IEC TC57 WG16 MAINTENANCE REQUEST

Maintenance notice:

This template needs to be completed and sent to: WG16@iectc57.org

Rules:

All participants in the IEC TC 57 WG16 may issue a Maintenance Request concerning IEC TC 57 WG16 documents, UML models or code components. This document defines the form that is to be used to submit such a request.

General guidelines for the Maintenance Request submission:

- The form is to be completed with all the necessary information.
- All associated documents required for the understanding of the Maintenance Request are to be provided.
- It is highly recommended to provide a presentation describing the use cases and why a change to an existing standard is necessary. Each use case must relate to an ongoing or upcoming project (American, European or National project). Valuable contextual information must be provided such as European regulations or directives, project specifications, and so on.
- If needed the requester can be invited to present their Maintenance Request to IEC TC57 WG16. Failing that an IEC TC57 WG16 member should champion the Maintenance Request so that any questions raised may be immediately resolved.

The IEC TC57 WG16 Convener will inform the submitter when the Maintenance Request is to be reviewed by the WG 16.

The Maintenance Request shall be provided to IEC TC57 WG16 Members and Corresponding Members at least one week prior to its presentation for approval.

The Maintenance Request will be debated within IEC TC57 WG 16 and its Members shall state:

- If the Maintenance Request is to be rejected and the reason of rejection.
- If the Maintenance Request is accepted.
- If the Maintenance Request is accepted with changes.

All decisions shall be obtained through consensus¹.

In all cases, the requester shall be informed of the IEC TC57 WG 16 decision.

Accepted Maintenance Requests, before being implemented in the existing standards, shall be updated in a common excel sheet.

¹ ISO definition of Consensus: "general agreement, characterized by the absence of sustained opposition to substantial issues by any important part of the concerned interests and by a process that involves seeking to take into account the views of all parties concerned and to reconcile any conflicting arguments".

General Information

Date of submission:	27/03/2024			
Submitter Name:	Bhagyashree Wahie			
Organisation:	ENTSO-E			
E-mail:	bwahie@entsoe.eu			
Maintenance Request ID	BW_20240327_01			
Maintenance Request Version	2-3 (revision September January 20245)			
Maintenance Request title	Introduce a new class named 'EnergyCharacteristics' in CIM & ESMP			

Description of the issue (Business requirements, use cases...

The requirement comes from the EU Implementing regulation (EU <u>2023/1162</u>) for access to metering & consumption data.

Need: The energy characteristic class will provide an arrangement for accessing energy related characteristics that falls under the scope of electricity.

Information whether an entity is representing production, consumption or combined.

Update in January 2025:

- See input in https://redmine.ucaiug.org/issues/7009
- <u>The suggestion is just to add a new attribute, flowCommodityOption to the MarketEvaluationPoint</u> class.

Possible impacts on profiles (ESMP or profiles based on ESMP)

There will be no impact on any of the ESMP profiles because this class will be optional.

Only a new class named energy characteristics will be imported from the CIM inside ESMP with an attribute flow Category with datatype string and cardinality [0..1]

Update in January 2025 (suggestions):

- The multiplicity of mRID in MarketEvaluationPoint in ESMP is suggested to be changed to 0..1 (optional), currently the attribute is required. It will remain required for most usages.
- <u>Add the new attribute flowCommodityOption to MarketEvaluationPoint (to be inherited by</u> <u>AccountingPoint when relevant).</u>

Description of the update

4.1 This request applies an update of IEC 62325-301 (If yes, please fill the points below) Yes A new class named EnergyCharacteristics will be introduced in the MarketManagement package with an attribute flowCategory with datatype string and cardinality [0..1] and linked to the Series class with cardinality [0..*] on both sides of the association and link it with the MarketEvaluationPoint class with cardinality [0..*] on both sides of the association.

Update in January 2025 (suggestions):

The new attribute flowCommodityOption in MarketEvaluationPoint will have datatype string and multiplicity [0..1].

Description of the change/update

- Reference to XMI (Optional)
- Snapshot of the update in IEC 62325-301 before

MarketManagement Series	
 + lastUpdateDate: Date [01] + methodType: String [01] + registrationDate: Date [01] 	
	Usagen MarketManagement::MarketEvaluationPoin
	 measurementMethod: String [01] meteredDataCollectionMethod: String [01] contractedConnectionCapadity: DecimalQuantity [0]

Snapshot of the update in IEC 62325-301 after



- Class and attributes descriptions

Class Name	Class Description	Attribute Name	Attribute type	Attribute Description	Cardinality
EnergyCharacteristics MarketEvaluationPoint	It describes the properties associated with energy sources, systems, or processes.	flowCategory flowCommodityOption	String	The <u>option of</u> flow category <u>commodity</u> , such as production, consumption, combined or exchange , of a related object .	01

4.2 Description of update of IEC 62325-351 (If yes, please fill the points below)

- Description of the change/update

Import Use the new attribute a new class named EnergyCharacteristics from the CIM inside ESMP with an attribute flowCategory flowCommodityOption from MarketEvaluationPoint having datatype as 'flowCommodityOption_string' and enumeration 'flowCommodityTypeList' and with cardinality as [0..1], associate it with the Series class with cardinality [0..*] and associate it with the MarketEvaluationPoint class with cardinality [0..*].

- Reference to XMI (Optional)

- Snapshot of the update in IEC 62325-351 before

+Series 0* <i>TimeSeries</i> «ACC» ESMPClasses::Series	
+ meteringMethod: String [01]	+MarketEvaluationPoint 0*
	«ACC» ESMPClasses::MarketEvaluationPoint
	 measurementMethod: String [01] mRID: MeasurementPointID_String description: String [01] meteredDataCollectionMethod: String [01] contractedConnectionCapacity: DedmalQuantity [01] name: String [01] connectionCategory: String [01] physicalConnectionCapacity: Decimal [01] disconnectionMethod: String [01]

Snapshot of the update in IEC 62325-351 after



- Class and attributes descriptions

Same as above for IEC 62325-301. For the enumeration the following codes will be used.



Final agreement

Agreed by SG on April 24th 2024, in ESMP SG on May 6^{th} 2024 and in ENTSO-E CIM WG on May 22^{nd} 2024.