AUCTIONS WORKSHOP – BRIEFING NOTE FOR AUCTION GAME

Introduction

The aim of the auction game is to enable participants to understand the auction design proposed in ENTSOG’s draft CAM network code, its advantages and potential disadvantages, through an interactive session.

The session will simulate a simplified version of an auction for long term (quarterly) capacity. Auction rules will be based closely on those set out in the draft CAM NC. A number of concurrent auctions will run; participants will be notified of the capacity available in each auction and will be invited to bid for a quantity of capacity against a series of price steps, starting at the reserve price. There will be a bidding window covering a number of ‘days’, and aggregated demand at each price step will be published at the end of each day. Capacity will be allocated and winning bidders announced at the end of the final round.

ENTSOG will present a worked example prior to the game. The game itself will last around 90 minutes.

The game

The game is based on a simplified system involving three networks and two interconnection points (IPs), as shown below. Production occurs largely within Network A. Network B contains a large storage facility, while Network C has a high number of exit points to domestic and industrial customers. Bundled firm capacity is auctioned from A to B and from B to C.
Capacity at A→B and B→C will be auctioned for a consecutive series of four quarters.

Participants will enter bids against a series of price steps, which will be pre-set by ENTSOG and will differ between IPs and between quarters (with summer capacity being less expensive than winter).

The game will be run using an Excel tool. Participants will enter bids within the Excel file and save it to a memory stick. At the end of each round ENTSOG will aggregate the bids and display the aggregate information, including the clearing price.

**Simplifying assumptions**

An actual auction of long term capacity, as proposed in the draft CAM network code, will involve concurrent auctions of 60 quarters across c.150 IPs, a bidding window of 10 days with interim results at the end of each day, and 30 price steps.

This situation implies a very high number of bids per user and would be far too complex for the game. We have therefore simplified as follows:

- 4 quarters
- 2 IPs
- A bidding window of 3 days with interim results at the end of each day
- 10 price steps

In addition, we will assume that for every bid, the minimum bid quantity (i.e. the minimum quantity that the bidder is willing to be allocated, should he not receive the full amount bid for) is zero. This greatly simplifies the methodology for any pro rata allocation that may be needed.
Scenarios

Participants will be split into groups of around 5. Each group will have at least one ENTSOG facilitator to ensure the group understands the game, to promote discussion, and to answer questions on the game itself and on auctions more generally.

Each group will be provided with an envelope containing a business scenario that will influence the amount of capacity they will try and purchase at each IP and for each quarter.