Appendix 2 – high level terre process

The diagrams below set out the timings and sequence of the TERRE process from a National Grid perspective. TERRE processes will begin one hour before the product delivery period, and BSPs will be notified of activation of their bids 30 minutes before the TERRE product delivery period. The 30 minutes at the start of the process named “TERRE Process” is an important time window, and in the first 15 minutes TSOs will have to carry out several tasks in order to be ready to submit data to the central platform and allow the TERRE algorithm to communicate results 30 minutes before real-time.

This section of the TERRE process is broken down in the timeline below:





Each of the process steps to be carried out by National Grid during this time are described in more detail below.

**GB Process Steps**

Step 1: BSPs submit offers to NGET



* + At the TERRE Balancing Energy Gate Closure Time (BEGCT) BSPs can no longer update their TERRE product offers (note the terminology used in TERRE is upward/downward offers rather than bids and offers). After this point submissions become firm. The BEGCT will ideally be aligned to current GB gate closure time of 1 hour *(although there is a risk that this could be 5 mins later due to timing overlaps with XBID project)*
  + BSPs to submit offers to NGET in € (TBC)
  + Submitted via existing Electronic Data Transfer\* mechanism as per the process for BOAs
  + Data can be submitted up until 05:00 D+1 (same as BOAs)
  + Balancing Mechanism Unit (BMU) capacities offered into both BOAs and TERRE
  + Both BMU and non-BMU participants able to submit offers

Step 2: NGET filters offers



* Offers will be assessed for security by NGET to ensure that any offers put forward onto the TERRE platform are operationally feasible
* If offers cannot be accommodated by NGET then these offers can either be:
  + Unshared: if NGET wish to keep highest cost bids back for own use (subject to volume restrictions related to procured volumes of reserves as per EB GL obligations)
  + Restricted: As a result of a physical constraint on the system

Step 3: NGET Determines Balancing Needs



* NGET will determine upwards / downwards imbalance need for energy to be submitted to the platform
* The max size of the imbalance need that a TSO can submit to the platform should be less than or equal to the sum of the shared offers made by that TSO in the same direction (as per EB GL obligations)
* Two types of imbalance need can be submitted by NG:
  + Inelastic need: not priced (volume absolutely required by TSO)
  + Elastic need: NGET will set a min / max price (depending on the direction of the need) that they are willing to receive/ pay to satisfy their needs
* A joint process with RTE, NGIC and NGET will determine the Available Transmission Capacity (ATC) limits for TERRE
* NGET can also express negative ATC values / flow limits to TERRE which will   
  re-dispatch the I/C to a new position using TERRE products – whilst maintaining system balance

Step 4: NGET submits data to TERRE platform and central algorithms



* NGET can submit imbalance needs up until 45 minutes before real-time
* NGET will notify BSPs of any restricted or unshared bids via extension of existing EDT accept/reject mechanism at the same time or prior to submitting bids to the central platform
* Submission of TSO imbalance needs will be firm
* Submissions will include details of unshared / restricted bids and Available Transmission Capacity limitations
* Netting and matching will be performed by the central algorithms
* Pay as clear price established

Step 5: NG Receive results from TERRE Platform



* TERRE Platform will send request for offer activations to NGET (volumes and prices)
* NGET will also receive updated Interconnector flows
* NGET will then communicate these activations to BSPs through existing EDL\* mechanism, in the form of BOA instructions
* These BOA instructions will have a TERRE flag for the purposes of BSC processes managed by Elexon (e.g. to be settled at clearing price not bid price)