

Expert Working Group

Oct 14th, 2014



Agenda



- Context (14:00-14:15)
 - ✓ R3DP 2016
 - ✓ SDR Winter 2015-2016
 - ✓ Short Term Sourcing R3DP
- Roundtable (14:15-15:45)
 - ✓ Input Febeg
 - ✓ Input Aggregators
 - ✓ Input Febeliec
 - ✓ Input DSOs
- Break (15:45-16:00)
- Planning SDR for 2015-16 (16:00-16:30)
- Conclusion (16:30-17:00)

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Context

R3DP 2016...

- Current R3DP product is valid until = 31/12/2015
- Current product design = delta-P product with no correction of BRP-perimeter
- Max volume = 100MW in 2015
- Max 40 activations/year with max. duration of 2hours per activation and min 12hrs in between
- **Notification to BRP** (under development): notification in real time (<15' after info received from BSP) and on aggregated level of total activated energy and the duration of the activation
- Prequalification process
- Contract DSO-BSP
- Meanwhile, within ATRIAS Flex project broad discussions on various type of flex were organized leading to a Consolidation Note with 3 main issues unveiled: confidentiality, transfer of energy and modalities of conditional M-Flex. However, ...
- focus of Expert Working Group is on consulting stakeholders on

the continuation and implementation of R3DP 2016 (and beyond if possible)

3 Expert Meeting scheduled between today and end 2014

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Context

SDR from DSO-grid for Winter 2015-2016...

- Current SDR only for TSO-connected customers
- Law (art. 7quinquies) foresees participation of DSO-connected access points

Questions?

- Prequalification process?
- Contract DSO-SDR provider?
- What reference curve (baseline)?
- What about so called "supplier back payment scheme"?
- Notification to BRP?
- Modalities of contract ELIA SDR provider related to DSO grid
- focus of Expert Working Group is on consulting stakeholders on

the questions raised above for SDR from DSO for Winter 2015- 2016

- 4 Task Forces are scheduled between today and end Jan 2015
- Product characteristics (# activations...) discussed in TF as purpose is top have harmonized product(s)

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Context

Short Term Sourcing R3DP...

- European trend towards STS → cross-border cooperation is possible when aligning to shorter sourcing cycles
- As of 2015, all of R1- and R2-volumes in 2015 via short term sourcing
- Some market participants can offer spare/residual R3-capacity on spinning unit ...
- others have more opportunities to win a ST-auction compared to 1 single yearly auction.
- In case annual auction is lost, R3-providers might shutdown their assets...
- and when transition to STS is delayed/cancelled, no newcomers arrive ...
- then ELIA might be facing a situation of imperfect competition! Hence, ELIA wants to create extra R3 liquidity.
- As R3 Production and R3DP are in competition, ELIA seeks to source both products on ST as of 2016.
- focus of Expert Working Group is on consulting stakeholders on

the transition to short term sourcing of R3DP (and R3 and ICH) as off 2016

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R3 DP 2016, R3 STS and SDR 2015-2016

Elia Expert Group 'Ancillaries by Distributed Energy Resources' 14.10.2014





MEMBERS























































October 14, 2014



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R3 DP 2016



TOWARDS ENDURING MARKET MODEL ...

Cap	Act/Cap	Act	Act/Cap	Act/Cap	Cap	Act	N/a	_
• Primary reserves	•Secondary reserves	• Uncontracted reserves ('Free Bids')	•Tertiary reserves via Generation units	•Tertiary reserves via sheddable customers	Balancing •R3DP	•Reserve contracts with neighbouring TSO	• Disconnect customers (forced)	
Pre-contracted Reserves		Bidladder	Pre-contracted Reserves		Bidladder			

Example R3 'Dynamic Profile':

- No economic criterion that will lead to the activation of the cheapest pool/BSP
- Activation without increasing marginal cost and thus saturating imbalance price

- A 'merit order mechanism' allows cost efficient activation but, therefore, an activation price is needed
- Integrating product groups to clusters, e.g.
 R3-products, by harmonising activation rules
- Volume and price of activated energy must be known for an activation based system





HURDLE IS 'TRANSFER OF ENERGY'

FEBEG priority is respect for the 'supply contract'



- Options for FEBEG:
 - Short term: 'Bilateral model'
 - Commercial contract between Requestor-BRP and Source-BRP
 - FEBEG is willing to start discussions with all interested parties
 - Long term: 'Model via client'
 - Adjusting metering: supplier bills client and client bills FSP
 - Is this feasible (costs, complexity, implementation time, ...)?
- For now: stability, pending enduring solution!
 - Keep market design for R3 DP
 - No further increase of the volumes
 - Prolongation temporary dispositions in ARP-contract



QUICK WINS R3 2016 (I)

- Transparent and non-discriminatory rules for partial activation of R3 DP
- Preventive limitation of grid usage:
 - Issue is related to relation between GU and DGO: FSP should as such not be involved!
 - > Limitations in grid code or access conditions in connection contract
 - > GU will have to inform FSP about possible constraints
 - GU can easily switch form FSP
 - GU can mandate FSP to fulfill certain formalities (as service to GU)
 - Need for clear and transparant rules:
 - > Equal treatment of all GU (technical behavior, not cause)
 - GU cannot be prevented to decrease consumption
 - Costs and administrative burden (entry barrier)
 - Quid opportunity loss for GU?



QUICK WINS R3 2016 (II)

- Use of sub-metering:
 - It should be possible to use sub-metering
 - Sub-metering has added value as it improves the accuracy of the determination of activated volumes:
 - > Allows more specific reference curves by sub-process
 - Proves activation that is perhaps not accurately reflected in the global off-take
 - Sub-metering should remain a non-regulated commercial activity:
 - Monitors specific energy flows behind the sub-meter and has thus no impact on the head meter
 - Allows most efficient solution on case by case basis, e.g. use of already existing sub-meters of the Grid User
 - ➤ All stakeholders to the transaction should agree upon the modalities



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SDR 2015-2016



SDR 2015-2016

Product design SDR 2015-2016 should be simple, transparent and non-discriminatory

- SDR product design should be manageable:
 - SDR 2015-2016: R3 DP-like solution
 - Further evolution:
 - ➤ <u>Short term</u>: 'Bilateral model'
 - Long term: 'Model via client'
- Preventive limitation grid usage (see above)
- Need for level playing field between SGR and SDR:
 - Transparency on 'out of market'-verification (= availability/consumption at any price, e.g. maintenance, ...)
 - Need for more transparency about prices 2014-2015: adapt product design accordingly



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R3 SHORT TERM SOURCING: NO OPINION



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Topics

- R3DP 2016-2017
- Strategic Reserves winter 2015-2016
- STS R3
- Bidladder 2016

R3DP: proposed design changes

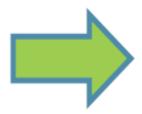
- Continue R3DP product design for 2016-2017
- Stick to current market model for transfer of energy (capacity product)
- Increase capacity
- For determination/settlement of activated volume, allow to use submetering
- Streamline and shorten pre-qualification process
 - Only in identified risk zones
 - Non-discriminatory (price triggered versus activation triggered)
 - Clear regulatory framework
 - legal status: connection contract versus pre-qualification results
 - Modalities of reviewed/reduced access to the network

Strategic Reserves: objectives & proposed design changes

- Unlock full demand response potential, to address increased market needs for peak power in light of current market conditions:
 - Extend scope of eligible loads, such that DGO-connected GU can partake
 - Introduce delta-P product for demand
 - Set technical specs, incl. review of qualification procedure
 - Allow determination of activation volume using sub-metering
 - Same as R3 (no need to cover separately in SR)
 - Introduce new reference curve (instead of nomination) to allow DGO participation
 - Based on sub-metering data
 - Use a x of y reference curve, corrected with day of event data (prior to notification)

STS R3

- This is not a top priority for the aggregators
- The aggregators do not oppose this change if
 - All the proposed design improvements for R3 are implemented.
 - Implementing STS does not take resources away from other more important changes



Aggregators agree that STS is the right long-term model, but doubt that the timing is right to make it a priority at this point.

Bidladder

- Open the Bidladder to DR from aggregators on a level playing field with Generation
 - One product definition that is accessible to both DR and Generation
 - Head-on competition between DR and Generation based on energy price
- Test new 'transfer of energy' model based on "fair wholesale market price"
 - Settle activated volume between BSP and BRPsource, i.e. BRP portfolio is corrected by transferring the activated volume between the BSP and the BRP
 - Use "fair wholesale market price" that is symmetric (same for regulation down and regulation up) for this transfer



Elia Expert WG Balancing

Febeliec position

Elia Expert WG Balancing 14 October 2014



Febeliec represents the industrial consumers of electricity and natural gas in Belgium



General comments

- General framework: increasing intermittent («non dispatchable») generation capacity + lack of dispatchable capacity lead to generation adequacy AND balancing issues
- Febeliec primary goal: all load flexibility should have the possibility to find its way to the market/system
- Demand response should be introduced on a voluntary basis and against a fair remuneration (market based or regulated tariff)
- Load flexibility is best reflected in demand curve (market)
- Residual flexibility can be made available for SDR → appropriate products
- Most flexible processes are valid and cheap alternatives for balancing (R1/R3)



R3DP 2016

- Potential of load flexibility on distribution level ?
- Smaller volumes, smaller organisations → more appropriate for aggregators
 BUT direct access for industry should remain possible!
- Product specifications : compliant with R3 needs



SDR DSO 2015-2016

- Potential of load flexibility on distribution level ?
- Smaller volumes, smaller organisations → more appropriate for aggregators
 BUT direct access for industry should remain possible!
- Product specifications : Febeliec survey



Feedback Febeliec members (survey)

Issue	#
Contract complexity / timing	7
Aggregators take significant part of reward	2
Process integration / Logistics issues	1
Reward too small (comparison other countries)	2
Reference for load reduction	2
Sub-metering / separate meters	2
85% Threshold	5
130 hours Threshold (more flexibility required)	2
Response time (6,5h)	3
SL/ ΔP	2
Interference with other products (R1, ICH, R3DP,)	2
Penalty for unavailability / no extra-reward for consumption < SL	5
Human aspects - convince my boss/production manager	3
Internal technical issues / Industrial risk	5



SDR DSO 2015-2016

- Potential of load flexibility on distribution level ?
- Smaller volumes, smaller organisations → more appropriate for aggregators
 BUT direct access for industry should remain possible!
- Product specifications : Febeliec survey

Febeliec works on alternative proposals...



STS R3 (R3Prod – R3DP)

- Balancing products and procedures evolve very rapidly
 - R1 / R2
 - R3DP
- Short term sourcing not interesting for industry
 - Increased risk for fixed cost recuperation
 - Impact on production process
 - ψ issues
- What about the bid ladder ??



R3DP 2016 SDR DSO 2015-2016 Short Term Sourcing

Expert WG ELIA 14/10/2014

Plan



Situation actuelle

Proposition

Application à R3DP2016, SDR 2015-2016



Procédure R3DP 2014 – R3DP 2015 GRD

Vérifications par pool:

- 1. Conformité du contrat de raccordement
- 2. Conformité de l'installation (Prescription Synergrid C10/11)
- 3. Sécurité du réseau (Prescription Synergrid C8-01)

Tendering Elia

Signature du contrat FSP-GRD (Annexe 1 = EAN du pool)

Communication des mandats des clients

Les EAN contractés reçoivent leur notification opérationnelle

Début du Contrat

Envoi de metering (éventuellement agrégé) à ELIA pour vérification des activations et de la disponibilité

Contrôle du respect des limitations techniques éventuelles

Comment rendre ce processus plus souple vis-à-vis des produits concernés ?



Réflexions pour R3DP 2016 et SDR 2015-2016

1. Conformité de l'installation

- À vérifier au fil de l'eau et par EAN
- Indépendant du service de flexibilité offert par le client
- Demande par l'URD, éventuellement via le FSP
- La conformité constitue un <u>pré-requis</u> à l'étude d'impact de la flexibilité (NFS)
- > Les GRD étudient la possibilité de délivrer un certificat de conformité

EG ELIA 14/10/2014 34



Réflexions pour R3DP 2016 et SDR 2015-2016

- 2. Etude de l'impact de la flexibilité sur le réseau (Network Flex Study NFS)
 - La NFS garantit la mise à disposition d'une capacité flexible pendant la a durée du contrat
 - La connaissance du produit est une nécessité pour le GRD
 - La NFS fixe les limites éventuelles liées aux limites opérationnelles du réseau pendant et après l'activation.
 - Tout non-respect des limitations éventuelles imposées implique la responsabilité du FSP
 - ELIA imposera la NFS dans le cadre des produits R3DP et SDR
 - ➤ La période NFS pourrait être raccourcie parce que NFS ne concerne que des EAN avec installation conforme



3. Contrat FSP-GRD

Réflexion en cours pour la mise en place d'un contrat générique par FSP.

A la demande des GRD et en l'absence de cadre réglementaire, ELIA imposera la signature de ce contrat.

Synergrid

Points d'attention:

- Le FSP s'engage à ne contracter que des clients répondant aux exigences GRD et à ne piloter ceux-ci que dans les limites imposées
- Registre d'accès: le contrat contient la liste des EAN concernés en annexe
- Registre d'activation: le FSP s'engage à informer le GRD des activations et le lien avec le produit
- Le contrat décrit, par produit, les services de données de comptage demandés au GRD



Conclusions

- ➤ Mêmes principes pour SDR2015-2016 et R3DP2016
- Volonté de raccourcir le délai NFS
- Séparation conformité (client final) et NFS (FSP)
- NFS liées au calendrier de chaque produit
- Demande d'un cadre régulatoire dont contrat d'accès FSP/GRD
- Adaptation de la prescription C8-01 et contrat
- Faut-il évoluer à long terme vers un processus NFS au fil de l'eau?



Merci pour votre attention

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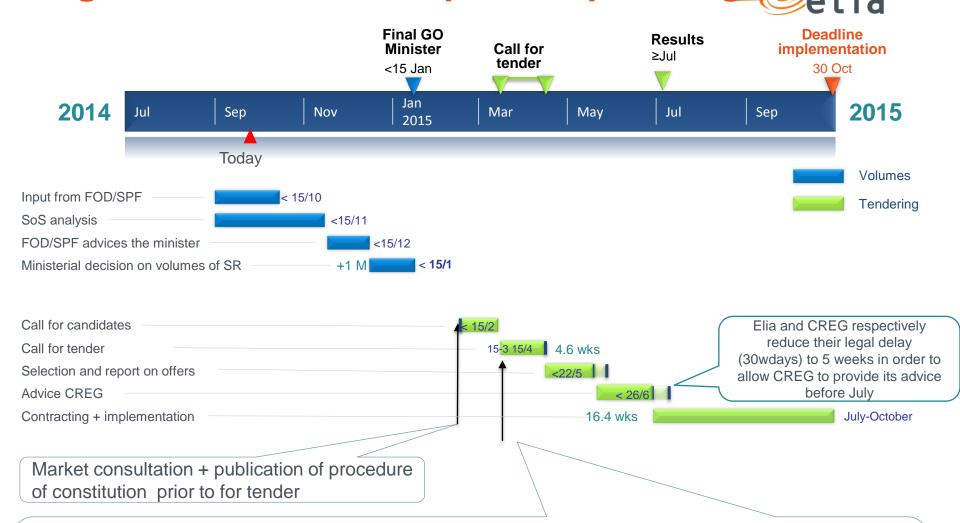
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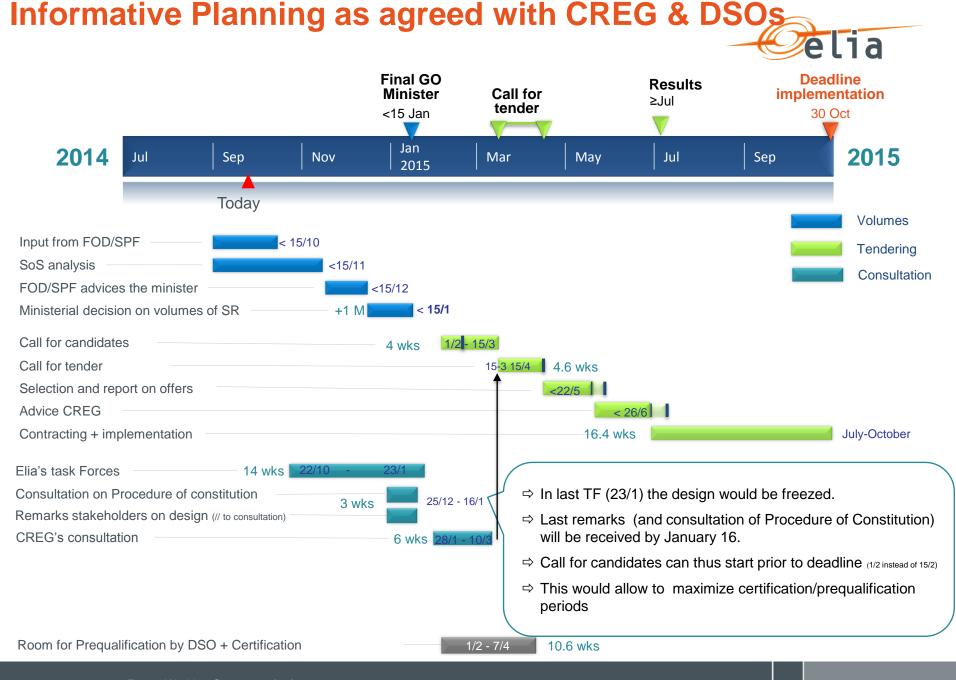
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Legal deadlines and impact on planning



- Contracts must be ready and Functioning Rules must be approved before call for tender.
- CREG needs 6 weeks for public consultation on that document.

 ⇒ Functioning Rules have to be introduced by end of January and thus design has to be finished by that date.
- ⇒ Task Forces will take place before end of January



Planning SRV2

> program of iSR Task Forces for stakeholders consultation:



- 4 task forces are planned between mid-October and end of January
- Specific topics related to SDR-DSO only (prequalification modalities, BSP-DSO contract, model, messages to market...) will be discussed in experts Working groups with feedback to TFiSR.

1st Expert Working Group	14/10 pm	round table where all stakeholders share their vision/expectation on R3DP 2016, SDR Winter 2015-2016	
Task Force 1	22/10 pm	all stakeholders are invited to present their expectations for this consultation.	
2nd Expert WG	17/11 pm	workshop	
Task Force 2	20/11 am	foreseen for design proposal by Elia and discussion	
3rd Expert WG	10/12 pm	Workshop and conclusions on SDR-DSO	
Task Force 3	11/12 am	foreseen for design proposal by Elia and discussion	
Task Force 4	23/11 am	final task Force where the design is frozen and where Elia answers to all questions received during public consultation	

Bilateral alignments with DSOs and CREG will take place between TF

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