# ELEXON

## **FMAR Design Workshop 1 Summary Notes**

Meeting Number	01	Venue	MS Teams
Date of Meeting	31 July 2025   13:00 – 15:00 GMT	Classification	Public

### **Summary**

## 1. Welcome & Agenda

- 1.1 The first FMAR Design workshop opened with a welcome and agenda overview from Elexon.
- 1.2 Elexon confirmed that workshop notes would be shared following the session and highlighted that stakeholder input, via GitHub contributions and workshop feedback, will play a key role in shaping future iterations.
- 1.3 The agenda for the session included:
  - FMAR programme introduction and scene setting
  - FMAR vision and scope
  - Review and prioritisation of 24 use cases
  - Roadmap checkpoints (2025–2027 horizon)
- 1.4 GitHub introduction, rules of engagement and next steps
- 1.5 Further detail on the agenda can be found <u>here.</u>
- 2. FMAR Programme Introduction and Scene-Setting
- 2.1 Elexon introduced the FMAR programme, highlighting its synergies with the market facilitator programme in delivering Flexibility Market Rules to enable flexibility markets.
- 2.2 The Enterprise Model for flexibility markets was presented as the primary artefact and reference point for designing the FMAR solution, serving to create a shared understanding of a complex system.
- 2.3 The model is comprised of three levels:
  - Level 1: This level is based on Ofgem's end-to-end market phase model.
  - Level 2: This level introduces more granular building blocks and is being developed as part of the end-to-end process workstream within the market facilitator programme. It aims to provide:
    - a) A toolkit to help align business processes between System Operators.
    - b) A toolkit for Flexibility Service Providers on their user journey
    - c) A foundation for a machine-readable conceptual model of the flexibility market, which would feed into the Flexibility Market Rules Catalogue as market facilitator.
  - Level 3: This level highlights the views being developed from different "as-is" submarket processes, with a particular focus on the qualification phase. This includes the examination of NESO's asset and unit registration processes for specific submarkets, such as the balancing mechanism and the single markets platform.
- 2.4 At a baseline level, the Enterprise Model breaks down asset registration, service provider/user registration, qualification, and service processes.

- 2.5 The Enterprise Model will be further enriched by a local programme glossary for defining key terms such as flexible asset. Ultimately, this local glossary intends to be merged with the global market facilitator glossary upon the market facilitator's go-live.
- 2.6 Elexon outlined the key actors featured in FMAR use cases and the submarkets in scope, as defined by the Ofgem decision document.

#### 3. FMAR Vision & Scope

- 3.1 The FMAR programme inherits a complex policy landscape, which altogether aim to increase flexibility market efficiency. Key initiatives and programmes outlined include:
  - Market Facilitator (Elexon)
  - Flexibility Digital Infrastructure (Ofgem)
  - Asset Visibility
  - Data Sharing infrastructure (DSI)
  - Flexibility Markets Unlocked
  - International Alignment (various programmes)
- 3.2 Elexon outlined a problem statement based on a vision to move from fragmentation to federation:
  - The current landscape is marked by fragmented and inconsistent asset registration and qualification processes.
  - These inconsistencies create barriers to asset portability and onboarding across markets for both behind-the-meter and front-of-the-meter assets.
  - There is a lack of a single, reliable source of truth for System Operators, which hinders operational visibility.
- 3.3 Elexon outlined the vision for FMAR, which is to create a single, standardised API layer that embodies the ethos of "register once, qualify once, use many times." This vision is supported by four main modules, with the first two being the initial focus for the 2027 go-live:
  - ARM (Asset Registration Module)
  - SPUM (Service Provider & User Module)
  - PSQM (Product & Service Qualification Module)
  - GICM (Grid Interaction & Constraints Module)
- 3.4 Elexon introduced four principles that will inform the design phase and Elexon's collaboration with industry:
  - Open & collaboration
  - API-first and interoperable
  - Standards-based
  - Secure & trusted
- 3.5 Participant discussion on this section:
  - 3.5.1 A participant asked whether Elexon could grant access to the Miro board hosting the Enterprise Model in detail. Elexon responded that this will be kept internal as it is a work-in-progress, with a view to share once finalised.
  - 3.5.2 A participant queried for further explanation on Service Provider User Model (SPUM). **Elexon explained** that the SPUM is for the registration and authentication of organisations and users, providing a shared identity framework and a unique ID for both. This module will allow them to interact with the other parts of the system.
  - 3.5.3 A participant asked how the scope described links to Ofgem's decision. **Elexon explained** that Ofgem's decision was primarily focused on asset and service provider registration. While other modules like "Products

- & Service Qualification" and "Grid Interaction & Constraints" are being considered, a change in scope to deliver them would require a new publication from Ofgem at the end of the year.
- 3.5.4 A participant suggested to refine terms such as "Asset" vs "Device." **Elexon confirmed** that this will be addressed in future iterations of artefacts.
- 3.5.5 A participant asked if FMAR is expected to be a one stop shop. **Elexon noted** that it's not necessarily a "one-stop shop" that masters all the data. It could operate in a federated way with existing market platforms, e.g. providing the status of pre-qualification to support coordination across operators.
- 3.5.6 Participants queried how the current approach fits with the potential future scope, including the Wholesale and Capacity Markets. **Elexon answered** that the solution is designed to be modular, which does not foreclose the possibility of including the Capacity Market solution in the future, although it is not in scope for the initial go live.
- 3.5.7 A participant asked if Elexon was selecting a design partner and how they were being selected. **Elexon responded** that there will be an open tender process for the design partner, with a down-selection via PQQ (Pre-Qualification Questionnaire) in advance.
- 3.5.8 A participant raised whether consumers are considered "users" within SPUM. **Elexon responded** that individuals interact with FMAR through the consumer consent solution, which is a prerequisite for a Flexibility Service Provider to claim and operate an asset. Whether consumers should be direct users in the SPUM is a question that can be explored in future sessions and on GitHub.
- 3.5.9 Participants asked if actors should include device manufacturers. **Elexon explained** that the actors will be invoked based on the use case descriptions and to identify which use cases might need to include device manufacturers via GitHub.

#### 4. Discussion of Use Cases

- 4.1 Elexon provided an overview of the current 24 use cases and invited participants to consider prioritisation for go-live and later phases via Slido and open discussion.
- 4.2 The FMAR design use cases are found on the market facilitator GitHub repository under <u>FMAR Use Case Catalogue here.</u>
- 4.3 The current use cases are categorised into five groups, including:
  - Customer Onboarding & Offboarding
  - Asset Registration & Maintenance
  - Market Unit Registration & Maintenance
  - Product & Qualification Management
  - System-Wide Function & Integrations

## 4.4 Participant discussion on this section:

- 4.4.1 A participant asked about the centralisation of data, suggesting some dynamic data (e.g., market units and zones) might be better managed elsewhere. **Elexon clarified** they are not determining centralisation at this stage, noting a federated model may be possible. The immediate focus is on whether the system needs to perform these functions. These use cases were included to future-proof design, even if not in scope for go live.
- 4.4.2 A participant asked how use cases would be narrowed down and inform design/procurement. **Elexon** stated that Elexon's architecture team will decide, taking industry input, triaging suggestions, and making transparent, justified decisions where there is support and documentation.
- 4.4.3 A participant noted unit composition differs across markets and asked if FSPs could be required to update unit composition within FMAR to ensure data quality. **Elexon recognised** the challenge, noting Flexibility Market Rules may ensure good practice, but highlighted that SO licence conditions don't extend to FSPs.

- 4.4.4 A participant asked how disputes between parties over flex provider changes would be handled. **Elexon referred** to use case 5.3: disputes would be logged via ticket, with evidence, and a governance layer would log the dispute, notify parties and provide a set of rules for the resolution process. This would also need to consider SLAs.
- 4.4.5 A participant queried if governance could achieve the goals of FMAR without new tech. **Elexon agreed** rules/processes help but noted Ofgem mandates a common IT asset registration solution.
- 4.4.6 A participant asked if a UI is in scope or if the solution will be API-only. **Elexon supported** a UI "front door" for single submissions, however, API is crucial for large portfolios, and Elexon is capturing this feedback for further iterations.
- 4.4.7 A participant asked how FMAR would integrate with existing platforms like EPEX or Piclo. **Elexon responded** that the workflow would not substitute access to local DNO markets but would allow market platforms to query FMAR on behalf of an FSP using a unique ID. The market platform would then ingest the data and proceed with their workflow. There would need to be simple onboarding processes for these platforms to integrate with.
- 4.4.8 A participant asked about reflecting the latest availability status and handling overrides. **Elexon** responded that they are exploring the concept of E-tags to prevent overrides from outdated data and that the availability status would be a topic for a subsequent workshop once use cases are prioritised.
- 4.4.9 A participant questioned if existing FSPs registered in several markets would need to re-register. **Elexon stated** that they are looking at the possibility of a migration activity to get at least the metadata for unique asset IDs into the system before go-live.
- 4.4.10 A participant asked if data flows had been mapped. **Elexon responded** that this would follow the prioritisation of use cases, after which they would produce new artifacts related to data architecture.
- 4.4.11 **Elexon** discussed the validation of asset data (use case 2.2), mentioning they would look at integrations with OEM cloud platforms or other external trusted data sources like the MCS registered data.
- 4.4.12 A participant discussed if FMAR would exclude data perceived as personal information, such as MPANs. **Elexon stated** they are considering scoping a data privacy and ethics impact assessment to address this and other non-technical artifacts, recognising there is divergence on MPANs as PII across the DNOs.
- 4.4.13 A participant asked if dispute resolution would consider liabilities. **Elexon confirmed** that this is a good point for feedback and something they would need to consider as part of their use case descriptions.
- 5. FMAR.Roadmap Checkpoints (2025–2027)
- 5.1 Elexon presented the FMAR roadmap from 2025 to 2027.
- 5.2 Elexon also confirmed that a two-month lookahead of upcoming FMAR Design Workshops will be provided. The next two sessions will be scheduled for:
  - 28 August 2025
  - 25 September 2025
- 5.3 Participant discussion on this section:
  - 5.3.1 A participant asked when API catalogues would be published for FSPs to plan activities. Elexon confirmed that these would be available during the agile build phase in 2026, if not in advance as part of the high-level design.
- 6. GitHub Collaboration Tool & Next Steps
- 6.1 Elexon introduced GitHub as the platform for FMAR design collaboration, highlighting its use for transparency and traceability.
- 6.2 How participants will engage:
  - Review published artefacts: directly view and review design documentation in the repository.

- Contribute to discussions: use the GitHub discussion section for informal feedback, including threads for general ideas, questions, and raising issues.
- Raise formal issues: for more formal change requests, participants can raise a public GitHub issue using a defined template. A two-week refinement period will follow artefact publication.
- 6.4 Issue template details: the template for raising an issue requires a user account and asks for:
  - Whether the request is a design change or a new requirement.
  - The proposing organisation or individual.
  - A brief description of the problem and the proposed change.
  - A self-scoring matrix to help Elexon triage the input, covering five pillars: strategic alignment, industry value, equity (time-criticality), how well-defined it is, and alignment with wider technical standards.
  - Links to specific FMAR artefacts that need updating.
  - Any supporting documents.
- 6.5 A public project board will be used to track the progress of new issues, allowing Elexon's architecture team to triage them and providing a way for the industry to stay aware of progress.
- Elexon will share a separate document with clearly defined rules of engagement and a user guide for those unfamiliar with GitHub. Feedback will be managed through refinement windows (e.g., a "two-week window") following the publication of artefacts to ensure the most time-critical value is delivered efficiently.

## 6.7 General participant discussion following this section:

- 6.7.1 A participant raised concerns that use cases mix dynamic services with static asset repositories and suggested a federated model via APIs to reflect today's decentralised market. **Elexon noted** this is under consideration, with Ofgem requirements the only fixed element.
- 6.7.2 A participant raised baseline association with assets as a future use case. **Elexon stated** this could feature in Phase 3 to support verification and settlement, potentially through a register of approved baselines

#### 7. Closing Remarks

- 7.1 Elexon shared a poll to gather feedback on the format and content of the first FMAR Design workshop. This feedback will be used to evolve and shape future workshops, and the link will remain open until the next session.
- 7.2 Elexon thanked participants for their contributions and acknowledged the value of the discussion during the first workshop.