

5MS/GS Transition Focus Group #3: *Transition planning for metering and metering data*

Friday 18 October 2019, 10:00am – 12:00pm

WEBEX details in calendar invitation

*This slide pack was developed for the Transition Focus Group meeting. This version of the slides has been annotated with notes from the meeting. These additional notes are either included in **blue font** or on new slides that have a yellow background.*

Attendees

Organisation	Name
AGL	Pieter Wijtzes
Alinta	Stephanie Lommi
Ausnet	Con Michailides
Citipower/Powercor	Mark Pilkington
Endeavour	Dino Ou
Energex	Terry Lodge
Energy Queensland	Nicole Bright
EnergyAustralia	Jon Ham
Ergon	Ingrid Farah
ERM/Powermetric	Snehal Jogiya

Organisation	Name
Essential	Tim Lloyd
Lumo	Mark Reid
Metering Dynamics	Jonathan Briggs
Origin	Amanda Pollard
Origin	Ciro Barbieri
Origin	Marian Vasjuta
Origin	Mario Iogha
Plus ES	Helen Vassos
Powercor	Greg Szot
Red Lumo	Nick Gustafsson
Red Lumo	Stephanie Macri

Organisation	Name
SAPN	David Woods
Simply	Aakash Sembey
Stanwell	Owen Self
Tango	Dale O'Donnell
Vector	Paul Greenwood
??	Nick Hickman
AEMO	Blaine Miner
AEMO	Craig Shelley
AEMO	Emily Brodie
AEMO	Greg Minney

Agenda

NO	TIME	AGENDA ITEM	RESPONSIBLE
Preliminary Matters			
1	10:00am - 10:10am	Welcome, introduction and general housekeeping	Greg Minney
Matters for discussion			
2	10:10am – 10:30am	Responses to actions from previous meeting	Greg Minney Craig Shelley
3	10:30am – 10:35am	Session objectives	Greg Minney
2	10:35am – 11:50am	Workshop	Greg Minney Blaine Miner Craig Shelley
Other business			
6	11:50am – 12:00pm	General business and next steps	Greg Minney

Reponses to actions

Greg Minney and Craig Shelley

MTP content – TFG feedback

- 2 responses:
 - One suggested clarifications of some of the commentary
 - One agreed with the content and noted it reflected the discussion at MFG #2
- Four other responses were received after this slide pack was distributed. Suggestions or questions posed by these responses will be addressed either in this meeting or AEMO will follow up directly with the relevant stakeholder.
- ACTION: AEMO to follow up on stakeholder responses where necessary

Responses to AEMO's actions (1)

TFG #2 Agenda item	Action	Response
Workshop on metering and metering data transition activities	AEMO to consider whether it could provide an aggregation service instead of MDPs	To be discussed in today's session
	AEMO to consider developing participant matrix so that it can provide visibility of when participants will transition to 5min capability for B2B metering data transactions (delivering or receiving).	Not commenced

Responses to AEMO's actions (2)

TFG #2 Agenda item	Action	Response
Group 1: Physical metering	AEMO to rerun metering reports to update the number of meters that need replacement or reconfiguration for 5MS. Will include consideration of type 1-3, 4* and 7, including SGA and cross-border meters.	Completed <ul style="list-style-type: none">AEMO has run reports for approx. 25,000 meters (incl type 7) that need to be delivering 5min data from 1 July 2021AEMO is in the process of distributing the reports to the relevant MDPsAEMO can share reports with applicable retailers.ACTION: Retailers who would like reports please request via 5ms@aemo.com.au
	AEMO to review calculations for special sites	In progress

Responses to AEMO's actions (3)

TFG #2 Agenda item	Action	Response
Group 2: Metering data delivery	AEMO to identify NER clause relating to sample meter interval lengths and share with TFG	There are no special provisions in the NER for sample meters. Sample meters: <ul style="list-style-type: none">• are (usually) type 4• are treated as any other type 4 under the 5MS Rule i.e. 30-minute unless new or replaced

Responses to AEMO's actions (4)

TFG #2 Agenda item	Action	Response
Group 3: MSATS standing data	AEMO to investigate whether cross boundary NMIs could be prohibited from being transferred in MSATS	The MP2 CATS Final Procedure confirms that cross boundary NMIs are not eligible to be transferred between retailers i.e. they are not eligible for CR1xxx transactions. MSATS will be developed in line with these requirements.
	AEMO to investigate whether the creation of a second wholesale NMI, associated with a single cross-boundary supply would affect Settlements if it is created pre 1 Dec 2020	No issues identified
	AEMO determine whether it is able to stagger introduction of the new NMI classification codes	This may be possible but consideration needs to occur regarding the impact on systems and processes pre 1 July 2021.

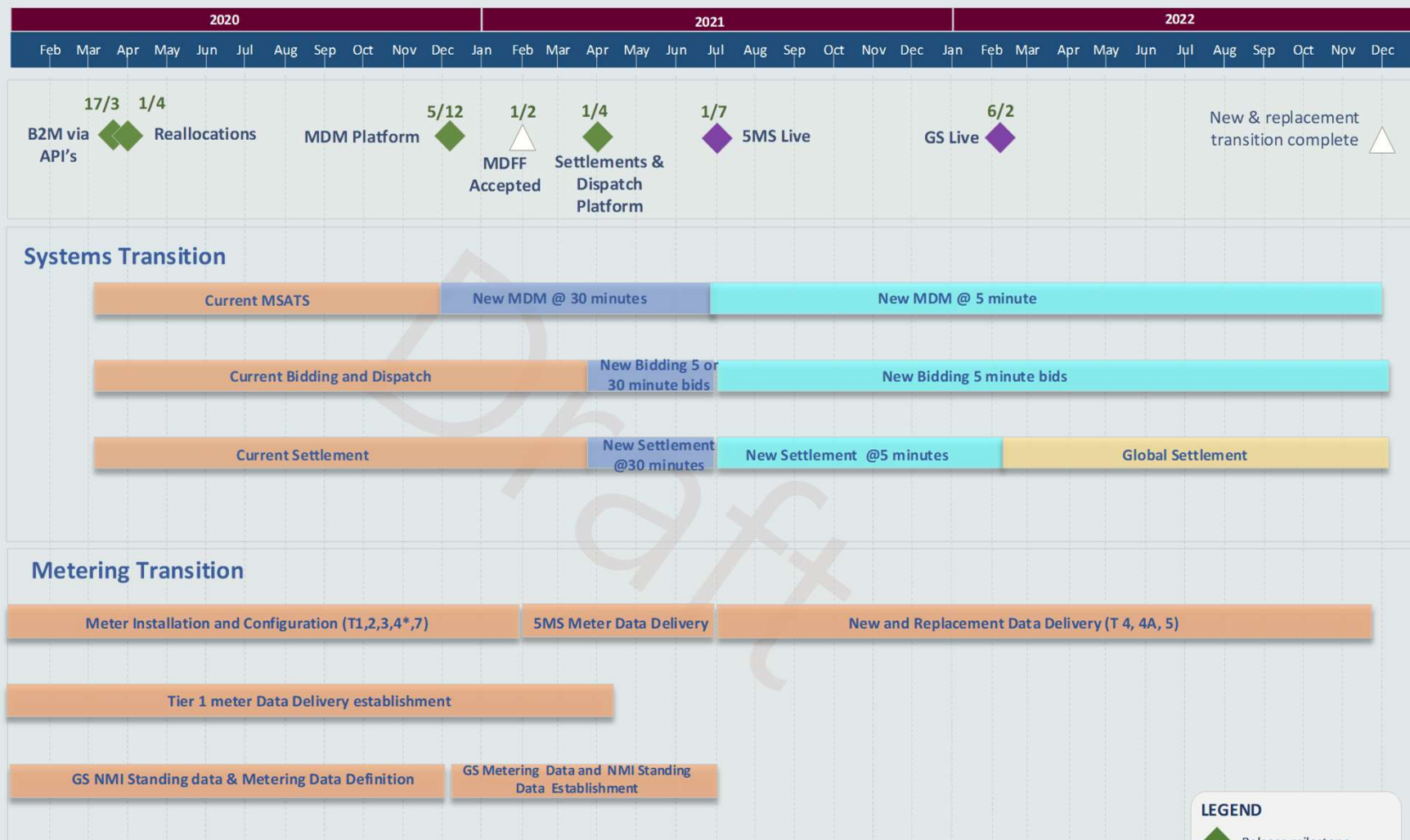
Session objectives

Greg Minney

Session objectives

- To provide a refresher/context on the metering transition plan (MTP)
- Confirm sub-categories and activities are suitable
- Assign dates to MTP actions
- Finalise any outstanding items (dates / dependencies) on the MTP
- Confirm next steps

Summary of proposed metering and metering data transition approach



Phased Implementation of platforms:

- Operational stabilisation on a 30-minute settlement basis
- Provides capability required to support SMS and GS metering transition and metering data population

LEGEND

- Release milestone
- Program Go-Live milestone
- Capability active/non active milestone

NOTES: Summary of proposed metering and metering data transition approach

- TFG suggested clarifications to the proposed transition chart:
 - Clarify when AEMO is capable of receiving 5-min data vs when participants are required to receive 5-min data i.e. separate B2B and B2M delivery.
 - Clarify that market is settling at 30-min up to 30 June 2021 and at 5-min from 1 July 2021
- ACTION: AEMO to consider clarifications to metering/metering data transition chart

Approach to workshop

Greg Minney

Approach to workshop

Work through the MTP section by section:

1. Meter installation and reconfiguration
2. Meter data delivery
3. MSATS standing data creation and maintenance

1. Meter installation and reconfiguration

- Approach:
 - BAU processes continue during transition for communication between MPs/MDPs and FRMPs
 - Not necessary for MPs to provide meter replacement and reconfiguration information, other than to AEMO
 - AEMO needs meter replacement and reconfiguration information to understand:
 - When substitution data is likely to be received for settlement
 - Progress of replacing/upgrading types 1-3 and 4* meters to inform risk and contingency management
 - AEMO will treat all MP program information as confidential

2. Meter data delivery

- Aggregation services **discussion**
 - Delivery and receipt of 5-minute data prior to 1 July 2021
 - AEMO is not planning on delivering this service due to:
 - Significant development requirements
 - AEMO not being an accredited MDP
 - Metering data exception management complexity
- Metering data delivery to AEMO
 - **ALL** interval metering data delivered to AEMO via MDFF/NEM12 from 1 July 2021 at the register level (consistent with B2B)
- Visibility of expected 5-min delivery volumes from new/replacement meters up until Dec 2022
 - By Q2 2020, MDPs to provide transition information on expected 5-min metering data volumes from 1 July 2021 to 1 December 2022.

NOTES: Meter data delivery

- TFG had extensive conversation around transition to 5-min granularity metering data, particularly around the following scenarios:
 - Some retailer/s and DNSPs not accepting 5-min metering data prior to 1/7/21 (discussed by Red/Lumo, Origin, AGL, Citipower/Powercor)
 - Customer switching concerns (where a customer producing 5-min metering data selects a retailer that is not ready to receive 5-min metering data) (raised by Red/Lumo)
- AEMO noted that pending legal advice, its underlying assumption is that MDPs are obligated to deliver 30-min granularity data prior to 1 July 2021 and 5-min granularity metering data thereafter. The exception is where a retailer, its MDP, its LNSP and AEMO agree to have metering data delivered at a lesser granularity.
- Alinta recommended clarifying the assumption in the transition plan. SAPN agreed, and also requested it be include on the high level transition chart.
- Tango enquired whether AEMO could provide an aggregation tool that retailers can utilise themselves for the transitional period. Could be useful to address the risk of vendors not being ready, particularly where multiple retailers use the same vendor. Noting that a tool may not be needed if the assumption holds true.
- ACTION: AEMO to provide information around its assumption that MDPs are obligated to deliver 30-min granularity data prior to 1 July 2021 and 5-min granularity metering data thereafter. **AEMO's position is that that MDPs need to deliver 30-min granularity data prior to 1 July 2021 and 5-min granularity metering data thereafter. This is unless there is agreement between the retailer, LNSP, MDP and AEMO [NER 7.10.5(a)].**

3. MSATS standing data creation and maintenance

- What support is required from AEMO for Tier 1 meter register **datastream** updates?
- Impacts of NMI Standing Data updates prior/during transition period
 - MSATS will not allow a FRMP to transfer the following NMI types:
 - XBOUNDRY
 - NCONUML
 - NREG
 - BULK
 - DWHOLSAL
 - **What is the impact on retailer systems of these NMI classifications being established prior to 1/7/2021?**

NOTES: MSATS standing data creation and maintenance

- ACTION: AEMO to correct first dot point to relate to datastreams rather than register updates. **Complete.**
- TFG discussed the start and end dates of 'transition periods':
 - Energex noted that these can have material impacts on participants' programs
 - Energy Australia raised the question of how early starts to transitions can be justified if moving early impacts retailers' systems. Potentially long periods affecting retailers' systems to support a soft start.
 - AEMO made the distinction between the 'capability window' and the 'transition period':
 - 'Capability window' – from when capability is available to an obligation date i.e. the maximum available time to transition
 - 'Transition period' – time period that TFG recommends as most suitable for transitioning. This is articulated through the metering transition plan as start and end dates, accounting for the for the capability window
- Red/Lumo requested that AEMO clarify what NMI classification codes would apply to CR1000 transfer transactions.
- ACTION: AEMO to clarify what NMI classification codes would apply to CR1000 transfer transactions. **AEMO confirmed after the meeting that only large and small NMI classification codes can be transferred between participants, all other codes are excluded.**
- AGL noted that the TFG also needs to consider the implications of not setting up NMI classification codes early. Late implementation could also have impacts to participant systems.
- AEMO responded that in the prior TFG meeting it was noted that there are certain NMI classification codes that are 'contained' e.g. NCUL, XBOUNDARY may only impact a few participants. But if code impacts more participants, then need to consider more broadly.

Metering transition plan

Metering transition plan

- General discussion on how to express capability window vs start/end dates of transitions:
 - Energy Queensland suggested another column in the Transition plan to indicate the capability readiness date vs start and end dates for participants
 - AEMO noted that an additional 'start date' column could cause confusion however capability window could be incorporated into the dependency column.
 - Endeavour noted:
 - that some stakeholders may think that the CATS procedures effective date is what they need to work to, rather than the transition period end date in the MTP. AEMO notes that this is likely a stakeholder engagement issue for AEMO.
 - that its understanding was that the end of transition period is the day before obligation date. AEMO responded that the transition end date is whatever the TFG recommends as appropriate for a transition.

Metering transition plan:

1. Meter installation and reconfiguration

Worked through MTP spreadsheet activities:

- A1 – no comments from MDPs
- A2 – procedures have been published so dependency removed. Plus ES noted that it has the meter list and is reviewing
- A3 – no comments
- A4 – TFG discussion around practicalities of updating required meters to record and provide 5min data:
 - Issues (such as site access difficulties) may pop up at the last minute, no matter how well planned and managed the rollout
 - Red/Lumo stated that MPs may need to “apply judgement” (e.g. where a site is going to be abolished a few days after 1/7/21). Metering Dynamics and PlusES noted that they would comply with their NER obligations.
 - AEMO noted that as part of readiness reporting, participants will report on progress and issues against schedule. Reporting will be an ongoing check on key activities.
- A5 – agreement
- A6 – A10 Subset type 4 – agreement that can assume that same activities as type 1-3, therefore same transition dates.

Metering transition plan:

1. Meter installation and reconfiguration continued

- A11 – A15 Cross boundary meters
 - Citipower/Powercor noted that transition dates for new cross-boundary metering will be different than for existing cross-boundary metering.
 - TFG adopted 2 new groups in the MTP - existing and new. No further comments were received.
- S06 to S09 – 4, 4A, VIC AMI, sample
 - AEMO suggested that these metering installation types should be treated as BAU
 - SAPN noted that the main issue with these fleets is when the volume will transition to 5-min granularity data (by 1 Dec 2022)
 - AEMO responded that this will be addressed in the meter data delivery section,
- Red/Lumo stated that at the previous TFG meeting there was discussion around VIC DNSPs putting in different codes for VIC AMI @ 30-min and VIC AMI @ 5-min because MSATS doesn't differentiate between the trading interval granularities
 - Citipower/Powercor noted they could potentially use "RWD5" and "RWD" **read type code** but it's a uniquely Victorian proposal (noting that Jemena wasn't on the call). It stated that some contestable small meter providers are considering moving all VIC AMIs to 5-min data, however Citipower only shifting post-2018 meters to 5-min.
 - Ausnet noted that it was open to using these read type codes because it was interested in having an interval length indicator.
 - Citipower responded that there may be future interest from retailers to move pre-2018 meters, but no confirmation of this need at the moment, so only considering the post-2018 meter migration. Ausnet confirmed they were also taking this approach.

2. Meter data delivery

- TFG discussion around the granularity of metering data being provided to local retailers prior to 1/7/21.
 - Red/Lumo was of the view that it didn't want local retailers receiving its 5-min data (if any) prior to 1/7/21
 - Citipower noted that it wouldn't want 5min data prior to 1/7/21 and therefore wouldn't agree.
 - Ergon noted that large customers can also choose metering data granularity (subject to agreement)
 - AGL requested that:
 - Bulk supply point meters are separated out from the type 1-3 and subset of type 4 meters in the TFG
 - Transition completion date for bulk supply point meter installation/reconfiguration and data delivery be well ahead of 1 July 2021
 - ACTION: AEMO to include bulk supply point meters as an additional category in the MTP
 - ACTION: AEMO to provide information to TFG on whether the LR should LR get data at different granularity than what required for settlement.
 - **AEMO's information post-meeting is that:**
 - If the retailer, LNSP, MDP and AEMO agreed to the delivery of 5min metering data, for a particular NMI pre-1 July 2021, the LR would by default receive 5-min metering data as well, even though the market was still settling on a 30-min basis.

3. MSATS standing data creation and maintenance

- Meeting closed, require further workshop to complete

General Business and Next Steps

Greg Minney

Reflection on session objectives

- To provide a refresher/context on the metering transition plan (MTP)
- Confirm sub-categories and activities are suitable
- Assign dates to MTP actions
- Finalise any outstanding items (dates / dependencies) on the MTP
- Confirm next steps

General business and next steps

Workshop outcomes and actions to be:

- Circulated to TFG and RWG
- Considered as part of the *Industry transition and go-live strategy*
- Form the basis of the formal MTP
- Provide basis for readiness reporting of metering transition activities

Consolidated actions

Section	Action	Responsibility	Due date / Response
Responses to actions	AEMO to follow up on stakeholder responses where necessary	AEMO	Ongoing
Responses to actions	Retailers who would like reports please request via 5ms@aemo.com.au	Retailers	Ongoing
Summary of proposed metering and metering data transition approach	AEMO to consider clarifications to metering/metering data transition chart	AEMO	Next TFG meeting: 6 Nov 19
Meter data delivery	AEMO to provide information around its assumption that MDPs are obligated to deliver 30-min granularity data prior to 1 July 2021 and 5-min granularity metering data thereafter.	AEMO	AEMO's position is that that MDPs need to deliver 30-min granularity data prior to 1 July 2021 and 5-min granularity metering data thereafter. This is unless there is agreement between the retailer, LNSP, MDP and AEMO [NER 7.10.5(a)].
	AEMO to include bulk supply point meters as an additional category in the MTP	AEMO	Next TFG meeting: 6 Nov 19
	AEMO to provide information to TFG on whether the LR should LR get data at different granularity than what required for settlement.	AEMO	If the retailer, LNSP, MDP and AEMO agreed to the delivery of 5min metering data, for a particular NMI pre-1 July 2021, the LR would by default receive 5-min metering data as well, even though the market was still settling on a 30-min basis.
MSATS standing data creation and maintenance	AEMO to clarify what NMI classification codes would apply to CR1000 transfer transactions	AEMO	Only large and small NMI classification codes can be transferred between participants, all other codes are excluded.

APPENDIX:

Refresher on 5MS and GS metering and metering data obligations

5MS Metering installation requirements

Metering Type	Requirement	Date
Types 1, 2, 3 and 7	<ul style="list-style-type: none">Must be capable of recording and providing, and configured to record and provide, five-minute trading interval energy data.	By 1 July 2021
Subset of Type 4*	<ul style="list-style-type: none">Must be capable of recording and providing, and configured to record and provide, five-minute trading interval energy data.	By 1 July 2021
Types 4, 4A and 5	<ul style="list-style-type: none">All new or replacement metering installations (other than type 4A metering installations) installed from 1 December 2018 must be capable of recording and providing, and configured to record and provide, five-minute trading interval energy data.All new or replacement type 4A metering installations installed from 1 December 2019 must be capable of recording and providing, and configured to record and provide, five-minute trading interval energy data.	By 1 Dec 2022

Note:

AEMO may grant an exemption where 1 type 1, 2, 3 or subset of type 4 meter is not quite capable of storing 35 days of metering data (i.e. 30-34 days) if it is reasonably satisfied that the Metering Provider will be able to otherwise satisfy the requirements of Chapter 7.

* Subset type 4 meters definition:

- Type 4 metering installations at a:
 - Transmission network connection point; or
 - Distribution network connection point where the relevant financially responsible Market Participant is a Market Generator or Small Generation Aggregator

5MS/GS metering data delivery to AEMO

Topic	Requirement	Date
File Format	<ul style="list-style-type: none">• MDFF NEM12 files to be the required file format<ul style="list-style-type: none">• For all interval metering data being delivered to AEMO• MDFF NEM13 files to be supported by AEMO• MDMF files for basic meter reads will continue to be supported and accepted	From 1 July 2021
Granularity	<ul style="list-style-type: none">• NEM12 interval metering data to be:<ul style="list-style-type: none">• Delivered at the register level (E, B, Q and K)<ul style="list-style-type: none">• NEM12 200 records must be accurate• As per the meter's trading interval configuration i.e. 5, 15 or 30-minute intervals	From 1 July 2021
Energy	<ul style="list-style-type: none">• Metering data which must be sent to AEMO:<ul style="list-style-type: none">• Import and Export Active energy (kWh) (E and B)• Import and Export Reactive energy (kVarh) (Q and K), where applicable• All other forms of measurement (such as volts and amps) are not required to be delivered to AEMO but will be processed if they are provided.	From 1 July 2021

5MS/GS: MSATS datastream standing data

Metering Type	Requirement	Date
Types 1, 2, 3 and 7	<ul style="list-style-type: none"> Net datastreams (N1) must be converted to Register level datastreams (E1, B1, etc.) 	By 1 July 2021
Subset of Type 4*	<ul style="list-style-type: none"> Net datastreams (N1) must be converted to Register level datastreams (E1, B1, etc.) 	By 1 July 2021
Types 4, 4A and 5	<ul style="list-style-type: none"> All new records relating to interval meters must be created at the register level e.g. E and B. Existing net datastream records can remain active post 1 July 2021, until an update to the datastream record is required e.g. meter replacement. Where an update is required to a CNDS record, the net datastream record is to be inactivated and any new active datastreams records are to be created at the register level. Datastreams associated with import and export reactive energy e.g. Q and K must be created in the CNDS table if they exist in the CRI table. <ul style="list-style-type: none"> Datastreams must be established in a manner that ensures they are not included in market settlements. 	From 1 July 2021
Basic Meters	<ul style="list-style-type: none"> All 1st tier datastreams must be activated and meter reads delivered to AEMO, for UFE purposes 	By 1 July 2021

5MS/GS: MSATS standing data - general

By 1 July 2021

- Non-contestable unmetered load (NCONUML) NMIs and associated standing data created in MSATS
- NMI Classification Code updates, for affected existing NMIs, to reflect the new code requirements

NMI Classification Code	Description
BULK	<i>Connection point where a transmission network connects to a distribution network - also termed 'Bulk Supply Point'</i>
DWHOLSAL	<i>Distribution network connection point where energy is directly purchased from the spot market by a Market Customer</i>
NCONUML	<i>Non-contestable unmetered load</i>
NREG	<i>Connection point associated with a non-registered embedded generator, i.e. a generating unit that is not classified by a Market Generator, but may be classified by a Small Generation Aggregator as a market generating unit.</i>
WHOLESALE	<i>Transmission network connection point where energy is directly purchased from the spot market by a Market Customer</i>
XBOUNDRY	<i>Connection point where a distribution network connects to another to distribution network</i>

Thank you for your
attendance and participation!