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R0300 / CP1622 DISPLAYED REGISTER DIGITS

INDUSTRY ENGAGEMENT

05 FEBRUARY 2026

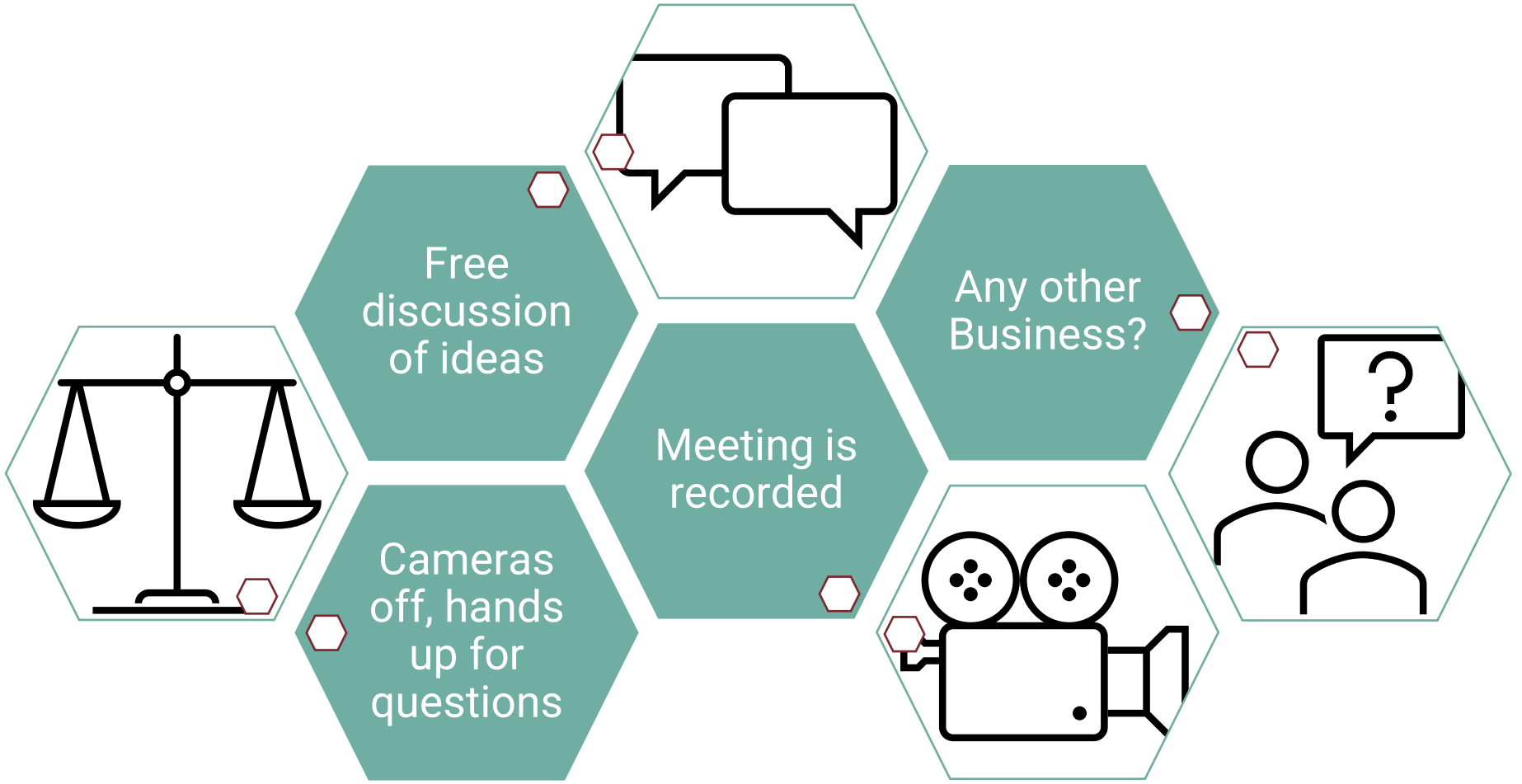
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WELCOME AND INTRODUCTION

HARRIET TRUSS

HOUSEKEEPING

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PRESENTERS

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Harriet Truss

REC Code Manager

Chris Day

Elexon BSSCo

AGENDA

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- Welcome
- Recap of CP1622 and current status
- Risk to migration
- Recap on J2313 Number of Displayed Register Digits
- Data specification correction
- Guidance on Meter Read truncation
- Solution review discussion

- Next steps

OBJECTIVES FOR WORKSHOP

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- Recap on issue
- Recap of relevant Data Items, existing validation and expected processing
- Gather industry input to solution requirements

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CP1622: RECAP & CURRENT STATUS

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History of CP1622

- MHHS Data Cleanse Report identified ~250,000 SMETS2 meters where the Number of Displayed Register Digits could not pass D0312/SMRS validation
- Report recommended loosening the SMRS validation to allow any number of digits from 1 to 9, which was the solution consulted on by CP1622
- CP1622 consultation confirmed broad support for this solution to reduce MTD rejections but raised concern about consistency of application across IF-005, D0312 and D0150, of which the D0312 is not specified in any BSCP
- REC Code Manager confirmed that CP1622 cannot progress until aligned with REC R0300, which covers population and validation rules for the D0312

Current Status of CP1622 proposal

- A convention was introduced by (pre-MHHS) MRA CP3558 and BSC CP1514 when populating Number of Register Digits for SMETS Meters in MTD flows, that the value provided *must match the physical meter (display) interface*
- The expectation is that most installed SMETS Meters comply with this convention, which is at odds with the claimed ~250,000 non-conforming meters
- The BSC does not have access to more granular information regarding the nature of the non-conforming meters, and so cannot challenge the quoted numbers
- Nevertheless, if these exceptions are genuine, it means that these values cannot be updated into SMRS by either D0312 or IF-005 due to validation restrictions
- For examples, some meters are claimed to have 7-digit displayed registers, but these cannot be updated in legacy (D0312) or MHHS (IF-005) due to these rules
- Parties and codes agree that population and validation rules for IF-005 and D0312 must be aligned across R0300 and CP1622 to avoid migration-driven failures

Why the CP1622 solution is not viable

- The existing population and validation rules for this data item in D0312, D0150 and IF-005 were deliberately designed to ensure that any Number of Register Digits sent in MTDs always represents the physically displayed value
- The data item (J2313) in D0312 and IF-005 is named ‘Number of Displayed Register Digits’ to avoid any ambiguity as to what it is recording
- The intent behind CP1622 (widening digit ranges to 1-9) would allow values that do not correspond to what the SMETS2 meter physically display.
- Some relaxation of SMRS validation rules may be necessary to allow genuine non-conforming meters to be updated, but if they are made too loose, it would allow erroneous values to be submitted for all SMETS meters
- Such an outcome would be worse than the current baseline, and so it is more important to find the correct solution that will endure beyond migration

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RISK TO MIGRATION

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CP1622 Migration Risks

- Failure to implement CP1622 does not *directly* prevent migration. The concern is that the affected Metering Systems will migrate with potentially incorrect values
- The Data Cleanse activity has used the existing D0312 data item rule to populate Number of Displayed Register Digits in SMRS for all SMETS meters. Any risk in relation to the ~250,000 meters is that values are *wrong*, rather than incomplete
- Genuine non-conforming meters will have to be updated post-migration, which will have to be managed under the relevant assurance framework, in this case REC
- It is more critical that the treatment of this data item (J2313) is the same before and after migration, whether updated in a D0312 or IF-005
- Suppliers will have the option to migrate any affected Metering Systems later in their portfolio, should they prefer to wait for a combined CP1622 / R0300 solution

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RECAP ON J2313

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R0032/R0102, and BSC CP1558, introduced the J2313/DI adding it into the D0312 in June 2023

- J2313 was created with similar attributes/structure to the existing “Number of Register Digits” DI50228 (J0478), but is not the same data item
- J2313 implemented with an attached rule in the D0312 to state the 5 and 6 value rules
- As part of R0032/R0102 the MPRS validation on the D0312 rule was included

IF-005 in MHHS arrangements has been created in line with D0312, with the J2313

IF-005 ‘MTD Updates to SMRS’
D0312 ‘Notification of Meter Information to MPAS’

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DATA SPECIFICATION LINKAGE

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NUMBER OF DISPLAYED DIGITS DATA ITEM

- DI-091 in IF005 DES138 – created to reflect D0312

DI-091	Number of Displayed Register Digits	The number of digits prior to the decimal point displayed by the total cumulative register of a smart meter	Metering Service		Integer 1	M	C	Mandatory for SMETS2 Meters		Where the Meter Type is S1 the Number of Displayed Register Digits value must be be per the manufacturer's specification Where the Meter Type is S2A, S2AD, S2ADE, 2ADF, 2ADEF, 2AEF, 2AF, S2B, S2BD, S2BDE, 2BF,2BDF, 2BDEF or 2BEF the value must be “5”. Where the Meter Type is prefixed with “S2C” the value must be “6”. Where the Meter Type is 2CDEF, 2CF, 2CDF or 2CEF the value must be “6”

ENERGY MARKET DATA SPECIFICATION

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DI-091 currently linked with J0478 in IF-005:

DI50228			J0478 / DI-091		Number of Register Digits
C			Number of Register Digits	Mandatory for SMETS2 Meters	

DI-091 should be linked with J2313 (DI51600) as per D0312:

C			Number of Displayed Register Digits	Where the Meter Type is S1, the value should be populated as per the manufacturer specification. Where the Meter Type is S2A, S2AD, S2ADE, 2ADF, 2ADEF, 2AEF, 2AF, S2B, S2BD, S2BDE, 2BF, 2BDF, 2BDEF or 2BEF the value must be 5 . Where the Meter Type is prefixed with S2C the value must be 6 . Where the Meter Type is 2CDEF, 2CF, 2CDF or 2CEF the value must be 6 .

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GUIDANCE ON METER READ TRUNCATION

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Guidance for SVA MOAs and Data Service Agents

- Validate reads according to the number of displayed digits on the physical meter register, not internal register lengths or device manufacturer defaults.
- Where truncation is required, apply it only to correspond to the physical display, as mandated in J2313 within the D0312 and mirrored in IF-005.
- Data Service Agents should follow cross-code guidance to ensure readings are correctly interpreted, and physical and electronic reads can be reconciled.
- This guidance could also apply to legacy Data Collectors, although its value will be time limited as migration to MHHS progresses in the next year.

BSC CP 1514 – BSCP504 on truncation

- 1.1 (i) “Where the Supplier retrieves readings remotely from smart Meters, they should ensure that the number of register digits in the readings passed to the NHHDC is consistent with the number of register digits defined as part of the Meter Technical Details (MTD). Where necessary, the leading digits from the reading should be truncated to ensure this consistency. This requirement applies to SMETS 2 Version 3.1 or above (or for other Meter Types where there is known to be a difference between the number of digits held in the internal register and those displayed on the Meter).”
- This Guidance (present in BSCP 701 also) is aimed at Non Half Hour Data Collectors and Smart Data Services. Arguably this guidance should also be added to BSCP709 as it may be the Supplier that truncates the reading received to align with the number of register digits displayed.

? Is it fair to assume that the vast majority of the issues highlighted by the Data Cleanse Report are caused by a misunderstanding of this guidance rather than a legitimate non-compliance against SMETS2?

? Should we add text similar to that in BSCP504 and BSCP701 into BSCP709 to ensure that both the sending and receiving party are aligned on process and cater for situations in which a Supplier may truncate the readings before passing on to a Data Service?

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SOLUTION REVIEW DISCUSSION

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SOLUTION REVIEW

- Validation in SMRS for the J2313 is based on that for the D0312, and only allows values of 5 or 6 and should only be populated for Smart meters

- Need to maintain alignment between validation applied to IF005 and D0312 so values are the same in legacy and MHHS to avoid issues where Metering Points move between migration states

- Once a Metering Point is migrated, when populating IF-005, in order to be able to bill a Consumer as per the display on their meter, a Supplier requires their Metering Service to populate the J2313 to reflect the actual display on the wall
  - This should not impact any remote read being used for settlement purposes
  - Validation of reads by NHHDCs should not influence the J2313 value populated

DISCUSSION

Parties have indicated that there are meters on the wall that don't meet the SMETS 2 specification, in particular displays with 7 register digits

- Indication that where records hold digits less than 5, this is erroneous data and should be corrected.

- Can you confirm that there are meters with display digits that aren't 5 or 6, what are they, is there a pattern?

- Do you support widening the validation in contrast with Smets specification?

- Do you support that the rules in the data specification should remain compliant with Smets, and only the SMRS validation be updated?

- Are there any 5 and 6 values populated in SMRS that are incorrect (not including known 7s)

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NEXT STEPS

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NEXT STEPS

- Agree an enduring cross-code validation approach for displayed digits across IF-005, D0312, D0150 and SMRS rules
- Ensure CP1622 and R0300 go live in similar timescales to prevent migration or reverse-migration rejections
- Re-consult once cross code alignment is complete. Gain SVG/REC Responsible Committee decision
- REC to raise CP for Data Item linkage correction

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THANKS FOR ATTENDING

CONTACT US: change.management@recmanager.co.uk