NEW MARKET MANAGEMENT SYSTEM

SCHEDULING MODULE



Market Management System

- Novita's Market Management System consists of 3 modules:
 - Scheduling System (ESS)
 - Balancing System
 - Settlement System



Balance Responsible Schedules

- ► For every role Balance Responsible Party submits one schedule:
 - Trade Responsible Party Trade Responsible Schedule
 - Consumption Responsible Party Consumption Responsible Schedule
 - Production Responsible Party Production Responsible Schedule



Schedule Message

- Balance Responsible Party can submit only one Schedule Message per role per day.
- System will accept Schedule Message with global position not in balance.
- Schedule Message can be manualy created in Scheduling Web Client application, imported as XML into Scheduling Web Client application or sent via authorized e-mail addresses.



Nomination Gates in Day-Ahead Process 1

- Balance Responsible Parties will be able to submit their Balance Responsible Schedules 7 days ahead but Scheduling System will check for syntax and semantic errors only.
- Checking of the Capacity Contracts will be done only after Rights Documents Gate closure.
- Time of Rights Documents Gate closure vary from border to border, but after 16:00h CET D-2 all Rights Document Gate for day D will be closed.
- After Rights Documents Gate closure Balance Responsible Parties will receive Anomaly concerning missing or exceeded Capacity Contract.



Nomination Gates in Day-Ahead Process 2

- Nominations of long-term exchanges on borders with Joint auctions shall be sent before 08:00 CET in day D-1 (trading day) for day D (delivery day).
- Nominations of long-term exchanges on borders with Split auctions shall be sent before 14:30 CET in day D-1 (trading day) for day D (delivery day).
- Nominations of short-term cross-border exchanges shall be sent before 14:30 CET in day D-1 (trading day) for day D (delivery day).



Nomination Gates in Day-Ahead Process 3

- Nominations of internal transaction, Consumption Responsible Schedules and Production Responsible Schedule shall be sent before 14:30 CET in day D-1 (trading day) for day D (delivery day).
- Checking of the internal mismatch and imbalance will be done only on predefined Internal Matching Gates.



Nomination Gates in Intraday Process 1

Borders working in sessions:

- Balance Responsible Parties will be able to submit their Balance Responsible Schedules from 18:00 CET in D-1 for D, but no later then 90 minutes before first hour of the session.
- Checking of the Capacity Contracts will be done after Rights Documents
 Gate closure for each session.
- Time of Rights Documents Gate closure is currently set to 140 minutes before first hour of the session (this can be a subject of change for each border separately).
- After Rights Documents Gate closure, Balance Responsible Parties will receive Anomaly concerning missing or exceeded Capacity Contract.



Nomination Gates in Intraday Process 2

Borders working in flowing blocks:

- Balance Responsible Parties will be able to submit their Balance Responsible Schedules from 18:00 CET in D-1 for D, but no later then 60 minutes before first hour with change.
- Checking of the Capacity Contracts will be done immediately while submitting Balance Responsible Schedules.



Nomination Gates in Intraday Process 3

Balance Responsible Parties will be able to submit their internal transaction, Consumption Responsible Schedules and Production Responsible Schedule from 18:00 CET in D-1 for D, but no later then 60 minutes before first hour with change.

Checking of the internal mismatch and imbalance will be done only on predefined Internal Matching Gates.



Right Status Information

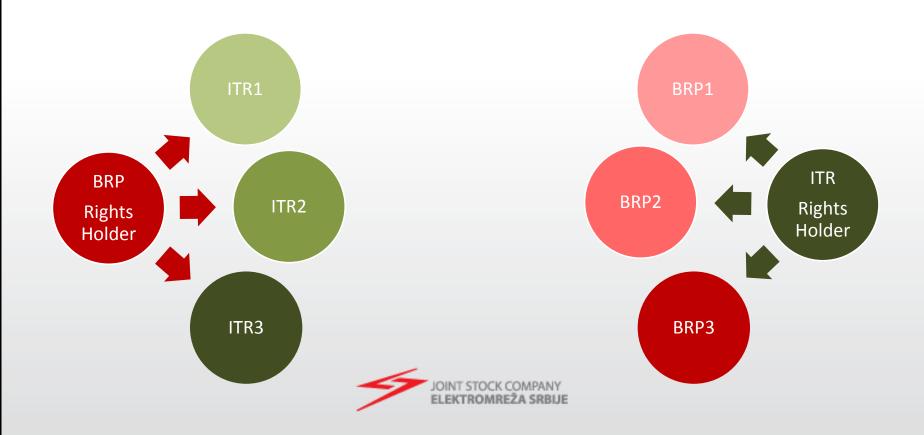
3 Acknowledgement Document - EMS - 20170310_ACK_EMS_00004 - 0				X
General Time Series (1) XML				
<u>I</u> dentification:	20170310_ACK_EMS_00004			
Time interval from:	2017-03-10	Time interval thru:	2017-03-10	
Document t <u>y</u> pe:	A17 - Acknowledgement Document			
<u>S</u> ender:	EMS (10XCS-SERBIATSO8)	<u>R</u> eceiver:	EMS (10XCS-SERBIATSO8)	
Sender role:	A04 - System operator	Receiver role:	A08 - Balance responsible party	
Receiving document identification:	20170310_BRS_EMS_101252	Receiving document version:	1	
Receiving document type:	A01 - Balance responsible schedule	$\underline{\textbf{D}}$ ate time receiving document:	2017-03-08 10:14:53 AM	
Recei <u>v</u> ing payload name:				
Created:	2017-03-08 10:14:53 AM	Processed:	2017-03-08 10:14:53 AM	
Reasons: A01 - Message fully accepted Message fully accepted A03 - Message contains errors at the time series level Message contains errors at the time series level				
	Open receiving document	ad Open internal request		
3 Acknowledgement Document - EMS - 20170310_ACK_EMS_00004 - 0				
General Time Series (1) XML				
Time Series Identification A Reasons				
TS00001 (1) A75 - Right status information One or more of the expected rights documents have not been received yet.				



Cross-border partners

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Cross-border partners will be no logner necessary. Rights Holder can nominate exchange with any Registered Participant in neighbouring Control Area (M:N model).



ENTSO-E Scheduling System IG Version

*Current

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="schedule-xsl.xsl"?>
<ScheduleMessage DtdVersion="2" DtdRelease="3">
```



*Future

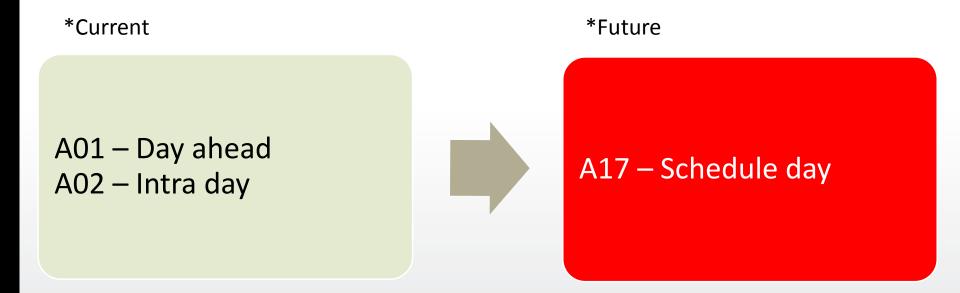
```
<?xml version="1.0" encoding="utf-8"?>
<ScheduleMessage DtdVersion="3" DtdRelease="3">
```



Message Identification, Type and Version

- Schedule Message Identification is arbitrarily. Maximum length is 35 signs. Only alphanumeric signs, hyphen (-) and underscore (_) are allowed. Note: Blanco is not allowed.
- Schedule Message Identification for adequate role has to be unique for every day.
- Message Type is always A01 Balance Responsible Schedule.
- Message Version has to be greater than or equal to maximum Time Series Version in Schedule.
- When Schedule Message is being sent again, Message Version must be increased.







*Current

A01 – Trade Responsible Party

A02 – Consumption Responsible Party

A06 – Production Responsible Party



*Future

A01 – Trade Responsible Party

or

A08 – Balance Responsible Party



- Time Series Identification is arbitrarily. Maximum length is 35 signs. Only alphanumeric signs, hyphen (-) and underscore (_) are allowed. Note: Blanco is not allowed.
- Time Series Identification has to be unique within the Schedule Message.
- Time Series Version has to be lower than or equal to Schedule Message Version.
- When values in Time Series are modified, Time Series Version must be increased, as well as the Message Version.
- Version of Confirmed Time Series cannot be changed.



Domain

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- New atribute is being introduced for nomination of Production Responsible Schedule and Consumption Responsible Schedule – Domain.
- Domain should be placed after "ScheduleTimeInterval" and before "ScheduleTimeSeries"
- Domain EIC for Production Responsible Schedule: 34Y-ESS-PRP----7
- Domain EIC for Consumption Responsible Schedule: 34Y-ESS-CRP----0
- <Domain v="34Y-ESS-CRP----0" codingScheme="A01"/>



Object Aggregation:

A02 – Metering point



A04 – Agreement Identification

Atribute Metering Point Identification shall not be used anymore for external trade.



 Capacity Contract Type and Capacity Agreement Identification rules will remain the same.

- Right Holder will be Market Participant who obtain Capacity in an Auction.
- Right Holder must be either IN Party or OUT Party in external trade.
- Balance Responsible Parties can see only their Capacity Contracts.



External Matching in Day-Ahead Process

- Matching process on borders will be carried through Long-term and Shortterm Matching cycles every day for following day.
- During Matching cycles, only Balance Responsible Party with external mismatch will be able to submit new version of Schedule Message with modification on concerning border.
- Once confirmed Time Series cannot be changed.
- Time Series Confirmation for external transactions will be created for every border separately after successful matching.
- In case of long-term mismatch on borders with Joint auctions Cut-off will be performed at 08:30 CET D-1 for D.
- ► In case of short-term mismatch or long-term mismatch on borders with Split auctions, Cut-off will be performed at 15:30 CET D-1 for D.



Internal Matching in Day-Ahead Process

- First Internal Matching Gate will be at 12:00 CET in D-1 for D.
- After receiving first Anomaly, next one will be initiated after every change of internal mismatch during next Internal Matching Gate.
- Cut-off for internal transactions is at 15:30 CET D-1 for D.
- Time Series Final Confirmation for internal transactions will be created at 15:30 CET.



Power Exchange Matching in Day-Ahead Process

- In case of mismatch between internal trade nominated by BRP and by Power Exchange, system will impose values nominated by Power Exchange (SEEPEX).
- Cut-off will be performed at Internal Gate Closure (14:30 CET in D-1 for D).
- Time Series Final Confirmation for internal transactions with Power Exchange will be created at Cut-off Gate.
- Confirmed Time Series with Power Exchange cannot be changed.



Matching process in Intraday Process 1

- Matching process will be carried through Matching cycles.
- For borders working in flowing blocks it is currently planned three Correction Matching cycles per each hour and one Cut-off Matching cycle. In case of mismatch, cut-off will be performed 45 minutes before first hour with change.
- For borders working in sessions it is currently planned three Correction Matching cycles per each session and one Cut-off Matching cycle. In case of mismatch, cut-off will be performed 45 minutes before the first hour of session.
- During Correction Matching Cycles, only Balance Responsible Party with external mismatch will be able to submit new version of Schedule Message with modification on concerning border.



Matching process in Intraday Process 2

Once confirmed Time Series with external nominations cannot be changed.

■ Time Series Confirmation will be created for every border separately after successful matching within Matching cycle.



Internal Matching in Intraday Process

- It is currently planned three Internal Matching cycles per each hour.
- After receiving first Anomaly, next one will be initiated after every change of internal mismatch during next Internal Matching Gate.



- We would like to invite you kindly to participate in live testing of the new Scheduling system.
- In order to be able to perform tests, you should send us your predefined e-mail adresses for which we will authorize you to submit Schedule Messages and receive notification from the system.
- We will create for you User Account and Password in order that you can access Scheduling Web Client application.
- We will send you notice of starting date for testing and we will also provide you with web-link and User Manual for Scheduling Web Client application.



Questions?



Thank you for your attention!

