

TC57 / WG10-12

Joint Meeting of WG11/12 in Klaus on March 27th / 28th, 2001: Minutes of Meeting

1. Meeting opening:

Meeting opened by Mr. Uwe Braun of Omicron, welcoming T57 WG 10-12 to Austria and to Omicron.

2. Appointment of secretary

Kay Clinard appointed as guest secretary for joint working group sessions.

3. Approval of Agenda

Meeting agenda was reviewed and approved.

4. Goose model as defined in 7.2

Herb Falk introduced the GOOSE model as defined in 7.2. Herb Falk gave a brief introduction of GOOSE - as agreed in Valencia, and GSSE - the original UCA GOOSE. Four additional services defined: Get Index, Get Data Set Reference, and equivalent services for UCA goose. Much discussion ensued for need for goose and services. Klaus Peter Brand noted the need for a basic modeling piece that includes both analog and status data for peer-to-peer communications for synchrocheck, and other similar applications. Proposal would allow for free allocation of functions. Two abstract models...sampled and event driven. For distributed differential application, phasor data could be sent (time stamped), and receiver could calculate fault values. GOOSE name should be retained for bit pairs. Present model in 7-2 is intended to represent agreement reached in Valencia.

- The group concluded that the current IEC goose as defined in 7-2 meets intent of committee decision from Valencia.
- Alex Apostolov was appointed to provide example as a part of US comments on use of IEC GSSE.
- Kay Clinard will enter comment to reverse GOOSE naming, to maintain original UCA naming.

5. Mapping of GOOSE

George Schimmel led the discussion for the mapping approach for GOOSE:

- Mapping of GOOSE in UCA: MMS Info Report / OSI connectionless / 802.2 (LSAP "FE" for OSI protocol) / 802.3
- IEC: ASN.1 encoding / 802.2 (LSAP-Filtering for a specific GOOSE) / 802.3 (MAC Address filtering)
- George Schimmel presented proposed ASN.1 Grammar and comparison with Herb Falk's proposed alternative. Group recommended keeping the grammar as simple as

possible, i.e. the minimum. The extensibility is to keep the backward compatibility as extensions are made. Should the list be linear, or hierarchical?

- The decision of the group was to blend the two. George, Herb and Gerhard Lang to discuss and provide solution for CDV comments.
- Discussion, if we need to specify the profiles of repetition of the GOOSE message. Agreement that this is a local issue of the sending device; the receiver gets the time within that the next frame shall be received, so he does not need to know the strategy.

6. Introduction of sampled measured value model

7. Mapping of sampled measured value model

IEC 60044-8, IEC 61850-9-1. Gerhard Lang presented the mapping of 9-1 & 9-2, and led the group discussion of this topic.

- Decision on mapping for GOOSE and sampled measured value model...the IEC GOOSE and the sampled measured values map onto the LSAP.
- Note that the two types of goose messages should not be separated by 8-1 versus 9-2, but both should be everywhere.
- Christoph presented what would be transmitted for a sampled measured value, multicast sampled measured values, and unicast sampled measured values. Note that on abstract level, the buffer content is restricted to one sample of all data included in the set. For the purpose of the mapping, multiple samples may be transmitted in the same frame. Refresh time is the maximum time versus the sampled time.
- Comment on CDV that refresh time (part 7-2, 16.4.4) should actually be hold time, as in GOOSE. However, we need information of the Time Quality (Time Accuracy) of the sampled values.
- We may need another section of document that provides guidelines on how to use the standard.
- Clemens Hoga will generate a CDV comment that we could add a communications lost indication comparable to that supplied with the GOOSE.
- Discussions on the need of 9-1 and 9-2. 9-1 shall be compatible to the universal dataset; 9-2 being more flexible shall be ASN.1 encoded. How to differentiate them? Use a different LSAP? It was finally agreed that for the universal dataset in 9-1, an ASN.1 tag 80 is added up front, which makes the message encoded as an octet string. Since then the next byte is the length, this makes it fully ASN.1 compatible!
- The group discussed the synchronization of samples, and the reference to IEC 60044-8. Mark will provide comments tomorrow on time synchronization for part 9-1.

8. Further Decisions on GOOSE and SMV mapping

- Mark Adamiak asked for mechanism to indicate LN or IED is "logging off". Today, when we take a device sending a GOOSE message out of service; we are unable to differentiate from an error condition; all receivers will miss the next GOOSE message and will create an alarm. It is proposed to add information that the device is going out of service. At the abstract level, this may be mapped as an additional bit (like the test bit) of the GOOSE message indicating that this message is a "good bye" message.

- Mark will comment on CDV asking for bit pair in GOOSE to be allocated for this purpose.

9. Introduction to Time Synch model

10. Mapping of Time Synch Model

Thomas Lindberg presented Time Model as defined in 7-2. In discussion of time quality, Mark Adamiak noted that there is an existing standard for time quality. An intense discussion of time quality ensued. The group consensus was to

- Change "Time quality" to "Time Error"
- Change "SOC" to "Seconds"
- No DST in time tag
- Add Time Model to Logical Node "Physical Device"
- Further discussion of leap seconds and other minutia referred to smaller group for discussion.

11. Further coordination

- Do 8-1 and 9-2 overlap? Timestamp and GOOSE probably belong in 8-1. Sampled values will be the only items in 9-2, with references to 9-1 and 8-1.
- For 8-1, if everyone is comfortable with style, then a small group can finish, based on comments from this afternoon, we should have draft available by the end of May. We may be able to go directly with CDV for 8-1, 9-1, and 9-2 at the same time. A decision will be based on the comments from the May draft. The goal is to have CDVs at end of July.

12. Next and future meetings

Next meeting WG10, 11 and 12 is already scheduled for the first week in October (October 2 – 5, 2001) in US. Details of time schedule need to be fixed; Mark Adamiak will provide organisational information. The meeting will mainly be dedicated to the comments received on CDV's for part 7-x.

No additional meeting needed to prepare CDV's for 8-x and 9-x.

13. Other items

nothing to be mentioned

3/28/01

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