

BEAMA Consultation Position

DESNZ Call for Evidence on Improving the visibility of distributed energy assets

Our role

BEAMA represents manufacturers across heating, EV charging, appliances, electronics, and wider electrical infrastructure. With deep experience in standards, regulation, and security, BEAMA is well placed to support government and industry in shaping governance that is practical, inclusive, and future proof.

Position Summary

BEAMA supports the principle of improving visibility of distributed energy assets, recognising the role it can play in supporting Clean Power 2030, accelerating connections, enabling flexibility markets, and empowering consumers. We agree with the vision set out in the consultation and the benefits it highlights.

At the same time, our members see several important risks that must be managed if these benefits are to be realised:

Implementation burden: installers already face multiple obligations, and without simplification there is a risk of low compliance.

Costs: new or parallel systems would be expensive for manufacturers, installers, DNOs and ultimately consumers. Enhancements should build on existing initiatives (e.g. Connect Direct, FMAR, Consumer Consent solution, DSI) rather than creating duplication.

Data quality and completeness: reliable asset registers require high coverage (90-95% for network-impacting assets), but also accurate, validated information maintained over the asset lifecycle, including decommissioning.

Consistency: national standards, a single data model, and alignment with ESOCR 2002 are needed to avoid fragmentation and ensure legal obligations remain clear.

Consumer trust: visibility depends on public confidence that data is handled securely, with clear consent processes and tangible benefits such as faster connections or access to smart tariffs.

Long-term success: solutions must be cost-effective, proportionate, and flexible enough to adapt as technologies and markets evolve.

In summary, BEAMA supports the theory and ambition of improved asset visibility but urges Ofgem and government to focus on practical delivery: simplifying installer processes, standardising data requirements, protecting consumers, and avoiding unnecessary costs. With these safeguards in place, asset visibility can deliver real benefits to the energy system and to consumers.

BEAMA's SSES Programme work

You can find BEAMA's response to each question of the consultation in the document below.

We are heavily engaged with the development of the SSES Programme.

If you wish to discuss the SSES programme with us, [please contact us via our website](#) or learn how we can support and represent your company [through BEAMA membership](#).

BEAMA Consultation Questions Response

Question 1

What are your views on:

a. The definition of assets relevant for consumer flexibility, network planning or other benefits of asset visibility?

b. Who do you think will need to have visibility of these assets?

c. What information about these assets will be most relevant?

a) We recognise the definition of assets set out in the consultation as a reasonable starting point. It captures the broad range of distributed energy resources that are likely to influence flexibility, planning and system operation. As the market evolves, it will be important to revisit this definition periodically to ensure it remains relevant and proportionate. We would also like specific assets to be considered in the future planning as there would be concerns that we broaden the scope too wide and it becomes a burden rather than a benefit for asset visibility.

b) Visibility of distributed energy assets could be valuable to a range of actors across the energy system. This includes:

- Network operators (DNOs and IDNOs), to support effective planning and safe day-to-day operation.
- System operators (ESO/FSO), to inform whole-system balancing and forecasting.
- Flexibility providers and aggregators, who require reliable data to deliver services such as dispatch and settlement.
- Suppliers, to design and manage tariffs and demand-side response offers.
- Product and service providers, who may use asset data for maintenance, safety, and performance monitoring.
- Consumers and their chosen agents, who should have oversight of their own assets and confidence in how information is being shared and used.

As new technologies and services emerge, it will be important that the visibility framework can adapt to include other relevant actors.

c) What information about these assets will be most relevant?

Two categories for consideration but it is suggested that no new/ additional burden is put on manufacturers to provide data that doesn't already exist. For manufacturers, ensuring a

standardised data set reduces costs and avoids repeated re-engineering for each ONO platform.

- Static (at registration): asset type, manufacturer, model, serial number, rated capacity, technology type, phase connection, MPAN/location, install date.
- Operational (ongoing): export capacity, consumption/generation profiles (low-resolution for planning), availability for flexibility, firmware/software version, de-commissioning events.

Question 2

To what extent do you agree with the benefits and use cases for asset data visibility and access set out in section 2, and how might they support increased system flexibility?

We broadly recognise the benefits and use cases for asset data visibility and access as set out in section 2 of the consultation. The benefits are significant and align with net zero objectives, but they can only be realised if the disbenefits are mitigated through a single national approach, streamlined digital processes, clear obligations, and robust data governance.

- Supporting DNOs to plan and operate their networks more efficiently, enabling quicker connections and reducing reinforcement costs.
- Helping the National Energy System Operator to improve whole-system forecasting and Regional Energy System Plans.
- Allowing flexibility markets to grow, with timely and accurate data enabling effective dispatch and settlement.
- Delivering consumer benefits through reduced system costs, greater access to smart tariffs, and opportunities to participate in flexibility services.

It is also important to note the challenges that would need to be addressed such the administrative burden, low compliance risk, data quality issues, fragmentation i.e different processes run by different DNOs, and consumer trust i.e. sharing of asset data.

Question 3

What level of asset registration (the minimum rate of registration of all installed assets, by asset type) do you believe is necessary to support effective network planning and operation? Please explain your reasoning.

We consider that a very high level of registration 90% plus for the main network-impacting assets such as EV charge points, PV, heat pumps and batteries is needed to make the data reliable for network planning and operation.

If the level of registration achieved is to be below 100% (which seems likely), then alongside work to achieve visibility of assets and secure benefits from that, there would need to be some sort of method to estimate what level has been achieved. Furthermore, it would be sensible to do some scenario planning for the implications of assets not being registered (eg an estimate of impact on the network, lack of engagement of consumers etc).

Question 4

Do you have a view of the comprehensiveness of the distributed energy asset visibility landscape set out in this call for evidence, or are there any other pertinent components, actors, gaps, barriers or duplication which should be considered?

We see the call for evidence as providing a good overview of the distributed energy asset visibility landscape. At the same time, there may be some areas worth further consideration, such as the role of gateways and building energy management systems that control multiple devices, how decommissioning of assets is captured, and the risk of duplication across existing processes like G98/G99 notifications, MCS certification, and warranty registrations. Clearer alignment of data standards and obligations could help to reduce these overlaps and ensure a more comprehensive and consistent picture.

Question 5

Do you have a view of the efficiency of the current asset visibility landscape?

The current asset visibility landscape has important foundations in place but is not yet efficient. Processes remain fragmented across DNOs, with overlapping obligations such as

G98/G99 notifications, MCS certification, and warranty registrations. This creates duplication for installers, inconsistency in the quality of data received, and higher costs for industry participants. While initiatives such as Connect Direct and FMAR are helping to standardise and automate processes, overall visibility of small-scale assets is still estimated at below 50%. Streamlining obligations, improving data quality, and moving towards common digital tools and standards will be important to increase efficiency and deliver the benefits set out in the consultation.

Question 6

Do you agree that the improvements to the minor connections process Ofgem has consulted on will encourage asset registration by installers, increasing asset visibility with DNOs?

We recognise the challenges identified in Ofgem's end-to-end connections review and agree that improving the minor connections process could encourage greater levels of asset registration. From a manufacturer's perspective, consistent and streamlined processes are important because they reduce the administrative burden on installers, particularly smaller firms, and make it more likely that assets are notified reliably.

Tools such as ENA's Connect Direct platform have already demonstrated that simplification helps, but inconsistencies remain between DNOs. Standardising approaches and aligning thresholds for assessment would improve installer experience, reduce delays for consumers, and ultimately enhance data quality in DNO registers.

For BEAMA members, better visibility through these improvements would reduce the risk of connection delays, support the uptake of low-carbon technologies, and ensure that the benefits of smart, connected products can be realised in practice. The key will be not just simplifying the process, but also ensuring that the data collected is stored in a consistent, interoperable way and can be accessed by relevant stakeholders in line with the vision set out in Section 4 of the consultation.

Question 7

What use cases or practical applications do you see for improved DNO registers of small-scale distributed energy assets and what industry actors would require access?

Please reference and where possible quantify benefits, as well as relevant access arrangements that would be required.

We don't have a view.

Question 8

Do you have a view of the completeness of installer obligations to register assets with DNOs as set out in section 4.2?

Are there obligations and existing requirements that have not been covered, but relevant in providing visibility of assets to DNOs?

The installer obligations set out in section 4.2 capture the main requirements, but there are areas where they may not be fully comprehensive. In particular, obligations do not always address items such as decommissioning or relocation of assets, firmware or functionality changes, gateway or building energy management systems.

Clearer and more consistent obligations across asset types would help ensure visibility is maintained throughout the asset lifecycle, while also avoiding duplication or unnecessary burden on installers.

All obligations must also remain consistent with the Electrical Safety, Quality and Continuity Regulations (ESOCR) 2002; clarifying how ESOQR requirements align with evolving visibility objectives would help provide a complete and more enforceable framework for installers.

Question 9

Which installer obligation clarification and streamlining option(s) would you support for increasing the registration of assets with DNOs?

Please explain your view.

A combination of clarification and streamlining measures that make the process simple, consistent, and reliable for installers is suggested. In practice, this could include clarification, streamlining/ consolidating current processes (e.g. G98/G99 notifications, MCS certification, warranty registrations), automation and feedback loops.

A mix of these options is preferable to relying on any one measure. Clarification alone risks leaving processes cumbersome, while streamlining without clear obligations may not drive compliance. Taken together, these actions would increase registration rates, improve data quality, and minimise burden on installers and manufacturers.

Question 10

How effectively could enhancements to existing digital tools (such as Connect Direct), or the development of new solutions, streamline the notification and registration process for installers, particularly in the context of minor connections processes and asset visibility objectives?

We don't have a view.

Question 11

Which existing notification and data provision requirements across distributed energy asset installation processes could be consolidated or streamlined and in what priority order?

What evidence supports the benefits of such consolidation in reducing installer burden and/or improving asset visibility?

We don't have a view.

Question 12

Do you agree with the proposed definition for a heat pump for the purposes of the ESA regulations? If not, what delivery routes would you see as appropriate for streamlining and consolidating of installer notification requirements, given that it would involve coordination across multiple recipient organisations?

Please consider cost and implementation feasibility for market participants in providing your views.

A centralised approach would be the most appropriate route to streamline and consolidate installer notification requirements. Building on existing platforms such as Connect Direct, a single national service managed under ENA governance and aligned with the REC could provide one point of entry for installers, with data then distributed securely to DNOs, system operators, certification schemes and other relevant parties.

This model would avoid duplication, reduce costs for installers and manufacturers, and ensure consistency across regions. Initial funding could come from existing regulatory allowances or innovation budgets, with ongoing operation covered through regulated cost recovery. This route balances feasibility with the need for simplicity, ensuring that installers only interact with one system while data flows are coordinated behind the scenes.

Question 13

How could the usage of digital tools and solutions be encouraged, making them desirable in reducing administrative burden on installers?

Digital tools will only be widely adopted if they make the installer's job quicker and easier than existing processes. This means designing them to fit seamlessly into installation workflows, with features such as OR code or serial number scanning, pre-populated product information, and real-time validation of fields like MPAN and address. Clear confirmation that registration is complete would also build confidence.

Adoption could be further encouraged through visible benefits for installers and consumers: for example, faster connection approvals, reduced risk of rework, and automatic links to MCS certification or warranty activation. Training and guidance should be kept simple, with incentives aligned to demonstrate that using digital tools saves time rather than adding burden.

The key is to make digital registration the "path of least resistance", so that compliance naturally follows from convenience.

Question 14

To what extent do you consider asset self-registration to be a desirable approach in this context?

In addition to the considerations outlined in Section 4.2, are there any other factors you believe are relevant to assessing the feasibility of this option?

Asset self-registration could add value as a complementary route, but it should not replace installer-led registration, which remains essential for meeting obligations under the Electrical Safety, Quality and Continuity Regulations (ESQCR) 2022. Consumers may welcome the ability to register their own assets for tariff or flexibility purposes, but without installer verification there is a risk of incomplete or inaccurate data, and potentially weaker assurance of safe connection.

Self-registration could be more effective if paired with the automated device-to-cloud registration, validated against manufacturer product catalogues, and underpinned by clear consumer consent processes, however this is only viable as a low cost option as manufacturers would not want to be burdened by complex and exhaustive technical changes to meet these requirements. This would give consumers transparency and choice, while ensuring ESQCR compliance and maintaining confidence in the accuracy of the data.

Question 15

What existing industry data may be used to help increase distributed energy asset visibility, with reference to:

A. What additional routes to access such data would be considered necessary and why?

B. what provisions (data safety, security and appropriate access consent) should be put in place to enable the better use of such data within the constraints of protecting critical national infrastructure (CNI) sensitive information?

Category	Existing data sources	Additional access routes needed	Provisions for safety, security & consent
Network data	DNO/IDNO records (connection applications, G98/G99 notifications, LV monitoring, Embedded Capacity Registers)	Role-based APIs to DNO registers; bulk aggregated data feeds at feeder/postcode level	Tiered access (granular for operators, aggregated for others); CNI safeguards to protect sensitive locational data
Certification & schemes	MCS Installation Database, Boiler Upgrade Scheme, historic RHI	Direct integration of MCS with DNO registers; automatic data flow into FMAR	Standardised schemas; data minimisation; interoperability across schemes



Market & system data	FMAR (Flexibility Market Asset Registration, once operational), REC central switching service, NESO Regional Energy System Plans	Alignment with Data Sharing Infrastructure (DSI); hashed MPAN matching for secure cross-system linkage	Role-based access; auditability of who accessed data and why; DPIAs for new use cases
Smart meter & supplier data	Smart meter export/consumption data (via DCC), MPAN records, supplier tariff data	Consumer Consent solution (RECCo) to manage access; APIs for aggregated usage data	Consumer control via consent dashboard; UK GDPR compliance; privacy-enhancing techniques (aggregation, pseudonymisation)
Manufacturer & installer data	Warranty registrations, commissioning tools, ENA Type Test Register, Connect Direct submissions	API integration with manufacturer apps for automated registration; standardised product catalogues	Data validation at source; encryption in transit/at rest; ISO 27001/CE+ standards
Public/authority data	EPCs, planning approvals, local authority heat maps	Improved interoperability with network planning tools	Aggregation to avoid re-identification; k-anonymity thresholds for public datasets

Question 16

Beyond the options already outlined, are there are additional policy or technical solutions that could effectively support the achievement of the objective to improve visibility of small-scale distributed assets?

In your response, please consider opportunities to enhance data collection, storage and access processes.

We recognise the objective to improve asset visibility, but believe that introducing entirely new systems or processes would come with significant cost and complexity. For manufacturers, installers, DNOs and consumers alike, these costs could outweigh the benefits if solutions are not carefully aligned with existing programmes.

Rather than new frameworks, the priority should be to enhance and integrate what is already in place: Connect Direct, FMAR, the Consumer Consent solution, and the Data Sharing Infrastructure. Building incrementally on these avoids duplication and spreads costs across existing governance structures.

The most effective policy direction is to streamline, standardise and automate existing processes rather than layering new obligations. This approach will keep costs down, minimise disruption, and deliver benefits faster while maintaining trust across the supply chain.

We think that given this has the form of quite an early stage call for evidence, with no clear front runner in terms of actions that would achieve the stated aims, there will need to be ongoing engagement with industry after the conclusion of this consultation when Government has considered suggestions made.

Question 17

Are there particular groupings or pairings of the proposed options that should be considered jointly to help deliver increased asset visibility?

No particular views.

Question 18

Do you agree with the proposed criteria for assessing future policy options to improve visibility of distributed energy assets, or are there any additional criteria that you feel should be considered?

We agree with the proposed criteria and see them as a sound basis for assessing future policy options. In addition, it will be important to test options against their cost and proportionality, ensuring they do not create disproportionate burdens for installers, manufacturers, or consumers. Criteria should also consider alignment with international standards, the quality and accuracy of the data delivered, and the extent to which solutions build consumer trust through clear consent and visible benefits.

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