2017-08-09_10th_TimeSync_Subgroup_Meeting

Participants:

Name	Company
Roman Graf	ABB
Jun Verzosa	Doble
Paul Myrda	Epri
Gustavo Silvano	GE
Ya-Shian Li-Baoud	NIST
Bernhard Baumgartner	OMICRON Lab
Romain Guilbault	OPAL-RT Technologies
Roy Lei Zhang	Siemens
Amin Abdul	Siemens
Jean-Sebastien Gagnon	Vizimax

Excused:

Name	Company
Juan Carlos Billalabeitia	GE
Patrice Roussel	Moxa
Roman Graf	ABB
Yoann Charpentier	GE
Marcello Dalmas	GE
Johannes Schilling	Belden
Jimyung Kang	Keri
Jay Yan	Moxa
Allen Goldstein	NIST
DJ Anand	NIST

Housekeeping:
- All E-mail communication is handles via the TimeSync Subgroup Google group.
  To send an E-mail to all group members use: iop-timesync-sg@googlegroups.com

- To enlist for the subgroup either:
  use this link: https://groups.google.com/forum/?hl=en#!forum/iop-timesync-sg and click Apply for membership or
  send an E-mail to bernhard.baumgartner@omicron-lab.com

- All data is stored on the **IOP Sharepoint** server in this directory (and subdirectories)
  TimeSync_Subgroup

- Meeting reports: can be found here Meeting reports

Mission:
- Allow IEC/IEEE 61850-9-3 and IEEE C37.238-2017 focused interoperability testing.
- Offer test bed for people that detect problems in the integrated tests and want to dig into the issue.

Discussed Topics:

- **2017 Test cases:**
  2015 Test cases for IEC/IEEE 61850-9-3 were reviewed and unnecessary tests deleted

  - A new draft is generated after each subgroup meeting. If you want to add comments or modify the draft check out the current file and apply your changes. (Make sure that track changes is switched on).

    Current Draft:
    http://iec61850.ucaiug.org/2017IOP-NOrleans/IOP%20Documents/TimeSync_Subgroup/2017_Test_Cases/IOP%20PTP%20Test%20Cases%20for%20IEC_IEEE_61850-9-3_Draft_2.docx

    Additional Test cases to be added:

- ☐ **Bernhard:**
  Power Down GM / Restart GM add to BMCA test
  Power Down OC / add to general OC (Slave only) test(IED)
  Power Down infrastructure
  Clause 7.1
  Powering up grandmasters with and without synchronization signal.

  - **Bernhard:** Isolated Testing IED restart [AG1]

    Testing IED restart / power up of a GOOSE subscriber[AG1]
    Restart of all components (GM, TC, BC and OC) should be tested
    How is impact on the other devices.

  - GM Capable Clock Test Case.

- ☐ ○ **Gustavo / Jean Sebastien will add it for integrated test cases:** Test on traceable flags - do we want to test something on that? Not impacting the BMCA?! - UTC offset valid flag. Merging Units might use these flag to mark SVs at globally synchronized.

  - ☐ What are the network failure modes in this case?

- [ ] HSR & PRP - single point failure
- [x] **Amin** to provide short E-mail to Bernhard
- [ ] **Gustavo** will also provide input ==RSTP== & PRP
- [x] Jay to send Topology proposals for additional test cases

- ○ Monitoring:
  Commercial test device like (**Calnex Paragon-X**) - measuring timing accuracy, Allen plans to bring a Calnex (to be confirmed)

- **Equipment list:**
  Every participant in the time sync subgroup should enter his equipment into the equipment list that can be found on the server:
  http://iec61850.ucaiug.org/2017IOP-NOrleans/IOP%20Documents/TimeSync_Subgroup/1588_Equipment_list.xlsx

- PICS for all 9-3 / 37.238 equipment that will be brought to the IOP should be submitted in addition to entering them into the Equipment list.

- **Time Reference**
  - ○ GPS Security (Spoofing and Jamming) should be evaluated.
  - ○ GLONASS should be tested as well if possible. --> Jean Sebastian might be able to borrow a simulator
  - ○ In-Room transmission of GPS Signal from Simulator would be better than distributing an L-Band Signal via cables (problems for some devices) --> Bernhard to check --> **GPS transmission not possible. GPS repeating requires a license.**
  - ○ Might be interested to have a re-broadcast of live GPS signal for the integrated testing.
  - [x] **PAUL:** Talk to Herb about **experimental license**
  - [ ] Stay tuned with FCC for experimental license

- **Transparent Clock Manufacturers:**
  - ○ We need to get the following companies on board:
  - [x] ○ **PAUL**: Cisco (has agreed to participate in the IOP - but not in TimeSync)
  - [x] ○ **PAUL**: Arbiter (Bernhard to check the E-mail from Paul)
  - [x] ○ GE Switches
  - [x] Moxa **(Bernhard) - does also have one step clock they will bring it**

Questions:
- ? [ ] Does someone have a GLONASS Simulator for testing?

To dos:
- [ ] **EVERYBODY: Please enter the equipment you plan to bring into the Spreadsheet available on the Sharepoint**
- [ ] **EVERYBODY: Review current 9-3 Test Case Draft and provide comments.**
- [ ] Jean Sebastian: Check if GPS/GLONASS simulator is available - check if you can borrow one or get specialists to come.
- [ ] Bernhard: Prepare proposal for PICS Template

Next meeting:

Wednesday August 16th
15:30 CEST - invitation will follow