WG13 Issues - CIM Issues #6350

[GMDM #18] Rationalise 61968-13 and 61970-4xx profiles

05/24/2023 12:07 PM - Pat Brown

Status:	Review		
Priority:	Normal		
Target version:			
Author/Contact Info:	Pat Brown pat@cimpledata.com	**Standard(s):**	61970-4xx, 61968-13
Base Release:	CIM17	**Version:**	
Solution to be Applied To:		**Clause:**	
Solution Version:		**Sub-Clause:**	
Solution Applied By:		**Paragraph:**	
Completion Date:		**Table:**	
CIM Keywords:	61970-AuxillaryEquipment, 61970-Contingency, 61970-ControlArea, 61970-Core, 61970-DC, 61970-DiagramLayout, 61970-Domain, 61970-Dynamics, 61970-Equivalents, 61970-Faults, 61970-LoadModel, 61970-Meas, 61970-Production, 61970-Protection, 61970-SCADA, 61970-StateVariables, 61970-Wires	**Originally Closed in Version:**	
Breaking Change:	Yes	**Origination Date:**	
Breaking Change Description:		**Origination ID:**	
CIM Impacted Groups:	WG13	**Originally Assigned To:**	
Requestor:	Pat Brown		

Description

There are two sets of grid model data profiles - 61970-4xxx and 61968-13. They rely on the same underlying information model but define different profiles, which sometimes overlap, sometimes are independent and sometimes are subsets. They grew from the historic division of CIM WGs by Transmission (WG13) and Distribution (WG14).

WG13 is now responsible for all grid model profiles and now 'owns' both sets.

The differences between the two can be characterised into several areas:
1) How profiles describing physical data are divided:
The 61970 view:
- Equipment - foundational grid model data which supports basic steady state analysis
- ShortCiruit - additional data needed by fault analysis tools
- Operational - additional data needed by operations tools (EMSs)
- Dynamics - additional data for sub-cycle analysis tools * no GeographicalLocation * no AssetCatalog

The 61968-13 view:
- Functional - foundational data which support connectivity and tracing
- ElectricalProperties - additional data supporting steady state and short circuit analysis
- GeographicalLocation - geospatial location of equipment and facilities
- AssetCatalog - asset characteristics from which electrical parameters can be derived
- Asset - limited individual structure modelling * no Dynamics

2) 61968-13 has no StateVariables profile
3) Balanced vs unbalanced
61970-4xx profiles describe balanced models
61968-13 profiles describe unbalanced models

There is a growing recognition that asset and geographical data are needed by transmission and that dynamics and state variable data is needed in distribution, so essentially the same types of profiles are valuable in both areas. Given the growing importance of TSO/DSO data exchanges and the increasingly similar use of grid model data across operations, planning, and markets in T and D,

a common approach to defining which class belongs in which profile would be very valuable.

Balanced modelling vs unbalanced modelling is the real modelling difference that needs to be supported.

This issue suggests that the profiles of 61970-4xx and 61968-13 be rationalised into a single cohesive set of profiles.

Decision

Oslo 14 June 2023,
Agreement is document in the slides

19-Sep-2024 Joint TF Hybrid meetings:
Reviewed. This is tied to balanced/unbalanced work in other issues. AI: associated the other issues to this one to be executed collectively. This should be the primary issues for the work.

Related issues:

Related to WG13 Issues - CIM Issues #6356: [GMDM #22] 61968-13 has SwitchPhas...	**Review**
Related to WG13 Issues - CIM Issues #5947: Description classes inheriting fro...	**In Progress**

History

#1 - 05/24/2023 12:07 PM - Pat Brown

- File GMDM 18 - Consolidate rationalize 61968-13 vs 61970 Profiles.docx added

#2 - 06/14/2023 04:40 AM - Chavdar Ivanov

- Status changed from New to Open

- Decision updated

#3 - 06/14/2023 04:40 AM - Chavdar Ivanov

- Status changed from Open to Review

#4 - 06/28/2023 11:08 AM - Pat Brown

- File 2023-06-13 61970-45x and 61968-13 harmonisation WG13 presentation.pptx added

#5 - 09/19/2024 09:57 AM - Todd Viegut

- Decision updated

#6 - 09/19/2024 10:36 AM - Todd Viegut

- Related to CIM Issues #6356: [GMDM #22] 61968-13 has SwitchPhase.closed attribute in Functional not SSH. added

#7 - 09/19/2024 11:05 AM - Todd Viegut

- Related to CIM Issues #5947: Description classes inheriting from IdentifiedObject added

Files

GMDM 18 - Consolidate rationalize 61968-13 vs 61970 Profiles.docx	74.6 KB	05/24/2023	Pat Brown
2023-06-13 61970-45x and 61968-13 harmonisation WG13 presentation.pptx	89.4 KB	06/28/2023	Pat Brown