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OfGEM 2021: Consultation on Data Best Practice guidance and Digitalisation Strategy and Action Plan guidance

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

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

A recommendation improvement to the *principle 8: Ensure Data Assets are interoperable with Data Assets from other data and digital services*

There is considerable benefit in the flexibility that a principles-based framework provides stakeholders on their ability to try different approaches on data sharing. However, it also misses an opportunity to be more prescriptive in certain areas that would help in the interoperability and standardisation of data, and to accelerate the use of standards that are already commonplace in other sectors. This is particularly true of time series data with sub-daily granularity such as with hourly or more detailed values e.g., for energy network monitored data. The ISO 8601-1:2019 standard is useful to provide datetime values that contain a UTC offset value which defines not only the general datetime value, but also provides enough information to **unambiguously** define the datetime by indicating whether any daylight savings have been applied. An example of an ISO 8601-1:2019 compatible datetime is 2021-06-21T18:24+00:00 where the +00:00 UTC offset in bold indicates that for the UK the datetime has no daylight savings applied i.e., it is a UTC value. In simple terms, the benefit of having **unambiguous** datetimes is that further data analysis does not need to calculate and in some cases guess whether a datetime is in UTC or localtime with a daylight savings value applied. In the UK in the summer under daylight savings, localtime and UTC differ by an hour. In localtime, there are also missing datetime values in the last Sunday in March when clocks shift forward and repeat datetime values in the last Sunday in October when the clocks shift back. Without knowing which datetime (localtime or UTC) the data are, it becomes much harder to combine different datasets, and the wrong offset may be chosen.

However, being fully prescriptive to state that **ALL** datetimes require to be in this format (or the closely aligned RFC 3339 format) would seem to be too prescriptive, as these formats are not currently immediately recognisable as datetimes by Microsoft Excel (some parsing is required). Excel is software (and its file format) that continues to be well used throughout the sector for analysis and the sharing of smaller datasets, and this will undoubtedly continue for some time.

Nonetheless, OfGEM could consider mandating that all datetimes for certain types of data (e.g., timeseries data from network operational monitoring) must have a datetime in ISO 8601-1:2019 or RFC 3339 format. Network operators would still have an option of providing an Excel compatible datetime too, but this would be in addition to the mandated format.

This would immediately make this network data much more interoperable with data across and between networks, and importantly, with other timeseries data such as weather data. These datetime formats (ISO 8601-1:2019 or RFC 3339) are felt to be fundamental to increasing the automation and speed of analysis between different datasets. If datetimes are not provided in these formats, then valuable time is taken up simply to parse the datetimes into one of these formats to provide an unambiguous datetime value for further analysis. OfGEM therefore has an opportunity to prescribe a requirement for datetimes for any network monitored data that are to be shared outside of an organisation: that these must adhere to one of these two standards.

Sharing network monitored data with ISO 8601 will become the default as best practice over time, as it has become in other sectors that require a datetime format that provides an **unambiguous** datetime value. If OfGEM mandates this to happen by a certain timeframe e.g., by the end of 2024 (2024-12-



31T23:59:59+00:00), then this would accelerate this standard throughout data providers, rather than waiting for it to percolate through the sector as best practice with feedback from data users. Having a target date for mandating this would also importantly provide a regulatory backstop of when network monitored datetime values would be standardised. This is not felt to be overly burdensome on network data providers over a timeframe to the end of 2024 to provide all network monitored data in ISO 8601-1:2019 or RFC 3339 compatible formats.

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

I believe there should be more explicit requirement for the archival of data under Principle 10 on 'Store, archive and provide access to Data Assets in ways that ensure sustained benefits'. Clause 3.16 states 'When Data Assets are not required by the Licensee, the Licensee **must ask stakeholders whether they consider if the Data Assets could create a future benefit if archived**. The Licensee must archive Data Assets when, taking account of stakeholders views', it determines the storage will be a net benefit to consumers and/or the Public Interest.' It might not be clear here who 'stakeholders' might be in this case. For the academic community, the clear message would be that **all data that has been made available through the DSP and DSAP framework would be archived**. The issues underpinning this are a) having historical datasets over longer timeframes provides a richer set of insights and b) we might not know whether '**a future benefit if archived**' is possible to determine in advance.

The UK Energy Research Centre's Energy Data Centre is mentioned in the documentation, there should be an explicit clause stating that archival of data should happen, e.g., in a similar presumed manner (there needs to be a compelling reason from a data provider why data would not be archived). A principle that could be explored in future would be the easing of restrictive clauses over time, i.e., after 5 years, previously restricted data would default to become open data. Perhaps this would link to the archival of data, e.g., when data is archived with a 3rd party organisation providing this service, then the data shifts to have open licence.

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?

The price and volume data from market exchanges should be within the definition of 'Energy System Data', potentially this can eventually be extended to the over-the-counter market for electrical trades too.

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?

I believe the principle on interoperability could be looked to be strengthened. Over time, this interoperability will become increasingly important to reduce the 'friction' and effort required to take a wider system view across different geographical areas and across different sectors. The lack of standardisation inherent with a principles-based approach means that implementation of the principles can lead to different data assets across the sector. The Common Information Model to define the physical assets of DNOs is a classic example of this, whereby the implementation of the Common Information Model has led to different data between different DNOs, i.e., it is significantly harder to try to combine or compare the data from CIM implementation between DNOs. Regulation should consider being much stronger in forcing the sector to agree a set of standards (ontology, classifications) by a certain date or – at a minimum – for a data provider to also provide a 'translator' that would translate data into a common format. This is necessary to allow comparison of data between data providers. If this area of interoperability is not strengthened – then there may continue to be best practice being adhered to by individual data providers, but these then require considerable effort to combine and compare. The clauses 3.12, 3.13 and 3.14 in the Principle on 'Ensure Data Assets are interoperable with Data Assets from other data and digital services' contain language such

as 'Licensees **must enable interoperability**', 'When the Licensee makes Data Assets available, it must do so in ways that **make it easy** for Data Users', 'The Licensee must make data available in such a way that **it is reasonably easy** for Data Users to'. This language is vague and does not help to balance the information and power asymmetry between data users and data providers. Who would determine whether the interoperability is '**easy**' or '**reasonably easy**', and thus if this principle was being adhered to?

OfGEM should reconsider how to strengthen this interoperability principle, perhaps by defining a target date (in a few years) where the sector has had to agree a common language and approach to interoperability. Once data visibility, data access, and data literacy have all improved – it is the interoperability and lack of commonality across the sector that will be the area that stops data from reaching its full potential.

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

The market exchanges operators (APX, N2EX) need to be included in the upcoming data and digital monopolies review. The pricing data from the day-ahead, within day markets should not continue to be difficult to access, e.g., behind paywalls. Its access needs to be brought into line with the guidelines that other digital monopolies in the sector are subject to. OfGEM may also consider widening this to the over-the-counter market too. Price data is an important element of the energy system and needs to be more easily available, and a potential way to do this would be for OfGEM to include organisations that create market pricing data in the DBP and DSAP, as pricing data through markets is a digital asset that has great importance to the sector.

