IEC TC57 WG16
MAINTENANCE REQUEST

Maintenance notice:

This template needs to be completed and sent to: WG16Part301@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 consensus[1].

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”.

1 General Information

Date of submission:	18/01/2023
Submitter Name:	Jan Owe
Organisation:	Svenska kraftnät
E-mail:	jan.owe@svk.se
Maintenance Request ID	ebIX® 2023/001
Maintenance Request Version	~~4~~ 5 (updated 1~~5~~9/0~~3~~4/2023)
Maintenance Request title	Add the attribute energyFlowCategory to the Accounting Point class incl. codes for consumption, production and combined.

2 Description of the issue (Business requirements, use cases…)

2.1 Background and UseCases

This MR replaces the MR from ebIX® 2022/027 (Addition of codes for consumption, production and combined to the direction attribute (DirectionKind_String enumeration) in the FlowDirection class, using the ebIX® Enn codes).

The background for this maintenance request is the IEC TR 62325-103 (TR), describing use cases with mapping from the downstream European energy market to CIM and what was seen as missing in CIM.

In the summary of the suggested updates, chapter 8.11, it is suggested to add the attribute marketEvaluationPointType with the following definition:

> A code specifying the direction of the active energy flow in this MarketEvaluationPoint or in this TimeSeries, such as consumption, production or combined.

However, after discussion in the ENTSO-E Retail market TF and ebIX® it is agreed to request addition of the attribute **energyFlowCategory** to the Accounting Point class instead. The Retail market TF suggested changing the MR to addition of a new attribute to the AccountingPoint~~MarketEvaluationPoint~~ class, since this kind of information is not relevant for the Exchange Points, instead of extending the DirectionType enumeration (Up, Down, Up and down…).

In addition it is request addition of related codes for consumption, production and combined to IEC 62325-351 / ESMPEnumerations.

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

This MR suggest addition of the attribute **energyFlowCategory** to the Accounting Point class instead and addition related codes for consumption, production and combined to IEC 62325-351 / ESMPEnumerations.

4 Description of the update

4.1 This request applies an update of IEC 62325-301 (If yes, please fill the points below)

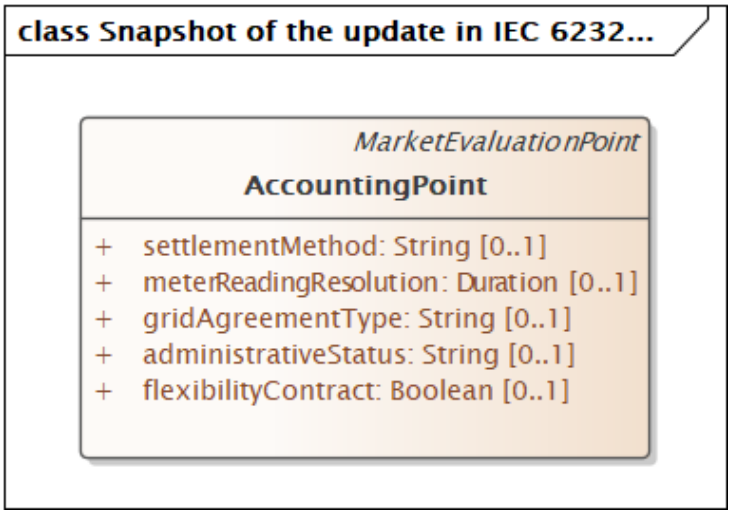
4.1.1 Description of the change/update

Add the new attribute **energyFlowCategory** to the AccountingPoint class in the TC57CIM/IEC62325/MarketManagement package.

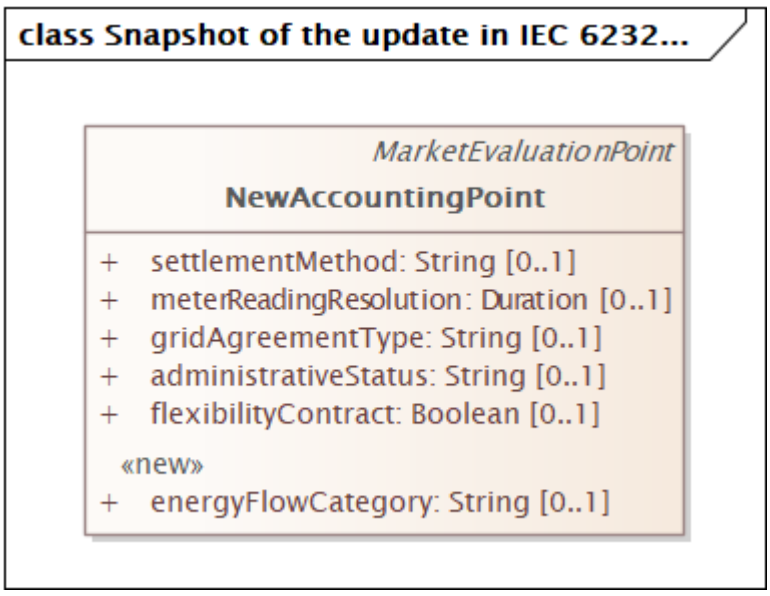
4.1.2 Reference to XMI (Optional)

None.

4.1.3 Snapshot of the update in IEC 62325-301 before



4.1.4 Snapshot of the update in IEC 62325-301 after



See the additions with stereotype <<new>> in the figure above.

4.1.5 Class and attributes descriptions

The following description is proposed for the new attribute: “The coded identification of the direction of energy flow in an Accounting Point.”

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

4.2.1 Description of the change/update

1) Add the new (inherited) attribute **energyFlowCategory** of type EnergyFlowCategoryKind_String to the AccountingPoint class in the ProfilesIEC62325/ProfilesIEC62325/IEC62325-351 Ed.3/ ESMPClasses package.

2) Add the new datatype **EnergyFlowCategoryKind_String** to the ProfilesIEC62325/ProfilesIEC62325/ IEC62325-351 Ed.3/ESMPDataTypes package.

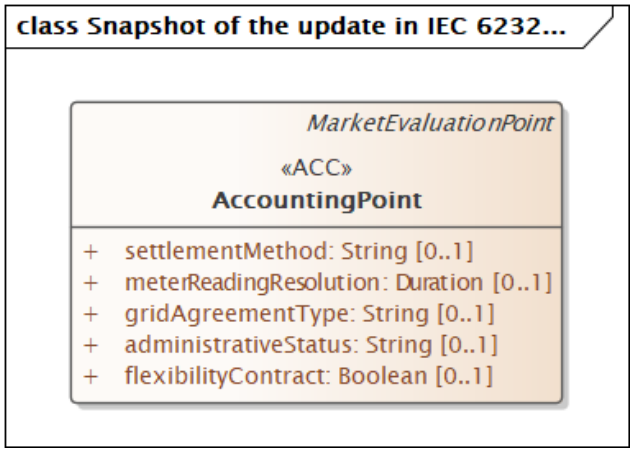
3) Add the new enumeration **EnergyFlowCategoryTypeList** to the ProfilesIEC62325/ProfilesIEC62325/ IEC62325-351 Ed.3/ESMPEnumerations package.

4) Add three new codes; consumption, production and combined to the ProfilesIEC62325/ProfilesIEC62325/ IEC62325-351 Ed.3/ESMPEnumerations/ package EnergyFlowCategoryTypeList enumeration.

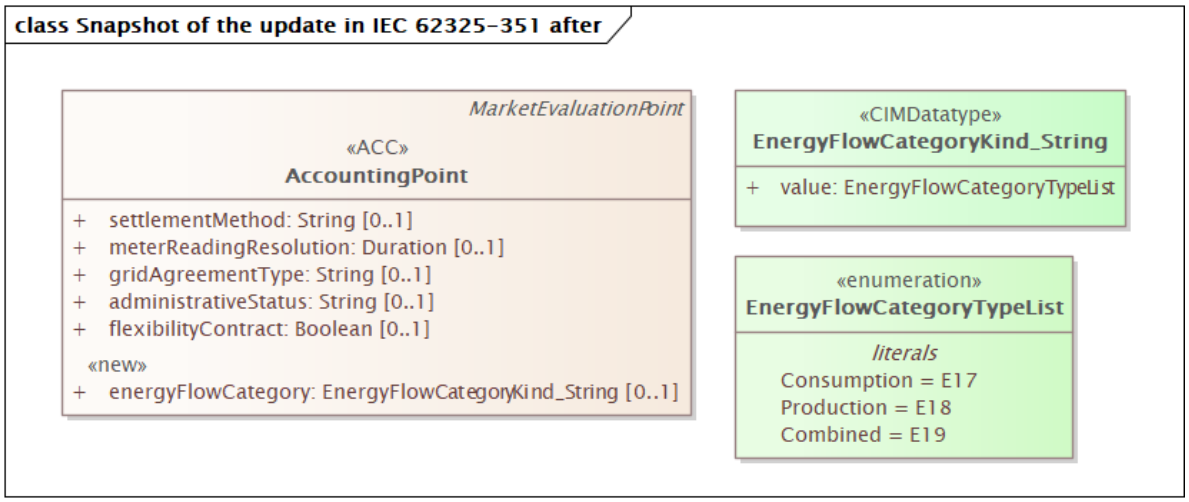
4.2.2 Reference to XMI (Optional)

None.

4.2.3 Snapshot of the update in IEC 62325-351 before



4.2.4 Snapshot of the update in IEC 62325-351 after



4.2.4.1 Class and attributes descriptions

Proposed definition of energyFlowCategory attribute:

The coded identification of the direction of energy flow in an Accounting Point.

Proposed definition of EnergyFlowCategoryKind_String datatype:

The coded identification of the direction of energy flow in an Accounting Point.

Proposed definition of EnergyFlowCategoryTypeList enumeration:

The coded identification of the direction of energy flow in an Accounting Point.

The following codes originates from the ebIX® code list and are heavily used in the European downstream (retail) energy market:

Code	Name	Description
E17	Consumption	Consumption signifies that an AccountingPoint takes energy from the grid.
E18	Production	Production signifies that an AccountingPoint feeds energy into the grid.
E19	Combined	Combined signifies that an Accounting Point can consume, take energy from the grid, or produce, feed energy into the grid.

5 Final agreement

From discussion: We discussed the definition, should it be changed from

“The coded identification of the direction of energy flow in an Accounting Point.”

to

“The coded identification of the kind of energy flow in an Accounting Point.”

Or to

“The coded identification of the classification of energy flow in an Accounting Point.”

The final suggestion (with “classification” in the definition) was agreed.

Conclusion: Group agrees to add the attribute energyFlowCategory to AccountingPoint with the definition “The coded identification of the classification of energy flow in an Accounting Point.” The request will be forwarded to WG 16.