

Consultation

Consultation on updates to Data Best Practice Guidance and Digitalisation Strategy and Action Plan Guidance

Publication date:	28 February 2023
Response deadline:	14 April 2023
Contact:	Liam Bennett
Team:	Energy System Data Regulation
Telephone:	N/A
Email:	digitalisation@ofgem.gov.uk

We are consulting on Data Best Practice Guidance and Digitalisation Strategy and Action Plan Guidance.

These guidance documents are associated documents that companies whose licences are subject to the RIIO-T2 (Transmission licensees) and RIIO-GD2 (Gas Distribution licensees price controls comply with.

As part of this consultation, we are proposing to update Data Best Practice Guidance and Digitalisation Strategy and Action Plan Guidance to insert the relevant references to companies whose licences are subject to the RIIO-ED2 (Electricity Distribution licensees) price control¹. We also propose to update Data Best Practice Guidance in response to developments in the digital energy sector and following a Call for Input published by Ofgem in September 2022².

Finally, we propose clarifications on whether specific Data Assets fall under the definition of Energy System Data, as set out in Data Best Practice Guidance. This includes the confirmation of aggregated smart meter consumption data, and Data Assets associated with the operation of flexibility markets, as Energy System Data.

¹ [RIIO-ED2 Final Determinations | Ofgem – core methodology document, chapter 4](#)
² [Call for Input for Data Best Practice | Ofgem](#)

Consultation – Consultation on updates to Data Best Practice Guidance and Digitalisation Strategy and Action Plan Guidance

In our Digitalisation Strategy and Action Plan (DSAP)³, published jointly with Innovate UK and the Department for Energy Security and Net Zero (DESNZ), we committed to implementing an agile regulatory environment regarding data, digitalisation, and market design. This consultation demonstrates our intent to operate in an agile manner, adapting guidance documents when changes in the sector require it.

This document outlines the scope, purpose and questions of the consultation and how you can get involved. Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at [ofgem.gov.uk/consultations](https://www.ofgem.gov.uk/consultations). If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

³ <https://www.gov.uk/government/publications/digitalising-our-energy-system-for-net-zero-strategy-and-action-plan>

© Crown copyright 2023

The text of this document may be reproduced (excluding logos) under and in accordance with the terms of the [Open Government Licence](#).

Without prejudice to the generality of the terms of the Open Government Licence the material that is reproduced must be acknowledged as Crown copyright and the document title of this document must be specified in that acknowledgement.

Any enquiries related to the text of this publication should be sent to Ofgem at:

10 South Colonnade, Canary Wharf, London, E14 4PU.

This publication is available at www.ofgem.gov.uk. Any enquiries regarding the use and re-use of this information resource should be sent to: psi@nationalarchives.gsi.gov.uk

Contents

Consultation on updates to Data Best Practice Guidance and Digitalisation Strategy and Action Plan Guidance.....	1
Chapter 1: Introduction	5
What are we consulting on?.....	5
Context and related publications	7
Consultation stages.....	10
Figure 1: Consultation stages	10
How to respond	10
Your response, data and confidentiality	10
How to track the progress of the consultation	12
Chapter 2: Changes to the design approach of Data Best Practice Guidance.....	13
Chapter 3: Data Best Practice Guidance and Digitalisation Strategy and Action Plan Guidance scope and content.....	17
Background to changes	18
Application to Electricity Distribution licensees.....	19
Metadata and open data licensing standards	21
Metadata standard.....	21
Open data licensing	23
Data Catalogue	26
Chapter 4: Energy System Data and its application	29
Background to changes	29
Aggregated smart meter data.....	30
Data relating to flexibility market operation	35
Appendices	38

Appendix 5 – Privacy notice on consultations 39
Personal data 39

Chapter 1: Introduction

What are we consulting on?

- 1.1 We are consulting on Data Best Practice Guidance (“DBP Guidance”) and Digitalisation Strategy and Action Plan Guidance (“DSAP Guidance”). We currently apply these guidance documents in the following way:
- As the associated documents to the RIIO-2 Digitalisation licence obligation (see Special Licence Condition 9.5 for Electricity Transmission, Gas Transmission, Gas Distribution, Special Condition 2.11 for the Electricity System Operator⁴);
 - As our data and Digitalisation standards, as stated in our Forward Work Programme (FWP) 2021/22 decision⁵.
- 1.2 DSAP Guidance defines the regulatory requirements for transparency, stakeholder engagement and coordination with respect to a licensee’s current and future products and services relating to data and digitalisation. These requirements are to be complied with when a licensee publishes its: (1) Digitalisation Strategy and (2) Digitalisation Action Plan. Any licensee working to publish a DSAP should do so using the most recently available guidance published by the Authority except where the Authority has stated otherwise.
- 1.3 DBP Guidance is designed to ensure that data is treated as an asset and used effectively for the benefit of consumers and the Public Interest. It is a principles-based approach which provides guidance on the quality, accuracy, and accessibility of data. By complying with this framework, licensees will enable the full benefits of digitalisation of the energy system to be realised for consumers.
- 1.4 We are consulting on amending DSAP Guidance to;
- Apply DSAP Guidance as the associated document for the RIIO-ED2 Digitalisation licence obligation (see Special Licence Condition 9.5 for Electricity Distribution⁶).

⁴ Details on these licence obligations are available here: <https://www.ofgem.gov.uk/publications-and-updates/decision-proposed-modifications-riio-2-transmission-gas-distribution-and-electricity-system-operator-licences>

⁵ See the Activities section of Point 6: <https://www.ofgem.gov.uk/publications-and-updates/forward-work-programme-202122>

⁶ <https://www.ofgem.gov.uk/publications/riio-ed2-statutory-licence-consultation>

- 1.5 We are consulting on amending DBP Guidance to;
- Apply DBP Guidance as the associated document for the RII0-ED2 Digitalisation licence obligation (see Special Licence Condition 9.5 for Electricity Distribution⁵). Details of this change are given in chapter 3 of this document.
 - Change the current structure of DBP Guidance to provide more certainty to licensees on the intended outcome of each principle with the aim of improving licensees' understanding of what is expected of them when complying with DBP Guidance. Each of the 11 principles will now have both an "explanation" section, and an "intended outcome" section. Details of this change are given in chapter 2 of this document.
 - Introduce the requirement for licensees to use the latest version, or a subsequent iteration, of the Dublin Core Metadata Standard⁷ as their Metadata standard. Details of this change are given in chapter 3 of this document.
 - Introduce the requirement for licensees to use either the latest version, or a subsequent iteration, of the Creative Commons Attribution Licence⁸ or the Open Government Licence⁹ as their open data licence. Details of this change are given in chapter 3 of this document.
 - Introduce the requirement for licensees to use a Data Catalogue to improve the discoverability of their Data Assets. Details of this change are given in chapter 3 of this document.
 - Update principle 9, "Protect Data Assets and systems in accordance with Security, Privacy and Resilience (SPaR) best practice", to provide further clarity on how licensees should act with respect to Cyber Security.
- 1.6 We are also consulting on 2 supplementary policy decisions that sit adjacent to DBP Guidance;
- Confirming our minded-to position from the Call for Input on Data Best Practice, that aggregated smart meter consumption data should be treated by licensees as Energy System Data. We are proposing that Distribution Network Operators (DNOs); 1) submit a revised Data Privacy Plan to allow sharing of

⁷ [DCMI: Home \(dublincore.org\)](https://dublincore.org/)

⁸ Current version is CC-BY 4.0 at the time of publication – <https://creativecommons.org/licenses/by/4.0/>

⁹ <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

aggregated smart meter consumption data, and begin sharing this data by 14 October 2023 and, 2) collectively determine and submit an interoperable methodology for publishing aggregated smart meter consumption data by 28 February 2024.

- Clarifying that, as currently defined, Energy System Data includes Data Assets associated with the operation of flexibility markets. Flexibility markets are a key tool for system operation across the energy system and Data Assets from the operation of these markets should be Presumed Open and subject to Open Data Triage. Information about the operation of markets is in the Public Interest.

1.7 Versions of DBP Guidance and DSAP Guidance with our proposed changes are also available as appendices to this consultation¹⁰.

Context and related publications

1.8 As we are implementing the Digitalisation Licence Condition (SpC 9.5) for Electricity Distribution licensees, both DBP Guidance and DSAP Guidance are required to be updated to signpost that Electricity Distribution licensees will be required to follow the guidance documents.

1.9 We are also utilising this opportunity to make improvements to DBP Guidance based on feedback from stakeholders, gathered through our Call for Input on Data Best Practice¹¹. These improvements are part of our response to developments in the digital energy sector, including the Energy Digitalisation Taskforce recommendations¹². The improvements to DBP Guidance and DSAP Guidance proposed in this consultation help us to meet the actions set out in our joint Digitalisation Strategy and Action Plan with DESNZ and Innovate UK¹³.

1.10 The design of DBP Guidance is informed by previous research and policy development relating to the Digitalisation of the energy system. Below we have listed important milestones leading to this consultation:

¹⁰ See appendices 1 and 2

¹¹ <https://www.ofgem.gov.uk/publications/call-input-data-best-practice>.

¹² <https://es.catapult.org.uk/news/energy-digitalisation-taskforce-publishes-recommendations-for-a-digitalised-net-zero-energy-system/>.

¹³ <https://www.gov.uk/government/publications/digitalising-our-energy-system-for-net-zero-strategy-and-action-plan>

- The (retrospectively named) Modernising Energy Data (MED)¹⁴ programme initiated the Energy Data Taskforce (EDTF) in November 2018, which published its report in June 2019 and made a series of recommendations¹⁵;
- In August 2019 Ofgem created and published an outline of the Data Best Practice Guidance principles for the first time. We did this within our position paper on Distribution System Operation¹⁶;
- Innovate UK (IUK) procured support to develop detailed guidance based on our DBP principles. This was carried out in collaboration with Ofgem and DESNZ (formerly the Department for Business Energy and Industrial Strategy). The Energy Systems Catapult (ESC) were awarded the contract for this piece of work and delivered it between November 2019 – January 2020. During this period the ESC hosted public workshops in collaboration with the MED programme;
- Ofgem issued the RIIO-2 Draft Determinations¹⁷ and RIIO-ED2 Sector Specific Methodology Decision (SSMD)¹⁸ consultations in July 2020. DBP licence obligations were included in the proposals;
- A draft of the Digitalisation Strategy and Action Plan Guidance was published in November 2020 and Ofgem hosted workshops during November-December 2020 to gather stakeholder feedback for future development;¹⁹
- RIIO-2 Final Determinations²⁰ and RIIO-ED2 SSMD²¹ consultation decisions were published by Ofgem in December 2020, confirming the inclusion of the licence obligations and stating that a consultation on the guidance will follow;

¹⁴ MED was a collaboration between Ofgem, The Department for Business Energy and Industrial Strategy. (BEIS) and Innovate UK:

<https://www.gov.uk/government/groups/modernising-energy-data>.

¹⁵ EDTF report: [A strategy for modern digitalised energy system](#).

¹⁶ [Ofgem position paper on Distribution System Operation](#) see page 27 for the principles.

¹⁷ RIIO-2 Draft Determinations core [document](#). DBP and DSAP part of 'Modernising Energy Data' (p27).

¹⁸ [RIIO-ED2 Sector Specific Methodology Consultation](#). DBP and DSAP part of 'Modernising Energy Data' (p47).

¹⁹ <https://www.ofgem.gov.uk/publications-and-updates/Digitalisation-strategy-and-action-plan-guidance-workshops>.

²⁰ [RIIO-2 Final Determinations](#) DBP and DSAP decision in the 'Modernising Energy Data' section (p29).

²¹ [RIIO-ED2 Sector Specific Methodology Decision](#) DBP and DSAP decision in the 'Modernising Energy Data' section (p52).

Consultation - Consultation on updates to Data Best Practice Guidance and Digitalisation Strategy and Action Plan Guidance

- Ofgem published its FWP 2021/22 consultation in December 2020 stating that we would develop Data and Digitalisation standards²²;
- Ofgem published an update to the RIIO-ED2 Business Plan Guidance²³ in February 2021, here Ofgem set out its expectations for DNOs demonstrating their competency of complying with Data Best Practice; and
- Ofgem published its decision about its FWP 2021/22, confirming that we would consult on the DBP and DSAP Guidance before establishing them as our data and digitalisation standards²⁴;
- Ofgem published a Consultation on DBP Guidance and DSAP Guidance to confirm these documents as our Data and Digitalisation standards in May 2021²⁵. The decision to implement and finalise these documents was completed in November 2021²⁶;
- Ofgem, DESNZ, and Innovate UK jointly published our Digitalisation Strategy and Action Plan in July 2021²⁷. This set out our vision for the digitalisation of the energy system, and the specific policies we will implement to meet this vision.
- Ofgem published its Draft Determinations and Final Determinations for RIIO-ED2 in June 2022²⁸ and December 2022²⁹ respectively. These documents set out our intent to introduce the Digitalisation licence obligation to the Electricity Distribution licences.

²² See new activities in Point 7: <https://www.ofgem.gov.uk/publications-and-updates/forward-work-programme-202122-consultation#Point%207:%20data%20and%20Digitalisation>.

²³ See pages 22-26 <https://www.ofgem.gov.uk/publications-and-updates/riio-ed2-business-plan-guidance>".

²⁴ See Activities section of Point 6: <https://www.ofgem.gov.uk/publications-and-updates/forward-work-programme-202122#Data%20and%20Digitalisation>.

²⁵ <https://www.ofgem.gov.uk/publications/consultation-data-best-practice-guidance-and-digitalisation-strategy-and-action-plan-guidance>.

²⁶ <https://www.ofgem.gov.uk/publications/decision-data-best-practice-guidance-and-digitalisation-strategy-and-action-plan-guidance>.

²⁷ <https://www.gov.uk/government/publications/digitalising-our-energy-system-for-net-zero-strategy-and-action-plan>

²⁸ Chapter 4 of the Core Methodology document <https://www.ofgem.gov.uk/publications/riio-ed2-draft-determinations>

²⁹ Chapter 4 of the Core Methodology document <https://www.ofgem.gov.uk/publications/riio-ed2-final-determinations>

Consultation - Consultation on updates to Data Best Practice Guidance and Digitalisation Strategy and Action Plan Guidance

- Ofgem published a Call for Input on DBP Guidance on 7 September 2022, which received responses from a wide range of industry participants³⁰. These responses, in part, helped to shape the changes herein.

Consultation stages

Figure 1: Consultation stages

Stage 1	Stage 2	Stage 3	Stage 4
Consultation open	Consultation closes (awaiting decision). Deadline for responses	Responses reviewed and published	Consultation decision/policy statement
28/02/2023	14/04/2023	Spring 2023	Summer 2023

How to respond

- 1.11 We want to hear from anyone interested in this consultation. Please send your response to the person or team named on this document's front page.
- 1.12 We've asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.
- 1.13 We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations.

Your response, data and confidentiality

- 1.14 You can ask us to keep your response, or parts of your response, confidential. We'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.
- 1.15 If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you *do* wish to be kept confidential and those that you *do not* wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we'll get in touch with you

³⁰ [Call for Input for Data Best Practice | Ofgem](#).

to discuss which parts of the information in your response should be kept confidential, and which can be published. We might ask for reasons why.

- 1.16 If the information you give in your response contains personal data under the General Data Protection Regulation (Regulation (EU) 2016/679) as retained in domestic law following the UK's withdrawal from the European Union ("UK GDPR"), the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see Appendix 4.
- 1.17 If you wish to respond confidentially, we'll keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We won't link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

Consultation - Consultation on updates to Data Best Practice Guidance and Digitalisation Strategy and Action Plan Guidance

General feedback

1.16. We believe that consultation is at the heart of good policy development. We welcome any comments about how we've run this consultation. We'd also like to get your answers to these questions:

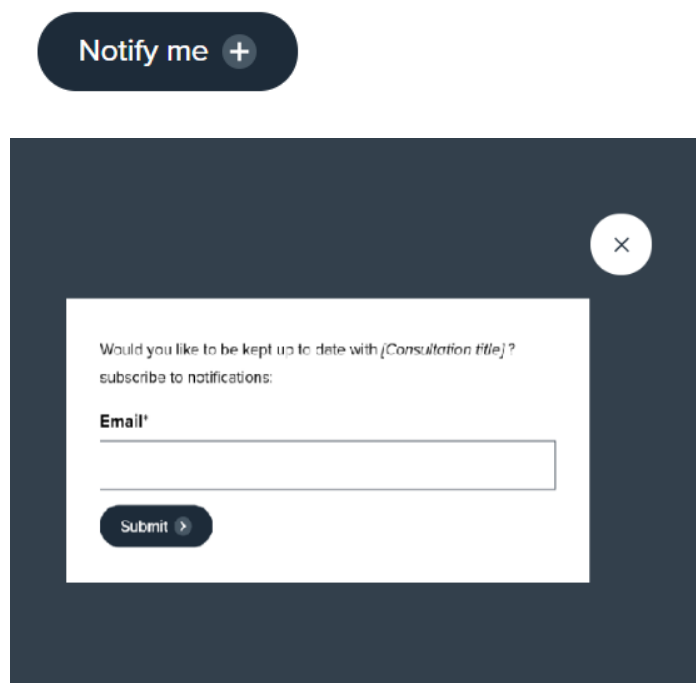
1. Do you have any comments about the overall process of this consultation?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Were its conclusions balanced?
5. Did it make reasoned recommendations for improvement?
6. Any further comments?

Please send any general feedback comments to stakeholders@ofgem.gov.uk

How to track the progress of the consultation

You can track the progress of a consultation from upcoming to decision status using the 'notify me' function on a consultation page when published on our website.

[Ofgem.gov.uk/consultations](https://www.ofgem.gov.uk/consultations)



Once subscribed to the notifications for a particular consultation, you will receive an email to notify you when it has changed status. Our consultation stages are:

Upcoming > **Open** > **Closed** (awaiting decision) > **Closed** (with decision)

Chapter 2: Changes to the design approach of Data Best Practice Guidance

Section summary

We are proposing to update the structure of Data Best Practice Guidance, and the associated supporting information document, to include the 'intended outcomes' for each of the 11 principles. The intended outcomes are aimed at helping provide guidance and additional clarity to ensure that licensees understand Ofgem's expectations for the behaviours required by the principles. The intended outcomes may be adjusted in future updates to DBP Guidance.

Questions

- Q1. Do you agree with our proposal to implement a structural change to DBP Guidance, introducing intended outcomes for each principle? If not, how do you suggest we could clarify the aim of each principle?
- Q2. What are your views on the proposed wording of our intended outcomes for each principle in DBP Guidance?

- 1.18 Data Best Practice (DBP) Guidance has always adopted a principles-based approach to defining its requirements. A principles-based approach allows licensees the freedom to explore solutions that best meet stakeholders' needs in the context of each specific application for data and digital services. We chose this approach to reflect the fact that our understanding of best practices and approaches to unlocking the benefits of Data and Digitalisation is continually developing and doing so at pace.
- 1.19 We built interoperability into the DBP principles to ensure that, whilst licensees have flexibility to develop their own approaches to products and services, Data Users can access and combine Data Assets across licensees with ease.
- 1.20 We have observed divergence amongst licensees on interoperability, highlighted to us through ongoing industry engagement and through our Call for Input on DBP Guidance. We identify this divergence as relating to 2 key issues:
- A lack of certainty in the DBP principles, leading to licensees interpreting the principles in different ways and differing in their approach to compliance.

- Limited progress by industry in developing standards to enable interoperability. This has led to organisations developing their own products and services, which are not interoperable.

- 1.21 To address the points above: Issue 1 will be addressed in this chapter; whilst issue 2 will be addressed in chapter 4.
- 1.22 We are proposing to provide further clarity when setting out our principles for licensees to uphold when utilising and sharing Energy System Data. We believe regular updates and clarifications to DBP Guidance can help our regulations respond to a fast-changing industry. This consultation seeks to gather licensees' views about the changes to DBP Guidance, alongside wider views from the energy industry and beyond.

Intended outcomes

- 1.23 We consider that a lack of clarity in the DBP principles is leading to different interpretations and hence differing approaches in the development of digital products and services.
- 1.24 To address these differing interpretations of the principles, we are proposing that DBP Guidance and DBP Supporting Information documents are updated to comprise of the original four types of information (principles, explanations, techniques, and examples), plus an intended outcomes section. The below table shows this proposed structure:

Table 1: Proposed structure of Data Best Practice Guidance

Type of information	Comment
Principles	The requirements that must be complied with. This is part of the Guidance. Principles are restated in the Supporting Information.
Explanations	Descriptions of the principles, including requirements for compliance. This is part of the Guidance. Explanations are restated in the Supporting Information.
Intended outcomes	Intended outcomes to be achieved by the principles, to confirm the behaviour we expect from obligated licensees.

Consultation - Consultation on updates to Data Best Practice Guidance and Digitalisation Strategy and Action Plan Guidance

	<p>This is part of the Guidance.</p> <p>Intended outcomes are restated in the Supporting Information.</p>
Techniques	<p>Suggestions that we think will help to support licensees when complying with the principles and interpreting explanations.</p> <p>These are not part of the Guidance.</p> <p>Techniques are only included in the Supporting Information.</p>
Examples	<p>Resources and demonstrations of compliance with aspects of the DBP or of the techniques being used in practice by licensees.</p> <p>These are not part of the Guidance.</p> <p>Examples are only included in the Supporting Information.</p>

- 1.25 The intended outcome for each principle does not replace the explanation of the principle, however, it will help to set out Ofgem’s expectations for how the explanation will be implemented. The intended outcomes help provide guidance and additional clarity to ensure that licensees understand Ofgem’s expectations for the behaviours required by the principles.
- 1.26 The techniques and examples are only included in the Supporting Information. The Supporting Information is an additional document provided by Ofgem. The goal of this Supporting Information is to provide signposting to useful resources and to provide support for licensees.
- 1.27 When undertaking actions to assess licensees’ compliance with DBP Guidance, we propose to use the intended outcomes as part of the assessment. Licensees will be expected to demonstrate how they are achieving the requirements set out in the explanation of the principle, using the intended outcomes as a guide. We consider that this approach provides additional clarity to licensees on Ofgem’s expectations for implementation of the DBP Guidance.
- 1.28 The intended outcome for each principle is set out in our proposed changes to Data Best Practice, Appendix 1.
- 1.29 Associated with this consultation is Appendix 1, which is the proposed Data Best Practice Guidance (i.e. the principles, explanations, with intended outcomes) with

Consultation - Consultation on updates to Data Best Practice Guidance and Digitalisation Strategy and Action Plan Guidance

tracked changes, and Appendix 3 which is the proposed updated Supporting Information for Data Best Practice Guidance, including the addition of the intended outcomes.

Question 1: Do you agree with our proposal to implement a structural change to DBP Guidance, introducing intended outcomes for each principle? If not, how do you suggest we could clarify the aim of each principle?

Question 2: What are your views on the proposed wording of our intended outcomes for each principle in DBP Guidance?

Chapter 3: Data Best Practice Guidance and Digitalisation Strategy and Action Plan Guidance scope and content

Section summary

This section explains our proposed changes to:

- Update both DBP Guidance and DSAP Guidance to signpost that Electricity Distribution licensees are now required to adhere to these documents.
- Introduce a requirement in DBP Guidance for the licensee to utilise the latest version, or a subsequent iteration, of Dublin Core as their Metadata standard.
- Introduce a requirement in DBP Guidance for the licensee to utilise the latest version, or a subsequent iteration, of either the Creative Commons Attribution Licence or Open Government Licence as their open data licence.
- Introduce a requirement in DBP Guidance for the licensee to create and publish a Data Catalogue, in a location available to all Data Users, to improve the discoverability of their Data Assets.

Questions

- Q3. What are your views on our proposal to require the use of Dublin Core as the Metadata standard for companies obligated under DBP Guidance?
- Q4. If you do not agree with this proposal, are there alternative Metadata standards that should be utilised by licensees instead?
- Q5. If you are a licensee required to comply with DBP Guidance, can you provide a timescale for the implementation of the proposal to adopt Dublin Core as your Metadata standard?
- Q6. What are your views on our proposal to require the use of the Creative Commons Attribution Licence or the Open Government Licence as the standard open data licence for companies obligated under DBP Guidance?
- Q7. If you do not agree with this proposal, can you suggest alternative open data licences to be utilised as a common open data licence?
- Q8. If you are a licensee required to comply with DBP Guidance, can you provide a timescale for the implementation of the proposal to adopt the Creative Commons Attribution Licence or the Open Government Licence as your open data licence?

Q9. What are your views on our proposal to require licensees to create and publish a Data Catalogue of their Data Assets?

Background to changes

- 1.30 The contents of the Data Best Practice (DBP) Guidance and Digitalisation Strategy and Action Plan (DSAP) Guidance documents are intended for the sector to adopt an approach to Digitalisation that best serves the Public Interest. DBP Guidance supports the sector in adopting a common, interoperable, approach to key digital building blocks. This is achieved through principle 8 of Data Best Practice and requirements to use 'commonly recognised' standards.
- 1.31 Over the last 15 months, since the DBP Guidance and DSAP Guidance documents have been in operation, there has been continuous engagement with licensees about the implementation and application of the principles. We envisage that this dialogue will continue with the revisions to DBP Guidance proposed within this document, to ensure that there is a shared understanding of the guidance requirements amongst industry participants. We also anticipate that future revisions will be required as the energy sector continues its Digitalisation journey.
- 1.32 The energy sector has changed significantly over the past 15 months, with the publication of, and subsequent DESNZ/Ofgem/Innovate UK response to³¹, the Energy Digitalisation Taskforce³², key innovation projects developed by the Net Zero Innovation Portfolio within DESNZ³³ with respect to digital infrastructure (Automatic Asset Registration³⁴, Digital Spine³⁵, Smart Meter Data Repository³⁶), and the numerous digitalisation innovation projects developed through the Strategic Innovation Fund³⁷.
- 1.33 This rapid development in digitalisation of the energy system emphasises the need for interoperability to enable effective operation of the energy sector. Interoperability between licensees' Data Assets will ensure that licensees do not

³¹ <https://www.gov.uk/government/publications/digitalising-our-energy-system-for-net-zero-strategy-and-action-plan/energy-digitalisation-taskforce-report-joint-response-by-beis-ofgem-and-innovate-uk>

³² <https://es.catapult.org.uk/news/energy-digitalisation-taskforce-publishes-recommendations-for-a-digitalised-net-zero-energy-system/>.

³³ <https://www.gov.uk/government/collections/net-zero-innovation-portfolio>

³⁴ <https://www.gov.uk/government/publications/automatic-asset-registration-aar-programme>.

³⁵ <https://www.gov.uk/government/publications/energy-system-digital-spine-feasibility-study>.

³⁶ <https://www.gov.uk/government/publications/smart-meter-energy-data-repository-programme>

³⁷ <https://www.ofgem.gov.uk/strategic-innovation-fund-sif>.

digitalise in silos, but instead collectively respond to the rapid digitalisation of the energy system. Interoperability between licensees' Data Assets will allow Data Users to develop products and services that are representative of the entire GB energy system, without the friction of integrating Data Assets that are produced in different formats.

- 1.34 Respondents to our Call for Input on Data Best Practice³⁸ also noted that, whilst there is a role for Ofgem to mandate standards if a market failure is identified, more complex data standards (the Common Information Model³⁹ for example) should be left to industry to develop. Ofgem understands that industry may be well placed to determine standards relating to Digitalisation, however, Ofgem will act to introduce standards where we identify market failures or poor incentives on licensees to develop standards.
- 1.35 Interoperability between Data Assets of licensees is a requirement that predominantly, though not exclusively, produces benefits for the wider energy system rather than directly for licensees at this time. As DBP Guidance is extended to other sector participants, we expect interoperability to deliver significant benefits for network licensees. We see a role for the regulator in determining building block (sector-agnostic enablers⁴⁰) standards for interoperability, to ensure the whole-system benefits are realised.

Application to Electricity Distribution licensees

- 1.36 In the RIIO-ED2 SSMD consultation⁴¹, we set out our expectations that Electricity Distribution licensees would begin their digitalisation journey ahead of business plan submissions, rather than wait until the RIIO-ED2 price control began. Through discussion with these licensees, it was decided that Electricity Distribution licensees would work to be voluntarily compliant with DBP Guidance and DSAP Guidance.
- 1.37 In the RIIO-ED2 business plan guidance we set out our expectation that Electricity Distribution licensees should demonstrate their current compliance with

³⁸ <https://www.ofgem.gov.uk/publications/call-input-data-best-practice>

³⁹ <https://www.ofgem.gov.uk/publications/common-information-model-cim-regulatory-approach-and-long-term-development-statement>.

⁴⁰ Sector-agnostic enablers are standards whose use is not restricted to the energy sector. This cross-sector use allows Energy System Data to be integrated and used alongside data from other sectors. This enhances the utility of Energy System Data.

⁴¹ https://www.ofgem.gov.uk/sites/default/files/docs/2020/07/ed2_ssmc_overview.pdf

DBP Guidance and DSAP Guidance, and where investment during the price control would enable or enhance compliance with the guidance documents.

- 1.38 The RIIO-ED2 SSMD, Draft Determinations⁴², and Final Determinations⁴³ have allowed licensees and other stakeholders to comment on the proposed decisions over the past 2 years, with significant support for the position. Stakeholders agreed with Ofgem that the Digitalisation licence obligation (SpC 9.5) should be consistent across all network licensees, to ensure that Energy System Data was treated with the same approach by all network licensees.
- 1.39 On 3 February 2023, we published our decision on the proposed modifications to the RIIO-2 Electricity Distribution licences⁴⁴. The Digitalisation licence obligation (SpC 9.5) was included in this document, which formally requires Electricity Distribution licensees to follow DBP Guidance and DSAP Guidance. This means that Electricity Distribution licensees have joined Gas Transmission, Gas Distribution, and Electricity Transmission licensees in being required to comply with DBP Guidance and DSAP Guidance. In this consultation, we are proposing to insert the relevant references to Electricity Distribution licensees. Please see appendices 1 and 2 for these references.
- 1.40 This is an important step to ensure our approach to Digitalisation is consistent across all network licensees. An additional purpose of requiring compliance with DBP Guidance and DSAP Guidance, is to ensure that the overall national energy system is designed and operated in a way that is in harmony with the wider digitalised ecosystem. To achieve this, we will need to expand the requirement to comply with these guidance document over the coming years.
- 1.41 In our Call for Input on Data Best Practice Guidance⁴⁵, we signposted our intent to expand compliance with DBP Guidance beyond network licensees. This was favourably received by respondents, however, we are not proposing to introduce this requirement to any other energy sector participants at this time. Organisations may adhere to the guidance documents voluntarily if they choose to do so.

⁴² <https://www.ofgem.gov.uk/publications/riio-ed2-draft-determinations>

⁴³ <https://www.ofgem.gov.uk/publications/riio-ed2-final-determinations>

⁴⁴ <https://www.ofgem.gov.uk/publications/decision-proposed-modifications-riio-2-electricity-distribution-licences>

⁴⁵ <https://www.ofgem.gov.uk/publications/call-input-data-best-practice>

Metadata and open data licensing standards

1.42 In chapter 3 of this document, we identified divergence amongst licensees in relation to key data standards and interoperability, highlighted to us through ongoing industry engagement and through our Call for Input on DBP. We see this divergence as relating to two issues.

- A lack of certainty in the DBP principles, leading to licensees interpreting the principles differently and diverging in their approaches to compliance.
- Limited progress by industry developing standards to enable interoperability. This leads to organisations developing their own products and services, which are not interoperable.

1.43 To address point 2 of the above, we are proposing to implement a common Metadata standard and a common open data licence through DBP Guidance.

Metadata standard

Metadata in DBP Guidance

1.44 The existing version of DBP Guidance has two key principles relating to Metadata usage. Principle 2 requires licensees to use common terms within Data Assets, Metadata and supporting information. Principle 3 requires licensees to describe data accurately using industry standard Metadata.

1.45 The application of principles 2 and 3 should enable greater discoverability of Data Assets and allows Data Users to better utilise licensees Data Assets for public benefit.

Industry practices

1.46 Our internal review on the implementation of DBP Guidance highlighted some positive developments on interoperable standards, particularly the development of the Common Information Model⁴⁶, the standardisation of Data Assets through the National Underground Asset Register program⁴⁷, and the development of the National Energy Systems Map⁴⁸.

⁴⁶ <https://www.ofgem.gov.uk/publications/common-information-model-cim-regulatory-approach-and-long-term-development-statement>.

⁴⁷ <https://www.gov.uk/guidance/national-underground-asset-register-nuar>.

⁴⁸ <https://www.energynetworks.org/newsroom/new-digital-energy-system-map-shows-the-power-potential-of-energy-digitalisation>.

- 1.47 Whilst use-case driven adoption of common standards is a positive development for the sector, we consider that further development and adoption of use-case agnostic, building-block standards that enable interoperability such as common Metadata standards and Open Data Licences is needed.
- 1.48 We have seen little evidence of common terms being applied to Metadata, and limited development of an industry standard for Metadata. Licensees have committed significant resource to the implementation of Data Best Practice, including significant change programs to implement new products and services, but discussions on interoperable industry standards have not developed as quickly. We note the Energy Networks Association's (ENA) Data and Digitalisation Steering Group (DDSG) are in the process of establishing a workstream looking at common standards, but the outputs and timelines for implementation from this workstream are not yet defined.
- 1.49 In our Call for Input on Data Best Practice some respondents, including some of those operating under DBP Guidance, requested that Ofgem identify and prescribe a common Metadata standard. Respondents highlighted the benefits to consumers of having common datasets defined and data shared according to these standards.
- 1.50 As industry may take some time to develop Metadata standards, and the responses to our Call for Input suggest the need to prescribe a Metadata standard, we consider that the conditions are appropriate for Ofgem to intervene.

Proposed decision

- 1.51 We are proposing to introduce the requirement for licensees obligated under DBP Guidance to use Dublin Core⁴⁹ as their Metadata standard.
- 1.52 In the DBP Guidance Supporting Information document, we identify the Dublin Core Metadata standard as a well-established standard for structuring Metadata. Dublin Core is a well-established standard for describing datasets and has many active users across several domains including the energy sector. Many of the elements of Dublin Core are straightforward to populate either manually or through an automated process to ensure Metadata is up to date.
- 1.53 The sector-agnostic nature of Dublin Core may present some implementation challenges in the energy sector but, as some licensees already utilise Dublin Core

⁴⁹ [DCMI: Home \(dublincore.org\)](https://dublincore.org/)

and are already successfully compliant with this proposed requirement, we think these challenges can be overcome. A sector-agnostic standard enables interoperability between sectors, a key aim of DBP Guidance.

- 1.54 Introduction of Dublin Core would allow Industry to provide consistent and understandable Metadata to Data Users and make this Metadata interoperable across the energy sector and other sectors and organisations that utilise Dublin Core.
- 1.55 In the future, industry may wish to develop a Metadata standard that is more specialised to the energy sector than Dublin Core. In that situation, we may update DBP Guidance to require the use of the industry-developed Metadata standard instead of Dublin Core, after considering the trade-off between specialisation and interoperability between sectors.
- 1.56 We have updated principle 3 in Appendix 1 to show our proposed change. Principle 3 is the most appropriate principle to include this requirement, as it considers the standardisation of Metadata across the industry.

Question 3: What are your views on our proposal to require the use of Dublin Core as the Metadata standard for companies obligated under DBP Guidance?

Question 4: If you do not agree with this proposal, are there alternative Metadata standards that should be utilised by licensees instead?

Question 5: If you are a licensee required to comply with DBP Guidance, can you provide a timescale for the implementation of the proposal to adopt Dublin Core as your Metadata standard?

Open data licensing

- 1.57 The sharing of a Data Asset using an open data licence⁵⁰ allows for simplified sharing, distribution, and re-use of an open Data Asset. An open data licence also provides clarity on how a Data User can use a specific asset, thereby reducing barriers to data sharing.
- 1.58 By establishing a common, interoperable, open data licence across licensees, Data Users can more easily utilise licensees' Data Assets and combine Data

⁵⁰ An open data licence is a data sharing agreement that places very few restrictions on what a Data User can do with the Data Asset being shared under the licence. These restrictions are usually; 1) giving reference to the Data Custodian, or 2) sharing any content or data derived from the original Data Asset under the same licence.

Assets across licensees. More efficient use of Data Assets will enable licensees, and Data Users, to react to the rapid changes we expect to see on the journey to net zero. This efficiency should lead to sector-wide cost reductions and consumer value. A common open data licence would give Data Users certainty over access and use to all Data Assets classified as Open Data by licensees.

Open data licensing in DBP Guidance

- 1.59 Principle 8 of DBP Guidance requires that licensees ensure Data Assets are interoperable with Data Assets from other licensees (and the wider GB landscape). We consider common open data licences to be an important aspect of interoperability, as we set out in the DBP Guidance supporting information document.
- 1.60 Principle 11 of DBP Guidance requires that licensees treat Energy System Data as Presumed Open and subject it to Open Data Triage. This process enables licensees to understand which of their Data Assets can be treated as Open Data. Once assets have been triaged and classified as Open Data, an open data licence allows for the effective sharing of the Data Asset.

Industry practices

- 1.61 We have observed limited use of open data licences by licensees, and no common open data licence has emerged from industry collaboration. We note the DDSG is in the process of establishing a workstream looking at data licensing, but the outputs and timelines for implementation from this workstream are not yet defined.
- 1.62 Our internal review on the implementation of DBP Guidance highlighted inconsistencies in application of open data licences, with different licensees using different open data licences and some not using open data licences at all.
- 1.63 In response to our Call for Input on Data Best Practice some respondents, including some of those operating under DBP Guidance, requested that Ofgem identify and prescribe a common open data licence. Respondents highlighted the benefits to consumers of having clarity on the conditions on use of Open Data in the energy sector.
- 1.64 As industry may take some time to develop a common open data licence, and the responses to our Call for Input suggest the need to prescribe a common open data licence, we consider that the conditions are appropriate for Ofgem to intervene.

Proposed decision

- 1.65 We are proposing to introduce the requirement for licensees obligated under DBP Guidance to use the latest version, or a subsequent iteration, of the Creative Commons Attribution Licence⁵¹, or the latest version of the Open Government Licence⁵².
- 1.66 In the DBP Supporting Information document, we had previously identified the Creative Commons Attribution Licence and the Open Government Licence as well-established open data licences.
- 1.67 The Creative Commons Attribution Licence is an internationally recognised standard and is used across the energy sector and beyond. The Open Government Licence (OGL) is an attribution licence that covers both copyright and database right which is mainly of use in the UK public sector but can be applied to non-public sector Data Assets. These two licences are interoperable, as explicitly stated in the OGL 3.0 Licence.
- 1.68 By requiring licensees to utilise these commonly recognised licences, our proposal will enable Data Users from inside and outside the energy sector to understand their rights when utilising Data Assets from licensees.
- 1.69 Adopting these sector-agnostic licences should allow for greater data sharing and utilisation across sectors. This is crucial to our proposed decision, as it is expected that the energy sector will require greater integration with other sectors if the UK is to meet its net zero goals.
- 1.70 In the future, industry may wish to develop an open data licence that is more specialised to the energy sector than either of the proposed licences. In that situation, we may update DBP Guidance to require the use of the industry-developed open data licence in addition to the proposed licences, after considering the trade-off between specialisation and interoperability between sectors.
- 1.71 We have updated principle 11 in Appendix 1 to show our proposed change. Principle 11 is the most appropriate principle to include this requirement, as it considers the triaging of Data Assets and their classification as Open Data.

⁵¹ <https://creativecommons.org/licenses/by/4.0/>.

⁵² <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>.

Question 6: What are your views on our proposal to require the use of the Creative Commons Attribution Licence or the Open Government Licence as the standard open data licence for companies obligated under DBP Guidance?

Question 7: If you do not agree with this proposal, can you suggest alternative open data licences to be utilised as a common open data licence?

Question 8: If you are a licensee required to comply with DBP Guidance, can you provide a timescale for the implementation of the proposal to adopt the Creative Commons Attribution Licence or the Open Government Licence as your open data licence?

Data Catalogue

Discoverability of Data Assets

- 1.72 One of the founding principles of DBP Guidance was to improve the discoverability and utilisation of network Data Assets. Greater understanding of the state of the energy networks leads to more efficient planning, building, and operation of the energy system.
- 1.73 We have seen improvements in the discoverability of network data assets, such as through the development of heat maps by the electricity distribution licensees, or through the use of Open Data Platforms.

Industry practices

- 1.74 Our review of the existing implementation of DBP Guidance found that some licensees see fewer requests for their Data Assets than other licensees. The review also found that those licensees who received fewer requests also had a lower level of visibility of their Data Assets. We consider that increasing visibility of licensees' Data Assets would result in a greater number of data requests, which in turn should lead to greater utilisation of network Data Assets. Greater utilisation of network Data Assets should lead to sector-wide cost reductions and more efficient planning, building, and operation, of the energy system.
- 1.75 It is our assessment, that the energy system is losing out on significant benefits through a lack of discoverability of network Data Assets.
- 1.76 Our review of the implementation of DBP Guidance suggests that licensees are waiting for Data Users to request access to specific Data Assets rather than proactively improving the discoverability of their Data Assets. It has become clear

that, particularly in the gas sector, that there are significant number of Data Assets which Data Users have no visibility of.

- 1.77 These Data Assets may, when in the hands of Data Users, provide value to licensees, end-consumers, stakeholders, or the Public Interest. 'Hackathons', including those held by Ofgem⁵³, have shown the value in making previously inaccessible Data Assets open to Data Users and capturing their insights. Licensees could, for example, increase the efficiency of the connections process by making connections data available to Data Users who can then cross-reference with other industry Data Assets.

Proposed decision

- 1.78 We are proposing to require licensees to create and publish a Data Catalogue, in a public location available to all their Data Users, to improve the discoverability of their Data Assets.
- 1.79 A Data Catalogue is an informative and searchable inventory of all Data Assets for which the licensee is the Data Custodian⁵⁴. This allows users to identify and search for Data Assets, including any Metadata associated with the Data Assets.
- 1.80 We are aware of some licensees creating or having created a Data Catalogue. Licensees with existing Data Catalogues should ensure their Data Catalogue utilises the Dublin Core Metadata Standard.
- 1.81 The use of Data Catalogues is widespread in digitalised sectors and is a useful tool to increase the internal and external utility of an organisation's Data Assets. Data quality metrics and validation can be integrated into a Data Catalogue and automated, improving the licensee's efficiency of data quality processes.
- 1.82 Our proposal to introduce a requirement for the use of a Data Catalogue is intended to improve the discoverability and utility of licensees' Data Assets. When paired with the use of the Dublin Core Metadata Standard, visibility of energy network Data Assets should be vastly improved. Data Users will be able to view the Data Catalogues of all licensees, structured in the same format using Dublin Core, and understand the complete suite of network Data Assets available to them from licensees.

⁵³ <https://www.ofgem.gov.uk/publications/climate-change-emergency-hackathon>.

⁵⁴ Adaptation of the IBM definition for a Data Catalogue - <https://www.ibm.com/uk-en/topics/data-catalog>.

1.83 We have updated principles 3 and 5 in Appendix 1 to show our proposed change. These principles are the most appropriate principles to include this requirement, as they consider the use of consistent Metadata and the discoverability of Data Assets respectively.

Question 9: What are your views on our proposal to require licensees to create and publish a Data Catalogue of their Data Assets?

Chapter 4: Energy System Data and its application

Section summary

This section provides clarity on two policy positions relating to the definition of Energy System Data provided within DBP Guidance. We propose to confirm the position to classify aggregated smart meter consumption data⁵⁵ as Energy System Data and propose that Distribution Network Operators share data related to the operation of flexibility markets.

Questions

- Q10. Do you agree with our proposed position on treating aggregated smart meter consumption data as Energy System Data?
- Q11. What are your views on our position that this Data Asset should be published in a non-interoperable fashion by 14 October 2023, if the appropriate security controls are in place?
- Q12. What are your views on our proposal that DNOs collectively determine an interoperable methodology by 28 February 2024, for publishing aggregated smart meter consumption data?
- Q13. What are your views on our proposal that licensees treat Data Assets associated with flexibility market operation as Presumed Open?
- Q14. Do you foresee any specific barriers to treating Data Assets associated with flexibility market operation as Open Data?

Background to changes

- 1.84 The positions we set out in this chapter are to provide clarity on the definition of Energy System Data, as set out in Data Best Practice Guidance (DBP Guidance).
- 1.85 These positions do not affect, or change, the principles of DBP Guidance in any way. They instead clarify a number of Data Assets as Energy System Data, which requires the licensee to treat the Data Assets as Presumed Open.

⁵⁵ We define smart meter consumption data as the data collected by DNOs as set out in their Data Privacy Plans.

Aggregated smart meter data

- 1.86 We are proposing to confirm our minded-to position from the Call for Input on Data Best Practice⁵⁶ that aggregated smart meter consumption data should be treated by licensees as Energy System Data.
- 1.87 We also propose that the Distribution Network Operators (DNOs) treat their aggregated smart meter consumption Data Asset(s) using Open Data Triage and share this Data Asset(s) publicly by 14 October 2023 in a manner that protects consumer privacy. We propose that DNOs collectively develop a methodology for aggregation, and sharing, of an interoperable smart meter consumption Data Asset by 28 February 2024.

Background

- 1.88 Consumption data from smart meters constitutes a valuable resource to the energy system and beyond. Access to, and utilisation of, this data would provide opportunities for a number of organisations within the energy sector including; DESNZ, Ofgem, academics, organisations with an interest in localised energy consumption, and those organisations who undertake modelling of electricity demand and/or vulnerability.
- 1.89 In our Call for Input for Data Best Practice, we highlighted the range of industry voices calling for open access to aggregated smart meter consumption data, including the Energy Digitalisation Taskforce⁵⁷, the Public Interest Advisory Group on access to smart meter energy data⁵⁸(PIAG), and the findings of the Modernising Energy Data Applications innovation program⁵⁹. These reports highlight the benefit of increasing access to aggregated smart meter consumption data, including:
- Innovation opportunities for existing market participants leading to stronger GB energy markets;
 - Greater visibility of demand across distinct sections of the distribution network;

⁵⁶ <https://www.ofgem.gov.uk/publications/call-input-data-best-practice>.

⁵⁷ <https://es.catapult.org.uk/news/energy-digitalisation-taskforce-publishes-recommendations-for-a-digitalised-net-zero-energy-system/>.

⁵⁸ PIAG-phase-2-final-report.pdf (cse.org.uk).

⁵⁹ <https://es.catapult.org.uk/report/modernising-energy-data-applications-learnings-and-recommendations/>.

- Development of machine-learning algorithms that model aggregated demand profiles across different time periods; and
 - Development of tools that utilise consumption data to improve efficiency of network planning and operation.
- 1.90 As with any publicly available Data Asset, there is also an unquantifiable potential value in making aggregated smart meter consumption data openly available. With access to this Data Asset, organisations may build products and services not previously considered by Ofgem, Government, network licensees or industry. The unlocking of this unquantifiable value is key to our principle of Presumed Open.
- 1.91 Disaggregated smart meter consumption data is rightly protected by the necessary data privacy and security requirements put into place to protect consumers' personal information, as set out in the Data Access and Privacy Framework (DAPF)⁶⁰. The DAPF is a set of obligations that govern access to disaggregated smart meter consumption data. These obligations include GDPR⁶¹, Standard Licence Condition 10A of the Electricity Distribution licence, and the provisions on access set out in the Smart Energy Code⁶².
- 1.92 We are satisfied that the position set out in our Call for Input is compliant with the DAPF and wider consumer protection legislation and regulation.
- 1.93 The DAPF sets out 3 conditions required for DNOs to access smart meter consumption data:
- The data must only be used for regulated purposes;
 - DNOs must submit Data Privacy Plans (DPPs) setting out how they will access and aggregate the data and what purposes they will use the data for, and;
 - That DPPs are approved by Government/Ofgem. DNOs are currently collecting, aggregating, and utilising smart meter consumption data as set out in their DPPs.
- 1.94 The proposal, as set out in the Call for Input on Data Best Practice, satisfies the DAPF in the following way. 1) Compliance with Data Best Practice is a regulated purpose, 2) we propose to require DNOs to submit revised DPPs detailing this

⁶⁰ <https://www.gov.uk/government/publications/smart-metering-implementation-programme-review-of-the-data-access-and-privacy-framework>.

⁶¹ <https://ico.org.uk/for-organisations/guide-to-data-protection/guide-to-the-general-data-protection-regulation-gdpr/>

⁶² <https://smartenergycodecompany.co.uk/>

new purpose for use of the Data Asset, and 3) we will assess the revised DPPs in line with existing privacy legislation.

- 1.95 DESNZ, as part of the Net Zero Innovation Portfolio, recently published their innovation opportunity “Smart Meter Data Repository Competition”, which aims to provide evidence to policymakers on the technical and commercial feasibility of a Smart Meter Data Repository. This highlights the intent within government and industry to provide access to smart meter consumption data.
- 1.96 We note that the findings from the project could signal a possible long-term solution to smart meter consumption data access, but there is no certainty that a repository will be found to be viable⁶³. If viable, the implementation of a repository could provide sufficient value to the market to override the need for DNOs to share aggregated smart meter consumption data publicly. We consider that the low marginal cost of DNOs publishing aggregated smart meter consumption data, and the interim period of high value of this Data Asset, justifies our proposal to implement the Call for Input position.
- 1.97 In Ofgem’s decision to introduce market-wide half-hourly settlement (MHHS)⁶⁴, we stated our intent to make disaggregated smart meter consumption data available to industry in a manner compliant with the relevant data protection rules. We consider this should stimulate innovation in value-added services and other new business models (for instance, flexibility offerings such as demand-side response and P2P trading, as well as opening up the market to allow parties to provide better tariff comparisons and potential use by third party intermediaries).
- 1.98 We added that making the data available to academics and policy makers, also in a manner compliant with data protection rules (for instance, appropriately aggregated and/or anonymised), should improve understanding and public policy making in the future.
- 1.99 Ofgem has subsequently published decisions on the reference architecture for MHHS⁶⁵ and on the future governance of that architecture via the Balancing and Settlement Code.⁶⁶ In these decisions we have made clear that, without access to

⁶³ <https://www.gov.uk/government/publications/smart-meter-energy-data-repository-programme>.

⁶⁴ [Electricity Retail Market-wide Half-hourly Settlement: Decision and Full Business Case | Ofgem](#), April 2021.

⁶⁵ [Decision on the reference architecture of the Market-Wide Half-Hourly Settlement Target Operating Model | Ofgem](#), December 2021.

⁶⁶ [Decision on the governance, funding and operation of an Event Driven Architecture for Market-Wide Half-Hourly Settlement | Ofgem](#), April 2022, pages 9-10.

the granular half-hourly smart meter consumption data held by that architecture, innovation will not occur at the scale and pace necessary to meet the UK's net zero targets.

- 1.100 Our position remains that third party access to that data must be provided on fair and non-discriminatory terms and that use of the data itself should be available on the same basis to ensure a level playing field in contestable markets, such as the market for value-added services. This should all be delivered in a manner consistent with DBP Guidance.

Responses to our Call for Input

- 1.101 We received 15 responses to our questions on the minded-to position. These respondents included network licensees, consumer advocate groups, code managers, organisations with expertise in digital transformation, and private individuals. The respondents were broadly in support of our position to widen access to smart meter data. Non-network licensee respondents were keen to see this happen as quickly as possible whilst protecting consumer privacy, in line with the PIAG recommendations.
- 1.102 Non-DNO network licensees were keen to see this Data Asset shared, as they believed it could help them with either system planning or future network development. Some Gas Distribution Networks (GDNs) saw this as a better route to accessing smart meter consumption data than establishing a similar framework to the DPPs.
- 1.103 DNOs were broadly supportive of the minded-to position but were more focused on the details associated with sharing the Data Asset. Several DNOs highlighted the need to update their Data Privacy Plan (DPP) to allow the sharing of this Data Asset.

Proposed decision

- 1.104 We are proposing to confirm our minded-to position from the Call for Input on Data Best Practice⁶⁷ that aggregated smart meter consumption data should be treated by licensees as Energy System Data.
- 1.105 This requires licensees, as set out in principle 11 of DBP Guidance, to subject aggregated smart meter consumption data to Open Data Triage and mitigate any identified sensitivities before sharing as Open Data. As part of Open Data Triage,

⁶⁷ <https://www.ofgem.gov.uk/publications/call-input-data-best-practice>.

licensees are required to assess Data Assets for sensitivities that relate to people's rights to personal privacy. We expect DNOs to consider this sensitivity in depth when undertaking Open Data Triage for aggregated smart meter consumption data. Given the strategic importance of this Data Asset to the wider industry, as highlighted by PIAG, we think this Data Asset should be shared as Open Data as soon as reasonably practicable.

- 1.106 We must, however, balance the need for haste with the need for this Data Asset to be published in an interoperable, secure fashion. Standardisation of this Data Asset would allow Data Users to create a GB-wide version of this Data Asset, increasing its utility. We must also ensure that this Data Asset is shared in a secure manner, so that consumers' privacy is protected.
- 1.107 To achieve the above objectives of speed, interoperability, and security, we are proposing that the DNOs, triage their aggregated smart meter consumption Data Asset, as set out in principle 11 of DBP Guidance, and make this Data Asset available on their website or open data platform. We are proposing that DNOs publish this Data Asset by 14 October 2023, as we consider this is a reasonable amount of time to triage, prepare, and publish the Data Asset. DNOs will also need to submit revised DPPs to Ofgem in the interim to enable this data sharing.
- 1.108 Licensees are required by principle 8 of DBP Guidance to enable interoperability between their Data Assets and other licensees' Data Assets. We consider that this requirement should be applied to the aggregated smart meter consumption Data Asset.
- 1.109 We are proposing that DNOs collectively determine and submit an interoperable methodology for publishing aggregated smart meter consumption data. We are proposing that this methodology is submitted to Ofgem by 28 February 2024, as we consider this a reasonable length of time for DNOs to collaborate and develop a new methodology. Under this proposal, DNOs would each submit a revised Data Privacy Plan to confirm any new methodology for aggregation they will be utilising, or DNOs are welcome to collectively produce a single Data Privacy Plan that covers all 14 network areas.

Question 10: Do you agree with our proposed position on treating aggregated smart meter consumption data as Energy System Data?

Question 11: What are your views on our position that this Data Asset should be published in a non-interoperable fashion by 14 October 2023, if the appropriate security controls are in place?

Question 12: What are your views on our proposal that DNOs collectively determine an interoperable methodology by 28 February 2024, for publishing aggregated smart meter consumption data?

Data relating to flexibility market operation

1.110 We observe that current availability of flexibility market data is disorganised or non-existent. We consider this lack of transparency in flexibility markets may be hindering the development of, and competition in, these markets.

1.111 We consider the lack of transparency also affects system operation, with poor visibility between the Electricity System Operator (ESO), Transmission Operators, and DNOs on system operations. A digital, interconnected energy system requires system operation to be undertaken with appropriate transparency. Better functioning markets and system operation will enable the UK to reach net zero at lower cost.

1.112 RIIO-ED2 presents a step-change in the use of flexibility to defer, or minimise, the need for reinforcement of the electricity distribution networks. DNOs are being incentivised to utilise flexible solutions, driven by greater data availability on the LV network.

1.113 DNOs currently operate flexibility tenders for network management, often through a 3rd party, non-regulated, independent market operator. We consider, where these flexibility markets are being operated on behalf of licensees, that Data Assets generated through flexibility market operation are Data Assets for which the licensee is the Data Custodian.

1.114 We expect these Data Assets to include, but not be limited to.

- Bids submitted for flexibility market tenders;

- Bids accepted for flexibility market tenders; and
- Utilisation of assets contracted within flexibility markets.

1.115 This means that Data Assets generated through flexibility market operation would be treated as Presumed Open. Publishing market operation Data Assets has precedent, as the ESO publishes Data Assets related to operation of its ancillary services markets through its Open Data Portal⁶⁸.

1.116 We consider that Data Assets relating to flexibility trading in the sector should be open and transparent, to encourage participation and growth in these markets. Availability of these Data Assets would give transparency to the price discovery process in flexibility markets and allows external parties to assess the efficiency and utilisation of flexibility markets. We expect greater scrutiny of these markets to enable more efficient outcomes in the Public Interest.

Proposed decision

1.117 We are, therefore, proposing to require licensees to treat Data Assets associated with flexibility market operation under Open Data Triage and ultimately publish these Data Assets (with appropriate sensitivities mitigated⁶⁹).

1.118 We consider it acceptable for licensees to request Market Operators to publish this information through their platforms, but the availability of this information must still be signposted from the licensee's website/open data platform/data catalogue as the licensee bears ultimate responsibility as the Data Custodian.

1.119 The ESO, in the operation of the Demand Flexibility Service⁷⁰, publishes market data on bids on the day bids are accepted/rejected. Data showing the utilisation of assets is published as soon as settlement data is obtained for the event. Under our proposal, we would expect a similar level of data availability from DNOs and, where used, independent market operators.

⁶⁸ <https://data.nationalgrideso.com/data-groups/ancillary-services>

⁶⁹ For example, it would be commercially sensitive to publish contracted values for markets whilst bidding is still taking place. Contracted values could be published after-market closure, which mitigates these sensitivities.

⁷⁰ <https://www.nationalgrideso.com/industry-information/balancing-services/demand-flexibility>

Question 13: What are your views on our proposal to require licensees to treat Data Assets associated with flexibility market operation as Presumed Open?

Question 14: Do you foresee any specific barriers to treating Data Assets associated with flexibility market operation as Open Data?

1.120 Where flexibility markets are being operated independently of licensees, for example Smart Local Energy Systems, we see benefits in the publishing of Data Assets generated through the operation of these flexibility markets. These companies are not regulated under Data Best Practice, and we cannot compel them to publish these Data Assets, but we consider that having all Data Assets related to the operation of flexibility markets being open and accessible would be beneficial for GB consumers.

Appendices

Index

Appendix	Name of appendix	Page no.
1	Track changes Data Best Practice Guidance v1.1 for consultation	See attachment
2	Track changes Digitalisation Strategy & Action Plan Guidance v1.1 for consultation	See attachment
3	Track changes Data Best Practice Supporting Information v1.1 for consultation	See attachment
4	Track changes Digitalisation Strategy & Action Plan Supporting Information v1.1 for consultation	See attachment
5	Privacy notice on consultations	39

Appendix 5 – Privacy notice on consultations

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer

The Gas and Electricity Markets Authority is the controller, (for ease of reference, “Ofgem”). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

4. With whom we will be sharing your personal data

We may share consultation responses with DESNZ and Innovate UK

5. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for six months after the project, including subsequent projects or legal proceedings regarding a decision based on this consultation, is closed.

6. Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data

- get your data from us and re-use it across other services
- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at <https://ico.org.uk/>, or telephone 0303 123 1113.

7. Your personal data will not be sent overseas

8. Your personal data will not be used for any automated decision making.

9. Your personal data will be stored in a secure government IT system.

10. More information

For more information on how Ofgem processes your data, click on the link to our "[ofgem privacy promise](#)".