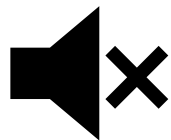


Information session Tranche 3 Programme Allocatie 2.0 (A2.0)

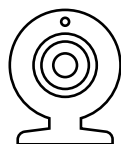
Information session 1

12 September 2023

Welcome to the information session for Tranche 3 A2.0



Mute your
microphone.



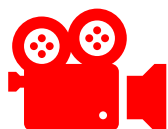
Turn **off** your
camera.



Ask questions via **the
chat feature**. We are
working with a
moderator.



Presentation on
mijnMFFBAS.



**The session is
being
recorded.**



The session will be
available for 4
weeks. E-mail
projecten@mffbas.nl



Recording is
taking place for
interested
parties, with your
approval.



All questions and
answers will be
placed on
mijnMFFBAS.

Tranche 3

Go live 1 January 2025

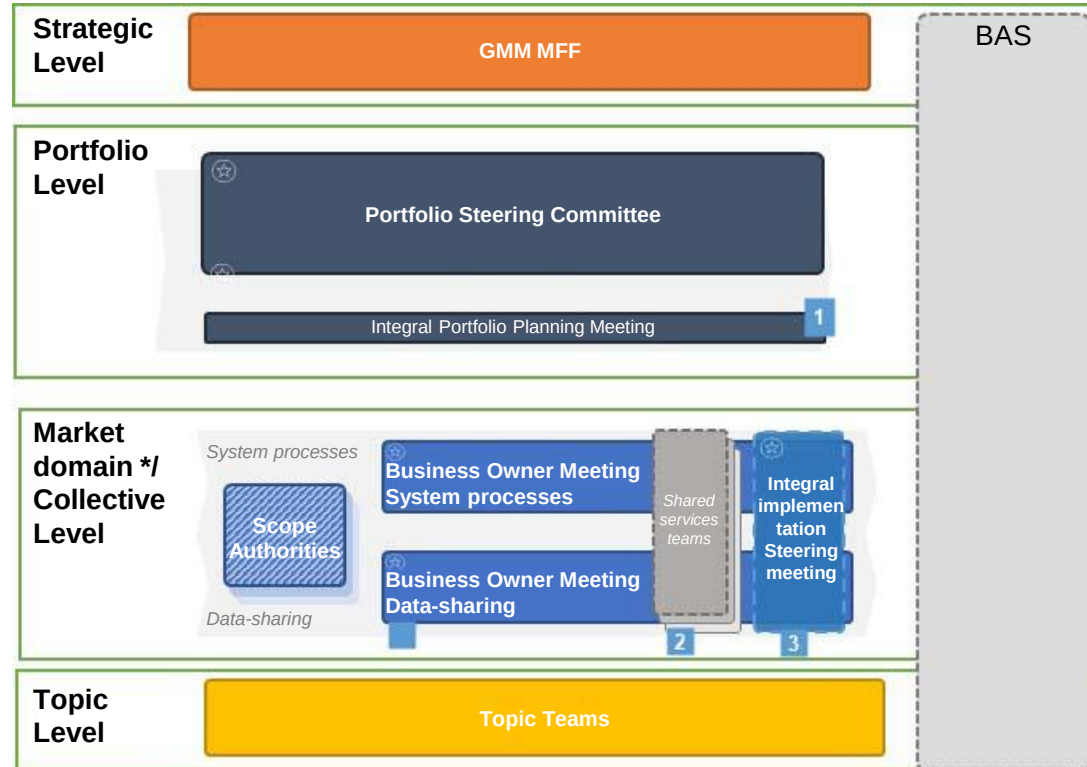
Content and speakers

Welcome; changed governance from SI to IISO; scope and planning	Mirjam van der Horst (chairman IISO, secretary PF SG)
New and changed processes and notifications; impact per market role	Bram van Straalen (member IISO and notifications team)
Explanation BRS, notification definitions and service descriptions	Jan de Jong (notifications team)
Explanation RFC's	Bram van Straalen
Construction and qualification central system of system operators • Central systems DSO at EDSN • Central systems at TSO	• Adrie Koster (programme manager EDSN) • Gijsbert Steenaert (programme manager TenneT)
Testing and transition	Jorik van Vilsteren (manager Testing and Transition)
Wrap-up	Mirjam van der Horst

Changed governance from SI to IISO

Mirjam van der Horst

From SI to IISO



 Across market domains  Optional, within Collective

1 Oversees the **cohesion and consistency** of **integral planning** at topic level (both specification and release planning) within the whole portfolio in consultation with all market roles, in line with the **jointly determine priority** in the GMM MFF and the available capacity in the market, and issues the accompanying advice.

Provides **advice and/or details** concerning **specific assigned recurring assignments** (e.g: Architects meeting, Testing working group and Consultation group Transition) to all Topic Teams.

2 Responsible for monitoring progress in the realisation process, performing sector tests, facilitating transition and communication about **market releases** with **all market parties**, and realising sector-wide IT developments.

3

Scope and planning Tranche 3

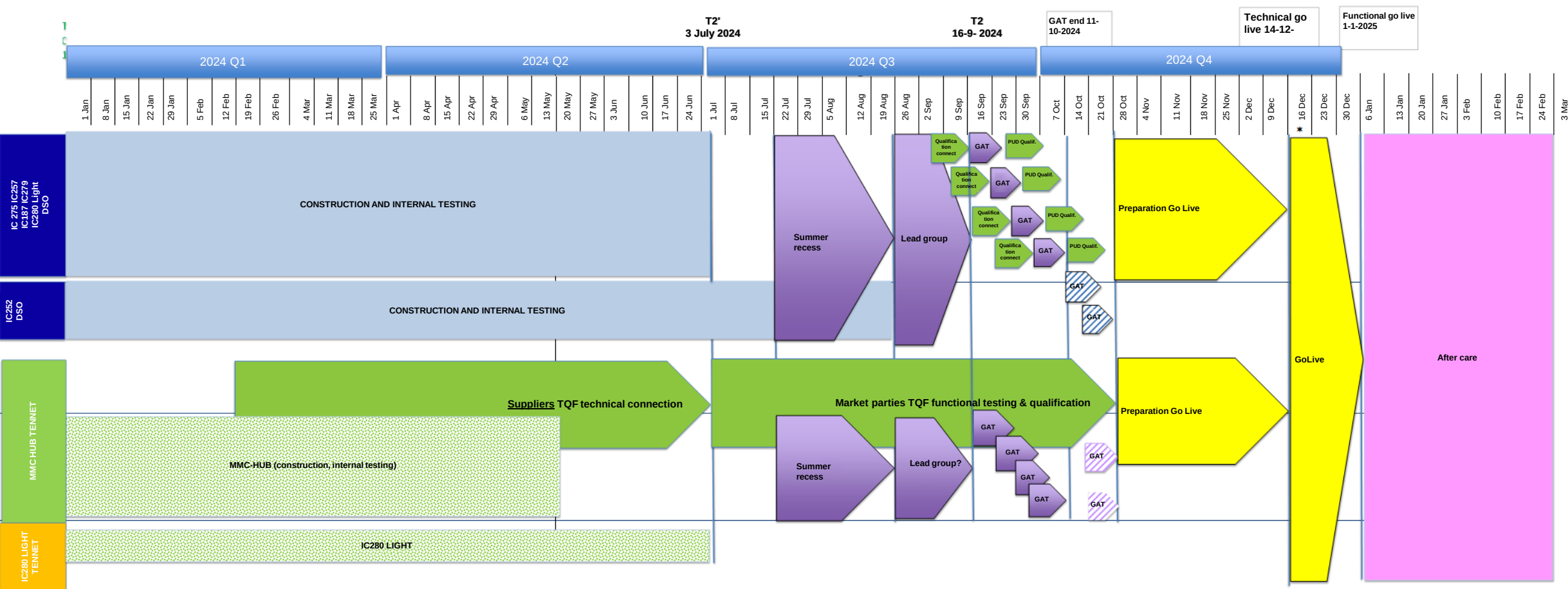
Mirjam van der Horst

Scope and planning Tranche 3

This information session will address the following components that are in scope for Tranche 3:

- IC187 'Retention period metering data Large consumption'
- IC252 'Settlement process Metering errors GV'
- IC257 'Settlement GV Telemetry Electricity'
- IC275 'Settlement SMA'
- IC279 'Settlement prices'
- IC280 Light ('Reconciliation notifications to XML'). There is no issue document for this issue!
- RFC A2.0-6 (TR2021.9) 'Optimising checks metering data notifications'

Planning Tranche 3



New and changed processes

Bram van Straalen

Tranche 1 and 2 – summary

- **Tranche 1 (TR2021)**

- **Metering notification GV (IC249)**
 - Distinction between **consumption** and **production** (no offsetting)
 - From EDINE to XML
- **Objection metering notifications GV (IC248)**
 - Process modifications (responsibility objection)
 - From EDINE to XML

- **Tranche 2**

- **Allocation**
 - Interim solution profile allocation (IC273)
 - Distinction between consumption and production (IC273 and IC276)
 - From EDINE to XML (IC273 and IC276)
- **Metering Correction Report 2.0 (IC253)**

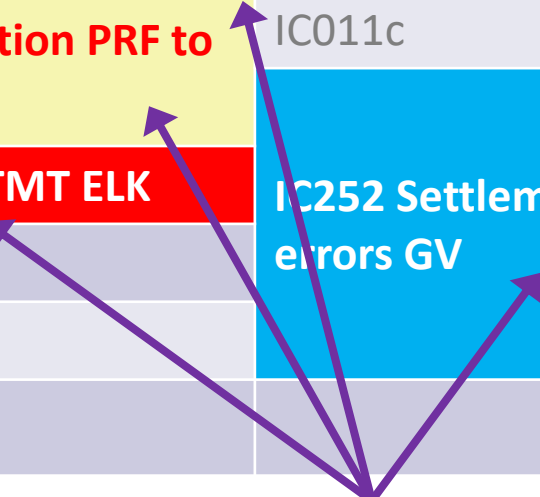
Tranche 3 – introduction

- **Definitive imbalance determination** on 10th working day after a calendar month
 - Difference between forecast/nomination of BRP with allocation volumes
 - Will be settled using an imbalance price
- **(New) measurement data** may be available **after definitive imbalance determination**
 - This offsetting is referred to as **settlement** or **reconciliation**
 - Depending on type of allocation point:
 - **granularity** measurement data (per OVP (= imbalance settlement period), per month or a longer period)
 - **timeliness** measurement data (if available)
- **Tranche 3 focuses on new/modified settlement processes**
 - Specified as issues per **type of allocation point** (allocation group)

Overview issues

ELK/GAS	KV/GV	All. group	Settlement/reconciliation	Settlement metering errors after settlement/reconciliation
ELK	KV	SMA	IC275 Settlement SMA	N/A
		PRF	IC280 Light Reconciliation PRF to XML	IC011c
	GV	TMT	IC257 Settlement TMT ELK	IC252 Settlement process metering errors GV
GAS		PRF	Reconciliation gas	
		TMT	Reconciliation gas	
	KV	PRF	Reconciliation gas	

IC279 Settlement prices



IC187 Retention period Metering data GV

Concise overview per issue

IC275

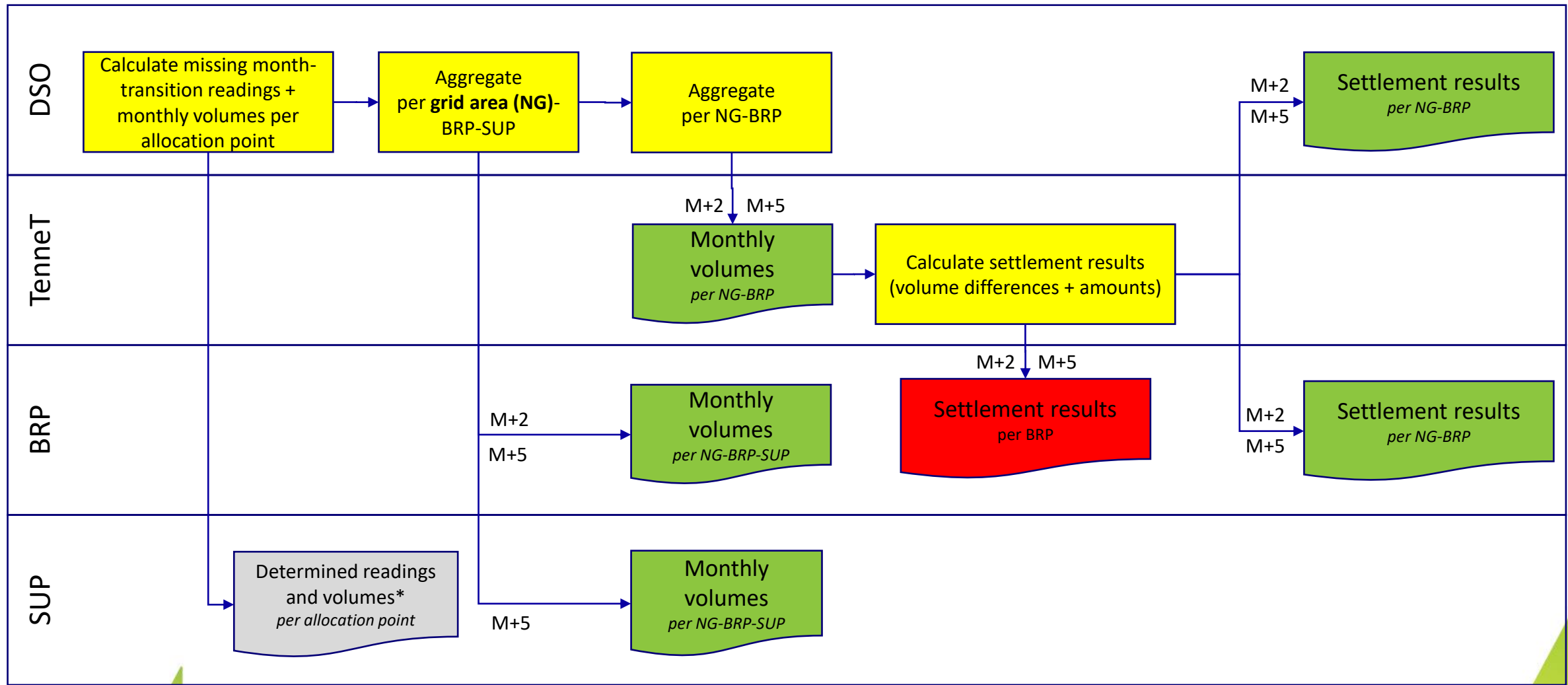
Settlement SMA

Does the issue have impact on?		
Large consumers	No	1
Small consumers	Yes	2
Electricity	Yes	3
Gas	No	4
DSO	Yes	5
TSO	Yes	6
SUP	Yes	7
MRP	No	8
BRP	Yes	9
Codes	Yes	10
Messages	Yes	11
Chain processes	Yes	12
Privacy	Yes	13
Is the issue release dependent/independent and what is the entry date of the issue?		
Release dependent	Yes	14
Release independent		15

IC275 'Settlement SMA' – overview

Metering data	• Monthly volumes based on month-transition readings
Period	• Settlement per calendar month = settlement month (month M)
Frequency	• M+2 = provisional • M+5 = definitive
To be settled volumes	• Difference between sum allocation volumes (per OVP) and monthly volumes
Responsibilities	• DSO: supply monthly volumes • SO: TSO (TenneT): calculation volume differences
Prices	• Monthly prices (without differentiation by tariff period)
Settlement	• Between TSO (TenneT) and the BRP

IC275 Settlement SMA – process flow



Explanation colours sheet 17&23

New process
step

Distribution of
data

Relevant for
billing

Existing data
from
exchange

IC275 'Settlement SMA' – example per grid area per BRP

	Allocation volumes		Monthly volumes	
Period	Consumption	Production	Consumption	Production
Calendar day 1, OVP 1	100	5	-	-
Calendar day 1, OVP 2	105	4	-	-
....	...	...	-	-
Calendar day 31, OVP 95	108	2	-	-
Calendar day 31, OVP 96	101	3	-	-
Σ Definitive allocation	1488246	378890	-	-
Monthly volumes	-	-	1495789	381271
Difference	-	-	7543	2381

Allocation volume per OVP

Sum of all allocation volumes in the concerned settlement month

Sum of monthly volumes from all allocation points for that BRP in the concerned grid area

Settlement with month price

IC275 'Settlement SMA' – sector documentation

Issue document

IC275 'Settlement SMA', version 1.0, 18-10-2022

Business Requirement Specification (BRS)

BRS 'Settlement data', version 1.0, 13-01-2023

Business service (BS)

- **Business service 'Exchange volumes for settlement and reconciliation electricity', version 2.0, 12-05-2023**
 - BSCMF0081 - Exchange aggregated volumes for settlement per grid area
- **Business service 'Exchange settlement results electricity', version 2.0, 12-05-2023**
 - BSCMF0087 - Exchange settlement results and reconciliation results for aggregated volumes

IC257

Settlement GV Telemetry Electricity

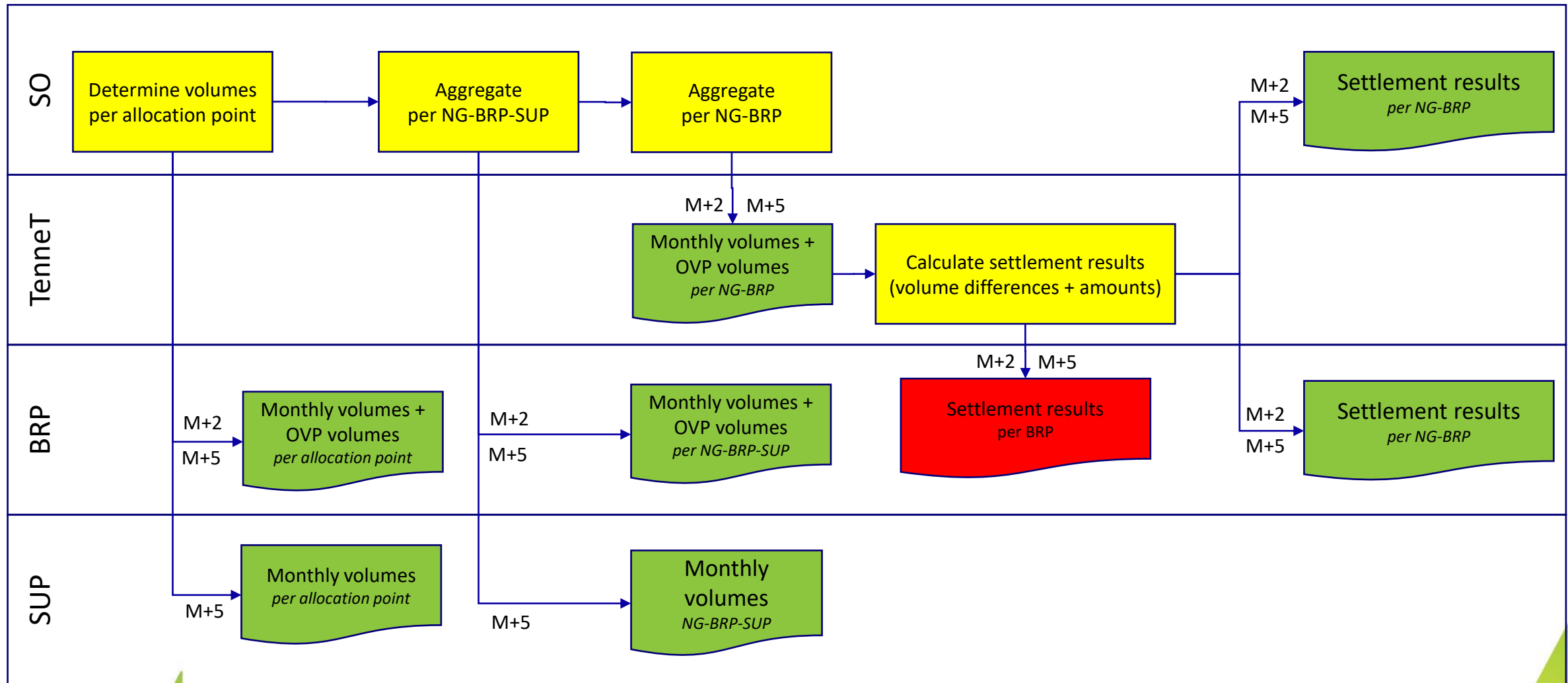
Does the issue have impact on..?	
Large consumers	Yes
Small consumers	No
Electricity	Yes
Gas	No
DSO	Yes
CDS Owner	Yes
TSO	Yes
SUP	Yes
MRP	Yes
BRP	Yes
Codes	Yes System code
Messages	Yes
Chain processes	Yes
Privacy	Yes
Is the issue release dependent/independent and what is the entry date of the issue?	
Release dependent	Yes
Release independent	No

IC257 'Settlement GV TMT ELK' – overview*

Metering data	• New OVP volumes (versus OVP volumes used in allocation) • Monthly volumes (volume measured across the whole month)
Period	• Settlement per calendar month = settlement month (month M)
Frequency	• M+2 = provisional • M+5 = definitive
To be settled volumes	• Difference between allocation volumes and OVP volumes (volume difference per OVP) • Difference between sum OVP volumes and monthly volumes (volume difference per month)
Responsibilities	• SO: supply OVP volumes and monthly volumes • TSO (TenneT): calculation volume differences
Prices	• Prices per OVP • Monthly prices (without differentiation by tariff period)
Settlement	• Between TSO (TenneT) and the BRP

* Replaces IC011B

IC257 'Settlement GV TMT ELK' – process flow



IC257 'Settlement GV TMT ELK – example per grid area per BRP

Period	Allocation volume		Volumes for settlement		Difference	
	Consumption	Production	Consumption	Production	Consumption	Production
Calendar day 1, OVP 1	100	5	102	6	2	-1
Calendar day 1, OVP 2	105	4	104	10	-1	6
....	-	-	-	-	-	-
Calendar day 31, OVP 95	108	2	115	3	7	1
Calendar day 31, OVP 96	101	3	99	2	-2	-1
Σ Volumes per OVP			1488246	378890		
Monthly volume	-	-	1495789	381271		
Difference (per month)	-	-			7543	2381

Allocation volume per OVP per energy direction

Volume for settlement per OVP per energy direction

Settlement with OVP price

Sum of all settlement volumes OVP in the concerned settlement month

Monthly volume in the concerned settlement month

Settlement with month price

IC257 Settlement GV TMT ELK – sector documentation

Issue document (IC)

IC257 ‘Settlement GV Telemetry Electricity’, version 1.0, 18-10-2022

Business Requirement Specification (BRS)

BRS ‘Settlement data’, version 1.0, 13-01-2023

Business service (BS)

- **Business service ‘Exchange volumes for settlement and reconciliation electricity’, version 2.0, 12-05-2023**
 - BSCMF0081 - Exchange aggregated volumes for settlement per grid area
 - BSCMF0082 - Exchange volumes for settlement per individual allocation point
 - BSCMF0083 - Exchange aggregated OVP volumes for settlement per grid area
 - BSCMF0084 - Exchange OVP volumes for settlement per individual allocation point
- **Business service ‘Exchange settlement results electricity’, version 2.0, 12-05-2023**
 - BSCMF0087 - Exchange settlement results and reconciliation results for aggregated volumes
 - BSCMF0088 - Exchange settlement results for aggregated OVP volumes

IC280 Light 'Reconciliation notifications to XML'

- No issue document
- No process modifications
- Convert EDINE notifications to XML
- Modification receipt
 - Changed content
 - Receipt per grid area-BRP-SUP

IC280 Light 'Reconciliation notifications to XML'

Metering data	• Monthly volumes per tariff period • Annual volumes per tariff period
Period	• Maximum 17 calendar months
Frequency	• Monthly
To be settled volumes	• Difference between sum allocation volumes (per OVP) and monthly volumes/annual volumes per tariff period
Responsibilities	• DSO: supply monthly volumes/annual volumes per tariff period • DSO: calculation volume difference per tariff period
Prices	• Month prices per tariff period
Settlement	• Between TSO (TenneT) and the BRP

IC280 Light – sector documentation

Issue document

N/A

Business Requirement Specification (BRS)

BRS 'Settlement data', version 1.0, 13-01-2023

Business service (BS)

- **Business service 'Exchange volumes for settlement and reconciliation electricity', version 2.0, 12-05-2023**
 - BSCMF0085 - Exchange aggregated allocation volumes and aggregated determined volumes for reconciliation per grid area
 - BSCMF0086 - Exchange allocated volumes and determined volumes for reconciliation per individual allocation point*
- **Business service 'Exchange settlement results electricity', version 2.0, 12-05-2023**
 - BSCMF0087 - Exchange settlement results and reconciliation results for aggregated volumes

* No XSD, because exchange CSV via GBU/UD

IC252

Settlement process metering errors GV

Number IC252
Date 13-01-2023
Version 2.0
Status Approved by SSG

Author(s) Emiel Zandvliet
Joost Neuteboom

Electricity and gas

Does the issue have impact on..?	
Large consumers	Yes
Small consumers	No
Electricity	Yes
Gas	Yes
DSO/CDS	Yes
TSO-E	Yes
SUP	Yes
MRP	Yes
BRP	Yes
Codes	Information code
Messages	Yes
Chain processes	Yes
Privacy	Yes
Is the issue release dependent/independent and what is the entry date of the issue?	
Release dependent	Yes
Release independent	No

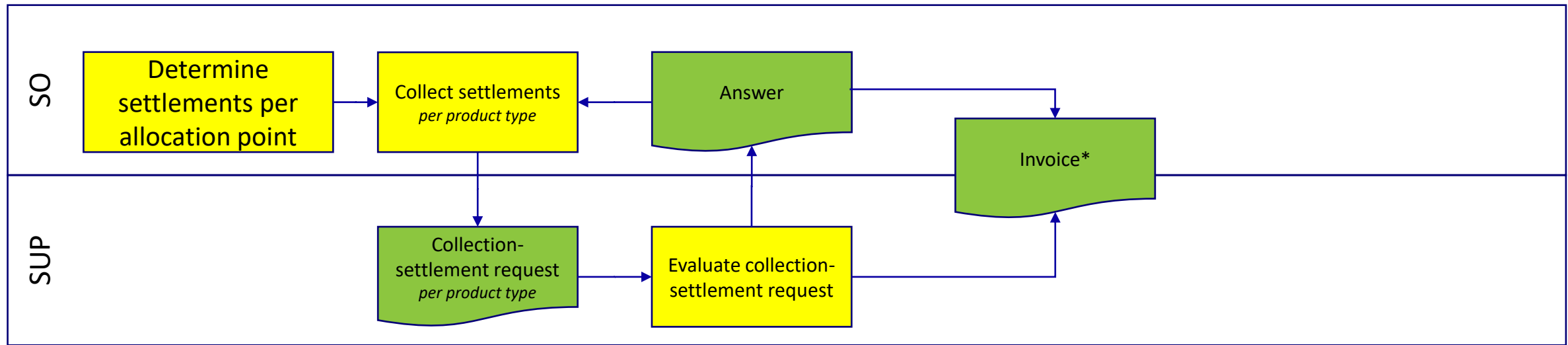
IC252 Settlement process metering errors

GV' – overview

Metering data	• Monthly volumes or annual volumes (following metering error) after settlement period/reconciliation
Period	• Settlement per calendar month (month M)
Frequency	• Monthly
To be settled volumes	• Difference with last notification with metering data • After reconciliation/settlement
Responsibilities	• SO: supply monthly volumes/annual volumes and volume differences • SO: calculation volume differences
Prices	• Month prices
Settlement	• Between SO and the SUP

No role for BRP and
TenneT

IC252 Settlement process metering errors GV – process flow



* The party that is the net recipient for the collection-settlement report sends the invoice to the counter party. The invoice is subject to a lower limit of €50.00.

IC252 ‘Settlement process metering errors GV’ – sector documentation

Issue document

IC252 ‘Settlement process metering errors GV’, version 2.0, 13-01-2023

Business Requirement Specification (BRS)

BRS ‘Settlement data’, version 1.0, 13-01-2023

Business service (BS)

- Business service ‘Exchange collection-settlement request’, version 2.0, 08-09-2023
 - BSCMF0090 - Exchange collection-settlement request

IC279

Settlement Prices

Does the issue have impact on..?	
Large consumers	X
Small consumers	X
Electricity	X
Gas	
DSO	X
TSO	X
SUP	X
MRP	
BRP	X
Codes	System code Electricity
Messages	X
Chain processes	X
Privacy	
Is the issue release dependent/independent and what is the entry date of the issue?	
Release dependent	X
Release independent	

IC279 'Settlement prices'

- 3 (new) types of settlement prices are distinguished:
 - Settlement price OVP
 - Settlement price per month without tariff period
 - Settlement price per month per tariff period (normal and low)

Allocation group	Issue	Settlement price
KV SMA	IC275	• Month price without tariff period
GV TMT	IC257	• OVP price (OVP volume) • Month price without tariff period (monthly volumes)
KV PRF and GV PRF	IC280L	• Month price per tariff period
GV	IC252	• Month price without tariff period

IC279 'Settlement prices'

Issue document

IC279 'Settlement prices', version 1.0, 18-10-2022

Business Requirement Specification (BRS)

BRS 'Settlement data', version 1.0, 13-01-2023

Business service (BS)

- Being carried out. Will be completed in Q4 2023.

IC187

Retention period metering data Large consumption

Electricity and
gas

Does the issue have impact on..?	
Large consumers	Yes
Small consumers	No
Electricity	Yes
Gas	Yes
DSO	Yes
TSO	No
SUP	Yes
MRP	Yes
BRP	Yes
Codes	Metering conditions electricity Metering code Gas DSO
Messages	No
Chain processes	No
Privacy	No
Is the issue release dependent/independent and what is the entry date of the issue?	
Release dependent	No
Release independent	Yes

IC187 'Retention period metering data Large consumption'

- **Contents**

- Retention period for metering data of large consumption facilities is being extended from 3 to 7 years

- **Scope**

- All **large consumption** metering facilities (telemetry metering facilities, profile metering facilities, production metering facilities and telemetry large consumption metering facilities) **electricity and gas**

Impact per market role

Introduction impact on market roles

Component Tranche 3	• This describes the component of Tranche 3 that has an impact on the market role. • A separate table has been created per component. • The aim was to provide the most comprehensive overview possible per market role.
Process and system impact *	• This describes the process and system impact that must be <u>structurally</u> incorporated as a result of Tranche 3.
Transition impact *	• This describes the impact that only applies to the implementation of Tranche 3. This is thus <u>one-off</u> impact concerning the implementation of Tranche 3.

*** This is a general estimate for the impact on market roles and the first step to having the actual impact for an individual market party determined by the concerned market party itself!**

Impact on market role SUP

IC275 'Settlement SMA'

IC275 – month-transition readings SMA

Component Tranche 3	• For the new settlement process SMA, the DSO will calculate month-transition readings if they cannot be read from the smart meter. • The DSO will distribute the meter readings and consumption to the SUP via the regular processes.
Process and system impact	• Distribution by DSO is a regular process. • Month-transition reading calculated by DSO.
Transition impact	• The first month-transition where this process starts is the functional go-live date for Tranche 3.

IC275 – volumes for settlement SMA

Component Tranche 3	• The DSO determines the aggregated volumes per calendar month based on the determined (monthly) volumes. • The DSO makes the aggregated volumes available to the SUP on M+5 per BRP/SUP.
Process and system impact	• Design process to receive these aggregated volumes via the MMC Hub. • Connect/qualify MMC Hub. • Implementation new notifications in accordance with: • Business service 'Exchange volumes for settlement and reconciliation electricity'
Transition impact	N/A

IC275 – settlement results SMA

Component Tranche 3	• TenneT supplies the settlement results (volume differences + amounts) that will be settled by TenneT to the BRP. • These settlement results (per calendar month per grid area and national) will be supplied to the BRP via the MMC Hub.
Process and system impact	• Settlement of settlement results between BRP and SUP (not a market process). • Coordinate operational details with the BRP.
Transition impact	N/A

IC257 'Settlement GV TMT ELK'

IC257 – volumes settlement TMT

Component Tranche 3	The SO supplies the volumes that will be settled by TenneT per allocation point to the SUP on M+5.
Process and system impact	- Connect/qualify MMC Hub. - Design process to receive and process these volumes. - Implementation new notifications in accordance with: <i>Business service 'Exchange volumes for settlement and reconciliation electricity'</i>
Transition impact	N/A

IC257 – settlement results

Component Tranche 3	- TenneT supplies the settlement results (volume differences + amounts) to the BRP. - The settlement results per imbalance settlement period (OVP) and per calendar month are determined each calendar month. - These settlement results (per grid area and national) will be supplied to the BRP via the MMC Hub.
Process and system impact	• Settlement of settlement results between BRP and SUP (not a market process). • Coordinate operational details with the BRP.
Transition impact	N/A

IC252 ‘Settlement process metering errors GV’

IC252 – settlement metering errors GV

Component Tranche 3	- Corrected metering data after metering errors are encountered by MRP, and after the reconciliation and settlement period has passed, are settled between SO and SUP via this process. - The SO compiles a collection-settlement request each month, which contains all to be settled corrections (per product type electricity/gas) per process month. - The SUP checks this collection-settlement request. - After approval, the claiming party bills the total amount of the collection-settlement request.
Process and system impact	- Design process to receive and process the collection-settlement requests. - Implementation new notifications in accordance with: <i>Business service 'Exchange Collection-settlement Request'</i> - Connect with PUD for this notification. - Design billing process based on definitive collection-settlement requests.
Transition impact	N/A

IC279 'Settlement prices'

IC279 – settlement prices

Component Tranche 3	• TenneT will calculate and publish new/modified settlement and reconciliation processes on its website.
Process and system impact	• Design process to receive and process settlement prices for calculation-settlement requests in accordance with: • <i>Business service name X (will be published in Q4 2023)</i>
Transition impact	N/A

Impact on market role BRP

IC275 'Settlement SMA'

IC275 – Volumes for settlement SMA

Component Tranche 3	- The DSO determines the aggregated volumes per calendar month based on the determined (monthly) volumes. - The DSO makes the aggregated volumes available to BRP on M+2 and M+5 per BRP/SUP.
Process and system impact	• Connect/qualify MMC Hub. • Design process to receive and process these aggregated volumes. • Implementation new notifications in accordance with: • Business service 'Exchange volumes for settlement and reconciliation electricity'
Transition impact	N/A

IC275 – settlement results SMA

Component Tranche 3	- TenneT supplies the settlement results (volume differences + amounts) that will be settled by TenneT to the BRP. - These settlement results (per calendar month per grid area and national) will be supplied to the BRP and the DSO via the MMC Hub.
Process and system impact	• Connect/qualify MMC Hub. • Design process to receive and process these settlement results. • Implementation new notifications in accordance with: • <i>Business Service ‘Exchange settlement results electricity’</i> • Settlement of settlement results between TenneT and the BRP. • Settlement of settlement results between BRP and SUP (not a market process). • Coordinate operational details with the SUP.
Transition impact	N/A

IC257 'Settlement GV TMT ELK'

*IC011B 'Settlement allocation errors
individually allocated connections'*

IC011B – phasing-out of this process

Component Tranche 3	• In relation to allocation points TMT, this process will be phased out and replaced by IC257 in accordance with IC011B. • This means IC011B will no longer be used for new metering errors as of Tranche 3. • Cases that are initiated before Tranche 3 will be processed in accordance with IC011B.
Process and system impact	• Phasing-out IC011B process.
Transition impact	• In terms of the last 6 months before Tranche 3, the provisional settlement proposal will also be the definitive settlement proposal. • In terms of the last 2 months before Tranche 3, the provisional (and thus also the definitive) settlement proposal will be compiled 1 month earlier. • Once Tranche 3 goes live, if new metering data becomes available due to an outstanding IC011B case, then the outstanding IC011B case will be closed.

IC257 – volumes settlement TMT

Component Tranche 3	- The SO supplies the volumes that will be settled by TenneT to the BRP in aggregated form. - The SO also supplies the volumes that will be settled by TenneT per allocation point to the BRP. - These volumes will be supplied to the BRP via the MMC Hub.
Process and system impact	• Connect/qualify MMC Hub. • Design process to receive and process these volumes. • Implementation new notifications in accordance with: • <i>Business service ‘Exchange volumes for settlement and reconciliation electricity’</i>
Transition impact	N/A

IC257 – settlement results TMT

Component Tranche 3	- TenneT supplies the settlement results (volume differences + amounts) to the BRP. - The settlement results per imbalance settlement period and per calendar month are determined each calendar month. - These settlement results (per grid area and national) will be supplied to the BRP via the MMC Hub.
Process and system impact	• Connect/qualify MMC Hub. • Design process to receive and process these settlement results. • Implementation new notifications in accordance with: • <i>Business Service ‘Exchange settlement results electricity’</i> • Settlement of settlement results between TenneT and the BRP. • Settlement of settlement results between BRP and SUP (not a market process). • Coordinate operational details with the SUP.
Transition impact	• See IC011B

IC280 Light 'Reconciliation notifications to XML'

IC280 Light – reconciliation volumes PRF

Component Tranche 3	- The DSO supplies the volumes that will be reconciled by TenneT to the BRP in aggregated form. - These aggregates are differentiated per profile category and energy direction (difference compared to E24). - The receipt remains with a slightly modified content, and is compiled per BRP/SUP.
Process and system impact	• Connect/qualify MMC Hub. • Design process to receive and process these aggregated volumes (with differentiation per profile category and energy direction). • Implementation new notifications in accordance with: • <i>Business service ‘volumes for settlement and reconciliation electricity’</i> • Actually a replacement for E24. • Design process for processing the modified receipts.
Transition impact	- DSO will stop sending E24 as of functional go live Tranche 3.

IC280 Light – reconciliation results PRF

Component Tranche 2	- TenneT supplies the reconciliation results (volume differences + amounts) to the BRP. - The settlement results per calendar month (maximum 17) are determined each calendar month. - These reconciliation results (per grid area and national) will be supplied to the BRP via the MMC Hub.
Process and system impact	• Connect/qualify MMC Hub. • Design process to receive and process these settlement results. • Implementation new notifications in accordance with: • <i>Business Service ‘Exchange settlement results electricity’</i> • Actually a replacement for E26 (but with 1 notification per calendar month).
Transition impact	• As of the functional go live for Tranche 3, only E25 notifications that have been received before the functional go live will be processed via an E26 (“run empty”).

IC279 'Settlement prices'

IC279 – settlement prices

Component Tranche 3	TenneT will calculate and publish new/modified settlement and reconciliation processes on its website.
Process and system impact	- Design process to receive and process settlement prices for calculation-settlement requests in accordance with: <i>Business service name X (will be published in Q4 2023)</i>
Transition impact	N/A

Impact on market role SO

DSO, TSO, CDS-operator as operator of an allocation point

IC257 'Settlement GV TMT ELK'

*IC011B 'Settlement allocation errors
individually allocated connections'*

IC011B – phasing-out of this process

Component Tranche 3	• In relation to allocation points TMT, this process will be phased out and replaced by IC257 in accordance with IC011B. • This means IC011B will no longer be used for new metering errors as of Tranche 3. • Cases that are initiated before Tranche 3 will be processed in accordance with IC011B.
Process and system impact	• Phasing-out IC011B process.
Transition impact	• In terms of the last 6 months before Tranche 3, the provisional settlement proposal will also be the definitive settlement proposal. • In terms of the last 2 months before Tranche 3, the provisional (and thus also the definitive) settlement proposal will be compiled 1 month earlier. • Once Tranche 3 goes live, if new metering data becomes available due to an outstanding IC011B case, then the outstanding IC011B case will be closed.

IC257 – volumes settlement TMT

Component Tranche 3	- The SO supplies the volumes that will be settled by TenneT to the BRP and TenneT in aggregated form. - The SO also supplies the volumes that will be settled by TenneT per allocation point to the BRP and the SUP: - These volumes will be supplied to the BRP via the MMC Hub.
Process and system impact	• Connect/qualify MMC Hub. • Design process for distributing these volumes. • Implementation new notifications in accordance with: • <i>Business service 'Exchange volumes for settlement and reconciliation electricity'</i>
Transition impact	N/A

* Only to SUP on M+5 and only monthly volumes (no volumes per OVP).

IC257 – settlement results TMT

Component Tranche 3	- TenneT supplies the settlement results (volume differences + amounts) to the BRP and the SO. - The settlement results per imbalance settlement period and per calendar month are determined each calendar month. - These settlement results (per grid area and national) will be supplied to the BRP via the MMC Hub.
Process and system impact	• Connect/qualify MMC Hub. • Design process to receive and process these settlement results. • Implementation new notifications in accordance with: • <i>Business Service ‘Exchange settlement results electricity’</i>
Transition impact	• See IC011B.

IC252 'Settlement process metering errors GV'

IC252 – settlement metering errors GV

Component Tranche 3	- Corrected metering data after metering errors are encountered by MRP, and after the reconciliation and settlement period has passed, are settled between SO and SUP via this process. - The SO compiles a collection-settlement request each month, which contains all to be settled corrections (per product type electricity/gas) per process month. - The SUP checks this collection-settlement request. - After approval, the claiming party bills the total amount of the collection-settlement request.
Process and system impact	- Design process for calculating and sending the collection-settlement requests. - Connect with PUD for exchange of notifications. - Implementation new notifications in accordance with - Implementation new notifications in accordance with: <i>Business Service 'Exchange Collection-settlement Request'</i> - Design billing process based on definitive collection-settlement requests.
Transition impact	N/A

IC279 'Settlement prices'

IC279 – Settlement prices

Component Tranche 3	TenneT will calculate and publish new/modified settlement and reconciliation processes on its website.
Process and system impact	- Design process to receive and process settlement prices for calculation-settlement requests in accordance with: <i>Business service name X (will be published in Q4 2023)</i>
Transition impact	N/A

Impact on market role DSO

In addition to impact on market role SO

IC275 'Settlement SMA'

IC275 – volumes for settlement SMA

Component Tranche 3	- The DSO determines the aggregated volumes per calendar month based on the determined (monthly) volumes. - The DSO makes the aggregated volumes available to TenneT on M+2 and M+5 per BRP. - The DSO makes the aggregated volumes available to the BRP and SUP on M+2 and M+5 per BRP/ SUP*.
Process and system impact	• Design process for calculating the missing meter readings. • Design process for determining the aggregated volumes each month. • Design process to distribute these aggregated volumes via the MMC Hub. • Connect/qualify MMC Hub. • Implementation new notifications in accordance with: • <i>Business service ‘Exchange volumes for settlement and reconciliation electricity’</i>
Transition impact	N/A

IC275 – Settlement results SMA

Component Tranche 3	- Each month, TenneT determines the settlement results (volume differences + amounts) that will be settled by TenneT with the BRP. - TenneT supplies the settlement results to the DSO per grid area.
Process and system impact	- Connect/qualify MMC Hub. - Design process to receive and process these settlement results. - Implementation new notifications in accordance with: <i>Business Service ‘Exchange settlement results electricity’</i>
Transition impact	N/A

IC280 Light 'Reconciliation notifications to XML'

IC280 Light – volumes for reconciliation PRF

Component Tranche 3	- Each month, the DSO determines the aggregated volumes per allocation point based on determined consumption in the reconciliation window. These aggregated volumes are differentiated per profile category and energy direction (difference compared to EDINE). - The DSO makes the aggregated volumes available to TenneT per BRP. - The DSO makes the aggregated volumes available to the BRP per BRP/SUP. - The DSO makes the volumes available to the BRP (receipt) per allocation point per BRP/SUP.
Process and system impact	• Modification existing process for determining these aggregated volumes (with differentiation per profile category and energy direction). • Modification existing process for compiling the receipt. • Connect/qualify MMC Hub. • Implementation new notifications in accordance with: • <i>Business service ‘Exchange volumes for settlement and reconciliation electricity’</i>
Transition impact	- DSO will stop sending E24 and E25 as of functional go live Tranche 3. - TenneT will stop sending E26 as of functional go live Tranche 3, with the exception of ‘running empty’ already received E25.

Impact on TenneT

In addition to impact on market role SO

IC275 ‘Settlement SMA’

IC275 – volumes for settlement SMA

Component Tranche 3	- The DSO determines the aggregated volumes per calendar month based on the determined (monthly) volumes. - The DSO makes the aggregated volumes available to TenneT on M+2 and M+5 per BRP.
Process and system impact	• Design process to receive and process these aggregated volumes. • Connect/qualify MMC Hub. • Implementation new notifications in accordance with: • Business service 'Exchange volumes for settlement and reconciliation electricity'
Transition impact	N/A

IC275 – settlement results SMA

Component Tranche 2	• Each month, TenneT determines the settlement results (volume differences + amounts) that will be settled by TenneT. • TenneT supplies the settlement results to the BRP and the DSO per grid area.
Process and system impact	• Connect/qualify MMC Hub. • Design process to calculate and distribute these settlement results. • Implementation new notifications in accordance with: • <i>Business Service ‘Exchange settlement results electricity’</i>
Transition impact	N/A

IC257 'Settlement GV TMT ELK'

IC257 – volumes settlement TMT

Component Tranche 3	• The SO supplies the volumes per imbalance settlement period that will be settled by TenneT to TenneT in aggregated form per BRP. • The SO supplies the volumes per calendar month that will be settled by TenneT to TenneT in aggregated form per BRP.
Process and system impact	• Connect/qualify MMC Hub. • Design process to receive and process these volumes. • Implementation new notifications in accordance with: • <i>Business service 'Exchange volumes for settlement and reconciliation electricity'</i>
Transition impact	N/A

IC257 – settlement results TMT

Component Tranche 3	- TenneT supplies the settlement results (volume differences + amounts) to the BRP and the SO. - The settlement results per imbalance settlement period and per calendar month are determined each calendar month. - These settlement results (per grid area and national) will be supplied to the BRP and the SO via the MMC Hub.
Process and system impact	• Connect/qualify MMC Hub. • Design process to calculate and distribute these settlement results. • Implementation new notifications in accordance with: • <i>Business Service ‘Exchange settlement results electricity’</i>
Transition impact	• See IC011B.

IC280 Light 'Reconciliation notifications to XML'

IC280 Light – volumes for reconciliation PRF

Component Tranche 3	• Each month, the DSO determines the aggregated volumes per allocation point based on determined consumption in the reconciliation window. These aggregated volumes are differentiated per profile category and energy direction (difference compared to EDINE). • The DSO makes the aggregated volumes available to TenneT per BRP.
Process and system impact	• Modification existing process for receiving and processing these aggregated volumes (with differentiation per profile category and energy direction). • Connect/qualify MMC Hub. • Implementation new notifications in accordance with: • <i>Business service ‘Exchange volumes for settlement and reconciliation electricity’</i>
Transition impact	- DSO will stop sending E25 as of functional go live Tranche 3. - TenneT will stop sending E26 as of functional go live Tranche 3, with the exception of ‘running empty’ already received E25.

IC280 Light – reconciliation results PRF

Component Tranche 2	- TenneT supplies the reconciliation results (volume differences + amounts) to the BRP. - The settlement results per calendar month (maximum 17) are determined each calendar month. - These reconciliation results (per grid area and national) will be supplied to the BRP via the MMC Hub.
Process and system impact	• Design process to determine and send these settlement results. • Connect/qualify MMC Hub. • Implementation new notifications in accordance with: • <i>Business Service ‘Exchange settlement results electricity’</i> • Actually a replacement for E26 (but with 1 notification per calendar month).
Transition impact	• As of the functional go live for Tranche 3, only E25 notifications that have been received before the functional go live will be processed via an E26 (‘run empty’).

IC279 'Settlement prices'

IC279 – settlement prices

Component Tranche 3	TenneT will calculate and publish new/modified settlement and reconciliation processes on its website.
Process and system impact	- Design process for calculating and publishing new/modified settlement prices: <i>Business service?? (will be announced in Q4 2023)</i>
Transition impact	N/A

Impact on market role MRP

*IC187 'Retention period
metering data Large
consumption'*

IC187 'Retention period metering data Large consumption'

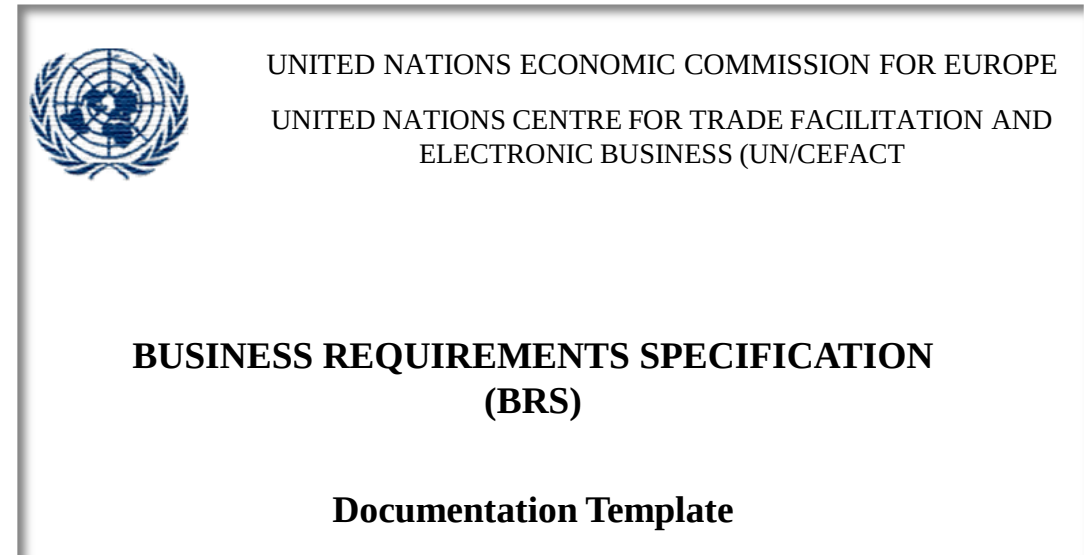
Component Tranche 3	• Extension retention period metering data large consumption from at least 3 to at least 7 years.
Process and system impact	• Design process for storing metering data for at least 7 years.
Transition impact	There must be 7 years of history no later than 4 years after implementation of Tranche 3.

Business Requirement Specification

Jan de Jong

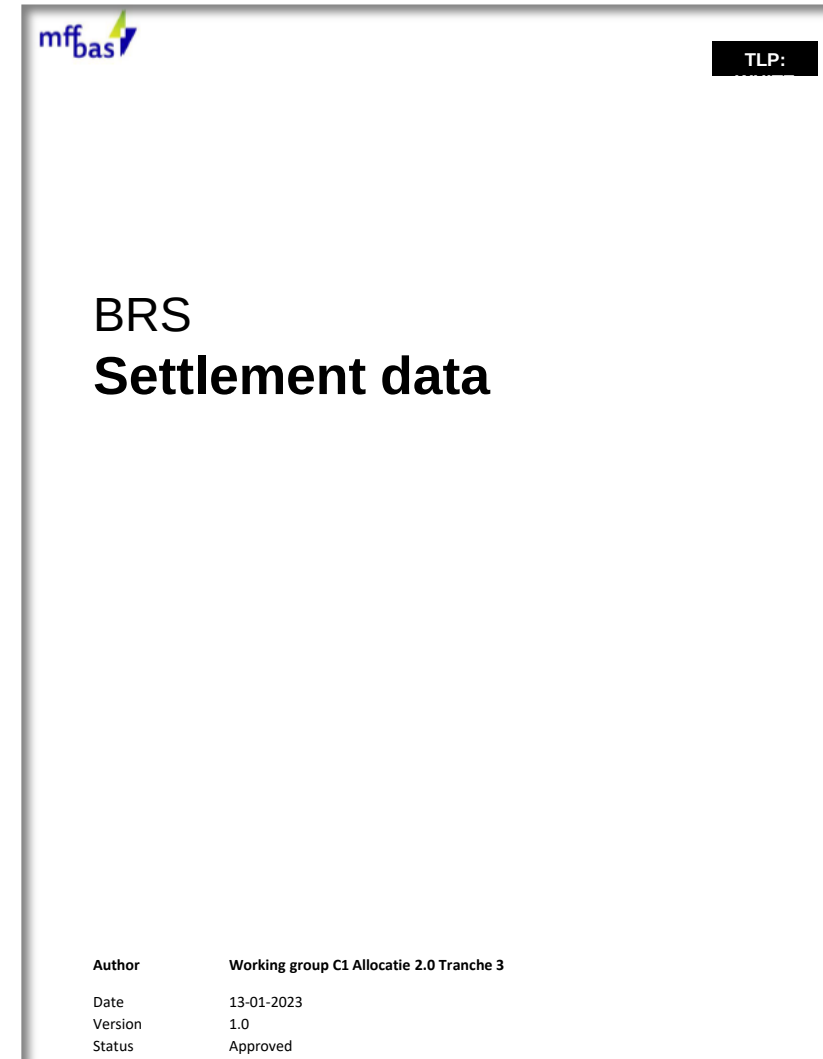
What is a Business Requirement Specification?

- A Business Requirement Specification (BRS) specifies the requirements for exchanging data
- A BRS is a standardised specification based on the UN/CEFACT Modelling Methodology (UMM)
- A BRS is compiled using input from the business, by the business
- For each use case, a description is provided about the exchanged data, who the stakeholders are, and what the purpose of the data is
- A BRS is technology independent



Aim of Business Requirement Specification for Allocatie 2.0

- Implement use cases and activity diagrams to timely and comprehensively specify processes concerning the exchange of data for Allocatie 2.0
- Implement class diagrams to timely and comprehensively specify data that is exchanged for Allocatie 2.0
- Ensure an overlapping 'bridge' between an IC and message definitions for new/modified services
- Be complimentary with the MSP
- Reduction of changes (RFC's) in services for Allocatie 2.0 in a later phase



Overview BRS use cases – receiving party BRP

Use case	Description	Supplier	Receiver	IC
A20.301	Distribution volumes for settlement SMA to BRP	DSO	BRP	IC275
A20.302	Distribution volumes for settlement TMT to BRP	SO	BRP	IC257
A20.303	Distribution volumes for reconciliation PRF to BRP	DSO	BRP	IC280 Light
A20.304	Distribution settlement results SMA to BRP	TSO	BRP	IC275
A20.305	Distribution settlement results TMT to BRP	TSO	BRP	IC257
A20.306	Distribution reconciliation results PRF to BRP	TSO	BRP	IC280 Light

Overview BRS use cases – receiving party TSO

Use case	Description	Supplier	Receiver	IC
A20.311	Distribution volumes for settlement SMA to TSO	DSO	TSO	IC275
A20.312	Distribution volumes for settlement TMT to TSO	SO	TSO	IC257
A20.313	Distribution volumes for reconciliation PRF to TSO	DSO	TSO	IC280 Light

Overview BRS use cases – receiving party SO

Use case	Description	Supplier	Receiver	IC
A20.321	Distribution settlement results SMA to DSO	TSO	DSO	IC275
A20.322	Distribution settlement results TMT to SO	TSO	SO	IC257

Overview BRS use cases – receiving party SUP

Use case	Description	Supplier	Receiver	IC
A20.331	Distribution volumes for settlement SMA to SUP	DSO	SUP	IC275
A20.332	Distribution volumes for settlement TMT to SUP	SO	SUP	IC257
A20.341	Distribution collection-settlement request to SUP	SO	SUP	IC252

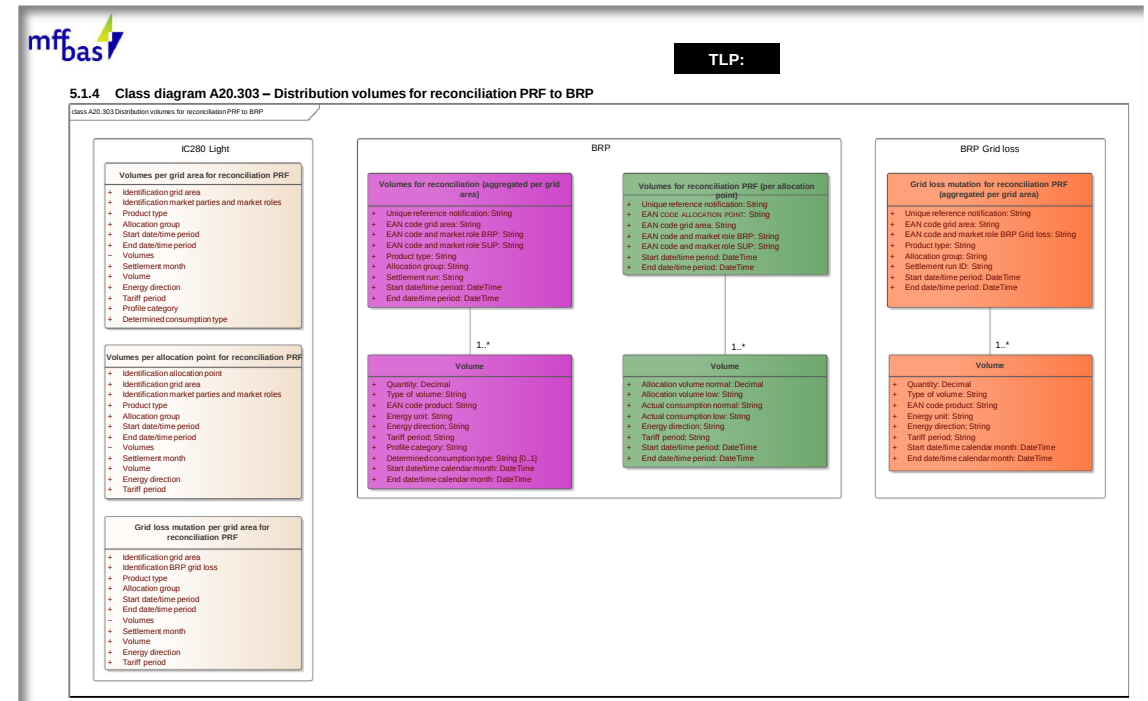
Overview BRS use case – receiving party market and public domain

Use case	Description	Supplier	Receiver	IC
A20.351	Announce settlement prices for market parties and public domain	TSO	Market parties Public domain	IC279

Message definitions and service descriptions

Underlying principles message definitions and service descriptions Tranche 3

- To-be-exchanged information: the class diagrams in BRS Settlement data electricity
- Message definitions: design choices (XML and JSON)
- Reference models: IEC CIM/ENTSO-e
- MMC Hub: TenneT Web Services guide
- MMC Hub: Technical Guide - Measurements & Allocations Documents



Data exchange in BRS for volumes settlement

Use case	Allocation group	Description
A20.301	SMA	Aggregated monthly volumes for settlement per grid area
A20.311	SMA	
A20.331	SMA	
A20.302	TMT	
A20.312	TMT	
A20.302	TMT	Monthly volumes for settlement per allocation point
A20.332	TMT	
A20.302	TMT	Aggregated OVP volumes for settlement per grid area
A20.312	TMT	
A20.302	TMT	OVP volumes for settlement per allocation point
A20.312	TMT	
A20.303	PRF	Aggregated monthly volumes for reconciliation per grid area
A20.313	PRF	
A20.303	PRF	Monthly volumes for reconciliation per allocation point
A20.313	PRF	

Data exchange in BRS for settlement results

Use case	Allocation group	Description
A20.304 A20.305 A20.306 A20.321	SMA TMT PRF SMA	Settlement results and reconciliation results for aggregated volumes
A20.305 A20.322	TMT TMT	Settlement results for aggregated OVP volumes

Business services for Tranche 3 – volumes for settlement

Exchanged information	Use case	Allocation group	Business service	Message definition	Note
Aggregated monthly volumes for settlement per grid area	A20.301 A20.311 A20.331 A20.302 A20.312	SMA TMT	BSCMF0081	AggregatedVolumeSettlementSeries	BRP: One notification per grid area per SUP TSO One notification per grid area per BRP SUP: One notification per grid area per BRP
Monthly volumes for settlement per allocation point	A20.302 A20.332	TMT	BSCMF0082	VolumeSettlementSeries	BRP: One notification per allocation point SUP: One notification per allocation point
Aggregated OVP volumes for settlement per grid area	A20.302 A20.312	TMT	BSCMF0083	AggregatedSettlementSeries	BRP: One notification per grid area per SUP TSO One notification per grid area per BRP
OVP volumes for settlement per allocation point	A20.302 A20.312	TMT	BSCMF0084	SettlementSeries	BRP: One notification per allocation point
Aggregated monthly volumes for reconciliation per grid area	A20.303 A20.313	PRF	BSCMF0085	AggregatedVolumeReconciliationSeries	BRP: One notification per grid area per SUP BRP NVL: One notification per grid area TSO One notification per grid area per BRP TSO One notification per grid area per BRP NVL
Monthly volumes for reconciliation per allocation point	A20.303 A20.313	PRF	BSCMF0086	VolumeReconciliationSeries	BRP: One notification per grid area per SUP ('Receipt')*

Business Services for Tranche 3 – settlement results

Exchanged information	Use case	Allocation group	Business service	Message definition	Note
Settlement results and reconciliation results for aggregated volumes per grid area or national portfolio	A20.304 A20.305 A20.306 A20.321	SMA TMT PRF	BSCMF0087	AggregatedVolume SettlementResultSeries	SMA and TMT: BRP: One notification per national portfolio BRP: One notification per grid area BRP NVL: One notification per grid area DSO/SO: One notification per grid area per BRP DSO/SO: One notification per grid area per BRP NVL PRF: BRP: One notification per national portfolio BRP: One notification per grid area BRP NVL: One notification per grid area
Settlement results for aggregated OVP volumes per grid area or national portfolio	A20.305 A20.322	TMT	BSCMF0088	AggregatedSettlement ResultSeries	BRP: One notification per national portfolio BRP: One notification per grid area BRP NVL: One notification per grid area DSO/SO: One notification per grid area per BRP DSO/SO: One notification per grid area per BRP NVL

Business Services for Tranche 3 – collection-settlement request

Exchanged information	Use case	Allocation group	Business service	Message definition	Note
Collection-settlement request	A20.341	N/A	BSCMF0090	Settlement Proposal	Per product type, one or more connections (gas) or allocation points electricity per notification

Business Services for Tranche 3 – settlement prices

Exchanged information	Use case	Allocation group	Business service	Message definition	Note
Request settlement prices	A20.351	N/A	BSCMF0089	SettlementPricesSeries	Settlement prices, and the accompanying allocation, increase and decrease volumes for settlement and offsetting processes, will be supplied to market parties and the public domain on a publicly accessible website per calendar month. In addition, there will be a business service (RESIDUAL API) for requesting settlement prices. This RESIDUAL API is still being developed.

Business services for Tranche 3 – service description ‘Volumes for settlement and reconciliation electricity’

Exchanged information	Business service
Aggregated monthly volumes for settlement per grid area	BSCMF0081
Monthly volumes for settlement per allocation point	BSCMF0082
Aggregated OVP volumes for settlement per grid area	BSCMF0083
OVP volumes for settlement per allocation point	BSCMF0084
Aggregated monthly volumes for reconciliation per grid area	BSCMF0085
Monthly volumes for reconciliation per allocation point	BSCMF0086



Business Service

Exchange volumes for settlement and reconciliation electricity

Name	SD030 – Exchange volumes for settlement electricity	Version	2.0
Code	BSCMF0081 - Exchange aggregated volumes for settlement per grid area BSCMF0082 - Exchange volumes for settlement per individual allocation point BSCMF2283 - Exchange aggregated OVP volumes for settlement per grid area BSCMF0084 - Exchange OVP volumes for settlement per individual allocation point BSCMF0085 - Exchange aggregated allocation volumes and aggregated determined volumes for reconciliation per grid area BSCMF0086 - Exchange allocated volumes and determined volumes for reconciliation per individual allocation point	Status	Approved

Date 12-05-2023 **Author** EDSN Business Integration

Page 1/83



Business services for Tranche 3 – service description

‘Settlement results electricity’

Exchanged information	Business service
Settlement results and reconciliation results for aggregated volumes per grid area or national portfolio	BSCMF0087
Settlement results for aggregated OVP volumes per grid area or national portfolio	BSCMF0088



Business Service

Exchange settlement results electricity

Name	SD030 – Exchange settlement results electricity	Version	2.0
Code	BSCMF0087 - Exchange settlement results and reconciliation results for aggregated volumes BSCMF0088 - Exchange settlement results for aggregated OVP volumes	Status	Approved
Date	12-05-2023	Author	EDSN Business Integration

Page 1/47



Business Services for Tranche 3 – Service description

Exchange collection-settlement request

Exchanged information	Business service
Collection-settlement request	BSCMF0090



Business Service

Exchange collection-settlement request

Name	SD030 - Exchange collection-settlement request	Version	1.0
Code	BSCMF0090	Status	Approved
Date	03-02-2023	Author	EDSN Business Integration

Page 1/40



Requests for Change

Bram van Straalen

Overview RFC's

- **Scope**
 - RFC A2.0-6 (TR2021.9) 'Optimising checks metering data notifications'
 - RFC A2.0-TR3-1 'Scope expansion with IC280L'
- **Planning**
 - RFC A2.0-TR3-4 'Qualification and connectivity PUD for IC252'
 - RFC A2.0-TR3-5 'Technical Go Live to 14-12-2024'
- **Contents (fine-tuning)**
 - RFC A2.0-TR3-2 'Fine-tuning definition and check Settlement run ID and Settlement result run ID'
 - RFC A2.0-TR3-3 'Simplification checks reconciliation volumes'
 - RFC IC280L-1 'Receipt per BRP-SUP'
 - RFC IC252-1 'Fine-tuning from WG C1'
 - RFC IC252-2 'Validations by PUD'
 - RFC 279.1 'Addition text to price formula v1.0'

Requests for Change – scope

RFC A2.0-6 'Optimising checks metering data'

Cause	1. Various minor and major inconsistencies and inaccurate texts for checks and error codes concerning metering notifications (Tranche 1). 2. Various missing checks concerning metering notifications (Tranche 1). 3. Various unnecessary checks concerning metering notifications (Tranche 1). 4. Incorrect product ID peak load electricity (Tranche 1)
Solution RFC	• Implement optimisations by go live Tranche 3. • Implement changes in the concerned business services (still needs to take place): • Exchange of measurement data time series • Exchange of measurement data volumes and meter readings • Exchange of measurement data volumes installation • Exchange of revision requests
Impact	• MRP: use new product ID peak load electricity. • BRP/MRP: checks in accordance with this RFC.
Status	• Approved in the SSG on 30-6-2023. • Business services still need to be modified. UNDER CONSTRUCTION

RFC A2.0-TR3-1 'Scope expansion with IC280 Light'

Cause	• IC280 Light has not yet been officially included in the scope by programme A2.0. • IC280 Light had been incorporated into the detailed documentation (BRS, BS and BD).
Solution RFC	• Official include IC280 Light in scope of Tranche 3.
Impact	• See the sheets with content concerning IC280 Light. • See the sheets with impact per market role.
Status	• Approved in the SSG on 30-6-2023. • IC280 Light has already been incorporated into the concerned business services.



Requests for Change – planning

RFC A2.0-TR3-4 'Qualification and connectivity PUD for IC252'

Cause	• IC252 is available for sector tests sooner than planned. • Qualification and test for IC253 (Tranche 2) was inefficient.
Solution RFC	• Modify planning qualification and test. • Split PUD qualification into 2 parts (connectivity and qualification).
Impact	• See the sheets concerning test and transition.
Status	• Approved in the SSG on 30-6-2023. • Included in planning. 

RFC A2.0-TR3-5 'Bring technical Go live forward to 14-12-2024'

Cause	When revising the planning, it appeared that the technical go live could be brought forward by a week, and thus need not be in the first week of the Christmas holidays.
Solution RFC	Bring technical go live forward from weekend 21-12-2024 to 14-12-2024.
Impact	• See the sheets concerning test and transition
Status	• Ratified for intake in the SI on 08-09-2023. • Still needs to be officially approved.



Requests for Change – contents (fine-tuning)

RFC A2.0-TR3-2 'Fine-tuning definition and check Settlement (result) run ID'

Cause	• The definition for the Settlement (result) run ID has not been formulated clear enough. • The BRPs and SUPs find the formulated check on the Settlement (result) run ID difficult to implement and of little added value.
Solution RFC	• Fine-tuning definitions concerning Settlement (result) run ID in: • Business service 'Exchange volumes for settlement and reconciliation' • Business service 'Exchange settlement results' • Change checks in: • Business service 'Exchange volumes for settlement and reconciliation' • Business service 'Exchange settlement results'
Impact	• See the sheets with impact per market role.
Status	• The RFC was approved in the SSG on 14-04-2023. • The changes have already been incorporated into the concerned business services.



RFC A2.0-TR3-3 'Simplification checks reconciliation volumes'

Cause	TenneT find the checks on reconciliation notifications sent by the DSO too complicated and inconsistent with checks on other notifications.
Solution RFC	• Change checks in: • Business service 'Exchange volumes for settlement and reconciliation'
Impact	• See the sheets with impact per market role.
Status	• The RFC was approved in the SSG on 14-04-2023. • The changes have already been incorporated into the concerned business service. 

RFC IC252-1 'Fine-tuning from WG C1'

Cause	• When developing the notifications for IC252 it appeared that a few components of IC252 concerning data exchange had not been written consistently and clearly.
Solution RFC	• Correct inconsistencies in IC252. • The overall solution in IC252 has thus not changed and is in keeping with the code change proposal.
Impact	• See the sheets with impact per market role.
Status	• Approved in the SSG on 03-01-2023 • The changes have already been incorporated into IC252.



RFC IC252-2 'Validations by PUD'

Cause	• Checks in the PUD concerning collection-settlement requests and response notifications are not consistent.
Solution RFC	• Change checks in: • Business service 'Exchange collection-settlement request'
Impact	• See the sheets with impact per market role.
Status	• Approved in the SI on 14-07-2023. • The changes have already been incorporated into the concerned business serv 

RFC IC280L-1 'Receipt electricity per BRP-SUP'

Cause	• In the business service 'Exchange volumes for settlement and reconciliation electricity', it is not clear enough that a separate receipt electricity must be supplied per grid area-BRP-SUP. • The name of the receipt must also be modified (must contain both the EAN code BRP and the EAN code SUP).
Solution RFC	• Fine-tuning description so that receipt must be supplied per grid area-BRP-SUP in: • Business service 'Exchange volumes for settlement and reconciliation electricity' • Change file name receipt in: • Business service 'Generic file exchange (GBU)' • Business service 'Exchange data sets'
Impact	• See the sheets with impact per market role.
Status	• Ratified for intake in the SI on 08-09-2023. • The changes still need to be incorporated into the concerned business services.



RFC IC279.1 'Addition text to price formula'

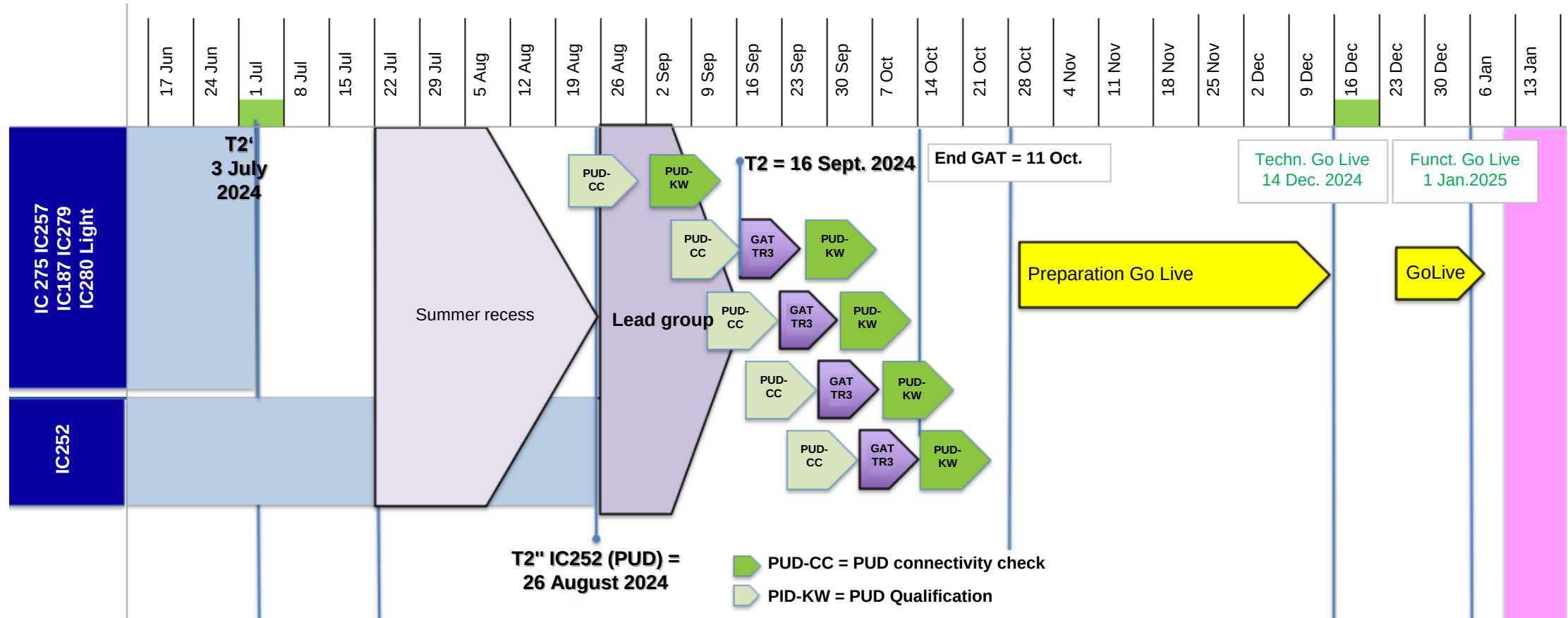
Cause	• The formula for determining the settlement price per OVP is mathematically incorrect if there are no increased and decreased volumes.
Solution RFC	• Include text in the code change proposal, stating that an average price will be used in these cases.
Impact	• TenneT: calculation of settlement prices. • Market parties: interpretation of the settlement prices announced by TenneT.
Status	• Approved in the SSG on 14-04-2023. • The change has been incorporated into a draft code change proposal.  UNDER CONSTRUCTION 

Qualification PUD (IC252)

Qualification for collection-settlement request (VVV) for SUP, TSO, CDS

Adrie Koster

Tranche 3 – Test & acceptance planning



IC-252: PUD qualification market parties for exchange collection-settlement request

- Many market parties have to qualify for the newly introduced PUD notifications. Strict agreements are needed to make sure that this process flows smoothly:
 - All parties that want to use the new automated notification flows via PUD must qualify for this at EDSN
 - This involves 3 logical steps that parties can actually carry out one after the other:
 1. PUD connectivity check
 2. Go through GAT test scenarios (please note: this covers entire scope of Tranche 3)
 3. PUD qualification
- At the start of Q3 2024, EDSN will supply a PUD qualification plan that includes the qualification scenarios
 - The plan will be shared with qualifying market parties via MFFBAS
 - EDSN will help parties during qualification, however, only once parties have completed connectivity and the GAT
 - To ensure an effective flow, the parties will be divided equally in 4 GAT groups, with an agreed time slot within which the 3 steps must be carried out.

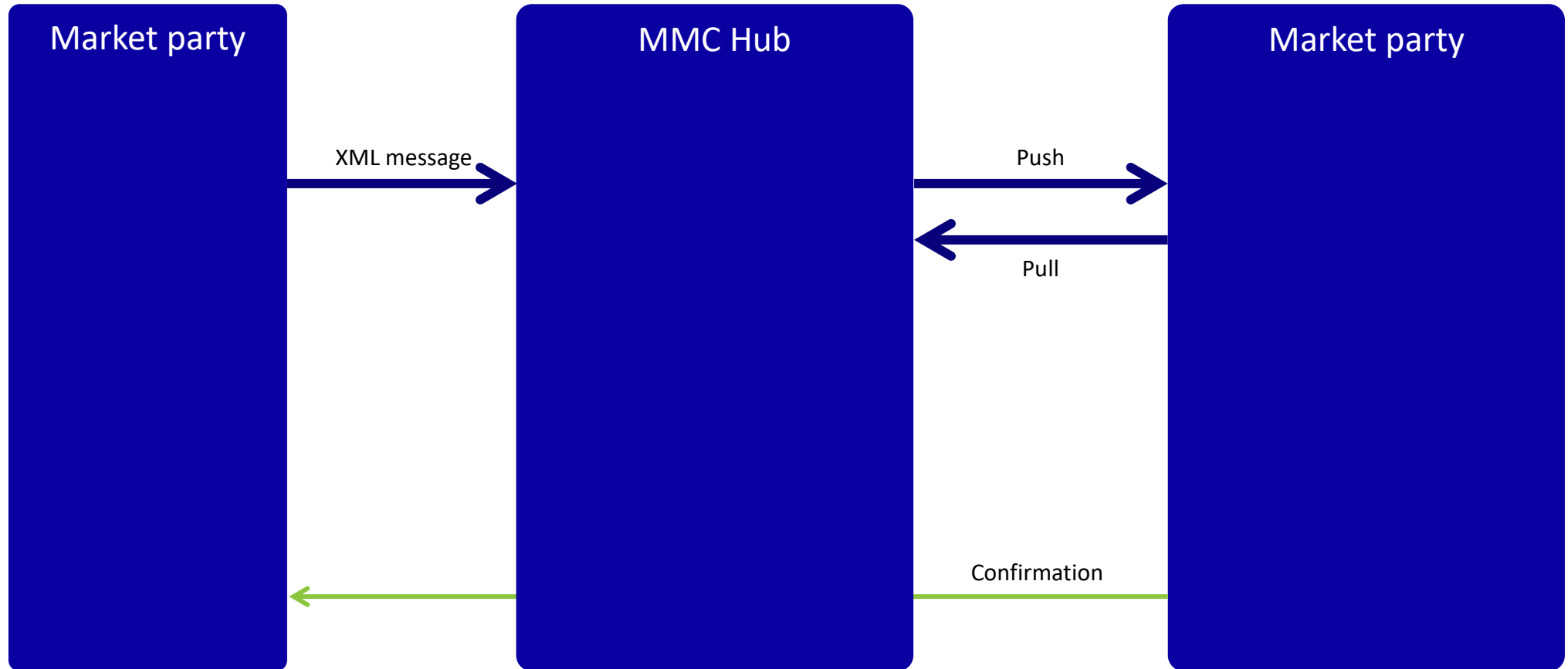
Way of Working Tranche 3

- EDSN/DSO's are modernising their IT landscape & way of working:
 - More (partial) deployments possible
 - Agile method
 - Chain-based approach
- Tranche 3 represents a major change for the sector, with a lot of impact and risks
- Early participation by market parties in relation to testing

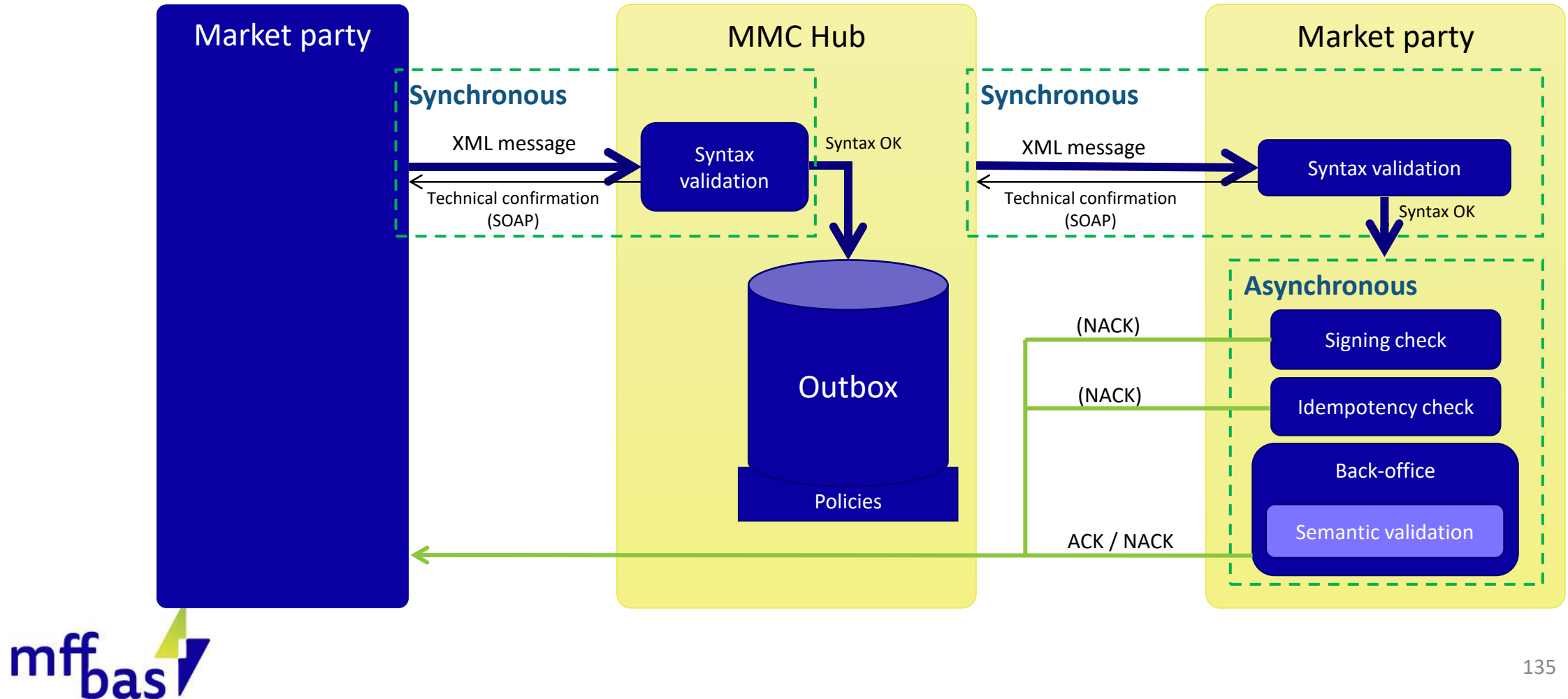
Central systems TenneT

Gijsbert Steenaert

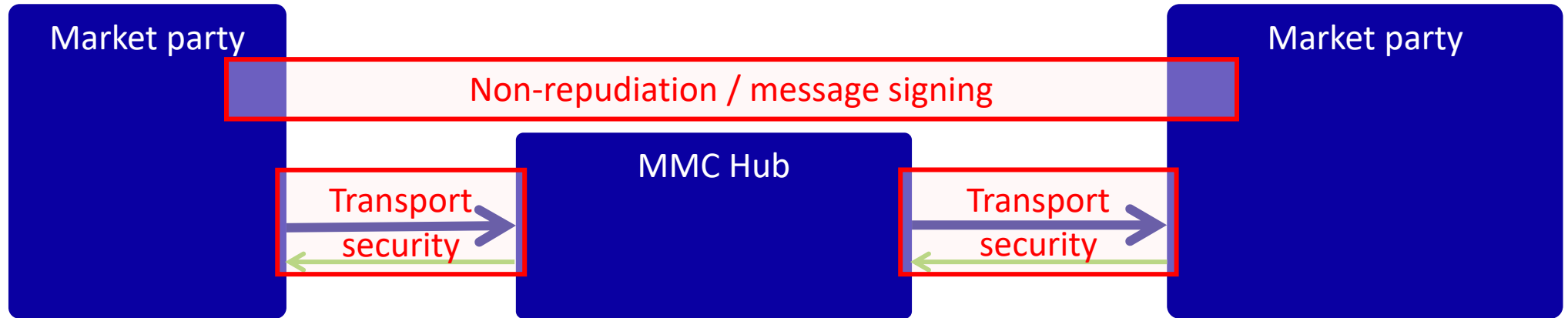
MMC Hub – central hub to facilitate market communication



MMC Hub – quick introduction



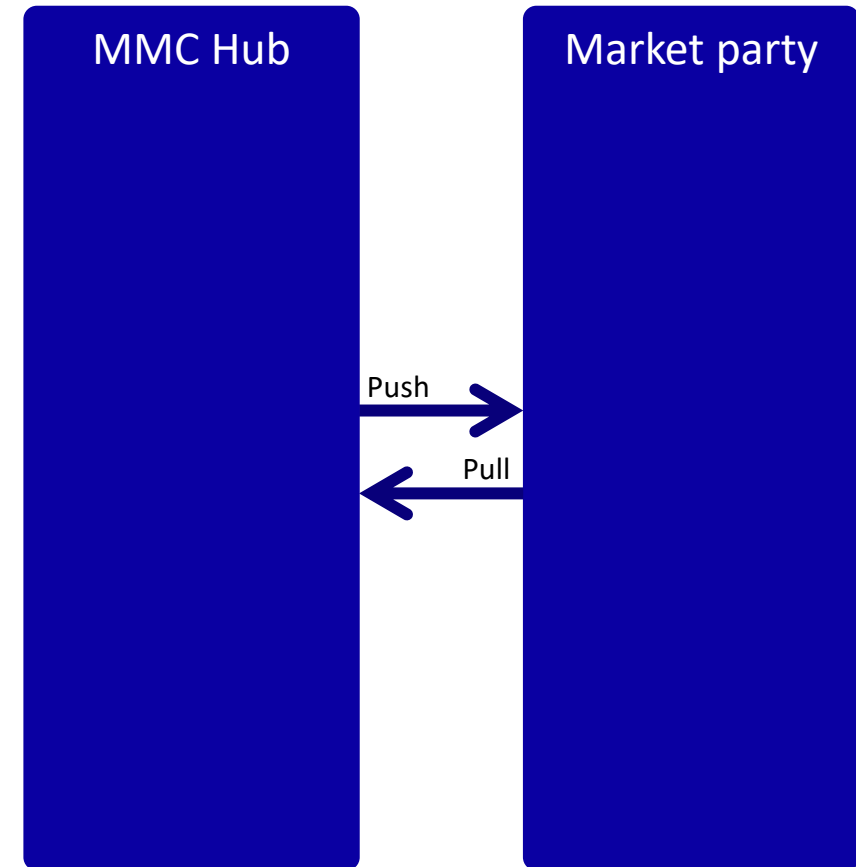
MMC Hub – secure communication



- **Transport certificates** are used to ensure safe and encrypted transport of information, whereby we ensure that only the involved parties are able to access the content of notifications. Transport security will be established between the market party and the MMC Hub using two-way recognition
- **Signing certificates** are used for non-repudiation purposes, which shows that the notification travelled from the sender to the recipient without being changed

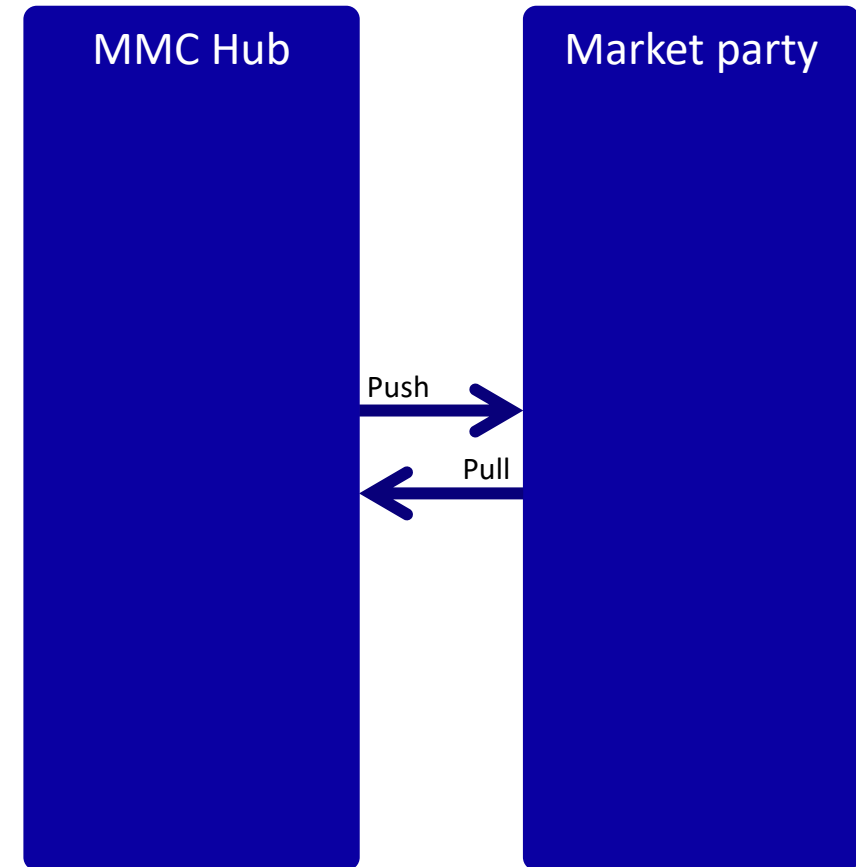
MMC Hub – push mechanism

- The push mechanism immediately offers notifications received on the MMC Hub to the web service of the receiving party
- The receiving party can choose a different web service address per Content Type (header information)
- Push will have been successful if there is a correct SOAP reply
- Retry mechanism if SOAP reply is not received
- If necessary, the notification can also be temporarily pulled from the MMC Hub



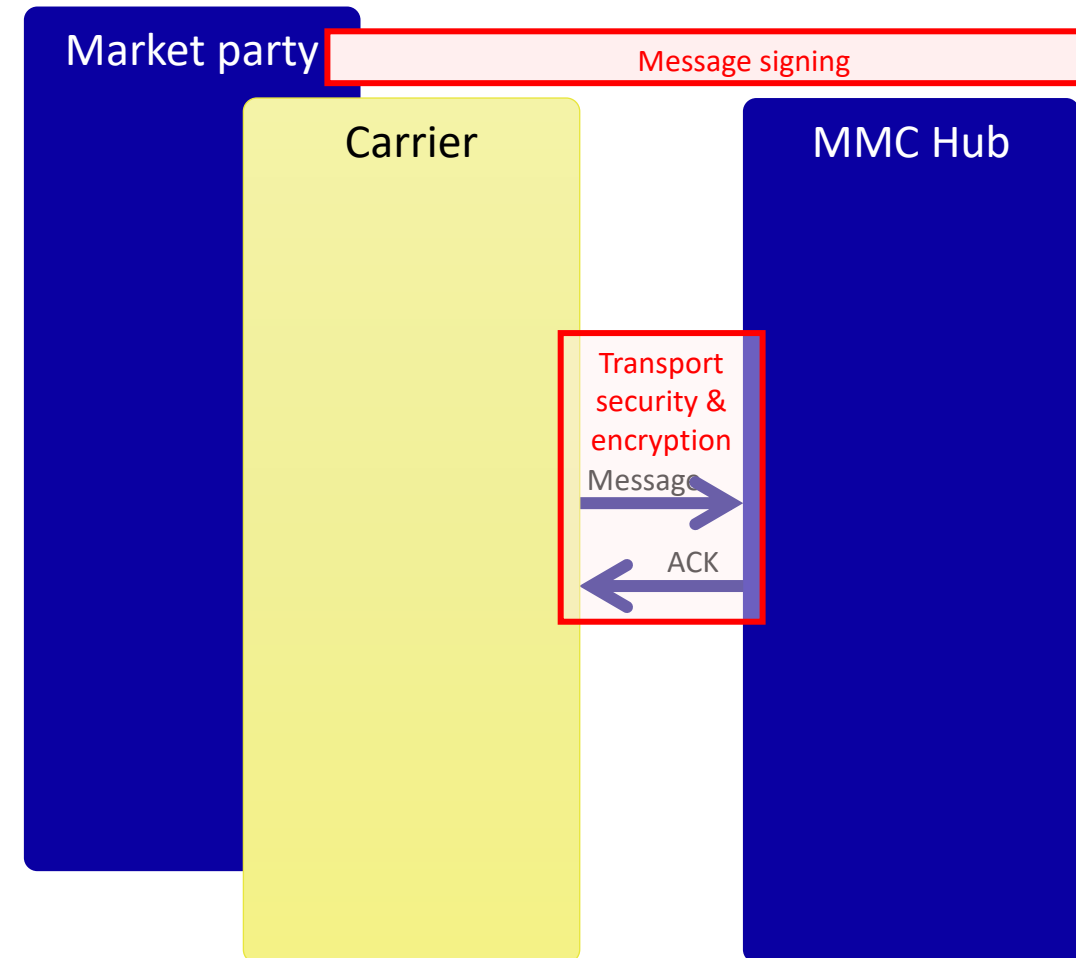
MMC Hub - pull mechanism

- Should the receiving party decide to use this option, the notification can be readied for sending in the outbox
- Collection will take place using the signing certificate of the receiving party, to make sure that only the rightful party receives the notification
- Collection starts with a LIST request, whereby a list is provided of ready but not-yet-collected notifications
- A GET message can then be used to collect the notifications. Notifications that have already been collected will also remain temporarily available
- Pull is unsuitable for very large volumes



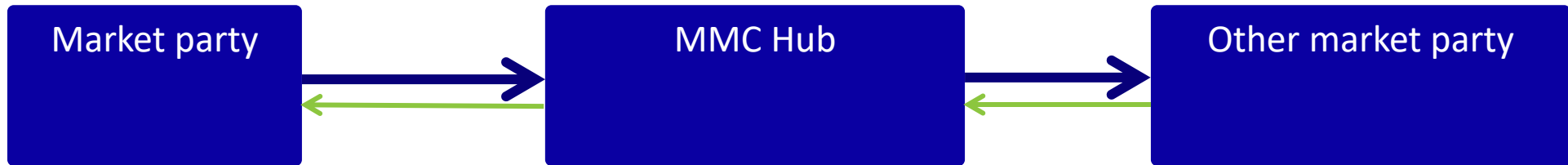
MMC Hub – using a Carrier

- Parties can contract a Carrier to facilitate their notification exchanges
- The Carrier will use its own transport security to establish communication with the MMC Hub
- The market party will remain responsible for its notifications at all times. Notifications must thus also be signed using the signing certificate *of the market party*
- Carriers must register as such with TenneT

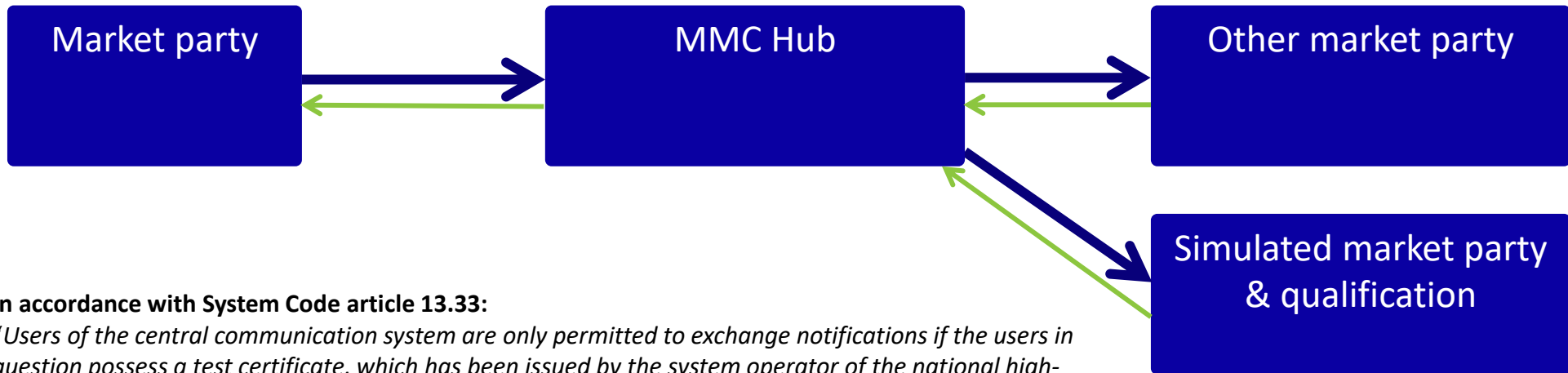


TQF – free testing in a production-like environment

Production environment



TQF environment

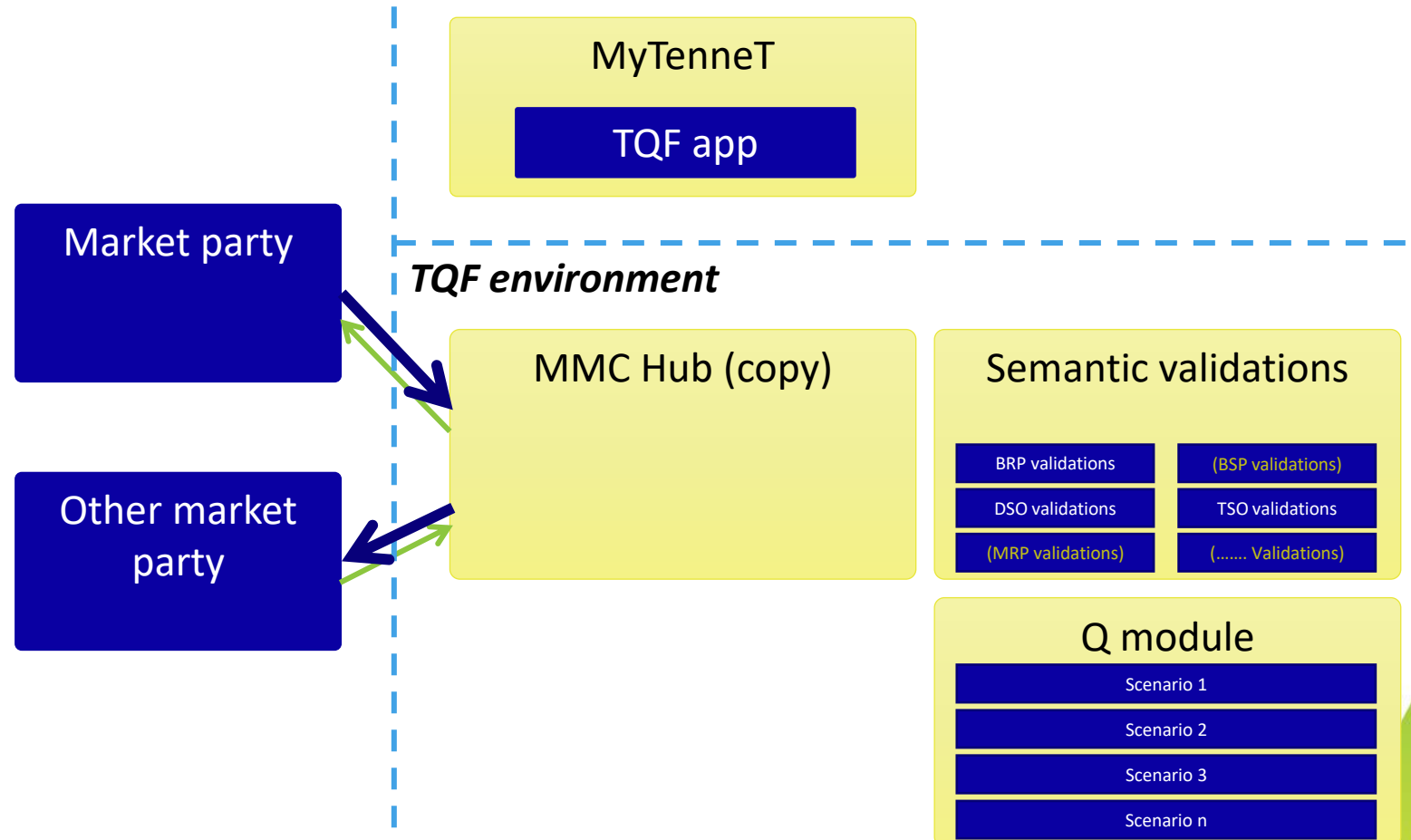


In accordance with System Code article 13.33:

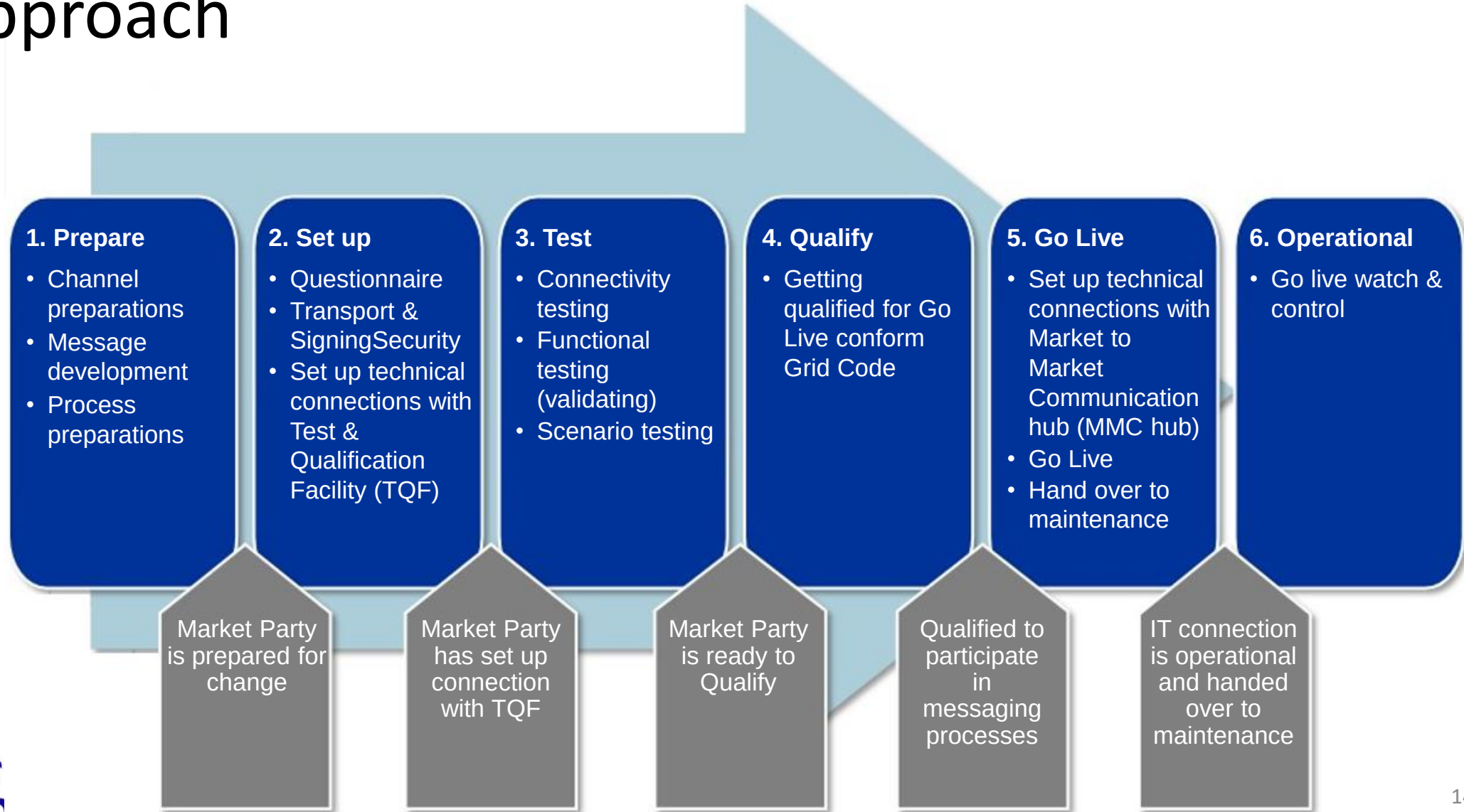
“Users of the central communication system are only permitted to exchange notifications if the users in question possess a test certificate, which has been issued by the system operator of the national high-voltage grid, for every exchanged notification. The certificate is valid for a maximum of 12 months.”

TQF – with other party or fully autonomously

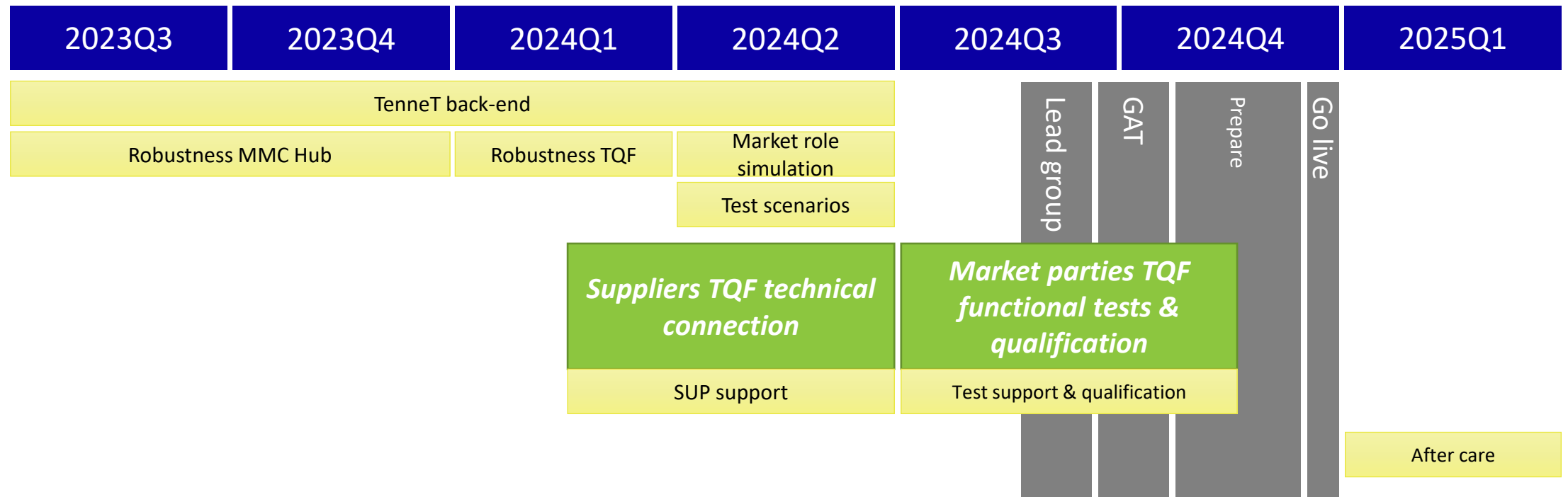
- Parties can test freely against the TQF: initially, but also to test later changes before the go live
- TenneT will use TQF to offer the semantic validations to be carried out by each market role
- TQF will soon also support various relevant testing and qualification scenarios
- The TQF app on MyTenneT offers a User Interface but self-service functionalities will also be available on TQF in time



Testing and qualification at TenneT – phased approach



Planning – parallel flows



TenneT supports market parties during their testing and qualification, via automation but also manually. We do this on a registration-only basis, because our capacity is too limited to assist all parties close to the deadline. *Not registered = no support.*

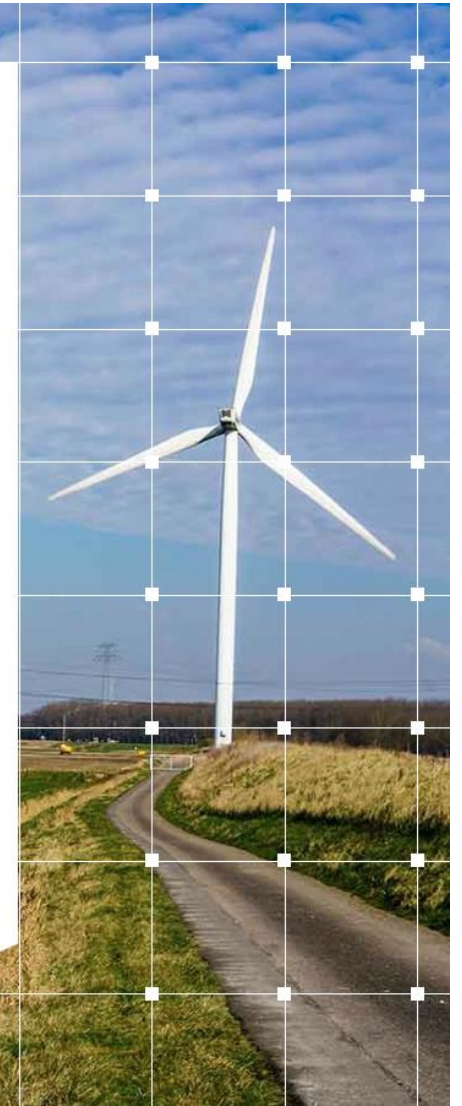
Parties that miss the deadline will then be assisted on a 'best effort' basis.

Suppliers – welcome to TenneT

- For suppliers, this is the first direct meeting with TenneT in relation to exchanging notifications
- In the interest of effective communication and cooperation, we kindly ask you to register in advance
- Registration is possible from now on via the TenneT Customer Care Center:
tennetccc@tennet.eu
- *By registering, you will allow us to reach you effectively using the correct contact details!*
- Detailed info will follow later, as well as access to MyTenneT where all the ins and outs about the MMC Hub and the TQF can be found

TenneT is a leading European system operator (Transmission System Operator, TSO). Our aim is to supply electricity in a safe and reliable manner, 24 hours a day, 365 days a year. This involves promoting the energy transition so that sustainable, reliable and affordable electricity can be ensured in the future. We are the first multi-national TSO to design, build, maintain and operate 24,500 kilometres of high-voltage connections in the Netherlands and large parts of Germany, and support the European energy market via 16 interconnectors with our neighbouring countries. With turnover of 6.4 billion euros and total assets worth 32 billion euros, we are one of the biggest investors in national and international electricity grids, both onshore and offshore. Our 6,600 employees do their utmost every day to meet the needs of society by displaying ownership, courage and empathy. We all work together to make sure that over 42 million end users can rely on a stable electricity supply.

Lighting the way ahead together



Disclaimer

This Powerpoint has been offered to you by TenneT TSO B.V. ("TenneT"). Its contents - all text, images and sounds - are protected under copyright laws. The contents of this Powerpoint may not be copied, unless the opportunity to do so is explicitly offered by TenneT and if no part of the content is modified. TenneT is committed to supplying correct and up-to-date information but cannot offer any guarantees concerning the correctness, accuracy and completeness of this information.

TenneT does not accept any liability for (alleged) damage, which is incurred as a result of this Powerpoint or has been caused by activities that are carried out based on data and information in this Powerpoint.

Information session Tranche 3 Programme Allocatie 2.0 (A2.0)

Information session 1

12 September 2023

Preparations MFF BAS Testing and Transition

Jorik van Vilsteren

Lead group tests

Scope and aim of the Lead Group Tests

- Initially connect the local landscapes of market roles BRP, SUP and MRP in the lead group to the central landscapes of DSO and TSO (EDSN and TenneT).
- Go through a number of pre-defined progression and regression test scenarios.
- Release the environments for the user acceptance test (GAT)

Participating market roles/market parties

- DSO
- TSO-E
- MRP (+FSO)
- BRP
- SUP

TSO, DSOs and SUP (Eneco), MRP (Kenter) and BRP (PV NED) have already said that they will be taking part. We would like to thank them for this!

If you are an SUP, BRP or MRP and would like to take part in the Lead Group Tests, please register by sending an e-mail to vrAGEN@mffbas.nl or register by mentioning your name and organisation via the 'chat' feature in this session.

Planning

Test activity	Period
Start Lead group Meetings	1 October 2023
Completion DTP Lead group	Q1-2024
Completion Test scenarios Lead group	to be determined
Completion Test data Lead group	to be determined
Completion Environment TenneT.	to be determined
Completion Environment EDSN	to be determined
Start Lead group Test	26-08-2024
End Lead group Test	14-09-2024
Completion Release advice Lead group	12-09-2024*

*Choosing Friday the 13th for a milestone is asking for problems ☹️

User Acceptance Tests (GAT)

Scope and aim of User Acceptance Test (GAT)

- Connecting the local landscapes to the central landscapes of EDSN and TenneT TSO, to enable market parties to interact with central systems and successfully navigate the chain processes
- In addition, it is a free testing period, whereby the output from central systems can be used to test the local processes

Planning (provisional)

Test activity	Period
Completion DTP GAT	Q1-2024
Group allocation GAT	Q1-2024
GAT Group 1	16-09-2024 to 28-09-2024
GAT Group 2	23-09-2024 to 04-10-2024
GAT Group 3	30-09-2024 to 11-10-2024
GAT Group 4	07-10-2024 to 18-10-2024

To make sure that the peak takes place at the start of the GAT period – and thus avoiding the risk of delay due to findings later in (/too late in) the project – we ask all market parties - particularly those with a large market share - to take part in the GAT as quickly as possible.

In other words: **remember that the GAT will start on 16 September 2024!**

Transition

Implementation strategy

➤ The Tranche 2 project has two go live moments:

- 14 December 2024 Technical Go Live
- 1 January 2025 Functional Go Live

➤ Based on the current insights, it will be a so-called Big Bang and there will definitely not be a dual phase

Consultation group Transition

- The Consultation group (KBG) Transition will gather once a month as of 1-10-2023
- All transition activities that are deemed necessary in advance (incl. Fall-back plan, Entry and Exit criteria, Integral Script) will be included in the **Transition plan**, which will be completed in 11-2023.
- New transition-related insights can be presented by the IISO or by members of the Consultation group Transition, and **appropriate actions/measures** will be assigned to them together with the accompanying communication.
- If market parties would like to participate in the KBG Transition (besides the already present DSOs, TSO-E, TSO-G, SUP, BRP and MRP/FSO), they can register by sending an e-mail to vrageen@mffbas.nl or by mentioning this via the chat feature in this session.

Thank you for your
attention, and good luck!