

Consultation

Consultation on Data Best Practice guidance and Digitalisation Strategy and Action Plan guidance

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Response deadline: 24/06/21

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We are consulting on: Data Best Practice (DBP) guidance and Digitalisation Strategy & Action Plan (DSAP) guidance. We are also publishing Supporting Information which is aimed at assisting practitioners to comply with both the DBP guidance and DSAP guidance.

Both sets of guidance will be associated documents that RIIIO-2 licensees (Transmission networks and Gas Distribution companies) must comply with. This consultation is also relevant to stakeholders of our RIIIO-ED2 price control as we will use the guidance to inform our determinations for RIIIO-ED2 licensees (Electricity Distribution companies). We will consult separately on the design of the RIIIO-ED2 price controls.

As part of this consultation, we are proposing to establish DBP guidance and DSAP guidance as Ofgem's data and digitalisation standards, with these to be followed by relevant licensees and by Ofgem itself.

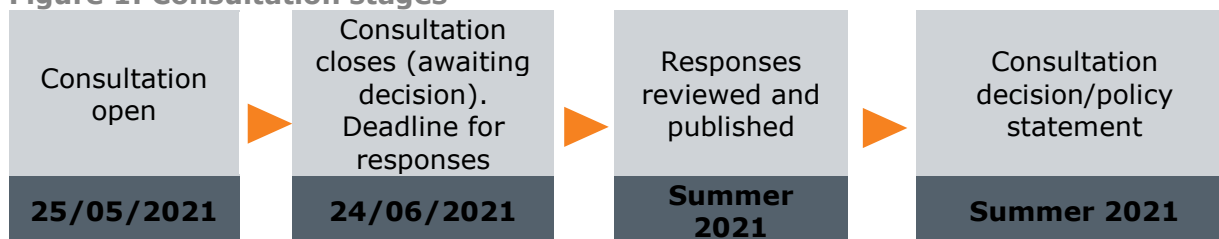
This consultation is also seeking stakeholder views relating to the design and scope of our upcoming review of data and digital monopolies in the energy sector.

Our overall aim through this work is to improve the digitalisation of the energy system and ensure better use of data to create benefits for consumers and the Public Interest. Benefits will include: (i) a more efficiently planned, maintained and operated energy system; (ii) greater visibility of, access to and ease of use of information and insight about the energy system; and (iii) improved integration between the energy system with other national infrastructure as well as products and services from other sectors.

Consultation stages

Outline the key stages the consultation will progress through to get to a final decision.

Figure 1: Consultation stages



How to respond

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.

We've asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.

We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations.

Your response, data and confidentiality

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.

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 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.

If the information you give in your response contains personal data under the General Data Protection Regulation 2016/379 (GDPR) and domestic legislation on data protection, 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 5.

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.

General feedback

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:

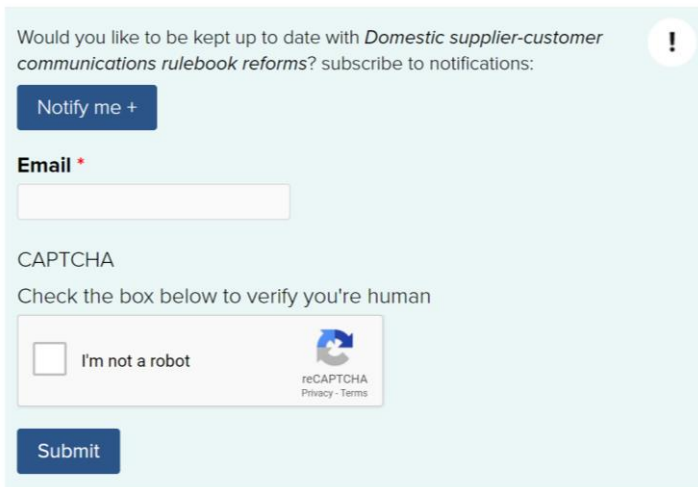
1. Do you have any comments about the overall process of this consultation?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Were its conclusions balanced?
5. Did it make reasoned recommendations for improvement?
6.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

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

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Introduction

What are we consulting on?

1.1. We are consulting on two sets of guidance relating to: (1) complying with Data Best Practice (DBP) and (2) publishing a Digitalisation Strategy and Action Plan (DSAP). Subject to this consultation, we will apply these two sets of guidance in the following ways:

- as the associated documents to the RIIO-2 Digitalisation licence obligations (see Special Condition 9.5 for Electricity Transmission, Gas Transmission and Gas Distribution and Special Condition 2.11 for the Electricity System Operator¹);
- to help inform the proposals we will make for the licence obligations that will apply to Electricity Distribution networks as part of the upcoming RIIO-ED2 price controls²;
- to provide further clarity to ED2 participants relating to our expectations as explained in the Business Plan Incentives³; and
- as our data and digitalisation standards, as stated in our Forward Work Programme (FWP) 2021/22 decision⁴, with these to be followed by licensees⁵ and by Ofgem itself.

1.2. DBP guidance is designed to ensure data is treated as an asset and used effectively for the benefit of consumers and the Public Interest. It is a principles-based set of guidance which provides guidance on the quality, accuracy and accessibility of data, and its requirements are not specific to the energy sector. It includes the principle that “data assets” must be treated as ‘presumed open’⁶ which means that data must be made available for all people to use, unless the organisation responsible for handling the data provides evidence of a specific reason for needing to reduce its availability (e.g. to protect individuals’ rights to

¹ 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>

² See the RIIO-ED2 Sector Specific Methodology overview document, paragraph 5.4:

<https://www.ofgem.gov.uk/publications-and-updates/riio-ed2-sector-specific-methodology-decision>

³ See the RIIO-ED2 Business Plan Guidance, pages 22-26

https://www.ofgem.gov.uk/system/files/docs/2021/04/riio-ed2_business_plan_guidance_-_april_2021.pdf

⁴ See the Activities section of Point 6: <https://www.ofgem.gov.uk/publications-and-updates/forward-work-programme-202122>

⁵ Licensees will be determined on a cases-by-cases basis by The Authority in relation to its legal powers to regulate the energy sector. In all cases The Authority will follow appropriate procedures before deciding whether to apply the data and digitalisation standard as an obligation on an entity.

⁶ ‘Presumed Open’ data is defined in the Energy Data Taskforce report: [A strategy for a modern digitalised energy system](#)

privacy). By complying with this guidance organisations will enable the full benefits of data to be unlocked for consumers.

1.3. Our DBP guidance is available in full as an appendix to this consultation⁷. The DBP principles are summarised below:

1. Identify the roles of stakeholders of Data Assets
2. Use common terms within Data Assets, Metadata and supporting information
3. Describe data accurately using industry standard Metadata
4. Enable potential Data Users to understand Data Assets by providing supporting information
5. Make Data Assets discoverable for potential Data Users
6. Learn and understand the needs of current and prospective Data Users
7. Ensure data quality maintenance and improvement is prioritised by Data User needs
8. Ensure Data Assets are interoperable with Data Assets from other data and digital services
9. Protect Data Assets and systems in accordance with Security, Privacy and Resilience best practice
10. Store, archive and provide access to Data Assets in ways that ensure sustained benefits
11. Treat all Data Assets, their associated Metadata and software scripts used to process Data Assets as Presumed Open

1.4. DSAP guidance defines regulatory requirements for transparency, stakeholder engagement and coordination with respect to an organisation's current and future products and services relating to data and digitalisation. These requirements are to be complied with when an organisation publishes its: (1) Digitalisation Strategy and (2) Digitalisation Action Plan. Any organisation working to publish a DSAP should, if currently obligated under their licence or not, do so using the most recently available guidance published by the Authority except where the Authority has stated otherwise. The DSAP guidance is also a principles-based set of guidance and, like the DBP guidance, is not specific to the energy sector.

1.5. The purpose of a Digitalisation Strategy is to share an organisation's understanding of its stakeholders' needs and the products and services required to meet those needs, all with an ultimate goal of creating consumer and Public Interest benefits. The purpose of a

⁷ See appendix 1

Digitalisation Action Plan is to show the progress an organisation is making toward delivering the work required to realise its Digitalisation Strategy.

1.6. The DSAP guidance is available in full on the Ofgem as an appendix to this consultation⁸. The DSAP principles are summarised below:

1. Prioritise providing benefits to the stakeholders who pay for the Products and Services as well as benefits that are in the Public Interest
2. Ensure Products and Services work towards a defined vision
3. Take full advantage of opportunities to deliver benefits early and to iterate improvements to Products and Services
4. Make it easy for stakeholders to understand the Products and Services, the status of their delivery and how to access them
5. Ensure visibility about the nature and status of actions in the Digitalisation Action Plan
6. Ensure there is shared understanding of success and performance is measured
7. Coordinate with the wider ecosystem of Products and Services

1.7. Lastly, we are also consulting to gain stakeholders' views on how we should design and scope our upcoming data and digital monopolies review, which will carry out later this year as part of our 2021/22 Forward Work Programme (FWP).

Context and related publications

1.8. All energy network companies that hold licences within our RIIO price controls published the first version of their Digitalisation Strategy in December 2019. In response to our feedback and request⁹, they updated their Digitalisation Strategy in December 2020 and published a Digitalisation Action Plan for the first time. Ofgem provides and maintains a list of web links to the latest versions of these DSAPs on our website¹⁰.

1.9. The design of our DBP guidance and DSAP guidance are 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:

⁸ See appendix 2

⁹ [Open letter](#) feedback from Ofgem about network companies' digitalisation strategies

¹⁰ Network DSAPs can be found on the Ofgem [website](#)

- The (retrospectively named) Modernising Energy Data (MED)¹¹ programme initiated the Energy Data Taskforce (EDTF) in November 2018, which published its report in June 2019 and made a series of recommendations that together are a strategy for a modern digitalised energy system¹²;
- In August 2019 Ofgem created and published an outline of the DBP guidance principles for the first time. We did this within our position paper on Distribution System Operation¹³;
- Ofgem published an update to our RIIO-2 business plan guidance in September 2019, within which we required energy network companies to each publish a Digitalisation Strategy (the DNOs are asked to voluntarily participate)¹⁴;
- Innovate UK procured support to develop detailed guidance from our DBP principles. This is carried out in collaboration with Ofgem and BEIS. The Energy Systems Catapult (ESC) were awarded the work and carried it out over the period November 2019 – January 2020. During this period the ESC hosted public workshops in collaboration with the MED programme;
- Energy network companies (including the voluntary participation by all DNOs) published the first version of their Digitalisation Strategies in December 2019;
- Ofgem provided feedback on the Digitalisation Strategies in an open letter in June 2020. We stated our intention to include compliance with DBP and the publication of DSAPs as licence obligations as part of the RIIO-2 and RIIO-ED2 price controls¹⁵;
- Ofgem issued the RIIO-2 Draft Determinations¹⁶ and RIIO-ED2 SSMD¹⁷ consultations in July 2020. DBP and DSAP licence obligations are included in the proposals;
- During August 2020 Ofgem held a series of bilateral feedback meetings with each energy network company, providing additional bespoke feedback about their Digitalisation Strategy;
- A draft of the DSAP guidance is published in November 2020 and Ofgem hosted workshops over November and December 2020 to gain stakeholder feedback on it for further development;¹⁸

¹¹ MED is 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>

¹² EDTF report: [A strategy for modern digitalised energy system](#)

¹³ [Ofgem position paper on Distribution System Operation](#) see page 27 for the principles

¹⁴ [RIIO-2 Business Plan Guidance](#)

¹⁵ [Open letter](#) feedback from Ofgem on network digitalisation strategies

¹⁶ RIIO-2 Draft Determinations core [document](#). DBP and DSAP part of 'Modernising Energy Data' (p27)

¹⁷ [RIIO-ED2 Sector Specific Methodology Consultation](#). DBP and DSAP part of 'Modernising Energy Data' (p47)

¹⁸ <https://www.ofgem.gov.uk/publications-and-updates/digitalisation-strategy-and-action-plan-guidance-workshops>

- RIIO-2 Final Determinations¹⁹ and RIIO-ED2 SSMD²⁰ consultation decisions were published by Ofgem in December 2020, confirming the inclusion of the licence obligations and stating that this present consultation on the guidance will follow;
- Ofgem published its FWP 2021/22 consultation in December 2020 stating that we would develop data and digitalisation standards²¹;
- Energy network companies each published a second version of their Digitalisation Strategies in December 2020, this time they also include a Digitalisation Action Plan;
- Ofgem published an update to the RIIO-ED2 Business Plan Guidance²² in February 2021, within which we set out our expectations for DNO's updating DSAP's and demonstrating their competency at complying with Data Best Practice; and
- Ofgem published its decision about its FWP 2021/22, confirming that we would consult over the DBP and DSAP guidance before establishing them as our data and digitalisation standards²³.

1.10. Within our RIIO-2 Final Determinations we required Transmission and Gas Distribution network companies to update their Digitalisation Strategy at least once every 2 years and its associated Digitalisation Action Plan at least once every 6 months. The deadlines for the next updates are as follows:

- A Digitalisation Strategy update must be published on or before March 31st 2022 and at least every 2 years after this date;
- A Digitalisation Action Plan update must be published on or before June 30th 2021 and at least every 6 months after this date (i.e. each subsequent 31st December and 30th June).

1.11. After we have made a decision following this consultation, Gas Transmission, Gas Distribution and Electricity Transmission companies will be required to comply with Data Best Practice guidance and Digitalisation Strategy and Action Plan guidance.

1.12. In the RIIO-ED2 SSMD we recommended that, until the beginning of RIIO-ED2, DNOs voluntarily adopt the DBP and DSAP licence obligations we created for the RIIO-2 price controls. We also set out minimum requirements in the Business Plan Guidance for DNOs,

¹⁹ [RIIO-2 Final Determinations](#) DBP and DSAP decision in the 'Modernising Energy Data' section (p29)

²⁰ [RIIO-ED2 Sector Specific Methodology Decision](#) DBP and DSAP decision in the 'Modernising Energy Data' section (p52)

²¹ See new activities in Point 7: <https://www.ofgem.gov.uk/publications-and-updates/forward-work-programme-202122-consultation#Point%207:%20data%20and%20digitalisation>

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

²³ See Activities section of Point 6: <https://www.ofgem.gov.uk/publications-and-updates/forward-work-programme-202122#Data%20and%20Digitalisation>

requiring them to demonstrate compliance with Data Best Practice and how they will continue to develop their DSAP. This is to help accelerate consistent progress towards the digitalisation of the energy system for the benefit of consumers. It will also help DNOs ensure that they are able to comply with any equivalent data licence obligations that we decide to introduce as part of the RIIO-ED2 price control, subject to the positions and decisions we adopt and take as part of the RIIO-ED2 consultation process. We will consult separately on those licence obligations as part of our determinations for RIIO-ED2, which will take effect in April 2023.

1.13. This consultation is one of our work packages from the MED programme. This work package and the overall work of the MED programme is relevant to wider initiatives, such as those of central government (for example: the National Data Strategy²⁴, the Data Standards Authority²⁵ and the activities of the Centre for Digital Built Britain²⁶). Our work on DBP and DSAP are part of this wider digitalisation agenda. We are learning from this wider programme of work and will use the feedback we receive in response to this consultation to help contribute to and progress these wider, related initiatives.

1.14. We have sought to develop DBP and DSAP openly with stakeholders. This has included publishing early drafts of the guidance as well as hosting a series of open workshops in 2019 and 2020 from the outset of the drafting processes. For the DSAP guidance we have also developed it in parallel with energy network companies publishing early versions of their DSAPs. Similarly for DBP, we have developed this in parallel to work such as the Energy Networks Association's development of an open data triage framework. Also, prior to this consultation, we have sought and gained advice about the content of our guidance from organisations including the Data Standards Authority²⁷, the Centre for Digital Built Britain²⁸, National Cyber Security Centre²⁹ and Gartner³⁰.

1.15. The potential for the wider application of the two sets of guidance has previously been stated either explicitly or implicitly (i.e., through references to the EDTF and the MED programme) in publications both by Ofgem and other organisations. These publications include:

²⁴ [National Data Strategy](#) from DCMS outline "the data opportunity" for the UK

²⁵ Data Standards Authority government [webpage](#)

²⁶ <https://www.cdbb.cam.ac.uk/>

²⁷ [Data Standards Authority](#)

²⁸ [Centre for Digital Built Britain](#)

²⁹ [National Cyber Security Centre](#)

³⁰ [Gartner](#)

- Ofgem’s electricity retail market-wide half-hourly settlement consultation³¹
- Ofgem’s approval of Elexon BSC modification P398: Increasing Access to BSC data³²
- Ofgem’s approval of Elexon BSC modification P390: Allowing extensions to ELEXON’s business and activities, subject to additional conditions³³
- Ofgem’s Switching Programme and Retail Code Consolidation: Proposed changes to licences and industry codes³⁴
- Ofgem’s key enablers for DSO programme of work and the Long Term Development Statement³⁵
- Ofgem’s position paper on Distribution System Operation: our approach and regulatory priorities³⁶
- Ofgem’s statutory consultation on the Post-2020 Smart Meter Rollout Reporting Requirements³⁷
- Ofgem’s Retail Energy Code Technical Specification Approach consultation³⁸
- Ofgem’s FWP 2021/22³⁹
- The Office for Zero Emission Vehicles (OZEV) consultation “The consumer experience at public electric vehicle charge points”⁴⁰
- The Centre for Data Ethics and Innovation’s report, the AI Barometer⁴¹
- The Department for Culture, Digital, Media and Sport’s National Data Strategy⁴²
- The BEIS 2020 Energy White Paper: Powering our net zero future⁴³

³¹ Electricity retail market-wide half-hourly settlement: [consultation](#)

³² Ofgem decision [document](#) for P398 modification

³³ Ofgem decision [document](#) for P390 modification

³⁴ [Switching Programme and Retail Code Consolidation: Proposed changes to licences and industry codes](#)

³⁵ [Key enablers for DSO programme of work and the Long Term Development Statement](#) cites Data Best Practice

³⁶ [Ofgem position paper on Distribution System Operation: our approach and regulatory priorities](#) cites Data Best Practice

³⁷ [Statutory Consultation on the Post-2020 Smart Meter Rollout Reporting Requirements](#)

³⁸ [REC Technical Specification Approach consultation](#) cites EDTF recommendations

³⁹ Ofgem [Forward work programme 2021/22 consultation](#) plans to develop data and digitalisation standards

⁴⁰ OZEV [consultation](#) cites work of Modernising Energy Data programme

⁴¹ CDEI AI Barometer: <https://www.gov.uk/government/publications/cdei-ai-barometer>

⁴² National Data Strategy response: <https://www.gov.uk/government/consultations/uk-national-data-strategy-nds-consultation/outcome/government-response-to-the-consultation-on-the-national-data-strategy>

⁴³ Energy White Paper <https://www.gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future>

1. Design approach of these guidance documents

Section summary

This section explains the format of the DBP guidance and DSAP guidance, together with the format of the Supporting Information. It also explains the status of the information provided in each.

1.16. The DBP guidance and DSAP guidance both adopt a principles-based approach to defining their requirements.

1.17. A principles-based approach will allow freedom to explore the specific solutions that best meets stakeholders' needs in the context of each specific application for data and digital services. We have chosen 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. As a result of that, we anticipate a need might emerge for us to use more prescriptive rules. We will consider the additional use of prescriptive data and digitalisation regulations as specific needs arise and evidence relating to consumer and Public Interest benefits require.

1.18. The DBP guidance, DSAP guidance and the Supporting Information are comprised of four main types of information:

Table 1: Structure of the DBP and DSAP guidance

Type of information	Comment
Principles	<p>The requirements that must be complied with.</p> <p>This is part of the guidance.</p> <p>Principles are restated among the Supporting Information.</p>
Explanations	<p>Descriptions of the Principles, including requirements for compliance.</p> <p>This is part of the guidance.</p> <p>Explanations are restated among the Supporting Information.</p>
Techniques	<p>Suggestions we think will help practitioners when complying with the Principles and 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 guidance or of the Techniques being used in practice by organisations.</p> <p>These are not part of the guidance.</p> <p>Examples are only included in the Supporting Information.</p>

1.19. The Principles and Explanations comprise the DBP and DSAP guidance. The Techniques and Examples are only included in the Supporting Information. The Supporting Information is not part of either the DBP guidance or the DSAP guidance. The Supporting Information is a service provided by Ofgem. The goal of this service is to provide signposting to useful resources; increase the visibility about communities of interest and to provide support on how to be compliant with the two sets of guidance.

1.20. As the Supporting Information is not part of the guidance, if Ofgem or stakeholder feedback identifies gaps or redundant information in the Supporting Information we may decide to make updates to the Supporting Information, without a consultation process. We

therefore propose to treat the Techniques and Examples information service as a “living document” that evolves over time and that sits alongside the guidance.

1.21. Given the diversity of work that can relate to data and digitalisation, we expect instances will occur where our Principles and Explanations will require compliance on topics for which we have not provided any Supporting Information about how this can be achieved. In such instances we will still require the Principles and Explanations to be fully complied with.

1.22. We will not make changes to the DBP or DSAP guidance (i.e. the Principles and Explanations), except where this follows appropriate consultation with stakeholders and in accordance with the relevant licence conditions.

1.23. Associated with this consultation are Appendix 1 and Appendix 2, which are the DBP guidance and DSAP guidance, respectively (i.e. the Principles and Explanations only) and, Appendix 3 and Appendix 4, which are the Supporting Information for DBP guidance and DSAP guidance, respectively. The Supporting Information restates the Principles and Explanations and additionally includes Techniques and Examples.

2. DBP and DSAP scope and content

Section summary

This section explains:

- the content that constitutes the DBP and DSAP guidance and Supporting Information and;
- the proposed scope of data assets that energy network companies must use in compliance with DBP.

Questions

Question 1: Do you have any recommended improvements to the Principles, Explanations, Techniques or Examples?

Question 2: Are there any other Principles and Explanations you believe should be included?

Question 3: Are there any additional Techniques or Examples you recommend we include?

Question 4: Do you agree with our treatment of data literacy and skills and of data governance as pre-requisites to compliance?

Question 5: Do you have a suggestion for improving our definition of Energy System Data and therefore the scope of data assets energy network companies must use in compliance with DBP?

Contents of the guidance

1.24. The content of the DBP and DSAP guidance is intended to ensure freedom to adopt the most efficient approach to digitalising products and services and developing data capabilities. It is also intended to ensure that this digitalisation always works to best serve consumers and the Public Interest, optimises for whole system benefits and aligns assets to operate in harmony with digitalised infrastructure and systems across the UK and global economy.

1.25. The purpose of introducing RIIO-2 (and anticipated RIIO-ED2) licence obligations, requiring compliance with DBP guidance and DSAP guidance, is to ensure the energy network (a part of the overall national energy system) is designed and operated in a way that is in

harmony with the wider digitalised ecosystem. This will better integrate the energy system with traditionally separate economic sectors, such as other utility networks, the built environment, the financial sector, and healthcare services.

1.26. The contents of the DBP guidance and DSAP guidance and the Supporting Information have been arrived at through open collaboration and research spanning across economic sectors. The breadth and depth of the topics covered means that the guidance and Supporting Information complement existing guidance from centres of excellence across different subject matter domains, for example the Information Commissioners Office (ICO) with respect to data privacy and the Open Data Institute (ODI) with respect to open data.

1.27. We have preferred using language in the DBP guidance and DSAP guidance that is not unique to energy networks or the energy sector. Our reason for doing this is to minimise future barriers of coordinating data and digitalisation investments and governing needs, such as regulation across different markets. The Supporting Information is deliberately selected from a variety of sectors, not just the energy sector.

1.28. The guidance is primarily an exercise in integration, joining together work that has been developed by numerous other organisations. For particular topics we have found a need for us (through the MED programme) to provide novel content, such as the codification of how to go about treating data assets as “presumed open” with an associated open data triage requirement, whose development we have carried out in partnership with the Energy System Catapult (ESC).

Question 1: Do you have any recommended improvements to the Principles, Explanations, Techniques or Examples?

Question 2: Are there any other Principles and Explanations you believe should be included?

Question 3: Are there any additional Techniques or Examples you recommend we include?

For all of these questions, if your opinion is that additional content needs to be included, we ask that you please provide your suggested content in the format of our guidance, i.e. Principle, Explanation, Techniques and Examples.

1.29. Neither the DSAP guidance or DBP guidance and associated Supporting Information themselves are intended to be a comprehensive how-to guides for achieving digitalisation and effective use of data assets; our goal from this information is only to set standards about topics that are relevant to a governing regulatory organisation, as it goes about its responsibilities for ensuring digitalisation and better use of data take place effectively.

1.30. We view data literacy and data skills as vital enablers to an organisation's ability to digitalise and improve its use of data. Where appropriate, our Supporting Information provides information relating to these topics; however, we have chosen not to include a dedicated Principle on the theme of data literacy and data skills in either set of guidance. We are treating these capabilities as implicit pre-requisites for an organisation to be able to meet the requirements of the Principles and Explanations in the guidance.

1.31. Similarly, we consider effective internal data governance to be a required enabler for compliance with the guidance. Some of our Principles do cover aspects of internal data governance needs (for example, the first Principle of the DBP guidance requires an organisation to "Identify the roles of stakeholders"). However, we have not intended to include Principles and Explanations on every aspect of internal data governance.

Question 4: Do you agree with our treatment of data literacy and skills and of data governance as pre-requisites to compliance?

Compliance with the guidance

1.32. The DBP guidance and DSAP guidance must be complied with by energy network companies as licence obligations (for a caveat regarding DNOs, see paragraph 1.12). This consultation is asking questions about the best approach to dealing with details relating to this compliance. Specifically, the exact content of the guidance and the scope of energy network company data that must comply with DBP guidance.

1.33. We envisage continued dialogue will be needed between Ofgem and energy network companies. This dialogue will be to ensure there is a shared understanding across the guidance requirements, including about how the ongoing maturity of data and digital markets is continuing to change the definition of effective compliance with the principles-based requirements.

The scope of data assets required to be used in compliance with DBP guidance

1.34. As part of our RIIIO-2 Final Determinations and the RIIIO-ED2 SSMD, we confirmed that we will require energy network company licensees' use of "Energy System Data" to

comply with our DBP guidance. We provided a working definition of “Energy System Data”⁴⁴, but we said we would re-visit this definition as part of this consultation.

1.35. Within the RIIO-2 Draft Determinations consultation we asked stakeholders for their views on what the definition of Energy System Data should be with respect to energy network companies’ licences. Stakeholders suggested numerous data assets in response to this. We have listed these suggestions in Table 2. Some of the responses relate to data assets not typically held by energy network companies.

Table 2: Stakeholder suggestions for data assets that should comply with DBP

Data asset	Description
Additional supply of renewable energy to the system	The volume of newly installed renewable energy generation capacity over a given time period, e.g. monthly.
All data held due to being a regulated entity	Any data assets that originate as part of a regulatory framework, such as a specific licence issued by The Authority.
All data relating to the operation of networks	For example, the cost of curtailment, balancing, and reinforcement among other operational data.
Annual additional capacity	The volume of new capacity added to a distribution or transmission network for a given year.
Customer / Consumer data	For example, the number of consumers, the volume of energy consumed and at what time, the type of supply point and the cost and location of new grid connections.
Connection costs	The price to connect a new asset to a network based on location and capacity.
Constraints	Limitations in the capacity for new installations across the network.
Data exchanges (e.g. with Elexon or ENTSO-E)	Data shared between networks, the ESO and going to or from these organisations from other entities
Demand forecasts	Estimations of future energy consumption for a given time period, e.g. monthly, weekly or daily.
Distributed energy resources	Smaller generation units that are located on the consumer's side of the meter. For example, PV panels, EVs, domestic storage etc.
Half-hourly settlement	The volume of energy generated, consumed and traded on a specific network over a 30-minute period.
Network assets	Equipment or smart appliances connected to gas or electricity distribution networks that can be controlled centrally (e.g. substations, PV panels, electric vehicles (EVs), EV charge points, energy storage etc).

⁴⁴ Our working definition had been evolved from the definition provided by the EDTF. The definition of Energy System Data we used was the “facts and statistics collected together that describe the energy system (current, historic and forecast), including: the presence and state of infrastructure, its operation, associated market agreements and their operations, policy and regulation.”

New innovations or solutions rejected by networks	Details on company proposals that have been rejected by network companies and their reasoning for reaching this decision.
Reinforcement costs	The cost to update and improve the physical capability of networks. E.g. transmission or distribution cables or substations.
Tariffs	The cost per unit of energy (gas or electricity) consumed in p/kWh as agreed with an Energy Supplier in the retail market.
Usage	Information on how energy is being consumed across a network.

1.36. We have developed the definition for the scope of Energy System Data for use when energy network companies comply with DBP. We are proposing that Energy System Data is defined as being:

“all Data Assets for which an entity is a Data Custodian⁴⁵ as a consequence of it exercising its rights and obligations under a licence granted under section 6 (1) (1A) of the Electricity Act 1989 or section 7, 7ZA, 7A or 7AB of the Gas Act 1986”.7AB of the Gas Act 1986”.

1.37. We are proposing this definition because it forms a direct relationship to Ofgem’s regulatory framework in relation to energy network companies. We anticipate that questions will remain about certain data assets and whether they are in or out of scope, however, we consider this definition to be an effective one for progressing and resolving detailed discussions about specific data assets and that it will also ensure that important data that should comply with DBP guidance is not excluded.

Question 5: Do you have a suggestion for improving our definition of Energy System Data and therefore the scope of data assets energy network companies must use in compliance with DBP?

⁴⁵ **Data Custodian:** A person, public authority, agency or other body that has a legal right to process and publish a Data Asset as the Data Controller or otherwise. **Data Controller:** A person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of a specific Data Asset. **Data Asset:** Any entity that is comprised of data. For example, a database is a data asset that is comprised of data records. A data asset may be a system or application output file, database, document, or web page. A data asset also includes a service that may be provided to access data from an application. For example, a service that returns individual records from a database would be a data asset. Similarly, a web site that returns data in response to specific queries (e.g., www.weather.com) would be a data asset.

3. Establishing our data and digitalisation standards and our upcoming data and digital monopolies review

Section summary

This section seeks evidence and information from stakeholders on whether the content of DBP and DSAP guidance is appropriate for use as Ofgem’s data and digitalisation standards. It also seeks stakeholder views relating to our upcoming review of the state of data and digital monopolies in the energy market.

Questions

Question 6: What are your views on DBP guidance and DSAP guidance being used as our data and digitalisation standards and, if you agree, what applications do you envisage for these standards?

Question 7: What is your view on the Electrical Engineering Standards Independent Review (EESIR) recommendation for “presumed capture and publishing of data” in relation to our default positions (DBP guidance and DSAP guidance)?

Question 8: Which gas and/or electricity market products/services (existing or planned) should be included in our upcoming data and digital monopolies review?

DBP guidance and DSAP guidance as our data and digitalisation standards

1.38. Throughout the development of our guidance and our engagement with stakeholders while running the MED programme, feedback we have received has raised questions around how data and digitalisation can be supported by regulation in other parts of the energy sector and in other sectors.

1.39. As progress is made towards Net Zero, we anticipate a continuation of the trend of an increase in numbers of non-traditional energy assets, including the uptake of smart household appliances, domestic energy storage, solar power and modern heating technology. Businesses will similarly adopt low carbon technologies and more intelligent practices when consuming energy and supplying energy into the energy system. All of these changes are leading to developments, such as new flexibility services and demand side response to maintain grid stability. This modern marketplace will increasingly depend on digitalised products and services and better use of data across the energy market.

1.40. Assets in other sectors (such as from the transport, water, telecoms and buildings sectors) are increasingly seeking to integrate their data with energy data, joining traditional markets and creating new ones. Further, modern techniques for generating insight using data, such as data science and AI, have the potential to take advantage of energy data for many far- and wide-reaching applications.

1.41. It is in response to these ongoing changes to the market that we decided in our FWP for 2021/22 to establish data and digitalisation standards. We said in FWP that we would do that by using the DBP guidance and DSAP guidance as the standards that licensees that we regulate would be required to comply with (subject to future consultations and decisions specific to those licensees). We also said that Ofgem, as an organisation, would apply and comply with those standards itself⁴⁶.

1.42. We have already seen Principles from DBP implemented by organisations other than energy network companies. Elexon has updated the Balancing & Settlement Code (BSC) to treat its data as presumed open and to accompany this with an open data triage process (see modification P398 'Increasing access to BSC data')⁴⁷.

1.43. Subject to this consultation, we will apply our data and digitalisation standards whenever we create or update regulatory requirements that relate to data and digitalisation. We will only deviate from those by exception, but only where evidence demonstrates that it is in the best interests of consumers and the Public Interest for us to do so.

1.44. We are seeking stakeholders' opinions on the following in relation to question 6:

- whether the proposed content of DBP guidance and DSAP guidance are appropriate for use as our data and digitalisation standards and therefore for use as our data and digitalisation standards when we create or update regulatory requirements relating to data and digitalisation in the energy market;
- which parts of the energy sector (i.e. among Ofgem's responsibilities) would particularly benefit from regulations requiring compliance with DBP guidance and/or DSAP guidance;
- what opportunities Ofgem can take advantage of to encourage the integration of energy data and digital services with those offered by other economic sectors; and

⁴⁶ See "Point 6" in the Ofgem FWP 2021-22 [decision](#)

⁴⁷ [Elexon P398 BSC Code Modification](#)

- the particular ways our standards can be applied to improve Ofgem’s own work, across government and/or with other regulators.

Question 6: What are your views on DBP guidance and DSAP guidance being used as our data and digitalisation standards and, if you agree, what applications do you envisage for these standards?

Data Capture and potential future improvements to our default position

1.45. A number of respondents to our RIIO-ED2 SSMD said that DBP should include a Principle for “presumed data capture and publishing”, as outlined in the Electrical Engineering Standards Independent Review (EESIR)⁴⁸. The EESIR proposes industry develops all future standards with a presumption that they will do all that is possible to enable greater real-time visibility of data about the network and system state at all levels.

1.46. We anticipate we will need to update our data and digitalisation standards over time. The potential to include one or more Principles relating to “presumed data capture and publishing” is a topic that we anticipate might drive such updates to our standards.

1.47. The “presumed capture and publishing” of data for speculative purposes will raise complex challenges regarding regulatory requirements about the associated data quality (such as the range of measures, recording cadence and precision) versus expenditure.

1.48. We are not proposing to include Principles or Explanations relating to data capture in the DBP guidance or DSAP guidance presently, as we believe there is still a lot of learning to be done regarding exactly how such Principles might work in practice. We consider it a higher priority to issue our two sets of guidance so that a first version of them can be complied with by energy network companies. We would, however, like to hear more from stakeholders about their opinion on this topic.

Question 7: What is your view on the Electrical Engineering Standards Independent Review (EESIR) recommendation for “presumed capture and publishing of data” in relation to our default positions (DBP and DSAP guidance)?

Defining the scope of our upcoming data and digital monopolies review

1.49. In the FWP 2021/22 we said we will conduct a review of data (and digital) monopolies, as we recognise the market changes technology is driving include the potential

⁴⁸ Electrical Engineering Standards Independent Review [document](#)

for growth and evolution in this part of the energy market. We anticipate making use of our guidance to help us conduct the review.

1.50. To help us prepare the design and scope of the review, we are interested in hearing stakeholders' views about which specific products/services in the energy market they think we should include in the review. We are also interested in receiving stakeholder's views on how we can best conduct the review, in particular where you think the DBP guidance and DSAP guidance might be important to how such Products and Services are delivered.

1.51. With respect to monopolistic data and digital services, we anticipate that the DSAP guidance might play a particularly strong role. That is because one of the aims of the guidance is to ensure the benefits of competition are gained from providers where market forces are weak.

Question 8: Which gas and electricity market products/services should be included in our upcoming data and digital monopolies review? Please include both existing and anticipated new products/services.

Appendices

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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 BEIS.

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 65 Consultation - Reviewing the potential impact of COVID-19 on the default tariff cap cap: cap period seven
- 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](#)".