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:	15/06/2023
Submitter Name:	Bhagyashree Wahie
Organisation:	ENTSO-E
E-mail:	bwahie@entsoe.eu
Maintenance Request ID	BW_20230615_01
Maintenance Request Version	2 (revision September 2024)
Maintenance Request title	Introduce a new class named Permission 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- To send the Master Data for permission related to the tasks or activities:

- To confirm the permission.
- To give permission to the respective party for accessing the validated historical consumption data specified in the permission request.
- To provide response to the permission request, whether the permission request is valid or invalid.
- Communicate validation result in case of valid request and indicating invalid results in case of invalid request to the respective party.
- Informing about successful establishment of permission.
- Giving permission to transfer data.

In the EU Implementing regulation there are some procedures that describe the exchanges between the roles, e.g. procedure 2 "Access to validated historical metering and consumption data by an eligible party", see link above.

In the Implementing regulation there are also "Info items" to be exchanged that e.g. informs that a Permission has e.g. identifications, dates, periods, purposes of the permissions and roles linked to them.

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

The new permission class will be used in ESMP.

Description of the update

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

Yes, because the permission-class does not exist in the IEC 62325-301 package.

Description of the change/update

Introduce a new class called Permission in the IEC 62325-301 MarketManagement package using inherited attributes mRID and createdDateTime and make it inherit from the Document class which is inherited from the Identified object class under Core package inside Base package within IEC 61970. Finally associate the Permission class with the Time Period class with cardinality [0..*], DateAndOrTime class with cardinality [0..*], MktActivityRecord class with cardinality [0..*], MarketEvaluationPoint class with cardinality [0..*], MarketObjectStatus class showing the life cycle of permission as (Active, de-active, rejected, accepted) having datatype string [0..*], MarketParticipant class with cardinality [0..*], Reason class with cardinality [0..*], & Timeseries class with cardinality [0..*] at both sides of associations.

A specific Permission can then be referenced in several TimeSeries, and a specific TimeSeries may reference several Permissions.

A specific Permission can have several DateAndOrTime associations, and a specific DateAndOrTime can be related to several Permissions.

A specific Permission can be referenced in several MktActivityRecords, and a specific MktActivityRecord can reference several Permissions.

A specific Permission can cover several MarketEvaluationPoints, and for a specific MarketEvaluationPoint there can be several Permissions.

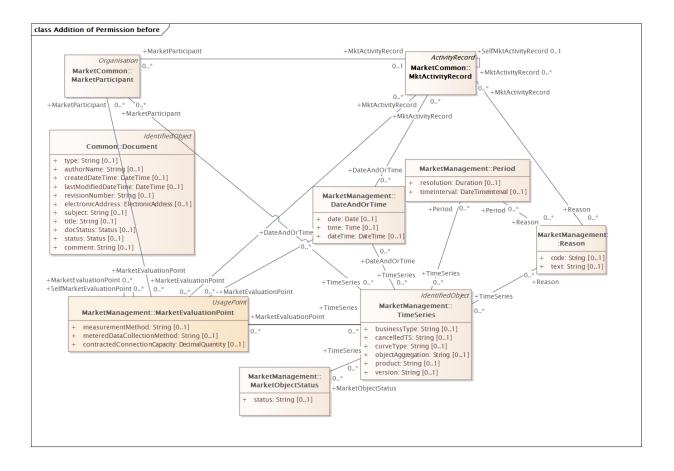
A specific Permission can have different statuses (at least over time) – specified using an association to MarketObjectStatus. And a specific status is valid for several Permissions.

A specific Permission can have several Reasons, and a specific Reason is valid for several Permissions.

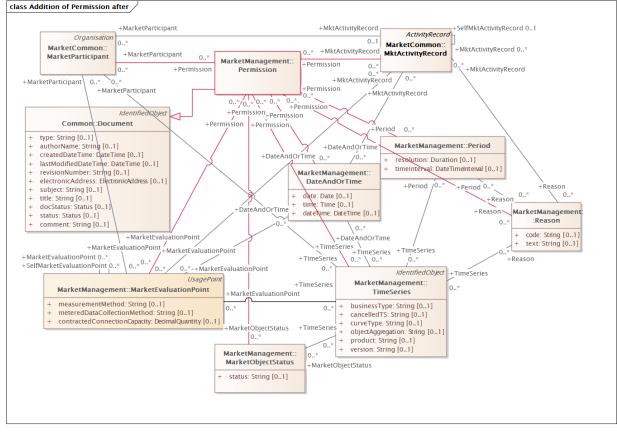
For a specific Permission there can be several (Time) Periods and for a Period there could be several Permissions.

A Permission can involve several MarketParticipants, and one MarketParticipant can have several Permissions.

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



- Snapshot of the update in IEC 62325-301 after



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- Class and attributes descriptions

Class Name	Class Description
Permission	Proposal: Specific right or authorisation granted to individuals or entities to access certain resources, perform specific actions, or obtain certain privileges within a system or organiszation.

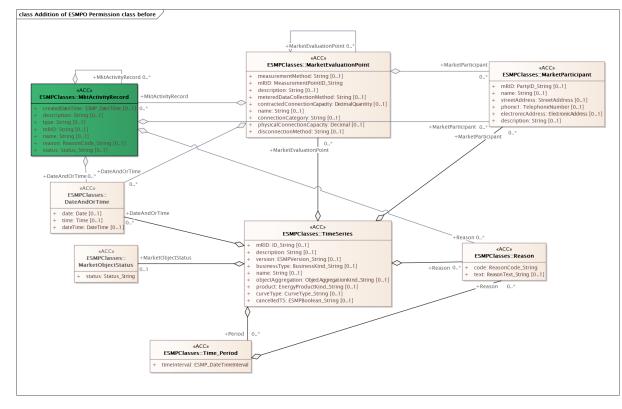
4.2 Description of update of IEC 62325-351 (If yes, please fill the points below)

- Description of the change/update

After introducing the Permission class from the IEC 62325-301 MarketManagement package, bring Permission Class in ESMP with inherited attributes mRID string [0..1] for the permission identifier and createdDateTime DateTime [0..1] for the permission creation Timestamp. MktActivityRecord class and MarketEvaluationPoint class shall be associated to Permission with cardinality [0..*], Also associate the Permission class with the Timeseries class, the Time_Period class the DateAndOrTime class, the MarketParticipant class, the Reason class and MarketObjectStatus class with cardinality [0..*] for all associations.

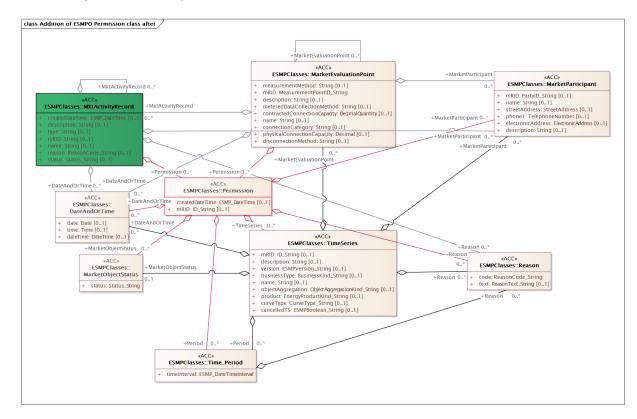
The relevant usecases exchanging Permission information will then let a MktActivityRecord (an Event) handle several Permissions. A MarketEvaluationPoint (or rather the inherited AccountingPoint) will reference one or more Permissions (or zero permissions if no permission was given). For a Permission some dates are possible to specify like the Permission end date and the Max lifetime of a Permission. For a Permission reasons like the purpose of the permission and a reason why a Permission is ended can be specified. Through the use of Series (inherited from TimeSeries) information like the measurement unit, the product etcetera can be specified relevant for a specific Permission. TimePeriods for the Permission can be specified, and different MarketParticipants involved in the Permission. With the usage of MarketObjectStatus a status for the Permission can be specified.

- Reference to XMI (Optional)
- Snapshot of the update in IEC 62325-351 before



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Snapshot of the update in IEC 62325-351 after



- Class and attributes descriptions

Same as in IEC 62325-301.

Final agreement

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