



Risk Assessment Number	SPEN_021
Dataset	Aggregated Smart Meter Data
No. Data Tables	3
Date	November 2024
Refresh Date	November 2025
Approver	Kirsty Scott

1. Principles

SPEN classify their data into three categories, based on the risk assessment outcome:

- *Open*: data is published for all to use, modify, and distribute with no restrictions.
- *Shared*: data is published to a limited group of participants with restrictions on usage.
- *Closed*: due to sensitivities within the data, it is not suitable for publication, however, may be shared with specific stakeholders under a bespoke data sharing agreement where appropriate.

The risk assessment determines the classification and whether it can be published.

The risk assessment considers 6 categories:

1. *Personal privacy*
2. *Security*
3. *Public interest*
4. *Commercial*
5. *Legislation/Regulation preventions*
6. *Other*

Risk scoring is based on a combination of the likelihood of the risk occurring and the impact of it – with an outcome between 0 and 10.

- Risk score of 4 or below: no mitigations applied.
- Risk score of 5-7: mitigations required to be applied before publication.
- Risk score of 8 or above: due to sensitivities within the data, dataset may be categorised as 'Closed' and not suitable for publication.
- If the **total** risk score after mitigation is above an 8 then the dataset is classified as 'Closed' and not suitable for publication.

The mitigations that can be applied are as below:

1. *Aggregation*: combining/summarising in order to reduce granularity whilst still maintaining some value.
2. *Anonymisation*: removal/partial removal of identifying features, e.g. location info, name, address, postcode.
3. *Delay*: deferring release of data for a defined period until a time where the risk is greatly diminished or no longer exists, e.g. outage data could be used to target the network when some sections are placed under greater load, therefore a delay in publication could be implemented to mitigate the risk of the data being used to attack the network.
4. *Pseudonymisation*: replacing identifying features with a different unique identifier, e.g. replacing name and address with an ID that is held internally.
5. *Redaction*: removal or overwriting of features.
6. *Restrict use and access*: e.g. subject to shared data licence conditions, user registration and approval.
7. *Other*: any other mitigating action that could be applied, details of the action are provided in the risk assessment.

Name of Dataset:	Aggregated Smart Meter Data	
Date of Assessment:	26/11/2024	
Dataset Owner:		
Assessment completed		
Dataset Description:	Provides a timeseries dataset containing the aggregated sum of each of the smart meters' energy data grouped by substation feeder, where SP Energy Networks currently collects this data. For protection of privacy, the data filters out rows where there are less than 5 meters connected.	
When assessing below, for all sections, consideration must also be given to other datasets that may be openly available elsewhere (within or out with the organisation) that when combined with this dataset could create sensitivity issues. Do not consider in isolation.		
Risk Assessment: If issues exist, mitigating actions must be listed within the Risk Scoring and Mitigation Table - see overleaf	PERSONAL PRIVACY: Is personal data contained in the dataset pre-mitigation? Considerations: 'Personal Data' means any information relating to an identified or identifiable natural person; an identifiable natural person is one who can be identified, directly or indirectly by combining with other information, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Public information can still be personal information, e.g. a satellite image of a house may be personal information that relates to an individual.	YES
	SECURITY: Does the dataset, pre-mitigation, include factors that would change the security posture of individuals, entities or impact national security? Considerations: If the dataset contains personal data, would publication of that data go against the rights and freedoms of the individual. If the dataset contains confidential business sensitive information (such as financial information or physical asset information), would publication of that data go against the obligation to implement appropriate technical and organisational measures to protect that information. If the dataset contains details of physical locations or structures, would the publication of that data go against the requirements to protect staff, the public or company infrastructure.	YES
	PUBLIC INTEREST: Does the dataset, pre-mitigation, have the potential to negatively impact public interest? Considerations: Could the dataset be reasonably interpreted, intentionally or unintentionally, in a way that would be detrimental to the public good or what is in the best interest of society. Does the data allow for good decision making by its users that allows for an efficient allocation of resources to meet overall stakeholder aims. Could the dataset be used in a way to restrict fair commercial competition. Does the dataset have appropriate transparency and accountability assigned to provide users comfort over the quality of data and its intent.	YES
	COMMERCIAL INTEREST: Does the dataset, pre-mitigation, contain information that through its disclosure would, or would be likely to, prejudice or harm the commercial interests of SPEN, those of an individual or customer, a company or another legal entity? Considerations: Are there intellectual property restrictions whereby the data has been obtained by SPEN but with terms and conditions imposed which would restrict onward publishing.	YES
	LEGAL / REGULATORY OBLIGATIONS: Does the dataset, pre-mitigation, breach any law or regulations to which SPEN is subject? Considerations: Are there specific legislation or regulation that prohibits publications in whole or in part? These laws include, but are not limited to: Utilities Act 2000; Electricity Act 1989; Gas Act 1986 / 1995; Competition Act 1998; Enterprise Act 2002; Enterprise and Regulatory Reform Act 2013; Data Protection Act 2018; General Data Protection Regulation (GDPR), Network and Information Systems Regulations 2018	NO
	OTHER: Other personal privacy, security, public interest, end consumer, legislation/regulation risk, health and safety implication risk? For example risk of health and safety being compromised? Is data quality substantially poor and substantially inadequate at meeting user's needs?	NO

Ref	Sensitivity Area	Risk Details:	Risk Impact before Mitigation	Risk Likelihood before Mitigation	Risk	Mitigating Actions	Risk Impact after Mitigation	Risk Likelihood after Mitigation	Risk	Action Taken / Comments
1	Personal Privacy	The data to be published is aggregated smart meter data, which is several levels removed from personal data. As such, it does not allow for the identification of individuals or their patterns of life.	Minor	Unlikely	3	Aggregation	Minor	Remote	2	Due to the aggregation of data (any instance of non-aggregation compliance will be removed from the dataset) no personal identifiers can be extracted or any patterns of life of any individual.
2	Security	The data to be published is aggregated smart meter data, which is several levels removed from sensitive operational details. As such, it does not contain information that could expose a cyber security vulnerability, be used in a manner harmful to SPEN's cyber security controls or reveal limitations/weaknesses in our operational activities. Additionally, it does not include specific information about system assets that could be exploited with malicious intent.	Minor	Unlikely	3	Aggregation	Minor	Remote	2	Due to the aggregation of data (any instance of non-aggregation compliance will be removed from the dataset) no personal identifiers can be extracted or any patterns of life of any individual. The data does not contain information that could expose a cyber security vulnerability, be used in a manner harmful to SPEN's cyber security controls or reveal limitations/weaknesses in our operational activities. Additionally, it does not include specific information about system assets that could be exploited with malicious intent.
3	Public Interest	Market Manipulation: Aggregated data might be used by market participants to predict energy consumption patterns, potentially leading to price manipulation or unfair competitive advantages. Incentivizing Negative Actions: If the data shows high energy consumption during certain periods, it might incentivize behaviours that are not aligned with Net Zero goals, such as increased use of fossil fuels during peak times to meet demand. Misinterpretation of Data: There is a risk that the data could be misinterpreted by the public or other stakeholders, leading to decisions that might	Minor	Unlikely	3	Other	Minor	Remote	2	With the data being shared on Open Licence, this results in more visibility of the data, thus there can be public monitoring to detect abnormal behaviours or manipulations.
4	Commercial	Misinterpretation of Data: There is a risk that the data could be misinterpreted by the public or other stakeholders, leading to decisions that might not be in the best interest of consumers or the	Minor	Unlikely	3	Other	Minor	Remote	2	Full descriptors will be published as to the data, its intention and use.
5	Legislation/Regulation Preventions	N/A	N/A	N/A	0	N/A	N/A	N/A	0	All consideration has been given to complying with SLC 10A DBP conditions have been considered compliance is evidenced throughout with all levels of Principle 3 being
6	Other	N/A	N/A	N/A	0	N/A	N/A	N/A	0	

Overall Risk Score (without mitigation)	3.86
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Overall Risk Score (with mitigation)	2.86
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LIKELIHOOD RATINGS:

	Likelihood
	N/A
	Remote. Would only happen in exceptional circumstances e.g. there are no historical instances.
	Unlikely. There may have been potential cases/near misses in the past.
	Possible. Known to have happened before on rare occasions or has partially occurred.
	Expected. Has happened before and strong possibility it will likely occur again.
	Certain. Expected to occur frequently.

IMPACT RATINGS:

	Impact	E.g. if in P&L and/or cash terms	Examples if in stakeholder terms. Reputation and relationships with employees; customers; shareholders, press, government, and/or regulators
	N/A	N/A	N/A
	Minor. Would have insignificant impact.	< £1m	Short term loss of employee morale, local adverse publicity/media report.
	Moderate. Would have moderate impact which can be effectively managed.	£1m-£10m	Minor employee disengagement, prolonged local adverse publicity/media reporting, localised stakeholder concern, temporary drop in share price, minor reduction in customer base.
	Significant. May require intervention but further impact on any other critical assets/processes unlikely.	£10m-£25m	Isolated employee disengagement, business unit(s), national media interest creating stakeholder concern, negative national stakeholder statements, prolonged decrease in share price, moderate reduction in customer base.
	Major impact on key processes/critical assets affected requiring immediate action to prevent long term damage to the organisation.	£25m-£50m	Employee disengagement across several business units, extensive prolonged adverse reactions from media and/or key stakeholders, significant decrease in share price, and a significant reduction in customer base.
	Catastrophic impact upon the business and/or wider industry and/or stakeholder. Reputational damage/ regulatory non-compliance.	>£50m	Companywide employee disengagement, downgrade in credit rating, extensive widespread negative reporting or public disputes with key stakeholders, loss of investor confidence, extensive reduction in customer base, escalation inevitable and impossible to contain.

RISK SCORING:

		IMPACT					
		Not Applicable	Minor	Moderate	Significant	Major	Catastrophic
LIKELIHOOD	Not Applicable	0	0	0	0	0	0
	Remote	0	2	3	4	5	6
	Unlikely	0	3	4	5	6	7
	Possible	0	4	5	6	7	8
	Expected	0	5	6	7	8	9
	Certain	0	6	7	8	9	10