Congdon as vice Chair of

802.1

Proposed: Wright Second: Seaman

For: 17 Against: 0 Abstain: 0

802.1 resolves to hold an interim session in Vancouver, Mon 9:00 through Fri Noon of

the week of 12th Jan 2004 (12th through 15th Jan), hosted by 802

Proposed: Seaman Second: Wright

For: 18 Against: 0 Abstain: 0

802.1 approves the July '2003 and Sept '2003 meeting minutes.

Proposed: Wright Second: Romanow

For: 17 Against: 0 Abstain: 2

802.1 resolves to hold a pre-meeting on the Monday morning of the March 2004 plenary

session.

Proposed: Romanow

November 2003

Second: Wright

For: 16 Against: 0 Abstain: 0

802.1 requests conditional approval from the SEC to forward P802.1D-REV to RevCom following completion of the Sponsor recirculation ballot that is currently in progress.

Proposed: Seaman Second: Wright 802.1 For: 19 Against: 0 Abstain: 0

802.1 requests approval from the SEC to forward the 802.1F Reaffirmation to RevCom.

Proposed: Lane Second: Wright For: 21 Against: 0 Abstain: 0

802.1 instructs the Editor for P802b to revise the document in accordance with the agreed disposition of ballot comments and to forward the revised draft for Sponsor recirculation ballot.

Proposed: Wright Second: Bell For: 21 Against: 0 Abstain: 0

802.1 requests conditional approval from the SEC to forward P802b to RevCom following completion of its upcoming Sponsor recirculation ballot.

Proposed: Wright Second: Bell For: 20 Against: 0 Abstain:0

802.1 instructs the Editor for P802.1ab, Bill Lane, to issue the next draft for Working Group ballot by December 8th 2003

Proposed: Lane Second: Wright

For: 20 Against: 0 Abstain: 0

802.1 instructs the Editor for P802.1X-REV, Tony Jeffree, to revise the document in line with the comment dispositions agreed during this meeting and issue the next draft for a WG confirmation ballot.

Proposed: Jarvis Second: Wright For: 21 Against: 0 Abstain: 0

802.1 requests conditional approval from the SEC to forward P802.1X-REV to Sponsor Ballot following completion of its WG recirculation ballot.

Proposed: Wright Second: Bell For: 20 Against: 0 Abstain: 0

802.1 instructs the Editor for P802.1ad, Mick Seaman, to revise the document taking account of the discussion during this meeting and issue the next draft for a second Task Group ballot

Proposed: Seaman Second: Wright For: 21 Against: 0 Abstain: 0

802.1 requests permission from the SEC to forward the P802.1af "Key Agreement" PAR to NesCom.

Proposed: Leech Second: Sala For: 20 Against: 0 Abstain: 0

802.1 instructs the Editor for P802.1ae, Allyn Romanow, to revise the document taking account of the discussion during this meeting and to issue the revised draft for Task Group ballot by 8th December 2003.

Proposed: Romanow Second: Larsen For: 20 Against: 0 Abstain: 0

802.1 appoints Don Pannell as liaison to 802.3.

Proposed: Romanow Second: Lane For:20 Against: 0 Abstain: 0

802.1 authorizes its January interim meeting to revise the P802.1AG draft PAR and, if approved by the interim, circulate it to the SEC under the 30-day rule.

Proposed: Wright Second: Larsen For: 21 Against: 0 Abstain: 0

<u>Any other business – Tony Jeffree</u>

None

Motion to Adjourn Proposed: Wright Second: Lane Unanimous

Attendees:

Brian Arnold

Andrew Baek

Chuck Bailey

Brandon Barry

Alexei Beliaev

Les Bell

Paul Bottorff

Richard Brand

Jim Burns

Marco Carugi

Dirceu Cavendish

Su-il Choi

Paul Congdon

Sharam Davari

Anush Elangovan

Hesham Elbakoury

David Elie-Dit-Cosaque

Norm Finn

Helena Flygare

David Frattura

Vivek Gupta

Steve Haddock

Cheng Hong

Ran Ish-Shalom

Atsushi Iwata

Neil Jarvis

Tony Jeffree

Yongbum Kim

Scott Kortla

Hiroaki Kurihara

Shobhan Lakkapragada

Bill Lane

Loren Larsen

Yannick Le Goff

Marcus Leech

Wei Liy Lim

Tom Mathey

David Melman

John Messenger

Hidekazu Miyoshi

Dinesh Mohan

Bob Moskowitz

Dave Nelson

Hiroshi Ohta

Don Pannell

Chan Young Park

Glenn Parsons

Antti Pietilainen

Ivan Reede

John Roese

Allyn Romanow

Jessy V Rouyer

Ali Sajassi

Dolors Sala

Mick Seaman

Koichiro Seto

Muneyoshi Suzuki

John Viega

Karl Weber

Ludwig Winkel

Michael D. Wright

Robert Wu

Shawn Yang Ilan Yerashami