

MEETING MINUTES

SUPPORTING INFORMATION FOR INTERESTED PARTIES READING THE IDSC MEETING MINUTES TO BE FOUND IN ANNEX 1

| MEETING DETAILS | | | |
|-----------------|------------------------------|------------------|----------------|
| Project Name | SIDC | | |
| Governance Body | Steering Committee | | |
| Meeting Date | 24 November 2021 11:00–15:45 | Meeting Location | Teleconference |

SIDC PARTIES

AFFÄRSVERKET SVENSKA KRAFTNÄT

AMPRION GmbH

AUSTRIAN POWER GRID AG

AS "Augstsprieguma tīkls"

BRITNED DEVELOPMENT LIMITED

ČEPS, a.s

CREOS Luxembourg S.A.

Croatian Transmission System Operator Ltd.

EirGrid plc

ELECTRICITY SYSTEM OPERATOR EAD

ELERING AS

ELIA SYSTEM OPERATOR SA/NV

ELES, Ltd., Electricity Transmission System Operator

Energinet Elsystemansvar A/S

FINGRID OYJ

Independent Power Transmission Operator S.A.

LITGRID AB

MAVIR Hungarian Independent Transmission

Operator Company Ltd.

NATIONAL GRID INTERCONNECTORS LIMITED

National Power Grid Company Transelectrica S.A.

Polskie Sieci Elektroenergetyczne S.A.

Red Eléctrica de España, S.A.U.

REN – Rede Eléctrica Nacional, S.A.

3RD PARTIES:

ACER

ENTSO-E

Ernst & Young, s.r.o

 BEA

MODO

Indra

E-Bridge

Artelys

RTE Réseau de Transport d'Electricité

Slovenská elektrizačná prenosová sústava, a.s.

SONI Limited

STATNETT SF

TENNET TSO B.V.

TENNET TSO GmbH

Terna - Rete Elettrica Nazionale S.p.A.

TRANSNET BW GmbH

50Hertz Transmission GmbH

BSP Energy Exchange LL C

CROATIAN POWER EXCHANGE Ltd.

EirGrid plc

EPEX Spot SE

European Market Coupling Operator AS

Gestore dei Mercati Energetici S.p.A.

HELLENIC ENERGY EXCHANGE S.A.

HUPX Hungarian Power Exchange Company Limited

by Shares

Independent Bulgarian Energy Exchange

OKTE, a.s.

OMI-Polo Español, S. A

Operatorul Pietei de Energie Electrica si de Gaze

Naturale "OPCOM" S.A.

OTE, a.s

Towarowa Giełda Energii S.A.

OBSERVERS

EMS

SEEPEX

Baltic Cable



AGENDA

| Agenda Topic | Time |
|---------------------------------------|-------------|
| 1) Welcome | 11:00–11:15 |
| 2) Approve minutes and review actions | 11:15–11:30 |
| 3) Integrated Plan | 11:30–11:40 |
| 4) QARM | 11:40–12:20 |
| 5) NEMOs report and TSOs | 12:20–12:40 |
| 6) OPSCOM report | 12:40-13:00 |
| Lunch Break – 13:00-14:00 | |
| 7) MSD | 14:00–15:00 |
| 8) BMSG | 15:00–15:10 |
| 9) Joint Governance | 15:10–15:30 |
| 10) COM SG Report | 15:30–15:35 |
| 11) AoBs | 15:35–15:45 |

1. Welcome

The IDSC Co-chairs opened the meeting by welcoming the SIDC members on the teleconference.

2. Approve minutes and review actions

a) Approve minutes

The minutes from the IDSC held on 27 October were approved. The version to be published will be provided to IDSC after the meeting for approval.

b) Review status open and due actions

The action point list was reviewed and the current status was shared with the IDSC. The open action points are addressed during the meeting, others are in progress.

3. Integrated Plan

The SIDC Conveners presented the integrated plan. The testing of R3.2 is slightly delayed compared to the original testing plan. During the testing a few bugs were discovered, which are being resolved. The development of the CPM – minimum viable product is going according to plan. First 2 reports were delivered; no issues were identified.

4. QARM

QARM Convener presented the status of work in QARM. The SIDC roadmap was updated in order to add more detail concerning the IDA implementation plan. The scope of the R3.3 is largely finalized. The last point under clarification is the list of bugs, which are to be fixed during the R3.3. Also the R3.3 system boundaries uplift are agreed.

5. NEMOs and TSOs Report

NEMOs informed the IDSC about the progress on several topics:

- REMIT reporting NEMOs are communicating with ACER concerning the extended REMIT reporting
- Intraday Auctions The selection of the CIP provider is being internally analysed

6. OPSCOM

The OPSCOM Convener presented the details of the SIDC operation for the last month. There was only 1 incident since last IDSC, which was succesfully resolved.



7. MSD

The MSD convener reported the progress in the MSD work. Further detailing of the IDAs design is ongoing, IDA implementation approach and testing approach drafts were prepared. Cross-product matching details were clarified – covering AM indicators, rounding residuals calculation etc. Concerning losses implementation in IDA, a new potential solution was identified, which is currently under discussion.

8. BMSG

The BMSG Convener presented the expected level of spending of the Budget 2021.

9. Joint Governance

The IDSC Secretary informed the IDSC that the joint governance implementation goes according to the plan. The signature process of the updated IDOA was started and is expected to be finalized in the next months.

10. COM SG Report

COM SG informed that preparation of the MESC and PCG slides is ongoing. The webpages were updated to contain also the algorithm monitoring reports and information concerning the expected 4th wave go-live (Greece and Slovakia).

11. AoBs

The IDSC agreed that the February and April 2022 MCSC physical meetings shall be cancelled due to the development of the pandemic. In case the situation improves and holding physical meeting will become a preferable solution, new possibilities for renting premises shall be investigated.



Last update: 09/12/2021

ANNEX 1

Single Intraday Coupling (SIDC) Intraday Steering Committee (IDSC) Supporting Information for Interested Parties reading the IDSC Meeting Minutes

1. What is the Intraday Steering Committee (IDSC)?

The IDSC is the main governance group that oversees the Single Intraday Coupling. It consists of 45 parties (NEMOs and TSOs) who are responsible for overseeing the operation, further expansion and development of SIDC.

2. What is the Single Intraday Coupling (SIDC)?

The aim of SIDC, formerly known as the XBID, Cross Border Intraday project, is to create a single pan European cross zonal intraday electricity market. An integrated intraday market will increase the overall efficiency of intraday trading by promoting effective competition, increasing liquidity and enable a more efficient utilisation of the generation resources across Europe.

With the increasing amount of renewable intermittent production, interest in trading in the intraday markets is increasing as it can become more and more challenging for market participants to be in balance after the closing of the Day-Ahead market. Being balanced on the network closer to delivery time is beneficial for market participants and for the power systems alike by, among others reducing the need of reserves and associated costs. In addition, the intraday market is an essential tool that allows market participants to take unexpected changes in consumption and outages into account.

SIDC is a cooperation between the Nominated Electricity Market Operators (NEMOs) and Transmission System Operators (TSOs) which enables continuous cross-border trading across Europe.

The SIDC Solution was first launched on 12th/13th June 2018 across 15 countries. In the first 14 months of operation over 20 million trades have been completed.

It is based on a common IT system with one Shared Order Book (SOB), a Capacity Management Module (CMM) and a Shipping Module (SM). This means that orders entered by market participants for continuous matching in one country can be matched by orders similarly submitted by market participants in any other country within the project's reach if transmission capacity is available.

The intraday solution supports both explicit (where requested by NRAs) and implicit continuous trading and is in line with the EU Target model for an integrated intraday market.

3. Why is the intraday market so important to integrate European markets?

There are three different physical markets for trading electricity; Forward Market, Day- Ahead Market and Intraday market before delivery hour.

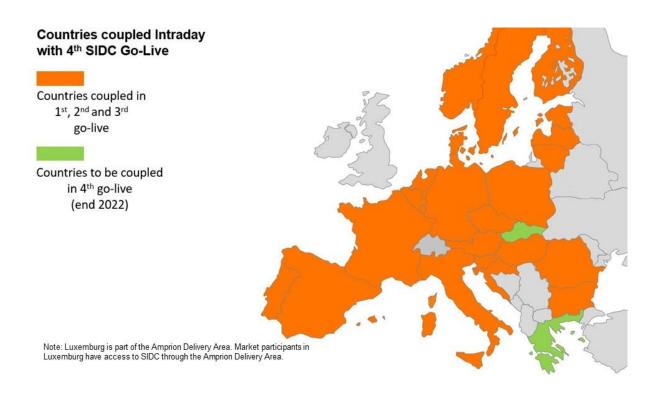
An integrated intraday market will promote effective competition and pricing, increase liquidity and enable a more efficient utilisation of the generation



resources across Europe. With the increasing amount of intermittent production, it becomes more and more challenging for market participants to be in balance after the closing of the Day-Ahead market. Therefore, interest in trading in the intraday markets is increasing. Being balanced on the network closer from delivery time is beneficial for market participants and for the power systems alike by, among others reducing the need of reserves and associated costs.

4. What is the geographical scope of the initiative?

The first go-live in June 2018 included 15 countries: Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Latvia, Lithuania, Luxembourg, Norway, The Netherlands, Portugal, Spain and Sweden. A second go-live with additional 7 countries – Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania and Slovenia - was realised in November 2019. A third go-live integrating Italy into the coupled region went live on 21st September 2021. Integration of Greece and Slovakia is planned for the end of 2021 (shown in green).



Please note: Luxembourg is part of the Amprion Delivery Area. Market participants in Luxembourg have access to the SIDC through the Amprion Delivery Area

5. Who are the partners involved?

The parties involved are:

Transmission System Operators (TSOs):

50HERTZ, ADMIE, AMPRION, APG, AST, ČEPS, CREOS, EirGrid, ELERING, ELES, ELIA, Energinet, ESO, FINGRID, HOPS, Litgrid, MAVIR, PSE, REE, REN, RTE, SEPS, SONI, STATNETT, SVENSKA KRAFTNÄT, TenneT DE, TenneT NL, TERNA, TRANSELECTRICA and TransnetBW.

Nominated Electricity Market Operators (NEMOs):



BSP, CROPEX, EirGrid, EPEX, GME, HEnEx, HUPX, IBEX, Nord Pool, OKTE, OMIE, OPCOM, OTE, SONI and TGE.

Please note integration of Swiss borders is not going to be possible due to the intergovernmental agreement on electricity cooperation not having been reached by end of 2016 [CACM Article 1 (4) & (5)]. In consequence, Swissgrid left the project in January 2017.

6. What is the relation between the SIDC project and the network codes/guidelines?

The SIDC initiative is a multiparty project working on the implementation of the SIDC Model being a continuous intraday market, based on a single capacity management module and a shared order book within a one-to-one relationship. The Guideline on Capacity Allocation and Congestion Management (CACM GL) endorses this SIDC Model. The CACM GL sets out, amongst others, the methods for allocating capacity in intraday timescales, rules for operating intraday markets and the basis for the implementation of a single electricity market across Europe.

SIDC is in line with the provisions of the CACM GL and the parties in the project fulfil the future requirements of CACM through their involvement.

7. Who is the system provider of the SIDC Solution?

The system provider is Deutsche Börse AG (DBAG).

8. What does this system do?

The orders submitted by the market participants of each NEMO are centralised in one shared order book (SOB). Similarly, all the intraday cross-border capacities are made available by the TSOs in the Capacity Management Module (CMM).

Order books displayed to the market participants via the usual NEMOs' trading systems contain orders coming from other participants of the concerned NEMO and also orders coming from other NEMOs for cross-border matching, provided there is enough capacity available.

Orders submitted for different market areas can be matched provided there is enough capacity available. In such a case, the order matching is associated with implicit capacity allocation. Concretely, when two orders are being matched the SOB and CMM is updated immediately. Trade is done on a first-come first-served principle where the highest buy price and the lowest sell price get served first. The update of SOB means that the orders that were matched are removed, and consequently that the available transmission capacity in the CMM is updated. For how many borders the capacities are updated depends on where the matched orders were located geographically.

For borders where NRAs requested for it, explicit allocation is made available to Explicit Participants (currently at the FR-DE and the SI-HR border).

During the trading period, available capacities and order books are simultaneously updated on a continuous basis.

The Shipping Module (SM) of the SIDC Solution provides information from trades concluded within SIDC to all relevant parties of the post-coupling process. The SM receives data from the SOB about all trades concluded:

- Between two different Delivery Areas
- In the same Delivery Area between two different Exchanges

The data from the SOB and the CMM are enhanced with relevant TSO, Central Counter Party (CCP) and Shipping Agent data from the SM and transferred to the parties at the configured moments.



9. How is the 24/7 availability of the system guaranteed?

Both CMM and SOB have a primary and a back-up system that are separated physically to guarantee highest availability of the system. Trading at local intraday platforms and the explicit access to the CMM is not affected by a down-time of the SOB.

10. How does the SIDC project communicate with stakeholders?

User Group meetings have been held approximately every 5-6 months, particularly prior to the 1st Go-Live. Attendees were a representative group of market participants. The purpose of the User Group has been to facilitate the interaction between the SIDC project and market participants with the aim of explaining the status of the SIDC project and building knowledge/confidence in the proposed solution. It has also provided stakeholders with the opportunity to provide feedback on key aspects of the project.

The User Group meeting slides and minutes have been published at a dedicated SIDC (or XBID) project section on the web pages of the involved NEMOs.

Regular SIDC project updates are also provided to:

- Regulators (NRAs), ACER and the European Commission through the Pentalateral Coordination Group meetings
- Market European Stakeholder Committee (MESC) at each scheduled meeting

SIDC (XBID) launch events were held before the 1st as well as before the 2nd Wave go-live. The meeting slides were published at a dedicated SIDC (XBID) project section on the web pages of the involved NEMOs. A further launch event for the 3rd Wave Go-Live was scheduled on the 29th April 2021 and took place as an online meeting.

Going forward, the Market European Stakeholder Committee (MESC) will serve as the primary interface between SIDC and the market parties.

11. What is the gain for market participants?

The solution is expected to increase the liquidity of the newly coupled intraday continuous markets, since orders submitted for the purpose will be potentially matched with orders submitted in any other participating country. In other words, orders that could not be matched in local markets increase their probability of being matched in the larger integrated market. In addition, the solution facilitates the operational tasks of intraday cross-border scheduling, since the capacity allocation and energy matching processes is done simultaneously. As a consequence, market efficiency is also expected to increase, to the benefit of the market participant.

12. How will this impact/how does this benefit the end consumers?

The direct benefit for the end consumer is expected to be positive, and the end consumers will benefit from this initiative increasing the overall wholesale market efficiency and facilitate the integration of the RES in the market. More concretely market participants having larger possibilities to be balanced before the hour of delivery will contribute to reduce the costs of reserves.

13. How does the SIDC project interlink with the PCR Day-Ahead project?



There is no direct interlink between these two projects other than the participating TSOs and NEMOs are mostly the same. However, both projects share the same purpose of implementing the European target models for electricity. Co-ordination is taking place between the senior leaders and project management teams of the two projects. In the future, in line with CACM requirements, it is expected that the governance for the ID and DA projects will progressively merge.

14. What are the Local Implementation Projects (LIPs)?

To implement the SIDC solution Local Implementation Projects (LIPs) were set up. Over 15 LIPs have been established so far. A LIP consists of one or more borders, one or more TSOs and one or more NEMOs. The LIPs main tasks are adaptation of local arrangements (i.e. procedures, shipping, contracts), IT system adjustments, secure equal treatment between NEMOs and implicit/explicit access and ensuring readiness for the participation in the SIDC LIP testing.

The LIPs are monitored via the SIDC Steering Committee where individual LIP's progress is reported. Further each LIP has set up a formal governance structure within the LIP (i.e. project manager, Steering Committee, etc.).

15. What are the responsibilities of the different groups mentioned in the IDSC minutes?

| Title | Responsibility | |
|--------------------------------|--|--|
| IDSC – Intraday Steering | The IDSC is the highest level of governance in SIDC and tracks | |
| Committee | project status, risks, issues etc. as well as making strategic | |
| | decisions and managing escalations within the project. | |
| OPSCOM and ICCC – Incident | OPSCOM is the governance body responsible for the ongoing | |
| Committee | operation of SIDC solution. It reviews operational performance | |
| | and incidents. The ICCC was established to ensure that there is | |
| | the ability to hold Incident Calls in the event of SIDC (XBID) | |
| | system incidents. | |
| ICT – Integrated Co-ordination | The ICT is responsible for ensuring all streams of activity in the | |
| Team | project are co-ordinated by means of an Integrated Plan. All | |
| | Project Managers, PMOs and TF/SG leads attend and update | |
| | progress against the project plan including identifying | |
| | dependencies/risks/mitigations etc. Issues are escalated to the | |
| | Co-Chairs of the IDSC. | |
| BM SG – Budget Management | The BM SG is responsible for the financial management of the | |
| Support Group | project. This includes budgeting, cost validation, financial | |
| | reporting, and the cost resettlement processes in accordance | |
| | with CACM, NRA cost reporting etc. | |
| COM SG – Communications | The COM SG is responsible for stakeholder management. This | |
| Support Group | includes developing material for meetings with the European | |
| | Commission, NRAs, MESC etc. It is also responsible for drafting | |
| | press releases. COM SG is also responsible for larger events | |
| | such as Pre- Go-Live Launch Events. | |
| OTF – Operational Task Force | The OTF is responsible for the description of Roles & | |
| | Responsibilities, Operational procedures, and maintenance and | |
| | testing of procedures. | |
| SG Losses – Sub Group Losses | The SG Losses focuses on designing the concept for Losses on | |
| | DC Interconnectors and specifying the requirements. Also for | |
| | undertaking functional specification reviews etc. It is also | |
| | responsible for aspects of the concept such as single sided | |
| | trades. | |



| MCD Market C.C. : D.: | The MCD to conscious for first to the last to the |
|---------------------------------|---|
| MSD – Market & System Design | The MSD is responsible for functional and technical aspects |
| | related to the software and infrastructure solution of XBID. |
| | This includes ensuring that IT requirements are specified for |
| | the DBAG solution and the review of functional specifications. |
| | It is also the joint body where technical decisions are made. |
| LIP – Local Implementation | A LIP is a project which manages a border/interconnector or |
| Project | group of borders/interconnectors to enable them to ,go-live' |
| | on the SIDC solution. A LIP will manage a plan covering local |
| | system adaptations, contractual changes, regulatory approvals |
| | and testing. There have been/are over 15 different LIPs (past |
| | and present). |
| LIP Testing – Local | The co-ordination of testing across the LIPs is essential. The LTC |
| Implementation Project Testing | co-ordinates preparation and execution of testing such as |
| and Co-ordination (also known | Connectivity, Functional Integration (FIT) and Simulation |
| as LTC). | Integration (SIT) with a focus on local systems integration with |
| | XBID and the support of End-to-End tests executed together |
| | with XTG etc. Reporting on progress is made to the IDSC. The |
| | role has been in place for the 1 st and 2 nd wave go-lives. |
| L TF – Legal Task Force | The LTF is responsible for the legal aspects of SIDC including |
| | drafting/review of legal agreements associated with the |
| | project. This includes contractual aspects relating to contracts |
| | with service providers and importantly, the Intraday |
| | Operational Agreement (IDOA). |
| XTG – SIDC (XBID) Testing Group | The XTG is responsible for testing the SIDC (XBID) solution. It |
| | manages this testing across NEMOs and TSOs for all of the |
| | modules (CMM, SM, SOB). The XTG assesses, plans and delivers |
| | the testing for each testing phase (e.g. User Acceptance |
| | Testing, UAT). The XTG interfaces with DBAG and ensures, for |
| | example, that the contractually agreed exit criteria are met for |
| | each testing phase. The XTG also have an important interface |
| | with the LTC. |
| GLC – Go-Live Co-ordinator | The GLC plays a critical role in ensuring that all parties are |
| | prepared for go-live (geographical extensions). This involves |
| | defining the Go-live strategy and approach as well as |
| | identifying the activities that needed to be completed for a |
| | successful go-live. As an example, the GLC tracked the |
| | completion of over 700 items for the 1st Go-Live. |
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16. And what do all the acronyms mean?

| Abrv. | Terms |
|-------|----------------------------|
| AOB | Any Other Business |
| АР | Action Point |
| ASR | Additional Service Request |
| ВВР | Business Blueprint |
| СС | Conference Call |
| CET | Central European Time |
| CR | Change Request |
| DST | Daylight Savings Time |
| ЕоВ | End of Business |



| EoD | End of Day |
|--------------|--|
| EoY | End of Year |
| EU | European Union |
| FS | Functional Specification |
| FTF | Functional Task Force |
| HL | High Level |
| ID SC | Intraday Steering Committee |
| IMT | Incident Management Tool |
| INC | Interim NEMO Committee |
| JSC | Joint Steering Committee |
| LIP | Local Implementation Project |
| MSD | Market & System Design |
| NEMO | Nominated Electricity Market Operator |
| ОВК | Orderbook |
| PM | Project Manager |
| PMI | Public Message Interface |
| PMO | Project Management Office |
| PP | Project Place |
| PTF | Performance Task Force |
| QARM / QA&RM | Quality Assurance and Release Management |
| R#.# | Release number #.# |
| RCB | Release Control Board |
| RTS | Realistic Test Scenario |
| SC | Steering Committee |
| SLA | Service Level Agreement |
| SPOC | Single Point of Contract |
| TBD | To Be Defined |
| TSO | Transmission System Operator |
| TWG | Technical Working Group |
| ws | Workshop |
| WG | Working Group |
| XTG | XBID Testing Group |