Minutes of the Task Force (TF)
"*Interspersing Express Traffic*" (IET)
2015/05/20; 2015/05/21; 2015/05/22

Attendance

1st Name	Name	Employer	Affiliation	20th am/pm	21th am (*1)/pm	22nd am/pm
Albert	Tretter	Siemens AG	Siemens AG	1/1	1/1	1/-
Alon	Regev	IXIA	IXIA	1/1	1/1	1/-
Ayla	Chang	Huawei	Huawei	-/-	-/1	-/-
Curtis	Knittle	Cablelabs	Cablelabs	1/1	-/-	-/-
David	Chen	Nokia	Nokia	-/1	-/-	-/-
Linus	Thrybom	ABB	ABB	1/1	-/-	-/-
Ludwig	Winkel	Siemens AG	Siemens AG	1/1	1/-	-/-
Marek	Hajduczenia	Bright House Networks	Bright House Networks	1/1	-/-	-/-
Matthias	Fritsche	Harting	Harting	1/-	-/-	-/-
Pat	Thaler	Broadcom	Broadcom	1/1	1/1	1/-
Peter	Scruton	UNH-IOL	UNH-IOL	-/-	-/-	1/-
1* joint session with 802.1 TSN						

Wednesday, May 20th 2015

1   Appointment of Recording Secretary

Albert offered to act as recording secretary.

2   Welcome and Introductions

Ludwig opened the meeting and welcomed the experts.

3   Approve Agenda

Ludwig presented the agenda.

The agenda was approved as proposed.

4   IEEE 802.3 templates and ground rules

Ludwig presented the boilerplate items like:

- Structure, Bylaws and Rules
- IEEE Standards Process
- Ground Rules

- Instruction for the WG Chair
- Participants, Patents, and Duty to Inform
- Patent Related Links
- ...

Ludwig called for disclosing Potentially Essential Patents
- Nobody provided any information about patents

5   Approval of the meeting minutes from the last meeting 3/2015 (Berlin)

5.1   Motion #1

Accept the 802.3br March 2015 Berlin meeting minutes without changes.

Moved by: Alon Regev

Seconded by: Matthias Fritsche

No Comments

The motion has been approved unanimously.

6   Comment Resolution of 802.3br Draft 2.0

IEEE P802.3br D2.0 Ethernet Interspersing Express Traffic Task Force comments resolution.

Lunch break at 12:00 o'clock noon till 1:30 pm

The meeting reconvened at 1:30 pm

Comment resolution continued.

The Chair recessed the meeting at 6:30 pm until May 21st, 2015 8:00 am for the joint meeting with the 802.1 TSN group.

Thursday, May 21th 2015

Joint session with 802.1 TSN

Ludwig and Michael opened the joint meeting at 8:00 am.

About 30 people in the room. Attendances of the 802.1 people see minutes of IEEE 802.1 TSN.

Ludwig presented the voting results of the 1st WG ballot of 802.3br draft 2.0.

Ludwig explained the next steps.

The following comments were discussed and resolved:

- Comment #188
- Comment #194
- Comment #57

Ludwig asked the chair of 802.1 Security TF (Mick Seaman) to provide a statement about the status of preemption and MAC Security, see Annex A.

Ludwig also asked the chair of 802.3 TSN TF (<u>Michael Teener</u>) to provide a statement about the status of the synchronization between 802.1 TSN and 802.3br IET TF. The overall status is that it is as planned. A written statement will be provided from Mike before the next plenary so that it can be presented to IEEE 802.3.

The joint meeting was finished at 9:00 am.

The 802.3br IET TF meeting reconvened at 9:00 am

Ludwig left the meeting at 10:00 and Ludwig advised Path Thaler to take over chairing of the 802.3br IET TF meeting.

Morning break from 10:00 am till 10:30 am.

The meeting reconvened at 10:30 am with the comment resolution.

Lunch break at 12:00 o'clock noon till 1:30 pm

The meeting reconvened at 1:30 pm with the comment resolution.

The Chair adjourned the meeting at 6:30 pm until May 22nd, 2015 9:00 am

Friday, May 22th 2015

The 802.3br IET TF meeting reconvened at 9:00 am

6.1   Motion #2

The IEEE P802.3br Interspersing Express Traffic Task Force accept the comment resolutions to D2.0 as detailed in p8023br-2-0-comment-dispostion.pdf created at the May 2015 Task Force meeting and charter the editor to produce working group draft D2.1 for a 30-day recirculation ballot.

Moved by: Alon Regev

Seconded by: Albert Tretter

No Comments

The motion has been approved by acclamation.

7   Adjournment

The meeting was adjourned at 9:45 am until the meeting in July 2015.

Annex A

Status of IEEE 802.1AE MAC Security (MACsec) with 802.3 preemption

Mick Seaman provided a verbal status report and summarized this to this written report:

Standards: the major effect of preemption on MACsec is priority based frame reordering. Complete reception of an express frame occurs before complete reception of preempted frame whose initial fragment was transmitted earlier, with an earlier packet number. Security has to assign a unique number to each frame before transmission begins for cryptographic reasons and this number is used to provide replay protection and (optionally) to enforce in order delivery. The potential for priority-based frame reordering already exists when MACsec is used to protect communication across a provider bridged networking, and a configurable replay widow is provided to allow some reordering without MACsec packet discard. The same replay window capability would accommodate 802.3 preemption without any change to published standards.

There is an identified customer need to support strict-in-order secure delivery over provider bridged networks, and this is being addressed by P802.1AEcg. This proposed standard enables multiple, per traffic class, transmit secure channels for MAC and thus will also meet strict ordering requirements (within traffic class, with express or preemptible transmission being selected for all the priorities allocated to a traffic class) for preemption.

Implementation: high-performance MACsec implementations are already heavily pipelined. While the work to support on more secure channels and interface with both pmac and emac should not be trivialized, those implementations already maintain state for multiple frames (and multiple keys during key rollover). P802.1AEcg has an informative annex advice on adapting existing MKA (MACsec Key Agreement) to use multiple transmit secure channels, showing how the key updates can be applied to all secure channels at roughly the same time, thus avoiding the need for additional key support.