RETAIL ENERGY CODE

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DETAILED ASSESSMENT OF DEML SANDBOX RISKS AND REFINED APPROACH TO FUTURE SANDBOX APPLICATIONS

BY KEV DUDDY, OPERATIONAL ACCOUNT MANAGER, REC CODE MANAGER
REVIEWED BY JEMMA JOHNSON – MARKET DESIGN LEAD, RECCO

FOR INFORMATION

This paper has been prepared by RECCo and the Code Manager in response to the action agreed at the PAB meeting on 24 March 2026: *"RECPAB_26_0324_05 – RECCo and the Code Manager to prepare a more detailed paper on the risks associated with the previously approved Sandbox Application and a refined approach to future Sandbox Applications."*

The paper:

- Expands on the risks arising from the **approved DEML Sandbox Application**, including governance, assurance, safety, market fairness and interaction with REC Issue I0278;
- Identifies the **cumulative and precedent-based risks** should similar Sandbox Applications be approved without further controls; and
- Proposes a **refined and more robust approach** to assessing, approving and managing future Sandbox Applications, aligned with REC governance and the Change Process.

The intention is not to reopen the PAB's decision on the DEML Sandbox, but to ensure lessons are captured and that future Sandbox activity strengthens – rather than undermines – assurance, safety and confidence in REC governance.

FOR DECISION

The PAB is invited to:

- **NOTE** the expanded risk assessment of the DEML Sandbox;
- **AGREE** that no further similar SIP Sandbox Applications be approved until the DEML trial has begun to deliver data and feed into the development of I0278;
- **AGREE** the proposed refined considerations that should apply to future Sandbox Applications; and
- **AGREE** the action RECPAB_26_0324_05 to be closed, and development of future documentation and process changes to be incorporated within the wider service realignment, beginning mobilisation in June 2026 and due to go live in September 2026.

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APPENDICES	Appendix A – Additional Risk Review

1 BACKGROUND

At the February 2026 PAB, the Board approved a Sandbox Application relating to a data-only Safe Isolation Provider (SIP) operating model (DEML), despite the original recommendation of the Code Manager to reject the application on governance and assurance grounds.

At the March 2026 PAB, RECCo and the Code Manager advised that:

- Interest has been received from another organisation in pursuing a similar Sandbox Application;
- There is increasing uncertainty across industry around governance, assurance, safety accountability and fairness; and
- Approving multiple Sandbox models in advance of a formal solution risks undermining REC Issue I0278 'Establishing the Safe Isolation Provider (SIP) as a Standalone REC Metering Party', which is intended to establish a durable framework for SIPs as standalone Parties.

The PAB therefore agreed that a more comprehensive articulation of risk, together with a clearer framework for future Sandbox Applications, is required.

2 DEML SANDBOX RISKS AND MITIGATIONS SUMMARY

The DEML Sandbox permits an operating model whereby:

- Administrative (Data Flow) activities are performed by an entity without Electricity Metering Operative (EMO)/Meter Operator Agent (MOA) accreditation;
- Physical site work and data submission functions are split across separate organisations;
- There is no REC mechanism to monitor or assure the interaction between those organisations.

This creates potential for an end-to-end accountability gap, particularly where safety-critical data is generated by one organisation and acted upon by another, with no single REC-accountable Party responsible for overseeing outcomes. Specific risks and mitigations for the trial are detailed below.

2.1 ENSURING WORKS ARE CONDUCTED AT THE CORRECT SITE

In scenarios where the Data Flow-sending SIP and EMO roles are being carried out by one single organisation, the Meter Serial Number (MSN), address and Meter Point Administration Number (MPAN) can be a verified match prior to works being undertaken on site. However, due to potential industry data mismatches between MSN, address and/or MPAN, there exists a risk with SIP Data Flow-only activity that the works are either completed at the wrong property, or that they are logged against the incorrect MPAN. Where a single organisation carries out both Data Flow-sending activities and physical works, there is the added benefit of being able to identify these mismatches in advance to have them resolved.

To mitigate this risk within SIP Data Flow-only activity and feed into the development of the I0278 solution, as part of the Sandbox trial DEML would identify jobs where the MSN, MPAN and address do not all match up. For instance, DEML would use the MSN to locate the MPAN and cross-validate it to the address via the Electricity Enquiry Service (EES). In this way, DEML would be able to provide details of mismatches in industry data after the event to identify how common this issue is amongst works conducted by this DEML SIP-only model (namely the

scenario where the organisation is only sending SIP Flows), and thus determining if the development of I0278 may need to further assess this for SIP Data Flow-sending only Parties.

2.2 EACH APPLICABLE ON-SITE SIP ACTIVITY RESULTS IN THE APPROPRIATE NOTIFICATION TO INDUSTRY IN-LINE WITH SLA

Under this split organisation approach, DEML are reliant on the EMO notifying them of completed works within sufficient time to allow them to send Data Flows within the Code-defined Service Level Agreements (SLAs). There is a risk that the handover does not occur within sufficient time to complete this, as well as potential for jobs to be not handed over at all, or passed with incomplete information. This prevents the ability to check that each job attended is then followed by a relevant Data Flow being sent within SLA on completion of the work. The interactions and handovers between DEML and the EMO must be clear, unambiguous and timely. This will allow DEML to accurately send Data Flows within the Code-required SLAs, with a high degree of confidence that the information provided on site is accurate.

The following items all appear within the data flows that the SIP is required to send and therefore, handovers must include the following information:

- Work completed/work aborted;
- Theft tamper suspected and further detail if required;
- Any Safety Issues/Faults with corresponding codes/descriptions;
- Confirmation of Smart Communications successfully re-established; and
- Confirmation whether Additional Needs Identified and its information.

Additionally, DEML will need to reconcile with the EMO that each site attended for SIP works was handed over after the event.

2.3 SAFETY CODES – DNO CODES

The on-site works of the EMO and requirement and understanding of the various Fault Codes are audited under the appointed EMO's Consolidated Metering Code of Practice (CoMCoP) accreditation. Whilst DEML operatives are not required to be technical experts, they should have sufficient training or reference material to enable them to interpret information appropriately to ensure it is accurately included within the Data Flow where applicable.

3 QUALITY ASSURANCE REQUIREMENTS

To support the mitigation of all risks, DEML should have internal review processes in place. For example, senior agents could periodically review whether information received from site operatives has been accurately reflected in the Data Flows submitted. The intention of this internal quality assurance would be to confirm accuracy, consistency and adherence to agreed processes.

Additionally, certain information should trigger internal checks to ensure accuracy of information, namely;

- A job that states a de-energisation where previous work ended as a failed re-energisation;
- B codes which would ordinarily prevent work from proceeding; and
- Attempts to raise A codes, which should instead be resolved on site in line with Service Termination Issue Reporting Guidance (STIRG) requirements.

Overall, the emphasis is not on over engineering controls, but on ensuring sensible, proportionate checks and balances are in place and supported by clear written procedures to demonstrate that the risks are understood and actively managed.

3.1 WIDER APPLICATION

The approved Sandbox interacts directly with the intended purpose and considerations for I0278. The concern is therefore not the DEML Sandbox alone, but the cumulative effect of further similar Sandbox Applications being applied for on governance, assurance, safety accountability and fairness. Key risks include:

- Embedding elements of a data-only SIP model before consultation and solution design are completed according to the standard Change Process elements for I0278;
- Creating expectations that may diverge from the eventual I0278 outcome; and
- Increasing complexity and disruption when transitioning from interim models to the final framework according to the outcome of the Change.

The Code Manager believes that the outputs from this Sandbox trial will assist with the development of I0278. Once the trial has delivered some real-world data a review could be carried out to determine whether further Sandbox Applications would also assist with the development.

3.2 I0278 – AIMS OF THE TRIAL

This trial aims to test the concept of separate SIP entities, assess whether it is a viable solution, and mitigate any perceived risks. Additionally, it allows the Change Process to identify any overlooked considerations that may have otherwise been missed as different scenarios may arise over the course of the trial.

DEML can provide real world data of instances of potential issues relating to data flows with this split responsibility model.

The greatest risk of the trial concerns ownership and responsibility of the end-to-end process. With their being two separate organisations involved, the ‘line in the sand’ of work handover must be very clear and understood by both Parties, and appropriate checks and balances must be in place. For example, the EMO is responsible for everything that happens on site, and the “Data Flow SIP” is responsible for sending the correct flows, with the correct information, according to the correct timescales. However, the correct information and timescales could be impacted by either side, for instance if there is ambiguity in job information or if the information does not reach DEML accurately.

All site works will be carried out by a single fully Qualified EMO. Therefore, concern with the health and safety implications of the work being undertaken on site is mitigated. Should DEML wish to expand operations to include other EMOs, these must be agreed by the Code Manager.

DEML will provide the Code Manager with the outputs of their internal assurance to highlight where potential issues exist, and whether they are greater or less of an issue than envisaged, supported by evidence.

4 LESSONS LEARNED AND PROPOSED FUTURE CHANGES

Due to the nature of the DEML application, the Code Manager has considered whether the application should have been submitted as a Derogation or a true Sandbox trial. Whilst the applicant was not specifically trialling a new product, they did wish to work in a way that was not currently supported by REC frameworks.

The DEML Sandbox has highlighted gaps in the current Sandbox approach, including:

- A more detailed proposal is required to be submitted for specific risks covering governance, assurance and safety;

- There is currently limited clarity on how Sandbox outputs should explicitly inform the Change Process;
- Consideration is needed on potential replication or expansion to other Parties, prior to the approval of any individual Sandbox; and
- The Code Manager should detail expected next steps in the event of an approval of an application.

Future Sandbox Applications should be able to demonstrate:

- A clearly defined innovation hypothesis linked to an identifiable gap in the REC;
- Why the objective cannot reasonably be met through existing REC arrangements; and
- How the Sandbox supports or challenges, rather than pre-empts, an active Change Proposal (where applicable).

RECCo and the Code Manager are currently mobilising changes within the overall Sandbox & Derogation process. That mobilisation will commence 01 June 2026. The above points will feed into the refinement of these processes and documentation.

5 PAB ACTIONS

The PAB is invited to:

- **NOTE** the expanded risk assessment of the DEML Sandbox;
- **AGREE** that no further similar SIP Sandbox Applications be approved until the DEML trial has begun to deliver data and feed into the development of I0278;
- **AGREE** the proposed refined considerations that should apply to future Sandbox Applications; and
- **AGREE** the action RECPAB_26_0324_05 to be closed, and development of future documentation and process changes to be incorporated within the wider service realignment, beginning mobilisation in June 2026 and due to go live in September 2026.

APPENDIX A – DEML REQUIRED OUTPUTS

These mitigations reflect DEML's specific historic qualification and operating experience and should not be considered replicable safeguards for future Sandbox Applications.

Risk Area	DEML Requirement	Output
2.1 Works conducted at correct site	Report identifying instances where the EMO reports a meter on site that does not match industry data	Quarterly – Notify Code Manager of total instances (and percentage) of jobs where MSN, MPRN and Address do not match in EES.
2.2 Each applicable on-site SIP activity results in the appropriate notification to industry, in line with SLA	Handover documentation and process between EMO and DEML includes the items referenced in 2.2	Provide Code Manager with a copy of the documentation
2.2 Each applicable on-site SIP activity results in the appropriate notification to industry, in line with SLA	DEML will need to reconcile with the EMO that each site attended for SIP works was handed over after the event.	Quarterly – Notify Code Manager of total instances (and percentage) of jobs where a site was not handed over.
2.2 Each applicable on-site SIP activity results in the appropriate notification to industry, in line with SLA	DEML will need to report on instances where a data flow was sent outside of SLA.	Quarterly – Notify Code Manager of total instances (and percentage) of jobs where a data flow was sent outside of SLA.
2.3 Safety Codes – DNO Codes	Training materials evidenced and where applicable, training delivered to agents	Provide Code Manager with a copy of the documentation

2.4 Quality Assurance Requirements	Evidence of procedure of internal quality assurance checking methodology. This should include “business as usual” quality checks for all jobs, and specific checks where information triggers a requirement as detailed in 2.4	Provide Code Manager with a copy of the documentation
2.4 Quality Assurance Requirements	DEML will need to report on instances where issues arise from the QA spot checks, as well as any instance where a trigger has resulted in further investigation.	Quarterly – Notify Code Manager of total instances (and percentage) of jobs where any of the triggers have flagged up further investigation and follow up action, as well as any issues identified by BAU QA checks.