


<b>Minutes ETC meeting, March 30<sup>th</sup>, 2023</b>	 <b>European forum for energy Business Information eXchange</b>
April 17 <sup>th</sup> , 2023	<b>ETC – ebIX<sup>®</sup> Technical Committee</b>

## Minutes ETC meeting

**Date:** Thursday March 30<sup>th</sup>  
**Time:** 10:00 – 12:00 and 13:00 – 15:00  
**Place:** GoToMeeting  
**Present:** Jan (NL), EDSN  
Jan (SE), Svenska kraftnät  
Kees, TenneT  
Ove, Edisys

**Appendix A:** ebIX<sup>®</sup> rules for how to make MRs to WG16

**Appendix B:** Mapping from ebIX<sup>®</sup> class diagrams for Validated measured data for continuous metered AP to CIM

### Attachment:

1. Appendixes for ETC minutes (docx)
2. ETC workplan (see ebIX<sup>®</sup> file manager at <https://filemanager.ebix.org/#>)

### 1 Approval of agenda

The agenda was approved with the following additions:

- Resolve matters from ebIX<sup>®</sup> Forum meeting March 21<sup>st</sup>, see item 9.1 under AOB.

Prioritised items:

- Review of non-submitted MRs from the ETC Excel sheet - focus item, see item 4.1.4.
- Not yet mapped attributes from the BRS for Alignment of metering configuration characteristics, see item 4.1.5.
- MRs to ENTSO-E CIM EG Retail market workgroup, see item 4.2.1.
- Review of HEMRM update suggestions from EBG, see item 6.1.

### 2 Approval of minutes from previous meetings

The minutes from previous meeting were approved.

### 3 Status for a common ebIX<sup>®</sup>, EU DSO Entity, ENTSO-E (CIM EG) and ENTSOG Area project

The ebIX<sup>®</sup> Forum agreed to stop the project as an ebIX<sup>®</sup> project. However if ENTSO-E would take the lead, ebIX<sup>®</sup> will join the project until end of 2023.

## 4 Resolve ebIX®/IEC issues

### 4.1 Making a European Style Downstream Market Profile (ESDMP)

#### 4.1.1 [Status for governance of reference models: basic IEC CIM and ESDMP \(follow-up item on the agenda\)](#)

The item was postponed.

#### 4.1.2 [MRs to WG16 CIM modelling team and Information from IEC meetings](#)

The item was postponed.

#### 4.1.3 [MRs based on Dutch requirements](#)

The item was postponed.

#### 4.1.4 [Review of non-submitted MRs from the ETC Excel sheet - focus item](#)

The MRs has not yet been reviewed by EBG, hence item was postponed.

#### 4.1.5 [Not yet mapped attributes from the BRS for Alignment of metering configuration characteristics](#)

- Jan (SE)/Ove had made the following MRs:
  - ebIX 2023-002-v4 - Add Meter, inc. Meter ID, to ESMP and add an association from MarketEvaluationPoint to Meter.  
**Status:**
    - Submitted to CIM Retail market wg
  - ebIX 2023-003-v1 - Add Meter type to Meter in ESMP  
**Status:**
    - Submitted to CIM Retail market wg
  - ebIX 2023-004-v2 - Add connectionCategory to Meter in ESMP  
**Status:**
    - Submitted to CIM Retail market wg
  - ebIX 2023-005-v3 - Add Bay to ESMP and add an association from Meter to Bay.  
**Status:**
    - Submitted to CIM Retail market wg
  - ebIX 2023-007-v1 - Add numberOfRegisters to Meter in 61968 and ESMP.  
**Status:**
    - Not yet submitted to CIM Retail market wg
  - ebIX 2023-008-v1 - Link pressureCompensation to Meter in ESMP.  
**Status:**
    - Not yet submitted to CIM Retail market wg
  - ebIX 2023-009-v1 - Link temperatureCompensation to Meter in ESMP.  
**Status:**
    - Not yet submitted to CIM Retail market wg
  - ebIX 2023-010-v1 - Add altitudeCompensation to EndDeviceInfo and link it to Meter in ESMP.  
**Status:**

- Not yet submitted to CIM Retail market wg
  - ebIX 2023-011-v1 - Add an association from Meter to UsagePointLocation in ESMP.
    - Status:**
      - Not yet submitted to CIM Retail market wg
- Ove had asked, Stefan, Joachim, Bostjan, Andrzej and Grazyna if the following attribute from the Meter class in BRS for metering configuration characteristics is in uses and if used: how it is used and if it is needed for the future:
  - Registers remotely switchable *Boolean* (Indication that the Meter is remotely switchable between the registers, for example by a tone frequency receiver).
    - Answer from Joachim:**
      - Old world: We use it by a tone frequency receiver.
      - New world: We plan it for special products of the Energy Supplier as additional to the normal regulated metering.
    - Answer from Andrzej:**
      - We don't use it. There was no need for such information.
    - Status:**
      - Hence, ebIX 2023-006-v1 - Add registersRemotelySwitchable to Meter in 61968 and ESMP was made.
  - Meter technique (A code indicating what kind of technique is used in the Meter).
    - Answer from Andrzej:**
      - I think we don't use this but I'm not sure what exactly is this attribute about. We plan to have information regarding:
        - a) type of meter – smart or not smart
        - b) type of metering method – continuous (15 min. profile), registers or “no measurement” (type of AP without meters, energy consumption is estimated using contracted power).
      - Status:**
        - Hence, no MR will be made for the time being.
- Ove will ask Joachim and Vlatka if Gateway still is needed.
  - Answer from Vlatka:**
    - Germany will need the Gateway also in the future. But I would wait with the MR until our national committee (DKE) has discussed that. They are preparing a CIM workshop in April, I will raise the question there.
    - Status:**
      - Hence, no MR will be made for the time being.

From Jan (SE) March 29<sup>th</sup>:

Regarding ebIX 2023-006-v1 - Add registersRemotelySwitchable to Meter in 61968 and ESMP:

One issue with that is that the class Register is not directly associated with the class Meter as in the ebIX® model. Both classes are associated with the UsagePoint (and therefore the MarketEvaluationPoint), but not directly with each other. I would like to do some investigation on this before submitting the MR.

But, what documentation do we have regarding this attribute, and existing implementations? I.e. describing this would be easier if knowing a use case where it is used. Maybe also the

inherited attribute “isSmartInverter” (Boolean) is something to look at? However, that is probably something else.

An update that is needed in the MR is that it describes updates to be done in “IEC 62325-301” related to the class Meter. But Meter is found in IEC 61968-11.

**Status:**

- The MR was reviewed, updated and will be submitted to CIM Retail market wg.
- Jan (SE)/Kees will ask Alvaro to change the direction of the association from MarketEvaluationPoint to MktActivityRecord in ESMP, ref. MR 2022/012.

**Status:**

- Jan (SE) has asked ENTSO-E, however without any response yet.

**Conclusion:**

- To be followed up at next ETC.
- Jan (SE) will ask WG16 if we should change the attributes in PositionPoint to longitude, latitude, altitude, but if not agreed, add explaining text to the description.

**Status:**

- Jan (SE) has asked WG16 if we should change the attributes in PositionPoint to longitude, latitude, altitude, but if not agreed, add explaining text to the description, however without any response yet.

**Conclusion:**

- To be followed up at next ETC.

*Continued action:*

- Ove will ask EBG how to use the conversion factor class in BRS for metering configuration characteristics, especially for temperature, pressure and measurement – and for electricity: is this the same as the constant in the register?

4.2 [Status for ENTSO-E CIM EG Retail market workgroup \(follow-up item on the agenda\)](#)

4.2.1 [MRs to ENTSO-E CIM EG Retail market workgroup](#)

*MRs followed up after review by CIM for retail market WG:*

- MR for IEC 62325-351 - ebIX 2022-016-v1 - Add ratedCurrent to ESMP 20230116

**Status:**

- The MR was discussed and found OK as is – will be resubmitted to CIM for Retail market wg.
- Currently the Netherlands uses a code consisting of number of phases and current, e.g. “3x25” or “1x16”, however only for small consumers. It is expected that the Netherlands in the future will split this into two codes, one for number of phases and one for the current.

*MRs to be followed up after review by CIM for retail market WG at next ETC meeting:*

- MR for IEC 62325-351 - ebIX 2022-015-v1 - Add phaseCount to ESMP 20230315

**Status:**

- Approved by CIM for retail market wg – to be submitted to WG16
- MR for IEC 62325-351 - ebIX 2023-001-v2 - Add energyFlowCategory to the Accounting Point class 20230315

**Status:**

- Approved by CIM for retail market wg – to be submitted to WG16

- MR for IEC 62325-351 - ebIX 2022-032-v7 - Add MeasurementMethodList to ESMP 20230118

**Status:**

- Approved by CIM for retail market wg – however, only changes to ESMP and no need for further follow up

*MRs to discuss at next ETC meeting:*

- MR for IEC 62325-351 - ebIX 2022-030-v8 - Add GridAgreementTypeList to ESMP 20230118

#### 4.3 Status for European (ebIX® and CIM EG Retail market workgroup) MRs to CIM

The item was postponed.

#### 4.4 Preparations for coming WG16 meetings

The item was postponed.

### 5 EG1 status

The item was postponed.

### 6 Resolve HG issues - Prioritised item on ETC meeting September 27<sup>th</sup>

#### 6.1 Review of HEMRM update suggestions from EBG

The item was postponed.

#### 6.2 BRP vs Energy Trader

The item was postponed.

#### 6.3 Status for harmonisation of the electricity and gas markets role models

The item was postponed.

#### 6.4 Suggestions for HEMRM extensions

The item was postponed.

#### 6.5 HG MR for the new domain (or CIM object) Grid Connection

The item was postponed.

### 7 ebIX® Business Information Model 2022.A

- 7.1 Shall we align the definition in the ebIX® Business Information Model and/or ebIX® BRs with CIM definitions for classes and attributes?

## 7.2 Use of XOR in combination with cardinalities

*Continued action:*

- Kees will make a proposal for update the “ebIX® introduction to Business Requirements and Information Models” with a chapter explaining the relationship between cardinalities and OR/XOR, including:
  - o XOR and cardinality of [1] lead to a required choice in the XML schema.
  - o XOR and cardinality of [0..1] lead to an optional choice in the XML schema.

## 7.3 Continue review and update of version 2022.A

Review of proposed updates in Appendix A and Appendix B in the separate appendix document.

## 8 Next meetings<sup>1</sup>

- Wednesday April 19<sup>th</sup>, 10:00 – 12:00 and 13:00 – 15:00, 2023, GoToMeeting
- Monday May 15<sup>th</sup> (09:00 – 16:00) and Tuesday May 16<sup>th</sup> (09:00 – 15:00) in Edisys offices in Oslo.
- Friday June 16<sup>th</sup>, 10:00 – 12:00 and 13:00 – 15:00, 2023, GoToMeeting
- Tuesday October 3<sup>rd</sup> (09:00 – 16:00) and Wednesday October 4<sup>th</sup> (09:00 – 15:00) in Svenska kraftnäts offices in Sundbyberg (Stockholm).

## 9 AOB

### 9.1 Resolve matters from ebIX® Forum meeting March 21<sup>st</sup>

ebIX® Forum decided at their meeting March 21<sup>st</sup> to close ebIX® by the end of 2023 and the ebIX® convenors were asked to make a list over what must be done before ebIX® ends and eventually what cannot be ended. A meeting was agreed to Thursday May 30<sup>th</sup> from 9:00 to 11:00 to discuss the ending plan.

The ebIX® Forum expects to hand over most of the ebIX® work to the EU-DSO entity and the Joint working group between the EU DSO Entity and ENTSO-E for further development/maintenance of the ebIX® reference models etc. The EU DSO entity will establish (or has established?) workstreams for “roles and business procedures” and “IEC/CIM” where ebIX® DSO members can be invited as experts or full members. However, the EU DSO Entity still have lack of people that can participate in external workgroups and work with harmonisation issues. The EU DSO Entity is currently focusing on making network codes for flex etc. and the SGTF/EG1 Implementing Acts (or Implementing Regulations).

#### *Action 2023a-01:*

- All ebIX convenors are asked to come up with prioritised work items that must be finalised before ebIX® ends by the end of 2023 (and if anything is left). These workplans will be discussed at the ebIX® Forum meeting May 30<sup>th</sup>.

Ove had drafted a first “ending plan for ebIX®” that was reviewed and updated.

#### **Actions:**

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<sup>1</sup> All Face-to-face meeting starts 09:00 the first day and end at 16:00 unless otherwise explicitly stated.

- All are asked to review and comment on the plan. The plan will be rediscussed at our next meeting.
- Ove will try to make some tries of exporting the ebIX® MD model to EA format, to get an idea of how much work it will be.

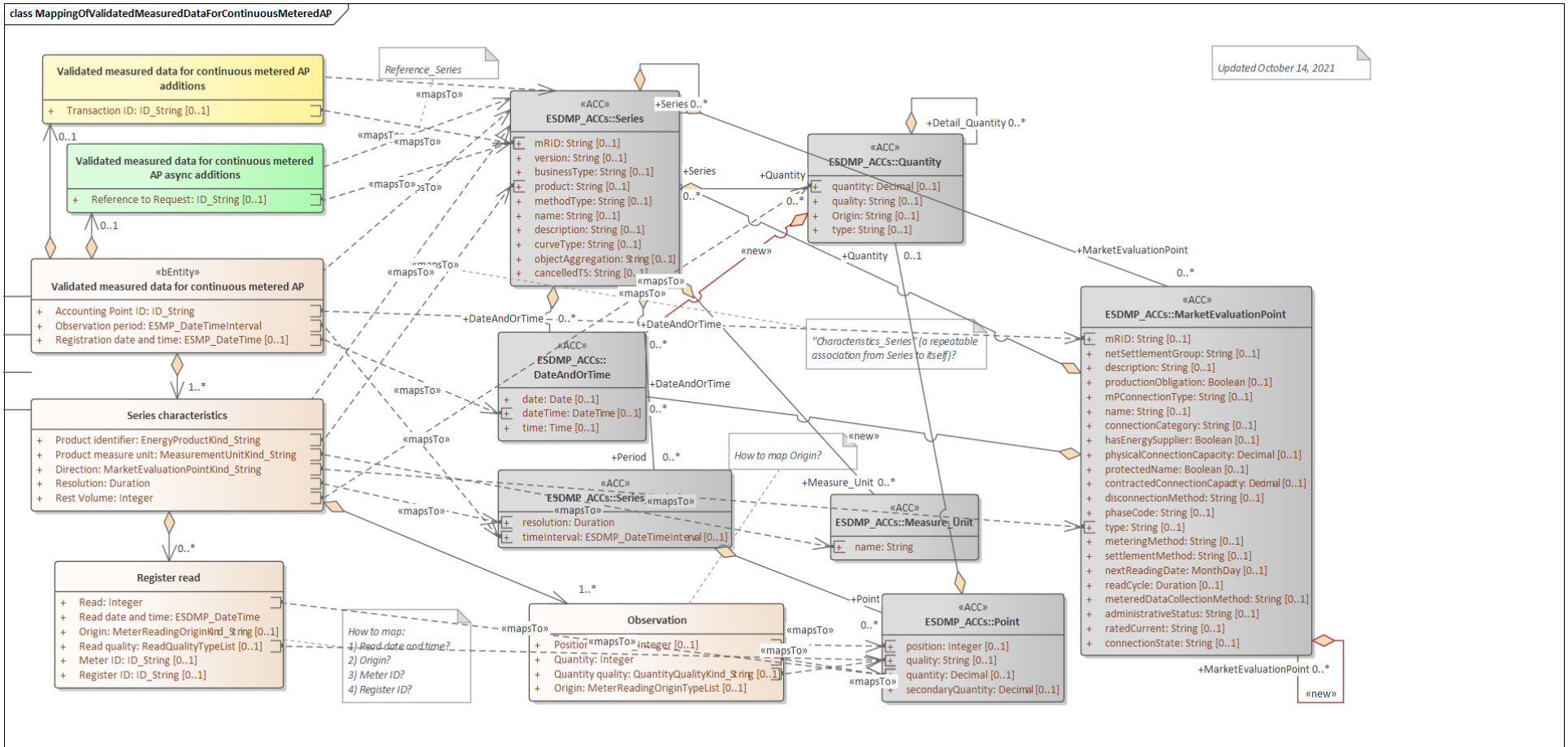
## Appendix A ebIX® rules for how to make MRs to WG16

- 1) Artefacts used for MRs to WG16 shall be stored as separate packages in the common cloud EA model.
- 2) Always review existing definitions of attributes, classes etc. that are related to the MR in question and if needed propose updates to these definitions.
- 3) First investigate basic CIM to see if the object we intend to send an MR for already is available there.  
If yes, we should make a MR for 62325-351 (ESMP), if not we make a MR for both basic CIM and ESMP.



### Appendix B Mapping from ebIX® class diagrams for Validated measured data for continuous metered AP to CIM

The mapping will be reviewed by ETC, while EBG will look into the definitions of classes and attributes to see if we need to update the ebIX® definitions or if we should send maintenance requests to IEC for update of the CIM definitions.



BRS attribute	BRS definition	CIM attribute	CIM definition
<p>«Business entity»</p> <p>Validated measured data for continuous metered AP</p>	The information set sent by a Metered Data Responsible to the Metered Data Administrator when exchanging validated measured data for continuous metered AP	Series	A set of similar physical or conceptual objects defined for the same period or point of time.
Accounting Point ID	The unique identification of the Accounting Point to which the validated measured data are attributed.	MarketEvaluationPoint / mRID	<p>Master resource identifier issued by a model authority. The mRID is unique within an exchange context. Global uniqueness is easily achieved by using a UUID, as specified in RFC 4122, for the mRID. The use of UUID is strongly recommended.</p> <p>For CIMXML data files in RDF syntax conforming to IEC 61970-552, the mRID is mapped to rdf:ID or rdf:about attributes that identify CIM object elements.</p>
Observation period	The specific period of time the validated measured data have been measured, calculated or estimated for.	Series_Period / timeInterval	The start and end date and time for a given interval.
Registration date and time	The date and time of the validation (and storage in the database) of this set of validated measured data.	DateAndOrTime / dateTime	Date and time as per ISO 8601 YYYY-MM-DDThh:mm:ss.sssZ.
Series characteristics	The characteristics of this set of validated measured data, i.e., the product and flow direction.	Series	A set of similar physical or conceptual objects defined for the same period or point of time.
Product identifier	A code specifying the energy product for the quantities in this set of validated measured data.	Series / product	The type of the product such as Power, energy, reactive power, transport capacity that is the subject of the time series.
Product measure unit	The unit of measure used for the quantities in this set of validated measured data.	Measure_Unit / name	The coded representation of the unit.
Direction	<p>A code specifying the direction of the energy flow that was measured with this validated measured data.</p> <p>A flow from the Accounting Point into the Metering Grid Area is defined as production and a flow from the Metering Grid Area into the Accounting Point is defined as consumption.</p>	MarketEvaluationPoint / type	Specifies if the Market Evaluation Point is an Exchange Point or an Accounting Point.

BRS attribute	BRS definition	CIM attribute	CIM definition
Resolution	<p>The resolution is the time between two observations, leading to the number of observations in this timeseries (calculated from the Observation Period divided by the Resolution).</p> <p>The Observation Period must contain a whole number of observations as derived from the resolution.</p> <p>The resolution is expressed in compliance with ISO 8601 in the following format:</p> <p style="text-align: center;">PnYnMnDTnHnMnS.</p> <p>For example <b>PT15M</b> for 15 minutes resolution.</p>	Series / resolution	The number of units of time that compose an individual step within a period.
Rest Volume	The Rest Volume is used for a volume that cannot be related to the 'normal' measured time series observations, i.e., the difference, for the Observation Period, between the start and end meter read and the aggregated volume from the exchanged time series.	Quantity / quantity	<p>The quantity value.</p> <p>The association role provides the information about what is expressed.</p>
Register read	A read from the register of the Meter linked to the Accounting Point and characteristics of the read. This read is at the basis of the validated measured data in the Observation.	N/A	
Read <sup>2</sup>	The value as read from or calculated for the register, for this Read date and time in the Observation period.	Point / quantity	Principal quantity identified for a point.
Read date and time	The timestamp of the moment in time when the value was registered in the Register of the Meter or the value was calculated for.	N/A	
Origin	A code specifying the role of the party that has retrieved or calculated the read.	N/A	
Read quality	The quality of this read, such as estimated, remotely read or physically read.	Point / quality	The quality of the information being provided. This quality may be estimated, not available, as provided, etc.
Meter ID	The unique identification of the Meter linked to the Accounting Point, which contains the register that has been read.	N/A	

<sup>2</sup> If the Register read is missing, the Meter Reading Origin Code shall be “E28 From Metered Data Responsible” and the Quantity Quality Code shall be “56 Estimated”.

BRS attribute	BRS definition	CIM attribute	CIM definition
Register ID	The unique identification of the Register within the Meter, where this data has been read from or is estimated for.	N/A	
Observation	One validated measured value within a timeseries.	N/A	
Position	The ordinal position of this Observation in this Observation Period for this set of validated measured data.	Point / position	A sequential value representing the relative position within a given time interval.
Quantity	The validated quantity of energy for this Observation.	Point / quantity	Principal quantity identified for a point.
Quantity quality	The quality of this quantity (volume), such as validated (default value, hence not sent), estimated, or temporary.	Point / quality	The quality of the information being provided. This quality may be estimated, not available, as provided, etc.
Origin	A code specifying the role of the party delivering the Quantity.	N/A	
Validated measured data for continuous metered AP additions	Additional information, related to validated measured data, the use of which may be agreed on a national level.	Series	A set of similar physical or conceptual objects defined for the same period or point of time.
Transaction ID	The unique identification of this set of information as given by the Metered Data Responsible.	Series / mRID	<p>Master resource identifier issued by a model authority. The mRID is unique within an exchange context. Global uniqueness is easily achieved by using a UUID, as specified in RFC 4122, for the mRID. The use of UUID is strongly recommended.</p> <p>For CIMXML data files in RDF syntax conforming to IEC 61970-552, the mRID is mapped to rdf:ID or rdf:about attributes that identify CIM object elements.</p>
Validated measured data for continuous metered AP async additions	Additional information related to validated measured data needed when using asynchronous communication.	Series	A set of similar physical or conceptual objects defined for the same period or point of time.
Reference to request	Information about the request for this set of validated measured data for continuous metered AP which uniquely identifies it.	Series / mRID	<p>Master resource identifier issued by a model authority. The mRID is unique within an exchange context. Global uniqueness is easily achieved by using a UUID, as specified in RFC 4122, for the mRID. The use of UUID is strongly recommended.</p> <p>For CIMXML data files in RDF syntax conforming to IEC 61970-552, the mRID is mapped to rdf:ID or rdf:about attributes that identify CIM object elements.</p>

class MappingOfValidatedMeasuredDataForContinuousMeteredAP

Target \ Source	1 DateAndOrTime	2 MarketEvaluationPoint	3 Measure_Unit	4 Point	5 Quantity	6 Series	7 Series_Period
1 Observation				Maps To Quant... → quantity  Maps To Position → position  Maps To Quantity → quantity			
2 Register read				Maps To Read → quantity  Maps To Read ... → quantity			
3 Series characteristics		Maps To Direct... → type	Maps To Produ... → name		Maps To Rest V... → quantity	Maps To Produ... → product  Maps To →	Maps To Resol... → resolu...
4 Validated measured dat...	Maps To Regist... → dateTi...	Maps To Accou... → mRID				Maps To →	Maps To Obser... → timel...
5 Validated measured dat...						Maps To Trans... → mRID  Maps To →	
6 Validated measured dat...						Maps To →  Maps To Refer... → mRID	

