

# Data Protection Impact Assessment

## ESB Networks – Smart Metering: Interval Data and SST Register Data Aug 2021

DPIA540

The below approvers confirm that all required sections in this document have been completed accurately.

Approved By	Date
Process Owner	12 October 2021
Data Owner (ESBN)	4 October 2021
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## Glossary

Abbreviation	Meaning
AMI	Advanced Metering Infrastructure
BPD	Business Process Design
CoLE	Change of Legal Entity
CoS	Change of Supplier
CRU	Commission for Regulation of Utilities
DB	Data Base
DSO	Distribution System Operator
ESM	Electricity Smart Meter
HES	Head End System
IPS	Intrusion Protection System
KMS	Key Management System
MDMS	Meter Data Management System
MEA	Microgen Export Application
MID	Measuring Instruments Directive
MPRN	Meter Point Registration Number (MPRN)
NSMP	National Smart Metering Programme

Abbreviation	Meaning
SMOC	Smart Meter Operation Centre
SST	Standard Smart Tariff

## 1. Background and Risks to the Data Subject

Section 1 and Section 2 constitute an Initial DPIA.

For the complete list of values for Data Subject Categories etc., please refer to the Records of Processing.

	Background Information
Business Unit	ESB Networks
Business Area	Smart Metering Project & Smart Meter Operations Centre (SMOC)
Process Name	Recording and Collection of 30-minute Interval Data and SST Register Data
RoP Process Reference	ROP N.SM.07
Process Owner	Manager of the Smart Metering Programme
Process Purpose	<p>To facilitate the implementation of the National Smart Metering Programme, Electricity Smart Meters (ESM) accurately record electricity energy usage for customers who have a smart meter installed and have availed of the Smart Metering services.</p> <p>Energy usage is recorded at 30-minute intervals (called Interval Data) and into three Time-of-Use (TOU) registers called the Standard Smart Tariff (SST) registers measuring day, night and peak energy usage respectively. Midnight snapshots of these SST registers are recorded daily on the ESM, and additionally monthly on the first day of the month.</p> <p>Customers who have chosen to subscribe to a Time-of-Use tariff through their Supplier will have their 30-minute Interval Data or SST Register data collected from the ESM and processed by ESNB in compliance with its obligations under Conditions 8 and 9 of its Distribution System Operator (DSO) Licence.</p>

	Background Information
	<p>The precise Interval or TOU Register data collected from each ESM depends on the Smart Data Service assigned to the MPRN being serviced by the ESM as requested by the registered Supplier.</p> <p>There are three Smart Data Services which a Supplier can request for a MPRN following the delivery of the V13 Retail Market Schema Release.</p> <p>These are:</p> <ul style="list-style-type: none"> <li>• MCC01 – requires daily collection of the 24-hr Cumulative Active Import Register (see separate DPIA for 24-hr cumulative register processing).</li> <li>• MCC12 – requires daily collection of the 30-minute Interval Channel for Active Import energy plus the daily midnight snapshot of the associated 24-hr Cumulative Active Import Register.</li> <li>• MCC16 – requires collection of the three SST registers for Day, Night and Peak energy consumption. These are also Cumulative Registers.</li> </ul> <p>In addition, the following data is also collected daily for all three Smart Data Services:</p> <ul style="list-style-type: none"> <li>• 30-minute Interval Channel for Active Export energy.</li> <li>• Interim MicroGen Solution (i.e. Microgen Export Application (MEA)) mandated by the Department of the Environment, Climate and Communications (DECC) as part of national Clean Energy Package (CEP) obligations.</li> </ul> <p>This data collected is used to support the Retail Electricity Market processes – Supplier Billing, Market Settlement Aggregation and Distribution Use of System billing.</p> <p>The export data is collected and processed by ESNB as determined by the CRU pursuant to Condition 9(2) of the DSO Licence.</p>

	Background Information
	<p>In accordance with ESB’s licence obligations and as stipulated within the Metering Code, which is managed by the CRU as the competent authority, billing data is required to be stored by ESB, for a minimum of 7 years.</p> <ul style="list-style-type: none"> <li>• <a href="#">CER-Metering-Code-CER13281</a> – section 4.2.3: ‘As a minimum, for each registered Meter, [7] full years of metered data shall be retained’.</li> </ul>
Data Subject Categories	<p>30-minute Interval Electricity Consumption Readings Standard Smart Tariff (SST) Register data</p>
Name of Controller / Joint Controller	<p>ESB Networks</p>
Name of Processor	<p>ESB Networks</p>
Estimated Frequency of Process	<p>30-minute Interval Data Channels are recorded continuously in the ESM and historical data will be retained on the ESM for up to 350 days.</p> <p>Midnight snapshots of the SST Registers are recorded daily on the ESM and historical data is retained on the ESM for up to 175 days.</p> <p>The relevant Interval Data and SST Registers are collected daily to satisfy the Smart Data Service to apply to the MPRN based on the Time-of-Use tariff that the customer has subscribed.</p> <p>The Interval Data or the SST Register Data is collected into the Head End System (HES) where it normally only resides for a few minutes while it is being processed and passed to the Meter Data Management System (MDMS). However, if the MDMS is not available to receive the data due to a disaster scenario, then the HES can store it for up to 15 days before deleting it.</p>



	Background Information
	<p>When the MDMS receives the data, it validates and stores it. The MDMS stores the data for 7 years as required by the Meter Code.</p> <p>The MDMS pushes the Active Import Interval data and the associated midnight snapshot of the Active Import Register to the ESNB Market System for use in DUoS Billing, Market Settlement Aggregation and for delivery to the appropriate Supplier.</p> <p>The MDMS holds the SST Register data until a bi-monthly billing request is received from the ESNB Market System to provide the three SST register values for a specific billing date.</p> <p>The ESNB Market System will also store any Interval Data and SST Register values it received for 7 years as required by the Meter Code.</p> <p>Metered microgeneration data (kW P-) is exported daily to the Microgen Export Application (MEA). The MEA has been created upon the regulators mandate. However, the MEA data is currently not being sent to suppliers pending formal regulatory approval and clarity on MEA data distribution from the regulator.</p>
High Level Description of the Flow of Data	<p>Interval Data is recorded and stored in every ESM at 30-minute granularity for 4 discrete energy measurement quantities:</p> <ul style="list-style-type: none"> <li>• Active Import Energy (P+). This is the energy consumed from the grid at the premise measured in kilowatts (kW).</li> <li>• Active Export Energy (P-). This is the energy exported to the grid from the premise measured in kilowatts (kW). Only customers with micro-generation equipment installed have the potential to export active energy to the grid.</li> <li>• Reactive Import Energy (Q+). This is the reactive energy consumed from the grid at the premise measured in kilovars (kVAR). It is usually consumed if inductive motors or other reactive loads are installed at the premise.</li> </ul>

	Background Information
	<ul style="list-style-type: none"> <li>Reactive Export Energy (Q-). This is the reactive energy exported to the grid from the premise measured in kilovars (kVAR). It is usually generated if capacitive loads such as synchronous motors or rotating generators are installed at the premise.</li> </ul> <p>Midnight snapshots of the SST Registers required to deliver the Standard Smart Tariff (SST) are recorded in every ESM each day. These are Cumulative Active Import Registers which only measure energy consumption during certain periods of the day as follows:</p> <ul style="list-style-type: none"> <li>SST Night Import Register (KWh) from 11pm to 8am</li> <li>SST Day Import Register (KWh) from 8am to 5pm and from 7pm to 11pm</li> <li>SST Peak Import Register (KWh) from 5pm to 7pm</li> </ul> <p>The interval data for all 4 Interval Channels is stored on the ESM for up to 350 days, in a first-in, first-out circular buffer.</p> <p>A daily snapshot of each SST Register is taken at midnight each day and is stored on the ESM for up to 175 days in a first-in, first-out circular buffer</p> <p>A monthly snapshot of each SST Register is taken on the first day of the month and is stored on the ESM for up to 36 iterations in a first-in, first-out circular buffer.</p> <p>Each ESM is individually configured to push the appropriate data to the HES to satisfy the Smart Data Service applicable at the MPRN.</p> <p>If the ESM is providing Interval Data, it will send an encrypted data package to the HES every 2 hours containing the most recent 30-minute interval values and it will send an additional encrypted data package to the HES just after midnight containing the appropriate 24-hr Cumulative Register snapshots.</p> <p>If the ESM is providing SST Register Data it will send an encrypted data package to the HES just after midnight containing the three SST Register values.</p>

	Background Information
	<p>When the HES receives a Data Package it decrypts the package and extracts the meter data. It passes the Meter Data to the MDMS. This process normally only takes minutes but the HES can hold the data for up to 15 days before deleting it (to cater for outages on the MDMS resulting from a disaster).</p> <p>When the MDMS receives the data, it validates it and stores it.</p> <p>The MDMS will push interval data to the ESN Market System between 1am and 5am each night to support Retail Market Processes.</p> <p>The MDMS will respond to ESN Market System requests for bi-monthly SST register values for a particular meter to satisfy a Billing Request.</p> <p>The 24-Hour Interval Active Import Energy data, and the SST Register data are collected and processed (for customers who have subscribed to a Time-of-Use tariff) in compliance with Condition 9 the DSO Licence issued to ESN.</p> <p>For Micro Generation customers the MEA combines the data from the MDMS and Sap IS-U.</p>
Data Fields	<p>30-minute Export Interval data (P-) will always be collected from customers to facilitate microgeneration however both 30-minute Import Interval data (P+) and SST Register Data will only be collected from customers who have subscribed to a Time-of-Use Tariff from their Supplier. The interval and SST data is referenced to the Unique Meter Identifier in the ESM, HES and MDMS.</p> <p>No customer identifying information is associated with the data in the ESM, while it is traversing the network or in the HES.</p> <p>When the data arrives in the MDMS, it can be linked to the Meter Point Registration Number (MPRN) for the premise at which the meter is installed.</p> <p>The address of the premise at which the meter is installed is also recorded in the MDMS. The customer name is <u>not</u> recorded in the MDMS.</p>

Background Information	
	<p>The Ordinance Survey X-Y co-ordinates for the premise at which the meter is installed are also recorded in the MDMS.</p> <p>When the data arrives into the ESNB Market System it can be linked to the correspondence name and address of the customer as provided to ESNB by their Supplier.</p>

Please complete the following questions as instructed. Please see Appendix Document [Number 1](#) for definitions.

Risks to the Data Subject Questions	Responses
1. Does the process involve the use of sensitive personal data, or highly personal data relating to criminal convictions or offences?	<p><u>No</u></p> <p>The process does not collect any sensitive personal data.</p>
2. Does the process involve large amounts of personal data, either considered by the number of data subjects concerned, the volume of data processed, the duration of the process or the geographic spread?	<p><u>Yes</u></p> <p>The process will involve the recording of 30-minute Interval and SST energy usage data on all ESMs. Collection of Interval or SST Register data from ESMs will only occur for customers that have subscribed to a Time-of-Use tariff from their Supplier.</p>
3. Does the process involve evaluating or scoring, including profiling or prediction, of data subjects, from personal data concerning performance at work, economic	<p><u>No</u></p> <p>The Interval and SST Register data will be recorded on the ESM but will only be collected to support the Time-of-Use tariff. The data will be used for billing and settlement purposes and not used in any subject evaluation, profiling or prediction.</p>

Risks to the Data Subject Questions	Responses
situation, health, location or movements?	
4. Does the process include automated decision making with legal or similar significant effects, e.g. does the processing lead to the exclusion of, or discrimination against, data subjects?	<p style="text-align: center;"><u>No</u></p> <p>The Interval and SST Register data will be recorded on the ESM and only collected from customers subscribing to a Time-of-Use tariff and no automated decision making will be carried out involving this data.</p>
5. Does the process include systematic monitoring / processing used to observe, monitor or control data subjects, such as data collected through "a systematic monitoring of a publicly accessible area"?	<p style="text-align: center;"><u>No</u></p> <p>The Interval and SST Register data will be recorded on the ESM and only collected and used for the billing and settlement purposes related to Time-of-Use tariffs. The process does not include systematic monitoring.</p>
6. Are datasets combined or matched within this process (from multiple controllers or multiple processes) in a way that would exceed the reasonable expectations of the data subject?	<p style="text-align: center;"><u>No</u></p> <p>The Interval and SST Register data will be recorded on the ESM and only collected from customers subscribing to a Time-of-Use tariff. The data will be used for billing and settlement purposes only.</p>
7. Is personal data about data subjects that could be considered vulnerable (including children) processed?	<p style="text-align: center;"><u>No</u></p>

Risks to the Data Subject Questions	Responses
	The Interval and SST Register data will be recorded on the ESM and only collected from customers subscribing to a Time-of-Use tariff. The data does not contain information about the customers status.
8. Does the process use innovative technological or organisational solutions for personal data processing that are new to ESB?	<p style="text-align: center;"><u>Yes</u></p> <p style="text-align: center;">Additional data will be recorded on the new ESM beyond what is recorded on legacy meters:</p> <p style="text-align: center;">Interval data at 30-minute granularity, SST Register data snapshots taken at 24 hr intervals, SST Register data snapshots taken at monthly intervals.</p> <p style="text-align: center;">This data will be collected and processed by a HES and MDMS solution, for customers subscribing to a Time-of-Use tariff which are new components in the ESB infrastructure.</p>
9. Does the process prevent data subjects from using an ESB service or exercising any of their rights mandated by GDPR?	<p style="text-align: center;"><u>No</u></p> <p style="text-align: center;">Customers are not prevented from using any ESB service and can exercise all of their GDPR rights with respect to data stored and processed in ESBN IT systems.</p>
10. Does the process involve data transfers across borders outside the EU (note that this includes access by people based outside the EU)?	<p style="text-align: center;"><u>Yes</u></p> <p style="text-align: center;">The All-Island Single Electricity Market Tibco hub is hosted in Northern Ireland which is outside the EEA but the transfer of meter data through this system to Energy Suppliers is facilitated by the EU Adequacy Decisions of 28<sup>th</sup> June 2021.</p>

## 2. DPIA Outcome

The below outlines whether a “full” DPIA is required. If a “full” DPIA is required, please complete the remaining Sections.

DPIA Requirement Questions	Response
Has “Yes” been answered to at least two questions in Section 1?	<u>Yes</u>
Has there been a DPIA previously completed where the nature, scope, context and purposes of the processing are very similar to the processing for this process?	<u>Yes</u>
Has the process previously been checked by the Data Protection Commission and found not to be high risk?	<u>No</u>
Is there any other reason why a DPIA is not required?	<u>No</u> (If “Yes”, please provide further details to justify the response)
Based on the above, a full DPIA is:	<u>Required</u>

If a full DPIA is **not required**, the following sections do not have to be completed.

### 3. Scope and Description of Processing

Please provide a detailed description of the process and the lawful basis for the process in the table below.

Main Processing Activity	
<p><b>Collection and Processing of Interval and SST Register Data</b></p>	<p style="text-align: center;"><b>Legal obligation</b> <b>Performance of a contract</b> <b>Public interest or exercise of official authority</b></p> <ul style="list-style-type: none"> <li>30-minute Export Interval data (P-) will always be collected from customers to facilitate microgeneration however 30 minute Import Interval data (P+) and SST Register data will be collected from the ESM only for customers who have entered into a contract with their Supplier for a Time-of-Use tariff in compliance with Condition 9 of ESBN’s Distribution System Operator (DSO) Licence.</li> <li>Interval Export data is collected from all ESMs as determined by the CRU pursuant to Condition 9 (2) of ESBN’s DSO Licence.</li> <li><a href="#">CER-Metering-Code-CER13281</a> – section 4.2.3: ‘As a minimum, for each registered Meter, [7] full years of metered data shall be retained’.</li> </ul>

If sub-processing activities are involved which rely on a different lawful basis for processing, please elaborate in the table below.

Sub-Processing Activity/Activities	
<p>N/A</p>	



### 3.1 Personal Information

Please complete the following table outlining the different types of personal and sensitive personal data which is processed. For the complete list of values for each category, please refer to the Registry of Processing.

Personal Data	Sensitive Personal Data or Data of a Highly Personal Nature
<p><b>Personal Data</b></p> <ul style="list-style-type: none"> <li>• Energy data measured at half-hourly intervals.</li> <li>• Snapshot of energy data measured in three TOU periods per day.</li> <li>• MPRN</li> <li>• Ordinance Survey X-Y co-ordinates for the premise</li> </ul>	<p><b>Sensitive Personal Data</b></p> <ul style="list-style-type: none"> <li>• N/A</li> </ul> <p><b>Children’s Data</b></p> <ul style="list-style-type: none"> <li>• N/A</li> </ul> <p><b>Criminal Convictions or Offences</b></p> <ul style="list-style-type: none"> <li>• N/A</li> </ul>

### 3.2 Recipients and Retention Period

Please complete the following table to describe who receives the data, and the retention period that applies in each instance.

Internal Recipients	Retention Period
<ul style="list-style-type: none"> <li>ESM (Interval data only)</li> </ul>	<ul style="list-style-type: none"> <li>Up to 350 days</li> </ul>
<ul style="list-style-type: none"> <li>ESM (SST Register data only)</li> </ul>	<ul style="list-style-type: none"> <li>Up to 175 days for the daily snapshots</li> <li>Up to 36 iterations of the monthly snapshots</li> </ul>
<ul style="list-style-type: none"> <li>HES</li> </ul>	Up to 15 days for both data types
<ul style="list-style-type: none"> <li>MDMS</li> </ul>	Up to 7 years for both data types
<ul style="list-style-type: none"> <li>ESBN Market System</li> </ul>	Up to 7 years for both data types
<ul style="list-style-type: none"> <li>Microgen Export Application</li> </ul>	14 months meter export data
<ul style="list-style-type: none"> <li>File Share (Archive)</li> </ul>	90 days
<ul style="list-style-type: none"> <li>File Share (Processed Folder)</li> </ul>	10 days

External Recipients	Retention Period
<ul style="list-style-type: none"> <li>Suppliers Interval or SST Register data will be provided to the registered supplier of end customers who have subscribed to the relevant Time-of-Use tariff.</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>

### 3.3 Assets on Which Personal Data is Stored

Please complete the following table to describe the assets on which personal data relies and the associated Access Rights and Technical Security measures.

Assets on which personal data relies				
Storage Type	Location	Descriptions	Access Rights	Technical Security Measures
ESM	Flash Storage on ESM	<p>Interval data is contained in Interval data logs which store a new value every 30-minutes.</p> <p>SST Register data is contained in Daily logs which store a new snapshot of the three register values every 24 hours.</p> <p>Monthly SST Register also contains logs which store a new snapshot of the three register values every month.</p>	<p>Accessible remotely by the ESBN HES application or locally via the ESM Optical Port. (Local access requires use of a Local Meter Operations Tool with appropriate cryptographic credentials).</p>	<p>Access to the data stored on the meter requires possession of one or more encryption keys which are unique to each ESM. The encryption algorithm used is AES-128.</p> <p>Local access via the ESM Optical port to the data stored on the meter requires possession of one or more encryption keys which are unique to each ESM. The encryption algorithm used is AES-128.</p> <p>Data Packets sent to the HES are encrypted by the ESM using a key which is unique to the ESM and can only be decrypted by the HES. The encryption algorithm used is AES-128.</p>
HES	Mongo-DB and	Mongo-DB provides temporary storage for	No end user access is permitted to the HES application or to either of its databases.	Access to the HES application and its databases is controlled by Role Based

Assets on which personal data relies				
Storage Type	Location	Descriptions	Access Rights	Technical Security Measures
	SQLServer DB	<p>all encrypted data packets received from the ESM while they are awaiting decryption. They reside in this DB for only minutes normally.</p> <p>SQLServer-DB provides temporary storage for the ESM data after it has been decrypted while it is waiting for the MDMS to collect and store it. Again, the data generally remains in the DB for only minutes but could remain there for up to 15 days if the MDMS is unavailable in a disaster scenario.</p>	<p>Access is restricted to the HES application jobs that process the data prior to transferring it to the MDMS.</p> <p>Role based access with logging, monitoring and auditing is provided to Database Administration and HES Maintenance Accounts.</p> <p>All backups of the databases are encrypted.</p>	<p>Access Controls (RBAC) which are implemented via dedicated Active Directory accounts, unique to each user and system service. A dedicated and isolated Active Directory Forest is implemented for the Smart Metering Operational Technology (OT) services including the HES.</p> <p>Formal logging and monitoring of activity is carried out.</p>
<b>MDMS</b>	Oracle DB	The Oracle DB in the MDMS stores Interval and SST register data received from the HES.	<p>The MDMS is the main end-user system for managing the ESM estate and the data collected from the ESMs.</p> <p>ESBN administrators access the application via a Web browser-based GUI. Database</p>	<p>Access to the MDMS application and its database utilises Role Based Access Controls (RBAC) and is implemented via dedicated Active Directory accounts which are unique to each user and</p>

Assets on which personal data relies				
Storage Type	Location	Descriptions	Access Rights	Technical Security Measures
		It also stores master data for the premise including the MPRN, Premise Address and X-Y co-ordinates.	<p>administrators and application support staff utilise management tools installed in the isolated OT domain.</p> <p>Role based access with logging, monitoring and auditing is utilised for all user and system accounts.</p> <p>All backups of the databases are encrypted.</p>	<p>system service. A dedicated and isolated Active Directory Forest is implemented for the Smart Metering Operational Technology (OT) services including the MDMS.</p> <p>Formal logging and monitoring of activity is carried out.</p>
<b>ESBN Market System (SAP-ISU)</b>	DB	<p>The database (DB) in the ESBN Market System stores Interval and SST register data received from the MDMS.</p> <p>It also stores master data for the premise including the MPRN, Premise Address and X-Y co-ordinates.</p> <p>It also stores customer name and address details received from the energy Supplier and vulnerable customer attributes.</p>	<p>End users access the application via a Web GUI Client. Database administrators and application support staff utilise management tools installed in the ESBN corporate domain.</p> <p>Role based access with logging, monitoring and auditing is utilised for all user and system accounts.</p> <p>All backups of the databases are encrypted as per ESB standard practice.</p>	<p>Access to the ESBN Market System application and its database utilises Role Based Access Controls (RBAC) and is implemented via dedicated Active Directory accounts which are unique to each user and system service. A dedicated security team manage and monitor all access to the ESBN Market System and implement a very granular security model.</p> <p>Formal logging and monitoring of activity is carried out.</p>

Assets on which personal data relies				
Storage Type	Location	Descriptions	Access Rights	Technical Security Measures
<b>Microgen Export Application (MEA)</b>	ESB on premise SQL database	The Microgen Export Application (MEA) is on-premise in ESBN combines the data from the MDMS and SAP IS-U (These will be used to create the per-supplier extract files containing the meter/customers interval and cumulative Export data once Regulator direction is provided).	<p>Role based access with logging, monitoring and auditing is provided to Database .</p> <p>Regular Joiner, Mover, Leaver reviews as part of the AD maintenance of the groups granting access to the MEA.</p>	<p>Access to the MEA application and its databases is controlled by Role Based Access Controls (RBAC) which are implemented via dedicated Active Directory accounts, unique to each user and system service.</p> <p>A dedicated and isolated Active Directory Forest is implemented for the Smart Metering Operational Technology (OT) services including the MEA.</p> <p>Formal logging and monitoring of activity is carried out.</p>
<b>Shared Drive</b>	OT	Location where MDMS files are moved for mirroring to IT	<p>Read / Write access managed through AD User Groups specific to the OT domain.</p> <p>Access to OT file shares, databases and servers is not possible using ESB Corporate domain accounts (CLD1)</p>	<p>Access controlled via Active Directory user groups unique to system service.</p> <p>Level of access is controlled using a user group per role e.g. admin vs read-only.</p>

### 3.4 Policies and Procedures

Please complete the following table to describe the internal policies and procedures that were consulted during the design of this process and any exception that may apply to each policy.

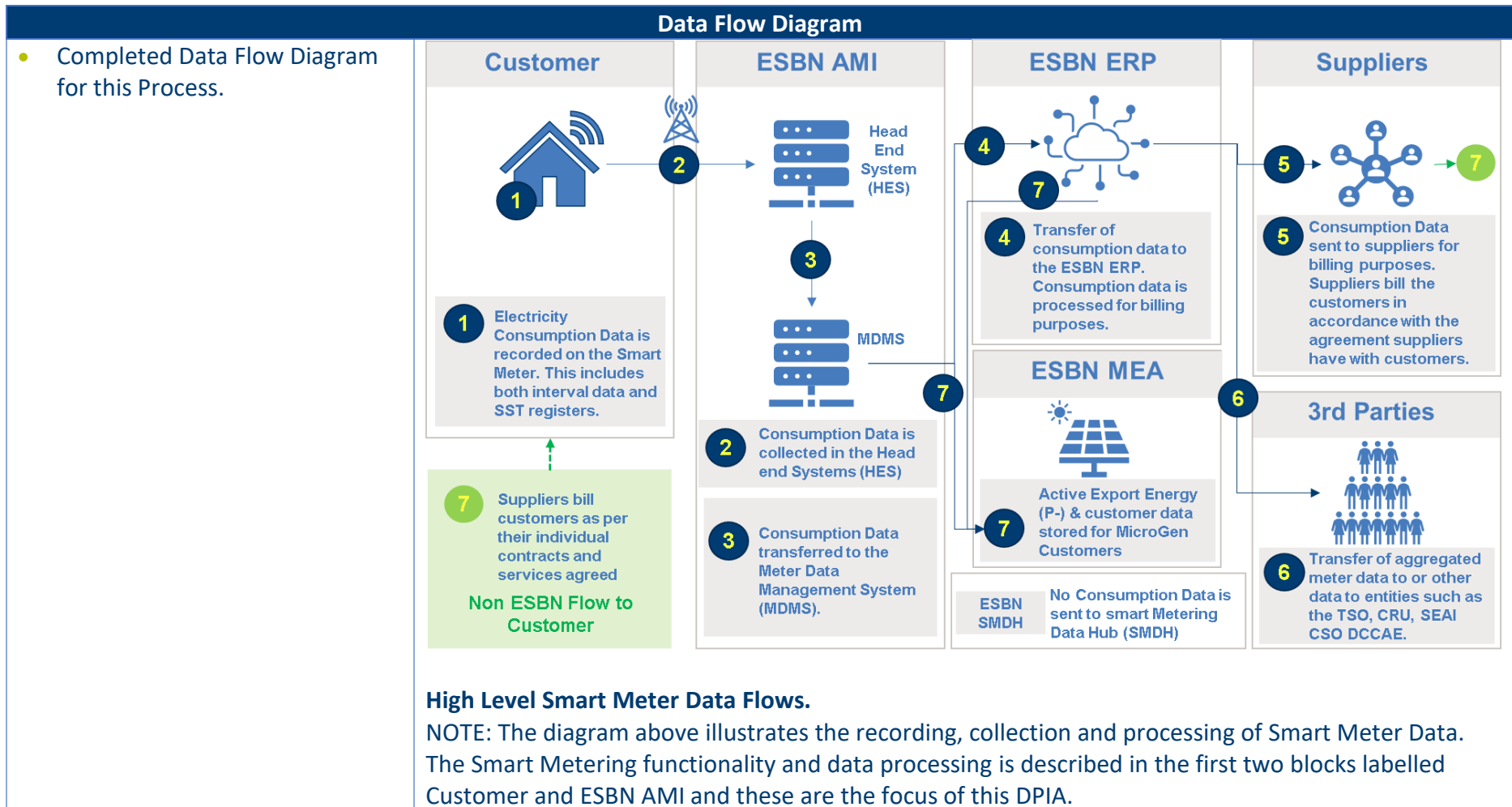
Policy or Procedure	Document Date and Version	Exception to Policy (if applicable)
<a href="#">CE16 - ESB Data Protection Policy</a>	25/05/2018 v5.0	Right to erase not fully complied with.
<a href="#">CE10 Corporate Policy on Cybersecurity</a>	20/12/18 v3.0	None
<a href="#">ICTP 36 - Information Management</a>	07/09/2016 v1.4	None
<a href="#">GP-004 Risk Management Policy &amp; Governance Framework</a>	17/04/2018 v8.0	None

For each exception listed above, please justify the reason why the exception is required.

Exception to Policy (if applicable)	Justification
Not fully compliant with right to erase	An exception to this policy applies for technical reasons, as the record of Interval data will remain on the meter for a period of up to 350 days, the daily snapshot records of SST Register data will remain on the meter for a period of 175 days, and 36 iterations of the monthly snapshot will remain on the meter before the buffer wraps and overwrites the old data. It is not technically possible to erase these buffers.

### 3.5 Data Flow Diagram

Following the instructions and using the template below, please complete and attach a Data Flow Diagram:





	<p>The 3<sup>rd</sup> and 4<sup>th</sup> blocks (labelled ESN ERP and Supplier) cover the processing that has always taken place for meter reading registers and this is being enhanced under the NSMP to cater for Interval Data and the SST registers. The processes remain largely unchanged – new messages have had to be introduced to cater for the new data types.</p> <p>The MEA stores the most recent 14 months of the 30-minute Interval Export Data and the midnight snapshot of the Export Register for every registered MicroGen Customer who has a communicating Smart Meter.</p> <p>No interval data is stored in the SMDH.</p>
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## 4. Necessity, Proportionality & Risk Assessment

Please complete the table below to describe the process risks and associated mitigations.

The risks noted in this section are considered from the perspective of the data subject. The risks have the potential to cause physical, material or non-material damage to the data subject in areas such as identity theft, fraud, financial loss, and reputational damage, loss of confidentiality or privacy related to sensitive categories of data, being deprived of their rights and freedoms or prevented from exercising control over their personal data. The risk rating criteria can be found in the Appendix in Section 9.

Risk No.	Considerations	Risk to Individuals/ Data Subject	RoP Process Reference	Current Measures to Address Risk	Probability Score	Impact Score	Risk Rating	Justification for Risk Rating	Result of Current Measures (Risk Eliminated, Reduced, Accepted, Gap)
R1	Are there measures to ensure data collected is specified, explicit and legitimate in purpose?	Risk of data being collected for unspecified and/ or illegitimate purposes	ROP N.SM.07.01	The services and functions ESB Networks is required to provide are set out in its DSO Licence. Interval and SST Register data will only be used to meet its Licence obligations.	1	1	1	The Import Interval Data and the SST Register data are only collected from the meters of customers that have subscribed to a Time-of-Use tariff. Export Interval Data is collected from all meters as determined by the CRU pursuant to Condition 9 (2) of the DSO Licence.	Risk eliminated.

Data Protection Impact Assessment

Risk No.	Considerations	Risk to Individuals/ Data Subject	RoP Process Reference	Current Measures to Address Risk	Probability Score	Impact Score	Risk Rating	Justification for Risk Rating	Result of Current Measures (Risk Eliminated, Reduced, Accepted, Gap)
R2	Are there measures to ensure data is <b>processed lawfully</b> ? (If consent is the basis to process personal data, are there measures to demonstrate consent and deal with withheld or withdrawn consent?)	Risk of unlawful processing of Interval data	ROP N.SM.07.02	Import Interval and SST Register data only collected from the meters of customers that have subscribed to a Time-of-Use tariff. Export Interval data will be collected from all meters under requirements from the CRU.	1	1	1	Import and Export Interval, and SST Register data, are processed by ESBN in compliance with Condition 9 of its DSO Licence and as determined by CRU pursuant to Condition 9 (2).	Risk eliminated
R3	Are there measures to ensure data is not <b>further processed</b> in a manner that is incompatible with the original purpose(s)?	Risk of unlawful and/or undesired further processing/ modification of personal data	ROP N.SM.07.03	The MDMS pushes the Active Import Interval data to the ESBN Market System only for use in DUoS Billing, Market Settlement Aggregation and for delivery to the appropriate Suppliers (i.e. the registered supplier of the end customer).  The SST Register data is held in the MDMS until a bi-monthly billing request is received from the	1	1	1	Collection of Interval Meter Data is limited to those customers that have subscribed to a Time-of-Use tariff. This data will only be shared with the registered Supplier of the end customer.  SST Register data is maintained within the MDMS system until a request is received from the ESBN Market system to provide	Risk eliminated

Data Protection Impact Assessment

Risk No.	Considerations	Risk to Individuals/ Data Subject	RoP Process Reference	Current Measures to Address Risk	Probability Score	Impact Score	Risk Rating	Justification for Risk Rating	Result of Current Measures (Risk Eliminated, Reduced, Accepted, Gap)
				<p>ESBN Market System to provide the three SST Register values for a specific billing date.</p> <p>Active Export data will only be shared with Suppliers of customers subscribed to a Microgen support scheme.</p>				register values for a specific billing date limiting the data that will actually leave the MDMS.	
R4	Are there measures to ensure data is <b>adequate, relevant and limited to necessary data points</b> ?	Risk of inadequate, irrelevant, and/ or excessive personal data being gathered	ROP N.SM.07.04	The ESM has been specifically deployed for the single role of recording household energy usage in accordance with the ESNB Meter Operator role in the electricity market.	1	1	1	Consumption data collected from the meters is limited to Active Import Interval Data, SST Register data and Active Export Interval Data. No unnecessary data is collected from the meter, and thus cannot be processed.	Risk eliminated
R5	Are there measures to ensure data is <b>accurate</b> and,	Risk of inaccurate and/or erroneous	ROP N.SM.07.05	Interval and SST Register data recorded on the	1	1	1	The accurate records stored on the MID certified	Risk eliminated

## Data Protection Impact Assessment

Risk No.	Considerations	Risk to Individuals/ Data Subject	RoP Process Reference	Current Measures to Address Risk	Probability Score	Impact Score	Risk Rating	Justification for Risk Rating	Result of Current Measures (Risk Eliminated, Reduced, Accepted, Gap)
	where relevant, kept up to date	personal data being processed		meter is accurate as the meter is a MID certified measuring device. All communication paths for the data are encrypted with a unique key for each meter ensuring that the data cannot be altered in transit.  The data undergoes a validation process on entering the MDMS to ensure its accuracy.				meter are collected into the HES and then onto the MDMS. Any modification of the data in the HES or MDMS is logged and audited. Processing is limited to the purpose built AMI smart metering solution.	
<b>R6</b>	Are there measures to ensure data is <b>kept for no longer than is necessary</b> for the purposes for which it is processed (limited storage duration of data)?	Risk of personal data being held for longer than is necessary and/or inappropriate destruction/ loss of personal data	ROP N.SM.07.06	Interval data is securely stored on the meter for up to 350 days. Daily SST Register data is securely stored on the meter for up to 175 days. 36 monthly snapshots of the SST Register data is stored on the meter. This is an inherent function of the data logs on the ESM and	1	1	1	Data stored in the HES is retained for a maximum of 15 days.  Billing related data in the MDMS is stored for 7 years as legally required due to its use in complying with the Meter Code.	Risk eliminated

Data Protection Impact Assessment

Risk No.	Considerations	Risk to Individuals/ Data Subject	RoP Process Reference	Current Measures to Address Risk	Probability Score	Impact Score	Risk Rating	Justification for Risk Rating	Result of Current Measures (Risk Eliminated, Reduced, Accepted, Gap)
				<p>consists of a wraparound buffer configured within the limited flash memory of the device.</p> <p>The data collected into the MDMS will be stored for 7 years as legally required in compliance with the Meter Code.</p>					
R7	Are there measures to <b>provide relevant information</b> (per GDPR Articles 12, 13, 14) to the data subjects?	Risk of insufficient information and/ or a lack of transparency related to the processing of personal data by the data controller	ROP N.SM.07.07	<p>Written information is provided to Data subjects upon ESM installation. Information is published on the ESNB Smart Metering web site. ESNB Privacy notice reflects ESM processing activities. Suppliers are obliged to inform the data subjects of the requirements for the collection of interval data prior to subscribing to a Time-of-Use tariff.</p>	1	1	1	Import Active Interval data and SST Register data is only collected from customers who have subscribed to a Time-of-Use tariff. This is indicated to ESNB in the form of an MCC Change Market message. P- (export) 30-minute data will always be collected from customers to facilitate microgeneration.	Risk eliminated

Data Protection Impact Assessment

Risk No.	Considerations	Risk to Individuals/ Data Subject	RoP Process Reference	Current Measures to Address Risk	Probability Score	Impact Score	Risk Rating	Justification for Risk Rating	Result of Current Measures (Risk Eliminated, Reduced, Accepted, Gap)
R8	Are there measures to ensure <b>right of access and portability</b> ?	Risk of inappropriate and/or untimely response to requests to access/ transport personal data	ROP N.SM.07.08	The solution allows for the extraction of Cumulative Register data in the case of a SAR request. Portability is not relevant as ESNB is the only DSO in the Irish Electricity Market.	1	1	1	The capability to extract the Cumulative Register data has been included in the solution.	Risk eliminated
R9	Are there measures to ensure a right to <b>rectify, erase, object and restrict</b> processing?	Risk of inappropriate and/or untimely response to requests to rectify, erase, object and restrict processing of personal data	ROP N.SM.07.09	Interval data recording is predefined on the meter and cannot be changed by ESNB. The right to rectify, erase, object and restrict can be fulfilled at a later stage of the processing of the data. Interval data will be retained in the MDMS for 7 years in line with the Meter Code and as required for billing purposes however, requests to erase the data will be fulfilled	1	2	2	As required by Condition 9 of the DSO Licence, Import Active interval data and SST Register data is collected from ESMs for customers who have agreed with their supplier to change to a Time-of-Use tariff. Export Active Interval data is collected from all ESMs to support Microgeneration as determined by the CRU pursuant to Condition 9 (2) of the DSO Licence.	Risk reduced

Risk No.	Considerations	Risk to Individuals/ Data Subject	RoP Process Reference	Current Measures to Address Risk	Probability Score	Impact Score	Risk Rating	Justification for Risk Rating	Result of Current Measures (Risk Eliminated, Reduced, Accepted, Gap)
				automatically at the end of 7 years.				P- (export) 30-minute data will always be collected from customers to facilitate microgeneration	
<b>R10</b>	Are there measures in place to protect the rights of the data subject where data has been or will be <b>disclosed to other recipients</b> including the <b>notification obligation</b> (Article 19)?	Risk of inappropriate disclosure of personal data	ROP N.SM.07.10	The data collected in the MDMS is only shared with the registered supplier of end user.  Data shared with suppliers is processed under the existing Market System solutions and the control measures are already in place to protect the data subject rights.	1	1	1	In the event of inappropriate disclosure, existing standard ESNB procedures for notification of relevant data subjects will be enacted.	Risk eliminated
<b>R11</b>	Are there measures in place to protect the rights of the data subject by the processor, where processing is carried out <b>on behalf of the processor (sub-processing)</b> ?	Risk of inappropriate access to, modification of and/or destruction/ loss of personal data processed by a third-party service provider	ROP N.SM.07.11	The data recorded on the ESM and collected into ESNB systems is processed solely by ESNB. No sub-processors are involved.	1	1	1	Data processing will only be carried out by ESNB in ESNB owned and operated systems. No data will be transferring to any external data processor. No new Third-Party	Risk eliminated



Data Protection Impact Assessment

Risk No.	Considerations	Risk to Individuals/ Data Subject	RoP Process Reference	Current Measures to Address Risk	Probability Score	Impact Score	Risk Rating	Justification for Risk Rating	Result of Current Measures (Risk Eliminated, Reduced, Accepted, Gap)
								processors are being introduced as part of this project and existing privacy arrangements are in place describing the obligations of a sub-contractor operating with ESNB data.	
R12	Are there technical and organisational measures in place against <b>unauthorised access to and/or processing</b> of personal data?	Risk of inappropriate access to, modification of and/or destruction/ loss of personal data	ROP N.SM.07.12	Interval and SST Register data on the ESM is only accessible via an encrypted connection from the HES system, or from an authorised encrypted local connection. Each meter is configured with a unique set of cryptographic keys that enable AES128 encrypted messages to and from the ESM.  Role based access control mechanisms are in place to limit access to the data to only those ESNB staff	1	1	1	The AMI infrastructure has been isolated from the main ESNB Network specifically to protect against authorised access to the data contained therein. Existing Market system protections ensure the confidentiality of the Interval and SST Register data after it is transferred to market systems.	Risk eliminated

Data Protection Impact Assessment

Risk No.	Considerations	Risk to Individuals/ Data Subject	RoP Process Reference	Current Measures to Address Risk	Probability Score	Impact Score	Risk Rating	Justification for Risk Rating	Result of Current Measures (Risk Eliminated, Reduced, Accepted, Gap)
				<p>who require it to manage the meter estate and to inform LV Network planning. All data transferred between the ESM, HES, MDMS, MEA and market systems is encrypted.</p> <p>The AMI infrastructure is isolated from the Corporate Environment through the use of Firewalls, IPS Devices and Separation of Services. The AMI infrastructure employs a dedicated IAM solution, ensuring that only authorised individuals are able to access personal data.</p> <p>All data access is logged and audited.</p>					
<b>R13</b>	Are there measures to safeguard	Inappropriate transfer of personal	ROP N.SM.07.13	Data will only be processed by ESBN	1	1	1	Access to the data is restricted to	Risk eliminated

Data Protection Impact Assessment

Risk No.	Considerations	Risk to Individuals/ Data Subject	RoP Process Reference	Current Measures to Address Risk	Probability Score	Impact Score	Risk Rating	Justification for Risk Rating	Result of Current Measures (Risk Eliminated, Reduced, Accepted, Gap)
	<b>international transfers (outside EU/EEA)?</b>	data to a country or international organisation where enforceable data subject rights and legal remedies are not available		and Registered Electricity Suppliers in the ROI.				ESBN and registered market participants.	

## 5. Actions to Integrate the DPIA Findings into the Process

Following the identification of the Risks in section 5, please complete the table below listing any recommended actions for each risk identified. These should be integrated into the process to incorporate DPIA findings.

Risk No.	Risk to Individuals/ Data Subject	Action No.	Action	Responsible	Completed Yes/No	Sign off
R1	Risk of data being collected for unspecified and/ or illegitimate purposes	N/A	No identified action.		Not Applicable	
R2	Risk of unlawful processing of personal data	N/A	No identified action.		Not Applicable	
R3	Risk of unlawful and/ or undesired further processing/ modification of personal data	N/A	No identified action.		Not Applicable	
R4	Risk of inadequate,	N/A	No identified action.		Not Applicable	

Risk No.	Risk to Individuals/ Data Subject	Action No.	Action	Responsible	Completed Yes/No	Sign off
	irrelevant, and/ or excessive personal data being gathered					
R5	Risk of inaccurate and/or erroneous personal data being processed	N/A	No identified action.		Not Applicable	
R6	Risk of personal data being held for longer than is necessary and/or inappropriate destruction/ loss of personal data	N/A	No identified action.		Not Applicable	
R7	Risk of insufficient information	N/A	No identified action.		Not Applicable	

Risk No.	Risk to Individuals/ Data Subject	Action No.	Action	Responsible	Completed Yes/No	Sign off
	and/ or a lack of transparency related to the processing of personal data by the data controller					
R8	Risk of inappropriate and/or untimely response to requests to access/ transport personal data	N/A	No identified action.		Not Applicable	
R9	Risk of inappropriate and/or untimely response to requests to rectify, erase, object and restrict	A.01.09	Where the data subject has requested erasing of their data, following a change from MCC12 or MCC16 back to MCC01, further collection of the data from the meter will cease, and the existing data contained on the meter is encrypted with a unique set of cryptographic keys that protect against unauthorised access.	SMOC	Yes	ESBN Smart Metering Project

Risk No.	Risk to Individuals/ Data Subject	Action No.	Action	Responsible	Completed Yes/No	Sign off
	processing of personal data		Erasure will be executed at any later stages in the processing flow as per customer request.			
R10	Risk of inappropriate disclosure of personal data	N/A	No identified action.		Not Applicable	
R11	Risk of inappropriate access to, modification of and/or destruction/ loss of personal data processed by a third-party service provider	N/A	No identified action.		Not Applicable	
R12	Risk of inappropriate access to, modification of and/or destruction/ loss of personal data	N/A	No identified action.		Not Applicable	

Risk No.	Risk to Individuals/ Data Subject	Action No.	Action	Responsible	Completed Yes/No	Sign off
R13	Inappropriate transfer of personal data to a country or international organisation where enforceable data subject rights and legal remedies are not available	N/A	No identified action.		Not Applicable	



## 6. Residual Risks

Following the completion of the Risk Assessment (Section 5) and the execution of the recommended actions (Section 6), please fill in the table below to describe any residual risks.

**Residual risks that have been rated as high or very high risk must be reported to the Data Protection Commissioner.**

Risk No.	Risk to Individuals/ Data Subject	Residual Risk Description	Justification for Residual Risk	Risk Owner
R9	Risk of inappropriate and/or untimely response to requests to rectify, erase, object and restrict processing of personal data	Low	<p>The recording of the 30-minute Interval and SST Register data on the ESM are an inherent feature of the meter and cannot be disabled. The data is protected against unauthorised access through the use of cryptographic keys protecting access to the data.</p> <p>The P- 30-minute interval Export data will always be collected in compliance with the DSO obligations under Conditions 8 and 9 of its Distribution System Operator (DSO) Licence. However, the right to rectify, erase, object and restrict can be fulfilled later on in the ESNB processing of the data.</p>	ESBN Smart Metering

## 7. Consultations

Please complete the table below to describe the parties consulted in preparing this DPIA and summarises their comments and input.

Consultation Group	Consulted (Y/N)	Detail
Data Protection Officer	Y	DPO and the ESB Legal Department has been engaged proactively by the project to advise and guide the project on compliance obligations throughout the course of the project lifetime.
Views of data subjects or representatives of data subjects, where appropriate	Y	As part of NSMP consultations with the CRU.
Data Protection Commission	Y	Initial discussions on the ESN Smart Metering Project approach.
Others (Please Describe)	Y	Electricity Association of Ireland, DECC.

## 8. Recommended Controls

Following the completion of the Risk Assessment (Section 5) and the execution of the recommended actions (Section 6) as well as the identification of any Residual Risks (Section 7), please see below a list of recommended controls.

Risk No.	Risk to Individuals/ Data Subject	Control No.	Control Description	Evidence of Control Existence	Control Owner	Control Frequency
R1	Risk of data being collected for unspecified and/ or illegitimate purposes	C.01.01	Documentation of Process Designs.  Implementation of process to match documentation.  Role based access to data and logging/auditing of data transfers.	As part of the project the management of all data flows has been drawn up in Business Process Design (BPD) documents. Specific BPDs have been drawn up for Interval and SST Register data outlining how the data is to be processed at each stage through the AMI infrastructure.	ESBN Smart Metering Project / SMOC	Ongoing
R2	Risk of unlawful processing of personal data	C.02.02	Collection of Import Interval or SST Register data from ESMs is completed under the obligations outlined in the DSO Licence to provide Metering and Data services. Interval Export data will always be	Condition 9 of the Distribution System Operator Licence requires that ESNB provides Metering and Data services to the market.	ESBN Smart Metering Project / SMOC	Ongoing

Risk No.	Risk to Individuals/ Data Subject	Control No.	Control Description	Evidence of Control Existence	Control Owner	Control Frequency
			<p>collected from ESMs to facilitate microgeneration.</p> <p>Export Interval data is collected as determined by the CRU pursuant to Condition 9 (2) of the DSO Licence.</p> <p>Implementation of process to match documentation.</p> <p>Role based access to data and logging/auditing of data transfers.</p>			
R3	Risk of unlawful and/ or undesired further processing/ modification of personal data	C.03.03	<p>Collection of Import Interval or SST Register data from ESMs is completed under the obligations outlined in the DSO Licence to provide Meter and Data services to the market. Export Interval data will always be collected from ESMs to facilitate microgeneration.</p> <p>Export Interval data is collected from all ESM as determined by the CRU</p>	Market agreements with Suppliers govern the use of data through the Market System.	ESBN Smart Metering Project / SMOC	Ongoing

Risk No.	Risk to Individuals/ Data Subject	Control No.	Control Description	Evidence of Control Existence	Control Owner	Control Frequency
			pursuant to Condition 9 (2) of the DSO Licence.			
R4	Risk of inadequate, irrelevant, and/ or excessive personal data being gathered	C.04.04	Solution Design Documents and Business Process Design documents created to define precisely what data is recorded on the ESM and how this data will be collected and processed in future phases of the project.	Interval and SST Register data is only collected and processed from customers who have agreed with their supplier to change to either MCC 12 or MCC 16.  Export Interval Data is collected from all ESM as determined by the CRU pursuant to Condition 9 (2) of the DSO Licence.	ESBN Smart Metering Project / SMOC	Ongoing
R5	Risk of inaccurate and/or erroneous personal data being processed	C.05.05	Meter is MID certified to ensure accurate recording.  Time is regularly synchronised on the meter to ensure it records meter data with valid date and time stamps.	MID certificate and test results are available for every meter.  Time synchronisation events are logged and collected from every meter.  MDMS validation of meter data received further ensures that any inaccurate or erroneous data is quickly identified.	ESBN Smart Metering Project / SMOC	Ongoing
R6	Risk of personal data being held for longer	C.06.06	Solution Design Documents, as well as Data Inventory Catalogues, identify the	Project documentation records this information.	ESBN Smart Metering Project / SMOC	Ongoing

Risk No.	Risk to Individuals/ Data Subject	Control No.	Control Description	Evidence of Control Existence	Control Owner	Control Frequency
	than is necessary and/or inappropriate destruction/ loss of personal data		lifecycle of the data on the ESM. The ESM is built to automatically manage this data lifecycle.			
R7	Risk of insufficient information and/ or a lack of transparency related to the processing of personal data by the data controller	C.07.07	As part of the Smart Meter roll out communications process, the customer will be informed about the Interval and SST Register data being recorded by the ESM and the basis on which it will be collected by ESNB.	Content in Smart Meter customer communications and in FAQs on the ESNB Smart Metering Website.	ESNB Smart Metering Project / SMOC	Ongoing
R8	Risk of inappropriate and/or untimely response to requests to access/ transport personal data	C.08.08	Existing procedures in place for fulfilling SAR requests.	Existing corporate processes and procedures.	ESNB Smart Metering Project / SMOC	Ongoing

Risk No.	Risk to Individuals/ Data Subject	Control No.	Control Description	Evidence of Control Existence	Control Owner	Control Frequency
R9	Risk of inappropriate and/or untimely response to requests to rectify, erase, object and restrict processing of personal data	C.09.09	<p>Data cannot be modified or deleted on the ESM.</p> <p>Facilities within MDMS &amp; MEA to support requests to rectify, erase, object and restrict processing of personal data.</p>	ESM automatically implements control as part of inherent data recording operation.	ESBN Smart Metering Project / SMOC	Ongoing
R10	Risk of inappropriate disclosure of personal data	C.10.10	<p>Data collected from the ESMs will be stored in the MDMS. The MDMS isolated from the main corporate LAN through the use of firewalls and uses a dedicated IAM system for user access.</p> <p>Interval and SST Register data is only provided to Suppliers through the Market System.</p> <p>Internal Firewall and IPS device to isolate AMI Infrastructure from corporate network.</p>	<p>Dedicated OT environment implemented for AMI systems.</p> <p>Firewall rules provide explicit control over, and logging of, any communication into and out of this environment.</p> <p>Role based access restricts enablement of remote communications to the ESM and transport of data from the ESM, to authorised individual(s).</p>	ESBN Smart Metering Project / SMOC	Ongoing



Risk No.	Risk to Individuals/ Data Subject	Control No.	Control Description	Evidence of Control Existence	Control Owner	Control Frequency
			<p>Separate IAM solution (from corporate network) for users who need to access to the AMI infrastructure.</p> <p>Data cannot leave the MDMS without intervention by an authorised user who is trained in handling personal data.</p>	Data sharing agreements between ESNB and the Suppliers govern the use of customer data.		
R11	Risk of inappropriate access to, modification of and/or destruction/ loss of personal data processed by a third-party service provider	C.11.11	There are no Third-Party Service Providers involved in the processing of meter data.	NA	NA	NA
R12	Risk of inappropriate access to, modification of and/or destruction/	C.12.12	<p>Data on the ESM cannot be modified or deleted.</p> <p>Data stored in the MDMS is protected by the underlying infrastructure. The MDMS is</p>	<p>Dedicated OT environment implemented for AMI systems.</p> <p>Firewall rules provide explicit control over, and logging of, any</p>	ESBN Smart Metering Project/ SMOC	Ongoing



Risk No.	Risk to Individuals/ Data Subject	Control No.	Control Description	Evidence of Control Existence	Control Owner	Control Frequency
	loss of personal data		<p>installed in a dedicated isolated environment and uses a dedicated User Access Management System.</p> <p>Internal Firewall and IPS device to isolate AMI Infrastructure from Corporate Network.</p> <p>Separate IAM solution (from corporate network) for users who need to access to the AMI infrastructure.</p> <p>Encryption technology employed for data transfer from meter to backend OT systems.</p> <p>Data shared with Suppliers is regulated by the Market Data Sharing Agreements.</p>	<p>communication into and out of this environment.</p> <p>Data encryption cannot be disabled for communication over the AMI network.</p> <p>Role based access restricts enablement of remote communications to the ESM as well as access to the MDMS.</p> <p>Secure Solution Architecture.</p> <p>Data Sharing Agreements.</p>		
R13	Inappropriate transfer of personal data to a country or	C.13.13	All AMI data processing activities occur in ESNB data centres located in Ireland.	<p>Data Sharing Agreements.</p> <p>Dedicated OT environment implemented for AMI systems.</p>	ESBN Smart Metering Project/ SMOC	Ongoing

Risk No.	Risk to Individuals/ Data Subject	Control No.	Control Description	Evidence of Control Existence	Control Owner	Control Frequency
	international organisation where enforceable data subject rights and legal remedies are not available		Data will only be processed by ESN and Electricity Suppliers in the ROI.	<p>Firewall rules provide explicit control over, and logging of, any communication into and out of this environment.</p> <p>Role based access restricts data transport to authorised and trained individual(s).</p>		

## 9. Appendix

Document Number	Document Name	Detail
1.	Definitions	 ESB DPIA Definitions.pptx
2.	Risk Rating Criteria	 ESB DPIA Risk Rating Criteria.pptx
3.	Distribution System Operator Licence (DSO)	<a href="https://www.esbnetworks.ie/docs/default-source/publications/distribution-system-operator-license-(dso).pdf?sfvrsn=4">https://www.esbnetworks.ie/docs/default-source/publications/distribution-system-operator-license-(dso).pdf?sfvrsn=4</a>
4.	Legislation/Regulatory Framework Mandating Smart Metering	Directive 2012/27/EU on Energy Efficiency S.I. No. 426 of 2014 (European Union (Energy Efficiency) Regulations 2014 CER/12/008 Decision on the National Rollout of Electricity & Gas Smart Metering CER/14/046 National Smart Metering Programme High Level Design Code (CER/07/085, Section: 4.2.3 ,As a minimum, for each registered Meter, [7] full years of metered data shall be retained'
5.	Trade and Settlement Code	<a href="https://www.sem-o.com/rules-and-modifications/balancing-market-modifications/market-rules/">https://www.sem-o.com/rules-and-modifications/balancing-market-modifications/market-rules/</a>
6.	Metering Code	<a href="https://www.cru.ie/wp-content/uploads/2013/07/CER-Metering-Code-CER13281.pdf">https://www.cru.ie/wp-content/uploads/2013/07/CER-Metering-Code-CER13281.pdf</a>
7.	Other Relevant Legislation	Statute of Limitations Act 1957, Section 11: Relevance: Data Retention 7 years – Six years liability period plus once for service of proceedings
8.	Price Review 5 Electricity Networks	<a href="https://www.cru.ie/price-review-5-electricity-networks/">Price Review 5 Electricity Networks - Commission for Regulation of Utilities (cru.ie)</a>