

Consultation Paper on Intraday Coupling model for Italian Borders

This document is a common proposal developed by Power Exchanges (hereafter referred to as “PXs/NEMOs”) and the Transmission System Operators (hereafter referred to as “TSOs”) of the Italian Borders (IB). The Italian Borders in this context cover the electrical borders, for both power flow directions, between Italy and Slovenia, Italy and Switzerland, Italy and Austria, Italy and France, Italy and Greece. Furthermore, the borders between Italian internal bidding zones are involved in this proposal. Finally, the geographical scope of this project includes the border between Austria and Slovenia.

The abovementioned parties intend to implement an Intraday Coupling Model in which the Target Model, based on a continuous trading mechanism, is complemented by a Complementary Regional Intraday Auction Mechanism (hereinafter the “Complementary Regional Intraday Auction Mechanism”).

This proposal is hereafter referred to as “IB model”.

PXs/NEMOS and TSOs of the IB welcome comments on this consultation paper on the IB model. Contributions can be sent in English by email to jd_consultation@jao.eu starting from 6th December until 13th January 2017.

Contributions received can be published on the JAO website unless market parties request otherwise when submitting their comments. A confidentiality statement in an email message will be treated as a request for non-disclosure.

Contributions sent to a different email address, or after the deadline will not be considered.

1 Background

CACM and XBID

On 14th August 2015, the Regulation (EU) 2015/1222 of 24th July 2015 establishing a guideline on Capacity Allocation and Congestion Management (hereinafter: “CACM”) has entered into force defining, among others, the requirements for the single intraday coupling which relies on:

- a continuous energy trading mechanism accommodating the implicit allocation of the intraday cross-zonal capacity¹;
- the development of a single methodology for pricing intraday cross-zonal capacity that shall reflect market congestion and be based on actual orders (“the Pricing of Intraday Capacity”)².

Moreover, CACM regulation allows PXs/NEMOs and TSOs to complement the single intraday coupling with a complementary regional auction mechanism as foreseen in article 63, paragraph 2 of the CACM regulation, which states that “[...] Complementary regional intraday auctions may be implemented within or between bidding zones in addition to the single intraday coupling solution referred to in Article 51 [...]”.

Regarding the continuous trading mechanism, the PXs/NEMOs and TSOs of the NWE+³ Region have developed the XBID solution which aims to be part of the target model for single intraday coupling. Local implementation of the XBID mechanism is organized on a local basis within Local Implementation Projects (LIPs). The PXs/NEMOs and TSOs of the IB have launched a local implementation project (hereinafter: “LIP 14”). The target of the LIP 14 is to set up all the steps needed to implement both the XBID Solution and a Complementary Regional Intraday Auction Mechanism. The go-live target date of XBID is Q3 2017. The XBID mechanism and the Complementary Regional Intraday Auction Mechanism can be implemented in several steps. A more detailed time line will be developed after the consultation. However for both project streams the go-live is expected after Q3 2017.

The Pricing of Intraday Capacity methodology has not yet been proposed by all TSOs and approved by the national regulatory authorities (hereinafter: “NRAs”).

¹ Article 51 of CACM regulation.

² Article 55 of CACM regulation.

³ North West Europe, plus Italy, Iberia, Switzerland and Austria

2 The regional Intraday Auction mechanism for Italian Borders (IB)

In order to provide an efficient allocation procedure (also allowing pricing) for intraday cross-zonal capacity, PXs/NEMOs and TSOs of the IB aim to design and implement a Complementary Regional Intraday Auction Mechanism.

To this end IBs Parties have developed two alternative options for the implementation of this Complementary Regional Intraday Auction Mechanism which would complement the continuous trading:

- Option A, which is based on the current structure of the internal Italian Intraday Auctions (MIs)
- Option B, which is not based on the current structure of the Italian MIs (foreseeing a possible simplified structure of MIs to be defined by Italian NRA).

Complementary Regional Intraday Auction mechanism – Option A

Option A has been developed considering that Italian MIs will be composed of 6 different sessions⁴: 2 sessions operated in the day D-1 (all 24 hours of the day D are tradable); 4 sessions operated in the day D (in each session only a subset of remaining hours of the day D are tradable).

Taking into account this structure of the MIs, Option A provides an opening Complementary Regional Intraday Auction in D-1 (corresponding to the second Italian MI operated in the day D-1), where all 24 hours of delivery day D are tradable and, possibly, a second Complementary Regional Intraday Auction in the morning of the day D (corresponding to one of the 4 Italian MIs operated in the day D), where only hours from 12:00 to 24.00 of the day D are tradable.

However, in order to perform the intraday auctions with the most updated value of the available cross border capacity, the first Complementary Regional Intraday Auction of the day D-1 (the one involving all the 24 hours of the day D) should be performed at h. 22:00, in order to allocate efficiently the cross-zonal capacity as recalculated by TSOs after the day-ahead allocation process has been terminated⁵. No later than h. 22:30 of the day D-1 PXs/NEMOs will publish the results of the first Complementary Regional Intraday Auction.

After the auction results have been published the **continuous trading in XBID can be started. In the continuous trading sessions only those hours will be tradable which will not be auctioned anymore either in the following Complementary Regional Intraday Auction or in the Italian MIs.** This implies that remaining hours of the day D will

⁴ Currently, Italian MIs are 5, and starting from February 2017 MIs' sessions will be increased to 7 (see: <http://www.mercatoelettrico.org/It/homepage/popup.aspx?id=298>). Nevertheless, in consideration of the fact that, according to this proposal, the second Italian MI operated in D-1 will be postponed at 22:00 h D-1, the third auction which is going to be introduced from February 2017 will be canceled when this proposal will be implemented.

⁵ This would imply that the Italian MI2 whose results are currently published by 17:00 in D-1 will be postponed in order to be integrated in the Complementary Intraday Regional Auction.

be released for the continuous trading in as many steps according to the numbers of the MIs sessions which are performed in Italy during the day D. By allowing the continuous trading only to those hours not to be auctioned in the remaining Intraday Auctions, the level of uncertainties in the capacity calculation covering the remaining hours is lower, therefore there is a higher probability of determining additional cross-zonal capacities with a new recalculation.

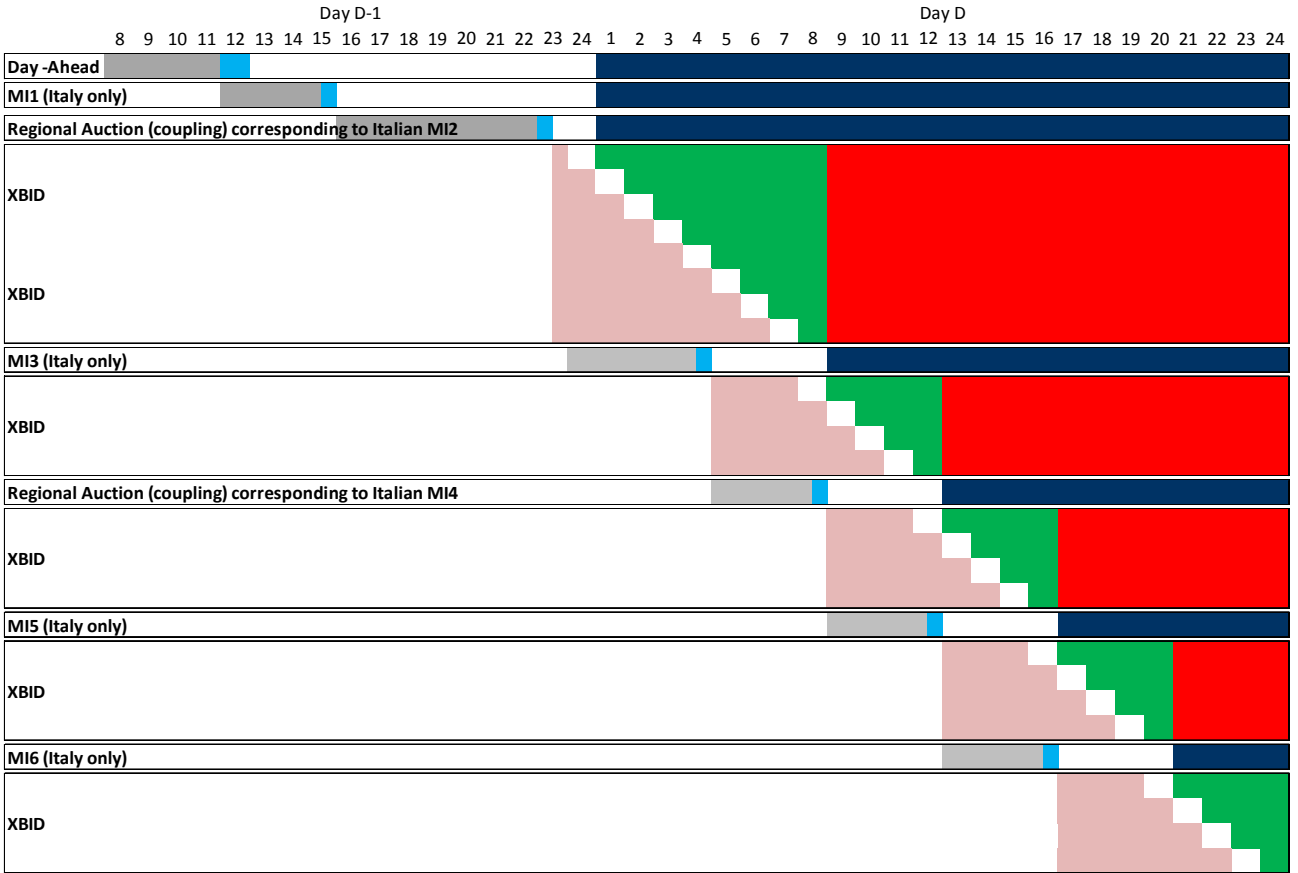
In day D, at h. 7:30, a second Complementary Regional Intraday Auction, covering delivery hours from 12:00 to 24:00 of day D, will be run. During this second Complementary Regional Intraday Auction, the continuous trading is not stopped since there is no overlapping between hours traded in XBID and hours traded in Complementary Regional Intraday Auction.







Only once the results of the second Complementary Regional Intraday Auction will be published (by h. 8:00), the continuous trading session will be progressively opened also for hours from 12:00 to 24:00 of day D as the relevant Italian MI sessions are performed.

This solution takes into account the all TSOs proposal on intraday cross-zonal gate opening and intraday cross-zonal gate closure times according to Art.59 (1) of the CACM Regulation, consulted by all TSOs from 18th April to 18th May 2016. In order to allocate and price the intraday cross-zonal capacity, as recalculated by TSOs for the intraday timeframe, the first Complementary Regional Intraday Auction will be held at 22:00 h in D-1. Therefore, the first continuous trading session will be opened as soon as the results of the first Complementary Regional Intraday Auction are available and no later than 22:30 of D-1.

The following graph is representing the sequence of the markets during day D-1 and day D in the Option A⁶:

⁶ Timetable of Italian MIs is reported only for illustration and can be subject to modification.



-  Submission of bids/offers for auction
-  Results calculation for auctions
-  Tradable hours in the auction
-  Trading period in XBID
-  Tradable hours for XBID
-  Not tradable hours for XBID

Dependencies between Intraday continuous trading and Intraday auctions timings

CACM Art. 14 (1), (2) and (4) require the TSOs to recalculate capacities for the intraday timeframe not only in D-1, but also within the Intraday timeframe. Moreover, it is explicitly required to take into account the latest available information for these calculations. Furthermore, CACM Art. 55 requires the pricing of intraday capacities. As a consequence, the capacities coming from the intraday capacity calculations need to go through the aforementioned price signal sending auctions first.

The frequency of the intraday capacity calculations is not yet defined, however it will be aligned with this proposal.

Furthermore, the opening of trading period of each hour in the XBID is defined so as to take into account the timings of the Italian MIs. Therefore, and in order not to distort the efficiency and accuracy of the capacity calculations, the continuous trading sessions are opened for those hours which will not be auctioned anymore in the following Complementary Regional Intraday Auction and in the following Italian MIs. This dependency also avoids creating market distortions among Italian bidding zones. Since the allocation takes place between bidding zones (no matter being the zones within or between countries), a fair and non-discriminatory treatment of all parties is required. This principle applies for both the bidding zones within Italy as well as the bidding zones linking Italy (Italy Nord and Italy Sud) to the bidding zones of neighboring countries.

Complementary Regional Intraday Auction mechanism – Option B

Option B has the following main features:

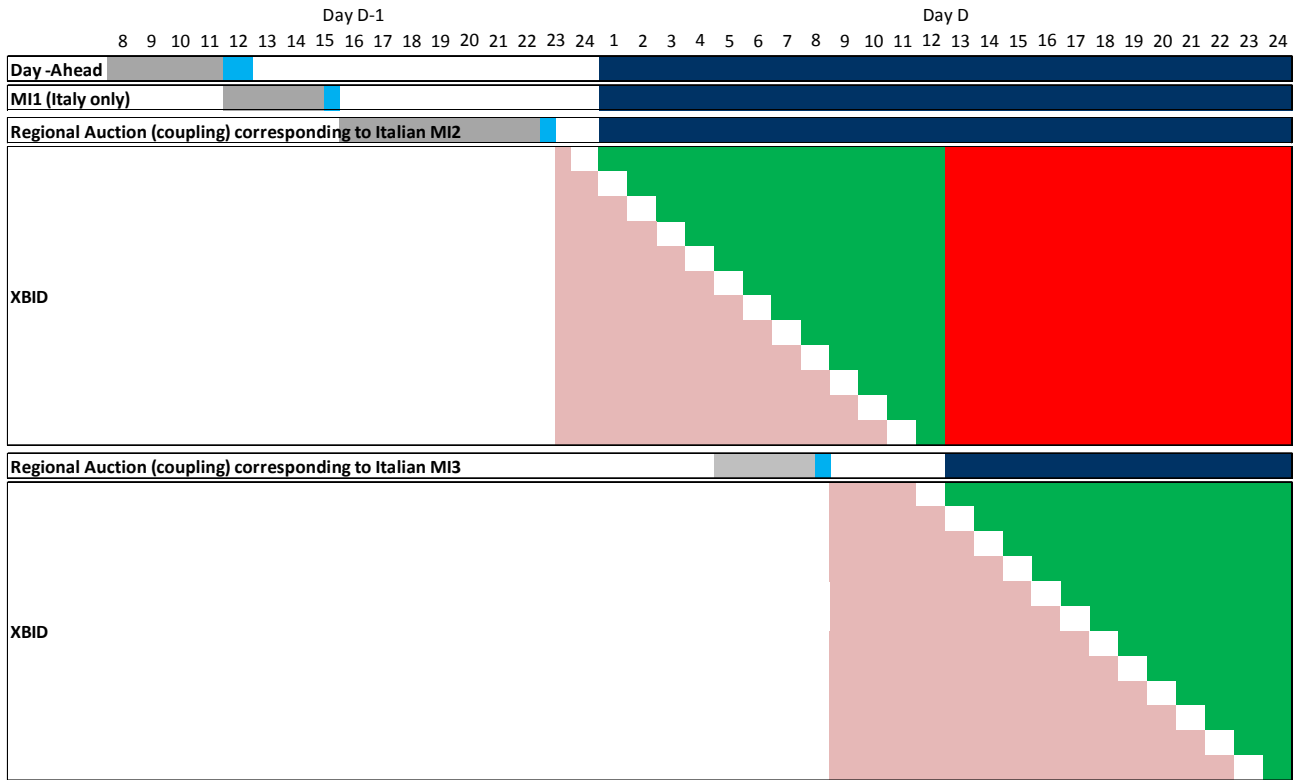
- The performance of two Complementary Regional Intraday Auction as in Option A: an opening Complementary Regional Intraday Auction in D-1 (corresponding to the second Italian MI operated in the day D-1), where all 24 hours of delivery day D are tradable and, possibly, a second Complementary Regional Intraday Auction in the morning of the day D, where only hours from 12:00 to 24.00 of the day D are tradable.
- The second Complementary Regional Intraday Auction would be needed in order to efficiently allocate additional capacity resulting from a new capacity calculation during day D.
- The reduction Italian MIs⁷ to one in D-1 and one in day D: on the Italian internal bidding zones, only one auction on day D will be performed as described above.







In this scenario, soon after the first Complementary Regional Intraday Auction is operated and the results are published at 22.30 of the day D-1, the hours 0:00 to 12:00 of the day D are tradable in the XBID, whilst the hours from 12:00 to 24:00 of the day D are tradable in the XBID soon after the conclusion of the second Complementary Regional Intraday Auction at 8.00 of the day D. The same principles described for option A are therefore applied: the continuous trading sessions are opened for those hours which will not be auctioned anymore in the following Complementary Regional Intraday Auction.

Compared to Option A, in Option B the trading period in the XBID of each hour is increased.

⁷ Final decision of possible reduction of MIs is subject to the evaluation of Italian NRA.

The following graph is representing the sequence of the markets during day D-1 and day D in the Option B:



-  Submission of bids/offers for auction
-  Results calculation for auctions
-  Tradable hours in the auction
-  Trading period in XBID
-  Tradable hours for XBID
-  Not tradable hours for XBID

3 Next Steps

Once the PXs/NEMOs and TSOs of the IB will receive the contributions to the Consultation Paper, they will finalize the IB model proposal and will send it to NRAs as foreseen in the Article 63, paragraph 1 of the CACM regulation.

Parties will take into account the provisions which will be defined with reference to the Pricing of the Intraday Capacity required by CACM regulation and also other regional auction initiatives when approved by NRAs.

Definitions

CACM: Guideline on Capacity Allocation and Congestion Management

IB: Italian Borders

LIP: Local Implementation Project

NEMO: Nominated Electricity Market Operator

NRA: National Regulatory Authority

PXs: Power Exchange

TSO: Transmission System Operator

XBID: Cross-Border Intraday (XBID) Project

MI: Mercato Infragiornaliero / GME Intraday Market Session