Data Management Plan

V1.0

Deliverable D2.4

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The Data Management Plan describes the data management life cycle for the data to be collected, processed and/or generated by the InterFlex project.			
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V0.1	30/10/2017	Creation of the structure	Aurelia Desegaulx
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EXECUTIVE SUMMARY

This report presents the data management life cycle for the data to be collected, processed and/or generated throughout the InterFlex project.

As part of making research data findable, accessible, interoperable and re-usable (FAIR), the deliverable will include information on:

- The handling of research data during & after the end of the project
- What kind of data will be collected, processed and/or generated
- Which methodology & standards will be applied
- Whether data will be shared/made open access and
- How data will be curated & preserved (including after the end of the project).

Within the InterFlex project, it may be necessary to limit access to certain information, in accordance with the article 12 of the Electricity Directive by guaranteeing that commercially sensitive information obtained in the course of carrying out their business shall remain confidential, and that information disclosed regarding their activities, which may be commercially advantageous, shall be made available in a non-discriminatory manner.

The document is structured in five main chapters and will be updated over the course of the project whenever significant changes arise, such as (but not limited to) new data, changes in consortium policies (e.g. new innovation potential, decision to file for a patent); changes in consortium composition and external factors (e.g. new consortium members joining or old members leaving).

The DMP will be updated as a minimum in time with the periodic evaluation/assessment of the project: M18 and M36.

1. **Introduction:** this section presents the scope of the document and specifies the EU expectations for the InterFlex project.

2. **Data Summary:** this section presents the purpose of the data collection/generation and its relation to the objectives of the project and the description of the data

3. **FAIR Data:** This section develops the way data are findable, openly accessible for the public data, interoperable and re-usable

4. **Allocation of resources**: this section details how making data FAIR in the InterFlex project

5. **Data Security and Ethical aspects:** This section presents the data security and the ethical aspects within the InterFlex project.

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1. INTRODUCTION & PROJECT BACKGROUND

1.1. Scope of the document

This report presents the data management life cycle for the data to be collected, processed and/or generated by the InterFlex project.

As part of making research data findable, accessible, interoperable and re-usable (FAIR), the deliverable will include information on:

- The handling of research data during & after the end of the project
- What data will be collected, processed and/or generated
- Which methodology & standards will be applied
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The DMP will be updated as a minimum in time with the periodic evaluation/assessment of the project: M18 and M36.

1.2. Notations, abbreviations and acronyms

The table below provides an overview of the notations, abbreviations and acronyms used in the document.

Table 1: List of acronyms

API	Application Programming Interface
TRL	Technology Readiness Level
DSM	Demand Side Management
GHG	Green House Gas
LCE	Low Carbon Energy

1.3. EU Expectations from InterFlex

InterFlex is a response to the Horizon 2020 Call for proposals LCE-02-2016 ("Demonstration of smart grid, storage and system integration technologies with increasing share of renewables: distribution system").

This Call addresses the challenges of the distribution system operators in modernizing their systems and business models in order to be able to support the integration of distributed renewable energy sources into the energy mix. Within this context, the LCE-02-2016 Call promotes the development of technologies with a high TRL (technology readiness level) into a higher one.

InterFlex explores pathways to adapt and modernize the electric distribution system in line with the objectives of the 2020 and 2030 climate-energy packages of the European Commission. Six demonstration projects are conducted in five EU Member States (Czech Republic, France, Germany, The Netherlands and Sweden) in order to provide deep insights into the market and development potential of the orientations that were given by the call for proposals, i.e., demand-response, smart grid, storage and energy system integration.

With Enedis as the global coordinator and ČEZ Distribuce as the technical director, InterFlex relies on a set of innovative use cases.

Six industry-scale demonstrators are being set up in the participating European countries:

Through the different demonstration projects, InterFlex will assess how the integration of the new solutions can lead to a local energy optimisation. Technically speaking, the success of these demonstrations requires that some of the new solutions, which are today at TRLs 5-7, are further developed reaching TRLs 7-9 to be deployed in real-life conditions. This allows

new business models and contractual relationships to be evaluated between the DSOs and the market players.

Environment: Through the optimisation of the local energy system, the project generates benefits in terms of increased energy efficiency (load shifts to off peak hours; optimized self-consumption in case of prosumers, increased awareness leading to active DSM and reduced electricity consumption), power generation optimization (peak shaving, avoiding electricity generation from carbonized peak load generation units) and increased share of renewables (optimized integration of intermittent renewable energy sources), resulting in the overall reduction of GHG emissions.

Socio-economic: The project stimulates the development of new services for end-customers allowing for instance the development of demand response service packages for small and large consumers as well as prosumers. The provision of community storage solutions or the optimal use of multiple source flexibilities should help to decrease the electricity bill without any noticeable impact on the supply quality.

Policy: The Use cases of the project will help to

- Formulate recommendations for micro grid operation (control schemes and observability),
- Elaborate an appropriate regulatory framework for self- consumption and storage solutions (community or individual residential storage)
- Provide guidelines on the participation of distributed resources in DSO operations (modifications of grid codes).

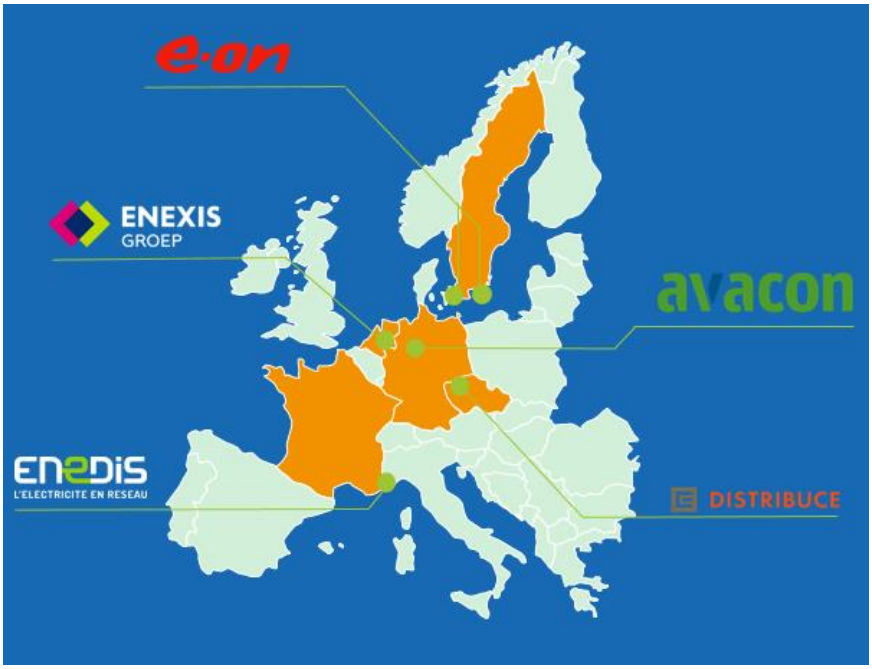

Figure 1: InterFlex Demo Map

2. DATA SUMMARY

2.1. Purpose of the data collection

The goal of the data collection is to design a structure for data classification and define level of confidentiality and access rights for each subcategory:

- To evaluate the technical and financial performance of the 6 demonstrators and the InterFlex project
- To communicate properly on the demonstrators and the results of the InterFlex project
- To make sure the 6 demonstrators methodology and results are exploitable and replicable
- Without affecting the confidentiality of some data

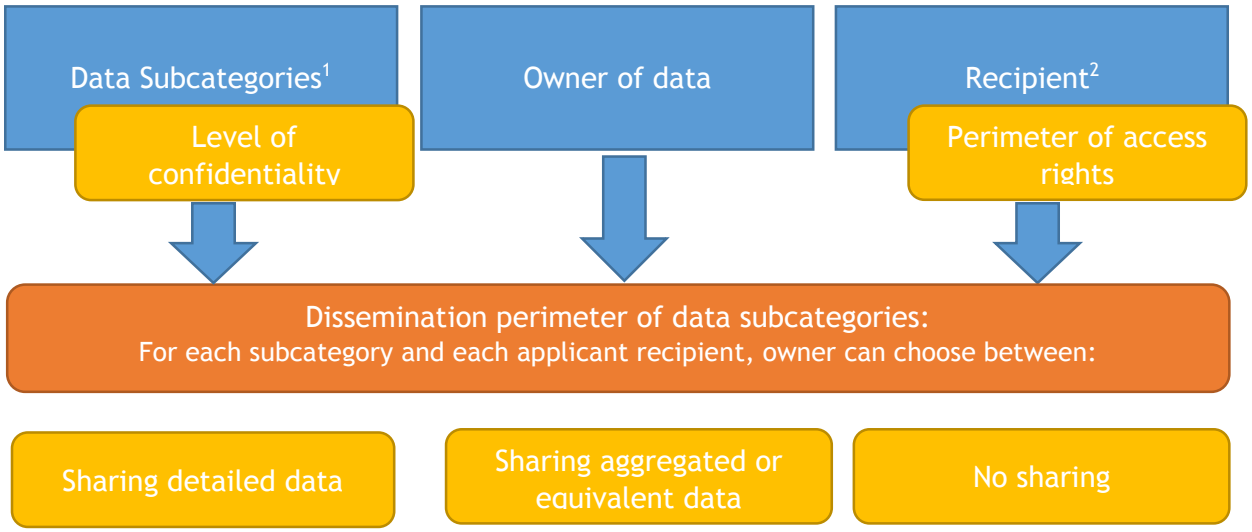

Figure 2 : Level of confidentiality and access rights

Detailed system data need to be transformed before being exchanged with non-authorized recipient:

- **Detailed data**: Raw data
- **Aggregated data**: Aggregated data: Data based on detailed data that are aggregated at a sufficient level so that raw data can't be identified(statistical law) with respect to competition laws
- **Equivalent data** : Data based on detailed data that are in an anonymous form or with modified values so that raw data can't be identified

[1]Each subcategory with several single information type is assigned to a level of confidentiality from 0 to 2
[2] Each recipient or group is assigned to a level of access rights from 0 to 2

2.2. Types and formats of generated or collected data

Different types of data are collected or generated within the InterFlex Project:

	Data	
	Subcategories	**Format used**
Document	Internal document	Detailed
	InterFlex deliverable	No restriction
	Communication material	No restriction
Financial data	Project financial data	Detailed
		Aggregated or Equivalent
	Solution cost and selling price	Detailed
		Aggregated or Equivalent
Parameter	Condition parameter	No restriction
	Scenario assumption	Detailed
		Aggregated or Equivalent
	Electrical parameter	Detailed
	Algorithm, formula, rules, specific model	Detailed
	Optimization value	Detailed
		Aggregated or Equivalent
	Forecast (consumption, production,...)	Detailed

	Data	
	Subcategories	**Format used**
Network data	Network topology	Detailed
		Aggregated or Equivalent
	Network state	Detailed
		Aggregated or Equivalent
Facility data	Customer's meter state and output	Detailed
		Aggregated or Equivalent
	Other device state and output	Detailed
		Aggregated or Equivalent
	Detailed specification on facilities (IS or devices)	Detailed
		Aggregated or Equivalent
	Information exchanged between IS or	Detailed
KPI	Data for KPI (input raw data)	Detailed
	KPI (KPI values)	Aggregated or Equivalent
Customer data	Customer's contract data	Detailed
	Information sent to / received from customer	Detailed
		Aggregated or Equivalent
	Customer analysis (profile analysis, studies on client reactivity)	Detailed
		Aggregated or Equivalent

Table 2: Data classification

2.3. Data Structure and utility

The data structure has been defined gathering and compiling all project data and processes. It may evolve and be updated during the life of the project.

The actual structure for Actors and Data for the InterFlex project are listed in the tables below:

Categories	Type	Subcategories	Definition and utility	Example
Actors	Role	DSO	Responsible for operating, ensuring the maintenance of and, if necessary, developing the distribution system in a given area	Avacon, CEZ, E.ON, Enexis, Enedis
Actors	Role	Industrial partner	All industrial partners involved in Interflex project at a DEMO level	- GE - Siemens - Schneider …
Actors	Role	University and research partner	All university or research partners involved in Interflex project at a DEMO level	- RWTH - AIT etc
Actors	Role	Retailer	Licensed supplier of electricity to an end-user	- EDF - Engie...
Actors	Role	Legal Client	A legal client of a DSO that is involved at Demo scale	- Company producer - Municipalities - Tertiary service providers
Actors	Role	Physical client	A physical client of a DSO that is involved at Demo scale	- Residential client
Actors	System	Charging facilities	Facilities to charge electrical vehicles	- Charging facilities
Actors	System	DER installation	Power plant that use renewable technology and are owned by a legal person	- Photovoltaics panels - Biomass farm - Wind power, …
Actors	System	In house device	All devices working on electricity that can be find in a customer's dwelling.	- Heater - Meter - Local display - Customer's battery
Actors	System	Communication infrastructure	All the infrastructure that are used for communication at all level (from customer's place to power command)	- Modem - Routers

Actors	System	Network device	All devices placed on MV/LV network for monitoring or gathering information on grid's situation or electrical parameters values. It also include the IS associated	- Secondary Substation control infrastructure - RTU : Remote terminal units - Circuits breakers - sensors
Actors	System	IS IT	All the hardware and software associated, used at power command to control and monitor the network	- SCADA - Central database - Control operation center
Actors	System	Interactive communication device	All device used to interact with customers in order to involved him in the Demo	- Web portal - Display used for communication

Table 3: List of actors

Categories	**Type**	**Subcategories**	**Definition and utility**	**Example**
Data	Document	Internal document	All the documentation made by Demo to run operation, to monitor and conduct the project's good development	- Meeting minutes - Report on the cost's impact of selected flexibility plans
Data	Document	Interflex deliverable	All the deliverables that Demo have to produce during the project's time as agreed in the DOW	- Risk analysis - Documentation on KPI - Detailed use case - Report on technical experimentation, market research, …
Data	Document	Communication material	All the documentation that describe the project to the public and can be put on the future website	- Purpose of the DEMO (leaflet) - Brief description of use case - Location of use case
Data	Financial data	Project financial data	All the financial data that are produced during the project and that are used to make financial report for European Commission and internal report	- Invoices - Cost and time imputation
Data	Financial data	Solution cost and selling price	All the financial data that can be made concerning estimation prices of solution for replication	- Unit product cost of hardware developed by Demo - Sell price of the solution develop (software,…)
Data	Parameter	Condition parameter	All the external parameters that may influence the success of the use case	- Weather - Time of day - Day of week …
Data	Parameter	Scenario assumption	All the stated parameters that are necessary to determinate a scenario for the use case	- Location of islanding - Experiment's location
Data	Parameter	Electrical parameter	All the electrical parameters that are used to supervise the network and its good state	- Intensity - Voltage - Frequency - Quality

Data	Parameter	Algorithm, formula, rule, specific model	All the intellectual data that are created during the project to made software's contents	- Algorithm to optimize flexibility plan - Simulation to determine location of circuit breaker - Voltage regulation algorithm
Data	Parameter	Optimized value	Values of parameters that optimized the use case or the demo's performance	- Optimization time of islanding
Data	Parameter	Forecast data	All the data used to forecast consumption or production of customer	- Forecast customer's consumption - Forecast photovoltaic panels' production
Data	Facility data	Network topology	All information on network devices and their location and interaction, mainly coming from GIS (Geographic Information System)	- Map of the network - Substations location - All the other data found in the GIS (Geographical Information System)
Data	Facility data	Network state	All information concerning the network's status (global or local) at a precise moment useful to monitor the network	- Feeding situation in a distribution area - State of network regarding Limit value violation - Location of constraint - Flexibility needs of DSO
Data	Facility data	Customer's meter state and output	All the information concerning customer's meter state and outputs information	- Customer's consumption or production
Data	Facility data	Other device state and output	All the information concerning device's state and outputs information	- State of charge of batteries - Consumption data coming from meter - Production data coming from meter - State of charge of storage components
Data	Parameter	Information exchanged between IS or sent to device	All automated information sent between facilities in order to send information or order for monitoring	- Order sent to breaker devices (open, close,…) - Information on local network status coming from sensors - Order and roadmap sent to network devices (batteries, aggregator,…)
Data	Parameter	Detailed specification on devices	All detailed information (reference components, specification, process,…) useful to build the devices	- Detailed specification of the telecommunication infrastructure - Detailed specification of interactive sensor network
Data	Network data	Network topology	All information on network devices and their location and interaction, mainly coming from GIS (Geographic Information System)	- Map of the network - Substations location - All the other data found in the GIS (Geographical Information System)
Data	Network data	Network state	All information concerning the network's status (global or local) at a precise moment useful to monitor the network	- Feeding situation in a distribution area - State of network regarding Limit value violation - Location of constraint - Flexibility needs of DSO
Data	KPI	Data for KPI (input raw data)	All raw data that are used to calculate the final KPI	- Duration of experiment - Customer response to DSO's demand - Electrical parameter used for KPI

Data	KPI	KPI (KPI values)	All the KPI values and the way to calculate them	- Economic KPI - System Efficiency KPI
Data	Customer data	Customer contract's data	All the data in customer's contact that are used for contact or make payment	- Address - Phone number - Bank account details
Data	Customer data	Information sent to /received from customer	All the information and data that are exchanged between the DEMO and the customer in order to involve customer in the experiment	- Customer's response to DSO's request to reduce consumption - Information and data available to customer in order to visualize its consumption - Advices and encouragement sent to encourage a smart consumption
Data	Customer data	Customer analysis (profile analysis, studies on client reactivity)	All the data that are produced in order to better understand the customer's behaviour regarding the possibility to adopt smarter habits in their electricity consumption	- Customer's typology and behaviour patterns - Analysis on customer's response to DSO's request

Table 4: List of data

3. FAIR DATA

3.1. Making data findable, including provisions for metadata

In order to make data findable and usable, regarding the level of access rights, rules have been defined to identify the data.

KPIs

Data concerned

- All demo KPIs
- Common KPIs

Characteristics

- KPI values were created in order to be shared and published outside the Interflex project
- KPIs reflect the results of the demos and the InterFlex Project and are one of the main tools of the Technical Management
- For each KPI, the level of dissemination has been defined in the deliverable 'D2.2 MinimalSetOfKPIs_CEZd_InterFlex_V1.0'

Rules/ Identification/Versioning

- Decision has been taken that only calculated values will be put inside the data clearing house located on the Project Intranet. The data collection frequency and responsibilities for data collection are defined for each KPI in the deliverable 'D2.2 MinimalSetOfKPIs_CEZd_InterFlex_V1.0'
    - Data name

- Data ID
- Methodology for Data collection
- Source/tools/Instruments for Data collection
- Location of Data collection
- Frequency of data collection
- Data responsible data collection
- KPI ID
- KPI Name

- Each responsible for WP KPI collection is the WPL who collects the different KPIs in the database stored on the InterFlex Intranet, so the Technical Director can assess the project thanks to the KPI collection.
- Each Raw data and calculated value has an Object Identifier defined in deliverable 'D2.2 MinimalSetOfKPIs_CEZd_InterFlex_V1.0'.

InterFlex Deliverables

Data concerned

- List of deliverables defined in the Grant Agreement (or its amended version)

Characteristics

- Depending on the deliverable, perimeter of dissemination can be different
- A level of dissemination is already pre-defined in the Grant Agreement

Rules/ Identification/Versioning

- Level of dissemination is chosen by the author and Technical committee validates the choice. Main deliverables and appendices may have different levels of confidentiality, especially if appendices are more detailed
- The deliverables are available on the Project Intranet and on the website for public audience
- Versioning and nomenclatures are defined in the deliverable 'D10.1 ProjectManagementPlan_Enedis_InterFlex_V2.0'

Demo's local Data

Data concerned

- Internal documents
- Electrical parameters
- Forecast data
- Device state and outputs and information exchanged between facilities
- Customer analyses (profile analyses, studies on client reactivity…)

Characteristics

- Data used to run each of the Demos on a daily basis

- Data are with low added value outside source Demo, as Demos are running separately without overlap

Rules to be applied

- Data should stay at Demo level and be used only by Demo partners for the achievement of their activity
- If another partner outside Demo needs these data, a written request and explanation should be provided about the way he is going to use the data (Agreement form)
  - > Sample data in an anonymous format can be sent only for illustration
  - > Providing aggregated data should be the rule
- A global description will be integrated inside deliverable

Project Financial Data

Data concerned

- Invoices
- Time spendings/imputations
- Cost/price
- Company internal financial documents

Characteristics

- Data can be at different levels of details
- Detailed data (cost by unit) are extremely sensitive
- Demos need to send financial data to Coordinator who will aggregates data to present a global cost statement covering all Demos and general expenses of each partner (for internal financial report) broken down to individual WPs

Rules to be applied

- Detailed data should stay in partner's accounting system
- Data sent to the Coordinator should be in the detailed level described in the template provided by Coordinator
- All data sent to Coordinator must be kept strictly confidential and must not be disseminated
- Coordinator aggregates data to present to the consortium
- Company internal financial information is not shared

Network Data

Data concerned

- Network topology
- Network state

Characteristics

- Network topology GIS information and Network state are highly confidential and sensitive

- Network state can be sensitive information as it can reveal grid's weakness and vulnerability

Rules to be applied

- Network topology with GIS information must not be shared except between DSOs
- If another partner needs network data, a written request and explanation should be provided about the way he is going to use the data (Agreement form)

> Data in an anonymous format : equivalent data without indication of location can be sent

> Providing aggregated data should be the rule

Demo Customer Data

Data concerned

- Customer's meter data
- Customer's contract data

Characteristics

- All this data are strictly under personal data protection (European and national laws)
- Detailed identification data (address, phone number,…) are sensitive information and must be secured

Rules to be applied

- Customer's contract must never be sent

- As stated in laws :

> Customer must have an access to this data

> Data must be protected and traceability of the use must be made

> Data can't be disclosed to anyone without the full consent of customers on usage and access rights

- All this information has to be clearly stated in the customer's contract that is signed to enter project
- in order to send information to other partners if the need is clearly established, these data have to be delivered in an anonymous format (equivalent data) or aggregated format
- The DSO must ensure to record these data in compliance with their national data protection regulations

3.2. Making data openly accessible

Data that are used to manage the project within the consortium are stored on the Project Intranet with a private login and password. This intranet is used as a working tool for the

sharing of documents related to InterFlex and consists of a private area, accessible online to the project partners.

It allows the safe access to project information and reports, circulation of preparatory and internal work, online exchanges and virtual communication tools such as shared Agenda, Instant Messaging etc.

Groups and access roles have been defined in order to assure clearly identified access rights.

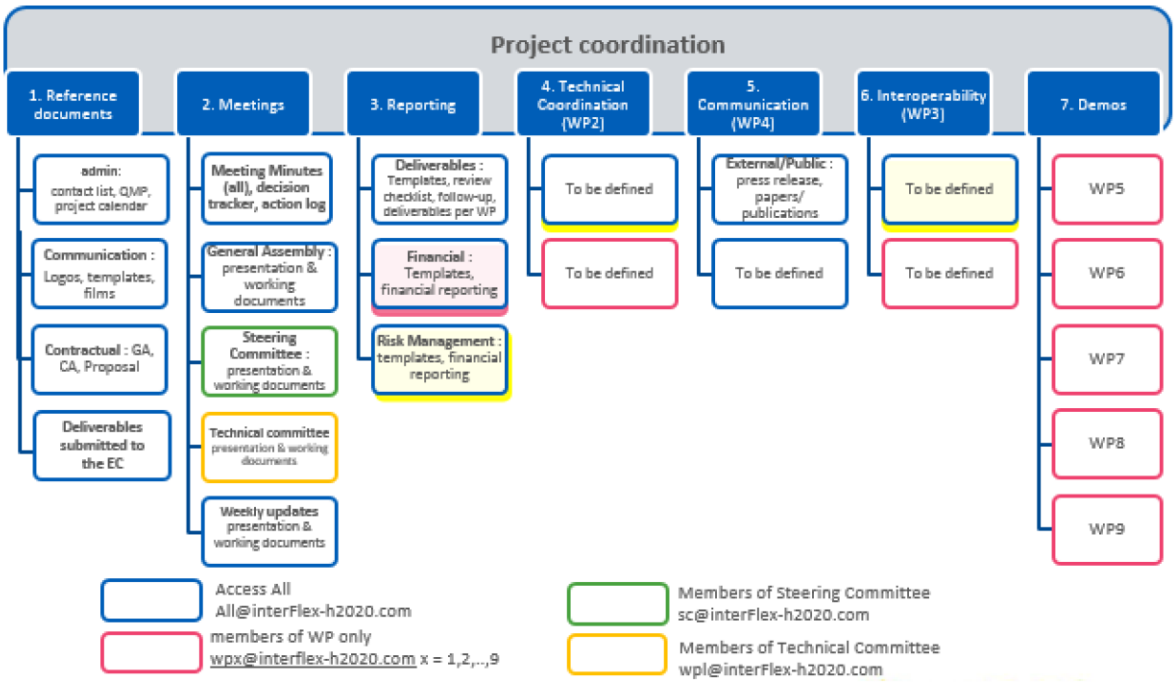

Figure 3: Tree view of the access rights of the Intranet

Data that are public are accessible on the project website. Key words and search tool are available in order to make the data more accessible.

Confidential data are identified with a confidential tag in order to protect them.

The access rights per actors per data is described in the table below:

	Data		Actors involved									
	Subcategories	Format used	Owner	Partner (s)chosen	DEMO	DSOs	GWP	All DEMOs	All GWPs	All InterFlex	European commission	Public
Document	Internal document	Detailed	x	x	x							
	InterFlex deliverable	No restriction	x	x	x	x	x	x	x	x	x	x
	Communication material	No restriction	x	x	x	x	x	x	x	x	x	x
Financial data	Project financial data	Detailed	x				x				x	
		Aggregated or Equivalent	x	x	x	x	x	x	x	x	x	
	Solution cost and selling price	Detailed	x	x								
		Aggregated or Equivalent	x	x	x	x	x	x	x			
Parameter	Condition parameter	No restriction	x	x	x	x	x	x	x	x	x	x
	Scenario assumption	Detailed	x	x								
		Aggregated or Equivalent	x	x	x	x	x	x	x	x	x	x
	Electrical parameter	Detailed	x	x	x							
	Algorithm, formula, rules, specific model	Detailed	x	x								
	Optimization value	Detailed	x	x								
		Aggregated or Equivalent	x	x	x	x	x	x	x	x	x	x
	Forecast (consumption, production,...)	Detailed	x	x	x							

	Data		Actors involved									
	Subcategories	Format used	Owner	Partner (s)chosen	DEMO	DSOs	GWP	All DEMOs	All GWPs	All InterFlex	European commission	Public
Network data	Network topology	Detailed	x									
		Aggregated or Equivalent	x		x	x	x					
	Network state	Detailed	x	x	x							
		Aggregated or Equivalent	x	x	x	x	x	x	x			
Facility data	Customer's meter state and output	Detailed	x									
		Aggregated or Equivalent	x	x	x		x					
	Other device state and output	Detailed	x	x	x							
		Aggregated or Equivalent	x	x	x	x	x					
	Detailed specification on facilities (IS or devices)	Detailed	x	x								
		Aggregated or Equivalent	x	x	x	x	x	x	x	x	x	x
	Information exchanged between IS or	Detailed	x	x	x							
KPI	Data for KPI (input raw data)	Detailed	x	x								
	KPI (KPI values)	Aggregated or Equivalent	x	x	x	x	x	x	x	x	x	x
Customer data	Customer's contract data	Detailed	x									
	Information sent to / received from customer	Detailed	x	x	x							
		Aggregated or Equivalent	x	x	x	x	x	x	x	x	x	x
	Customer analysis (profile analysis, studies on client reactivity ...)	Detailed	x	x	x							
		Aggregated or Equivalent	x	x	x	x	x	x	x	x	x	x

Table 5: Data classification

3.3. Making data interoperable

In order to identify and aggregate the data in an interoperable way the InterFlex project uses the SGAM framework/ Use case methodology approach and also the IEC PAS 62559 based template to describe in detail the Use Cases. See deliverable D2.1.

The SGAM framework and its methodology are intended to present the design of Smart Grid use cases in an architectural but solution and technology-neutral manner.

The SGAM framework consists of five layers representing business objectives and processes, functions, information exchange and models, communication protocols and components. These five layers represent an abstract and condensed version of the GWAC interoperability categories. Each layer covers the smart grid plane, which is spanned by electrical domains and information management zones. The intention of this model is to represent on which zones of information management interactions between domains take place. It allows the presentation of the current state of implementations in the electrical grid, but furthermore to depict the evolution to future smart grid scenarios by supporting the principles universality, localization, consistency, flexibility and interoperability

InterFlex aims to get information on:

1. Description of the Use Case
2. Diagrams of the Use Case
3. Technical data - Actors
4. Step by Step Analysis of Use Case (can be extended by detailed info on "information exchanged")
5. Information exchanged

Moreover, the WP3 focuses on defining an interoperable API for IT systems involved in the flexibility transactions with cybersecurity constraints (D3.6), Interoperability and interchangeability validation results (D3.7), and Scalability and replicability analyses for all the use cases (D3.8).

3.4. Increase data re-use (through clarifying licenses)

In order to enable and promote data re-use, all data provided need to take the following questions in a reasonable way into account and must be specified in the Exploitation Plan of the project (D4.7, D4.8, i.e., 1st and 2nd version of the Exploitation Plan of the project results):

- How will the data be licensed to permit the widest possible re-use?

- When will the data be made available for re-use? If an embargo is sought to give time to publish or seek patents, specify why and how long this will apply, bearing in mind that research data should be made available as soon as possible.
- Are the data produced and/or used in the project useable by third parties, in particular after the end of the project? If the re-use of some data is restricted, explain why.
- How long is it intended that the data remains re-usable?
- Are data quality assurance processes described?

4. ALLOCATION OF RESOURCES

Enedis as Project Coordinator of the InterFlex project is responsible for data management of the project.

All relevant data such as KPI results, publication and deliverables must be accessible at least 5 years after the end of the project. As such, the Intranet and Internet platforms will be available and maintained by Enedis during this period from 2020 until 2024. The corresponding estimated expenses are shown hereunder:

- Intranet licences: 96€/year/licences. 1 licence for each of the 20 partners (TBC)
- Internet Hosting and maintenance: 40€/month

Cost category	Year 2020	Year 2021	Year 2022	Year 2023	Year 2024	Total
Intranet	1 920 €	1 920 €	1 920 €	1 920 €	1 920 €	**9 600 €**
Internet	480 €	480 €	480 €	480 €	480 €	**2 400 €**
Total direct costs	**2 400 €**	**2 400 €**	**2 400 €**	**2 400 €**	**2 400 €**	**12 000 €**

Table 6 : Direct data management costs excluding HR after the end of the project

5. DATA SECURITY AND ETHICAL ASPECTS

5.1. Data security

Based on common works and agreements among GWP and Demo leaders, each subcategory of data was assessed with three levels of confidentiality in order to ensure data security.

Depending on the constraints applying to these types of data (laws, internal rules…), it is possible to apply a level of confidentiality as followed:

- Level 0:
  - Detailed data can never be shared
  - Aggregated data or equivalent data can be shared
- Level 1:
  - Detailed data can be shared with some partners upon request and dedicated agreement
  - No restriction on aggregated data or equivalent data
- Level 2:
  - No restriction whatsoever.

5.2. Ethical aspects

Ethics requirements in the protection of personal data must be taken into account. Indeed, within the context of Interflex demos and exploitation of related results, partners will be collecting or processing personal data.

As such, the D1.1 Ethics POPD deliverable (protection of personal data) specifies for each partner:

- Certification by their competent Data Protection Authority of compliance with applicable local and European laws,
- Detailed information on the procedures that will be implemented for data collection, storage, protection, retention and destruction
- where applicable, providing templates of consent forms to be given out to customers whose personal data may collected and used

6. APPENDIX

List of InterFlex Common KPIs

Interflex Project KPI	KPI ID	KPI TYPE	KPI Description
Flexibility	WP2.2_KPI_1	Technical	Flexible power that can be used for balancing specific grid segment.
Hosting capacity	WP2.2_KPI_2	Technical	Percentage increase of network hosting capacity for DER.
Islanding	WP2.2_KPI_3	Technical	Capacity of the energy system to switch to islanding whilst keeping the power quality requirement.
Customer recruitment	WP2.2_KPI_4	Social	Measure whether demos are managing to recruit enough customer bases in order to attain demo objectives.
Active participation	WP2.2_KPI_5	Social	Reflects how versatile the demos are in leveraging flexibility from different technologies.

7. REFERENCES

1. Grant Agreement number – 731289 - INTERFLEX – H2020-LCE-2016-2017/H2020-LCE-2016-SGS
2. Deliverable D1.1 Ethics POPD (protection of personal data)
3. Deliverable D2.3 Field data access rights
4. Deliverable D2.1 Minimal Set of KPIs