# Recent PAC Sub-Groups Update

14th December 2020

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# AQ SUB-GROUP

- Group ran through the series of AQ reports, to understand the value of what is currently available.
- Noted that the reports on 2B.11 are the only reports that do not have an industry equivalent – however, there is a mirror report available in the UK Link secure area.
- Appetite to consolidate and link reports was discussed.
- AQ Calculation Failures – felt more context needed on reasons.
- AQ Increases & Decreases – debate about whether this report was still relevant with rolling AQ, consensus was potentially not. Also noted that current report does not show proportion of movement.
- AQ Corrections – mod 736 and the additions to the report through XRN 4876 was discussed.
- Next steps: PAFA to look at how existing reporting can be linked, now and in the future; Xoserve to look into contextual information around AQ calculation failures.

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# THEFT SUB-GROUP

- Fraser Mathieson of Electralink joined the group, once approval from SPAA Executive had been obtained. This allowed a review of the issue across codes.
- While the original scope of the group was to look at current reporting around theft, undetected theft was also discussed.
- The group looked at existing theft reporting in the UNC, and Fraser updated the group on the recommendations of the Joint Theft Reporting Review (JTRR) group, and how some of these were being brought forward through mod 734S.
- Key next steps:
- PAFA, Xoserve and Electralink to collaborate to bring theft reporting to PAC, as well as data for risk valuation.
- PAFA to liaise with REC to look at ways to promote theft detection across codes.
- PAFA to work with Electralink and Xoserve to ensure input into PARR reporting for mod 734S happens at most appropriate point.
- Xoserve to sample cleared theft cases so PAC can understand how quickly rolling AQs 'catch up' following confirmed theft (or whether AQ corrections are needed).

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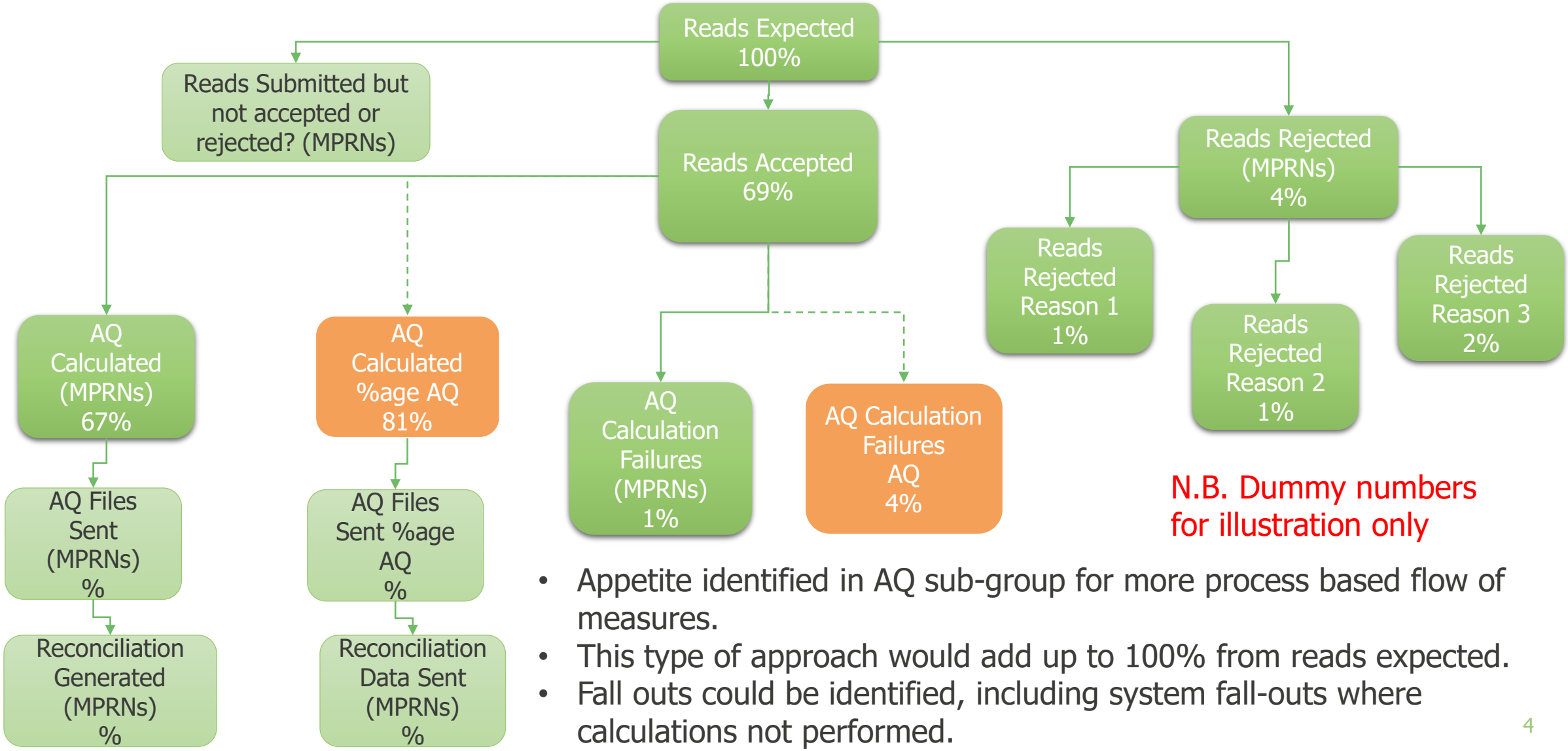
# HIGH LEVEL VIEW OF A POTENTIAL BASIS FOR MORE INTUITIVE READ & AQ REPORTING (FOLLOWING AQ SUB-GROUP)




N.B. Dummy numbers for illustration only

- Appetite identified in AQ sub-group for more process based flow of measures.
- This type of approach would add up to 100% from reads expected.
- Fall outs could be identified, including system fall-outs where calculations not performed.

# AQ SUB-GROUP UPDATE: LINKS BETWEEN EXISTING PARR REPORTING

- There are different levels of core granularity across some reports that mean they don't always easily cross-reference.
- Greater linking of existing indicators can still provide insight.
- Work required to ensure calculations across measures 'flow'.

N.B. Numbers are based on high level industry totals for a single month, but uses for example averages across EUCs for some measures, so some caution advised. Their purpose for this slide is illustrative.

| Category | PARR Report | PARR Number | Class 1 | Class 2 | Class 3 | Class 4 | Class 4 Monthly | Class 4 Annual | Class 4 Group 1 (Monthly >293,000) | Class 4 Group 2 (Monthly Smart/AMR <293000) | Class 4 Group 3 (Annual, <293000, cyclic read) | Not Class Specific |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Recent Read | Read Performance | 2B.5 | 96.58% | 75.16% | 57.11% | | 45.50% | 82.99% | | | | |
| | Estimated Reads | 2B.1 | 3.34% (96.66%) | 24.84% (75.16%) | | | | | | | | |
| | Meter Read Validity 1 - 7 | 2B.6 | 4.81% | 8.30% | 8.21% | 14.46% | | | | | | |
| | Shipper Transfer Read | 2B.4 | | | | | | | | | | 35.13% |
| AQ | Mod 672 AQ Calculation | 2B.15 | | | | | | | 46.76% | 51.87% | 86.41% | |
| | AQ Portfolio Calculation | 2B.11a | 83.99% | 70.45% | 84.49% | | 42.99% | 35.14% | | | | |
| | AQ Portfolio Increase | 2B.11b | 43.35% | 24.66% | 47.66% | | 34.47% | 36.75% | | | | |
| | AQ Portfolio Decrease | 2B.11c | 43.20% | 43.98% | 25.83% | | 42.95% | 40.21% | | | | |
| | AQ Calculation Failures 1 - 5 | 2B.11h | | | | | | | | | | 151,267 |
| | AQ Correction Reason Code 1 (Theft) | 2B.8 | | | | | | | | | | 1 |
| | AQ Correction Reason Code 2 - 4 | 2B.8 | | | | | | | | | | 2,872 |
| Aged Read | No Read 1 Year (by EUC) | 2B.7 | 1.08% (98.92%) | 8.55% (91.45%) | 2.47% (97.53%) | 9.78% (90.22%) | | | | | | |
| | No Read 2 Years (by EUC) | 2B.7 | 0.03% (99.97%) | 4.89% (95.11%) | 1.65% (98.35%) | 3.14% (96.86%) | | | | | | |
| | No Read 3 Years (by EUC) | 2B.7 | 0% (100%) | 0% (100%) | 0% (100%) | 1.33% (98.67%) | | | | | | |
| | No Read 4 Years (by EUC) | 2B.7 | 0.07% (99.93%) | 1.03% (98.97%) | 0.11% (99.89%) | 3.68% (96.32%) | | | | | | |
| | Replaced Meter Read | 2B.10 | | | | | | | | | | 26,392 |
| | Check Reads | 2B.1 | 109 | 400 | | | | | | | | |
| Meter asset / meter point | No meter recorded | 2B.3 | 0 | 0 | 153 | 90,125 | | | | | | |
| | No meter recorded and data | 2B.2 | 0 | 0 | 74 | 8,640 | | | | | | |
| | Standard Correction Factor (by EUC) | 2B.9 | | | | | | | | | | 1,870 |

# OPTIONS FOR MORE ACCESSIBLE PARR REPORTING

- Mock up below of what a more accessible PARR output report might look like.
- Could benefit PAC and industry, making performance clear and accessible to all.

N.B. Dummy numbers for illustration only

By Class and by month - 1, 2, 3, Class 4 agreed combination, tab per class

| | Current Read | | | Current AQ | | | Additional AQ and read health | | | | | Aged Read | | | | | | Asset and supply point data | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Read Performance (Reads Accepted versus Expected) | Meter Read Validity By Reason Codes | Reads not submitted (by calculation) | AQ Calculated by MPRNs | AQ Calculation Failures | AQ Calculated by AQ Percentage | AQ Correction Reason Code 1 (Theft) | | AQ Correction Reason Code 2 - 4 | | Shipper Transfer Read | No Read 1 Year | No Read 2 Years | No Read 3 Years | No Read 4 Years | Replaced Meter Read (percentage of portfolio) | Check Reads not provided (versus required) | No meter recorded | No meter recorded and data | Standard Correction Factor |
| | | | | | | | Count | %age energy | Count | %age energy | | | | | | | | | | |
| Shipper 1 | 75% | 5% | 20% | 74% | 1% | 82% | 1 | 2% | 1,500 | -4% | 40% | 95% | 96% | 97% | 98% | 0.20% | 5% | 0.50% | 0.40% | 50 |
| Shipper 2 | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx |
| Shipper 3 | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx |
| Shipper 4 | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx |
| Shipper 5 | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx | xx |

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# PARR REPORTS MAPPED TO RISKS

- Mapping of PARR reports to existing PAC risks shows monitoring not occurring for multiple risks.
- As the risk valuation work develops in the short term, options for PARR reports for other risks will likely be required.

| PARR Report | Theft | Offtake errors | Bypass | JTRR 1 (Not all theft energy entering settlements) | JTRR 2 AQ Corrections and theft | Unregistered / shipperless | Est reads class 1 & 2 | WAR Bands | Derived meter read drift | Meter readings fail validation | Read submission frequency (PC4) | No read line in the sand | Transfer Reads | Incorrect or missing meter asset data | AQ Corrections | Retrospective Updates | Incorrect use of standard CF above 732,000 kwh | Use of standard CF for sites consuming on or below 73,200 kwh | Incorrect use of bespoke CF below 732,000 kwh | Removal and/or non-replacement of correction equipment | Post New UK Link implementation reconciliations: pot 2 | Understated AQs on 177,000 PC3 meters | Smart meter exchanges - Late meter exchanges involving smart meters | AMR data provision | Covid 19 Measures |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Read Performance | | | | | | | | | | x | x | | | | | | | | | | | | | | |
| Estimated Reads | | | | | | | x | | | | | | | | | | | | | | | | | | |
| Meter Read Validity 1 - 7 | | | | | | | | | | x | | | | | | | | | | | | | | | |
| No Read 1 - 4 Year | | | | | | | | | | | | x | | | | | | | | | | | | | |
| Replaced Meter Read | | | | | | | | | | | | | | | | x | | | | | | | | | |
| Mod 672 AQ Calculation | | | | | | | | | | | x | | | | | | | | | | | | | | |
| AQ Portfolio Calculation | | | | | | | | | | | x | | | | | | | | | | | | | | |
| AQ Portfolio Increase | | | | | | | | | | | | | | | | | | | | | | | | | |
| AQ Portfolio Decrease | | | | | | | | | | | | | | | | | | | | | | | | | |
| AQ Calculation Failure 1 - 5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| AQ Correction Reason Code 1 - 4 | | | | | x | | | | | | | | | | x | | | | | | | | | | |
| Check Reads | | | | | | | | | x | | | | | | | | | | | | | | | | |
| Shipper Transfer Read | | | | | | | | | | | | | x | | | | | | | | | | | | |
| No meter recorded | | | | | | | | | | | | | | x | | | | | | | | | | | |
| No meter recorded and data | | | | | | | | | | | | | | x | | | | | | | | | | | |
| Standard Correction Factor | | | | | | | | | | | | | | | | | x | | | | | | | | |
| WAR Bands | | | | | | | | x | | | | | | | | | | | | | | | | | |
| NDM Sample Data | | | | | | | | | | | | | | | | | | | | | | | | | |

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# POTENTIAL WAYS FORWARD

- Link existing measures where possible in the short term.
- Is there a chance to rationalise and improve the PARR reporting as it migrates to DDP?
- Outputs should be standardised by core granularity, by class, for example.
- Underlying granularity to be retained and improved for PAC and PAFA insight.
- Chance to reconsider whether counts or percentages are best measure of each benchmark?
- Ensure calculations allow flow of information across measures (meter read validity for example).
- Totals required for each measure.
- Class 4 needs further consideration to standardise measures and obligations.
- Consider if PARR reports required for other settlement risks not currently covered.

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