

**Minutes of meeting**  
**Experts Working Group 22/03/2013**  
**Ancillary Services provided by Distributed Energy Resources**

**List of participants:**

<b>Company/ association</b>	<b>Name</b>	<b>Present</b>	<b>Excused</b>
EnergyPool	E. Scholtès		x
REstore	P-J. Mermans	x	
Actility	M. Hajjam	x	
ENI	A. Thoreau	x	
GDF Suez	D. Hendrix	x	
EDF Luminus	F. Demaret	x	
FEPEG	S. Harlem		x
WOM	H. Mariën	x	
CREG	J. Gheury	x	
CREG	B. Libert	x	
Lampiris	S. Heyselberghs	x	
ORES	M. Lefort	X	
Eandis	L. Decoster	X	
Infracx	A. Dexters	x	
Elia	H. Vandenbroucke	x	
Elia	A. Tsiokanos	x	
Elia	S. Otjacques		x
Elia	T. Desmet	x	
Elia	S. De Baets	x	
Elia	P. Ottoy	x	
Sia Partners	B. Aubard	x	

**1. Agenda**

- Introduction & Context
- Pilot Project R3 from decentralized load: first learning's
- Elements to consider in order to diversify A.S. Resources
  - Correction of BRP's perimeter ( 2 reasons)
  - Implications if BSP ≠ BRP
  - Solutions investigated
- R3 from distributed energy resources
  - Feasibility issues for 2014
  - Impact on DSO grid
  - Main characteristics
  - Realistic design of such a product for 2014
  - Next Steps

## **2. Main Stakeholders reactions following the request of Elia to get written feedback following the meeting and the minutes and presentation**

**FEPEG/GDF SUEZ** thinks there is a certain amount of “unpredictability” between BRP and client, when there are no agreements between BRP and BSP. They think that the activation of a GU itself can be handled by the BRP, but after the activation, they say that GU probably will want to recharge their buffer and this extra off take is not nominated upfront. Overall they want a transparent view on the consumption of their clients and they want additional agreements between BSP & BRP.

**Actility** is pleased with the initiatives taken by Elia for smart demand-side management have caught a wide and deserved interest by nearly all parties, but Actility feels that the haste with which the mechanism has been thought up will have counterproductive effects.

Actility thinks that Model 3 is not suitable in the long run. They mention that by paying a fixed premium to be divided between BSP and flexible customers, the model adds an additional cost to electricity consumers. In addition to this, Actility thinks that the limited number of activations that such a mechanism would allow prevents the participation of DSO connected customers to have a significant impact on average Marginal Incremental Price (MIP) and Marginal Decremental Price (MDP).

Actility also thinks that such a model does not properly allocate the value of the flexibility. Indeed while the BSP and the customer would be remunerated through the payment of fixed premia yet to be financed, the BRP would need to be compensated for the adjusted energy in order to avoid a potential “vol d’énergie”. As demonstrated by Actility in a post meeting answer to Elia, paying the MIP to the BRP as suggested by ELIA is far too large a compensation because the MIP is most of the time way higher a price than the procurement one. This unexpected windfall is undeserved as the BRP is a passive actor of the flexibility market in this case, and this redistribution effect quite similar but opposite to “vol d’énergie” should be avoided at all costs. Not only is this unfair (the BRP did not take any risk in trying to develop demand side management technologies), but should a BRP try and become also BSP for its customers, a competition bias would be created in favour of the integrated BRP/BSP actor: with equal margins, an integrated actor could propose more value to the customers than would a pure BSP.

As a conclusion Actility sees model n°1 as the best model available so far. They are concerned that a capacity-only mechanism will prove costly and less efficient. Actility believes that the efforts needed to implement model n°1 and model n°3 are quite similar in terms of IT development.

**EnergyPool** is more in favour to 20-25 activations as a maximum which is more in line with Elia needs as it is going to be at the end of the merit order. 40 to 45 activations could reduce the number of customers willing to be curtailed and lead to increase the reservation cost.

Regarding the period of notice, EnergyPool is in favour to stick to the European guidelines on about R3: 15' to react and not 3'

To guarantee 100% of availability, EnergyPool would like to get:

- a secondary market;
- aggregation facilities with customers connected to TSOs and DSOs grids (load & prod);
- a tender with at least quarterly lots with a split Peak/Off Peak.

EnergyPool is in favour to have a period of recovery after activation between 2 to 4 hours

EnergyPool has no appetite to use last 15min metering value as reference point

**REstore** would like to use of “sub-meters” to measure the demand of the specific flexible equipment at the site which is contracted for demand curtailment, to be capable to capture curtailable demand in case the flexible load is part of a large industrial site, with a significant share of non-flexible load

REstore proposes to cap the annual penalty to 1 x the annual reservation remuneration for the settlement for availability.

About the volume to be allocated, REstore recommends to drop the volume thresholds (total # MW and # of MW per player) for 2014 and to use a 100 MW goal rather than a cap. About the settlement for activation, REstore is in favour to have a formula reflecting that when less energy has been activated than the energy that should have been delivered, then the aggregator will not receive the availability fee for the entire window (peak, off-peak, window) in which the activation was not delivered.

**ORES** expert adds some general comments:

- the approach to address the implementation cost of the such a R3 service has to be a holistic one which means the electrical system has to be considered as a whole. The cost optimization of one or more market roles may not be done at the detriment of the other(s) in general and the customer in particular. Examples:
  - Eastern loop where a local congestion on the ELIA network could be generated by a diminution of the load in distribution and an increase of the reinjected power in the ELIA network. ;
  - Second situation: the costs for the DSO's in particular has to be taken into account in the total cost of the solution;
- the presentation done was too general: the short term and long issues were mixed which can be a problem to implement a first solution for 2014. To avoid such a situation, it has been suggested that the short term solution was clearly delimited in the discussion; the long term issues (like congestion prevision / mitigation, interaction models, data transmission, real time analysis,... ) must be analysed in the different projects (like GREDOR in Wallonia) ; Both approaches must be covered by a same vision to be discussed from now on;

### **3. Introduction**

Elia explains its willingness to introduce progressively diversification in its products to be used for its ancillary services. Elia references to the Terms of Reference (ToR) agreed upon by all participants.

The goal of this working group is to reach a mutual consensus on new balancing products from distributed energy resources:

- To give input & remarks for a proposed product design by Elia to be implemented with pragmatic solutions for 2014 (contractual/technical characteristics are presented in the WG);
- To develop an enduring, long term oriented model for 2016 onwards taking into account the remarks received from the stakeholders;

This first Expert Working Group focuses on the proposed product design for 2014, which will be presented to the TF Balancing of 17/04/2013. The following Expert Working Groups will go more into detail discussing several topics for the long term (LT) solution. Participants are welcome to propose additional topics to the agenda of the coming Expert WG's by sending an e-mail to Mr. Vandenbroucke ([Hans.vandenbroucke@elia.be](mailto:Hans.vandenbroucke@elia.be)), cc: Mrs Pauline Ottoy ([pauline.ottoy@elia.be](mailto:pauline.ottoy@elia.be))

### **4. Pilot Project R3 from decentralized load: first learnings**

REstore presents feedback on the currently running pilot project it has with Elia and highlights several first lessons learned:

- In order to solve the problems with the "vol d'énergie", there is a need for a clear market model for efficiency purposes;
- But in order to have a workable schedule for 2014, REstore is not in favour to have another bilateral consultation phase between each aggregator and each BRP towards the end of 2013, as the last consultation phase at the end of 2012 took a lot of time and resources from all parties involved. The current model without perimeter

compensation, tested in the pilot project, could be a valid model continued for at least 2014.

- To have a good settlement, DSO's need to be involved to give correct, validated AMR metering data
- REstore communicates to each concerned ARPs the list of EANs included in their portfolio for delivery of R3 to Elia, and whenever activated at the request of Elia, informs the relevant ARPs at the latest 5 minutes after the start of the curtailment wrt. to the impact on their perimeter .
- REstore is in favour to deliver demand curtailment in the form of a "fixed, committed reserve" which can be activated at each point in time in the selected availability windows independent of the nominal power demand of a site at the moment of activation, rather than a shedding limit as currently used under the pilot project. Demand curtailment in the form of a "fixed committed reserve" is also applied at most other European TSOs using Demand Response (UK, Germany, ...) and creates a level playing field with Open Cycle Gas Turbines.
- REstore informs that in general, sites in portfolio require REstore not create a power peak after the end of the activation, in excess of the 'historic' power peak level which was in place prior to joining the DR program.

## **5. Elements to consider in order to diversify A.S. Resources**

Elia re-clarified the definition of the correction of the perimeter of the BRP, the implications when the BSP is not the BRP and 3 possible way-forwards aiming at independency of the BSP towards BRP (see slides).

## **6. R3 from Distributed Energy Resources: Proposed solution for 2014**

**Important remark:** The presentation given here by Elia focusses here on load but the proposed product is also applicable for generation response.

### 5.1 Main Characteristics

Elia presents main characteristics for the proposed Elia solution for 2014.

### 5.2 Feasibility for 2014

Elia explains the **feasibility** for 2014:

- ***Contractual impact for Elia***  
The current ARP contract and Balancing rules are impacted by the R3 DSO 2014 product and will be adapted accordingly.
- ***Congestion Management:***  
DSOs should be involved in the prequalification of the possible access points, which are eligible to participate in an aggregator's portfolio.  
Taking into account the mentioned concern of congestion management(i.e. congestion that could create a curtailment activated by a BSP on their grid), the DSO experts express their willingness to be involved in the prequalification of the list of EAN proposed by BSPs for the R3 DSO 2014 product.

Elia therefore proposes to include the DSOs in the loop of the reserves tendering process for R3 DSO in order to perform this prequalification. Elia will make a proposal towards the DSOs for stating the details of this prequalification process, inspired by the European Network Code on Load Frequency Control (which is currently under consultation), by the next Expert WG.

- ***Needed Data exchanges (slide 20-21):***

On the topic of Settlement of the service, represented Experts from DSOs confirm that Atrias cannot be seen as delivering the metering data of the curtailed site to the

interested stakeholders (i.e. BRPs, BSPs, Elia) before 2016. They highlight that Atrias is a data platform and a DSO clearing house and not a specific entity (DSO still validates data & grid users remain owner of their own data).

For the short term implementation ("R3 DSO" tender for 2014), experts from DSOs provide their conditional agreement (to be validated internally) to deliver the metering data of the active access points to Elia for controlling the activation.

Eandis adds however that the DSOs remain service providing companies and that it is possible that these data are provided as part of a "commercial metering" service

Under the short term implementation where no correction is applied on the BRP perimeter, BRPs also want to receive, on top of the list of active sites that can be curtailed within their perimeter, the metering data from the DSOs in order to refine the parameterization of their forecasting model.

### 5.3 Specific Product Design for 2014

Elia explains the details of the proposed product design for 2014 (slide 23-25).

CREG questions Elia's proposal to start with 30 MW with a maximum of 15 MW per BSP. It can be seen from two points of view: either to let as much market parties participate as possible if the price is reasonable or to just choose the best two providers. The CREG prefers the first point of view. Therefore the number of possible actors should not be limited. Therefore CREG suggests to increase the volume and to allow all interested BSPs to participate while respecting limited impacts on costs and lowering the risks.

Elia says it will formulate its tender and specifically the clause related to volume accordingly.

REstore wonders if it is possible to show statistic information regarding R3 Prod. This may facilitate Aggregators to base their proposition on these characteristics. Elia responds that it will present this in the next Expert WG.

## **7. Next steps**

A final proposition of the product R3 DSO 2014, taking into account the remarks and feedbacks from the stakeholders in this Expert WG, will be presented to the TF Balancing of 17/4/2013.

**To that extent, a concrete product proposal for R3 DSO 2014 can be found in the attached slides**

All written comments & reactions in general, to these minutes in specific (in Track Changes) & to the concrete proposal can be sent at the latest by April 2<sup>nd</sup> to:

- Hans Vandenbroucke ([Hans.Vandenbroucke@elia.be](mailto:Hans.Vandenbroucke@elia.be))
- Pauline Ottoy ([Pauline.Ottoy@elia.be](mailto:Pauline.Ottoy@elia.be))

For the next Expert WG meeting, a doodle will be sent for possible dates close around the next TF Balancing in order to avoid unnecessary travel.