



Department for the
Economy
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An Roinn
Geilleagair



DESIGN PLAN FOR THE ROLL-OUT OF SMART ELECTRICITY METERS

APRIL 2026

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Ministerial Foreword

The publication of the Smart Electricity Meter Design Plan is a major milestone in the delivery of the Energy Strategy and a critical element of the delivery of a smart electricity grid for the future.

Every household and business relies on accurate information to make choices. Similarly, NIE Networks and the electricity system operator, SONI, rely on accurate and detailed information to efficiently plan and deliver the electricity grid of the future. Through real-time data, smart meters will transform how consumers, energy suppliers and system operators access information to enable effective decisions.



Smart meters will give customers detailed information to make choices which save money, save energy and make effective use of new low-carbon and renewable technologies. They will provide NIE Networks and SONI with real-time information to help plan and deliver a more efficient, modern, flexible, reliable and lower cost electricity system for all.

The roll-out of smart meters will deliver significant benefits to our economy by supporting efficient grid development, supporting the transition to renewable energy sources, facilitating the development of new services from energy suppliers, enabling choice and facilitating more effective responses to severe weather events.

This Plan demonstrates how we are continuing to put consumers at the heart of the Energy Strategy as smart meters give consumers the opportunity to lower their costs and enhance the service they receive.

I look forward to continuing our collaborative approach with strategic partners as we work towards the delivery of roll-out, targeted to commence in early 2028. Together we can ensure the successful delivery for the benefit of energy consumers and the economy.

A handwritten signature in black ink that reads "C. Archibald".

DR CAOIMHE ARCHIBALD, MLA
Minister for the Economy

Executive Summary

The Executive's Energy Strategy outlines the vital role that smart electricity meters have in achieving our decarbonisation goals by 2050. Increased levels of renewable energy, underpinned by an electricity network fit for the future, will deliver multiple system benefits, while giving consumers greater control over the electricity they use and the price they pay.

Smart electricity meters are the new generation of electricity meters. They record electricity usage in much the same way as a traditional meter and also enable the automatic provision of consumption information to the electricity distribution company - NIE Networks.

System benefits include more effective planning and operation of the electricity grid, including the reduction of carbon emissions through better use of renewable electricity and low-carbon technologies. For consumers, greater levels of information empower consumers to make informed decisions about their energy usage and tariff choices. In time, smart tariffs and services developed by suppliers will encourage customers to shift their usage to times when there is an abundance of cheap renewable energy such as wind available, choosing to lower their electricity costs.

Background

The Department consulted on a smart metering design plan in October 2024¹. There was a high level of interest in the plan, and 203 responses were received. Detailed analysis has been completed and has formed the basis for the policy which designates roles and responsibilities for delivery of the roll-out programme.

The principles for successful roll-out have been identified as:

- Consumers will be at the heart of smart metering.
- Consumers will have a say in who can access their personal data.
- Smart metering installation and operation will be secure and safe.
- Smart metering will be future-proofed; and
- Value for money.

Roles

The Department for the Economy ('the Department') along with the Utility Regulator (UR) is setting up a Delivery Group² which will set guiding principles and make decisions on the roll-out. The group will work with a range of advisory expert groups to develop and provide oversight for the delivery of a detailed programme plan.

NIE Networks will continue its role in procuring and installing meters and will develop enhanced systems to store and manage data, and communicate with service providers (suppliers).

¹ [Design plan for the roll-out of smart electricity meters | Department for the Economy](#)

² The Delivery Group was previously referred to as the Oversight Group in the public consultation.

The Utility Regulator will approve design requirements, provide regulatory oversight, design and implement consumer protections into licence conditions and codes of practice and approve programme cost recovery through the normal regulated price control process.

Consumers will be at the heart of the programme and there will be an engagement strategy to ensure all consumers receive the information they need to minimise the cost of the service they receive. The Consumer Council will chair an Expert Group which will focus on protection and consumer engagement.

Responsibilities

A Delivery Group, comprising the Department for the Economy and the Utility Regulator, is being established to develop and agree a detailed work programme. The Delivery Group will also establish several expert groups who will provide advice and recommendations to guide and manage the programme delivery.

These expert groups will advise on:

- Consumer Focus.
- Data Management and Cyber Security.
- Procurement and Roll-out.
- Energy Services and Smart Tariffs.

The Delivery Group will develop a programme plan setting out all the elements and projects involved in delivering a smart meter roll-out, particularly identifying interdependencies, bottlenecks and decision points. The Delivery Group will put in place reporting arrangements to ensure the roll-out is a success.

Energy Services and Smart Tariffs

Suppliers, working through the Energy Services and Smart Tariffs Expert Group, will develop well-structured time of use tariffs and other services. Protections will be put in place to ensure consumers can have the option to pay a flat rate for electricity as they are able to do today.

Data Management

The Data Management Expert Group will develop recommendations to ensure that data management meets both legal requirements and the requirements of the Information Commissioner. It will also ensure that cyber security measures are fully considered and implemented in the roll-out strategy.

Functional & Technical requirements

The Procurement and Roll-out Expert Group will work with the Consumer Focus Expert Group to develop the requirements in the regulatory arrangements. It will look to industry to develop the more detailed technical specifications under appropriate governance structures.

Consultation Responses

The Department received a total of 203 responses: 175 via Citizen Space and 28 via email. 45 responses came from organisations and 158 from individuals.

Organisations responding were wide ranging and covered: consumer representatives, advice bodies, energy advice bodies, local councils, energy industry, consultancies, those involved in the rollouts in Britain and Ireland, business, and farming representatives.

Respondents were generally very supportive of the plans for smart metering. There was recognition of the benefits on offer to consumers and strong support for the need for a targeted education and communications plan. Some respondents raised the need for special consideration to be given to the specific needs of vulnerable groups. Forty-three individuals indicated their preference to keep the status quo of traditional meters.

Next Steps

The Delivery Group will develop a programme plan which will set out the projects and timeline for the implementation of the Smart Electricity Meter Programme. This will include engagement with stakeholders whose expertise will be vital to its development.

The Department is committed to ensuring a successful roll-out by ensuring that adequate preparation and planning is carried out. This will include working with the Utility Regulator and NIE Networks on detailed project plans, scoping and preparing the Data Access Code, working with the expert groups and NIE Networks to complete the specification for the smart metering system.

NIE Networks will commence formal procurement upon the design plan publication. This is projected to take around 18 months to complete. The target for first meter installations is early 2028.

1 Introduction and Background

1. As we make the transition to a low-carbon economy, smart meters have a vital role to play. Smart meters will allow consumers to get access to the information they need to fully understand and effectively manage their energy consumption, save money, and reduce carbon emissions. This will be central to helping consumers address the rising costs of energy and in helping to tackle climate change. In this technological age, reading meters remotely will reduce costs and support the provision of better customer service, while at the same time fully safeguarding personal privacy.
2. This decision paper follows on from the consultation on the Design Plan for the roll-out of Smart Electricity Meters which was published in October 2024. 203 responses were received from a diverse range of organisations and individuals, helping to shape the policy contained in this paper. This Design Plan also builds on the extensive and valuable engagement officials have had with stakeholders.

What is a smart meter?

3. Smart electricity meters are the new generation of electricity meters. They record electricity usage in much the same way as a traditional meter but can automatically send consumption information at regular intervals to NIE Networks.

What are the benefits to the wider electricity network/grid?

4. Enriched data from smart meters will bring huge benefits to the electricity grid by providing more detailed, accurate and timely data. This enhanced visibility will enable better grid management by the system operator and improved infrastructure management by NIE Networks, lowering costs for consumers.
5. The benefits include:
 - Accurate and Real-Time Data - Smart meters will provide real-time energy consumption data, offering a detailed picture of energy usage patterns across the grid.
 - Efficient Energy Generation - By understanding when and where energy is needed, there will be reduced waste and optimal resource allocation.
 - Reduced Risk of Outages - Potential issues can be identified at an earlier stage and prevent outages by allowing for timely intervention and better balancing of the grid.
 - Integration of Renewables - Consumers will have the enhanced data they need to participate in the energy market with renewable technologies.
 - Demand-Side Response - Consumers can adjust their energy consumption based on price signals or other incentives, to lower their costs, and helping to balance supply and demand.
6. Smart meters will play a crucial role in modernising the energy grid, making it more efficient, reliable, and environmentally sustainable, thus, safeguarding our energy network for the generations which follow.

What are the benefits to consumers?

7. Smart meters will deliver significant benefits to consumers by:
 - Giving consumers better information so that they can make informed decisions about their energy usage, tariff and energy service choices.
 - Removing the need for estimated billing and meter reading by providing real-time usage data.
 - Allowing more effective planning and operation of the electricity grid to lower consumer costs and improve consumer experiences.
 - Helping to prevent, detect and deal with faults or interruptions to electricity supplies.
 - Helping to reduce carbon emissions through better use of renewable electricity and low-carbon technologies such as electric vehicles.
 - Enabling suppliers to develop new tariffs which will encourage customers to shift their usage to times when there is an abundance of available, cheap, renewable energy, such as wind. At the same time consumers who cannot change their usage patterns, such as dairy farmers will be protected by the retention of traditional tariffs.
 - Shifting usage patterns will reduce the amount of fossil fuel generation that is needed to manage peak demand times, thus further delivering on carbon savings and lowering costs for consumer.
 - Allowing consumers to get the best from low-carbon technologies such as heat pumps, electric vehicles, and solar PV. Thus, enabling further cost savings for consumers and carbon savings for everyone.
 - Paving the way for smart services and smart appliances in homes and businesses.

What preparatory work has the Department done?

8. The Department published the Executive's Energy Strategy in December 2021. The Strategy sets out how we will achieve net zero carbon and affordable energy by 2050. It set a target of 70% of electricity consumption to be from a diverse mix of renewable sources by 2030. This target has since increased to 80% through the Climate Change Act.
9. The publication of this design plan for the rollout of smart meters is a step towards creating an electricity grid which is ready to support delivery of the 80% renewable electricity target by 2030 and beyond.
10. A cost benefit analysis (CBA) on electricity and gas smart meters, commissioned by the Department in 2022, concluded that the consumer benefits associated with smart electricity meters exceed the costs. Therefore, there is a sound economic basis for proceeding with the smart electricity meter roll-out. The roll-out represents a significant investment and economic opportunity that involves providing meter installations in around 900,000 electricity consumer premises.

- 11.** Since the publication of the CBA, the Department has been working with the Utility Regulator to develop this Design Plan for smart electricity meters and systems. The Department commissioned a detailed review of smart metering programmes in other countries from energy metering experts LCP Delta to understand the key risks and barriers to implementation and consolidate knowledge on best practice. This included an analysis of rollouts across Europe, with a deep dive into the issues that arose in GB, the south of Ireland, and Italy. LCP Delta's report is available on the department website³. The findings and recommendations from this review were used to inform this Design Plan for smart meter deployment, which is tailored to the needs of our electricity market and consumers.
- 12.** Our objective is to ensure consumers get value for money, put people in control of their electricity usage and have choices to allow them to pay less. Another objective is to improve the efficiency, operation, planning, and control of the electricity grid.
- 13.** This design plan for the roll-out of new meters covers the principles for a successful roll-out, roles and responsibilities (including for procurement, deployment, data management systems, and consumer protection and engagement), and how consumers will pay for smart metering systems.
- 14.** Our formal consultation, that took place in the latter part of 2024, was an important part of the stakeholder engagement process to gather feedback on the proposed key principles for the roll-out in the future. Engagement during the consultation and responses received have informed this Design Plan.

2 The Principles for a Successful Roll-out

15. In our formal public consultation, we set out the principles that are intended to guide the design and implementation of the smart metering programme, and to assist decision making when difficult decisions are required. These principles were widely accepted by stakeholders who responded to the consultation. We have slightly amended the principle on futureproofing due to stakeholder feedback to reflect that continuous improvement and innovation is needed to ensure adaptability to technological advances and evolving consumer needs.
16. These principles are discussed below.

Consumers will be at the heart of smart metering

17. Significant consumer benefits will be delivered through smart metering, but many of these can only be realised through consumer engagement, participation, and excellent communications to support consumers' unlocking the opportunities. Decisions must consider the impact on consumers, how they can be engaged, supported, and protected.
18. Success will come in many forms and enable consumers to participate in the energy market, allow them to save money, enable a personal green transition, support the adoption of consumer low-carbon technologies, and maximise the benefit of renewable energy resources.

Consumers will have a say in who can access their personal data

19. Personal data will continue to be protected. Consumers must have a simple method of gaining access to their personal data. If they wish, they will be able to share it with a trusted individual or adviser or service provider.
20. Anonymised data will be used to deliver wider system operation and consumer benefits without compromising any personal data.
21. Currently, NIE Networks reads meters and provides meter data to the consumer's nominated supplier who then uses that data to prepare individual bills. This will not change in the future system except that the data will arrive electronically in real-time and therefore be more accurate and timelier.
22. NIE Networks and the System Operator for Northern Ireland (SONI) will have access to data which does not include personal information for the purposes of planning and operating a safe, efficient, and flexible electricity system. This will help to deliver the electricity grid of the future.

Smart Metering installation and operation will be secure and safe

23. The installation will be planned, training provided, and due care and attention taken during the installation process to ensure the safety and security of consumers and installers. The overall smart metering solution will be designed to help deliver lower electricity costs to consumers and to facilitate the transition to a low-carbon energy system.

Smart Metering will be future-proofed (as far as technically reasonable)

- 24.** Choices affecting the selection, design, and implementation of smart metering will consider future-proofing to ensure that early obsolescence does not erode the benefits or incur unnecessary extra early costs.
- 25.** This will encompass the meters, communications, central IT systems, security, and privacy, among other things. There is also an onus to provide continuous improvement and innovation to ensure adaptability to technological advances and evolving consumer needs.

Value for money

- 26.** Functional requirements and procurement will seek to deliver value for money. The programme requires a 100% roll-out as existing metering technology will become redundant. Decisions in respect of the specific circumstances of individual properties will be pragmatic, innovative and flexible.

3 Summary of Decisions

27. The following is a summary of key decisions taken, having considered the responses to the questions posed in the consultation paper. More details are available in later sections of this Design Plan.

Roles and responsibilities

- 28.** The Department along with the UR is setting up a Delivery Group which will set guiding principles, and metrics, in addition to reviewing policy and evaluating the programme as it evolves.
- 29.** The Delivery Group will approve the project and any subsequent amendments and decide as and when any further expertise is required. In addition, it will provide overall governance and oversee a range of expert groups, which will be responsible for different work programmes/projects that will contribute to the roll-out. More information on the Delivery Group and the expert groups is included in the later section on responsibilities.
- 30.** The Department will review the existing primary and secondary legislation regarding electricity metering. Any legislative amendments that may be required will be made to ensure the regulatory framework supports the smart meter roll-out.
- 31.** NIE Networks will procure meters and systems and store and manage data, subject to normal regulatory approvals. NIE Networks will report progress to the Delivery Group.
- 32.** The Utility Regulator and the Department will approve design requirements for the meters and system. The Utility Regulator will provide regulatory oversight, design and implement consumer protections into licence conditions and codes of practice and approve programme cost recovery through the normal regulated price control process.
- 33.** The consumer complaints process will remain as it currently is. That is, if consumers have a complaint about the meter or the installation process to contact NIE Networks, and billing issues are to be resolved with suppliers. If complaints remain unresolved, consumers can contact the Consumer Council. Where the Consumer Council has been unable to resolve billing complaints, they can be referred to the Utility Regulator.
- 34.** The Consumer Council will chair an Expert Group which will focus on consumer protection and engagement. This group will also propose an engagement strategy with core messaging to the Delivery Group for approval. It will also act as an advisor to the Delivery Group on consumer engagement issues ensuring that the consumer's voice is at the heart of all elements of the design and roll-out.

- 35.** Prior to roll-out, this group will facilitate collaboration amongst the relevant stakeholders (Consumer Council, consumer advice organisations, suppliers, the Department and NIE Networks) who will develop recommendations on a consumer education campaign to the Delivery Group for review. These stakeholders will then be responsible for delivering this campaign. As chair of the Consumer Focus Expert Group, the Consumer Council will relay information and advice to the Delivery Group and other relevant expert groups.
- 36.** Suppliers will play a central role and will be formally represented within the relevant expert groups for the roll-out, ensuring their perspectives are embedded throughout the process. Through the expert groups, they will contribute to workstreams in collaboration with other stakeholders and provide advice to the Delivery Group.
- 37.** In addition, existing electricity market forums (Central Design Authority and/or the Electricity Retail Industry Group,) will provide a dedicated space for the sector to be updated on and discuss smart metering developments. The Delivery Group will review and approve outputs and consider guidance from suppliers, through the expert groups. This will ensure that supplier input is actively reviewed and incorporated into decision-making.
- 38.** Suppliers will develop phone apps and billing information, along with time of use and dynamic tariff product and service offerings, while maintaining flat tariffs, which meet the needs of consumers. This work will be led by an expert group and involve multiple stakeholders.
- 39.** The Information Commissioner's Office, who regulates the data protection legislation, has been and will continue to be engaged. This engagement will help us to ensure consumer data is protected and energy companies adhere to the highest standards of protection in relation to the processing of personal data.

Consumer protection and engagement

- 40.** The roll-out will need to be sensitive to the needs of different groups of consumers such as those with access needs or other vulnerabilities. To address these areas of specific concern, there will be requirements for additional, specific consumer protections.
- 41.** Consumer representatives will be involved in the co-design of metering and data systems, ensure the smart metering solution meets the needs of all consumers, particularly vulnerable consumers who may have accessibility requirements. Throughout the roll-out we will seek to ensure that voices are heard, and trust is built.
- 42.** The Consumer Focus Expert Group, chaired by the Consumer Council, will help to ensure adequate engagement with organisations who represent consumers, of all ages and backgrounds, including those with specific needs or disabilities as well as organisations representing non-domestic consumers.

- 43. Many bodies will have a role to play in communication and engagement with consumers, including the Department, Utility Regulator, suppliers, NIE Networks, the Consumer Council and other consumer and advice organisations. It will be important for an independent body to provide impartial advice to all consumers.
- 44. There will be a co-ordinated communications plan to deliver support to consumers throughout every phase of the programme. From initial engagement at the time of the publication of this Design Plan, using tools like the fact sheet, through a more structured comms plan which will be further developed in conjunction with the Consumer Focus Group to ensure maximum transparency as we move closer to the first installations in early 2028 and finally a range of post installation support to consumers.
- 45. Consumers will continue to pay for meters through the regulated price control process.

Tariffs and Smart Services

- 46. Suppliers, engaging through the Energy Services and Smart Tariffs Expert Group, will develop well-structured time of use tariffs and other smart services. Innovation will be supported through the competitive supply market.
- 47. There will be a provision for fixed rate tariffs to continue. Adequate protections will be put in place to ensure they will remain and be available for consumers who need them, so they have the option to pay the same flat rate for electricity, no matter what time it is.
- 48. Consumers will continue to be able to pay for electricity on a prepayment or credit basis.

Data Management

- 49. An expert group will be established to make recommendations on a privacy policy and Data Access Code for smart metering data. The group will also work with the Information Commissioner's Office to ensure the highest standards are met.
- 50. Data will be used by NIE Networks to better plan and operate the electricity system. Anonymised data will be shared with the Department to help plan the transition to a low-carbon economy.
- 51. Individual consumers will be able to consent to share their data with trusted advisors and service providers.

Cybersecurity

- 52. The Data Management Expert Group will develop recommendations to ensure cyber security measures are fully considered and implemented in the roll-out strategy.

Functional and Technical Requirements

- 53.** The Procurement and Roll-out Expert Group will work with the Consumer Focus Expert Group to develop the requirements in the regulatory arrangements. It will look to industry to develop the more detailed technical specifications under appropriate governance structures.
- 54.** Designing a bespoke system is likely to be expensive and unnecessary, therefore we propose using tried and tested off the shelf meters and systems which have been successful elsewhere while considering user needs as part of this process.

Roll-out Strategy

- 55.** A plan for roll-out will be produced and will dovetail with the existing meter replacement programme. The aim will be to complete the installation programme within 3 years of it commencing.

4 Consultation Responses

- 56.** This chapter is an analysis of the responses to the Department's public consultation on the roll-out of smart electricity meters carried out between 3 October 2024 and 16 January 2025. The consultation initially closed on 12 December 2024, however on 19 December it was re-opened for a further four weeks due to public demand.
- 57.** Further information on the public consultation can be found on the [Department's website](#).

Methodology

- 58.** Respondents were given the opportunity to submit their views via the 'Citizen Space' platform or via email. They were asked to indicate if they were responding as an individual or on behalf of a group or organisation. Where appropriate, this information is used in the analysis in this report.
- 59.** Many organisations took the opportunity to respond via email. This allowed them to provide a greater volume of detail where they felt it would be useful and, also, to address points that perhaps fell outside the scope of the questions within the Citizen Space survey.

Summary of Responses

- 60.** The Department received a total of 203 responses: 175 via Citizen Space and 28 via email. 45 responses came from organisations and 158 from individuals.
- 61.** Organisations responding were wide ranging and included consumer representatives, advice bodies, local councils, energy industry, consultancies, those involved in the rollouts in Britain and Ireland, business, and farming representatives. Their responses provided valuable and detailed insights.
- 62.** In addition to technical feedback, the Department particularly welcomed feedback from those dealing with debt, older people, rural dwellers, digitally excluded, people with specialist housing needs, those on a low income, those who have experienced fuel poverty and other vulnerable groups⁴. Whilst calling for special consideration to be given to the specific needs of vulnerable groups, these organisations were generally very supportive of the plans for smart metering. There was recognition of the benefits on offer to consumers and there was strong support for the need for a targeted education and communications campaign.

Misinformation circulating among the general public

- 63.** There were 43 consumer responses who preferred to keep the status quo of traditional meters and have no desire to receive more detailed consumption information, more accurate billing or new tariffs or services which will be available with smart meters.

⁴ Organisations who provided insights into the needs of these groups included Advice NI, Bryson Energy, Christians Against Poverty, Commissioner for Older People, Consumer Council, Equality Commission, National Energy Action, Northern Ireland Housing Executive and the Ulster Farmers Union.

- 64. Their answers were consistent with many repeatedly stating ‘I do not consent’ or ‘I do not want this’ without providing reasoning. The Department is aware of misinformation circulating amongst the general public. This may have been the basis for a number of these similar responses. Their main concerns seem to be around health and safety, data safety, personal data privacy, cyber security of the system and the potential risk that this could lead to the cost of electricity rising.
- 65. The consumer protection ethos within this Design Plan along with the consumer engagement strategy that will be delivered will aim to address the circulating misinformation and reassure those consumers who are currently sceptical about smart meters.
- 66. Organisations representing vulnerable consumers were much more positive in their responses. Some of these organisations listed several other potential benefits and opportunities from smart metering, for example making it easier to top up prepayment meters, having an interface that is more consumer friendly and suitable for carers to help manage affairs, simplified and seamless switching and better use of low-carbon technology.
- 67. The Department appreciates the time taken by consumers to respond. We will use this information to work with stakeholders to ensure there is a clear and transparent communications strategy, allowing accurate information to reach the public in a way that is meaningful and relatable.

Detailed summary of each question

- 68. This section gives detail on the responses provided to the twenty-one questions asked in the consultation.

Guiding Principles

1. Do you agree with the guiding principles for the programme?

Option	Organisations		Individuals	
	Yes	34	75.56%	13
No	2	4.44%	145	91.77%
N/A	9	20.00%	0	0.00%

Of the organisations which responded, 95% either agreed or did not specifically answer this question, and stated reasons as such as:

- Removing estimated billing is welcome.
- Support the shift to renewable energy systems.
- Allows greater control and flexibility.
- Has potential to help protect the vulnerable consumer

Many of those who responded negatively expressed an overall opposition to smart metering and this opposition was reflected throughout their responses. Those who disagreed expressed concerns around perceived health impacts, reliability, cyber security, cost to the bill payer, fears regarding government access and control. Each of these perceived concerns will be addressed by the roll-out process which will deliver consumer protections and services which are at least as good, and in many cases, enhanced compared to where they are now.

2. Do you have any further suggestions?

Respondents made suggestions including that the Department might consider further principles on continuous improvement and innovation, vulnerable consumers, and knowledge and education.

Roles and responsibilities for the roll-out of the new system

3. Do you agree with the overarching roles that have been set out for each of the organisations above?

Option	Organisations		Individuals	
	Yes	32	71.11%	15
No	3	6.67%	143	90.51%
N/A	10	22.22%	0	0.00%

There was a clear divergence between the answers given by organisations and those given by individual members of the public. Those who agreed provided reasons such as:

- Current bodies undertaking similar duties should provide support during the roll-out.
- A network led roll-out is the most suitable approach.
- It will be important that roles are undertaken subject to oversight from the Utility Regulator and the Department.

Individuals who disagreed expressed fears around organisations controlling how much energy families use. There were also suggestions around the need to have more inclusion of energy suppliers and terms of reference for organisations involved. Smart metering will improve the level of control consumers have of their energy usage, therefore fears regarding loss of control are not well-founded. We aim to address this through transparent communications overseen by the Consumer Focus Expert Group.

4. Are there other organisations not mentioned who will need to be assigned a role?

When asked if there are other organisations who could be assigned a role, suggestions were made. These included energy advice agencies, housing associations, business organisations, construction industry representatives, councils, and academic bodies.

Consumer Protection and Engagement

5. Do you agree that consumer representatives should be involved in the design of the requirements for the new systems and procurement as part of a co-design group?

Option	Organisations		Individuals	
Yes	34	75.56%	91	57.59%
No	1	2.22%	67	42.41%
N/A	10	22.22%	0	0.00%

Organisations were strongly in support of having consumer representatives involved in co-design for the new system requirements, on the basis that it would help ensure the diverse needs of domestic and non-domestic consumers would be better met. Involving consumers at the start would help to improve acceptance of the new system. It was also suggested that involving consumer feedback in the process may slow down the roll-out timescale.

6. Do you agree that the language used in this initiative should be reviewed by consumers, and are there titles other than 'smart metering programme' that should be considered for the roll-out?

Option	Organisations		Individuals	
Yes	33	73.33%	87	55.06%
No	1	2.22%	71	44.94%
N/A	11	24.45%	0	0.00%

On language for the programme, 59% of respondents agreed that consumers should review this. Some commented that using behavioural insights would help with effective communications and a range of titles were proposed. It was, however, noted that it could cause confusion if the term 'smart meters' was not used. It was also noted that language should be explored.

7. Do you agree that the roll-out needs to be sensitive to the needs of different groups and that the Oversight Group along with consumer representatives should review all aspects of consumer protection to ensure needs are met?

Option	Organisations		Individuals	
Yes	34	75.56%	115	72.78%
No	0	0.00%	43	27.22%
N/A	11	24.44%	0	0.00%

There was broad support in favour of the concept of delivering a roll-out that is sensitive to the needs of different groups. Respondents stated that support may be required for people living in areas where it may be difficult to obtain consistent data connectivity, those who are digitally excluded, people with disabilities and medical conditions, farmers, small businesses, private renters, and low-income households.

8. Do you agree that some consumers may have limited scope to cut down on energy consumption or use a smart meter? Yes/No – please comment and if so, do you have any recommendations to help support these consumers.

Option	Organisations		Individuals	
	Yes	34	75.56%	120
No	2	4.44%	38	24.05%
N/A	9	20.00%	0	0.00%

There was general agreement that there would be consumers who have limited scope to cut down on energy consumption, change the pattern of their energy use or use a smart meter. Respondents highlighted people with limited exposure to new technologies and those who live in energy inefficient homes. Respondents commented that these groups could be supported by having access to tailored support during the roll-out.

9. Do you have any comments on the plan to review the needs of small businesses in order to consider installation and longer-term support for this group?

Respondents said that tailored support could also include different solutions for small businesses and farms, consider the potential for disruption during the installation process, the ability or inability to shift demand for electricity to outside of peak hours and how they might receive advice on how to become more energy efficient.

10. Do you agree that suppliers (working with wider industry) should develop time of use or dynamic tariffs so that consumers can take advantage of lower prices at certain times of the day or when there is an abundance of renewable energy in the system?

Option	Organisations		Individuals	
	Yes	32	71.11%	67
No	3	6.67%	91	57.59%
N/A	10	22.22%	0	0.00%

There were mixed views regarding having new dynamic tariffs. Of those who agreed, some stated that this would help balance the grid more effectively by reducing demand during peak hours. However, there were comments that a dynamic tariff would not be suitable for everyone and that fixed tariffs should remain an option.

About half of the respondents who responded negatively to the suggestion, did not provide any reasons, while others reflected on the following:

- Safety for domestic consumers linked to running appliances when not at home or asleep. These times could potentially be linked to lower tariff periods.
- Some industries (e.g. dairy farming), micro/small business sector and consumers may be unable to substantively amend their working practices to avail of any benefits which variable tariffs may bring. These groups stated that it will be essential to have the ability to choose the option to remain on a fixed rate tariff.

- There was a perceived risk that enabling suppliers to vary the tariffs which they charged the consumer may lead to over-pricing in ‘peak’ periods, to generate increased profit margins for shareholders.

11. Do you agree that a coordinated plan is needed to allow trusted organisations to deliver consumer information, advice, and support at appropriate points throughout the consumer journey?

Option	Organisations		Individuals	
Yes	34	75.56%	76	48.10%
No	0	0.00%	82	52.90%
N/A	11	24.44%	0	0.00%

It was generally agreed that a co-ordinated plan is needed to allow trusted organisations to deliver consumer information, advice, and support. Respondents reasoned that building trust is paramount, and alignment is needed in messaging to avoid confusion.

12. Do you have any comments on our overall approach to data privacy and consumer consent?

Respondents felt that consumers being able to give consent to share data with third parties is essential in driving trust. Data collection should be limited to what is necessary, and that embedding privacy considerations into the Design Plan is essential.

13. Do you have any comments on the proposal to allow trusted organisations to have access to aggregated and anonymised data for lawful purposes?

On allowing trusted organisations to have access to aggregated and anonymised data for lawful purposes, respondents felt that this would be crucial for maximising the benefits of smart meters. It should be done in a way that is clear and transparent for consumers. Having better data would mean grid operators can use the data to identify faults, improve grid management, and ensure grid stability.

There were also comments questioning what a trusted organisation would be and asking for certainty regarding who has access to what data.

14. Are there any other specific organisations who should be included to give advice to the data management workstream?

There were a range of additional types of organisations suggested who could be included in further engagement as we move forward. These covered cyber security experts, energy suppliers, industry representatives for renewable energy, government departments, meters and software manufacturers, telecoms providers, and the Information Commissioner’s Office.

Functional and Technical Requirements

15. Do you agree that the Oversight Group should develop a list of functional requirements for the meters and data systems to be discussed with industry and consumer representatives?

Option	Organisations		Individuals	
Yes	28	62.22%	68	43.04%
No	5	11.11%	90	56.96%
N/A	12	26.67%	0	0.00%

Opinion was split on whether the Oversight Group should develop a list of functional requirements for the meters and data systems. Some respondents suggested that there were currently meters and data systems widely available which could be used.

Respondents commented they felt it was important to consider prepayment meter functionality, for example, to help those with home micro-generation and that an off-the-shelf technology with proven capability would be ideal, as long as it is future-proofed and has a long lifespan.

Respondents commented that NIE Networks should work closely with suppliers and consumer groups to ensure that meter functionality meets the needs of consumers. Others believed that industry was best placed to develop a detailed requirements specification through a dedicated technical subgroup.

16. Can you suggest any improvements to the current payment system for both credit and prepayment meters that should be requirements for the procurement process?

Respondents stated that smart meters could deliver improvements to the current payment system for both credit and prepayment meters and that this should be a requirement for the procurement process, using it as an opportunity linked to the smart meter roll-out.

Respondents expressed that new meters could potentially encourage the use of renewables, allow consumers to pay the amount they want to on the meter without having a cap, have a new interface that is more consumer friendly and suitable for carers to help vulnerable consumers manage their affairs. Some commented that the technology could potentially provide suppliers with information on when consumers have self-disconnected so that support could be offered. Simplified payment with seamless switching, along with advanced security measures and fraud detection were other opportunities respondents suggested.

17. Commercial mobile networks, private radio frequency, power line communication and Broadband will be explored as potential communications methods to transfer smart meter data. Do you agree these are the main methods and are you aware of any other ways this can be done?

Option	Organisations		Individuals	
Yes	26	57.78%	37	23.42%
No	5	11.11%	121	76.58%
N/A	14	31.11%	0	0.00%

Regarding the technology to be used to transfer smart data, respondents suggested that a blended approach could be taken to ensure 100% coverage. This may include mobile networks, private radio frequency and broadband. NIE Networks proposed that power line communications (via the electricity wires) may not be suitable due to restrictions.

Roll-out Strategy

18. Do you agree with the strategic goal that all consumers should have smart meters?

Option	Organisations		Individuals	
Yes	32	71.11%	10	6.33%
No	1	2.22%	148	93.67%
N/A	12	26.67%	0	0.00%

There was a divergence in opinion on the strategic goal that ‘all consumers should have smart meters’ between the organisations and the consumers who responded. Whilst organisations were in favour of their introduction, individuals who responded disagreed with this strategic goal as they felt this should be a personal choice.

The organisations who agreed stated there was an opportunity to improve grid connection, reduce operational costs and drive energy efficiency.

Those who disagreed commented that consumers should be given the choice of retaining a traditional meter and retaining traditional tariff structures. They also expressed concerns regarding connectivity in different areas.

19. Do you have any comments on which groups of consumers might be prioritised at the outset to receive a smart meter, and which groups should wait for longer or which approach might be most suitable?

On prioritising which consumer groups would receive a smart meter first, there were various suggestions. It was felt that those who specifically requested them, also known as ‘early adopters’ would benefit greatly. In addition to this, there were other approaches cited, such as take a geographic approach, vulnerable consumers with disabilities and medical conditions, small businesses, and those with high consumption levels.

20. Would the same approach be appropriate for the non-domestic sector as for the domestic sector?

Option	Organisations		Individuals	
Yes	13	28.89%	57	36.08%
No	21	46.67%	101	63.92%
N/A	11	24.44%	0	0.00%

Some respondents noted that small businesses may require more flexible installation schedules to minimise disruption, and that there may be opportunities at scale in working with organisations who have multiple small business electricity supplies. Some felt that larger businesses who already have advanced metering systems and half hourly reading could wait until closer to the end of life of the current asset before it is replaced.

21. Do you agree that the Oversight Group should set targets and provide reporting at various stages?

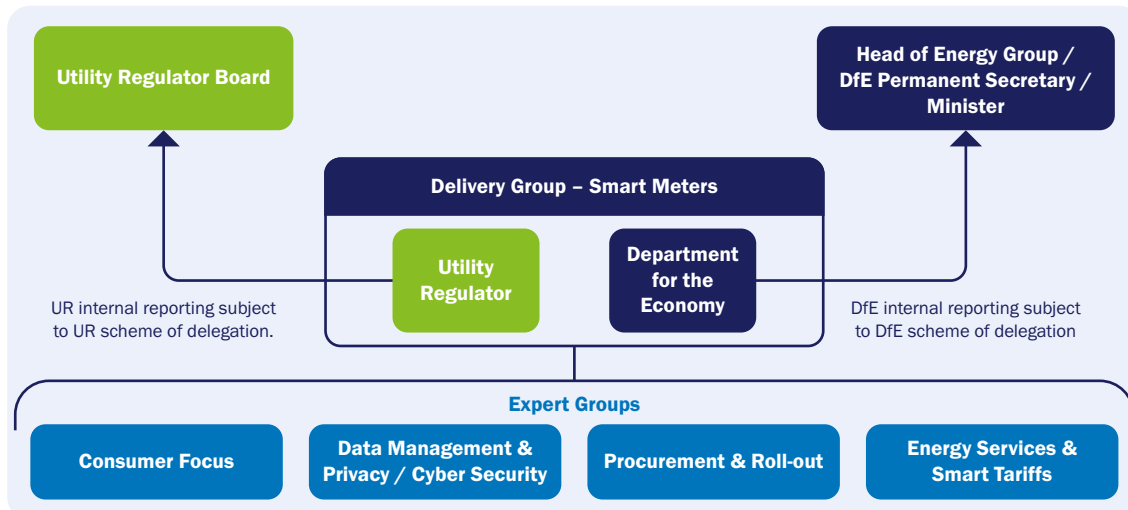
Option	Organisations		Individuals	
Yes	32	71.11%	51	32.28%
No	1	2.22%	107	67.72%
N/A	12	26.67%	0	0.00%

In relation to the Oversight Group setting targets and providing reports, it was suggested that it would be important to provide transparency on the progress to consumers and other interested stakeholders. This would foster trust and ensure the programme stays on track. Metrics such as installation numbers and quality checks, programme costs, details on how vulnerable consumers have been identified, information on time of use tariffs and savings made by consumers, were mentioned as useful metrics.

5 Responsibilities

- 69.** Having considered the consultation feedback, including around how the needs of consumers can be best met, a bespoke structure will be established to guide and manage the delivery of the programme. It will consist of a Delivery Group (comprising the Department for the Economy and the Utility Regulator) and a number of expert groups who will provide advice to the Delivery Group with recommendations and expert advice.
- 70.** The role of the Delivery Group is to:
- Ensure that delivery is aligned to the guiding principles of the programme and this smart meter Design Plan.
 - Provide overall governance to the delivery of the Design Plan.
 - Establish a range of expert groups.
 - Establish a Programme Management Approach and produce a programme plan with metrics, which sets out all the workstreams/projects that the expert groups and individual members are required to deliver.
 - Provide oversight of the workstreams conducted by expert groups and individual members review and approve the outputs, ensuring the programme is delivered to schedule.
 - Provide programme governance by setting out the delegated authority for each expert group. For matters which are beyond the delegated authority, the Delivery group will consider recommendations by the expert group(s) and make decisions accordingly.

Chart 1- Illustrative Governance Structure



- 71.** The Delivery Group will agree the number of expert groups, their terms of reference and membership, including the chair. A work programme and timeline will also be agreed with each expert group, based on the detailed programme plan which will be developed in the next stage of the smart meter delivery.
- 72.** It was positive to hear that a broad range of organisations are keen to share information and work with the expert groups to bring a wealth of expertise and advice to the programme. Many of these organisations will be invited to engage with the expert groups as part of the programme.

6 Consumer Protection and Engagement

- 73.** Consumer protection and engagement is a fundamental consideration for this programme, and it will be led by the guiding principle that consumers will be at the heart of the smart meter roll-out programme.
- 74.** Ensuring that the rights and needs of both domestic and non-domestic consumers are safeguarded is essential to gaining widespread trust and providing the necessary platform for wholesale adoption of smart meters. There is a big opportunity for consumers to have more control over their energy consumption - both how much they use and when they use it.
- 75.** There are a range of factors that influence consumers' willingness and desire to embrace smart metering, including:
- Awareness – consumers need to become aware of smart metering and its potential benefits, which might stimulate an interest in engaging with smart metering.
 - Confidence – consumers need to be confident that the smart meters will be safe and secure.
 - Information / support – consumers will need to understand how to access information through a range of means, including through new apps and what action they might be able to take to lower their energy costs.
 - Opportunity – not all consumers have the same scope to save money. Some consumers, perhaps more vulnerable consumers, may have limited scope and will need to continue to have regulatory protections.
- 76.** The focus is that homes and businesses need greater control and visibility of their supply. We want consumers to have more choice when it comes to energy, as well as being able to make informed decisions.
- 77.** Businesses are a specific group requiring careful consideration in preparation for the roll-out. Representatives will be invited to give feedback on requirements, and the information will be channelled to the Delivery Group.
- 78.** Individual responses to the consultation raised issues about the possibility of remote disconnection for those who fall into debt. There is no intention to change the existing debt recovery policy and there will be a review of the existing codes of practice to ensure that protections are retained.
- 79.** The Consumer Focus Expert Group will help NIE Networks by providing guidance about consumer needs, including:
- Challenges presented within Section 75 groups (for example, older people).
 - People with disabilities - primarily sight impairment and cognitive impairment.
 - Those who are digitally excluded.

Data Management and Cyber Security

- 80.** The Delivery Group will invite key stakeholders and agencies to establish an expert group on data management and cybersecurity, to provide expert advice to the Delivery Group and deliver the relevant projects.
- 81.** This expert group will undertake further analysis to establish the different potential data requirements of industry participants and whether such data collected needs to be personal, aggregated or anonymised, helping to map out when and where data can be shared lawfully, and in line with data protection legislation. The Information Commissioner's Office will be called upon to review the group's proposals and make recommendations.
- 82.** The expert group will make recommendations on a Data Access Code which will be approved by the Delivery Group. This code will establish the regulatory framework on data management and access. There are a range of instances when third parties will have a legitimate need to access personal data. For example, suppliers will require personal consumption information to provide accurate billing. In other instances, consumers will have a choice and be able to consent to trusted third parties offering additional services, to access their data. The Expert Group will consider the process for consumers sharing consent for their data to be accessed.
- 83.** There is also the case that anonymised and aggregated data should be made available for research, providing value to consumers in the longer-term.

7 Functional and Technical Requirements

84. Agreement on a set of common functional requirements (what the system must do) and technical specifications (how will the system do it) are essential for the interoperability that is needed to ensure that all consumers find it easy to use the system and switch electricity supplier if they wish.
85. Getting the minimum functional and technical requirements right for smart meters is critical in the initial stages of the roll-out design. This is to reduce the risk of increased costs down the line. It will also enhance consumer satisfaction and allow more ease of use.
86. For this, a Procurement and Roll-out Expert Group will work with its members to deliver detailed technical specifications of the metering solution. To meet the needs of consumers, it will require liaison with the Consumer Focus Expert Group which will develop a list of requirements the meters must have, through a co-design process. The Procurement and Roll-out Expert Group will present the specification for the procurement to the Delivery Group for approval.

8 Roll-out Strategy

Collaboration

87. A well-planned strategy for the roll-out minimises risk, reduces logistical challenges, minimises cost, to ensure that smart metering works for consumers.
88. Recognising that consumers have diverse needs, particularly fuel poor households, and that there may be geographical areas with communications challenges is important. The Consumer Focus and Procurement and Roll-out expert groups will bring forward recommendations to the Delivery Group in these areas.
89. The roll-out will be sensitive to the needs of different groups of consumers such as those with particular access needs or other vulnerabilities. To address areas of specific concern, there will be engagement with consumer representative organisations to identify challenges experienced by specific consumer segments, and any additional needs they may have.

Sequencing and Speed

90. The Procurement and Roll-out Expert Group will recommend to the Delivery Group the most cost-effective approach for organising the roll-out to deliver the best outcomes for consumers.
91. The aim is to ensure that all consumers are provided with a smart meter, as quickly as possible, to ensure they access the opportunity to lower their electricity costs.
92. It is important to note that the availability of traditional meters in the future will become more difficult as global markets switch to smart meters, with the expectation that eventually traditional meters will be phased out.

Metrics and Programme Reporting

93. The Delivery Group will set targets and ask the expert groups to provide reporting that enables them to monitor progress. The group will also develop reporting arrangements which will be clear and transparent. The Delivery Group will urgently develop a detailed programme plan setting out all the elements and projects involved in delivering a smart meter roll-out, particularly identifying interdependencies, bottlenecks and decision points.
94. Regular reporting will improve transparency and help to build trust between stakeholders and consumers, ensuring the programme stays on track. Installation rates, consumer engagement levels, and technical challenges encountered will be among the key metrics for inclusion. Periodic publication of reports will keep people informed and aligned with the roadmap.

9 Next Steps

- 95.** This is a new and significant metering programme which will bring benefits to consumers, businesses, the energy industry and others.
- 96.** The Delivery Group will develop a detailed programme plan which will set out the projects and detailed timeline for the implementation of the Smart Metering Programme. This will include engagement with stakeholders whose expertise will be vital to its development.
- 97.** It is critical that the detailed delivery programme makes urgent progress. This will ensure the benefits from having enriched data and better, more reliable systems, with an improved smarter electricity grid, are achieved as quickly as possible.