

Aggregate energy data

Based on IEC 62559-2 edition 1
Generated from UML Use Case Repository with Modsarus® (EDF R&D Tool)

1. Description of the use case

1. Name of use case

Use case identification		
ID	Area(s)/Domain(s)/Zone(s)	Name of use case
	Access to data,Balance management,Market for flexibilities,Operational planning and forecasting,Services related to end customers	Aggregate energy data

2. Version management

Version management				
Version No.	Date	Name of author(s)	Changes	Approval status
1	2018-04-12	Kalle Kukk (Elering)		
2	2018-10-03	Ricardo Jover (EDF)	UML model	
3	2018-10-04	Eric Suignard (EDF)	Version post WP5&9 physical meeting in Tallinn	
4	2018-10-11	Ricardo Jover (EDF)	Assumptions concerning users of the Application	
5	2019-05-07	Eric Suignard (EDF)	WP6-7-8 demos alignment and miscellaneous changes	
6	2020-06-16	Eric Suignard (EDF)	innogy's and Elering's review	

3. Scope and objectives of use case

Scope and objectives of use case	
Scope	Aggregation of different types of data made available through data exchange platform
Objective(s)	Making private data available to other parties without authorization (permission) requirement.: Making different types of data available for reporting and statistics
Related business case(s)	

4. Narrative of Use Case

Narrative of use case	
Short description	
Data Exchange Platforms can support data aggregation by transporting aggregated data from a data source to an application. Aggregation itself takes place at data source. Aggregated data may be useful for different applications (services) – e.g. related to benchmarking, national statistics, imbalance reporting. Also, aggregated data would not require consent (permission rights) for personal data or commercially sensitive data.	
Complete description	
<p style="text-align: center;"><u>Summary of use case</u></p> <ul style="list-style-type: none"> Request aggregated data <u>Description:</u> 	

- Aggregates data
Description:
- Forwards aggregated data
Description:
- Forwards aggregated data
Description:
- Forwards aggregated data request
Description:
- Forwards aggregated data request
Description:
- Requests aggregated data
Description:
- Sends aggregated data
Description:

5. Key performance indicators (KPI)

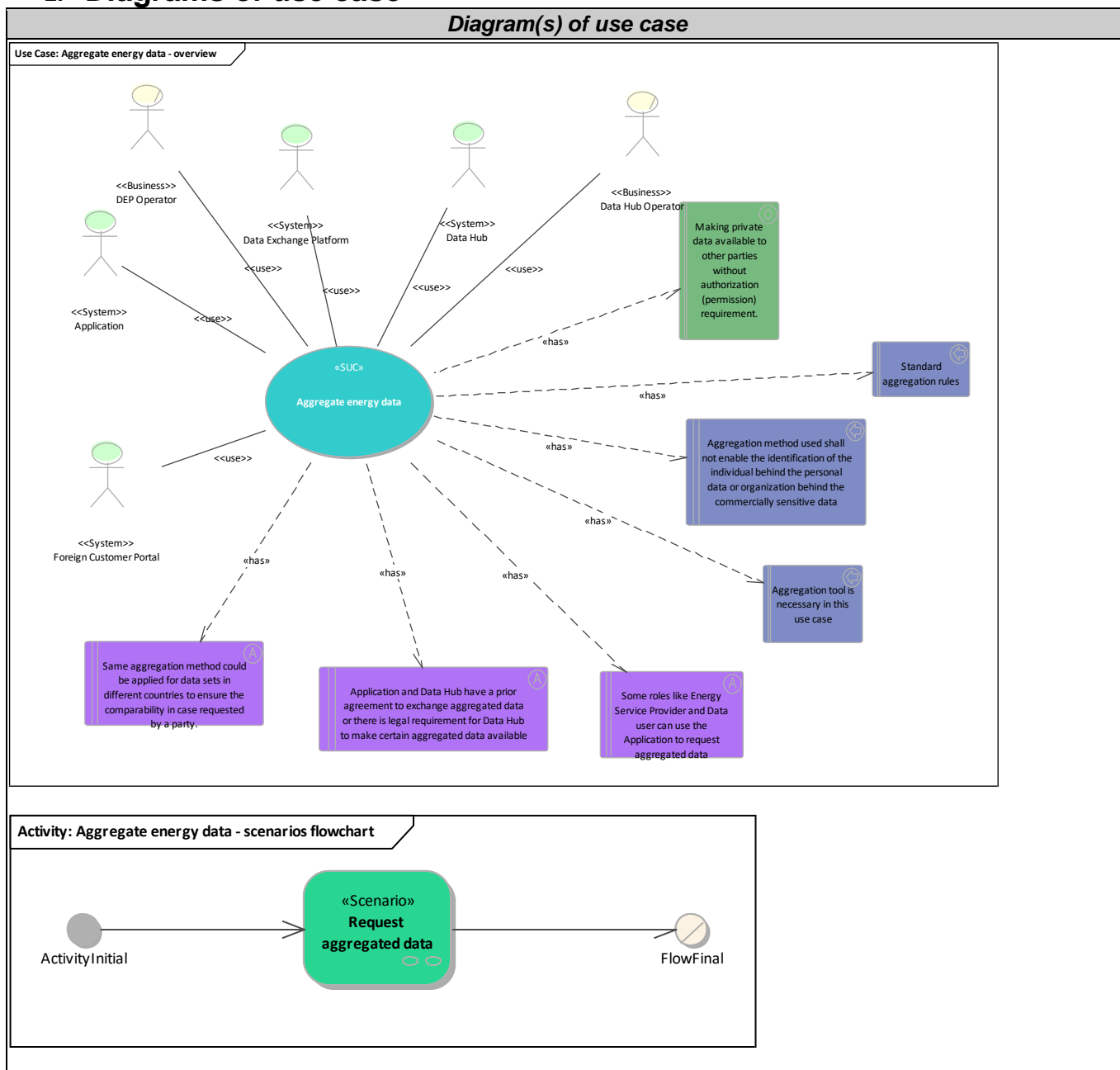
6. Use case conditions

Use case conditions	
Assumptions	
1	Same aggregation method could be applied for data sets in different countries to ensure the comparability in case requested by a party.
2	Application and Data Hub have a prior agreement to exchange aggregated data or there is legal requirement for Data Hub to make certain aggregated data available
3	Some roles like Energy Service Provider and Data user can use the Application to request aggregated data
Prerequisites	
1	Aggregation method used shall not enable the identification of the individual behind the personal data or organization behind the commercially sensitive data
2	Aggregation tool is necessary in this use case
3	Standard aggregation rules

7. Further information to the use case for classification/mapping

Classification information
Relation to other use cases
Level of depth
Prioritisation
Generic, regional or national relation
Nature of the use case
SUC
Further keywords for classification

2. Diagrams of use case



3. Technical details

<i>Actors</i>			
<i>Grouping (e.g. domains, zones)</i>		<i>Group description</i>	
<i>Actor name</i>	<i>Actor type</i>	<i>Actor description</i>	<i>Further information</i>

			<i>specific to this use case</i>
Application	System	Any kind of system connected to a Data Exchange Platform and used by a market participant who wishes to receive data.	
Data Exchange Platform	System	Data exchange platform (DEP) is a communication platform the basic functionality of which is to secure data transfer (routing) from data providers (e.g. data hubs, flexibility service providers, TSOs, DSOs) to the data users (e.g. TSOs, DSOs, consumers, suppliers, energy service providers). DEP stores data related to its services (e.g. cryptographic hash of the data requested). The DEP does not store core energy data (e.g. meter data, grid data, market data) while these data can be stored by data hubs. Several DEPs may exist in different countries and inside one country.	
Data Hub	System	Data Hub is an information system which main functionality is to store and make available measurements (e.g. meter data, operational data) and associated master data. Data Hubs are not necessarily centralized in a country or in a region.	
Foreign Customer Portal	System	Customer Portal for another country. Can also mean a separate portal in the same country.	
Data Hub Operator	Business	Data hub operator owns and operates an information system which main functionality is to store and make available electricity (also gas, heat) metering data and associated master data. Can be : <ul style="list-style-type: none"> • Grid Data Hub Operator in the sphere of a System Operator • Market Data Hub Operator in the sphere of a Market Operator • Meter Data Hub Operator in the sphere of a Metered Data Operator • Sub-meter Data Hub Operator in the sphere of an Energy Service Provider 	
DEP Operator	Business	Data exchange platform operator owns and operates a communication system which basic functionality is data transfer.	

2. References

4. Step by step analysis of use case

1. Overview of scenarios

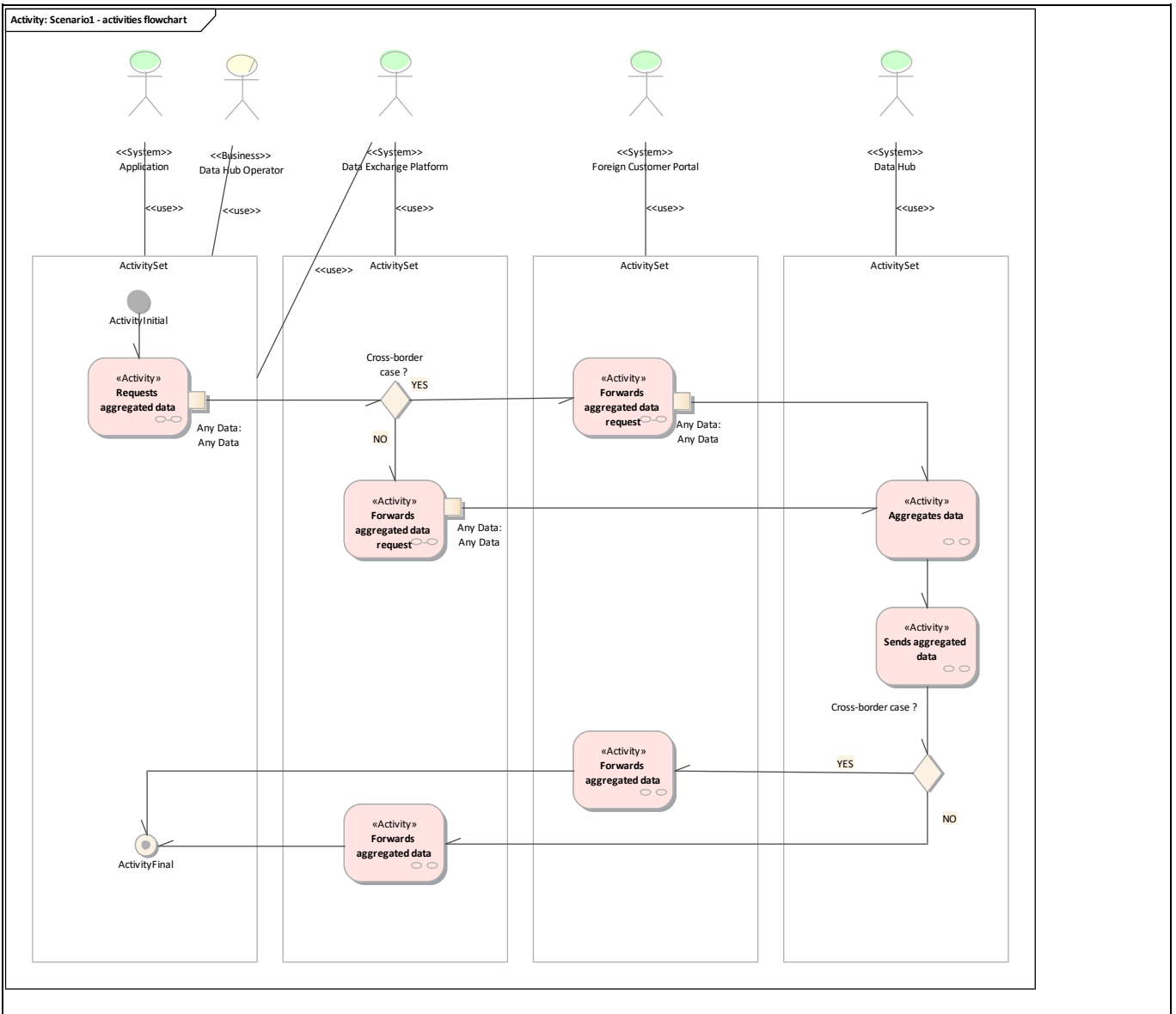
Scenario conditions						
No.	Scenario name	Scenario description	Primary actor	Triggering event	Pre-condition	Post-condition
1	Request aggregated data					

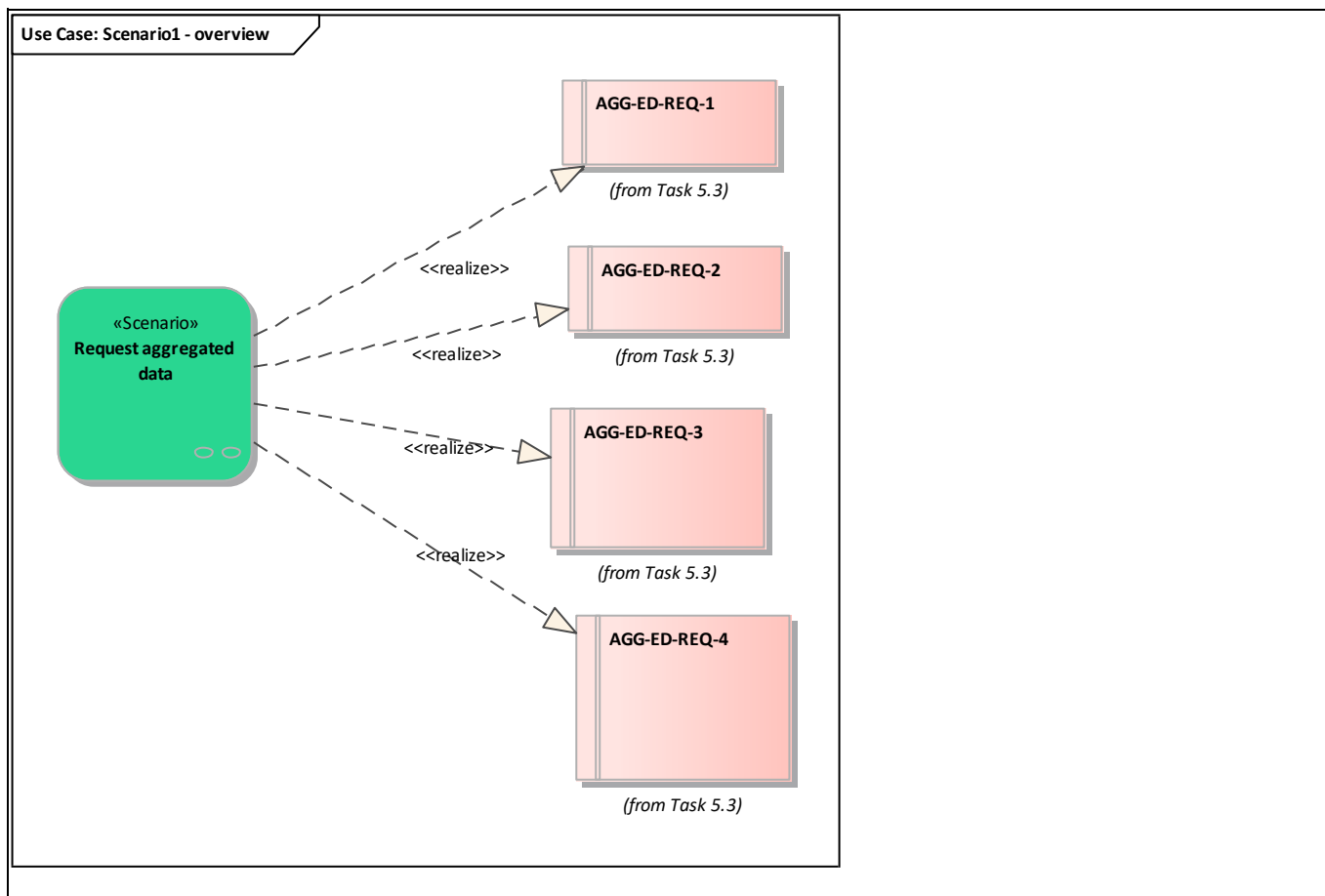
2. Steps - Scenarios

- Request aggregated data

Requirement list (refer to "Requirement" section for more information)	
Requirement R-ID	Requirement name
Cat1.Reg1	AGG-ED-REQ-3
Cat1.Reg2	AGG-ED-REQ-4
Cat1.Reg3	AGG-ED-REQ-2

Cat1.Reg4	AGG-ED-REQ-1
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Scenario step by step analysis

Scenario								
Scenario name		Request aggregated data						
Step No	Event	Name of process/activity	Description of process/activity	Service	Information producer (actor)	Information receiver (actor)	Information exchanged (IDs)	Requirement, R-IDs
1.1		Aggregates data			Data Hub			
1.2		Forwards aggregated data			Foreign Customer Portal			
1.3		Forwards aggregated data			Data Exchange Platform			
1.4		Forwards aggregated data request			Data Exchange Platform	Data Hub	Info1-Any Data	
1.5		Forwards aggregated data request			Foreign Customer Portal	Data Hub	Info1-Any Data	
1.6		Requests aggregated data			Application	Data Exchange Platform, Foreign	Info1-Any Data	

						Customer Portal		
1.7		Sends aggregated data			Data Hub			

- 1.4. Forwards aggregated data request

Business section: Request aggregated data/Forwards aggregated data request

Information sent:

Business object	Instance name	Instance description
Any Data	Any Data	

- 1.5. Forwards aggregated data request

Business section: Request aggregated data/Forwards aggregated data request

Information sent:

Business object	Instance name	Instance description
Any Data	Any Data	

- 1.6. Requests aggregated data

Business section: Request aggregated data/Requests aggregated data

Information sent:

Business object	Instance name	Instance description
Any Data	Any Data	

5. Information exchanged

Information exchanged			
Information exchanged, ID	Name of information	Description of information exchanged	Requirement, R-IDs
Info1	Any Data		

6. Requirements (optional)

Requirements (optional)		
Categories ID	Category name for requirements	Category description
Cat1	Task 5.3	Requirements integrated from Task 5.3.
Requirement R-ID	Requirement name	Requirement description
Req1	AGG-ED-REQ-3	Data source (e.g. meter data hub) ability to aggregate data
Req2	AGG-ED-REQ-4	DEP ability to forward aggregated data from a data source to a data user
Req3	AGG-ED-REQ-2	Standard rules to aggregate data in order to ensure the comparability of aggregated data sets

Req4	AGG-ED-REQ-1	Standard rules to aggregate data in order not to enable the identification of persons behind data
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7. Common terms and definitions

8. Custom information (optional)