Regulatory Policy Committee

Smart Metering Policy Framework Design – Post 2025

Lead department	Department for Energy Security and Net Zero
Summary of proposal	The proposal is to amend supply licence conditions to complete the domestic smart meter roll out by 2030 and to urgently fix smart meters in traditional mode, supported by annual deployment plans and a communication hub-only swap out centralised funding arrangement in the context of the 4G transition.
Submission type	Options Assessment – 19th May 2025
Legislation type	Secondary legislation
Implementation date	Early 2026
RPC reference	RPC-DESNZ-25052-OA (1)
Date of issue	01 July 2025

RPC opinion

Rating[1]	RPC opinion
Fit for purpose	The OA outlines the problem under consideration with sufficient supporting evidence, focusing the argument for intervention on market failures. The OA has considered a long-list of policy options for each reform in the proposed package and provides sufficient justification for the selection of short-list options. The OA now provides a sufficient assessment for the preferred way forward from the short-list. The analysis would be improved if the Department were able to include some further sensitivity analysis and fully explain the research that was undertaken to inform the estimates.

RPC summary

Category	Quality[2]	RPC comments

[1] The RPC opinion rating is based only on the robustness of the rationale, options identification (including SaMBA) and justification for preferred way forward, as set out in the Better Regulation Framework guidance. RPC ratings are fit for purpose or not fit for purpose.

[2] The RPC quality ratings are used to indicate the quality and robustness of the evidence used to support different analytical areas. The definitions of the RPC quality ratings can be accessed here.

Rationale	**Green**	The OA outlines the problem under consideration, although could provide sources for the supporting evidence. The OA's argument for intervention is focused on market failures. The OA would benefit from fully applying the SMART objectives framework in its objectives and could benefit from detailing the activities and resource required in the theory of change diagram.
Identification of options (including SaMBA)	**Green**	The OA has considered a long-list of policy options for each reform in the proposed package but could benefit from using the Green Book's Strategic Options Framework Filter (SOFF). The Department provides sufficient justification for the generation and selection of short-list options. However, this could be improved by applying the critical success factors (CSFs). The Department discusses non-regulatory policy alternatives and has provided a sufficient SaMBA.
Justification for preferred way forward	**Green**	The OA could benefit from providing further detail on the type of research that was undertaken to underpin the cost-benefit analysis and could apply a more thorough sensitivity analysis. The Department has provided sufficient justification for the selection of the preferred option.
Regulatory Scorecard	**Weak**	The OA summarises the impacts of the proposal on business, household, total welfare and government priorities, but should adjust the EANDCB and EANDCH to reflect the costs passed on to households. The OA could also expand on the impacts faced by low-income consumer groups and consider the impact of the proposal on competition and innovation more broadly.
Monitoring and evaluation	**Satisfactory**	The OA outlines the indicators that will be considered to evaluate the policy, but could be strengthened by outlining the available datasets it will use to find and obtain these metrics.

This opinion has had some material redacted from the version originally issued to the department for the reason(s) stated in the redaction.

Response to initial review

As originally submitted, the OA was not fit for purpose for four reasons:

1. The OA needed to develop its generation of short-list options, as only one option was subject to options short-list appraisal. The short-list also needed to include a 'do-nothing' option, in line with Green Book guidance.
2. The OA needed to consider non-regulatory alternative options as part of its options generation.
3. The OA needed to further explain the trade-offs that have occurred between the preferred option and other options to justify the selection of the preferred way forward.
4. The OA did not provide a sufficient explanation of the methodology or modelling underpinning the cost-benefit estimates.

The Department has now:

1. Expanded the short-list to include further options [text redacted from the published opinion reflecting policy in confidence material removed from the version of the IA published by government]. The short-list also includes an overall the 'do-nothing' option.
2. Included three non-regulatory options.
3. Included sufficient explanation of the trade-off between the preferred option and Option 2d. The OA now provides a sufficient qualitative assessment for the selection of the preferred option from the short-list.
4. Detailed the methodology underpinning the cost-benefit analysis, including assumptions and data sources.

Summary of proposal

Smart meters are upgrading Great Britain's energy system and are playing a vital part in the Government's mission to build a flexible and decarbonised power system. Smart meters enable accurate billing by automatically recording consumers' energy use in every half-hour period, allowing suppliers to bill based on consumers' actual rather than estimated usage. They also send regular and accurate meter readings to suppliers automatically, ending the need for manual meter reads or estimated bills.

A four-year 'Targets Framework' began on 1 January 2022 and set individual suppliers binding annual smart meter installation targets across the domestic and non-domestic sectors. With an expectation that around 30% of the domestic rollout will need to be completed after the end of the current framework on 31st December 2025, the Government needs to ensure that new installations continue at pace after this point, so that all energy consumers – including those yet to receive a first-time smart meter install – can benefit from the rollout.

To maximise the number of working smart meters in GB, the Government is proposing using the powers given in Section 88 of the Energy Act (2013) to amend the energy supplier licence conditions on three regulatory changes.

- Setting a target for new domestic installations to be complete by December 31st, 2030, subject to All Reasonable Steps.
- Adjusting the Data Communications Company (DCC) Licence and the Operational Licence Conditions (OLC) in the Supply Licences to clarify the responsibilities on Suppliers to take all reasonable steps to recover and maintain meters in smart mode. Linked to this, the proposal is to establish a centralised funding arrangements to enable energy suppliers to complete Communication Hub-only replacements, where appropriate, in the context of the transition to 4G.
- Requiring Energy Suppliers to submit *"Deployment Plans"* to Ofgem.

The OA has considered 14 short-list options for post 2025, although we note that these cover different areas, for not all of which there are alternatives in the shortlist.

[Table of options redacted from the published opinion reflecting policy in confidence material removed from the version of the IA published by government]

Rationale

Problem under consideration

The OA outlines the problem under consideration, explaining how the existing Targets Framework for smart meter roll out is due to end in December 2025, leaving the current level of smart meter coverage insufficient to support the Government's Clean Power 2030 mission. The Department evidences this problem [text redacted from the published opinion reflecting policy in confidence material removed from the version of the IA published by government]. The OA also sets out the current limitations in consumer outcomes, referencing the 10% of existing smart meters that currently operate in traditional mode, leaving consumers without smart services. The

OA would benefit from sourcing these data points, as it is not clear where these percentages are derived from. The OA could also benefit from further developing the evidence base to support the problem under consideration, perhaps by providing more detail on the impacts for consumers from using of a traditional smart meter or drawing further on industry experiences of the current roll out.

The OA could also benefit from expanding the problem statement, further detailing the problems which may have caused the incomplete roll out and explaining what has changed recently within the Targets framework. The Department would also benefit from considering the wider rationale for intervention, detailing the original rationale of the Clean Power 2030 mission and the consequential effects from the problems identified. This would help to explain how the current roll out coverage will negatively affect the overall impact of a decarbonised power system.

Argument for intervention

The OA's argument for intervention is focused on market failures, such as negative externalities, coordination failure and misaligned incentives. The Department's description of these arguments is sufficient, although could be further improved by the inclusion of any supporting evidence, where relevant.

Objectives and theory of change

The Department sets out four objectives for the policy period beyond 2025. The OA would benefit from fully applying the SMART objectives framework when forming the objectives. The provided objectives are specific, achievable and time-limited but do not consider the measurability aspects of the SMART framework.

The OA provides a theory of change diagram that is fit for purpose but could benefit from also detailing the activities and resource that are required to take place, in addition to the 'interventions' listed. The theory of change would also be better placed alongside Section 3 of the OA. This would help to illustrate the process by which the SMART objectives will be met.

Identification of options (inc. SaMBA)

Identification of the 'long-list' of options

The OA has considered a long-list of policy options for each reform in the proposed package.[text redacted from the published opinion reflecting policy in confidence material removed from the version of the IA published by government]. The Department details these options in the OA, describing qualitatively what they would involve and their associated risks. However, the assessment could be improved by including detail on the process behind developing the long-list of options, such as how research and stakeholder engagement (with energy suppliers) has been used to form these policies. The long-list of options could benefit from using the Green Book's Strategic Options Framework Filter (SOFF), which could help present the long-list in greater detail whilst retaining a clear and concise structure. This is

particularly helpful as several of the options in the OA are implemented cumulatively and not considered in isolation. The OA could therefore use the strategic framework filter to demonstrate how the scope and delivery has been incrementally increased for each option, helping to ensure the long-list is presented clearly for a lay reader.

Justification for the short-listed options

The OA carries forward 14 options through to the short-list [text redacted from the published opinion reflecting policy in confidence material removed from the version of the IA published by government].They are assessed against as part of a package against a do nothing option.

The Department clearly explains its assessment of the long-list options using SMART objectives and provides further qualitative justification for the generation and selection of short-list options. However, rather than using the SMART objectives to rank and discard the long-listed options, the OA should apply the critical success factors (CSFs) to the long-list to justify the generation of the short-list. The CSFs would help the Department to display a systematic process of how the longlisted options were discarded to produce a short-list. The use of CSFs could have provided a clearer argument for why certain options were discounted [text redacted from the published opinion reflecting policy in confidence material removed from the version of the IA published by government]. Furthermore, SMART objectives are not an effective method for justifying the generation of the short-list, as it is best practise for all long-list options in an OA to meet SMART objectives.

Consideration of alternatives to regulation

The Department discusses non-regulatory policy alternatives, such as open letters setting expectations on annual installations and supplier league tables for installations. The OA explains why these are not suitable as they are already in place and have not provided enough incentives for energy suppliers in isolation of regulatory approaches.

SaMBA and medium-sized business (MSB) assessment

The Department has provided a sufficient SaMBA. The OA exempts microbusinesses from the deployment plan measure as there is limited additional benefit to their inclusion and justifies against exemption for small suppliers as they are already subject to similar obligations. The OA outlines why further exemptions from the proposals for SMBs are not appropriate, explaining that exempting certain suppliers from installation obligations would have significant detrimental impacts on consumers served by those SMB suppliers. Furthermore, the communication hub funding measure will benefit SMBs by ensuring they can finance at the same rate as larger suppliers.

The OA has also considered natural mitigations for the impact of the preferred option on SMBs, [text redacted from the published opinion reflecting policy in confidence material removed from the version of the IA published by government]. Equally, domestic suppliers of all sizes are also able to recover costs incurred during the

installation and operation of smart metering via the Smart Meter Net Cost Change (SMNCC) component of Ofgem's price cap. The OA also details existing industry arrangements which will reduce the disproportionate impact on SMB suppliers, such as the fact smaller organisations only contribute to the operational costs and not capital costs. The SaMBA could be improved by clearly detailing the potential impacts of the proposal on SMBs and directly relating these to the mitigations proposed.

Justification for preferred way forward

Identifying impacts and scale

The Department has identified and monetised the key impacts from the proposal, estimating an NPSV for the preferred option of between £590 million and £1,824 million. The OA does not provide a separate NPSV estimate for the other shortlisted options, instead these are differentiated qualitatively on the basis of their non-monetised costs. The Department justifies this approach [text redacted from the published opinion reflecting policy in confidence material removed from the version of the IA published by government]. Whilst this is sufficient, the OA could benefit from providing a clearer qualitative assessment for these non-monetised options, explicitly detailing their costs and benefits for comparison with the preferred option.

The Department has modelled the impacts of the proposal as a range based on 85% to 100% of smart coverage at the end of 2030. The OA justifies these ranges, explaining that they are supported by both observed conversation rates and data showing that a relatively small proportion of consumers would never take up smart meters. These scenarios of smart coverage drive an estimation of smart meter rollout (relative to the counterfactual), which is then monetised by applying the costs and benefits per smart meter, including supplier in-premises costs (including asset costs, installation costs and maintenance costs), energy and time savings for consumers, carbon and air quality benefits.

The Department also discusses a number of non-monetised impacts, such as the cost for suppliers submitting deployment plans and the impacts from amending the OLC. As these two regulatory changes make up a significant proportion of the OA's proposal package, the Department could provide further qualitative explanation of these impacts, alongside any rough estimates to indicate their potential scale.

Appraisal of the shortlisted options

The OA clearly explains the counterfactual position to which the costs and benefits are compared to. The counterfactual represents a world where smart meter rollout continues only under the NRO once the existing Targets Framework expires at the end of 2025. Estimated installations in this scenario are calculated using data from energy suppliers on the number of meters that are replaced at the end of their asset life. The OA states that this also takes account of broader plans to increase electrification of domestic energy use, but could benefit from clarifying how this has been accounted for.

The Department explains the methodology underpinning the monetised NPSV estimates for the preferred option, setting out the key assumptions and data sources that have been utilised to calculate the costs and benefits. The overall approach of the analysis is based on the approach taken to the programme's 2019 cost-benefit analysis and utilises data from the UKTIMES model and data collected from energy suppliers as part of the quarterly official statistics report. The analysis is also reliant on data collected from internal and external research commissioned by the programme. The OA could benefit from providing further detail on the type of research that was undertaken, including the stakeholders engaged and their representativeness.

The OA considers the risks associated with the preferred option, modelling the policy scenario as a range from 85% to 100%. The Department also adjusts for uncertainty by applying an optimism bias to the installation and asset costs. However, the OA could be improved by applying a more thorough sensitivity analysis to the preferred option, testing the impact of key uncertain assumptions, such as the reduction in energy consumption and time saved from smart meters.

Selection of the preferred option

The Department explains that the preferred option is to apply an All Reasonable Steps obligation to reach 100% smart meter penetration [text redacted from the published opinion reflecting policy in confidence material removed from the version of the IA published by government] on the design and setting of annual deployment plans. The Department has provided sufficient justification for the selection of the preferred option, explaining qualitatively the trade-offs and considerations that have been made to support the options preference[text redacted from the published opinion reflecting policy in confidence material removed from the version of the IA published by government]

Regulatory Scorecard

Part A

Total impacts

The Department indicates that it expects the preferred option to have an overall positive impact on total welfare due to the reduced domestic consumer energy consumption and energy supplier benefits. These impacts are expected to outweigh the smart meter installation costs, resulting in a positive NPSV of between £590 million and £1,824 million.

There are also a number of non-monetised impacts from the preferred option, which are expected overall to be positive. These impacts include the administrative cost to suppliers from completing and submitting deployment plans (expected to be low) and the financial benefit of a communications hub.

Impacts on business

The Department indicates they expect the preferred option to have an overall negative impact on business, estimating an EANDCB between £32 million and £96 million. This consists of costs faced by suppliers, including the costs associated with metering equipment and installation costs of installing additional smart meters (as well as supplier and industry operating expenditure (Opex)). The OA could benefit from summarising the main costs faced by businesses in the regulatory scorecard.

The OA states that these costs can be passed on to households through the Smart Metering Net Cost Change (SMNCC) as part of Ofgem's price cap. Therefore, as the reformed better regulation framework allows for some forms of intended pass-through effects to be treated as direct, these costs should be classified as a direct impact on households and the Department should adjust the EANDCB (and EANDCH) figure accordingly. If the costs from the legislation primarily fall onto consumers, rather than suppliers, the OA could also benefit from clarifying the rationale behind the regulation, as it is not clear why suppliers would not naturally undertake the activity if they can recover their costs.

The OA could also consider the how the savings to consumers would be passed through to suppliers. It is not currently clear how energy savings for consumers will have an (indirect) impact on suppliers and how the potential loss in margins will be passed up the supply chain.

Impacts on households, individuals or consumers

Despite the positive EANDCH (between £4 million and £13 million), the Department indicates that it expects the preferred option to have an overall positive impact on households due to the scale of energy and time consumption benefits.

The costs faced by households are those related to the energy consumption of smart metering equipment. However, the OA does not summarise the different (monetised) household impacts in the scorecard, and could provide further clarity on whether any additional costs are also included in the EANDCH metric.

Furthermore, as detailed above, the EANDCH should be adjusted to reflect the direct costs which will be passed through to households part of Ofgem's price cap. The Department could also consider adjusting the directional rating in the household scorecard to reflect this additional cost.

Distributional impacts

The OA states that the package of measures are not anticipated to have any significant or adverse distributional impacts and details the potential positive distributional impacts on small energy suppliers and low-income consumer groups who will receive the benefits of smart metering whilst the roll out is maintained. The OA could further expand on the impacts faced by low-income consumer groups, particularly for prepay fuel poor customers, who will benefit from the continuous rollout of smart meters and their ability to be remotely topped up.

Part B

The Department considers the impact of the proposal on wider government priorities, stating that the policy will have a neutral impact on business environment and international considerations. The Department briefly references the impact of the policy on energy suppliers but could benefit from expanding its overall discussion of the business environment impact. For instance, the OA could detail how establishing centralised funding arrangements may avoid unnecessary burdens and expenses for suppliers, improving their competition and innovation. The OA could be improved by providing any relevant evidence to illustrate the scale of this impact for business, perhaps by utilising any relevant results from industry engagement.

The Department indicates that preferred option is also expected to support natural capital and decarbonisation. The OA explains that the policy will help to facilitate the UK's progress towards achieving its net zero and clean power ambitions by reducing carbon emissions and increasing clean air. However, the OA could expand on its assessment of this impact in the regulatory scorecard. This could also be improved by including any relevant evidence to support this impact, as well as a summary of the quantified impacts.

Monitoring and evaluation

The OA confirms that a post-implementation review will take place in 2035, 5 years after the conclusion of the rollout obligations for 2030. As PIRs are typically conducted 5 years after implementation of the policy (rather than the objectives within the policy), the Department could provide further justification for this delayed review date.

The OA explains that the Smart Metering Implementation Programme (SMIP) monitors the activities of the programme and outlines the indicators that will be considered to evaluate the policy, such as number of installations, number of smart meters operating in traditional mode and cost of installation visits. However, the OA could be strengthened by outlining the available datasets it will use to find and obtain these metrics, and how the data will be gathered. Whilst the Department sets out some data sources which will be used to gather these metrics (such as DESNZ's NEED database) but could benefit from further explaining the nature of the data collected and how it will be gathered. The OA could benefit from relating these metrics directly to the theory of change diagram and SMART objectives.

Furthermore, the Department could outline any research questions that it aims to address and answer through the future data collection. This would be for the benefit of the consultation. The OA could also consider any external factors that will have an impact on the success of the intervention

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