

Guidance

Data Assurance Guidance for Electricity and Gas Network Companies

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This document is to be used by all network companies as a guide to the data assurance requirements relating to the Data Submissions they make to Ofgem. It provides guidance on best practice for conducting and reporting Risk Assessment and Data Assurance Activities to ensure complete, accurate and timely Data is submitted to Ofgem. It also specifies the format, content, scope, and timing of reporting to Ofgem on Data Assurance Activities and plans.

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Version History

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1.1	Decision document (new)	Ofgem	02/15
1.2	Consultation document (submission list updates)	Ofgem	12/15
1.3	Decision document	Ofgem	01/16
1.4	Decision document (Interim arrangements for 2022 DAG submission)	Ofgem	11/21
2.1	Decision document (RIIO2)	Ofgem	05/22
2.2	Decision document	Ofgem	03/23
2.3	Decision document	Ofgem	01/24

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1. Introduction

Section Summary

The principles behind these data assurance requirements, the background and purpose of data assurance, and the document structure.

Purpose of the Data Assurance Guidance (DAG)

- 1.1. The receipt of robust Data from Licensees is essential to enable the Authority¹ to effectively carry out its role as a regulator. It is important for assessing Licensees' price control forecasts, explaining to customers what is being delivered in return for the revenue that Licensees are allowed to earn, and in monitoring performance against the price control settlements. It is therefore imperative that Licensees take full responsibility for the integrity of the Data they collect, analyse and submit to Ofgem.
- 1.2. For clarity, Data includes any discrete quantitative units or qualitative information submitted to Ofgem. This includes, but is not limited to, qualitative explanatory information that may be drawn together from different business units such as Engineering Justification Papers (EJPs), explanatory narratives associated with Regulatory Reporting Pack (RRPs) and consultant reports.
- 1.3. Any Licensee that has not employed reasonable measures to ensure its Data Submissions are accurate and submitted on time for Ofgem to effectively carry out its regulatory duties faces the risk that Ofgem may take actions against it. The tools available to Ofgem range from warning letters and investigations (which may involve an Ofgem Audit) to full licence enforcement action and the imposition of fines. In extreme circumstances, this may involve licence revocation.
- 1.4. The RIIO framework² includes Data Assurance licence conditions for all Licensees. These conditions require Licensees to undertake processes and Data Assurance

¹ The terms the "Authority", "Ofgem", "we" and "us" are used interchangeably in this document. The Authority refers to the Gas and Electricity Markets Authority. Ofgem is the Office of the Gas and Electricity Markets Authority.

² RIIO (Revenue=Incentives+Innovation+Outputs) is Ofgem's regulatory framework for setting price controls for network companies. The current price control period will last for five years.

Activities for the purpose of reducing and managing the Risk of any inaccurate or incomplete reporting, or any misreporting, of information to Ofgem. The requirements are set out in the following licence conditions:

- For holders of an Electricity Transmission Licence³: Standard Licence Condition B23 (Data assurance requirements)
- For holders of an Electricity Distribution Licence⁴: Standard Licence Condition 45 (Data Assurance requirements)
- For the holders of a Gas Transporter Licence⁵: Standard Special Condition A55 (Data Assurance requirements)

1.5. This Data Assurance Guidance (DAG) is issued pursuant to the relevant conditions listed in paragraph 1.4 above. Licensees are required to comply with the provisions of this DAG under their licence. The DAG consists of:

1. DAG Guidance Document (this document)
2. Network Data Assurance Report (NetDAR) Template
3. Risk Assessment (RA) Template
4. Exceptional Submission Assurance Template (ESAT)

1.6. The overarching aim of the DAG is to reduce the Risk to customers and other stakeholders of any inaccurate reporting and misreporting by Licensees, and therefore the Data Assurance Activity should be proportionate to the risk of the Data Submission. It places the onus firmly on Licensees to ensure the integrity of the Data submitted to Ofgem.

1.7. The DAG applies to all Data Submissions made as part of the price control (both those that are regular and any other ad-hoc requests as determined by Ofgem).

1.8. The Data Submissions (containing quantitative or qualitative Data) to which the DAG applies are listed in Appendix 1a (electricity transmission), Appendix 1b (gas transmission), Appendix 1c (gas distribution), and Appendix 1d (electricity distribution) and Appendix 1e (electricity system operator).

1.9. For all Data Submissions, Licensees are required to:

³ Excluding those holding a licence only for offshore transmission

⁴ Excluding independent Distribution Network Operators (iDNOs)

⁵ Excluding independent Gas Transporters (iGTs) and site-specific pipeline operators

- undertake a **Risk Assessment** for each Data submission following the common Risk Assessment methodology set out in **Chapter 2 (Risk Assessment)**.
- determine **Data Assurance Activities** for each Data submission. **Chapter 3 (Data Assurance Activities)** provides a set of defined Data Assurance Activities from which Licensees should select the most appropriate for each Data Submission based on the results of the Risk Assessment or provide details of the Data Activities if they are not set out in Chapter 3. It is the Licensees' responsibility to apply adequate and proportionate assurance to all Data Submissions.
- Report to Ofgem, through an annual NetDAR, and Exceptional Submission Assurance Template (ESAT), where appropriate, the results of the Risk Assessments as well as the appropriate Data Assurance Activities planned and carried out. The reporting requirements are set out in **Chapter 4 (Reporting Requirements for Regular Submissions)** and **Chapter 5 (Reporting Requirements for Exceptional Submission)**.

1.10. **Appendix 2** sets out definitions of relevant terms used in the DAG.

Compliance and enforcement

1.11. Ultimate responsibility for Data assurance (and regulatory compliance with any legal provisions requiring the provision of accurate Data) lies with the Boards of the Licensees. Ofgem relies on the Data submitted by the Licensees and expects it to be accurate and reliable and therefore takes misreporting of Data very seriously. The DAG has been issued in order to help Licensees comply, by providing clarity on the regulatory requirements for the Licensees on Data assurance. It is important to recognise that compliance is related to, but separate from, enforcement. The DAG can help Licensees to maintain compliance and to deliver corrective actions where appropriate. It can also help deter future non-compliant behaviour. While the DAG has a role to play in compliance, Licensees should not rely solely on us or the DAG to remain compliant.

1.12. The vision for Ofgem’s enforcement work is to “achieve a culture where businesses put energy consumers first and act in line with their obligations under their licence.”⁶ In addition, our strategic enforcement objectives are:

- to deliver credible deterrence across the range of our functions, stamping out bad and sharp practice and ensuring fair treatment for all consumers, especially those in vulnerable situations; ,
- to ensure visibility and meaningful consequences for Licensees that fail consumers and do not comply with their obligations under their licence; and
- to achieve the greatest positive impact by prioritising enforcement resources and using the full range of our powers.

We will therefore take enforcement action, where appropriate, to deliver those objectives.

1.13. We have a suite of case prioritisation criteria to guide us in the performance of our enforcement functions, which are published in our enforcement guidelines⁷. Ofgem may revise its enforcement guidelines from time to time. Licensees are responsible for ensuring they are familiar with the latest guidelines and annual enforcement priorities. If enforcement action is ultimately undertaken for non-compliance, then distinct compliance monitoring can also play an important role in ensuring that the Licensee in question complies with agreed upon assurance measures.

1.14. Ofgem’s receipt of a Licensee’s NetDAR should not be taken as tacit approval of any conduct described within the DAG. The contents of any Licensee’s NetDAR submitted may, along with other sources of evidence, be used by Ofgem for the purposes of compliance. It may also form the basis of any Data Submission enforcement investigations.

⁶ Ofgem, “Open letter on regulatory compliance”, 28 March 2014: <https://www.ofgem.gov.uk/ofgem-publications/86894/openletteronregulatorycompliance28march2014.pdf>

⁷ <https://www.ofgem.gov.uk/publications/enforcement-guidelines>

2. Risk Assessment

Section Summary

The Risk Assessment methodology that each Licensee should use to determine, for reporting purposes, each Data Submission's overall level of Risk.

Introduction

Introduction

- 2.1. As noted above, Ofgem's approach to Data assurance is one that is based on Risk. There should be a clear link between the materiality of Risk of a Data Submission and the level of Data assurance employed for that Data Submission.
- 2.2. It is expected that each Licensee will follow the approach to Risk Assessment set out in this section. This comprises a Risk Assessment matrix that combines assessments of the impact and the probability of the Risk. While the Risk score that results from the matrix may be different for each Licensee, Ofgem expects all Licensees to follow a consistent approach to the scoring.

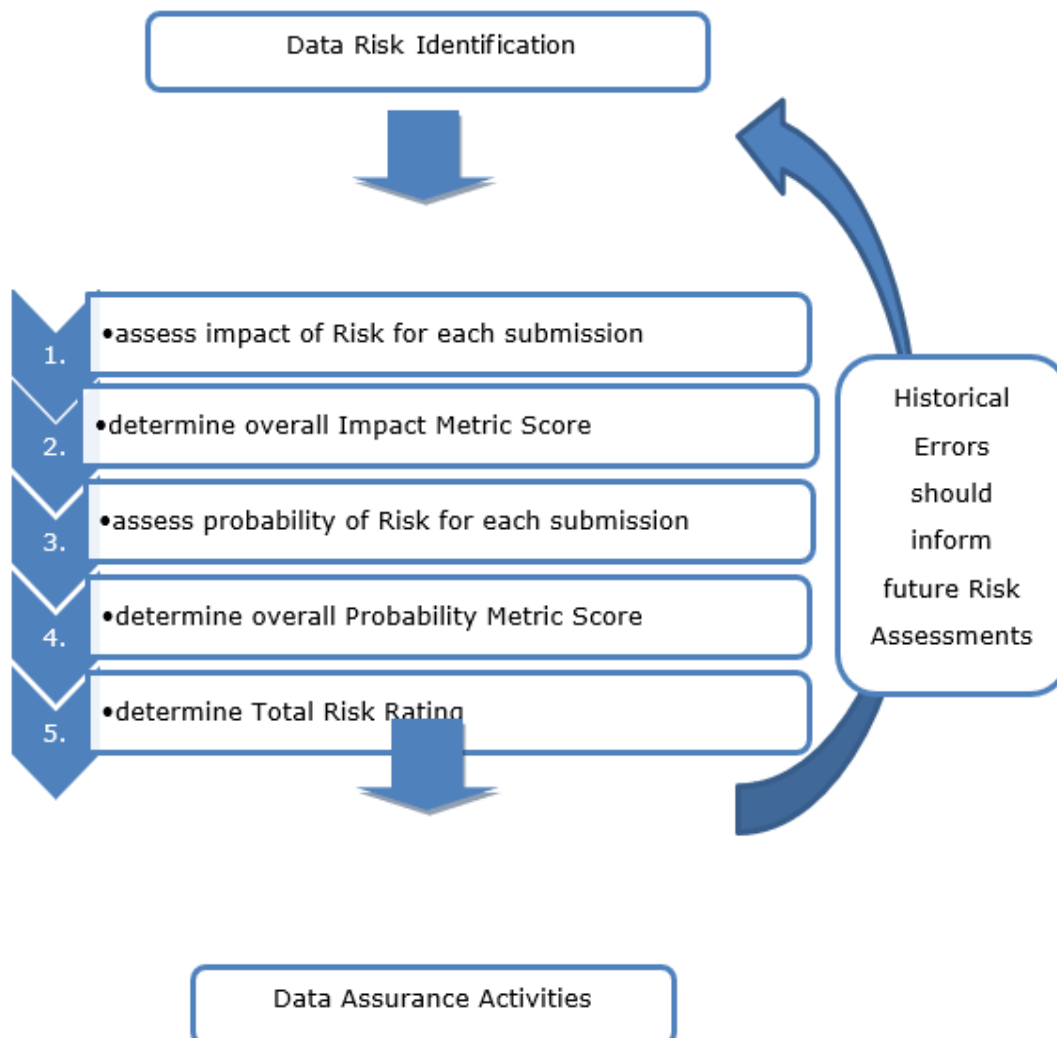
The Risk Matrix

- 2.3. **Risk**, for the purpose of the DAG, is an estimation of an uncertain future outcome resulting as a consequence of inaccurate or incomplete Data Submission and having a negative impact(s) in the Risk assessment Template defined categories of customers, competition and financial. A Risk is specified by its probability of occurrence and its impact. Risks relate to the **expectation** that inaccurate or incomplete Data Submissions **may occur**. The overall Risk profile for each Data Submission is determined by assessing both the probability of it containing an Error and the impact this Error could have across key drivers. Therefore, the Risk Matrix comprises two component metrics – the Impact Metric and the Probability Metric. The Total Risk Rating is a combination of both metrics.
- 2.4. The probability element of Risk is proxied by the Probability Metric and the impact element of Risk is proxied by the Impact Metric. The Impact and Probability Metrics are defined as follows:

- **Impact Metric:** a measure to represent the impact of an identified Risk materialising. It relates to the expected impact of inaccurate, incomplete, poor quality, misreported or late Data on customers, competition and the financial allowance awarded to Licensees. It is scored by assessing each Data Submission against these impact categories.
- **Probability Metric:** a measure to represent the probability of Error occurrence. It is scored through the evaluation of the processes for Data collection, reporting and the related control systems and processes.

2.5. Each Licensee is expected to follow a five-stage process in assessing the overall Risk for each Data Submission, which is summarised below. The details of each stage are provided in the sections that follow. The results of the Risk Assessment should inform the choice of the appropriate Data Assurance Activity for each Data Submission.

Figure 2.1: Five-stage Risk Assessment



Impact Metric: stages 1 and 2

- 2.6. Table 2.1 sets out the criteria for assessing the Impact Metric for each Data Submission.
- 2.7. The list of Data Submissions for each Sector is provided in the appropriate appendix: Appendix 1a (electricity transmission), Appendix 1b (gas transmission), Appendix 1c (gas distribution), Appendix 1d (electricity distribution) and Appendix 1e (electricity system operator).
- 2.8. The Impact Metric has four ratings, 1 to 4, with 4 denoting the highest level of adverse impact and 1 denoting the lowest level of adverse impact that could arise due to the use of inaccurate or incomplete Data or poor quality Data.
- 2.9. To calculate the Impact Metric there are three categories that should be scored on a scale from 1 to 4. The three impact categories are:
 - a. Customers
 - b. Competition
 - c. Financial
- 2.10. Ofgem is of the view that the three existing impact categories provide sufficient scope for Licensees to capture any major impacts they might want to consider. Licensees should design their plan to mitigate all Risks that they know are relevant to the Licensee and must explain in their NetDAR the reasons for any apparent misalignment between Risk Assessment results and their planned activities.
- 2.11. The scores must be recorded in the Risk Assessment Template (Excel file) under the relevant impact categories (a to c). Each category is to be scored separately.
- 2.12. To calculate an overall Impact Metric Score for a Data Submission, Licensees should take the highest score of all impact categories.
- 2.13. In all cases, Licensees should assess impact over the period of the current price control period plus any impact on allowance setting for the next price control period (and in respect of Errors, any applicable prior price control periods).

- 2.14. Licensees should interpret the impact assessment as being the associated impact of inaccurate, incomplete and/or late Data Submissions and poor quality information and not the impact associated with poor performance that the Data might reveal. In doing so, Licensees should assume a realistic worst-case scenario⁸.
- 2.15. The Impact Metric Score can be used to assess both the potential impact of Risks and the actual impact of Errors. The Impact Metric Scoring methodology described here should be used to define the Impact Metric Score of future Data Submissions and to evaluate Error materiality. Material Errors are the Errors with Impact Metric Score of 3 and 4.
- 2.16. Licensees should consider historical Errors in assessing the Impact Metric Score for future Data Submissions. For example, if an Error has occurred, the Impact Metric Score for the relevant future Data Submission(s) should be equal to or greater than the actual Impact Metric Score. The revised Impact Metric Score should remain for a minimum of two years following the Error detection. However, in most circumstances we would expect the revision to be permanent for the duration of the current price control Period.
- 2.17. While Ofgem expects that the Impact Metric Score for each Data Submission may be similar across the Licensees within a Sector, we accept that there may be some differences and have therefore not specified an Impact Metric Score for specific Data Submissions. Licensees within a Sector should standardise Impact Metric Scores as far as reasonably possible, whilst acknowledging that scores may differ.

Table 2.1: Impact Metric: assessment of impact caused by inaccurate, incomplete or late submission during the current and any price control period

⁸ For example: One worst-case scenario might be no data submitted and then used for modelling, resulting in zero modelled costs in this area. However, this may not be realistic as such an error would be obvious from the modelling results. A more realistic worst case will be derived by Licensees using their own experience, expertise, and judgement to determine a more realistic value. Where we have a range of possible impacts: If we illustrate impact severity on a distribution curve, we may consider an impact on the far right tail of the distribution curve (eg >2 standard deviations from the mean) to be unrealistic. The actual "worst case scenario" may be far more severe than the realistic worst case scenario but only arise in unusual or extreme circumstances.

Score	(a) Customers	(b) Competition	(c) Financial
4	<p>Creates a breach in licence conditions that has a major impact on a large number of customers, other network operators, service providers, or shippers⁹</p> <p>or</p> <p>Creates a significant number of legitimate customer complaints either directly or indirectly</p>	High impact on the ability of third parties to compete in the market place	<p>An Error or omission that could potentially give rise to a major financial impact (assessed against a financial value equivalent to $> \pm 5\%$ of Licensee's annual baseline totex allowance¹⁰)</p> <p>For ESO the annual baseline totex allowance per Financial Determination is replaced by the cost benchmark value contained in Table 2.2 of the ESO Cost and Outputs schedule.</p>
3	<p>Creates a breach in licence conditions that has a moderate impact on a large number of customers, other network operators, service providers, or shippers</p> <p>or</p> <p>Creates a breach that has a major impact on a small number customers, other network operators, service providers, or shippers</p> <p>or</p> <p>Creates a moderate but high profile number of legitimate customer complaints or dissatisfaction, either directly or indirectly</p>	Moderate impact on the ability of third parties to compete in the market place	<p>An Error or omission that could potentially give rise to a significant financial impact (assessed against a financial value equivalent to $\geq \pm 1\%$ Licensee's annual baseline totex allowance but $\leq \pm 5\%$)</p> <p>For ESO the annual baseline totex allowance per Financial Determination is replaced by the cost benchmark value contained in Table 2.2 of the ESO Cost and Outputs schedule.</p>
2	<p>Creates a breach that has a moderate service impact on any customer, other network operators, service providers, or shippers (and does not score 3 or 4)</p> <p>or</p> <p>Creates a moderate but low profile level of customer complaints, either directly or indirectly</p>	Low impact on the ability of third parties to compete in the market place	<p>An Error or omission that could potentially give rise to a low financial impact (assessed against a financial value equivalent to $< \pm 1\%$ Licensee's annual baseline totex allowance)</p> <p>For ESO the annual baseline totex allowance per Financial Determination is replaced by the cost benchmark value contained in Table 2.2 of the ESO Cost and Outputs schedule.</p>

⁹ Includes independent network operators and suppliers.

¹⁰ The baseline totex allowance as published in the relevant Final Proposals or Final Determination document should be used for calculation of thresholds.

Score	(a) Customers	(b) Competition	(c) Financial
1	Has no or negligible service impact on all customers, other network operators, service providers, or shippers.	Negligible or no impact on the ability of third parties to compete in the market place.	No or negligible potential for financial impact on the level of incentives receivable from the Regulator as a result of an Error.

Probability Metric: stages 3 and 4

- 2.18. Table 2.2 sets out the criteria for assessing the Probability Metric for each Data Submission to represent the probability of an Error occurring.
- 2.19. The Probability Metric has four ratings, from 1 to 4, with 4 denoting the highest probability and 1 denoting the lowest probability of inaccurate, incomplete or late Data Submission.
- 2.20. There are seven categories that should be scored for each Data Submission in order to calculate its Probability Metric Score. These are:



- 2.21. I1 to I4 reflect the inherent (I) probability of Error where no controls other than general system or process controls are used to reduce Risk. C1 to C3 reflect the

control (C) framework in place to reduce the probability of Error. Combining these gives the overall probability of Error, taking into account any controls that are in place.

2.22. Categories I1 to I4 (inherent probability) have three ratings 2 to 4, with 4 denoting the highest probability and 2 denoting the lowest probability of inaccurate, incomplete or late Data Submission. These are indicators of the probability of Error associated with the systems used, available Data and reporting rules without any control in place.

2.23. Categories C1 to C3 (control assessment) have three ratings 0 to 2, with 0 denoting the weakest control and 2 denoting the strongest control. These are indicators of the level of confidence in the control environment (i.e. confidence in the Licensee's ability to prevent Errors or decrease the probability of Errors occurring). Each of these categories is scored either 0, 1, or 2 representing low, medium, and high controls.

2.24. The rules for calculating an overall Probability Metric Score for any Data Submission are as follows:

- Select the maximum of inherent probability category score.
- Calculate the arithmetic average rounded to nearest whole number of scores in the control environment assessment.
- Subtract the average control score from the maximum inherent score.
- If both the inherent probability and control framework assessment are scored 2 the Probability Metric Score to be used is 1 (instead of 0, as $2-2=0$).

Overall Probability Score =	Maximum [1, Maximum (Inherent Score) minus Average (Control Score)]
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2.25. The rules are based on the principle that (all other factors being constant) high inherent probability or a weak control framework should result in a higher Risk score, while low inherent probability or strong control framework should result in a lower Risk score.

2.26. The overall Probability Metric Score ranges from 1 to 4.

2.27. We might expect to see greater variation between Licensees in the Probability Metric Scoring than we would expect for Impact Metric Scores. This is because each Licensee will have different reporting systems, processes, and control environments for submitting Data.

Table 2.2: Probability Metric
Reporting Assessment, Inherent Probability

I Score	I1. Complexity of Data sources¹¹	I2. Completeness of Data set	I3. Extent of manual intervention	I4. Complexity & maturity of reporting rules
4	Two or more numerical systems or two or more financial systems or manually sourced from two or more data systems from internal business units or external parties.	Data not routinely captured by Licensee to populate this Data Submission. Reporting for a significant number of elements of the Data Submission is based on extrapolation of sample Data rather than full Data set ¹² .	More than 60% ¹³ of the Data is manually collated ¹⁴ and reported.	The rule set is incomplete or the rules require significant interpretation, judgement or assumptions or the first issue of rules have been completed within the last 12 months.
3	One numerical and one financial Data system used to populate this Data Submission.	Data routinely captured by Licensees to populate this Data Submission but for less than 2 years or some elements of reporting based on extrapolation of sample Data rather than full Data set.	More than 0% but less than 60% of the Data is manually collated and reported.	The rule set is complete and has not changed for at least 12 months, but the rules require some interpretation, judgement or assumptions.
2	Single Data system used to populate this Data Submission.	Complete Data set routinely captured to populate this Data Submission for 2 years or more	Data collation and reporting are fully automated.	The rule set is complete; the rules require no interpretation, judgement or assumptions; the rules have been in place for more than 12 months.

¹¹ For multiple-module systems, each individual module is considered to be a separate system for these purposes.

¹² For example, where a population asset count is inferred by sampling the number of assets in a particular region.

¹³ This refers to 60% of input cells.

¹⁴ Manual intervention defined as where there is a manual process to change the data structure or format, e.g. summation, division into detailed elements etc. Where data is being passed between functions within the Licensee without changes to its complexity, dimensions, reference period or such like this is not considered manual intervention. This does not cover initial input of data into the numerical or financial system.

Control Framework Assessment

C1. Control activities¹⁵	C2. Experience of personnel	C3. Evidence of historical Errors with this Data¹⁶	C Score
<p>There are inadequate validation / preventative controls or controls have been in place for less than 12 months or systems and processes not documented, and control points not assessed (i.e. any such material lacks substantial coverage) or Data Submissions not subject to effective review or supervision processes.</p>	<p>This Data Submission being collated by employees with no prior experience of doing so and no method statement available to explain prior year approach to completing this report.</p>	<p>Material Errors identified for this report, or table level as appropriate, within the last two years; and the issues identified have not been eliminated or no Audit¹⁷ undertaken on this Data Submission in the last five years.</p>	0
<p>There are adequate validation / preventative controls.¹⁸ and controls have been in place for more than 12 months but less than 2 years and systems and processes substantially documented, and control points assessed and Data submissions subject to effective review or supervision processes.</p>	<p>This Data Submission being collated by employees with no prior experience of completing this Data Submission but using method statements for prior Data Submissions to support them or this Data Submission being collated by employees with prior experience of completing this Data Submission – with no method statements for prior years available.</p>	<p>Material Errors for this Data Submission have been identified within the last two years for which all issues have been remediated but not yet validated or no Audits undertaken on this Data Submission within the last two years, but audit has been undertaken within the last five years.</p>	1

¹⁵ Licensees should use their judgement to determine whether it is appropriate to assess control framework at the RRP level or at the table level.

¹⁶ Evidence of historical errors should be assessed at the table level and not at the overall submission level.

¹⁷ Internal or External Data Audit

¹⁸ This requires the control framework to have some visibility with management. This control framework should contain a mix of controls that enable Licensees both to prevent Errors from occurring and to detect, prior to submission to Ofgem, any Errors that do occur.

C1. Control activities¹⁵	C2. Experience of personnel	C3.Evidence of historical Errors with this Data¹⁶	C Score
There are extensive validation / preventative controls. ¹⁹ and controls have been in place for more than two years and systems and processes fully documented ²⁰ and control points fully evaluated and assessed ²¹ and Data Submissions subject to comprehensive and effective review and supervision processes. ²²	This Data Submission being collated by employees with prior experience of completing this Data Submission – with method statements for prior years in place.	Audit has been undertaken on this Data Submission within the last two years and no Material Errors were identified and either there were no previously identified Errors in this Data Submissions. or Audit confirmed that any previously identified issues have been properly addressed.	2

Total Risk Score: stage 5

- 2.28. Impact and Probability Metric Scores should be combined to arrive at a total Risk score in accordance with the impact-probability matrix below (figure 2.2).
- 2.29. There are four levels of Total Risk: low, medium, high and critical. The assessed Total Risk Rating should be used by Licensees to inform their choice of Data Assurance Activities to be applied to a Data Submission. It is the Licensee’s responsibility to demonstrate to Ofgem the robustness and suitability of its Data assurance plan and Risk reduction measures. See sections 3 on Data Assurance Activities’ and 4 on Reporting Requirements’ below.

¹⁹ This requires the control framework to have good visibility with management. This control framework should contain a mix of controls that enable Licensees both to prevent Errors from occurring and to detect, prior to submission to Ofgem, any Errors that do occur.

²⁰ This is technical and business process documentation that is updated on a regular basis.

²¹ This requires that some type of Audit process (independent or self-audit) has taken place.

²² Documented systems and processes must require Data Submissions to have been reviewed and the strengths and weaknesses identified before being submitted to management.

Figure 2.2: Impact-Probability Risk Matrix

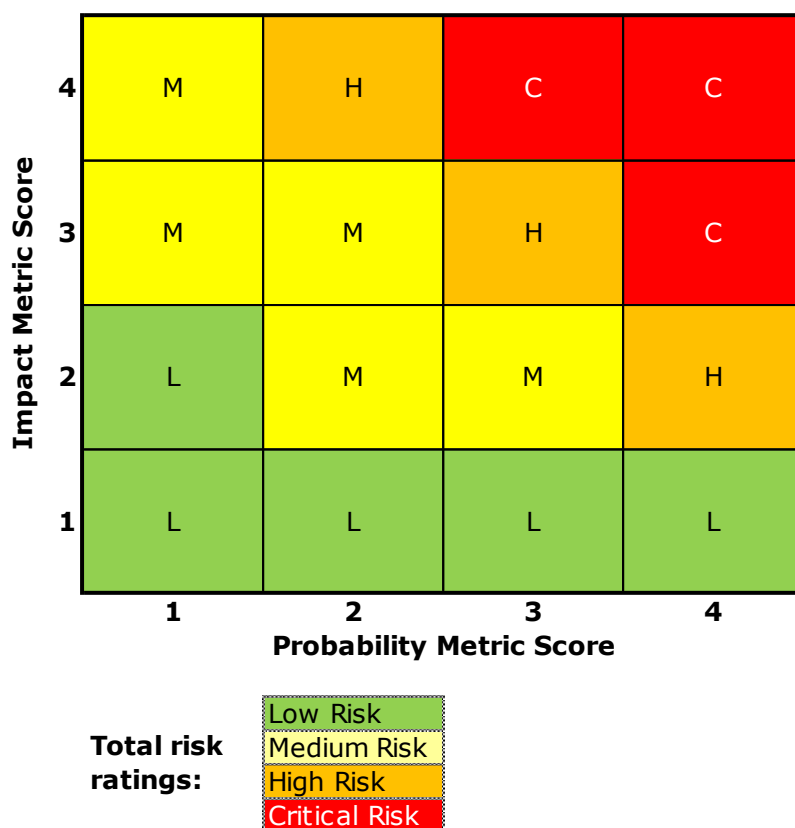


Table-based assessment

2.30. For large Data Submissions, it may be appropriate to undertake Risk Assessments at the level of individual tables that comprise the Data Submission. Licensees should use their judgement to determine whether it is appropriate to Risk assess at table level or at Data Submission level. Regardless of the chosen assessment level, if a Data Submission is broken down at table level in Appendix 1 (a, b, c, d or e) then the Licensee must provide scores for each individual table as part of its annual NetDAR submission.

Forecast Data

2.31. Where Data Submission contains forecast Data, then the forecast Data is subject to the same requirements for Planning, Review and Sign-off. When assessing the probability of incorrect or inaccurate Data Submission, Licensees should consider the systems and processes behind any historical input Data utilised in arriving at forecast views. Unless there is a clear rationale against it, we would generally

expect the Probability Metric Score for forecast Data to be as a minimum the same as the score for historical input Data. The Impact Metric Score for forecast Data should be assessed according to the Impact Metric criteria (Table 2.1). In many cases, forecast Data is more critical than historical Data, for example, where the Data is used to set allowances, and in these circumstances we might expect the Impact Metric Score to be higher than the score for historical input Data.

Qualitative Data Submissions

2.32. As stated in paragraph 1.2 above, qualitative (i.e. narrative based information) Data submissions are within the scope of the DAG. Licensees must use reasonable endeavours to assess qualitative Data Submissions against the Risk scoring criteria set out in Chapter 2. As with quantitative Data Submissions, Licensees must ensure that their planned activities for qualitative Data Submissions are appropriate to the total level of Risk of the Data Submission²³. The Risk Assessment is simply one tool that Licensees can use to demonstrate the appropriateness of their planned activities. However, where the Risk Assessment is insufficient to demonstrate appropriateness, then Licensees should provide additional evidence, justification, and/or assessment criteria in their NetDAR or ESAT to demonstrate the appropriateness of their planned assurance activities.

2.33. Four types of qualitative Data Submissions fall within the scope of the DAG:

1. Purely qualitative narrative reports (not driven by quantitative Data);
2. Narrative that provides justification for load related and non-load related investments that act as a decision support tool and justification for investment decisions (e.g. Engineering Justification Reports, Cost Benefit Analysis (CBAs));
3. A Data Submission that is simply reporting Data contained in a RIGs table or other quantitative Data Submission – this type of Data

²³ For example, if the result of the Risk Assessment is high Total Risk Rating, whereas intuitively the Total Risk Rating for the Data Submission should be low, then Licensees should plan Data Assurance activities proportionate to a low-Risk Data submission and should explain in their NETDAR why this was appropriate.

Submission should be Risk assessed using the Probability Metric Scoring of the source data; and

4. A Data Submission that interprets or explains Data contained in a RIGs table or other quantitative Data Submission (e.g. RIGs narrative) – the Probability Metric Score should reflect the processes and systems for transferring and validating the accuracy of the Data transfer from the quantitative systems to the qualitative report. The probability of Errors in the underlying Data is assumed to be zero in these cases.

2.34. Where a quantitative Data Submission is used to inform qualitative Data Submission, then an assessment of the impact of inaccurate, incomplete or late submission of those dependent qualitative Data Submissions should also be factored into the quantitative Data Submission's Impact Metric Score.

Changes in regulatory regime

2.35. When assessing the Risk of future Data Submissions where the submission reporting requirements in respect of the Data Submission or the regulatory regime might change (e.g. when moving into RIIO-T3/GD3/ED3/ESO3) then, unless otherwise instructed by Ofgem, Licensees should carry out their Risk Assessments based on the assumption that the reporting requirements and regulatory requirements in force at the time of Data Submission will not change.

2.36. Licensees should consider whether it is appropriate to employ any additional assurance or measures to mitigate the Risk of potential changes and should provide explanation for any such additional assurance or measures in their NetDAR.

2.37. Refer to Table 4.1 which gives a summary of annual NetDAR requirements and sets out the date of effect for version 2.1 of the DAG Guidance Document for each Licensee.

3. Data Assurance Activities

Section Summary

Guidance on the Data Assurance Activities that should be used by a Licensee to provide confidence to Ofgem and other stakeholders that its Data submissions (past and future) are reliable.

Introduction

3.1. Each Data Assurance Activity is defined in terms of who should undertake the activity, when (i.e. under what circumstances) and what this involves. Subject to paragraph 3.4 below, all Data Assurance Activities must be conducted before Data Submissions are made to Ofgem, and not after. This means, for example, that if a Licensee has stated that a particular Data Submission will be subject to an Internal Data Audit then that Internal Data Audit must be complete before the Data Submission is submitted to Ofgem.

Data Assurance Activities

- 3.2. For all Data Submissions, the Data Assurance Activities are informed by the results of the Risk Assessment and the established, day to day, governance processes of the Licensee. All Data Submissions (including those rated as low Risk) require a degree of Planning, Review, and Sign-off. Examples of such activities include but are not limited to those that are provided in Table 3.1 below.
- 3.3. In determining the Data Assurance Activities appropriate to any Data Submission, Licensees may consider other relevant factors in addition to the results of the Risk Assessment. However, they must explain any apparent misalignment between Risk scores and planned or undertaken assurance activities in their NetDAR. This is of importance for any Data Submissions assessed as high or critical Risk.

Additional assurance activities

- 3.4. It is recognised that, throughout the Regulatory Year, Licensees may carry out assurance activities that are in addition to the Data Assurance Activities, in

particular for those Data Submissions rated as high or critical Risk in the Risk Assessment . An understanding of these additional assurance activities can provide increased confidence in the accuracy of the Data provided by the Licensee. Licensees must explain the relationship between high or critical Risk scores and additional Data Assurance Activities undertaken in their NetDAR. Examples of such activities include but are not limited to those that are provided in Table 3.2 below. Licensees are required to report to Ofgem any such audits and summary of their findings that relate to high or critical Risk Data Submissions. They are also required to provide an associated Underlying Activity Audit report to Ofgem, should Ofgem request one.

Table 3.1: Data Assurance Activity options

	When applies	Who is responsible	What: content/coverage
Planning			
Methodology Statement and Submission Plan	All Data Submissions	Person(s) compiling Data Submission/ core team managing the Data Submission.	Explains process to produce the Data Submission and should include details of systems, responsibilities, timings, additional methodologies to complete any calculations required etc. Details the plan to complete the Data Submission, including details of timetable, responsibilities, sign-off and governance meetings as relevant.
Review			
	When applies	Who is responsible	What: content/coverage
Second Person Review	All Data Submissions	Person with reasonable understanding of requirements. Not status related. Separate from person who completed the Data Submission/table.	Must check the Data Submission in detail and any associated commentary. Confirm adherence to and adequacy of the methodology statement. Confirm accuracy of Data through checking inputs, including any management assumptions and reviewing evidence to support entries/statements.
Internal Expert Review	As identified through Risk Assessment.	A regulatory specialist or someone who understands the Data Submission in detail (and may have been directly involved in its preparation).	Responsible for ensuring that Data Submissions are complete and accurate and in accordance with any guidance issued by Ofgem. The expert reviewer satisfies him/herself that the Data Submission has been completed in

	When applies	Who is responsible	What: content/coverage
			full and the key control activities have been performed and any unusual findings investigated and resolved.
Internal Data Audit	As identified through Risk Assessment.	An Independent Internal Assurance Provider, e.g. a Group Internal Audit Function or Assurance Function (or equivalent) or a subject matter expert not directly involved in the Data Submission.	<p>Programme agreed by Audit, Governance or Planning Committee, or equivalent.</p> <p>Responsible for providing evidence of verification of Data.</p> <p>Done through a sampling approach.</p> <p>Intends to determine the level of confidence that can be placed on the entire Data Submission through testing a sample of the Data.</p> <p>Reported/documentated through formal governance channels.</p>
Internal Submission Process Audit	As identified through Risk Assessment.	An Independent Internal Assurance Provider, e.g. a Group Internal Audit Function or Assurance Function (or equivalent).	<p>Programme agreed by Audit, Governance or Planning Committee, or equivalent.</p> <p>Not responsible for ensuring that Data Submissions are complete and accurate but to provide an independent challenge to the process to produce the Data Submission.</p> <p>Review of the adequacy and effectiveness of the internal control systems to ensure Data Submissions are timely, complete and accurate.</p> <p>Formal report produced.</p> <p>Control gaps/areas for improvement identified and actions logged.</p>

	When applies	Who is responsible	What: content/coverage
External Data Audit	<p>As identified through Risk Assessment.</p> <p>Useful where specialist knowledge required. Essential for financial accounts.</p>	<p>Audit carried out by a third party outside the Licensee or its group. Independent registered audit organisations or independent experts with or without formal audit qualifications, where appropriate.</p>	<p>Programme agreed by Audit, Governance or Planning Committee, or equivalent.</p> <p>Responsible for providing evidence of verification of Data.</p> <p>Done through a sampling approach.</p> <p>Intends to determine the level of confidence that can be placed on the entire Data Submission through testing a sample of the Data.</p> <p>Formal report produced.</p>
External Submission Process Audit	<p>As identified through Risk Assessment.</p>	<p>Audit carried out by a third party outside the Licensee or its group. Independent registered audit organisations or independent experts with or without formal audit qualifications, where appropriate.</p>	<p>Programme agreed by Audit, Governance or Planning Committee, or equivalent.</p> <p>Not responsible for ensuring that Data Submissions are complete and accurate but to provide an independent challenge to the process to produce the Data Submission.</p> <p>Review of the adequacy and effectiveness of the internal control systems to ensure Data Submissions are timely, complete and accurate.</p> <p>Formal report produced.</p> <p>Control gaps/areas for improvement identified and actions logged.</p>
Sign-off			
	When applies	Who is responsible	What: content/coverage
Senior Manager Sign-off	<p>All Data Submissions</p>	<p>Accountable senior manager.</p>	<p>This review must be done in line with the minimum review criteria as established by each Licensee.</p> <p>Detailed review of Data Submission/table and the narrative.</p> <p>Complete and sign a record of evidence attesting to confidence in the accuracy of the Data Submission.</p>

	When applies	Who is responsible	What: content/coverage
Director Sign-off	As identified through Risk Assessment.	A Director of a business function for example Director of Operations or Financial Director.	<p>Must complete a final review prior to submission to Ofgem.</p> <p>This review must be done in line with the minimum review criteria as established by each Licensee and include a challenge of the Senior Manager Sign-off.</p> <p>Must complete and sign a record of evidence attesting to accuracy of the Data submission.</p> <p>Drives an overall confidence assessment for the Data submission.</p>
CEO Sign-off	As identified through Risk Assessment.	Chief Executive Officer	<p>High-level oversight.</p> <p>Final layer of challenge to adequacy of the Data Submission in terms of completeness and accuracy.</p> <p>Must complete and sign a record of evidence attesting to accuracy of the Data Submission.</p>
Board Sign-off	As identified through Risk Assessment.	Licensee Board	<p>High-level oversight.</p> <p>Board reviews summary of the Data Submission and assurance activities followed, as presented by a relevant Director.</p> <p>Detailed review of tables and assurance processes formally delegated to Director who approves with delegated authority on behalf of the Board.</p> <p>Approval of the Data submission must be minuted to enable completion of a record of evidence attesting to accuracy, to be delegated to the CEO or other director identified by the board.</p>

Table 3.2: Additional assurance activities undertaken by Licensee

	When applies	Who is responsible	What: content/coverage
Internal Underlying Activity Audit	As identified through Risk Assessment and any other relevant management information in the business.	An Independent Internal Assurance Provider, e.g. a Group Internal Audit Function or Assurance Function.	<p>Programme agreed by Audit, Governance or Planning Committee, or equivalent.</p> <p>Not responsible for ensuring that Data Submissions are complete and accurate but to provide an independent challenge to the process to produce the Data Submission.</p> <p>A review of operational processes that feed the systems that generate the Data Submission. For example, inspection processes that drive health index classifications, connection quotation processes that drive GS performance.</p> <p>Can be done during the year as opposed to directly before submission.</p> <p>Formal report produced.</p> <p>Control gaps/areas for improvement identified and actions logged.</p>
External Underlying Activity Audit	As identified through Risk Assessment and any other relevant management information in the business.	Audit carried out by a third party outside the Licensee or its group. Independent registered audit organisations and independent experts with or without formal audit qualifications, where appropriate.	<p>Programme agreed by Audit, Governance or Planning Committee, or equivalent.</p> <p>Not responsible for ensuring that Data Submissions are complete and accurate but to provide an independent challenge to the process to produce the Data Submission.</p> <p>A review of operational processes that feed the systems that generate the Data Submission. For example, inspection processes that drive health index classifications, connection quotation processes that drive GS performance.</p> <p>Can be done during the year as opposed to directly before submission.</p> <p>Formal report produced.</p> <p>Control gaps/areas for improvement identified and actions logged.</p>

4. Reporting Requirements for Regular Submissions

Section Summary

Details of the Data assurance reporting requirements relating to Licensees' Regular submissions.

Regular Submissions

- 4.1. Regular Submissions are the Data Submissions made by a Licensee, which are listed in Appendix 1 (a, b, c, d or e) as a Regular Submission and are planned for the price control period. Submission periods are typically set out in the relevant licence condition or associated guidance/governance document. Regular Submissions are classified as either:
- Repeatable interval Data Submissions (e.g. monthly, quarterly, annually – for example annual Regulatory Reporting Packs)
 - or
 - Non-repeatable Data Submissions, which may be a one-off submission at a pre-determined date or submission window. (e.g. main Data Submissions relating to uncertainty mechanisms, Re-opener applications, RIIO business plans, innovation applications or submissions made by Licensees in support of claims under any other funding or incentive mechanism).

Annual reporting

- 4.2. For NetDAR Submissions, Licensees are required to provide one report to Ofgem each year. This report must contain two main sections, the first relating to past submissions, and the second relating to future submissions. These are defined as follows:
- **Past Data Submissions Section** (Section 1): details the assurance work done on Submissions made in the Past Year, the review of the Past Year Risk scoring, and the Errors identified up to the report submission date.
 - **Future Data Submissions Section** (Section 2): explains the Licensee's Risk scoring, Total Risk Rating, and Data assurance plans for the Future Year's Data Submissions. It may also provide a longer-term outlook of a Licensee's Data assurance plans.

- 4.3. Appendix 4 contains a list of areas that are of interest to Ofgem when reviewing each NetDAR. Licensees can use this as a pre-submission check to help inform the content of their NetDAR. It is not designed for prescriptive use in NetDAR templates and licensees may structure the narrative to suit their specific organisation. Where we consider information is insufficient or further clarity is required, Ofgem may raise supplementary questions.
- 4.4. Where a Licensee is part of a larger ownership group comprising a number of regulated network companies, then NetDAR should be submitted²⁴ per Sector (i.e. electricity transmission, gas transmission, electricity distribution, gas distribution) within that group of companies. Differences in processes between Licensees in the same group should be factored into Risk Assessments and, where material, these differences should be addressed in the NetDAR.²⁵
- 4.5. Within the "Past Data Submissions" section, Licensees are required to report to Ofgem if they have undertaken:
- Any material changes to the Data Architecture or organisational data processes that may increase/decrease the Risk of reporting and state if the changes are in progress or completed in the Past Year. The above changes can occur in either individual business units or the Licensee as a whole.
 - The planned Data Assurance Activities, as stated in the Past Year's NetDAR submission for high and critical Risks and summarise the assurance done.
- 4.6. Within the "Future Data Submissions" section, Licensees are required to report to Ofgem the Conditions / tables for which their overall Risk rating has changed since the Past Year's NetDAR submission. In addition, Licensees are required to report to Ofgem any Data Submissions where the overall Risk rating remains high or critical but there has been movement in the Risk scoring to determine this. Tables the Licensees are not required to report against should be left blank and comment that the Risk table has not changed from the Past Year.

²⁴ Although both part of the Cheung Kong Group, Northern Gas Networks Limited and Wales and West Utilities Limited are required to submit separate reports.

²⁵ This does not apply to NGENO/NGET as NGENO is a legally separated company that holds an ET licence.

4.7. Where the Risk Assessment guidance changes between NetDAR submissions, then Licensees are not required to update their Past Year scores to apply the latest version of the DAG (i.e. the Past Year scores of the NetDAR in Table 4.1 should be identical to the Future Year scores reported in the previous year’s NetDAR). Licensees should explain in their NetDAR when scores have changed purely as a result of a change in the Risk Assessment guidance.

Table 4.1: Summary of annual NetDAR requirements

Sectors	Calendar year	Submission date	Subject period		Risk Assessment Scope	
			Past Year	Future Year	Past	Future
GTO, GDN, ESO (interim arrangement)	2022	31 July	1 March 2021 to 31 March 2022	1 April 2022 to 31 March 2023	Any Data Submissions listed in Appendix 1 and submitted during the relevant subject period.	
ETO, GTO, GDN, ESO	Remainder of RII02 Price control	31 March	1 April of the preceding calendar year to 31 March	1 April of the current calendar year to 31 March of the next calendar year	Any Data Submissions listed in Appendix 1 and submitted during the relevant subject period.	
DNOs	2023 only	31 March 2023	1 April 2022 to 31 March 2023	1 April 2023 to 31 March 2024	Updated Data Submissions (ED1) listed in Appendix 1 and submitted during the relevant subject period.	
DNOs	2024 to 2028	31 March	1 April of the preceding calendar year to 31 March of the current calendar year	1 April of the current calendar year to 31 March of the next calendar year	New Data Submissions (ED2) listed in Appendix 1 and submitted during the relevant subject period.	

Report formats

4.8. The NetDAR should consist of a succinct narrative document. It should adhere to the specified format and must provide any required information as set out in the current version of the NetDAR template. References to supporting documentation should be included where appropriate but such documentation need not be appended to the NetDAR.

- 4.9. The NetDAR should, as much as possible, function as standalone documents. It should therefore give a reviewer a good understanding of the Licensee's Risk management strategies, its Risk appetite, and the strengths and weaknesses of its Data assurance and Risk reduction plans. It should provide the reviewer with as much confidence as possible that the Licensee is proportionate in reducing Risk to tolerable levels within a reasonable timeframe and/or applies appropriate Data assurance to manage the Risks.
- 4.10. For Data Submissions with critical and high Risk ratings that the Licensee is required to report on in accordance with paragraph 4.6, detailed Data Assurance Activity explanation is required. The detailed explanation should include:
- A description of any established Data Assurance Activities taken as described in paragraph 3.3. (Licensees may cross-reference to any relevant narrative);
 - An explanation of any additional assurance activities as outlined in paragraph 3.4.
 - The specific aims/outcomes of the assurance activities;
 - The expected and actual completion date; and
 - An indication of whether the assurance activities are completed or ongoing.

Where Licensees are not required to report a Data Submission under paragraph 4.6, no explanation is required.

- 4.11. The aims of the assurance activities should be related to mitigating Risks through reducing the impact or the probability of the Risks. Examples of assurance activities are changes in processes and systems such as IT system development, implementation (new reporting software), new record keeping solutions, or process automation.
- 4.12. When Licensees submit the NetDAR, they are required to submit results of their Risk Assessment and assurance activity plan in the current version of the Risk Assessment (Excel) template.

Table 4.2: Report templates

Template	Format	Current version
Network Data Assurance Report Template	Word	2.2
Risk Assessment Template	Excel	2.2

4.13. In addition, when compiling their NetDAR, Licensees are encouraged to compile and submit an issue log to record any observations, suggestions, and/or problems encountered.

Error reporting

4.14. Licensees must take all reasonable steps to ensure the quality of their Data. Quality Data will in all material respects be accurate, complete and fairly presented. Licensees are required to notify Ofgem of the possibility of any significant revisions to improve Data quality. This notification must be issued to Ofgem as soon as it becomes evident to the Licensee that a reasonable likelihood exists of Material Errors in any of its past Data Submissions.

4.15. Additionally, Material Errors detected up to the NetDAR submission date must be reported in the NetDAR. Material Errors are those that score 3 and 4 on the Impact Metric Scoring system (Table 2.1) if individually assessed. While Licensees are already required to report Material Errors to Ofgem as soon as they become aware of them, the NetDAR must also contain details of Material Errors in the following circumstances:

- a. the Error has not been picked up by the Licensee’s control systems or procedures and has been detected after submission of the relevant Data Submission; and
- b. the Error was detected by the control systems or procedures prior to submission of the relevant Data Submission but a similar Error may not have been picked up in past Data Submission(s).

Additional instances of a Data Submission

- 4.16. In some circumstances, a Licensee may be required to submit more than one instance of the same Data Submission within a Regulatory Year than is normally required under a licence condition. This may occur, for example, as a result of a submission date change derogation, due to changes in reporting frequency, or because Ofgem has required a resubmission.
- 4.17. Each instance of the Data Submission may not necessarily score the same on the Risk Assessment or may not be subject to the same Data Assurance Activities. In such circumstances, each instance of the Data Submission should be treated as a separate Data Submission for reporting purposes.
- 4.18. If more than one instance of a Data Submission is required in a normal reporting year (e.g. monthly submissions) then, provided the associated Risk and Data Assurance Activities undertaken are unchanged between Data Submissions, all instances may be reported as if they were a single Data Submission.

5. Reporting Requirements for Exceptional Submissions

Section Summary

Details of the Data assurance reporting requirements relating to Licensees Exceptional Submissions.

- 5.1. An Exceptional Submission is an adhoc submission by a Licensee but not listed in Appendix 1 (a, b, c, d or e) as a Regular Submission. For example, Exceptional Submissions may include submissions made in response to a formal information request issued by Ofgem, if stated by Ofgem that fall within the scope of the DAG.
- 5.2. For Exceptional Submissions, Licensees are required to undertake and submit a Risk Assessment and to identify and explain appropriate Data Assurance Activities in accordance with the same guidance that applies to Regular Submissions in the Exceptional Submission Assurance Template.
- 5.3. As explained in paragraph 3.4, Licensees must provide an explanation of any Data Assurance Activities carried out for Exceptional Submissions. Licensees may direct Ofgem to narratives already provided in the Regular Submissions NetDAR reports that are relevant to the Exceptional Submission. An understanding of these additional activities can provide increased confidence in the accuracy of the Data provided by the Licensee.
- 5.4. Licensees are required to submit an Exceptional Submission Assurance Template only for Exceptional Submissions. However, Licensees can include extracts from other DAG templates e.g. Risk Assessment Templates if that will enhance their Exceptional Submissions.
- 5.5. Where Licensees are to submit multiple Exceptional Submissions of a similar nature within a short time-frame and the Data Assurance Activities are common across the multiple Exceptional Submissions, Licensees may submit a single Exceptional Submission Assurance Report.

Template	Format	Current version
Exceptional Submission Assurance Template	Word	2.2

Appendices

Appendix	Name of Appendix
1	Data Submissions to which the Risk Assessment applies
2	Definitions
3	Relevant Licensees
4	NetDAR pre-submission reference

Appendix 1: Data Submissions to which the Risk Assessment applies.

The Appendices 1a, 1b, 1c, 1d and 1e are contained within the Risk Assessment Template. The appendices apply on a Sector basis as follows:

- 1a. Electricity Transmission
- 1b. Gas Transmission
- 1c. Gas Distribution
- 1d. Electricity Distribution
- 1.e Electricity System Operator

Appendix 2: Definitions

Please note that the plural form of the below defined terms are also as defined.

- **Accountable Senior Manager:** an individual at a sufficiently high level in the Licensee so that his or her primary focus is on long-term strategic objectives of the Licensee rather than short-term project or contractual ones. There must also be a direct line of responsibility from the individual to the specific business area to which a Data submission relates.
- **Action:** is an individual element of the Data Assurance Activity plan. It has a pre-defined aim, measurable outcomes and expected or actual completion timeframes. Its progress is reported in the NetDAR.
- **Audit:** An investigative examination of Data or of the processes and systems involved in the collection, computation, compilation and/or interrogation of Data, with the specific purpose of verifying the accuracy or reliability of the Data or the adequacy of the processes and systems used to ensure Data accuracy or reliability. An Audit will result in the production of a formal report detailing its scope, methodology, findings, and recommendations.

Further clarification:

A DAG-related Audit can be either Review of the submission process or the Data contained in a Data Submission. DAG-related Audits can be performed by either independent internal or independent external resources. DAG related Audits may be voluntary or mandatory.

- **Audit, Governance or Planning Committee or equivalent:** Committee or business unit with its primary focus on long-term strategic objectives of the Licensee and duly authorised to set out and Sign-off on overall organisational audit programmes, having appropriately assessed and balanced all internal and external Risks and priorities.

- **Board:** means the board of directors of the Licensee.
- **Board Sign-off:** The formal certification from the Board of the Licensee that all reasonable steps have been taken to ensure and verify that a Data Submission meets the level of accuracy or reliability as specified under the relevant licence condition(s).
- **Chief Executive Officer (CEO):** the most senior accountable officer of the Licensee, includes any person occupying the position of chief executive officer, regardless of title.
- **Control Framework Assessment:** an assessment of the level of reliability of the relevant control systems and procedures used to prevent and/or detect Data Errors prior to use of the Data for the purpose of strategic decision making and prior to submission of the Data to Ofgem.
- **DAG Licence Condition:** means Standard Licence Condition B23 for electricity transmission Licensees, Special Standard Condition A55 for gas transmission and gas distribution Licensees, and Standard Licence Condition 45 for electricity distribution Licensees.
- **Data:** As defined in the DAG Licence Condition: “means, information contained in any submissions to the Authority under this licence in respect of which the licensee must carry out a Risk Assessment, as specified in the DAG, as may be further clarified in the DAG.”
- **Data Architecture:** means the models, policies, rules and standards that govern how Data is collected, stored, integrated and used by business units in a Licensee.
- **Data Assurance Activity:** As defined in the DAG Licence Condition: “means, in respect of Data, an activity undertaken by or on behalf of the licensee in order to verify or provide assurance that Data meets the required level of accuracy and reliability (as may be further clarified in the DAG)”.

- **Data Audit:** An Audit focused on verifying the accuracy or reliability of Data. The audit must be conducted by person(s) with sufficient levels of expertise and knowledge to enable them to correctly attest to the accuracy or reliability (or otherwise) of the Data.
- **Data Error:** An inaccuracy in a Data Submission that negatively affects the quality and reliability of future and/or past Data Submissions. While Risk relates to possible future inaccurate or incomplete Data Submissions, Error relates to actual occurrences of inaccurate or incomplete submissions. For Risk Assessment, only a limited number of potential impacts are considered and the magnitudes of these impacts in the event of actual occurrence are often uncertain. Errors can be detected or undetected. The actual impact of an Error may only become apparent post detection and may not be the same as the assumed impact used in a Risk Assessment prior to any Error detection. Risk Assessment usually assumes no undetected historical Errors.
- **Data Submission:** a submission to the Authority (listed in Appendix 1a, 1b, 1c, 1d or 1e) in respect of which the Licensee must carry out a Risk Assessment.
- **Director:** A Director of a business function, for example Director of Operations or Finance Director.
- **Error:** Refer to Data Error for definition.
- **Exceptional Submission:** A submission that has not been planned for the duration of the price control period, where there are no timings or submission windows set out in the relevant licence condition (e.g. ad-hoc information request from Ofgem). Adhoc information requests issued by Ofgem that fall within the scope of the DAG will be clearly stated by Ofgem and will allow sufficient time for licensees to complete the relevant processes to provide the Data Submission.

- **Exceptional Submission Assurance Report:** The report on Data Assurance Activities undertaken for the Exceptional Submission, following the Exceptional Submission Assurance Report Template.
- **Financial System:** an IT system, or an individual module of a multiple-module system, used for the purpose of collection, computation, compilation and/or interrogation of financial data.
- **Future Year:** The Regulatory Year commencing on 1 April after the relevant scheduled NetDAR submission date.
- **Impact Metric Score:** a measure to represent the impact of an identified Risk materialising. It relates to the expected impact of inaccurate, incomplete, misreported or late Data on customers, competition and the financial allowance awarded to Licensees. It is scored by assessing each Data Submission against these impact categories.
- **Independent:** with the exception of "Independent Internal Assurance Provider" means an individual or organisation without a vested interest in the performance of the Licensee.

This means that:

- o its remuneration is not determined by reference to the financial performance of the Licensee or a related undertaking, and
 - o in respect of an organisation: it is not a unit within the Licensee (e.g. Internal Audit), it is not a related undertaking , or
 - o in respect of an individual: he or she is not an employee of the Licensee or of a related undertaking and he or she does not hold any shares in the Licensee or a related undertaking.
- **Independent Internal Assurance Provider:** means an officer or business unit of the Licensee or a related undertaking with sufficient levels of expertise and

knowledge to enable it to conduct a thorough Audit. An Independent Internal Assurance Provider will have had no involvement in the collection, computation, compilation and/or interrogation of the Data, or in the case of process assurance will have had no involvement in the design or implementation of the associated systems or processes.

- **Internal Audit:** means the Licensee's function of assuring that its Risk management, governance and internal control processes are operating effectively.
- **Licensee:** means any holder of an electricity transmission licence, a gas transporter licence, or an electricity distribution licence (excluding independent Distribution Network Operators (iDNOs), independent Gas Distribution Networks (iGDNs), and Offshore Transmission Owners (OFTOs)). The relevant Licensees are listed in Appendix 3.
- **Material Error:** an Error (or combination of Errors) that would lead to a Data Submission or part of a Data Submission failing to meet the level of accuracy or reliability as specified under or pursuant to a relevant licence condition(s). For DAG purposes a Material Error is one with an Impact Metric Score of 3 or 4.
- **Material Changes:** to the Data Architecture or organisational Data processes is where the change undertaken alters the current understanding and associated risks Ofgem has on the Licensee's Data Architecture or organisational Data processes.
- **NetDAR (Network Data Assurance Report):** Report submitted annually by Licensees to comply with reporting requirements under the DAG Licence Condition.
- **Numerical System:** an IT system, or an individual module of a multiple-module system, used for the purpose of collection, computation, compilation and/or interrogation of non-financial Data.
- **Past Year:** The prior Regulatory Year ending on the 31 March.
- **Planning:** A methodology statement and submission plan that explains the systems, processes, responsibilities, and timings for a Data submission.

- **Poor quality data:** Is data that is inaccurate, incomplete, or out of date and data that is not fit for purpose.
- **Probability Metric Score:** a measure to represent the probability of Error occurrence. It is scored through evaluation of the processes for Data collection, reporting and the related control systems and processes.
- **Process Audit:** An Audit focused on verifying the adequacy of processes and systems. The Audit must be conducted by person(s) with sufficient levels of expertise and knowledge to enable them to correctly attest to the adequacy (or otherwise) of the processes and systems, to identify weaknesses, and to recommend improvements.
- **Regular Submissions:** Data Submissions made by a Licensee that are planned and expected during the price control period. Regular Submissions may be submitted at regular intervals (e.g. monthly, quarterly, annually) or may be a one-off submission within a planned submission window during the price control as stated within the relevant licence conditions or relevant supplementary guidance document (e.g. Re-opener applications, innovation funding applications).
- **Reporting Assessment:** an assessment of the level of accuracy and reliability of the relevant systems and procedures used in the collection, computation, compilation and interrogation of Data.
- **Regulatory Year:** The Regulatory Year runs from 1 April in one year to 31 March in the subsequent year.
- **Review:** the process of checking, validating, and certifying that Data has been correctly collected, computed, compiled and interrogated, to the required level of accuracy and reliability, and in adherence to applicable rules, guidance or policies.
- **Risk:** An estimation of an uncertain future outcome resulting as a consequence of inaccurate or incomplete Data Submission and having a negative impact in the defined categories of customers, competition and financial. A Risk is specified by its

probability of occurrence and its impact. Risks relate to the expectation that inaccurate or incomplete Data Submissions may occur.

- **Risk Assessment:** is the identification of Risks, their Impact and Probability Metrics and the Total Risk Rating. As defined in the DAG Licence Condition: “means an assessment of the likelihood and potential impact of any inaccurate or incomplete reporting, or any misreporting, of Data by the Licensee to the Authority under this licence (as may be further clarified in the DAG).”
- **Risk Assessment Template:** an excel spreadsheet that contains a list of the Data Submissions per Sector and a summary table designed to capture the results of a Licensee’s Risk assessment and Data Assurance Activities for Past and Future Years.
- **Sector:** means either electricity transmission (ET), gas transmission (GT), gas distribution (GD), electricity distribution (ED) or electricity system operator (ESO). Where the term “transmission” without specifying electricity or gas is used then it refers to both electricity transmission and gas transmission.
- **Senior Manager Sign-off:** The formal certification from an Accountable Senior Manager that (to the best of his or her knowledge and having taken all reasonable steps to confirm and verify) the Data Submission meets the level of accuracy or reliability as specified under the relevant licence condition(s). For Data Submissions not falling under the sole remit of a single Accountable Senior Manager, each relevant Accountable Senior Manager is required to Sign-off before the Data Submission may be considered to have Sign-off at this level.
- **Sign-off:** formal certification that all reasonable steps have been taken to validate and check that all aspects of a Data Submission (including accompanying narrative or commentary) are correct and meet the required levels of accuracy.
- **Total Risk Rating/Total Risk Score:** an assessment combining the impact and likelihood of inaccurate, incomplete or late Data Submission. A classification of Risk

into Critical, High, Medium and Low categories. It represents the significance of the Risk.

- **Underlying Activity Audit:** An Audit, not necessarily directly related to a single Data Submission, that focuses on upstream operational processes or activities that underpin Data submission(s).

Appendix 3: Relevant Licensees

Electricity Distribution

Company Group	Licensee	Company number	Licence Type
Electricity North West	Electricity North West Limited	2366949	Electricity Distribution
Northern Powergrid	Northern Powergrid (Northeast) plc	2906593	Electricity Distribution
	Northern Powergrid (Yorkshire) plc	4112320	Electricity Distribution
SSE plc	Scottish Hydro Electric Power Distribution Plc	SC213460	Electricity Distribution
	Southern Electric Power Distribution Plc	4094290	Electricity Distribution
Scottish Power Ltd	SP Distribution Plc	SC189125	Electricity Distribution
	SP Manweb Plc	2366937	Electricity Distribution
UK Power Networks	Eastern Power Networks Plc	2366906	Electricity Distribution
	London Power Networks Plc	3929195	Electricity Distribution
	South Eastern Power Networks Plc	3043097	Electricity Distribution
National Grid Electricity Distribution	National Grid Electricity Distribution (East Midlands) Plc	2366923	Electricity Distribution
	National Grid Electricity Distribution (South Wales) Plc	2366985	Electricity Distribution
	National Grid Electricity Distribution (South West) Plc	2366894	Electricity Distribution
	National Grid Electricity Distribution (West Midlands) Plc	3600574	Electricity Distribution

Electricity Transmission

Company Group	Licensee	Company number	Licence Type
National Grid	National Grid Electricity Transmission Plc	2366977	Electricity Transmission
SSE	Scottish Hydro Electric Transmission Plc	SC213461	Electricity Transmission
Scottish Power	SP Transmission Plc	SC189126	Electricity Transmission

Electricity System Operator (ESO)

Company Group	Licensee	Company number	Licence Type
National Grid Electricity System Operator Limited	National Grid Electricity System Operator Limited	11014226	Electricity Transmission

Gas

Transporter

Distribution Network operators (DNs)

Company Group	Licensee	Company number	Licence Type
Cadent Gas Limited	Cadent Gas Limited	10080864	Gas Transporter
Cheung Kong Group ²⁶	Northern Gas Networks Limited	5167070	Gas Transporter
	Wales & West Utilities Limited	5046791	Gas Transporter
Scotia Gas Networks Limited	Scotland Gas Networks Plc	SC264065	Gas Transporter
	Southern Gas Networks Plc	5167021	Gas Transporter

²⁶ Although both part of the Cheung Kong Group, Northern Gas Networks Limited and Wales and West Utilities Limited are required to submit separate reports.

National Transmission System (NTS) operator

Company Group	Licensee	Company number	Licence Type
National Gas Transmission plc	National Gas Transmission Plc	02006000	Gas Transporter

Appendix 4: NetDAR pre-submission guidance notes

Broad aspects likely to be outlined include the following. Note this is not a prescriptive list, but for guidance only and could be covered in any relevant section of the NetDAR.

Organisational Data Assurance

Governance

- Outline of established governance structure
 - Define the established governance structures that are involved in risk assurance and providing information relating to the NetDAR - preferably including an overview diagram.
- Executive Board/Committee
 - Key board members.
 - Role of the board in reviewing and/or approving DAG process and Data Submissions.
 - Confirm ownership of the DAG document i.e. who provides final Sign-off for the Risk Assessment and NetDAR submission (e.g. is it assigned to a board member or sub-committee etc).
- Data assurance and risk management committees
 - Duties of risk management committees, as relevant, (e.g. involvement, if any, in reviewing data assurance process, DAG sign-off, ensuring best practice etc).
 - Brief description of the composition of committees that oversee data assurance and risk management e.g. Audit Committee, Risk Management.
 - Key reporting lines and interactions of the above with other committees, executive board and regulatory/compliance teams.
 - The committees' independence e.g. internal and external auditors having unrestricted and confidential access to committee chair.
- Data Assurance/Compliance Team equivalent
 - Provide a brief description of team structure, role and remit.
 - Outline reporting structure and how issues are escalated up the organisation to executive Board.
 - How the team ensures data assurance processes are being applied consistently across the organisation and working as prescribed.
 - Areas of interaction with External/Internal auditors and other teams.

- IT committee or equivalent
 - Duties of IT committees (or equivalent) and the committees link or involvement with the Data Assurance team and DAG process, if any.
 - IT committee or equivalent's role in developing Data Architecture through IT investments and of Data integrity, collection, consolidation and reporting.
- Other committees
 - Outline any other committees, as relevant e.g. a Finance Committee and its role in relation to data assurance process.

Controls and systems in place

- Ofgem reporting
 - Officer/board member with overall responsibility to ensure that Data Submissions are completed on a timely and accurate basis.
 - Overview of the Licensee's Data Submission process i.e. Data collection, review and approval stages.
 - The role and authority levels, if any, of board sub-committees in Data Submissions.
- Data repository systems
 - Outline core (integrated) data repository system and accounting system in place e.g. SAP HANA system.
 - If there are multiple systems in place explain:
 - How the Licensee company assures itself of data integrity and connectivity across the Licensee.
 - Additional assurance processes in place to mitigate the higher Risks posed by multiple systems.
 - Overview of the Licensee's strategic aim e.g. if it plans to integrate data systems or continue with multiple systems.
 - For companies embarking on system upgrade or integration, provide an overview of the strategy approval/sign off process, highlighting key timelines and benefits of the investment to data integrity and accuracy.
- Audit Team
 - Overview of the role, remit, and reporting structure of the audit team.
 - Audit team's involvement, if any, in data assurance, risk management and setting internal control processes.

Past Data Submissions

- Data Architecture changes
 - Brief summary of any changes to the Data Architecture for a Licensee's business unit that has submitted Data to Ofgem.
- High and Critical scored items
 - Explanation of factors leading to high or critical Risk scores – with reference to the Impact and Probability Metrics.
 - Explanation of established Data Assurance Activities (Licensees may direct to relevant narratives from the Organisational Data Assurance section of the NetDAR) and any additional Data Assurance Activities undertaken for Data submitted to Ofgem.
- Past Data Submissions issues
 - Provide update on key issues raised in previous years DAG Data Submissions or from Ofgem response letters.
 - If the issues have been resolved, describe work or additional assurances taken to address the issues and confirm appropriate Sign off (Where possible please make reference to the Impact and Probability Metrics).
- Errors identified in the past Data Submissions (compare with existing information)
 - Describe briefly the Errors identified in past Data Submissions and how they have been rectified.
 - State the financial, reputational or customer impact of the Error and if it still has an impact on the Licensee.
 - Confirm if the concerns/Errors raised in Ofgem's DAG response letters have been addressed.

Future Data Submissions

- Potential issues
 - Provide an overview of future/emerging Risks to increase Risk scores.
 - Provide an overview of any additional assurance activities to be implemented to manage emerging Risks that exceed established assurance activities.
 - Any future work/investment which will fully mitigate the Risk and timelines.
- Risk Assessment for Future Data Submissions

- Brief explanation of challenges of Risk Assessment for the Future Year including difficulties in carrying out Risk identification and Risk assessment or any necessary assumptions applied.

- Data Assurance Plan
 - Provide a clear description of the Data Assurance Activity in place and how this will reduce identified Risk.
 - Explanation of planned Data Assurance Activities (Licensees may direct to relevant narratives from the Organisational Data Assurance section of the NetDAR) or any additional Data Assurance Activities to mitigate to high and critical Risk scores and why the planned actions are appropriate. The impact of the Risk reduction on Licensee's finance, customers, reputational Risks and Data integrity where applicable.
 - Lessons learnt, if any and how the Licensee will deal with similar Risks in future.

- New Risk reduction initiatives
 - A brief explanation of the Licensee's future long-term initiatives planned in RIIO-2 to reduce submission Risk by improving processes or procedures or the quality of the underlying Data.