MRC Day-Ahead Price Coupling
Meeting with the Energy Community Contracting Parties

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Co-Chair ID

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Co-Chair DA
MRC organization structure – Current situation

- MRC JSC
- PMO
- JAO: SPOC + Settlement Party
- MRC OPSCOM
- Algorithm & SF TF
- Legal TF
- Budget TF
- ICG
  - Coordination Group
  - Business and IT experts of different regions
- SDAC DAOA
  - PMO
  - DAOA
    - Core DAOA drafting team
    - Review group*

ToR on all groups, approved by JSC
DAOA ad hoc working group will be closed, as the work on the DAOA is finalized

* "all TSOs" (including non-MRC TSOs)
* "all NEMOs" (including non-MRC NEMOs)
I. PCR High Level Status

- Price Coupling of Regions (PCR) is the voluntary initiative of 7 European Power Exchanges, to develop a single price coupling solution to calculate electricity prices and allocate cross-border capacity on a day-ahead basis across Europe.
- PCR has, since its Go-Live in Feb 2014, proven to be operationally robust and ready to facilitate the EU target of an integrated electricity market.
- **Major milestones achieved:**
  - 04 Feb ‘14: NWE Go-Live + SWE in common synchronised mode using PCR
  - 13 May ‘14: SWE Full Coupling
  - 19 Nov ‘14: Launch of the 4M Market Coupling using separate PCR Solution
  - 24 Feb ‘15: CSE Coupling (FR-IT, AT-IT, SI-IT)
  - 20 May ‘15: CWE FB Implementation
  - 16 Jun ‘15: Provision of PCR Simulation Facility to MRC

### Expansion PCR

<table>
<thead>
<tr>
<th>Region</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4MMC</td>
<td>Separate PCR Solution, Successfully launched on 19 Nov 2014. To be coupled to MRC as soon as possible (via CEE Flow Based/NTC)</td>
</tr>
<tr>
<td>Serbia</td>
<td>Independent operation of algorithm</td>
</tr>
<tr>
<td>Switzerland</td>
<td>TBD integration into MRC</td>
</tr>
</tbody>
</table>
### MRC JSC Participants – 21 member Countries

85-90% of Europe's electricity consumption

#### 32 TSO's

- 50Hz
- Admie
- Amprion
- APG
- AST
- BritNed
- Creos
- Eirgrid
- Eltering
- ELES
- Elia
- Energinet
- ESO
- Fingrid
- HOPS
- LAGIE
- LitGrid
- MAVIR
- National Grid
- Nemo Link
- PSE
- REE
- REN
- RTE
- Statnett
- SvK
- Swissgrid
- TenneT BV
- TenneT GmbH
- TERNA
- Transelectrica
- Transnet BW

#### 12 PX's

- EPEX
- Nord Pool
- GME
- OMIE
- BSP
- Cropex
- EXAA
- HUPX
- IBEX
- OTE
- SemoPX
- TGE
MRC JSC Organisation of meetings

- Six MRC JSC meetings per year,
  - Normally at Munich Airport, Municom
  - Physical present, dial in not possible today due to size and technical constraints
- Draft agenda of the meeting is provided 3 weeks prior to the meeting
- Final draft agenda and session files are provided one week prior to the meeting
- All matters presented with cover-note (dec, info, dis)
- All material available on Projectplace

- Following dates are fixed so far in 2019
  - 13th of February 2019
  - 10th of April 2019
  - 11th of June 2019

- Plan to align with ID meetings
Example of follow-ups to JSC

### MNA planning - update 23/11/2018

<table>
<thead>
<tr>
<th>PCR MNA Development Planning - Version 22/11/2018</th>
<th>Responsible Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euphemia 10.3 Development &amp; Testing</td>
<td></td>
</tr>
<tr>
<td>- 1.1 Development Euphemia 10.3 Release - prototype 2</td>
<td>PSEB</td>
</tr>
<tr>
<td>- 1.2 Development Euphemia 10.3 Release - prototype 3</td>
<td>NAG</td>
</tr>
<tr>
<td>- 1.3 Development Euphemia 10.3 Development - prototype A</td>
<td>NAG</td>
</tr>
<tr>
<td>- 1.4 Development Euphemia 10.3 Development - Final prototype integration - into R3.9.9 WP</td>
<td>NAG</td>
</tr>
<tr>
<td>- 1.5 Type test - enhanced Euphemia 10.3 WP</td>
<td>NAG</td>
</tr>
<tr>
<td>- 1.6 FT creation - tests</td>
<td>NAG</td>
</tr>
<tr>
<td>- 1.7 PT creation - isolated Euphemia functional parts</td>
<td>NAG</td>
</tr>
<tr>
<td>- 1.8 PT creation - isolated Euphemia functional parts</td>
<td>NAG</td>
</tr>
<tr>
<td>- 1.9 Test report Euphemia 10.3</td>
<td>NAG</td>
</tr>
<tr>
<td>- 1.10 Development Euphemia 10.3 status release</td>
<td>NAG</td>
</tr>
<tr>
<td>- 1.11 Test Euphemia 10.3 a new release</td>
<td>NAG</td>
</tr>
<tr>
<td>- 1.12 Test Euphemia 10.3 a new release</td>
<td>NAG</td>
</tr>
</tbody>
</table>

| PMB 10.1 & PMB 10.2 Development & Testing        |                  |
| - 2.1 Test preparation for PMB 10.1 | NAG   |
| - 2.2 Development PMB 10.1 release review | NAG   |
| - 2.3 Development PMB 10.2 - release | NAG   |
| - 2.4 Development PMB 10.1 - Bug-fix version | NAG   |
| - 2.5 Euphemia with new interface delivered to Ursus | NAG   |
| - 2.6 Development PMB 10.2 - continued bug-fixing | NAG   |
| - 2.7 PMB 10.2 testing (Ursus) | NAG   |
| - 2.8 PMB 10.2 delivery (Ursus) | NAG   |

| Procedures impact assessment                      |                  |
| - 3.1 Review of AOC procedures | PSEB | NAG |

| Saph 10.3 - PMB 10.1, PMB 10.2 Integration testing |                  |
| - 4.1 Preparatory workplan AOC (PMB 10.1) | NAG |
| - 4.2 KMPM 10.1 (Integration final PMB 10.1 + Final R3.9.9) | NAG |

| Testing                                           |                  |
| - 5.1 Technical validation of the releases C1.5 and PMB 10.1 |                  |
| - 5.2 Testing C1.5 and PMB 10.1 level NFC systems |                  |
| - 5.3 Combined functional testing with BCR MIBs | NAG |
| - 5.4 Combined tests with PHENEX + PH | NAG |
| - 5.5 Combined functional testing: integration | NAG |
| - 5.6 Tests with PHENEX | NAG |
| - 5.7 Tests with PHENEX | NAG |
| - 5.8 Technical validation: testing of all BCR NFC systems | NAG |

10/12 - Update of FN22 Connectivity tests
b) Notable events* since 17/10/2016

Overview based on incident log and newly defined severity levels

MRC Incidents in period 2015-2018

Strong focus on operations
ICG Plan

ICG Deliverables:
- Budget and planning
- Regional MNA specificities
- Technical validation MNA specifications
- Testing and assessment of the MNA solution
- Monitoring of procedures updates
- Implementation SEC
- Implementation CCM

ICG assumptions
- First MNA Go-Live: January 2019, given the regional planning uncertainties
- MRC testing completion: preferably 4 weeks, but at least 2 weeks before Go-Live
- Duration MRC testing: 2 weeks MRC end to end testing including procedures and 1 week contingency

Legend:
- **Meeting**
- **DD** Completed
- **DD** Missed
- **DD** Go-Live
- **DD** Partially completed

**ICG Plan**

1. **JSC**
   - **Sept**: Plan update
   - **Oct**: Plan update when needed
   - **Nov**: 05
   - **Dec**: 13
   - **Jan**: 10
   - **Feb**: 11

2. **ICG**
   - **Collecting**: Deadline for inclusion in MRC plan
   - **Evaluating**: Validation
   - **Validation**: Validation
   - **Drawing guidance document**: Validation
   - **Monitoring**: Validation
   - **ICG Deliverables**
     - Budget and planning
     - Regional MNA specificities
     - Technical validation MNA specifications
     - Testing and assessment of the MNA solution
     - Monitoring of procedures updates
     - Implementation SEC
     - Implementation CCM

3. **OPS/COM**
   - **06**: SEM Q8
   - **20**: SDAC
   - **04**: Split DE
t
   - **15**: IST
   - **27**: NEMO

4. **PCR**
   - **INT**
   - **Proc. Test**
   - **PCR technical readiness**

5. **CWE**
   - **Impact assessment**
   - **System adaptation**
   - **Procedures adaptation**

6. **Baltic**
   - **Impact assessment**
   - **System adaptation**
   - **Procedures adaptation**

7. **Nordic**
   - **Impact assessment**
   - **System adaptation**
   - **Procedures adaptation**

8. **Polish**
   - **Impact assessment**
   - **System adaptation**
   - **Procedures adaptation**

9. **NRAs**
   - **Implementation plan**
   - **Monitoring of approved SEC and CCM**
New Governance SDAC + SIDC

- All TSOs and all NEMOs have agreed on an enduring Governance structure for DA and ID
- This implies changes for both DA and ID
- Currently more details are being worked out by the Governance Group
  - Roles and powers of the different bodies
  - Organizing of work
  - Relation to Entso-E MC / all NEMOs
  - Voting rules
  - Escalation rules
  - etc

- The TSO Governance Group is reporting via Market Integration to Entso-E Market Committee
  - Consulting the JSC MRC TSOs in the pre meetings
- NEMO Committee (Cosimo)
How to join the MRC operation?

• Harmonize law and rules
  – National legislation, implementing 3rd IEM Package

• Establish a PX
  – Can also be a serviced solution

• Partner inside the MRC
  – Establish a coupling project

• When new agreement is signed – SDAC DAOA
  – Energy Community parties can apply to become observers (By Decision in JSC)
Questions?