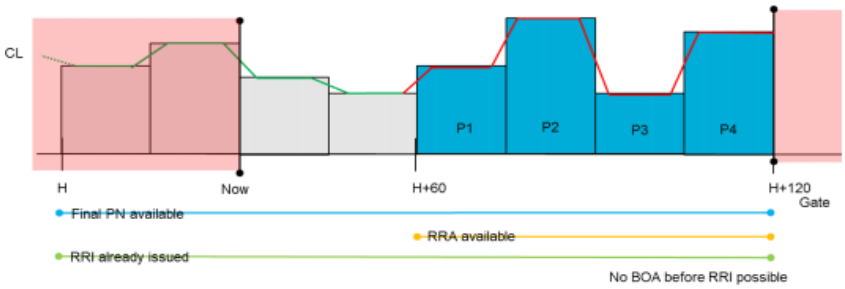
TERRE market integration testing
Question and Answers

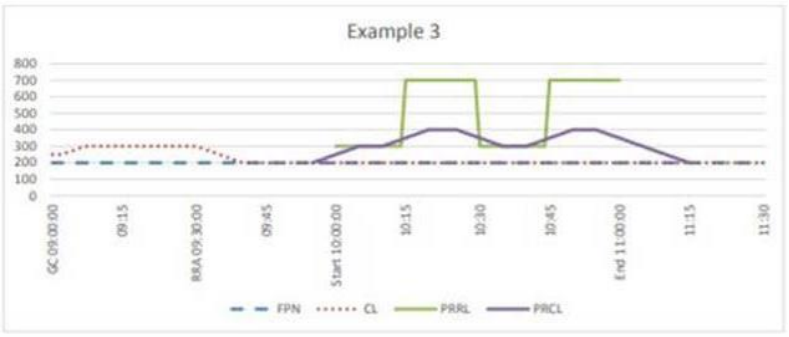
Version: 15 October 2020

*Preparation for participation in the Replacement Reserve (RR) market, being created by the Trans-European RR Exchange (TERRE) industry project – **GB Go-live date tbc***

Question	Answer
1. What are the timeline and key dates?	The below test phases planned for this year has been successfully completed. • Early visibility testing • Connectivity testing • Data submission testing, • Replacement Reserve Instruction (RRI) processing End to End testing is currently in progress and is planned to be completed by 30th Oct 2020 Please note: GB go-live has been delayed beyond 2020.Please refer to the announcement of 4 September on the Replacement Reserve (RR) of the NGESO website.
2. When market participants were asked to submit a set of testing scenarios, did NGESO supplement these or combine them in some way for the testing activity?	Yes. The scenarios received from the Market Participants were mapped with the existing scenarios of NGESO.
3. Are there any modifications to the consistency of RR Bids?	Please refer to the EDT specification document, which describes the different rules for RR Bids.
4. If an existing Bid-Offer-Acceptance (BOA) in an opposite direction coincides with a Libra activated instruction no RR Instructions (RRIs) will be created for any activation periods for that Balancing Service Provider (BSP) in the entire auction period, even if the BOA only affects one activation period. Why is this? What will then happen to this volume which is expected to be delivered through LIBRA?	Issuing of BOA in opposite direction for one activation period (15mins) will not impact RRI for other activation periods. LIBRA only gives the information after optimising the result. The volume which is expected through LIBRA is not delivered and remains unsatisfied in such scenarios.

Question	Answer
5. What ramp rate do we submit if we can ramp up in under a minute?	Maximum allowable ramp rate is 999 MW/min.
6. Do we access the test server over our existing Electronic Data Transfer (EDT) link?	Yes, test server can be accessed through the existing EDT link.

7.	Concerning the times that RR Instructions (RRIs) are issued, are they sent for the full auction period, half an hour before the first activation period starts? Could Balancing Service Providers (BSPs) subsequently update their Final Physical Notification (FPN)? Or is the RRI that covers Q2 and Q3 sent after gate closure for this half hour (HH)? Section 3.2.3 seems to suggest that the RRI for Q4 would not be issued until gate closure of the following HH. The information may well be in the specification, but what is the timeline for when RRIs will be sent out?	Yes, RRIs are sent for the full auction period – 30 mins prior to the activation period BSPs can indeed update FPN before the gate closure time., but up to certain limits, and as per the rules inGC0097: Grid Code processes supporting TERRE. RRIs will start being issued at H-30. These will be issued in sequence as close as possible to each other, once the previous RRI has been accepted (see example below). As the ramp after P4 is outside the BM gate, the RRI will have to be modified by the starting ramp of the next RR cycle, or will be returned to FPN at or shortly after H-30, i.e. at the point when the FPN is known for that last 30.  The Post-Replacement Committed Level (PRCL) is the unit's new level when the participant's submitted import/export run-up and run-down ramp rates have been applied to the Post-Replacement Reserve Level (PRRL). The PRCL is broken down into a number of RRIs, following the turning points within the PRCL. In the example below, three RRIs will be required. The final RRI will be held back until the FPNs beyond the TERRE auction period are available:

Question	Answer
	• The declared run up and run down rates for an RR Provider are equal and are 10 MW/min. there are no BOAs in this TERRE period and the FPN = 200MW • The RRAs are as follows • RRA(1) from 10:00 to 10:15 = 100MW • RRA(2) from 10:15 to 10:30 = 500MW • RRA(3) from 10:30 to 10:45 = 100MW • RRA(4) from 10:45 to 11:00 = 500MW • The PRRL are as follows • PRRL(1) from 10:00 to 10:15 = 300MW • PRRL(2) from 10:15 to 10:30 = 700MW • PRRL(3) from 10:30 to 10:45 = 300MW • PRRL(4) from 10:45 to 11:00 = 700MW The maximum change that can be achieved from one PRRL to the next PRRL is 100MW (e.g. if started to ramp up at 10:10 ending at 10:20) and so these results are infeasible. Using the above infeasibility rules will result in the following PRCL: 
8. What feedback is expected after RR-bid submission?	Acknowledgements (acceptance and rejections) of files will follow the same process being followed for physical/dynamic data.
9. Will Stable Export Limit (SEL) be accounted for in any RR Acceptances (RRAs)?	SEL is ignored for generating RR Instructions (RRIs).
10. If a pumped storage unit is pumping (ie. PN is at a negative value) and wants to create a TERRE bid, to take the unit out of pump (ie. to zero output), but the unit is also available for an offer into generation for the same activation period, how do we submit this into TERRE? Can it be done in one single file?	Yes, it can be done with a bid for both UP and DOWN for the same activation Period (DP) – a 15-minute slot in an auction period.

Question	Answer
11. We cannot generate on a unit if we are pumping on any other unit and vice versa. Can we link different BMU bids with each other?	No, different BM units cannot be linked with each other.
And if NGESO has an existing bid into pump on one unit for the same activation period as a Libra activated RR Acceptance (RRA) to generate on another unit, and we cannot physically deliver both instructions, what would happen in this scenario? Would we still receive an RR Instruction (RRI)?	Checks are only made for the BMU submitting the RRbid and thus requesting the RRI. If the submitted bids are accepted by LIBRA, RRIs will be sent to respective BMU and its acceptance/rejection will be dependent on decision taken by unit based in its capability to deliver the received RRIs.
12. We had a number of files unexpectedly rejected by NGESO, with the rejection reason mentioning Associated Bid ID when no Association was included.	Regardless the number of files used for submissions, In the same auction period, different association bid set should be used for different BMUs<<c_rrb_8>>. Similarly, different bid IDs should be used for same auction period<<c_rrb_2>>. Please refer to Data Validation and Data Consistency (DVDC) document for rules.
13. If a unit is generating at Stable Export Limit (SEL), and is available to both increase and also reduce generation, how is this reflected in a TERRE bid?	This would be done as exclusive bids – one to increase and one to reduce with different bid IDs but the same exclusive bid ID. Libra would then only be able to instruct ONE of the bids.

The example above with two exclusive curves is also described below:

Bid ID	Direction	Max vol	Min vol	Price	Delivery period	Exclusive bid ID (as for bids exclusive with each other)
546454	Upward or downward	Q_max1	Q_min1	P1	[H,H+15]	ID1
		Q_max2	Q_min2	P2	[H+15,H+30]	
		Q_max3	Q_min3	P3	[H+30,H+45]	
		Q_max4	Q_min4	P4	[H+45,H+60]	
546455	Upward or downward	Q_max5	Q_min5	P5	[H,H+15]	ID1
		Q_max6	Q_min6	P6	[H+15,H+30]	
		Q_max7	Q_min7	P7	[H+30,H+45]	

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14. We can both pump and generate but there is a transition time >10 minutes needed between these modes. Would we have to link all of our bids in a one-hour period to be either in a generation mode or a pump, given that we could not generate for the first activation period and then pump in the second one. Will this in turn affect the subsequent auction periods in the same way? We will not know the RR Acceptance (RRA) for Q4 of the previous auction period when we submit the following auction period bid.	The RR Instruction (RRI) will only be generated for the activation period once the gate has been closed and the Final Physical Notification (FPN) set. Maximum & Minimum Export Limit (MEL/MIL) could be used to indicate the inability to deliver RRAs but this would result in imbalance volumes.
15. In the ENTSO-E documentation, the Max and Min MW quantities for an indivisible bid must be the same. However, the Electronic Data Transfer (EDT) spec says the minimum quantity should not be set for indivisible bid, which seems to contradict the ENTSO-E document. Could you clarify please?	It is specified that an indivisible bid will consist of a single quantity and a single price. Therefore, when it says min qty= max qty, it tries to explain the literal meaning of Bid. In this type of bid, we should not give different values for minimum quantity, and it is implicitly understood in the system. As per the design, Libra accepts only a single quantity when the bid is indivisible, and raises an error if indivisible bids are submitted with minimum quantity. Please refer to the Data Validation and Data Consistency (DVDC) document to avoid such discrepancies.
16. How participants are supposed to understand what is and is not acceptable? How can we find out why these Bids were 'cancelled'?	All responses from LIBRA will be published on ELEXON BMRS Portal based on which the participants can conclude the outcome of each bids. However, due to current limitations this functionality cannot be tested during the current cycle of E2E testing.

Question	Answer
17. Does Stable Export Limit (SEL) get taken into account in TERRE instructions? We can generate at any load from 150MW (SEL) to 300MW Maximum Export Limit (MEL), but not between 0MW and 150MW. Does this mean all of our bids are non-divisible, as we are limited to a generation above 150MW, or will SEL be accounted for in any RR Acceptances (RRAs)?	If the participant is playing in both markets, they will be expected to submit a full set of operational data. It means that their bids will be Divisible because they are able to set a minimum volume as specified below: **Table 1: Divisible bid characteristics** Characteristics: Allowed values Direction: Upward or downward Max Volume: Between 0 and IT limit Min volume: Different from 0, lower than max volume Price: Between price cap and floor Delivery period: [H,H+15] OR [H+15,H+30] OR [H+30,H+45] OR [H+45,H+60] *This means they will never be FULLY divisible* **Table 2: Fully divisible bid characteristics** Characteristics: Allowed values Direction: Upward or downward Max Volume: Between 0 and IT limit Min volume: 0 Price: Between price cap and floor Delivery period: [H,H+15] OR [H+15,H+30] OR [H+30,H+45] OR [H+45,H+60]
18. By when we could submit the bids for End-to-End (E2E) testing?	After successful a connectivity test, partners can submit their bids at any time before the gate closure.
19. Is there any adjustment to the End-to-End (E2E) testing schedule?	Yes, E2E testing is being carried out in 2 cycles. Cycle-1 = 21-Sep to 02-Oct Cycle-2 = 20-Oct to 30-Oct
20. Is there any update on GB Go-Live date?	GB Go live date is delayed beyond 2020. Please refer to the announcement of 4 September on the Replacement Reserve (RR) of the NGESO website.
21. Any updates on current status of joint test strategy between NGESO and ELEXON, and its future planning?	The Joint Test strategy is on hold until further notice. We will re-plan and update all stakeholders in 2021 once the position regarding use of EU platforms in clearer.