Task Force Implementation of Strategic Reserve

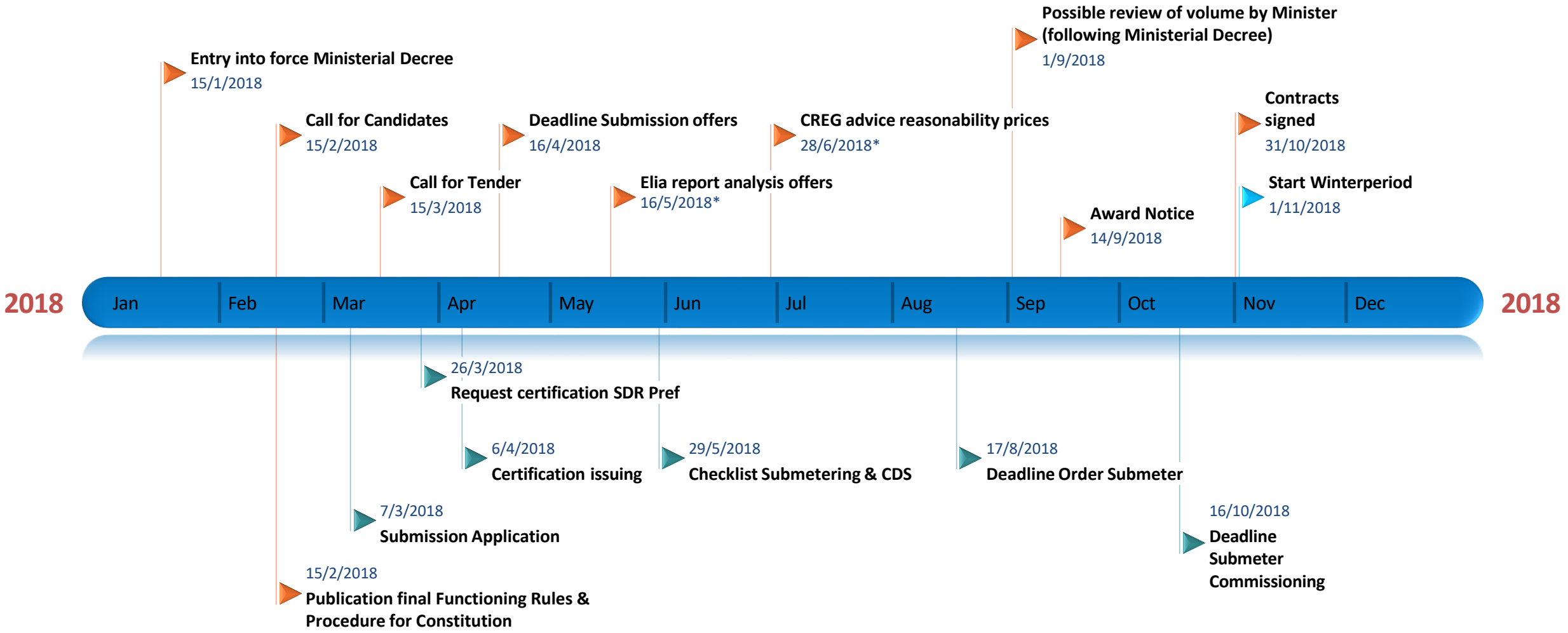
Task Force – July 9, 2018

Meeting Agenda

- **Status Tender 2019**
- **Adequacy study 2019**
  - Market response study update
  - Results of public consultation on methodology
  - Launch of public consultation on the input data
- **SR design Winter 2019/20**
  - Transfer of Energy for SDR
  - Emergency Generators
  - Other

Status Tender 2019

Timeline 2018 (15.02.2018)



** Notwithstanding the legal deadline of 31/5/2018, ELIA strives to submit its report to CREG already by 16/05/2018. As a consequence and following the legally stipulated terms, CREG would conclude its advice by 28/06/2018 (in stead of the legal deadline of 12/07/2018).*

Adequacy Study 2019

Update market response study - Presentation E-CUBE

Adequacy Study 2019

Public consultation on methodology and input data

4 reactions on the public consultation on methodology
→ 23 April 2018 – 21 May 2018

4 answers

FEBELIEC – Michaël Van Bossuyt
CREG – Bart De Waele
FEBEG – Steven Harlem
Dominique Woitrin

- Stakeholders acknowledge the **continuous improvements** and **effort to increase transparency** by Elia

Answers clustered by category:

- Data
- Assumptions
- Publication of results
- Market Response
- Flow Based

Does it make sense to have an iteration step smaller than 100MW in the volume assessment study?

There‘s a distinction between hypotheses errors and modelisation accuracy and robustness.

We should and can only discuss the latter for answering this question.

When increasing the SR step, the LOLE decreases

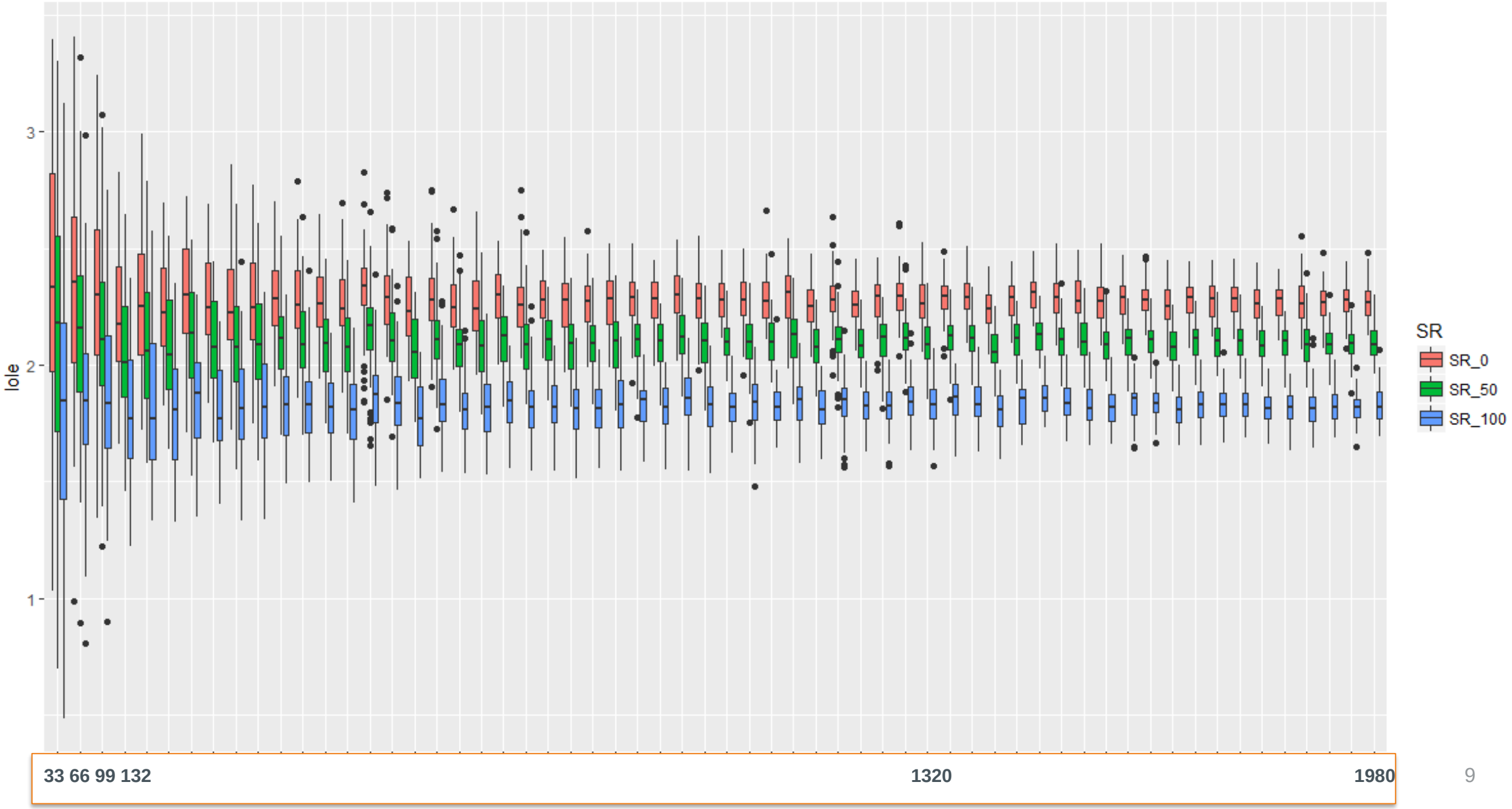
→**As sensible step size is the one for which the true LOLE will be distinct between steps.**

If we are asked to modify a parameter or rerun the model, we don‘t want to end up with a LOLE higher than the one for the previous SR iteration…

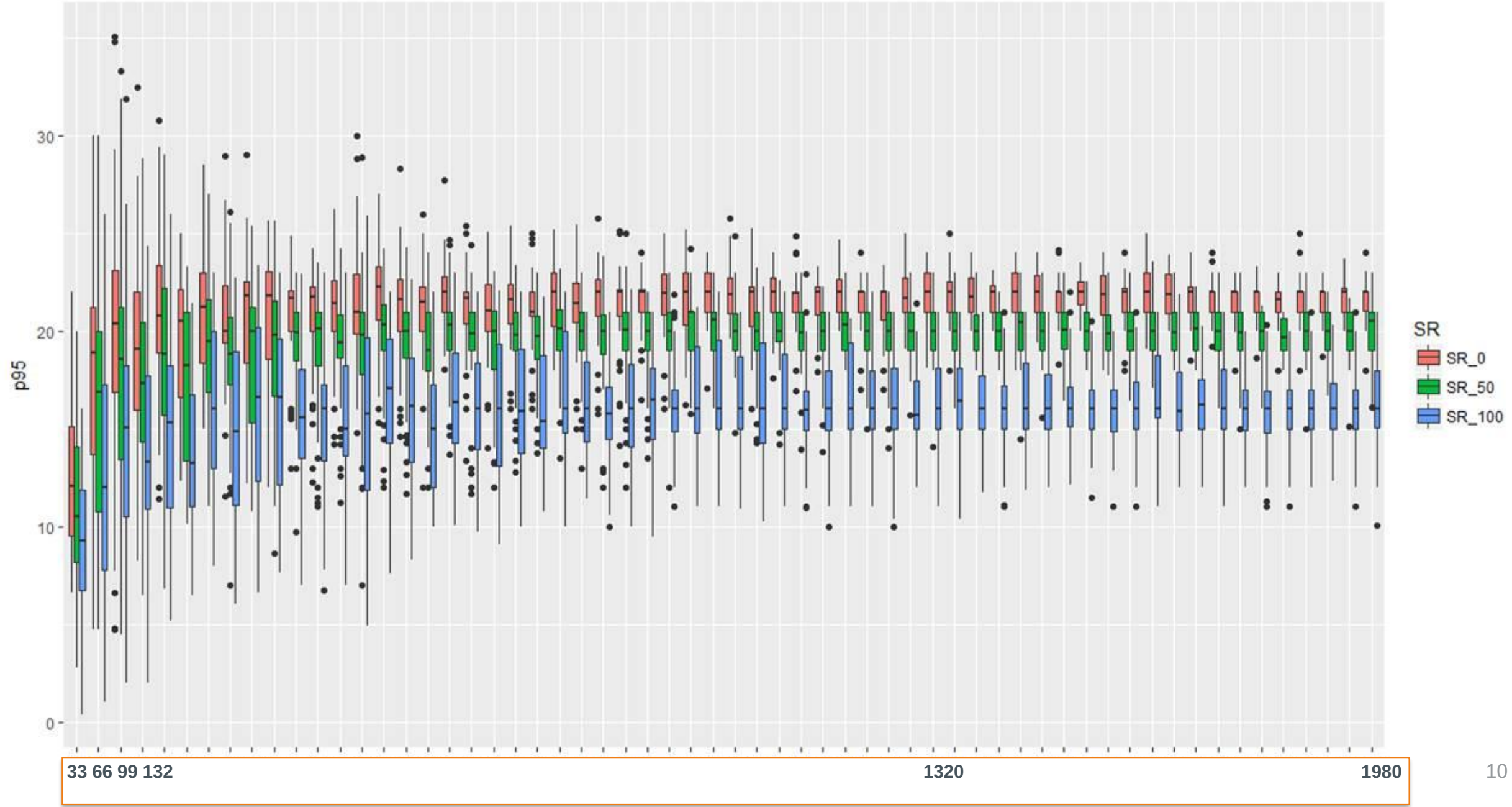
We perform a very large simulation run (~20 Million hourly LOLE/ENS values) and analyze the results :

1) look at confidence interval
2) look at behaviour “SR vs MCyr number“

LOLE_AVG analysis



LOLE95 analysis



Answer in consultation report

1. The iterative process proceeds in blocks of 100 MW, and therefore the resolution of the results is thus also on 100 MW blocks.

2. This step size was chosen as small as possible, but still ensuring statistically robust results for the determination of the volume. Especially when searching for the tail of the LOLE distribution for covering the legal P95 criterion, this statistical robustness is a limiting factor. Choosing a smaller step size might lead to a calculation result that differs depending on the random seeding of the model.

3. Important to note is that this step size is also in line with the resolution used in adequacy studies performed by neighboring countries.

Remarks on forced outage rates and on availability of nuclear power plants

“Official” rates/availability figures given by power plants producers are not “reliable” and can lead to wrong assessments .

Assessments might thus be too optimistic.

A specific “low probability-high impact” sensitivity was defined last year, and will also be included in this year’s assessment. Its purpose is exactly to cover for (a.o.) the differences between the statistically defined forced outage rates, and the realized availabilities of the nuclear units in BE and FR in the past years.

Remark on Emergency Generators

The approach used in this study makes sure that all production units reported to Elia by DSOs (whether or not aggregated) are taken into account.

Data provided by DSOs consists mainly of small distributed generators, which production is mainly related to energy processes. These are considered in the new non-CIPU category which will be introduced this year, as explained in the consultation report.

From the above mentioned data from DSOs, Elia has no visibility on the detailed installed capacity of emergency generators connected to the Elia grid.

Still some emergency power generators might be market driven. If emergency generators react to price signals and are active in the market in times of scarcity, their contribution is already taken into account in the market response (MR) volumes considered in the assessment.

Comment on effect of updates on the Market Response volumes within the following years (both volumes and the % projected evolutions)

Volumes and projected evolutions have been updated by ECube consultants, (see previous presentation within the TF iSR).

The method is conceived to take into account market response observed to be available in the EPEX day-ahead market. By estimating the historical flexibility in ancillary services, and estimating the share of flexibility in future ancillary services, the method takes into account that existing flexibility which participated in the ancillary service market might migrate to the energy market, and back (referred to as communicating vessels).

Elia confirms that the method is robust to possible evolutions concerning the volume on Bidladder. Existing flexibility (observed in the day-ahead market or ancillary service market) can be offered in the energy market, before being offered on Bidladder (the capacity is not reserved so it can migrate freely to the energy market when facing elevated prices), thus as such, this part of the potential flexibility on Bidladder is already taken into account.

Furthermore, although new flexibility is not accounted for in the historic observations on the day-ahead market or ancillary services, its potential contribution can still be accounted for, by means of the extrapolation factors used. If eg Bidladder would facilitate new flexibility, its potential contribution will be captured by the extrapolation factor(s) considered.

Comments regarding usage of demand growth data from IHS MARKIT

On weather correction factors:

Elia makes sure that no double counting is made between considerations made by IHS MARKIT when using “weather correction factors” and Elia’s temperature sensitivity of load.

On usage of demand growth scenarios:

Elia takes note of the feedback by CREG and other stakeholders. Elia will analyze the different scenarios of demand growth estimates available for this study and upon discussions together with FPS Economy will communicate, during the data consultation, on which scenario(s) is (are) the most relevant in terms of expected evolution of demand for the assessment.

Comments on the effect of NEMO and ALEGrO and BeDeLux on SR volumes

Flow based domains used to evaluate the volume of strategic reserve are constructed with the current rules for the calculation of the day-ahead flow based domain including the LTA patch and MinRAM patch.

The effect of the NEMO link will be considered in the FB simulation for Winter 2019 - 2020 and further and the effect of ALEGrO will be considered in the FB simulation for Winter 2020 - 2021 and further.The BeDeLux project will not be considered as it is still in pilot trial phase.

An increase of FB volume and import capabilities is expected from NEMO, ALEGrO and MinRAM.

Comments on usage of 6% FO for selected HVDCs

Elia uses this value from ENTSO-E study MAF, which includes also maintenance works of HVDCs. There is no guarantee that outages might not occur in some of the climatic conditions considered in the assessment, irrespectively of the age of these assets. An update might be considered if better data is available within the ENTSO-E framework.

Comments on implementation of flow based methodology

***Only winter 2017 typical days to be used*.**

The latest set of typical days as defined within the CWE SPAIC process will be used. This means that a new set of typical days based on 2017 will be used compared to the ones used for winter 2018-19. Only the winter is modelled, Elia therefore builds its model and performs its assessment only for the "Winter period" and thus only considers the SPAIC typical days corresponding to the winter period November 1 until 31 March in the assessment.

Network topology

How are congestion of big countries eg DE considered

The effect of internal congestions is considered in the FB parameters and modelling performed. Elia will also apply a minimum RAM (MinRAM) of 20% for all Critical Network Elements and Contingencies (CNEC's).

AT-DE split

Capacity calculation will be designed with separate German and Austrian bidding zones, but this feature will not yet be operational in autumn 2018. The timing for a go-live date is on 1 October, 2018.

Because of the tight schedule above mentioned, Elia won't be able to incorporate this feature in its FB methodology for this years' assessment, since neither historical nor new domains considering such split will be available at the time of the assessment.

Comment on publication of results

Elia should provide 0,1 hours and 0,1 GWh resolution.

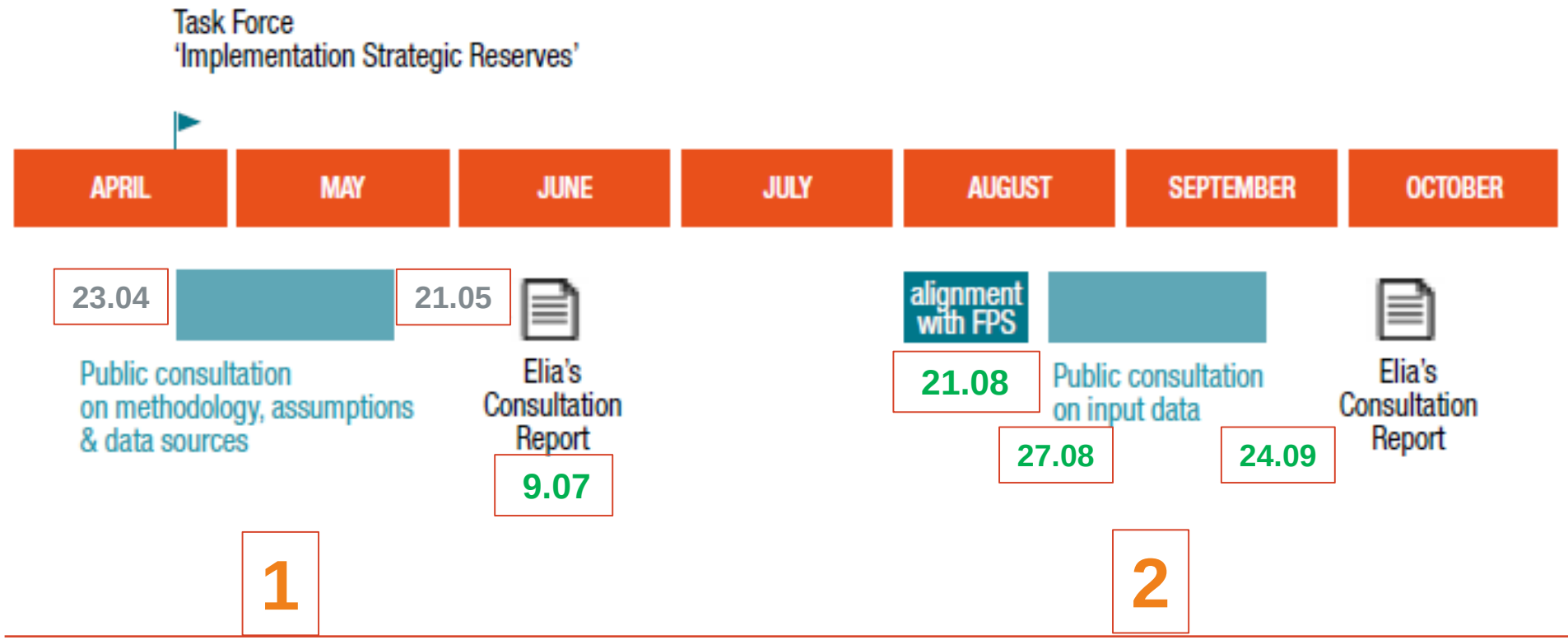
Elia takes note of this comment by the CREG and will publish its results to 1 decimal value accuracy.

Elia should publish in the volume assessment report, the activation criteria, equivalencefactor and other criteria relevant for the selection procedure.

Elia will include a short technical annex with the requested parameters in its report.

Volume determination: two public consultations are held

Stakeholder comments were taken into account: sufficient duration of consultations is foreseen.



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Data for **Belgium** will be prepared in the following categories

Available sources

✓ **Generation**
- Nuclear and fossil production
- Renewables, CHP
- Pump/turbine/Hydro

✓ **Interconnections**
- Flow Based domains
- NTC values outside CWE

Needs

✓ **Demand**
- Hourly profile
- Total demand growth
- Market response

✓ **Balancing reserves**

Variables

✓ **Outages**
- Forced outages

SR design
Overview

Upcoming Electricity Law Amendment related to Strategic Reserves

- **Drivers for amendments**
  - Implement engagements taken in the context of the EC State Aid Inquiry
  - Improve the framework after some years of experience
- **Status**
  - 4/7/2018: Discussion of E-law amendment on SR in Parliamentary Commission, expected to be adopted by Plenary before the summer break
  - Entry into force: 10 days after publication in “Belgisch Staatsblad / Moniteur Belge”, with a few exceptions as mentioned in the “Exposé de motifs / Memorie van Toelichting”

- **Detailed text:** http://www.dekamer.be/FLWB/PDF/54/3208/54K3208001.pdf

Upcoming Electricity Law Amendment related to Strategic Reserves

Overview of main changes covered by the amendments

- **Changed notification regime for capacity going out-of-market**
  - Changed timings for temporary / definitive closures
  - Also applicable on structural reductions (as from 5 MW)
- **Timing rules on return-to-market of out-of-market-capacity**
- **Volume determination**
  - To be based on high impact/low probability scenario
  - Volume revision possible until 1/9
  - Bi-annual 10 year ahead adequacy & flexibility study by Elia (first study < 30/6/2019)
- **Yearly contracts only** (no more 3-year contracts)
- **Changes to the annual process of strategic reserves**
  - Adapted tender calendar (e.g. award date) due to possibility of volume revision until 1/9
  - Longer period for submitting offers (+1 month)
  - Adaptation to the process/selection in case of offers considered manifestly unreasonable by CREG
- **Design changes**
  - Participation of emergency generators (as SDR) allowed (as of Winter 2019/20)
  - Divisibility of offers for SGR (as of Winter 2019/20)

Administrative Imbalance Price (AIP)

- **In the Task Force of February 8, 2018, Elia presented its last proposal for the AIP, resulting in**
  - Elia's tariff modification proposal submitted to CREG on 08/06/2018
  - CREG's decision on 28/06/2018

- **A price floor of "at least 10.500 €/MWh" replaces the price cap of "4500 €/MWh" in the 'tarifaire fiche'**
  - "10.500 €/MWh" to be sufficiently higher as the intra-day price (cfr. European EEAG decision)
  - "At least" to allow that accepted balancing offers can set a price above the 10.500 €/MWh price cap
  - Conditions to have the administrative imbalance price remain unchanged

- **The balancing rules will remove the bid cap set by the AIP (by removing reference to the 'tarifaire fiche')**
  - A bid cap will be defined in the balancing rules at 13.500 €/MWh
  - A dynamic modification process when selected offers attain the bid cap (cfr. working group balancing)

  ➔ Subject to the modification of the 'balancing rules'

Workplan SR Design Winter 2019/20

	Topic	Trigger	Planning
1.	Application of Transfer of Energy for SDR	Modification E-Law + Transfer of Energy Rules	Public consultation on ToE-rules ongoing. Discussion in TF 9/7
2.	Emergency Generators	Modification E-Law	Presentation proposal in TF 9/7
3	Divisibility offers for SGR	Modification E-Law	Presentation proposal in TF 9/7
5	Investigate exceptions to the full exclusion DPs participated or participating in AS	Request CREG (Decision FR) Market Request	Feedback in TF 9/7
6	Investigate the revision design for tests (planning and penalties)	Market Request	Feedback in TF 9/7
7	Improve transparency towards parameters following the Adequacy Study (activation criteria, heat map,…)	Request CREG (Decision FR)	After summer (linked to publication of the volume report).
8	Clean-up functioning rules, procedure for constitution and contracts following E-Law amendment	Modification E-Law	After summer

SR design Winter 2019/20
Transfer of Energy for SDR
Feasibility analysis

Many ToE-relevant aspects are similar when applying ToE on SDR compared to mFRR (1/2)

- **Both products are contracted by Elia, both with a prequalification procedure and comparable contractual framework**
  - ToE-arrangements can be put in the Procedure for Constitution / SDR-contract in a similar way as done in the mFRR-contract (e.g. annexes arranging *opt-out*)
  - The role of the ARP-contract in ToE is equal for SDR and mFRR
  - The role of the SR functioning rules is comparable to the role of the balancing rules, i.e. limited to non-existent for ToE
    - E.g. Baseline SDR to be transferred from the SR Function Rules to ToE-rules approved by CREG
- **Both products are only activated upon request by Elia**
  - Elia is the only possible *Flexibility requesting party* for SDR, hence Elia disposes of the necessary information.
- **The providers of both products, i.e. the FSPs, are *de facto* the same type of parties**
  - The implementation is facilitated as no new (type of) actors are expected.

Many ToE-relevant aspects are similar when applying ToE on SDR compared to mFRR (2/2)

- **Similar delivery points are used for both products**
  - Delivery points can be located in DSO, CDSO and TSO grids, requiring similar data transfers
- **Both product are evaluated on a 15min basis**
  - Similar metering requirements apply (head- and submeter are allowed)
- **‘X out of Y’-baseline is applied on both products**
  - No new baselines are to be developed for applying ToE on SDR
- **SDR is by law only about ‘vraagflexibiliteit’ and excludes generation (except for emergency generators)**
  - The scope of ToE matches with the scope of SDR
  - Emergency generators are not raising difficulties with the practical check on ‘vraagflexibiliteit’ (i.e. yearly average net offtake > 0)

Few aspects should be considered and evaluated whether changes compared to ToE for mFRR are needed (1/3)

- **mFRR is activated within the 15mins before the delivery period, whereas for SDR a longer notification period is applicable: should this impact on different process steps related to ToE?**

SDR activation process (cf. SR Functioning Rules section 7.3.2) characterized by three steps:

- ***"Warm-up"*** (from 6,5h until 1,5h before period for which volumes are requested) : no volumes activated yet, actual delivery of volumes not yet confirmed by Elia

  ➔ no ToE to be applied as there is no injection of any volumes. No notifications of BRPsource yet as actual injection remains unconfirmed

- ***"Ramp-down"*** (from 1,5h before period for which volumes are requested): activation of the requested volume from 0 MW until the requested volume

  ➔ Although volumes could be injected, the SDR-provider receives no remuneration for these volumes. (he only receives a fixed remuneration for warm-up and a variable remuneration for volumes delivered in effective delivery). The SDR-provider has a clear incentive to keep the volumes in this phase very limited. Applying ToE would also involve an incentive correction for the BRPfsp and the risk of penalties, which would be contradictory to the fact that no remuneration is provided.

  ➔ no ToE to be applied

- ***"Effective delivery"*** (real-time): requested volume being delivered

  ➔ **ToE to be applied** as requested volumes are being delivered

  ➔ Those 15min periods can each be treated similarly to an mFRR-activation: for each QH of those periods, the same information exchange (timing, granularity, etc., cf. infra) between FSP-Elia and Elia-BRPsource should be applied. Perimeters of BRPfsp and BRPsource are adapted accordingly and a compensation of the energy between the FSP and the supplier should take place.

Few aspects should be considered and evaluated whether changes compared to ToE for R3 are needed (2/2)

AS IS

- **For SDR on TSO access points a perimeter correction is already applied (cf. ARP contract) (but no other ToE-aspects are applied)**
  - The ARP-contract (Art. 11.1.4) today foresees in a perimeter correction of the relevant BRP(source) for SDR activation
    - Currently **Only on TSO access points** (not for other types of delivery points)
    - Upon activation, the offtake of such TSO access point is replaced by the value of the baseline

TO BE

➔ Perimeter correction for all delivery points

➔ **The same principle of perimeter correction in cases of ToE for mFRR are to be applied also for SDR, i.e. asymmetric adjustments**, meaning:

- Any underdelivery is for the account of the BRPfsp
- Any overdelivery is for the account of BRPsource

Underdelivery ➔ BRP_{bsp} takes the imbalance in case underdelivery	**Overdelivery** ➔ BRP_{source} takes the imbalance in case overdelivery
• $BRP_{bsp} = -(Req–Del)$ • $BRP_{source} = 0$ (adjusted with delivered)	• $BRP_{bsp} = 0$ • $BRP_{source} = + (Del–Req)$ (adjusted with requested)

Few aspects should be considered and evaluated whether changes compared to ToE for mFRR are needed (3/3)

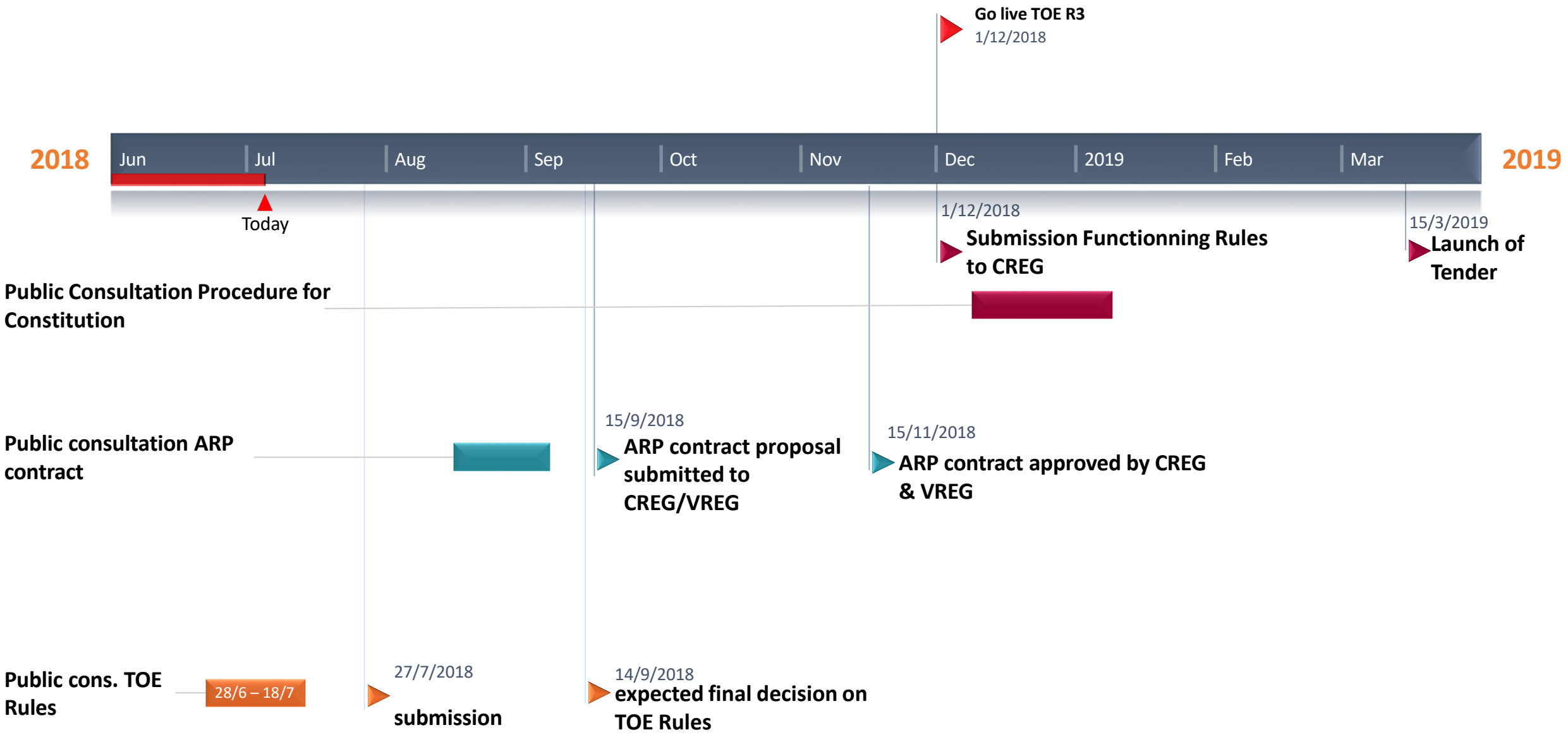
Cf. E-law Art. 19 bis, §3, 2°-3°:

- **CREG determines the standard price for ToE in case of SDR**
- **CREG determines the rules for the financial and contractual guarantees to be provided by the FSP**

➔ CREG has already determined those aspects, which are to be applied also on the SDR market

Transfer of Energy for SDR
Impact ToE rules and framework

Indicative planning ToE in SDR for W 19-20



Public consultation ToE-rules and principal changes

- Consultation period from **28/6/2018 – 18/7/2018**
- Main track changes in the ToE-rules w.r.t. public consultation:

Section 4: application field

- Extension of the field of application towards the market segment of tertiary control by non-CIPU Technical Units (1/12/2018) and strategic reserves by SDR-units (1/11/2019)

Section 9: Baseline

- **Description of the baseline methodology 'High X of Y'** for R3 and SDR

Transferred from Functioning Rules to ToE Fules

Section 11: Calculation of delivered energy

- Calculation of the delivered energy in case of a 'Combo' between R3 and Bidladder
- **Calculation of the delivered energy in case of SDR**

Edel = Baseline – measurement + specific modalities for Over-delivery

Section 13: Notifications

- Addition of an **additional notification** procedure to the ARPsource in // with the activation request sent to the FSP (see next slide)
- **Description of the notification procedure in case of SDR**

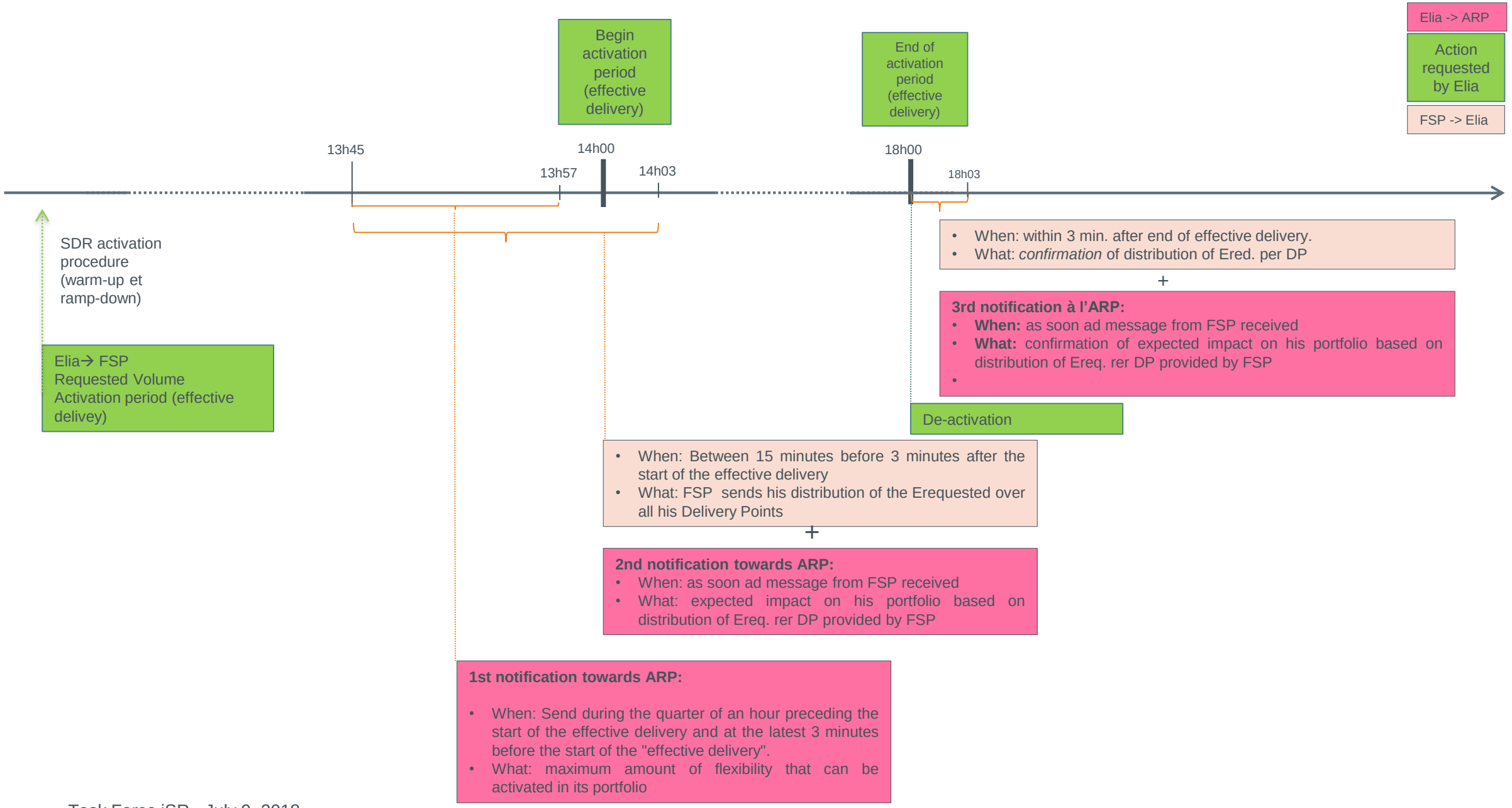
Similar approach as for R3

Section 14: Penalties

- Existing penalty for Bidladder if FSP fails the second notification (3x) is extended to the first notifi
- Addition **of penalty mechanism** (exclusion auction) for R3 & SDR **in case the FSP fails to notify Elia 3 times within 30 working days**

Similar approach as for R3

Notification procedure SDR



SR design Winter 2019/20
Emergency Generators

Emergency Generators: Modification E-Law

- **Modification of the E-Law will facilitate the participation of Emergency Generators in Strategic Reserves as SDR.**
  - "Memory of Understanding" specifies in the attached explanatory note that this modification will only be implemented as from Winter 2019-20 (due to required changes to the functioning rules)
- **Current product design of SDR is determined to contract demand capacity, which can reduce the grid offtake upon activation, with specific product requirements concerning :**
  - Certification : to contract capacity which is likely available during scarcity periods (based on historic consumption)
  - Availability : to remunerate capacity which is effectively available (based on measured consumption)
  - Activation settlement : to only remunerate the activated energy (based on baselining)

***Art.7quiquies § 2**. "Iedere speler die beschikt over vermogen gelokaliseerd in de Belgische regelzone, en die beantwoordt aan de specificaties zoals bepaald in de proceduremodaliteiten, kan deelnemen aan de procedure voor de aanleg van de strategische reserve, voor zover hij beantwoordt aan één van de volgende kenmerken :*

1° iedere transmissie- of distributienetgebruiker, individueel of op geaggregeerde wijze, via offertes van vraagzijdebeheer of door middel van noodstroomgroepen die in eilandbedrijf kunnen werken ;..."

***Art 2. 68°** "noodstroomgroep die in eilandbedrijf kan werken" : installatie voor elektriciteitsproductie binnen een verbruikssite, waarvan het nominale vermogen niet significant hoger is dan het verbruiksvermogen van de site in kwestie, en die uitsluitend geïnstalleerd is teneinde de elektriciteitsbevoorrading van deze site of van een deel ervan te garanderen wanneer de elektriciteitsbevoorrading afkomstig van het netwerk waarop het is aangesloten uitvalt voor deze site of een deel ervan"*

Emergency Generators: Certification

Constraints for Participation provided by Electricity Law:

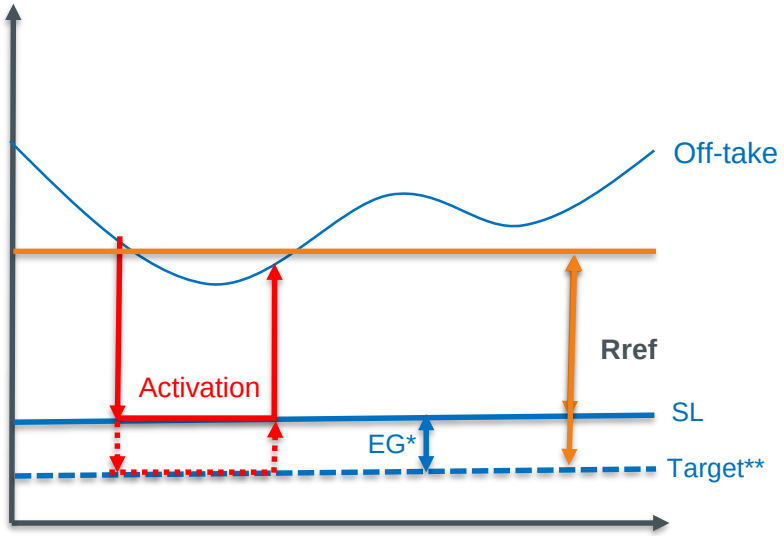
1. installatie voor elektriciteitsproductie binnen een verbruikssite
2. nominale vermogen niet significant hoger is dan het verbruiksvermogen van de site in kwestie
3. uitsluitend geïnstalleerd is teneinde de elektriciteitsbevoorrading van deze site of van een deel ervan te garanderen…

Procedure of Constitution (+framework in functioning rules)

- **Candidate supplier has to specify for each delivery point the capacity in demand response, and the capacity in emergency generators**
- **Elia's certification process (described in procedure of constitution) will exclude emergency generators' capacity if:**
  - On an access point outside a consumption site
  - Generators' capacity is significant higher as maximum consumption of the site (during previous 3 years), i.e. 110%.
  - Generators operating in parallel of the system more than 5 minutes per month, cfr COMMISSION REGULATION (EU) 2016/631of 14 April 2016 establishing a network code on requirements for grid connection of generators
  - Generators which cannot generate when disconnected from the grid.
  - Generators used for activities other than securing supply of the site (e.g. ancillary service or energy markets)
- **Elia's certification process will certify a capacity for emergency generators on a delivery point lower or equal as the rated power of the corresponding generators' rated capacity defined in the technical specifications.**
  - Declaration d'honneur, technical fiche, single wire scheme,
  - The right to conduct physical check at location

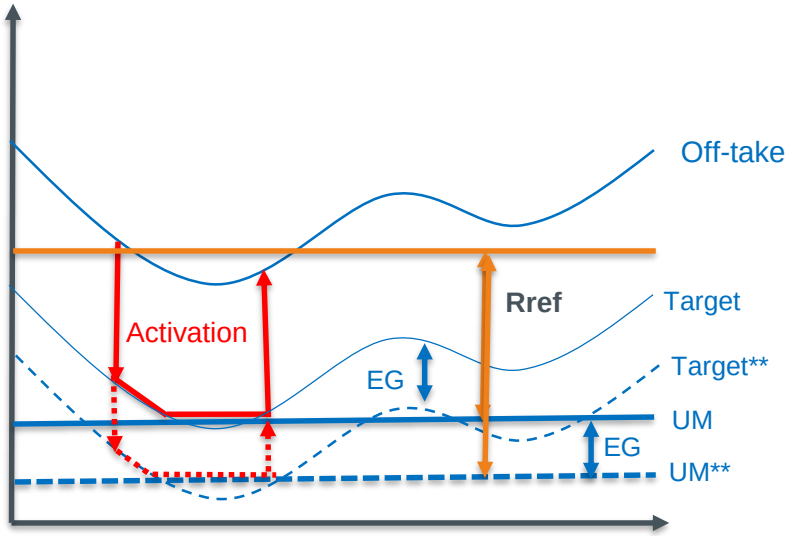
Emergency Generators: Availability

DROP-TO POOL



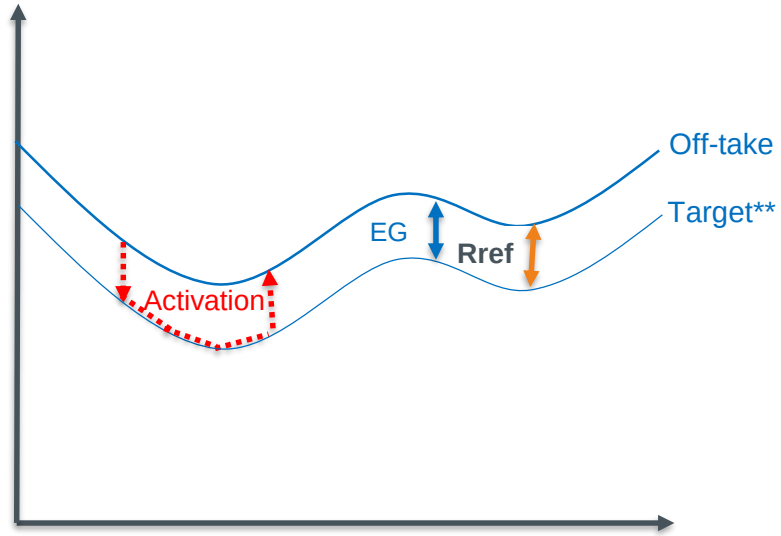
A certified capacity* of emergency generators (EG) can be added to a pool of SDR-DROP-TO increasing the Rref

DROP-BY POOL



A certified capacity* of emergency generators can be added to a pool of SDR-DROP-BY increasing the Rref

EG POOL (DROP-BY)



A certified capacity* of emergency generators can be offered as a seperate pool of EG where Rref is determined by the certified capacity

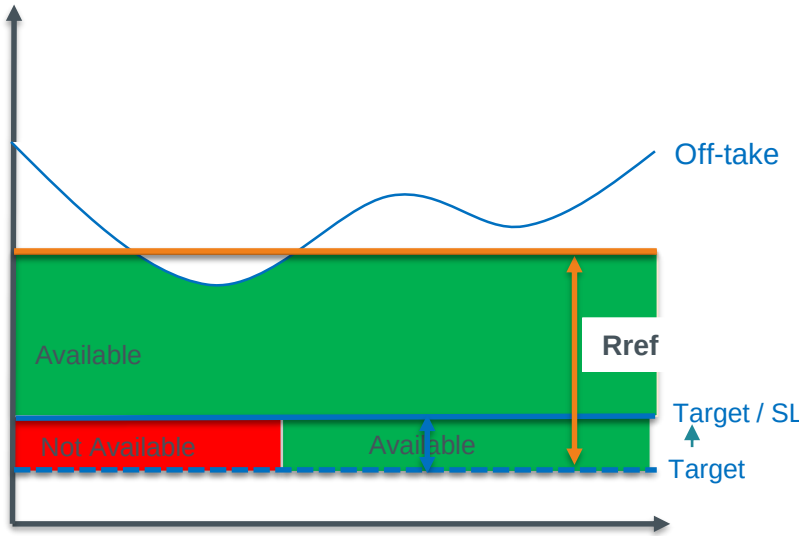
**Total certified capacity of emergency generators (EG) certified*

***Target is defined as the off-take level of the pool (or injection level in case of submetered EGs) to attain when activated*

Emergency Generators can be incorporated in the existing product design of SDR, without overthrowing the existing requirements.

Availability of Emergency Generators

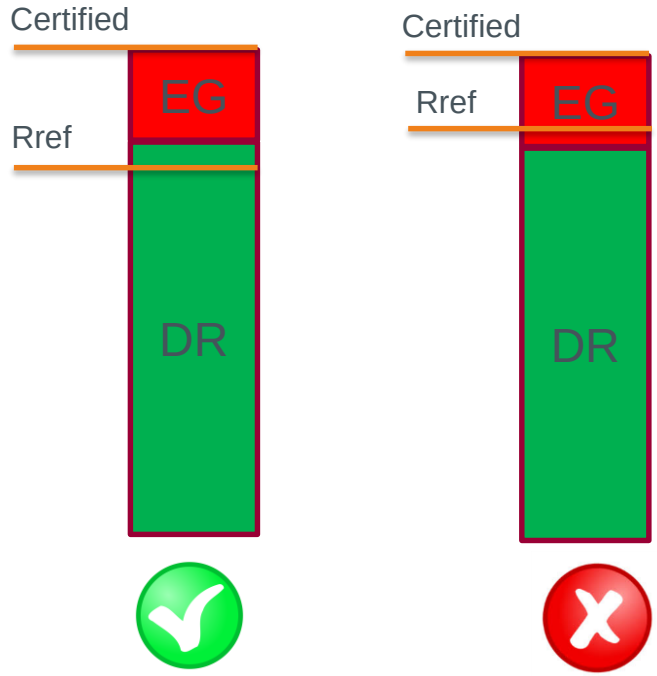
- **A SDR-supplier is remunerated following the availability of the capacity**
  - Available capacity can be lower as the Rref (reduced remuneration)
    - No incentive/obligation to consume
    - Certification ensures availability during scarcity



- **As with SGR, an SDR supplier has to announce unavailability of capacity provided with emergency generator (planned maintenance, unexpected failure)**

1. The target is temporarily corrected with the unavailable capacity
   1. Reduces the remuneration payment (cfr. green surface)
   2. Reduces the target for testing purposes (and avoids activation penalties)

2. Elia conducts a check of the Certified Capacity versus Contracted Capacity
   1. If Certified – EG > Contracted: Ok
   2. If Certified – EG < Contracted: Penalties as with SGR (missing volume*1.3 Reservation Price)



Next steps

- The proposed modification will impact :
  - Functioning Rules: Concrete text proposals will be presented where possible
  - Procedure for Constitution
  - Contracts

- Market parties are invited to provide feedback (before or during the next task force)

Other

Divisibility of offers

Art. 7 quinquies: […]

§3*bis* De volumes aangeboden door de deelnemers aan de procedure voor de aanleg van de strategische reserve moeten deelbaar zijn, rekening houdend met de technische karakteristieken van de aangeboden capaciteit en volgens de modaliteiten bepaald in de procedure voor de aanleg van de strategische reserve bedoeld in paragraaf 1.

- Already implemented for SDR in Functioning Rules of Winter 2018/19
- To be implemented for SGR in Functioning Rules of Winter 2019/20

High-Level SDR Bidding Principles:

For each (combination of) Delivery Point having received a maximum SDR Reference Power as a result of the Certification, the SDR Candidate can submit one or more offer(s) for a SDR Reference Power smaller or equal to such maximum SDR Reference Power :

1. Smallest Offered Volume: The smallest offered volume for each Certified Combination Number should be of a minimum volume of 1 MW and a maximum of 10 MW. Exceptions can be made for units whose production process limits the units technically to supply less than 10 MW. The necessary substantiation will be required

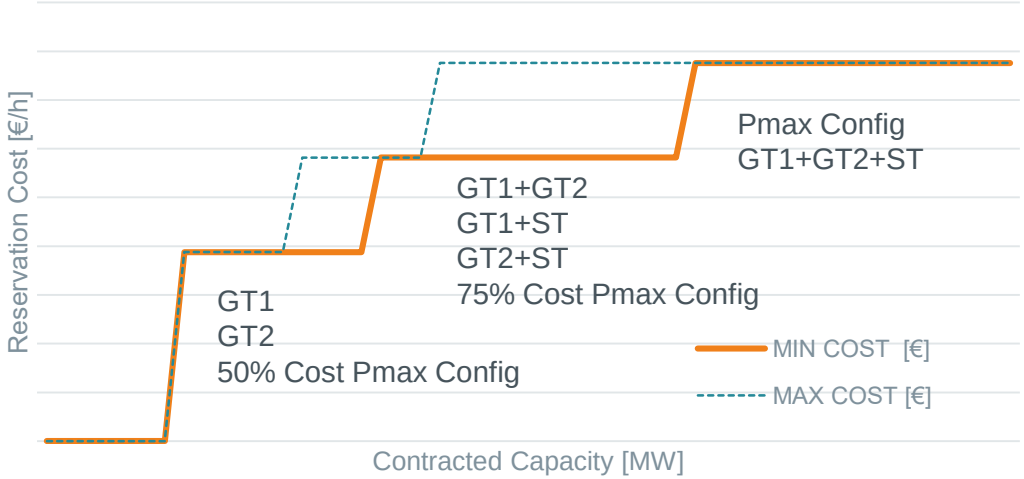
2. Volume Increments : When sorting the offers in terms of offered volume, the difference between 2 Capacity Bids can be at maximum 10 MW for each Certified Combination Number. Capacity Bids for a smaller volume are allowed and strongly encouraged. However, exceptions can be made for units whose production process limits the units technically to supply less than 10 MW. The necessary substantiation will be required.

3. Total Cost : The total cost (unit price × volume) of the smallest volume that can be retained resulting from a Capacity Bid, should never exceed the total cost of the smallest volume that can be retained from a Capacity Bid with a larger offered volume. In other words, the total cost for a volume should not exceed the total cost of a larger volume for each Certified Combination Numbe

Impact assessment of divisibility

- **A power plant must offer all technical configurations possible at the moment of leaving the market.**
  - ➢ A power plant cannot offer all other technical configurations possible (even when requiring modifications)
- **A divisibility towards configuration allows Elia to always select the cheapest configuration.**
  - A lower configuration is assumed to result in a lower reservation cost because it may impact the fixed O&M.
- **Further divisibility (e.g. in steps of 10 MW) does not result in further reservation cost reductions.**
  - The reservation cost is assumed to remain constant within a configuration as having no impact on fixed O&M.

Illustrative example of a power plant which can offer in different configurations.



- Fixed maintenance cost for configuration giving the maximal capacity is larger as for other configuration resulting in lower capacity
- Within a configuration, the fixed maintenance cost is assumed to be independent from the reserved capacity.

Market requests

- **Combo AS-SDR?**
  - **A constructive exchange between Elia & Febeliec revealed that it is very hard to find straightforward solutions that safeguards the out-of-market character within the boundaries of the product philosophy**. In contrast, it might be worthwhile for demand response providers to explore the possibilities already available. **Therefore, it is proposed not to pursue this development at this stage.**

- **Modifications for test conditions :**
  - **Specification of criteria for planning tests**
    - De facto, Elia already checks market conditions and the grid situation as part of a larger check on the overall situation when planning tests.
    - Elia does not see a concrete need to further specify this in the functioning rules. It is to be avoided to provide too stringent rules because (1) the surprise effect of tests should remain and (2) the rules should not become restrictive (e.g. in assessing secure grid operation).
  - **Repeat penalties for voluntary tests of SGR**
    - Refer to decision CREG and answer Elia on the public consultation on FR for Winter 2016-17.
    - Elia does not see any reason to reconsider this decision
      - Penalties to maintain energy program remain necessary to maintain program (and avoid unwanted impact on the market)
      - Penalties to deliver Pmin and Pmax necessary to ensure contracted capacity and service quality
      - Elia agrees that tests improve quality of the service (and penalties may reduce incentive to test), but difficult to justify remunerating when unit is proven to be unavailable