The implementation of the 15 minutes products in the Intraday Market
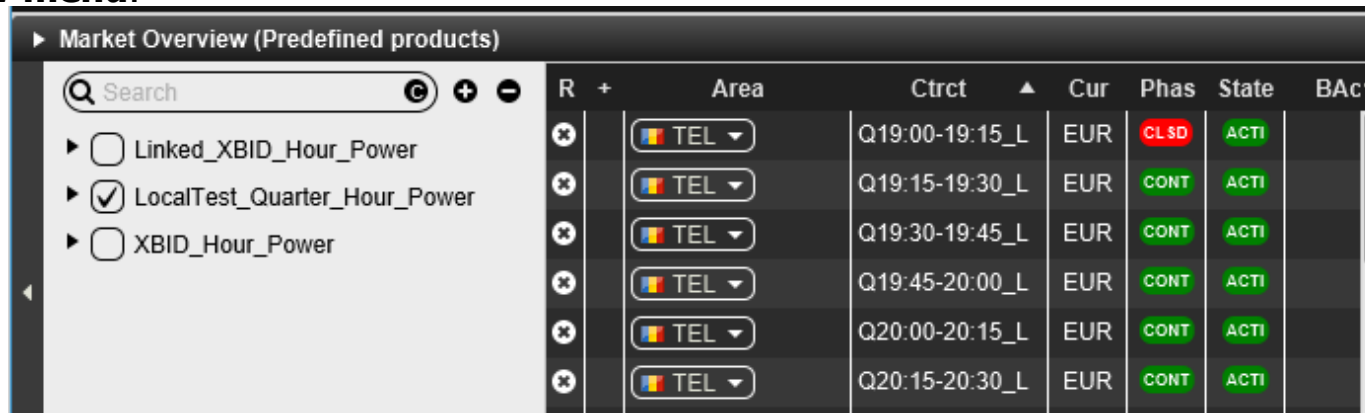
OPCOM S.A.

Legislative framework

- Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline for balancing the electricity system, Article 53 (1);

- Commission Regulation (EU) 2019/943 of 05 June 2019 regarding the internal electricity market, Articles 8 (4) si 8 (2);

- Order of ANRE no. 63 of 31.03.2020 approving the implementation schedule of the necessary measures to ensure the settlement conditions at an interval of 15 minutes;

- Order of ANRE no. 230 of 16.12.2020 prorogating the implementation of the settlement at an interval of 15 minutes until the date of **01.02.2021**.

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Trading on the 15 minutes contracts

- In accordance with the deadline provided by ANRE Order no. 230 of 16.12.2020, respectively on February 1, 2021, OPCOM will make the 15-minute product available for trading.

- Until the implementation of the 15-minute product on the RO-HU interconnector for cross-border trading within the Single Intra-Day Coupling (SIDC) - an ongoing process, this product will be traded locally.

- The 15-minute product will be offered for trading alongside the hourly product, including UDDP products (User Defined Delivery Period, a block product type). Prior to the implementation of the 15-minute product on the RO-HU interconnector, trading within SIDC will continue exclusively on hourly and UDDP products. After this moment, both 15 min and 60 min products (linked products as defined within the Annex 1 of the Procedure related to the operation of the intraday electricity market), will be traded locally exclusively during the periods when cross-border trading is not possible.

- The 15 min product can be tested by market participants in the simulation environment provided by OPCOM, respectively https://portal-simu.m7.energy/xrpm/simu/.

- The API access facility will be made available by OPCOM after clarifying all implications with the trading system provider.

Changes made due to the implementation of the local 15 minutes product

- To trade on the 15 minutes contracts it is required to select the corresponding product in the **Market overview menu**.

- The trading schedule of the 15 minutes contracts is similar to the one of the hourly products. Each 15 minutes contract (**Q**XX:XX-XX:XX_L) will open for continuous trading starting with 15:00 CET in the previous day and it will close 60 minutes before delivery starts.

- Creating block offers based on 15 minutes contracts isn't possible.

Notes:

- In the production environment the product will have the name: **Local_Quarter_Hour Power**

- Please note that the scheduling attached to the contracts in SIMU environment could be different from the production one, for testing reason.

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Physical notification for granularity of 15 minutes

- The physical notification will have 15 minutes granularity, therefore will contain 96 (92, 100 during the daylight-saving time changes) intervals of 15 minutes instead of 24 (23,25) hourly intervals.

- A trade of 15 MW on the hourly contract 22-23_XB (CET), which coincide with the intervals 93, 94, 95, 96 (related to the hourly interval 23-24 EET) from the physical notification, is represented in the physical notification on all 4 15 minutes intervals (check the previous examples)

- A trade of 30 MW on the contract Q15:00-15:15_L (CET) is represented on interval 65 in the physical notification (related to the interval 16:00-16:15 EET).

```
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  </Interval>
- <Interval>
    <Pos v="94"/>
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  </Interval>
- <Interval>
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  </Interval>
- <Interval>
    <Pos v="96"/>
    <Qty v="15.0"/>
  </Interval>
```

```
- <Interval>
    <Pos v="65"/>
    <Qty v="30.0"/>
```

Note: Physical notification with 15 min granularity will apply as of 1st February 2021 EET delivery day, respectively starting with first hour (EET time) of 1st February 2021.

The implementation of the 15 minutes products in the Intra-day Market

Principles of bidding/trading at a granularity of 15 minutes (1)

- Bidding and trading at a granularity of 15 minutes will be done considering the **average hourly power [MW]** and **the price for a MWh [Euro/MWh]**.

Example 1:

- In case of bidding/trading of 10 MW at the price of 10 Euro on a 15 minutes contract **Q11:30-11:45_L (CET)**, the following will be applied:

  - Physical notification (average hourly power) on 15 minutes intervals: 10 MW on the interval 12:30-12:45 EET;

  - Energy traded on 15 minutes interval: 10*15/60=2,5 MWh;

  - The value of the trade related to the 15 minutes interval: (10*15/60)*10=25 Euro.

Side	Contract	Quantity	Price (EUR)	Type			Val.Restr.	Date & Time	Area
Buy Sell	Q10:30-10:45_L	10.0	10.00	REG			GFS	Validity Date	TEL

Text	Recv BG	Accnt	O/C	Balancing Group	Exe.Restr.	State
Text	Recv BG	P	O		NON	ACTI

The implementation of the 15 minutes products in the Intra-day Market

Principles of bidding/trading at a granularity of 15 minutes (2)

Example 2:

- In case of bidding/trading of 10 MW at a price of 10 Euro on a global hourly contract **11:00-12:00_XB (CET)**, the following will be applied:

  - Physical notification (average hourly power) at 15 minutes:

    - 10 MW on the interval 12:00-12:15 EET;

    - 10 MW on the interval 12:15-12:30 EET;

    - 10 MW on the interval 12:30-12:45 EET;

    - 10 MW on the interval 12:45-13:00 EET.

  - Energy traded on the hourly interval: 10 MWh;

  - The value of the trade related to the hourly interval : 10*10=100 Euro

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Principles of bidding/trading at a granularity of 15 minutes (3)

- Considering the previously exemplified trades for the same participant and also sense (sell or buy), the following is obtained:
    - Physical notification (average hourly power) at 15 minutes:
        - 10 MW on the interval 12:00-12:15 EET;
        - 10 MW on the interval 12:15-12:30 EET;
        - 20 MW on the interval 12:30-12:45 EET;
        - 10 MW on the interval 12:45-13:00 EET.
    - Total energy traded : 12.5 MWh;
    - Total value of the energy traded: 125 Euro.

- Note: Don't confuse the representation for power with that for energy or value!

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Principles of bidding/trading at a granularity of 15 minutes (4)

```
419    </ScheduleTimeSeries>
420    <ScheduleTimeSeries>
421    <SendersTimeSeriesIdentification v="1234567890123456_CONSUMPTION"/>
422    <SendersTimeSeriesVersion v="1"/>
423    <BusinessType v="A03"/>
424    <Product v="8716867000016"/>
425    <ObjectAggregation v="A03"/>
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427    <OutArea v="10YRO-TEL------P" codingScheme="A01"/>
428    <InParty v="1234567890123456" codingScheme="A01"/>
429    <OutParty v="30XROOPCOM-PI--S" codingScheme="A01"/>
430    <MeasurementUnit v="MAW"/>
431    <Period>
432    <TimeInterval v="2021-01-07T22:00Z/2021-01-08T22:00Z"/>
433    <Resolution v="PT15M"/>
434    <Interval>
435    <Pos v="1"/>
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437    </Interval>
438    <Interval>
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441    </Interval>
442
443    <Interval>
444    <Pos v="95"/>
445    <Qty v="16.0"/>
446    </Interval>
447    <Interval>
448    <Pos v="96"/>
449    <Qty v="16.0"/>
450    </Interval>
451    </Period>
452    </ScheduleTimeSeries>
453
```

Physical Notification:
96 intervals

- Note: Settlement note won't be changed. The 15 minutes contracts will appear adequate in the case there were trades made on them.

Ex.: 20210109 01:00-20210109 01:15

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Representation of the 15 minutes contracts

- The representation in ComTrader will be similar with the one for hourly trade:
  - Contracts for the current delivery day: Q10:00-10:15_L, Q23:45-T00:00_L
  - Contracts for the next delivery day: QT10:00-T10:15_L, QT23:45-TT00:00_L
  - Contracts for the previous delivery day: 20210107 23:00-20210107 23:15

- In the case of the Daily order report, TC540 the only changes will be the name of the contract, respectively of the trading intervals.

- In the case of the Daily Trade report, TC810 the changes will involve: the name of the contract, the trading intervals and the unit of the contract. The contract unit is 0,25 for the 15 minutes product and 1 for the hourly products.

```
- <tc540Grp1>
   - <tc540KeyGrp1>
        <partIdCod>TRD001</partIdCod>
      - <instTitl>
           <isinCod>20210106 14:15-20210106 14:30</isinCod>
        </instTitl>
        <currTypCod>EUR</currTypCod>
        <product>LocalTest_Quarter_Hour_Power</product>
   </tc540KeyGrp1>
   - <tc540Rec>
        <tranTim>12:00:25.121+01:00</tranTim>
        <mktArea>RO</mktArea>
        <tso>TEL</tso>
```

```
- <tc810Grp>
   - <tc810KeyGrp>
        <membExcIdCod>GXXX1</membExcIdCod>
        <membClgIdCod>OPCOM</membClgIdCod>
        <stlIdAct>0000</stlIdAct>
        <stlIdLoc>OPC</stlIdLoc>
      - <instTitl>
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        </instTitl>
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        <product>LocalTest_Quarter_Hour_Power</product>
        <currTypCod>EUR</currTypCod>
```

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Thank you for your attention !

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