

# Decision

## Decision on Data Best Practice guidance and Digitalisation Strategy and Action Plan guidance

**Publication date:** 15/11/2021

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This document sets out our decision to publish an updated set of Data Best Practice guidance and Digitalisation Strategy and Action Plan guidance along with the supporting information for both guidance documents. We are publishing both sets of guidance, and both sets of supporting information alongside this decision.

We have completed our consultation on the form and content of the Data Best Practice guidance and Digitalisation Strategy and Action Plan guidance and reviewed the responses. Twenty-eight responses were received, all of which supported the principles set out across the two guidance documents.

In addition, we received several suggestions for improvements and editorial clarity which we have considered and implemented where the comments were aligned with the guidance intent. This decision document provides a summary of the consultation responses received and our response to them, including the rationale for the changes we are making to the draft sets of guidance.

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## 1. Introduction

### Context and related publications

1.1. We consulted on two sets of guidance relating to the new RIIO-2 licence obligations to: (1) comply with Data Best Practice (DBP) and (2) publish a Digitalisation Strategy and Action Plan (DSAP). The consultation proposed to apply the 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 Operator<sup>1</sup>);
- 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 controls<sup>2</sup>;
- to provide further clarity to ED2 participants relating to our expectations as explained in the Business Plan Incentives<sup>3</sup>; and
- as our data and digitalisation standards, as stated in our Forward Work Programme (FWP) 2021/22 decision<sup>4</sup>, to be followed by licensees and by Ofgem.

1.2. As part of the consultation, we also asked for stakeholders' views on the design and scope of our upcoming data and digital monopolies review. The review will take place as part of our 2021/22 Forward Work Programme (FWP).

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<sup>1</sup> 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>

<sup>2</sup> 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>

<sup>3</sup> 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](https://www.ofgem.gov.uk/system/files/docs/2021/04/riio-ed2_business_plan_guidance_-_april_2021.pdf)

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

## Our decision-making process

1.3. We consulted from 26 May 2021 to 24 June 2021 and sought stakeholders' views on eight questions. We received 28 responses to the consultation and have taken all of those responses into consideration in arriving at our decision. Stakeholders' responses to the consultation were published on our website<sup>5</sup>.

1.4. Below we have set out each question and reflected the contributions stakeholders made in their responses – and addressed each theme with a response. Additionally, we have provided a change log in the annex which sets out the amendments made to the document with an explanatory comment attached. For brevity, we have excluded from the log minor grammatical changes or obvious errors that have been corrected and only included material changes.

1.5. In addition to the guidance documents, we also provided supporting information documents to assist licensees with examples and techniques related to the principles. We will not be making any changes to the supporting information documents, beyond replication of changes to guidance documents. The supporting information will remain under review and may be updated periodically based on stakeholder feedback and energy market changes or developments.

## Your feedback

### General feedback

1.6. We believe that consultation is at the heart of good policy development. We are keen to receive your comments about this report. We'd also like to get your answers to these questions:

1. Do you have any comments about the overall quality of this document?
  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. Are its conclusions balanced?
  5. Did it make reasoned recommendations?
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<sup>5</sup> <https://www.ofgem.gov.uk/publications/consultation-data-best-practice-guidance-and-digitalisation-strategy-and-action-plan-guidance>

6. Do you have any suggestions for improvements to the guidance documents?
7. Any further comments?

Please send any general feedback comments to [Ofgemdataservices@ofgem.gov.uk](mailto:Ofgemdataservices@ofgem.gov.uk)

## 2. DBP and DSAP scope and content

### Section summary

This section reviews the responses to our questions regarding the content of the DBP guidance and DSAP guidance, together with the content of the supporting information

## Questions

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

2.1. We received 19 responses to this question. Stakeholders were generally comfortable with the content of the guidance and supporting information, but suggestions were made for improvements. The key themes for these are outlined below, with sub-bullets representing the range of views or questions on that theme.

- Cost of data:
  - Questions were raised by stakeholders on who pays for the data and how costs are recovered by Licensees
  - Stakeholders noted that Licensees should be able to evaluate if capturing and publishing data is economic and efficient
- The use of Dublin Core and other standards relating to Metadata
  - A stakeholder suggested that any chosen format for Metadata should be machine readable
  - Some stakeholders suggested that the requirement to 'easily' join data assets was too broad
  - The guidance could include International Organization for Standardization (ISO) standards for describing data and Metadata

- The guidance could implement a Common Information Model<sup>6</sup>
- Dublin Core offered a split view from stakeholders, either it being an appropriate model for Metadata or that it did not provide sufficient information to be useful for the sector.
- Software Scripts:
  - The inclusion of Software Scripts was considered by some stakeholders to be too onerous a requirement to be met by Licensees
  - Several requests from stakeholders for clarification of what a 'Software Script' is
  - A stakeholder mentioned that existing legal frameworks may stop Software Scripts from being made available.
- Open Data Triage:
  - Some stakeholders raised that there may be a risk that sensitive information could be derived from an aggregation of various open data assets.
  - Clarification was requested by stakeholders on who would be responsible for the risk outlined above.
  - Another question raised by stakeholders was whether the Authority would provide a list of exceptions to Presumed Open and a list of what types of data should be published.
- Compliance with the guidance:

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<sup>6</sup> A Common Information Model (CIM) is an open standard that defines how managed elements in an IT environment are represented as a common set of objects and relationships between them.



- A small number of stakeholders raised that as Licensees ability to comply with DBP will be at differing levels of maturity, further clarification was needed around how compliance will be measured.
- A few stakeholders said that the language used in the guidance has become more prescriptive since the original draft. They were concerned that may mean that compliance with the guidance is treated as a tick-box exercise by licensees rather than an opportunity to continually improve the use of data.
- Interoperability:
  - Some stakeholders noted that making old data interoperable would be a significant undertaking and seek to limit DBP principle eight: Ensure Data Assets are interoperable with Data Assets from other data and digital services, by creating an exemption for old data.

2.2. On the cost of data our view is that an appropriately designed Data Triage Process mitigates the risk of burdening the networks with significant extra cost and that DBP leaves the implementation of Open Data Triage with the licensee. In order to address the potential for high costs being borne by Licensees we have amended DBP principle 6 to include a caveat for Licensees on cost. This states that “The Licensees must then develop and deliver Products and Services to meet Data Users' requirements, where doing so is of reasonable cost and would benefit at least one of the following: end-consumers, stakeholders or the Public Interest”. This provides information for Licensees on how to proceed where the activity may be economically inefficient.

2.3. On the use of Dublin Core or other standards relating to Metadata we have updated principle 3 of the DBP, to say that we expect Metadata to be machine readable. We have made this change as the explicit requirement for Metadata to be machine-readable will ensure lower barriers to stakeholders looking to access Metadata. Regarding the other points raised, given the principles-based approach we have taken to developing the DBP we have not incorporated specific industry requirements such as Dublin Core or Common Information Models at this time. We will work with industry to understand specific industry requirements and standards such as the Common Information Model and seek to update the DBP principles in the future if required.

2.4. Regarding Software Scripts, we consider the sharing of software scripts, subject to the Open Data Triage process, to be an important enabler to assist the UK energy system

to be responsive to the needs of current and future users of the system. We are therefore retaining this requirement and have added a definition of what we view software scripts to be in the guidance to provide further clarity to Licensees. In response to Stakeholders concerns on existing legal frameworks stopping sharing of Software Scripts we do not think any change to the guidance is required at present. We expect that through the Open Data Triage process, and the record of that which Licensees are required to keep, specific evidence will be able to be captured to demonstrate where existing legal frameworks may stop the sharing of information. This will allow us to monitor and create an evidence base to target any potential future changes to legal frameworks that are prohibitive to Open Data.

2.5. On Open Data Triage we have made no changes to the requirements. The licensees as Data Custodians are responsible for their Data Assets. We expect that the risk to the energy system and Licensees will be mitigated through licensees' implementation of robust data governance processes and Open Data Triage. Where there is a risk that harmful be insights may be derived from Open Data, we expect that these will be able to be appropriately managed through existing SPAR frameworks and processes. On the request for a list of exemptions to Presumed Open, in we do not consider it would be appropriate to prescribe and exhaustive list of exemptions in the guidance which is intended to provide a principles-based approach to compliance. We may, in future, however, include in the Supporting Information documents examples of possible exceptions.

2.6. Regarding compliance with the guidance, given the licence condition itself expects licensees to use best endeavours, we envision compliance with the guidance to focus on ensuring alignment across the networks towards coherent implementation of the principles. Our views on specific licensee's activities and efforts to meet the principles set out in the guidance will be taken on a case-by-case basis.

2.7. On interoperability our view is as set out in the guidance; that older data and its interoperability should be prioritised by licensees based on data user and consumer stakeholder feedback they gather. As a first step, data quality or the lack of interoperability need not be a blocker to releasing data and we expect licensees to triage data regardless of its current interoperability or quality. As such we have made no changes to the interoperability requirement.

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

2.8. There were 19 responses to this question. The majority were happy with the existing principles and explanations and made no further suggestions. The suggestions that were made by stakeholders are outlined below:

- Continuity of Service: Data should be consistent over time to ensure that Data Users processes reliant on said Data are unaffected by updates. Changes to the format of data will not change without warning.
- Data should be managed as a strategic asset: This principle would give guidance on how to value data as a strategic asset by determining its worth, the cost to run and maintain it and the condition it is in.
- Presumed Open must be published with an Open Data Licence<sup>7</sup>: Published data must include an Open Data Licence so it is clear to Data Users what it can be used for. An existing license, such as CC-BY-4.0, CC0, or OGL, should be used to ensure standardisation across open data licenses.
- Charging data: A specific principle within DBP that covers data relating to charging electric vehicles.

2.9. On all the themes above we do not agree that these should be explicit principles and therefore the guidance will not be amended to reflect these suggestions. Our reasons for that decision are outlined below:

- On Continuity of Service, we understand that the implementation of each of the existing principles will cover this suggestion and therefore does not require a specific principle.
- On Data as a Strategic Asset, this is a proposal that may be considered in future updates but will require further investigation. We consider that, at present, the goal the suggested principle appears to work towards will be sufficiently captured by the other principles

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<sup>7</sup> <https://theodi.org/article/publishers-guide-to-open-data-licensing/>

- On Charging data, we consider that the type of data the proposed principle seeks to capture is already captured under the current definition of Energy System Data.
- While we view the Open Data Licence suggestion as an important aspect in the development of a more coherent data landscape in energy, we do not, at present, have sufficient information to mandate a specific Open Data Licence for use by Licensees.

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

2.10. We received 16 responses to this question. The majority were content with the existing techniques and examples in the Supporting Information for both DBP and DSAP.

2.11. The responses focussed on providing additional context for existing techniques and further examples of good practice, including a mixture of practice emergent from the energy sector itself, and more broadly from other markets such as telecoms.

2.12. We have decided not to make updates to the techniques and examples at this time given the stakeholders comfort with the resources provided along with the consultation. In future updates we may incorporate additional techniques and examples from this round of feedback into the Supporting Information.

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

2.13. There were 16 responses to this question. Stakeholders were in broad agreement with our treatment of data literacy/skills and data governance as pre-requisites for compliance.

2.14. Some stakeholders agreed with data literacy being treated in this way but wanted approaches to data governance to be mandated by the Authority. One respondent suggested that governance of data standards should be “presumed open” and should engage with the sector in a modern way such as moving away from formal consultations to open discussions.

2.15. Other stakeholders agreed with the treatment of both as pre-requisites but felt there needed to be a clear funding mechanism for these areas. Another respondent felt that

data literacy was an issue at senior levels of organisations but not at the working level. Finally, one respondent agreed that they should be pre-requisites but wanted the maturity of licensees to be considered when determining compliance.

2.16. Regarding Data Governance, we are not of the opinion that this should be mandated at this time, as Licensee's have differing requirements on Data Governance and a one size fits all approach may be difficult to implement in a way that creates comparable positive outcomes. A presumed open approach on data governance is an interesting proposition, however at this time based on the feedback we have received we will not be implementing this suggestion as stakeholders' were broadly content with the existing approach. On data literacy we view the funding for this work to be part of business-as-usual activity for the licensees and do not consider that it would be appropriate to provide separate funding for it.

2.17. We welcome this feedback and as a result have decided to maintain our proposed approach to treat data literacy, skills, and data governance as pre-requisites and not explicit principles.

**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?**

2.18. We received 16 responses to this question. There was broad agreement with the definition, but several stakeholders also made suggestions as well as comments regarding its implementation. Please see the summary below.

- a clearer overview would be 'all Data Assets for which an entity is a Data Custodian as a consequence of it exercising its rights and obligations under the appropriate licence of either the Electricity or Gas Act (1989 / 1986) to ensure effective and efficient operation'
- Concerned about the definition being too wide, and that compliance should be based on "reasonable endeavours" instead of "best endeavours".
- Price and market exchanges should be included as well as over-the-counter market electrical trades.
- The definition should be more forward looking to include data assets that a company creates or owns.
- The RIIO-2 FD definition was preferred as the scope was not as broad.

- The definition should also cover data collected by Code Administrators. It should be extended to explicitly cover all data collected because of any activities arising from an obligation in any of the referenced Licences
- “Energy System Data” should be defined as “Asset and Network Data”. This is immediately more obvious and literal, serving the spirit of the definition’s intention. It also need to be caveated for exclusions around where other legislation etc. prevents licensees from publishing.
- The definition does not cover all customer and stakeholder needs.
- It should be extended to explicitly cover smart meter data.

2.19. Given the interaction between the definition of Energy System Data and the Open Data Triage process we consider that the ask for caveats, exclusions or a reduction in scope of the definition is addressed through the Open Data Triage process.

2.20. We consider that the Open Data Triage process should be used to set the boundaries of what is and what is not acceptable in relation to publishing Energy System Data. Where stakeholders seek further expansion or contraction of the definition, we believe that there is already a suitable balance which covers consumer and stakeholder needs. This is because the existing definition captures data assets relating to exercising its rights and obligations under a licence, thereby casting a sufficiently wide net to consider relevant Data Assets.

2.21. The Open Data Triage then gives licensees the tools to set appropriate controls on the access of that data by third parties. Therefore, we are not making any change to the definition of Energy System Data, as there is no clear need at present, but we will keep the definition under review.

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

#### Section summary

This section sought views on how Ofgem should approach certain data and digitalisation topics. Responses suggested that our guidance was appropriate and should be reused elsewhere and that a review of data and digital monopolies is an important piece of work. While stakeholders were supportive of the Electrical Engineering Standards Independent Review (ESSIR) as an option for incorporation into DBP, we do not consider that the cost and benefits of doing so are currently well enough understood to embed its recommendations into our guidance at this time.

#### 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?**

3.1. There were 15 responses to this question. Stakeholders were largely supportive with our plans to use DBP and DSAP as the Authority's data and digitalisations standards.

3.2. A few stakeholders felt these standards should apply across the sector. One wanted clarity on what circumstances would allow for deviation from these standards to be acceptable. Another suggested that applying them as standards based on the potential benefits delivered would be suitable. Another respondent felt that any data obtained by a licensed entity should be subject to these standards. A further comment stated that clear system boundaries would need to be defined for DBP and DSAP to be used in this way.

3.3. Some stakeholders felt that it was not appropriate for the Guidance to be applied as specific standards as they are principles based. One respondent stated that DBP is a logical starting point for data standards, but DSAP needs to be reworked to form a standalone digitalisation standard. Another felt that the DBP and DSAP were a good starting point but may need to develop over time.

3.4. We acknowledge that the standards set out in the Guidance are the beginning of a longer journey that industry, and Ofgem, must undertake to ensure effective digitalisation of the energy sector. Our intention is to replicate the RII02 licence conditions into the ED2 price control to ensure all network licensees are operating to the same principles. As

digitalisation of the energy sector develops we hope to work with other parties such as energy suppliers to develop equivalent / consistent standards across the energy industry.

3.5. On Ofgem’s use of the DBP guidance and DSAP guidance as our data and digitalisation standards we will continue to develop our own capabilities in line with these guidance documents.

**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)?**

3.6. There were 13 responses to this question. Most stakeholders supported the recommendation from the EESIR for “presumed capture and publishing of data” but agreed it would not be appropriate to add it to DBP at this stage and that further investigation was required.

3.7. Several stakeholders agreed that adopting a “presumed capture and publishing” approach could increase risks relating to cyber security and consumer privacy. Many also agreed that “presumed capture and publishing” should not be applied until the cost implications and value to the energy ecosystem are understood. One respondent felt that it could lead to over-investment from consumers but without “presumed capture” there may be no investment. Another suggested it was better to wait until the digital maturity of the sector had improved before implementation.

3.8. We recognise the importance of the EESIR recommendation, and its potential ability to increase the amount of data which will be generated about the energy system. We will not, however, be embedding the EESIR recommendation into the guidance at this time. We share stakeholders’ concerns, outlined above, that the recommendation could generate significant cost implications and further analysis needs to be undertaken before any implementation of EESIR recommendations could be considered.

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

3.9. There were 11 responses to this question with several suggestions. These suggestions are outlined below:



- Aggregators
- Central switching service
- Data Communications Company (DCC)
- Day-ahead data
- Electric Vehicle data
- Generators
- Local energy markets
- Low Voltage (LV) data assets
- Market exchange operators (e.g., APX, N2EX)
- Open Energy
- Products and services paid for by charges to market participants
- Retail Energy Code (REC)
- Smart meter data
- Software providers (back-office solutions)
- Suppliers
- Transmission data assets

3.10. One respondent recommended a consultation to inform this piece of work. Another highlighted that the risk of new monopolies emerging as the sector proceeds with digitalisation.

3.11. We will use the information provided by stakeholders to help inform the scope of our data monopolies review. This review is currently in progress, and we plan to communicate our plans to the industry early in 2022.

## 4. Next steps

### Next Steps

4.1. We will continue to work with licensees to monitor, review and develop the guidance to ensure it is fit for purpose and enables Licensees to comply with the licence obligations.

4.2. If you have any questions regarding the guidance or its development, please contact [ofgemdataservices@ofgem.gov.uk](mailto:ofgemdataservices@ofgem.gov.uk)

## 5. Appendix

### Changelog

Change number	Document	Change location	Change description	Explanation
1	Data Best Practice Guidance and Supporting Information	Principle 2 explanation	Updated language for clarity. 'Easily join' replaced with 'link'	Clarifies expectation of what licensees are required to do. Easily join too broad.
2	Data Best Practice Guidance and Supporting Information	Definitions	Created a definition for 'Software Scripts'	To provide clarity on what types of software scripts we expect this guidance to apply to
3	Data Best Practice Guidance and Supporting Information	Principle 2 explanation	Added requirement that format must be machine readable	Provide additional clarity on expectations to licensees and increase consistency between licensees.
4	Digitalisation Strategy and Action Plan Guidance and Supporting Information	Principle 4 and explanation	Updated from 'Make it easy to' to 'enable'	Clarification for licensees
5	Data Best Practice	Principle 8 explanation	Updated 3.12 & 3.13 in DBP	Gives clear scope that we

	Guidance and Supporting Information		setting out expectations for interoperability	are discussing data assets from other followers of this guidance.
6	Data Best Practice Guidance and Supporting Information	Principle 6 explanation	Updated 3.9 in DBP to reflect a caveat for reasonable costs	To ensure licensees can take a measured approach to developing products and services.
7	Data Best Practice Guidance and Supporting Information	Open Data definition	Slight modification to Open Data definition	Clarifying language “no restrictions” to “without restrictions”