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1. Form for balancing product bid, submission via web service

Document	Reserve Bid Document;
Document format	.XML
Namespace	urn:iec62325.351:tc57wg16:451-7:reservebiddocument:7:1
Communication channel	web-service

DOCUMENT STRUCTURE DIAGRAM



Tag	Value	Mandatory	Description	Conditions
Header				
mRID	(135 chars)	Y E S	Unique identification of the Bid Document	
revisionNumber	(13 chars)	Y E S	Document version	Initial transmission shall equal "1"
type	A37	Y E S	Type of the document	A37 - Reserve Bid document
process.processType	A47	N O	The process type identifies the process to which the information flow is directed.	A47 - Manual frequency restoration reserves(mFRR)
Sender_MarketParticipant.mR ID	(116 chars)	Y E S	Identification of the party who is sending the document	EIC of party who is sending the document

	1			1
Sender_MarketParticipant.Ma	A27	Y		A27 - resource
rketRoleType		Е	role that is played by	provider
		S	the sender.	
Receiver MarketParticipant.	10X1001A100	Y	Identification of the	TSO EIC code:
mRID	1B54W	Е	party who is receiving	10x1001a1001B54W -AST
		S	the document	IUXIUUIAIUUIB54W -AST
Receiver_MarketParticipant.	A04	Y	Identification of the	A04 - System operator
MarketRoleType		Е	receiver role	
		S		
CreatedDateTime	UTC	Y	Date and time of	The date and time must
	DateTime	Е	document creation	be expressed in UTC as
		S		YYYY-MM-DDTHH:MM:SSZ.
reserveBid_Period.timeInter val				
start	UTC	Y		The start and end date
	DateTime		time of the period	and time must be
		S		expressed in UTC time
			document.	zone and as YYYY-MM- DDTHH:MMZ.
end	UTC	Y		The start and end date
	DateTime	E	· · · <u>·</u> · · · · · · · ·	and time must be
		S	by the document.	expressed in UTC time zone and as YYYY-MM-
				DDTHH:MMZ.
domain.mRID	10YLV-	Y		EIC code of Latvia:
	1001A00074	E S	sender	10YLV-1001A00074
<pre>subject_MarketParticipant.m</pre>	10X1001A100	Y		TSO EIC code:
RID	1B54W	E	transmitting TSO	10X1001A1001B54W -AST
		S		
subject_MarketParticipant.M	A04	Y	Identification of the	A04 - System operator
arketRoleType		Е	transmitting TSO role	
		S		
Bid_TimeSeries				
Bid_TimeSeries	(135 chars)	Y	Unique identification of the bid assigned by	

auction.mRID	BalticCoBA	Y E S	A unique identification assigned by the Reserve Allocator of the set of specifications that clearly defines the auction to which the tender is addressed. For general reference purposes only	Constant value: Baltic CoBA
businessType	Z54	Y E S	The nature of the time series for which the product is handled.	Regulation offers: 254 - Volume for mFRR standard product;
acquiring_Domain.mRID	10YLV- 1001A00074	Y E S	The EIC identification of the scheduling area where the energy is going	Equal to connecting_Domain.mRID EIC code of Latvia: 10YLV-1001A00074
connecting_Domain.mRID	10YLV- 1001A00074	Y E S	The area where the energy is coming from	EIC code of Latvia: 10YLV-1001A00074
provider_MarketParticip ant.mRID	(116 chars)	N O	A unique identification of the Resource Provider responsible for reserve bid	EIC of the BSP
quantity_Measure_Unit.n ame	MAW	Y E S	measurement used for	Always expressed in megawatts - MAW
currency_Unit.name	EUR	N O	The currency in which the monetary amount is expressed.	Constant value: EUR
price_Measure_Unit.name	МШН	N O	The unit if measurement used for the price of energy expressed within the time series	Constant value: MWH
Divisible	A01 A02	Y E S	The indication of whether or not the tender may be reduced to the MinimumActivationQuant ity in increments compliant with the StepIncrementQuantity.	A01 - Yes (divisible) A02 - No (not divisible)
BlockBid	A02	N O	The indication that all the time intervals in the time series are to be considered as a whole and that they cannot be subdivided. The default value for this attribute is A02: "No".	A02 - No
LinkedBidIdentification	(135 chars)	N O	The identification used to associate bids that are to be linked together. If the bid is not linked then the attribute is not used.	Example: Bid B is linked with bid A. Bid B can be activated only after bid A is activated. Bid B need to have bid A ID.
status	A06 A11	N O	The status of the bid.	The following Status codes permitted: A06 - Available A11 - Unavailable

rea	je+	eredResource.mRID	(118	N	Identification of the	EIC code of Resource
reg.			(118 chars)	0		Object. For example specific power generating module or demand unit or group qualified by TSO.
flo	wDi	rection.direction	A01 A02	Y E S	This identifies the direction of the energy flow.	A01 - UP; A02 - DOWN.
	-	al_MarketProduct. ProductType	A02	N O		A02 - Specific product
	validity_Period.timeInt erval		UTC DateTime interval	N O	The period when the bid can be activated	The start and end date and time must be expressed in UTC time zone and in compliance with the following format: YYYY-MM- DDTHH:MMZ/YYYY-MM- DDTHH:MMZ.
	Pe	riod				
-	Ti	meInterval				
L		start	UTC DateTime	Y E S	The beginning date and time of the period covered by the document.	The start and end date and time must be expressed in UTC time zone and as YYYY-MM- DDTHH:MMZ.
	end		UTC DateTime	Y E S	Ending date and time of the period covered by the document.	The start and end date and time must be expressed in UTC time zone and as YYYY-MM- DDTHH:MMZ.
	Re	solution	PT60M	Y E S		Time resolution for bid is equal to MTU in compliance with following format: PnYnMnDTnHnMnS.
-		Point				
		Pos	(16 chars)	Y E S	Position within the time interval	
		quantity.quanti ty	<pre>(117 numeric chars) Min = 1MW, resolution 1MW</pre>	Y E S	Quantity offered	That is expressed in the Measurement Unit Quantity, two decimal positions should be included.
		Energy_Price.am ount	(1…17 numeric chars)	N O	The price of the energy	Two decimal positions should be included.
Rea	son	1				This class is strictly associated with the status attribute that has the value of A11 = no longer available.
Rea	son	Code	(13 chars)	Y E S		If status = All: B16 - A tender that has been requested is no longer available in the MOL.

				If status = A06: empty (tag is removed from XML)
Tag	Value	Mandatory	Description	Conditions

2. Form for balancing product bid, submission via e-mail service

Reserve Bid Document form

E-mail subject: "RPS"_Regulesana // File name: "RPS"_Reg_DD.MM.YYYY.xlsx

Message								
Document Identification			A unique identificatio	on of Document				
Document version	1		1 and up					
Document type	A37		A37					
Process type	A47		A47					
Sender and role		A27	EIC of BSP A27 - BSP					
Receiver And role	10X1001A1001B54W	A04	EIC of AST A04 - TSO					
Creation Date Time	2021-11-01T00:00Z		UTC date time expres	sed as YYYY-MM-DDTHH:	MMZ			
Reserve Bid Time Interval	2021-11-01T22:00Z	2021-11-02T22:00Z	UTC date time expres	sed as YYYY-MM-DDTHH:	MMZ			
Domain	10YLV-1001A00074		EIC of area covered by	y sender, LV 10YLV-100	1A00074			
Subject Party and role			Empty					
Time series					(Add two columns for each seperate bid)			
Reserve Bid Identification	BID_ID_1	BID_ID_1	BID_ID_2	BID_ID_2	Unique identification of the bid assigned by BS			
Auction Identification	BalticCoBA		BalticCoBA		BalticCoBA			
Business type	Z54		Z54		Z54 - Volume for mFRR standard product			
Acquiring Area	10YLV-1001A00074		10YLV-1001A00074		LV10YLV-1001A00074			
Connecting Area	10YLV-1001A00074		10YLV-1001A00074		LV10YLV-1001A00074			
					A unique identification of the Resource			
provider_MarketParticipant.mRID					Provider responsible for reserve bid (EIC)			
Measure Unit Quantity	MAW		MAW		MAW			
Currency		EUR		EUR	EUR			
Measure Unit Price	MWH		MWH		MWH			
Divisible	A01		A02		A01 - divisible, A02 - indivisible			
Linked Bid Identification					Linked bid ID			
Block bid	A02		A02		A02 - No			
status	A06		A06		A06 - Available, A11 - Unavailable			
Reserve Object					EIC code of Resource Object			
Direction	A01		A02		A01- Up, A02 - Down			
Resolution	PT60M		PT60M		PT60M			
Time series Data	Volume	Price	Volume	Price				
1					Volume and price for each period			
2					[]			
24								

3. Form for updating the balancing product bid after the end of the bid submission period, for sending via web service

Document	ERRP Activation Document;
Document format	.XML
Namespace	urn:entsoe.eu:wgedi:errp:cobaactivatondocument:5:0
Communication channel	web-service

DOCUMENT STRUCTURE DIAGRAM



Tag	Value	Mandatory	Description	Conditions
Header				
DocumentIdentification	(1…35 chars)	Y E S	Unique identification of the document for which the time series data is being supplied.	All additions, modifications, or suppressions for the time series and activation period must use the same identification.
DocumentVersion	(13 chars)	Y E S	Document version	Starts at 1 and increases sequentially.
DocumentType	A42	Y E S	Type of the document	A42 - Tender reduction
ProcessType	A30	N O	The process type identifies the process to which the information flow is directed.	A30 - Tertiary reserve process
SenderIdentification	(116 chars)	Y E S	Identification of the party that is	EIC of party who is sending the document.

				the owner of the document	
SenderRole		A27	Y E S	the role that is	A27 - resource provider
Recei	verIdentification	10X1001A1001B 54W	Y E S	the party who is	10X1001A1001B54W -AST
Recei	verRole	A04	Y E S	Identification of the receiver role	A04 - System operator
Creat	ionDateTime	UTC DateTime	Y E S	The date and time that the document was prepared for transmission by the application of the sender.	The date and time must b expressed in UTC time zone as YYYY-MM- DDTHH:MM:SSZ.
Activ	ationTimeInterval	UTC DateTime interval	Y E S	This information provides the start and end date and time of the activation period	The start and end date and time must be expressed in UTC time zone and as YYYY-MM- DDTHH:MMZ/YYYY-MM- DDTHH:MMZ. Period should contain only future MTU (currently 1 hour)or period till end of current MTU if the Tende reductions is done after start of the corresponding MTU.
	ActivationTimeSer ies				
	AllocationIdentif ication	(135 chars)	Е	The identification of the allocation that was established with the Resource Provider to provide reserves.	mRID of Bid_TimeSeries (Reserve Bid Document).
	ResourceProvider	(116 chars)	Y E S	A unique identification of the Resource Provider responsible for reserve activation	BSP EIC code
	BusinessType	Z54	Y E S	time series for	Z54 - Volume for mFRR standard product;
	ConnectingArea	10YLV- 1001A00074	Y E S	The area where the energy is coming from	EIC code. 10YLV-1001A00074 -Latvi
	MeasureUnit	MAW (13 chars)	Y E S	The unit of measurement used for the quantities expressed within the time series.	Always expressed in megawatts -MAW
	Direction	A01 A02	Y E S	direction of the	A01 = UP, this signifie that the available powe can be used by the Acquiring area to increase energy. A02 = DOWN, this signifies that the available power can be

					used by the Acquiring area to decrease energy
Stat	us	A11	Y E S	specific activation	All = Unavailable - the quantities in the time series are unavailable.
ResourceObject		(118 chars)	N O	Identification of the resource that is used to supply energy capabilities to the System Operator.	EIC code A Resource Object is only used if a specific Resource Object is to b activated.
	Period				
	TimeInterval	UTC DateTime interval	Y E S	This information provides the start and end date and time of the period being reported.	The start and end date and time must be expressed in UTC time zone and in compliance with the following format: YYYY-MM-DDTHH:MMZ/YYYY- MM-DDTHH:MMZ. Period should contain only future MTU (currently 1 hour) or period till end of current MTU if the Tender reductions is done after start of the corresponding MTU.
	Resolution	ΡΤnΜ	Y E S		PnYnMnDTnHnMnS. Where nY expresses a number of years, nM a number of months, nD a number of days. The letter "T" separates th date expression from th time expression and after it nH identifies number of hours, nM a number of minutes and r a number of seconds.
	Interval				
	Pos	(16 chars)	Y E S	This information provides the relative position of a period within an activation interval	The relative position must be expressed as a numeric integer value beginning with 1. All leading zeros must be suppressed.
	Qty	(117 numeric chars) Min = 1MW, resolution 1MW	Y E S	This information defines the quantity that is to be activated for the interval in question and that is expressed in the Measurement Unit Quantity.	If the document type is Tender reduction, then quantity for which the volume decreases.

4. Form for updating the balancing product bid after the end of the bid submission period, for sending via e-mail

Message			
Document Identification			A unique identification of document
Document version	1		1 and up
Document type	A42		A42
Process type	A30		A30
Sender and role	EIC of BSP	A27	EIC of BSP A27 - BSP
Receiver And role	10X1001A1001A55Y	A04	EIC of AST A04
Creation Date Time	2021-11-01T00:00Z		UTC date time expressed as YYYY-MM-DDTHH:MMZ
	Service and an Alignment and Calculation		UTC date time expressed as YYYY-MM-DDTHH:MMZ
Activation Time Interval	2021-11-01T00:00Z	2021-11-01T01:00Z	Only future (after GCT) or current MTU (after start of MTU)
Time series			
Reserve Bid Identification	BID_ID_1	Bid ID	
provider_MarketParticipant.mRID		EIC of the BSP	
Business type	Z54	Z54 - Volume for mFRR s	tandard product
Acquiring Area	10YLV-1001A00074	LV10YLV-1001A00074	
Connecting Area	10YLV-1001A00074	LV10YLV-1001A00074	
Measure Unit Quantity	MAW	MAW	
Direction	A01	A01- Up, A02 - Down	
Status	A11	A11 - Unavailable	
Reserve Object		EIC code of Resource Ob	ject
Resolution	PT60M	PT60M or less (if the MT	U has started)
Time series Data	Volume		
	1	the quantity for which th	ne available volume decreases.

5. The form of the balancing product bid activation order and activation order updates, for communication via web service

Document	ERRP Activation Document;
Document format	.XML
Namespace	urn:entsoe.eu:wgedi:errp:cobaactivatondocument:5:0
Communication channel	web-service

DOCUMENT STRUCTURE DIAGRAM



ELEMENT DESCRIPTION

Activation document from TSO

Tag Header	Value	Mandatory	Description	Conditions
DocumentIdentification	(135 chars)	Y E S	Unique identification of the document for which the time series data is being supplied.	All additions, modifications, or suppressions for the time series and activation period must use the same identification.
DocumentVersion	(13 chars)	Y E S	Document version	Starts at 1 and increases sequentially.
DocumentType	A40	Y E S	Type of the document	A40 - Activation order
ProcessType	A30	N O	The process type identifies the process to which the information flow is directed.	A30 -Tertiary reserve process

Sen	derIdentification	10X1001A1001B 54W	Y E S	Identification of the party that is the owner of the	10x1001A1001B54W -AST
Sen	derRole	A04	Y E S	document Identification of the role that is played by the sender.	A04 - System operator
Rec	eiverIdentification	(116 chars)	Y E S	Identification of the party who is receiving the document	EIC of the receiver
Rec	eiverRole	A27	Y E S	Identification of the receiver role	A27 - resource provider
Cre	ationDateTime	UTC DateTime	Y E S	The date and time that the document was prepared for transmission by the application of the sender.	The date and time must be expressed in UTC as YYYY- MM-DDTHH:MM:SSZ.
Act	ivationTimeInterval	UTC DateTime interval	Y E S	This information provides the start and end date and time of the activation period	The start and end date and time must be expressed in UTC time zone and as YYYY-MM- DDTHH:MMZ/YYYY-MM- DDTHH:MMZ.
L	ActivationTimeSeries				
	AllocationIdentificat	(135 chars)	Y E S	of the allocation	mRID of Bid_TimeSeries of the Reserve Bid Document.
	ResourceProvider	(116 chars)	Y E S		BSP EIC code
	BusinessType	Z54	Y E S		Z54 - Volume for mFRR standard product
	AcquiringArea	(116 chars)	Y E S	reserve is	EIC code. For normal activation: 10Y1001A1001A94A - Synchronous area of Baltic states For special activation: 10YLV-1001A00074 -Latvia 10YLV-1001A001A39I - Estonia 10YLT-1001A0008Q - Lithuania 10YFI-1

Connect	227222	10YLV-	Y	The area where the	ETC code
Connecti	ngArea	109LV- 1001A00074	E	energy is coming	EIC code. 10YLV-1001A00074 -Latvia
			S	from	
Measure	Jnit	MAW	Y E S	measurement used	Always expressed in megawatts -MAW
Directic	n	A01 A02	Y E S	direction of the	A01 = UP, this signifies that the available power can be used by the Acquiring area to increase energy. A02 = DOWN, this signifies that the available power can be used by the Acquiring area to decrease energy.
Status		A08	Y E S	The status of the specific activation request.	A08 = In process - the quantities in the time series are requested for activation.
Resource	eObject	(118 chars)	N O	Identification of the resource that is used to supply energy capabilities to the System Operator.	EIC code A Resource Object is only used if a specific Resource Object is to be activated.
	Period				
	TimeInterval	UTC DateTime interval	Y E S		The start and end date and time must be expressed in UTC time zone and in compliance with the following format: YYYY-MM-DDTHH:MMZ/YYYY- MM-DDTHH:MMZ.
	Resolution	PTnM	Y E S	defining the number	PnYnMnDTnHnMnS. Where nY expresses a number of years, nM a number of months, nD a number of days. The letter "T" separates the date expression from the time expression and after it nH identifies a number of hours, nM a number of minutes and nS a number of seconds.
	Interval				
	Pos	(16 chars)	Y E S	provides the	The relative position must be expressed as a numeric integer value beginning with 1. All leading zeros must be suppressed.
	Qty	(117 numeric chars)	Y E S	defines the	
Reason					
	nde series	(13 chars)	Y	Reason codes for activation	A37 - Balancing 201 - Countertrade

	Z02 - Countertrade
	Z03 - Countertrade
	Z04 - Countertrade
	Z05 - Countertrade
	A46 - System services

6. BSP and AST message exchange form for balancing product bid activation order, activation order update and confirmation of activation order, communication via email

I. Form for balancing power activation command

The example of the form shows a demand for an electricity market participant to activate the balancing power for a load of 10 MW on 2 November 2016 from 13:00 to 14:00.

From:"AST_dispeceri" <dispeceri@ast.lv>To:[e-mail address of the electricity market participant]Date:02.11.2016 13:00Subject:(02-11-2016 h 13 – 14 Regulēšana uz noslodzi, pakalpojuma pieprasījums EMP ->AST02-11-2016 h 13 - 14 Aktivēt regulējošo jaudu uz noslodzi EMP ->AST

10MW sākot no **13:00** līdz **13:60**, where EMP is the abbreviation for electricity market participant.

II. Form for confirming the received power activation command:

From: [e-mail address of the electricity market participant]
To: dispeceri@ast.lv, ast.plan@ast.lv
Date: 02.11.2016 13:00
Subject:(02-11-2016 h 13 – 14 Regulēšana uz noslodzi, pakalpojuma pieprasījums EMP ->AST
ACCEPTED

Apstiprinu saņemto dispečera komandu.

02-11-2016 h 13 - 14 Aktivēt regulējošo jaudu uz noslodzi EMP ->AST 10MW sākot no 13:00 līdz 13:60

III. Form for balancing power deactivation command

From:	"AST_dispeceri" <dispeceri@ast.lv></dispeceri@ast.lv>
To:	[e-mail address of the electricity market participant]
Date:	02.11.2016 13:30
Subject:	(02-11-2016 h 13 – 13:30 Regulēšana uz noslodzi, pakalpojuma pieprasījums EMP - >AST

02-11-2016 h 13 - 14 Aktivēt regulējošo jaudu uz noslodzi EMP ->AST 10MW sākot no 13:00 līdz 13:30,

IV. Form for confirming the received power deactivation command:

From: [e-mail address of the electricity market participant]

To: dispeceri@ast.lv, ast.plan@ast.lv

Date: 02.11.2016 13:30

Subject:Re.:(02-11-2016 h 13 – 13:30 Regulēšana uz noslodzi, pakalpojuma pieprasījums EMP->AST ACCEPTED

Apstiprinu saņemto dispečera komandu.

7. Forms for the confirmation of received balancing product bid activation order and update of activation order, communication via web service

Document	ERRP Activation Document;
Document format	.XML
Namespace	urn:entsoe.eu:wgedi:errp:cobaactivatondocument:5:0
Communication channel	web-service

DOCUMENT STRUCTURE DIAGRAM



Activation response from BSP						
Tag	Value	Mandatory	Description	Conditions		
Header						
DocumentIdentification	(135 chars)	Y E S	Unique identification of the document for which the time series data is being supplied.	All additions, modifications, or suppressions for the time series and activation period must use the same identification.		
DocumentVersion	(13 chars)	Y E S	Document version	Starts at 1 and increases sequentially.		
DocumentType	A41	Y E S	Type of the document	A41 Activation response		
ProcessType	A30	N O	The process type identifies the process to which the information flow is directed.	A30 -Tertiary reserve process		

SenderI	dentification	(116 chars)	Y E S	Identification of the party that is the owner of the	EIC of the sender
SenderF	Role	A27	Y E S	document Identification of the role that is played by the sender.	A27 - resource provider
Receive	erIdentification	10x1001A1001B 54W	Y E S	Identification of the party who is receiving the document	10x1001A1001B54W -AST
Receive	erRole	A04	Y E S	Identification of the receiver role	A04 - System operator
Creatic	nDateTime	UTC DateTime	Y E S	The date and time that the document was prepared for transmission by the application of the sender.	The date and time must be expressed in in UTC time zone and as YYYY-MM- DDTHH:MM:SSZ.
Activat	ionTimeInterval	UTC DateTime interval	Y E S	This information provides the start and end date and time of the activation period	The start and end date and time must be expressed in UTC time zone and as YYYY-MM- DDTHH:MMZ/YYYY-MM- DDTHH:MMZ.
OrderId	lentification	(135 chars)	N O	The identification of the Activation Order that is being acknowledged by Activation response	Is mandatory for A41 = Activation Response. DocumentIdentification of Activation document from TSO
OrderId on	lentificationVersi	(13 chars)	N O	The version of the Activation Order that is being acknowledged by Activation response	Is mandatory for A41 = Activation Response. DocumentVersion of Activation document from TSO
	ActivationTimeSer ies				
	AllocationIdentif ication	(135 chars)	Y E S		mRID of Bid_TimeSeries (Reserve Bid Document).
	ResourceProvider	(116 chars)	Y E S	identification of	BSP EIC code
	BusinessType	Z54	E	The nature of the time series for which the product is handled.	Z54 - Volume for mFRR standard product;
	AcquiringArea	(116 chars)	E	The area where the reserve is contracted for use (destined)	EIC code. For normal activation: 10Y1001A1001A94A - Synchronous area of Baltic states
					For special activation: 10YLV-1001A00074 -Latvia 10Y1001A1001A39I -Estonia 10YLT-1001A0008Q - Lithuania

				10YFI-1U - Finland 10YSE-1K - Sweden
				10YPL-AREAS -Poland 10Y1001A1001A49F -Russian area 10Y1001A1001A51S -Belarus
				area
lingArea	10YLV- 1001A00074	Y E S	The area where the energy is coming from	EIC code. 10YLV-1001A00074 -Latvia
eUnit	MAW	Y E S	The unit of measurement used for the quantities expressed within the time series.	Always expressed in megawatts - MAW
Lon	A01 A02	Y E S	This identifies the direction of the energy flow.	A01 = UP, this signifies that the available power can be used by the Acquiring area to increase energy. A02 = DOWN, this signifies that the available power can be used by the Acquiring area to decrease energy.
	A07 A09	Y E S	The status of the specific activation request.	Activation Response: A07 = Activated - the quantities in the time series have been activated (accepted) A09 = Cancelled - the activation proposal quantities in the time series are rejected.
ceObject	(118 chars)	NO	Identification of the resource that is used to supply energy capabilities to the System Operator.	EIC code A Resource Object is only used if a specific Resource Object is to be activated.
eriod				
imeInterval	UTC DateTime interval	Y E S	This information provides the start and end date and time of the period being reported.	The start and end date and time must be expressed in UTC time zone and in compliance with the following format: YYYY-MM-DDTHH:MMZ/YYYY- MM-DDTHH:MMZ.
esolution	PTnM	Y E S	The resolution defining the number of periods that the time interval is divided.	PnYnMnDTnHnMnS. Where nY expresses a number of years, nM a number of months, nD a number of days. The letter "T" separates the date expression from the time expression and after it nH identifies a number of hours, nM a number of minutes and nS a number of seconds.
	eUnit .on :eObject eriod imeInterval	 NAW NAW NAU A01 A02 A07 A09 Conordian A07 A09 Conordian A07 A09 Conordian Conord	1001A00074E SSUnitMAWY E S.onA01 A02Y E S.onA01 A02Y E S.onA07 A09Y E S.onA07 A09Y E S.onA07 A09Y E S.onA07 A09Y E S.onA07 A09Y E S.onA07 A09Y E S.onA07 A09Y E S.onA07 A09Y E S.onA07 A09Y E S.onA07 A09Y E S.onA07 A09Y E S.onA07 A09Y S.onIntervalY E S.onUTC DateTime intervalY E S.onPTnMY E S	1001A00074 E energy is coming from SUDIT MAW Y The unit of measurement used for the quantities expressed within the time series. Son A01 Y This identifies the direction of the energy flow. Non A01 Y The status of the specific activation request. A07 A09 Y Secobject Secobject (118 chars) N Identification of the resource that is used to supply energy capabilities to the System Operator. secobject UTC DateTime interval Y This information provides the start and end date and time of the period being reported. esolution PTnM Y The resolution defining the number of periods that the time interval is

	Pos	(16 chars)	Y E S	This information provides the relative position of a period within an activation interval	The relative position must be expressed as a numeric integer value beginning with 1. All leading zeros must be suppressed.	
	Qty	(1…17 numeric chars)	Y E S	This information defines the quantity that is to be activated for the interval in question and that is expressed in the Measurement Unit Quantity.		
Reason						
Re sime Cos	deries	(13 chars)	Y	Reason codes for	A37 - Balancing	
			E S	-activation	201 - Countertrade 202 - Countertrade 203 - Countertrade 204 - Countertrade 205 - Countertrade A46 - System services	

8. Form for acknowledgement message, communication via web service

Document	IEC 62325-351 Acknowledgement			
Document format	.XML			
Namespace	urn:entsoe.eu:wgedi:acknowledgement:acknowledgementdocument:6:0			
Communication channel	web-service			

Document structure diagram



Tag	Value	Mandatory	Description	Conditions
Header				
DocumentIdentification	(135 chars)	Y E S	An acknowledgement document is sent in reply to the receipt of a document.	This identification is assigned by the party who is acknowledging the application reception of a document
DocumentDateAndTime	UTC DateTime	Y E S	Date and time of transmission of the acknowledgement.	The date and time that the document was prepared for transmission by the sender. The date and time must be expressed in CET time zone and in UTC as YYYY-MM- DDTHH:MM:SSZ
SenderIdentification	(116 chars)	Y E S	Identification of the party that is the owner of the document	EIC code of the sender
SenderRole	A27	Y E S	Identification of the role that is played by the sender.	A27 - resource provider

ReceiverIdentification		10x1001A1001 B54W	Y E S	Identification of the party who is receiving the document	EIC code of TSO: 10X1001A1001B54W -AST
Rece	eiverRole	A04	Y E S	Identification of the receiver role	A04 - System operator
Reco cat:	eivingDocumentIdentifi ion	(135 chars)	Y E S	Unique identification of the document that has been received.	This information identifies the document that has been received by the receiving party. The identification is extracted from the received document.
Rece	eivingDocumentVersion	(13 chars)	Y E S	The version of the document that has been received.	The document version must be provided for all documents being acknowledged that have a document version attribute.
Reco	eivingDocumentType	(13 chars)	Y E S	The document type is used to identify the type of document being acknowledged.	The document type is mandatory in contexts where there is potential ambiguity about the document being acknowledged.
	TimeSeriesRejection		N O		
	SendersTimeSeriesIden tification	(135 chars)	Y E S	The identification code provided in the document being acknowledged to identify a time series with error.	
	ReasonCode	(13 chars)	N O	A code providing the acknowledgement status at Time Series Level.	Reason codes are described in the table below.
	ReasonText	(1150 chars)	N O	Textual description of a rejection.	Reason Title from table below should be used as ReasonText.
	TimeIntervalError		N O		
	QuantityTimeInter val	UTC DateTime	Y E S	The start and end date and time of the time period in error. This information is used to identify the time interval that has been identified as being in error.	This is a calculated value using the position in question, the resolution and the start of the time interval of the period. The date and time must be expressed in in CET time zone and UTC as YYYY-MM- DDTHH:MM:SSZ
	ReasonCode	(13 chars)	Y E S	A code providing the acknowledgement status at Interval level.	Reason codes are described in the table below.
	ReasonText (1150 chars)		Y E S	Textual description of a rejection.	Reason Title from table below should be used as ReasonText.
Rea	son		Y E S		
Rea	ReasonCode (13		Y E S	A code providing the acknowledgement status.	Reason codes are described in the table below.
Rea	sonText	(1150 chars)	Y E S	Textual description of a rejection.	Reason Title from table below should be used as ReasonText.

XML elements group	Data entity
Acknowledgment header elements	Documents
TimeSeriesRejection elements	Document validation errors. In this case field <i>Reference to Time Series ID</i> are mandatory.
TimeIntervalError elements	Document validation errors. In this case fields <i>Reference to Time Series ID</i> and <i>Reference to Interval ID</i> are mandatory.
Reason	Document validation errors

ACKNOWLEDGMENT XML MESSAGE DATA MAPPING

Acknowledgement message error codes

The following codes are used to indicate validation errors in the incoming messages.

Reason code	Reason Title	Meaning			
Header level					
A01	Message Fully Accepted	Message is accepted.			
A02	Message Fully Rejected	Message is not accepted.			
A03	Message contains errors at the time series level	It is necessary to look at the time series level to determine the time series that contain errors.			
A04	Schedule time interval incorrect	The schedule time interval is not within the contractual agreement or the period does not agree with the schedule time interval.			
A51	Message identification or version conflict	Message version number conflict. The message identification is already in the receiving system or a higher version already exists.			
A53	Receiving party incorrect	The receiving party or receiving role code is incorrect. The receiver party or role doesn't correspond to the current document type. Message rejected.			
A78	Sender identification and/or role invalid	The sender party or sender role code is incorrect. The sender party or role doesn't correspond to the current document type. Message rejected.			
A79	Process type invalid	The process type does not figure in the list of valid process types for this document.			
A80	Invalid domain	The domain does not found in the list of valid domains for this document and process.			
	Time Series level. These errors are shown in acknowledgment TimeSeriesRejection block.				
A09	Time series not matching	Time series mismatches.			

		In Coba use when the particular bid's describing information (business type, Resource provider, Direction etc.) in the CMOL and AO doesn't match.
A22	In party/Out party invalid	In Party or Out Party EIC code on the data file is faulty. Also will be shown in which Time Series (by Time series ID) the faulty code was discovered.
A23	Area invalid	In Area or Out Area EIC code on the data file is faulty. Also will be shown in which Time Series (by Time series ID) the faulty code was discovered.
A55	Time series identification conflict	The identification of the time series is duplicated or incorrect. Time series and message will be rejected.
A57	Deadline limit exceeded/Gate not open	The deadline for receiving schedule messages has passed. Message rejected. Message is sent either too soon (before Gate Open time) or too late (after Gate Close time).
A62	Invalid business type	The business type does not belong to the valid set of business types for the process in question.
B09	Bid not accepted	The bid in question has NOT been accepted (bid is not divisible, etc.)
		 This code will be used in following discrepancies as well: Specified energy price does not correspond to minimum and maximum values defined for bid product in the product configuration
A81	Matching period invalid	The period is not within the expected limits (for example, doesn't correspond to minimum and maximum activation duration).
		The one time series periods overlap. Message rejected.
Interval These er	level Trors are shown in acknowledgn	nent TimeIntervalFrror block.
A41	Resolution inconsistency	The resolution is not coherent with the time interval, or resolution not valid – for example is zero for the first activation order version
A42	Quantity inconsistency	The quantity is not coherent. For example a time period with the same version number but different quantities or a not permitted number of digits after the decimal point, etc. Digits after the decimal dot are more than permitted. All data must be presented with accuracy one digit after the decimal dot.
		 This code will be used in following discrepancies as well: Specified tendered quantity (BidQty) does not correspond to minimum and maximum values defined for bid product in the product configuration

		 Specified minimum activation quantity exceeds minimum value defined for bid product in the product configuration Specified minimum step increment quantity does not correspond to minimum and maximum values defined for bid product in the product configuration
A46	Quantities must not be signed Values	On the form there must be no signed values: consumption or production must not be negative values; for the fixed deliveries there is a separate column for each direction – negative numbers are not used.
A49	Position inconsistency	A position is missing or too many.
A71	Linked bid rejected due to associated bid unsuccessful	The bid in question has been rejected because an associated bid has been unsuccessful or is not activated yet.

9. Form for the submission of generation schedule and consumption schedule (baseline)

Document	IEC 62325-351 Energy Account Market Document
Document format	.XML
Namespace	urn:iec62325.351:tc57wg16:451-4:energyaccountdocument:4:0
Communication channel	web-service

DOCUMENT STRUCTURE DIAGRAM



Tag	Value	Mandatory	Description	Conditions
Header				
mRID	(135 chars)	Y E S	Unique identification of the document for which the time series data is being supplied.	All additions, modifications, or suppressions for the time series must use the same identification.
RevisionNumber	(13 chars)	Y E S	Document version	Version of the document being sent. A document may be sent several times, each transmission being identified by a different version number that starts at 1 and increases sequentially.

Туре	A14	Y E S	The document type	Al4 - Resource provider resource schedule
DocStatus	A02	Y E S	The document status	A02 - Final
process.processType	A05	Y E S	The process type identifies the process to which the information flow is directed.	A05 - Metered data aggregation
process.classification Type	A01	Y E S	A type that is used to classify the document by aggregation or classification	A01 - Detail
sender_MarketParticipa nt.mRID	(116 chars)	Y E S	Identification of the party that is the owner of the document	EIC code of the sender
sender_MarketParticipa nt.marketRole.type	A27	Y E S	Identification of the role that is played by the sender.	A27 - resource provider
receiver_MarketPartici pant.mRID	10X1001A1001B 54W	Y E S	I racinerricación or	AST EIC code: 10X1001A1001B54W
receiver_MarketPartici pant.marketRole.type	A04	Y E S	Identification of the receiver role	A04 - System operator
CreatedDateTime	UTC DateTime	Y E S	The date and time that the document was prepared for transmission by the application of the sender	The date and time must be expressed in UTC time zone and in UTC as YYYY-MM- DDTHH:MM:SSZ.
period.timeInterval				
start	UTC DateTime	Y E S	The beginning date and time of the period covered by the document.	The start date and time must be expressed in UTC time zone and as YYYY-MM-DDTHH:MMZ. period.timeInterval is fixed during 1 day. Full local time day, expressed in UTC.

end	UTC DateTime	Y E S	Dirating dated and	The end date and tin must be expressed in UTC time zone and a YYYY-MM-DDTHH:MMZ. Period.timeInterval fixed during 1 day.
Time series				
mRID	(135 chars)	ΥES	Sender's identification of the time series instance.	This must be unique for the whole docum and guarantee the n- duplication of all attributes of the account time series class. This must be unique for the whole docum and guarantee the n- duplication of all attributes of the account time series class. mRID should be provided in followin form: EIC_NNNNNNNNNNNNNNN P_XXXXXXX where N's are replat with EIC of the object with measurement po- number of corresponding commercial metering point (within the object) under which the sub-metering is done(for example:12345678) Example:EIC_00Z00EXAL LE000A_MP_12345678
BusinessType	A13	Y E S	The nature of the time series for which the product is handled.	A13 - Load profile
Product	8716867000030	Y E S	Identification of an energy product such as power, energy, reactive power, transport, capacity, etc.	8716867000030 - Act energy
objectAggregation	A02	Y E S	object is	A02 Metering point
area_Domain.mRID	10YLV- 1001A00074	Y E S	settlement	Latvia EIC code: 10YLV-1001A00074

			-		
marketPar RID	ticipant.m	(116 chars)	N	The party of concern for the time series	In special cases when report data is concerning other market participant, EIC of that said participant should be included here. By default, sender EIC should be used.
measure_U	nit.name	MWH	Y E S	The unit of measurement used for the quantities expressed within the time series.	Always expressed in megawatt-hours - MWH
marketEva nt.mRID	luationPoi	(1…16 chars) EIC	N O	A point where the calculation of the energy produced or consumed is carried out.	It may be a physical point situated at an extremity of a line; a virtual point that is an agreed position between two connections or an aggregation of physical or virtual points. Baseline (Baseline data for whole portfolio): EIC of BSP
Pe	riod				
Ti	meInterval				
	start	UTC DateTime	Y E S	The beginning date and time of the period being reported.	The start date and time must be expressed in UTC time zone and as YYYY-MM-DDTHH:MMZ. timeInterval is same as period.timeInterval for submission on D-1. For Baseline updates during day only MTUs that are available for updates (no later than HH-60min) can be included. YYYY-MM-DDTHH:MMZ.
	end	UTC DateTime	Y E S	Ending date and time of the period being reported.	The end date and time must be expressed in UTC time zone and as YYYY-MM-DDTHH:MMZ. timeInterval for submission on D-1 is the same as period.timeInterval. For Baseline updates during day only MTUs that are available for updates (no later than HH-60min) can be included. YYYY-MM-DDTHH:MMZ

Re.	solution	PT1H	Y E S	The resolution defining the number of periods that the time interval is divided.	PnYnMnDTnHnMnS: Where nY expresses a number of years, nM a number of months, nD a number of days. The letter "T" separates the date expression from the time expression and after it nH identifies a number of hours, nM a number of minutes and nS a number of seconds. Baseline: PT1H
	Point				
	Position	(16 chars)	Y E S	This information provides the relative position of a period.	The relative position must be expressed as a numeric integer value beginning with 1. All leading zeros must be suppressed.
	in_Quanti ty.quanti ty ty		Y E S	The quantity of the product that enters the area.	The quantity of the product that enters the area for the position within the account interval in question. Max three decimal positions.
	out_Quant ity.quant ity	(1…17 numeric chars)	Y E S	The quantity of the product that leaves the area.	The quantity of the product that leaves the area. For the position within the account interval in question. Max three decimal positions.

10. BSP control metering data submission form

Document	IEC 62325-351 Energy Account Market Document				
Document format	.XML				
Namespace	urn:iec62325.351:tc57wg16:451-4:energyaccountdocument:4:0				
Communication channel	web-service				

DOCUMENT STRUCTURE DIAGRAM



Tag	Value	Mandatory	Description	Conditions
Header				
mRID	(135 chars)	Y E S	Unique identification of the document for which the time series data is being supplied.	All additions, modifications, or suppressions for the time series and must use the same identification.
RevisionNumber	(13 chars)	Y E S	Document version	Starts at 1 and increases sequentially if metering data update is necessary.
Туре	A11	Y E S	The document type	All - Aggregated energy data report
DocStatus	A02	Y E S	The document status	A02 - Final

process.processType	A05	Y E S	The process type identifies the process to which the information flow is directed.	A05 - Metered data aggregation
process.classification Type	A01	Y E S	A type that is used to classify the document by aggregation or classification	A01 - Detail
sender_MarketParticipa nt.mRID	(116 chars)	Y E S	Identification of the party that is the owner of the document	EIC code of the sender
sender_MarketParticipa nt.marketRole.type	A27	Y E S	Identification of the role that is played by the sender.	A27 - resource provider
receiver_MarketPartici pant.mRID	10X1001A1001B 54W	Y E S	Identification of the party who is receiving the document	AST EIC code: 10X1001A1001B54W
receiver_MarketPartici pant.marketRole.type	A04	Y E S	Identification of the receiver role	A04 - System operator
CreatedDateTime	UTC DateTime	Y E S	The date and time that the document was prepared for transmission by the application of the sender	The date and time must be expressed in UTC time zone and in UTC as YYYY-MM- DDTHH:MM:SSZ.
period.timeInterval				
start	UTC DateTime	Y E S	The beginning date and time of the period covered by the document.	The start and end date and time must be expressed in UTC time zone and as YYYY-MM- DDTHH:MMZ. Period.timeInterval is one full quarter hour. Possible values for start time: YYYY-MM-DDTHH:00Z; YYYY-MM-DDTHH:15Z; YYYY-MM-DDTHH:15Z; YYYY-MM-DDTHH:45Z.
end	UTC DateTime	YES	Ending date and time of the period covered by the document.	The start and end date and time must be expressed in UTC time zone and as YYYY-MM- DDTHH:MMZ. Period.timeInterval is one full quarter hour. Corresponding possible values for end time: YYYY-MM-DDTHH:15Z; YYYY-MM-DDTHH:15Z; YYYY-MM-DDTHH:45Z; YYYY-MM-DDTHH:00Z.

Time series				
mRID	(135 chars)	Y E S	Sender's identification of the time series instance.	This must be unique for the whole document and guarantee the non- duplication of all the attributes of the account time series class. This must be unique for the whole document and guarantee the non- duplication of all the attributes of the account time series class. mRID should be provided in following form: EIC_NNNNNNNNNNNNNM_M P_XXXXXXX where N's are replaced with EIC of the object within whom the submetering is done (for example: 00Z00EXAMPLE000A) and X's are replaced with measurement point number of corresponding commercial metering point (within the object) under which the sub-metering is done(for example:12345678) Example:EIC_00200EXAMP LE000A_MP_12345678
BusinessType	A14	Y E S	The nature of the time series for which the product is handled.	Al4 – Aggregated energy data
Product	8716867000030	Y E S	Identification of an energy product such as power, energy, reactive power, transport, capacity, etc.	8716867000030 - Active energy
objectAggregation	A02	Y E S	Identifies how the object is aggregated	A02 Metering point
area_Domain.mRID	10YLV- 1001A00074	Y E S	The area of concern for the imbalance settlement responsible that the time series addresses	Latvia EIC code: 10YLV-1001A00074

market RID	Participant.m	(116 chars)	N	The party of concern for the time series	In special cases when report data is concerning other market participant, EIC of that said participant should be included here. By default, sender EIC should be used.
measure_Unit.name		МWH	Y E S	The unit of measurement used for the quantities expressed within the time series.	Always expressed in megawatt-hours - MWH
marketEvaluationPoi nt.mRID		(1…16 chars)	И	A point where the calculation of the energy produced or consumed is carried out.	It may be a physical point situated at an extremity of a line; a virtual point that is an agreed position between two connections or an aggregation of physical or virtual points. Metering data: EIC of the object within whom the submetering is done.
	Period				
	TimeInterval				
	start	UTC DateTime	Y E S	The beginning date and time of the period being reported. Same as Period.timeInterva 1	The start date and time must be expressed in UTC time zone and as YYYY-MM-DDTHH:MMZ. Period.timeInterval is one full quarter hour. Possible values for start time: YYYY-MM-DDTHH:00Z; YYYY-MM-DDTHH:15Z; YYYY-MM-DDTHH:15Z.
	end	UTC DateTime interval	Y E S	Ending date and time of the period being reported. Same as Period.timeInterva l	The end date and time must be expressed in UTC time zone and as YYYY-MM-DDTHH:MMZ. Period.timeInterval is one full quarter hour. Corresponding possible values for end time: YYYY-MM-DDTHH:15Z; YYYY-MM-DDTHH:25Z; YYYY-MM-DDTHH:45Z; YYYY-MM-DDTHH:00Z.

		I			
Re	solution	PT1M	Y E S	The resolution defining the number of periods that the time interval is divided.	PnYnMnDTnHnMnS: Where nY expresses a number of years, nM a number of months, nD a number of days. The letter "T" separates the date expression from the time expression and after it nH identifies a number of hours, nM a number of minutes and nS a number of seconds. Metering data: PT1M
	Point				
	Position	(16 chars)	Y E S	This information provides the relative position of a period.	The relative position must be expressed as a numeric integer value beginning with 1. All leading zeros must be suppressed.
	in_Quanti ty.quanti ty	(117 numeric chars)	Y E S	The quantity of the product that enters the area.	The quantity of the product that enters the area for the position within the account interval in question. Six decimal positions should be included.
	out_Quant ity.quant ity	(117 numeric chars)	Y E S	The quantity of the product that leaves the area.	The quantity of the product that leaves the area. For the position within the account interval in question. Six decimal positions should be included.
	Reason				
	Reason Code	A01 A48	Y E S	The coded motivation of an act.	Metering data: A01 - Message fully accepted A48 - Modification reason After the deadline Metering data modification (with code A48) is allowed only in case of communication or technical problems.
	Reason Text	(1512 chars)	N O	Additional textual information providing an additional explanation of the reason code.	If ReasonCode A48: reason of the modification.

12. Schematic of the message exchange process for exchanging messages via web service

