IEEE P802.3br Interspersing express traffic (IET) Task Force (TF) Closing Report

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IEEE P802.3br IET
Project information

- Task Force Organization
  - Ludwig Winkel, Chair
  - David Chen, Secretary
  - Pat Thaler, Chief Editor
- Task force web and reflector information
  - Reflector information: http://www.ieee802.org/3/DMLT/reflector.html
  - Home page: http://ieee802.org/3/br/index.html
    - PAR: http://www.ieee802.org/3/br/P802d3br_PAR.pdf
    - *5C*: http://www.ieee802.org/3/br/8023-DMLT-SG-1311-Winkel-5C-v2.3.pdf
    - Objectives: http://www.ieee802.org/3/br/8023-DMLT-SG-1309-Winkel-Objectives-v2.3.pdf
    - Approved timeline: http://www.ieee802.org/3/br/Schedule
  - Private area: http://ieee802.org/3/br/private/index.html
    - Note: The draft, and any other content, is posted for your review only, and neither the content nor access information should be copied or redistributed to others in violation of document copyrights

IEEE P802.3br IET
Activities this week

- Met
  - on Tuesday and Wednesday.
  - Joint 802.1TSN meeting at Thursday morning (details see next slide)
- Work done:
  - Comment resolution for .3br D2.1 (details see next slides)
  - Updated work plan and schedule (details see next slides)

Report of the joint 802.3br/802.1TSN

MAC Sec 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.

802.1 TSN: IEEE 802.1bu is on the way to sponsor ballot

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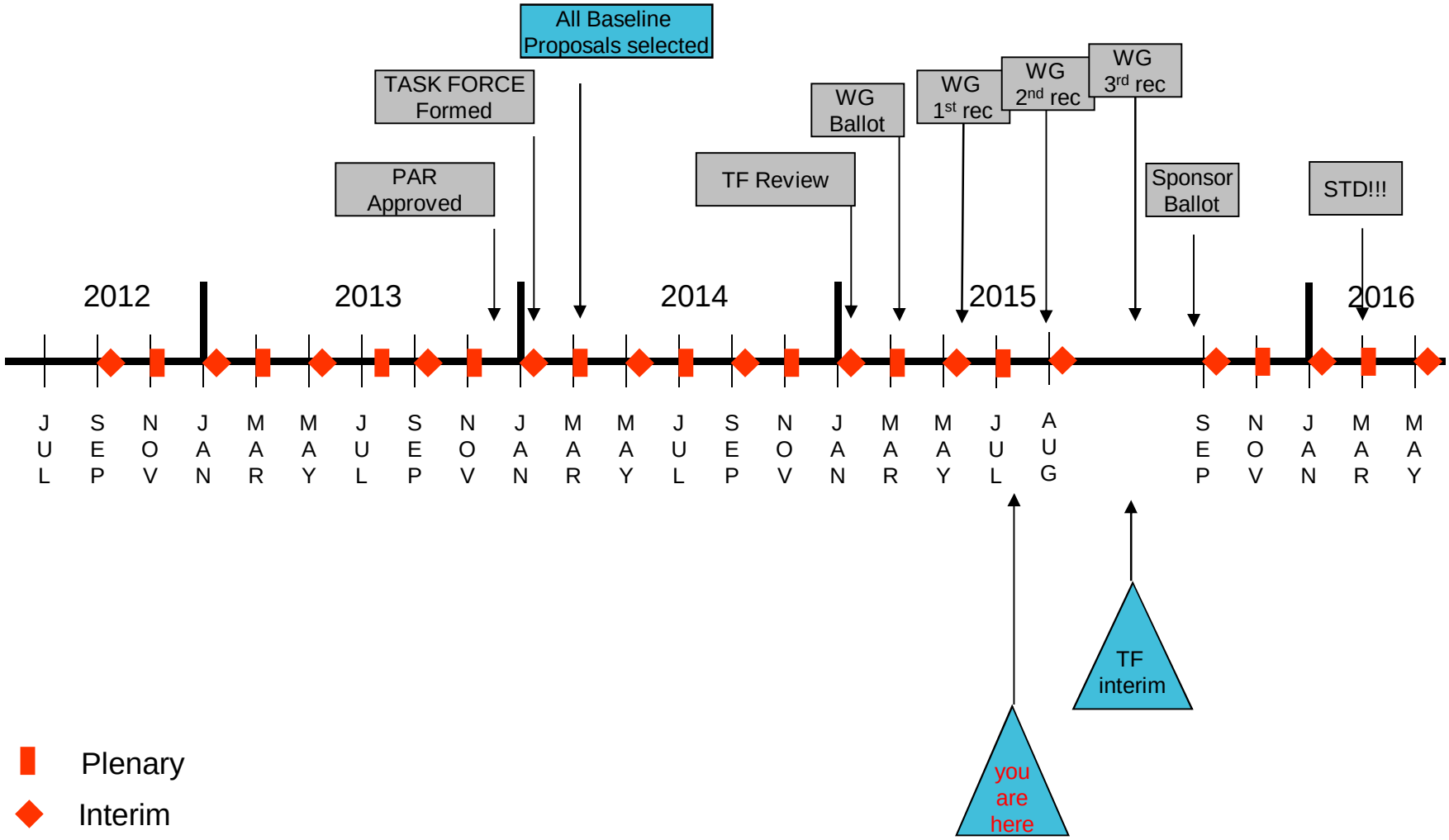
Adopted timeline



IEEE P802.3br IET to Sponsor ballot(conditional)

The 1st Working Group recirculation ballot on IEEE P802.3br draft D2.1 closed on 12th July 2015 at 23:59 AOE

Vote Tally Draft D2.1

	D2.0	D2.1		D2.0	D2.1
Voters	275	275			
Approve	72	81	**Response rate:**	**50,91%**	**52,73%**
Disapprove with comment	16	15	**Approval rate:**	**81,82%**	**84,38%**
Disapprove without comment	1	0	**Abstain rate:**	**36,43%**	**33,79%**
Abstain	51	49			
Returns	140	145			
Comments	385	114			
Comments w/ floor	387	115			

IEEE P802.3br IET to Sponsor ballot(conditional)

Comments that support the remaining disapprove votes and WG responses ? unresolved negative comments from ? commenters, see http://www.ieee802.org/3/br/Comments%20received%20on%20IEEE%20P802.3br%20drafts/

Recirculation ballot and resolution meeting schedule

2nd Working Group recirculation ballot open date	Sat 1st August 2015
2nd Working Group recirculation ballot close date	Sat 15th August 2015
Comment resolution meeting	Fri 21st August 2015
3rd Working Group recirculation ballot open date	Thu 27th August 2015
3rd Working Group recirculation ballot close date	Thu 10th Sept. 2015
Comment resolution meeting week of	Wed/Thu 16/17th Sep 2015

Motion 1

Motion to suspend the IEEE 802.3 Operations manual 2.8.2 a) Abstention rate rule for the Working Group Ballot of IEEE P802.3br.

Moved: Ludwig Winkel on behalf of the TF IET

Y: N: A:

Motion 2

Confirm the IEEE 802.3br CSD (grandfathered 5C) available at http://www.ieee802.org/3/br/8023-DMLT-SG-1311-Winkel-5C-v2.3.pdf

and grant conditional approval to progress IEEE Draft P802.3br to sponsor ballot once the Working Group ballot process has been successfully completed.

Moved: Ludwig Winkel on behalf of the TF IET

Technical (≥ 75% required)

Y:0 N: 0 A: 0 Results: Passes

TF interim announcement

IEEE 802.3br will held an interim in Santa Clara (hosted by IXIA) on 2015-08-21 (details see http://www.ieee802.org/3/br/public/2015-08%20Santa%20Clara%20(TF%20interim)/.

Reminder: Sponsor Ballot Pool Formation

Sponsor Ballot Pool for IEEE P802.3br is still being formed. You have until 2015-07-26, 23:59 Eastern Time to sign up.

A message on the IEEE P802.3br reflector explaining the procedure for signing up in detail.

Questions?

Thank you!