



# Standard products: October 2015 survey results, proposals

October 2015

# Introduction

The first draft of manual standard products defined in early 2015 have been presented and discussed several times with ACER and stakeholders in 2015. The received feedback and expected evolutions lead WGAS to improve the products and propose a second draft detailed in the next slides.

Question was asked to TSOs to provide an estimation of their use of balancing energy per proposed manual standard product. Even if automatic products represent a large part of balancing energy, they are excluded of this adequacy survey (indeed the definition of aFRR is still under discussion and submitted to the result of e-bridge study expected in Q1 2016). Therefore, it should be clear that the results must be interpreted with caution: some TSOs almost fully rely on mFRR and/or RR, while others only on aFRR (hence percentages have different meanings for different TSOs) and the values are based on estimations without experience on the practical usage of the new standard products.

The results are collected and presented through coloured (allow a quick view on the result) maps for each proposed manual standard product and the sum of percentage for all products. This later provides a good overview of the adequacy between proposed products and TSO power needs.

# Summarized conclusion

- ENTSO-E has intensified work in order to reduce the list of standard products for mFRR and RR.
- During this work it became clear that a common understanding of the concept and the definition of the minimum and maximum duration is needed.
- The settlement of ramps or blocks for direct activated or schedule activated products is closely related to the activation algorithm and pricing.
- The following slides reflect the current status of the discussion within ENTSO-E. More discussion is needed for providing a more firm proposal of standard products from ENTSO-E. Especially new insights on the relation with the activation algorithm and pricing mechanism may lead to a change in proposed standard products.
- Nevertheless ENTSO-E would like to share these thoughts with stakeholders and receive feedback on them on this preliminary stage. WGAS ask MC approval to go further in the discussion process.

# Content – detailed presentation

- Standard products reminder
- Answering TSOs
- Expected use of TSO per product
- Additional questions
- Conclusions and proposals
- Next Steps
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# Standard products reminder

**ACTUAL DEFINITIONS, subject to discussions: common understanding and agreement is not reached yet**

- **Minimum delivery period** of the bid is a pre-defined value to request that BSPs should be able to deliver energy at least equal to the Minimum Delivery Period and for the TSO to activate the bid at least for the Minimum Delivery Period
- **Maximum delivery period** of the bid represents a value meaning that BSPs should be able to deliver energy up to the Maximum Delivery Period and for the TSO to activate the bid no more than the Maximum Delivery
- **Period Delivery period** (from NCEB): means a time period of delivery during which the Balancing Service Provider delivers the full requested change of power in-feed or withdrawals to the system
- **Validity period** (from NCEB): means the time period when the balancing energy bid offered by the balancing service provider can be activated, whereas all the characteristic of the product are respected. The validity period is defined by a beginning and an ending time.

**It means :**

Beginning of Validity Period  $\leq$  min delivery period  $\leq$  **activation**  $\leq$  max delivery period  $\leq$  Ending of Validity Period

# Standard products reminder

## Product naming

Product are named based on a generic method:

- For Direct Activated Product

P-[DA]-[FULL ACTIVATION TIME]-[MIN DELIVERY PERIOD]/[MAX DELIVERY PERIOD]

- For scheduled Product

P-[SCH]-[FULL ACTIVATION TIME]-[MIN DELIVERY PERIOD]/([MAX DELIVERY PERIOD])

This naming allows to simply identify a product as the main characteristics are described in the name itself.

# Standard products reminder

Ongoing discussions on minimum and maximum activation duration of the products

	P-DA-15-15/30 (mFRR)	P-DA-10-10/25 (mFRR)	P-DA-5-5/20 (mFRR)	P-Sch-15-0/15 (mFRR)	P-Sch-30-15 (RR)	P-Sch-15-15 (RR)
FAT	15	10	5	15	30	15
Min delivery	15**	10**	5**	0	15	15
Max delivery	30**	25**	20**	15	15 / 60	15
Temporal divisibility	Mandatory yes. between min and max. Minute based resolution	Mandatory yes.	Mandatory yes.	NO	NO	NO
Links (temporal)	No	No	No	No	Yes / No	No
Activation method	Continuous process	Continuous process	Continuous process	Continuous process, or clearing	clearing	clearing
Ramps (financial settlement)	7.5 min*	5 min*	2.5*	no	no	no
Bid size	1 MW (tbc) to 9999 MW					

- : Arbitrary value set at the half of Full Activation Time, to start discussion
- \*\* : proposal for starting point of discussions. Topic is still discussions on the minimum and maximum activation duration



# Standard products reminder

## MAIN EVOLUTIONS COMPARED TO THE FIRST DRAFT

- **Minimum bid size** has been reduced from 5MW to 1MW under the pressure of ACER which consider the value of 5 too high to allow participation of DSR or RES.
- **Maximum delivery period** has been proposed to be fixed (while it was not in the first draft) under the request of both stakeholders and ACER to make the products comparable and improve transparency
- **Temporal links** has been detailed and allowed only for some SCH products activated based on clearing algorithms.
- **Settlement of ramps** has been precised in accordance with inputs from stakeholders and ACER. ENTSOE initial position and proposal was to let open the settlement principle to stakeholder position. 3 options were mentioned: ramps predefined, ramps defined by BSP, blocks. Market parties express their interest in the way reminded in the table above.

At this point in time of the discussion with third parties, all the proposed standard products characteristics are not fixed and still open to inputs from all involved parties: TSO, ACER, stakeholders



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# European maps with TSOs answered the survey

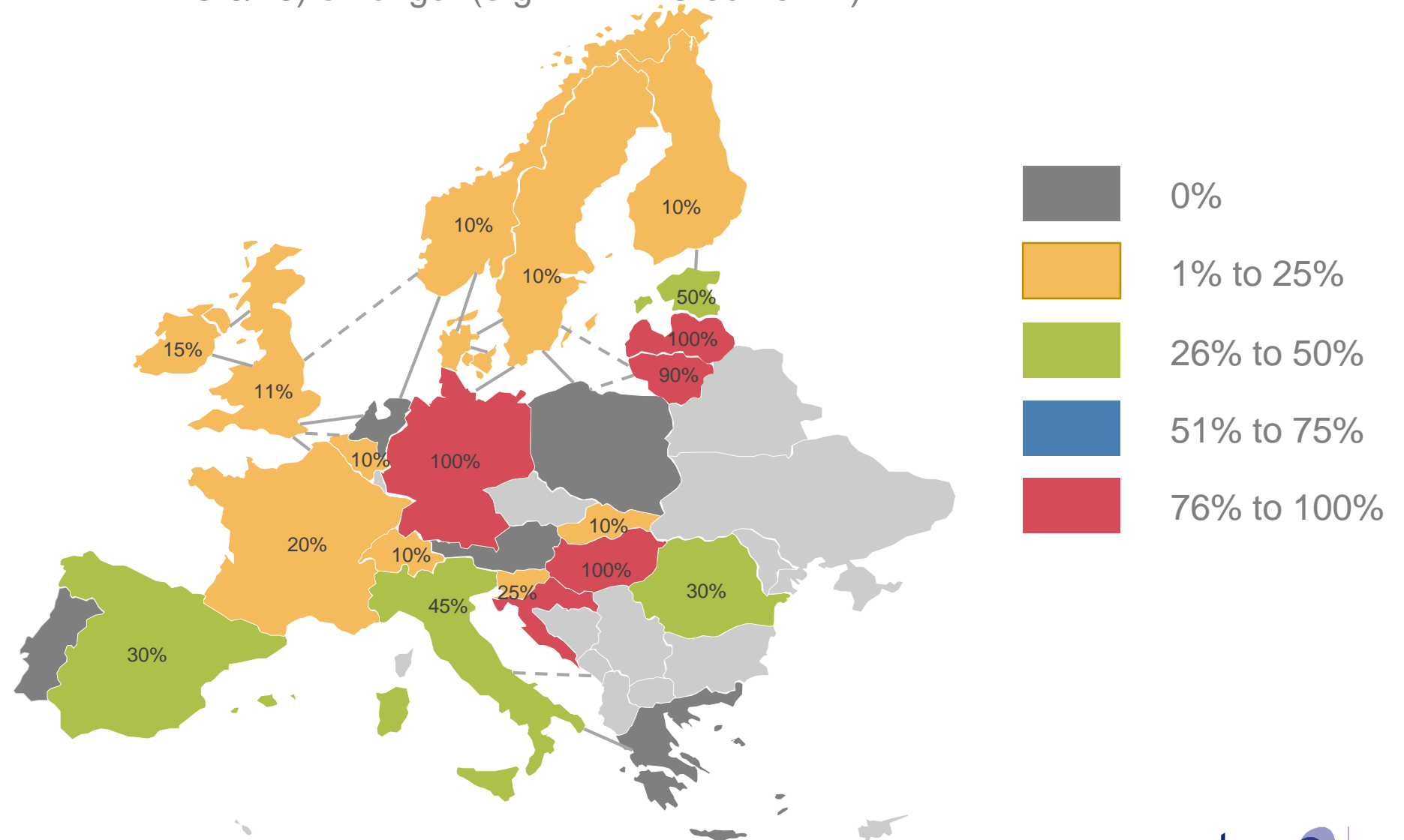


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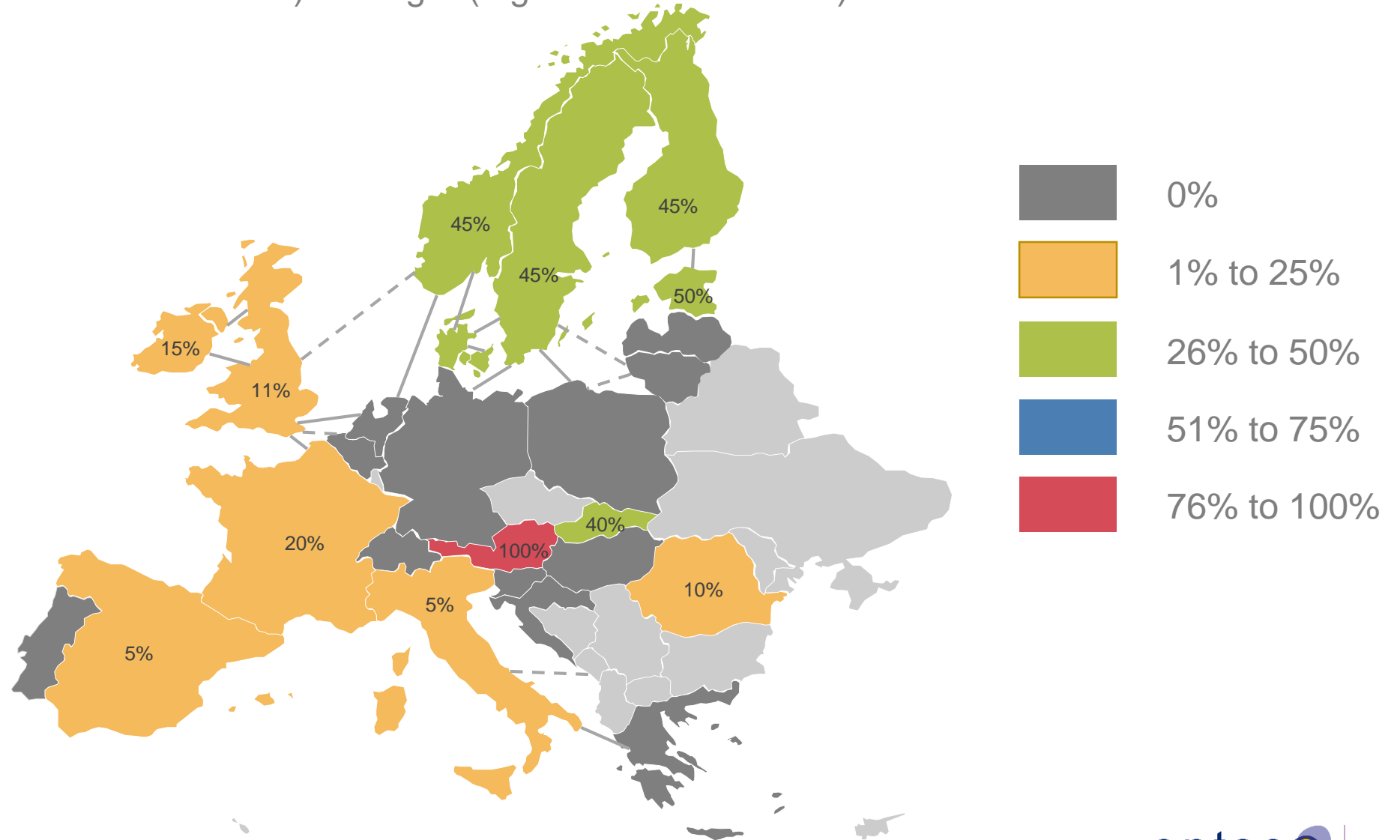
P-DA-15-15/30

**! duration still under discussions.** Answer from TSOs are usually completed by modification request on the delivery period: shorter (e.g. P-DA-15-0/15) or longer (e.g. P-DA-15-30/45 ... )



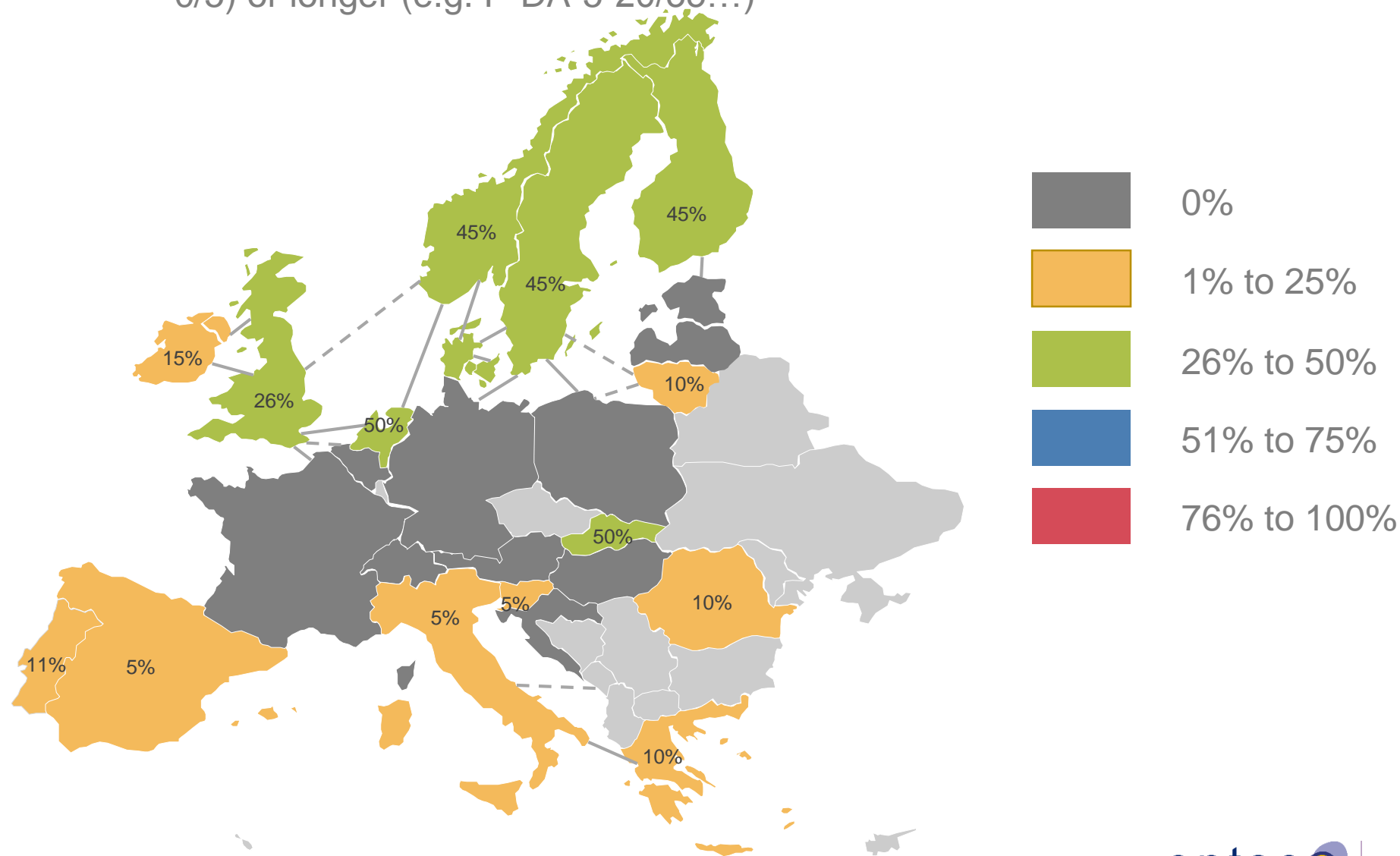
P-DA-10-10/25

**!! duration still under discussions.** Answer from TSOs are usually completed by modification request on the delivery period: shorter (e.g. P-DA-10-0/10) or longer (e.g. P-DA-10-25/40 ...)

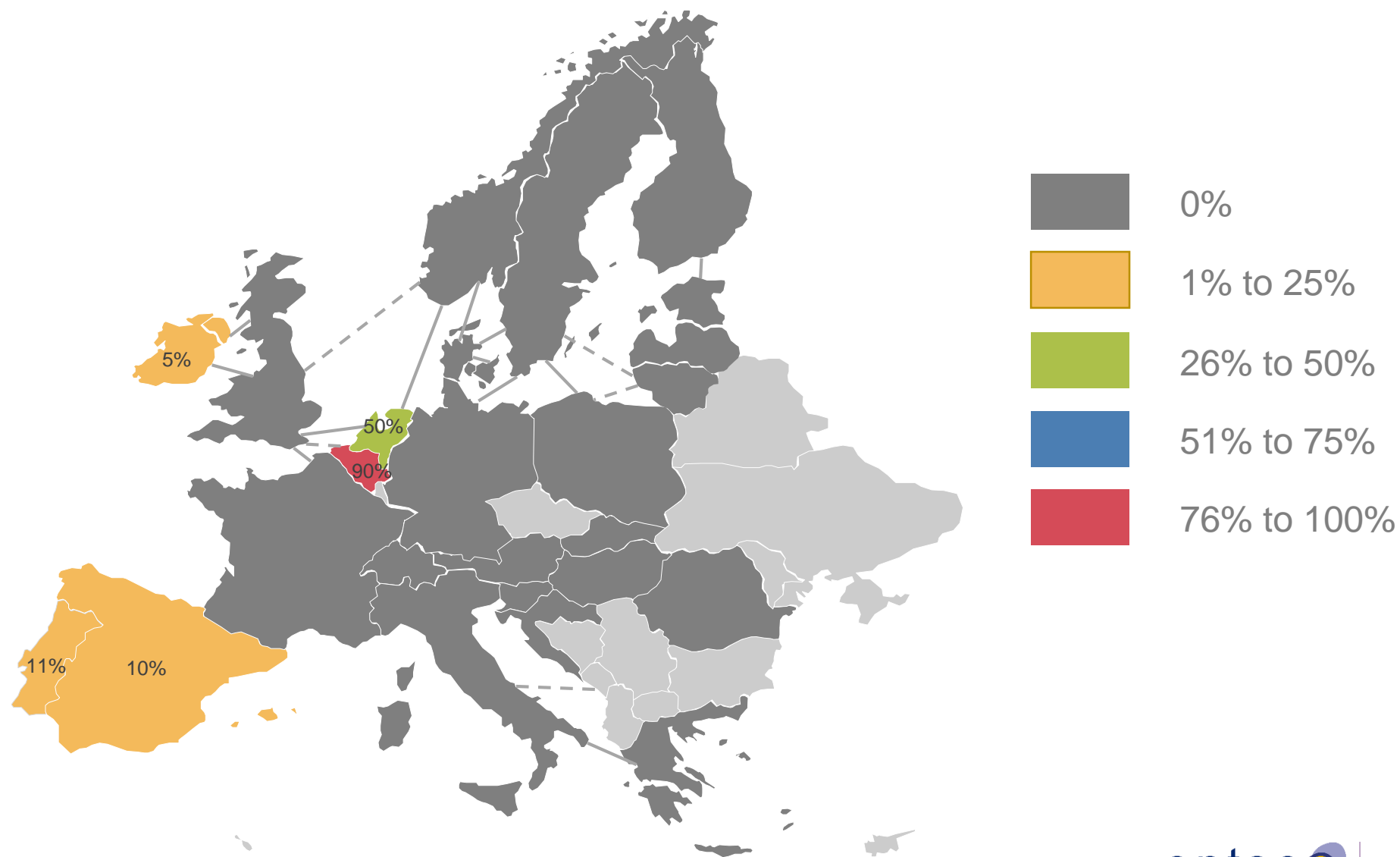


# P-DA-5-5/20

**!! duration still under discussions.** Answer from TSOs are usually completed by modification request on the delivery period: shorter (e.g. P-DA-5-0/5) or longer (e.g. P-DA-5-20/35...)

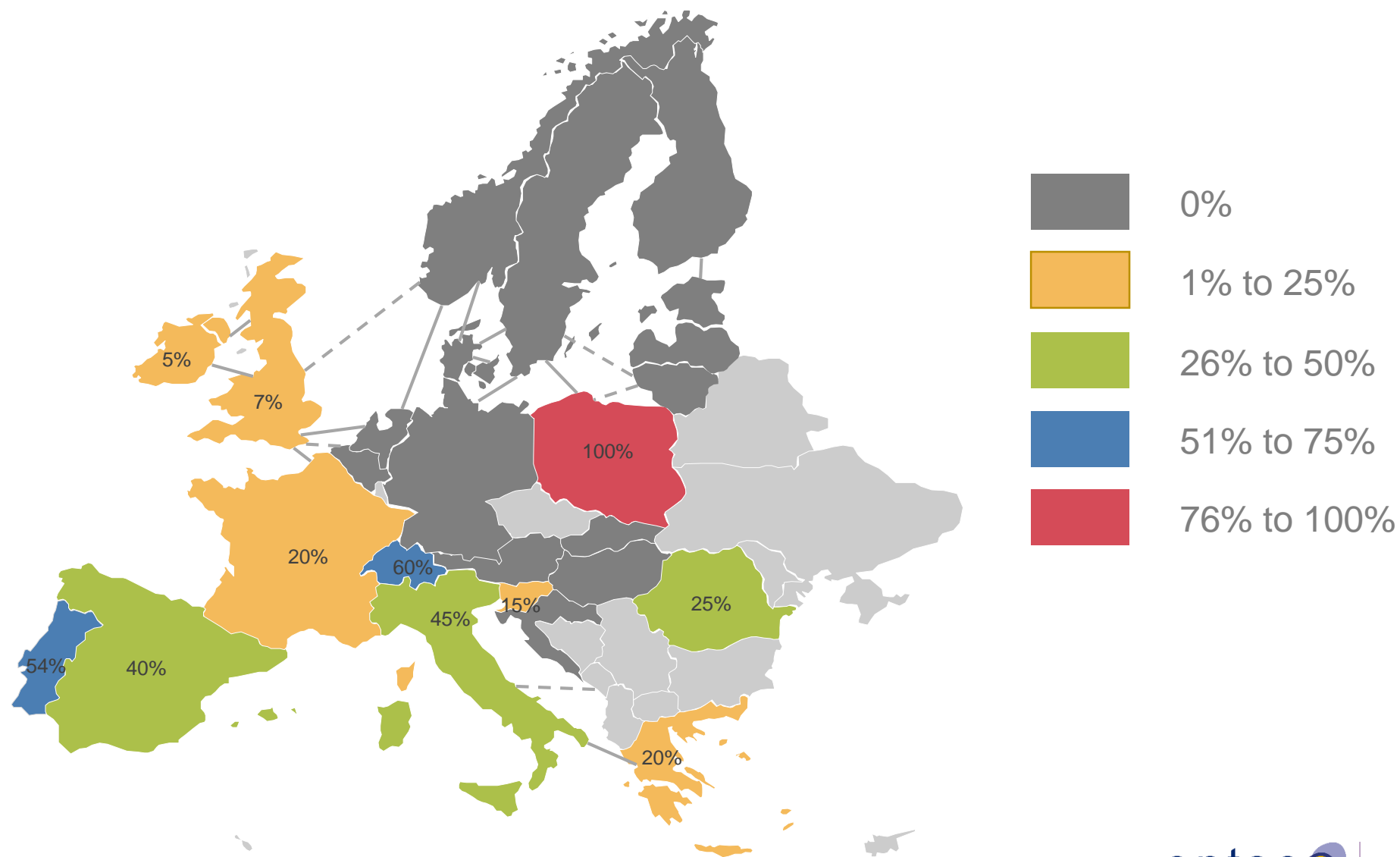


# P-SCH-15-0/15

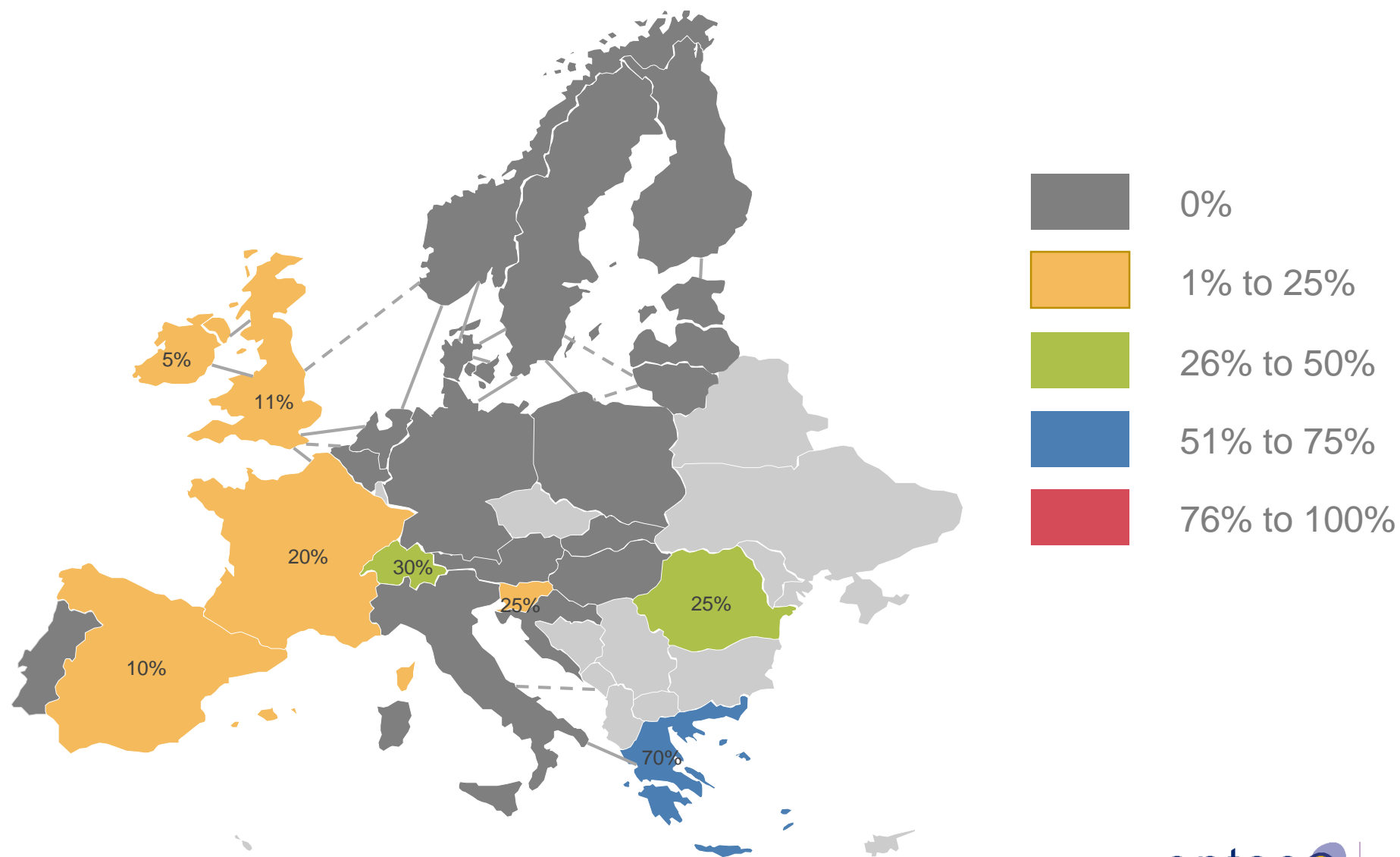




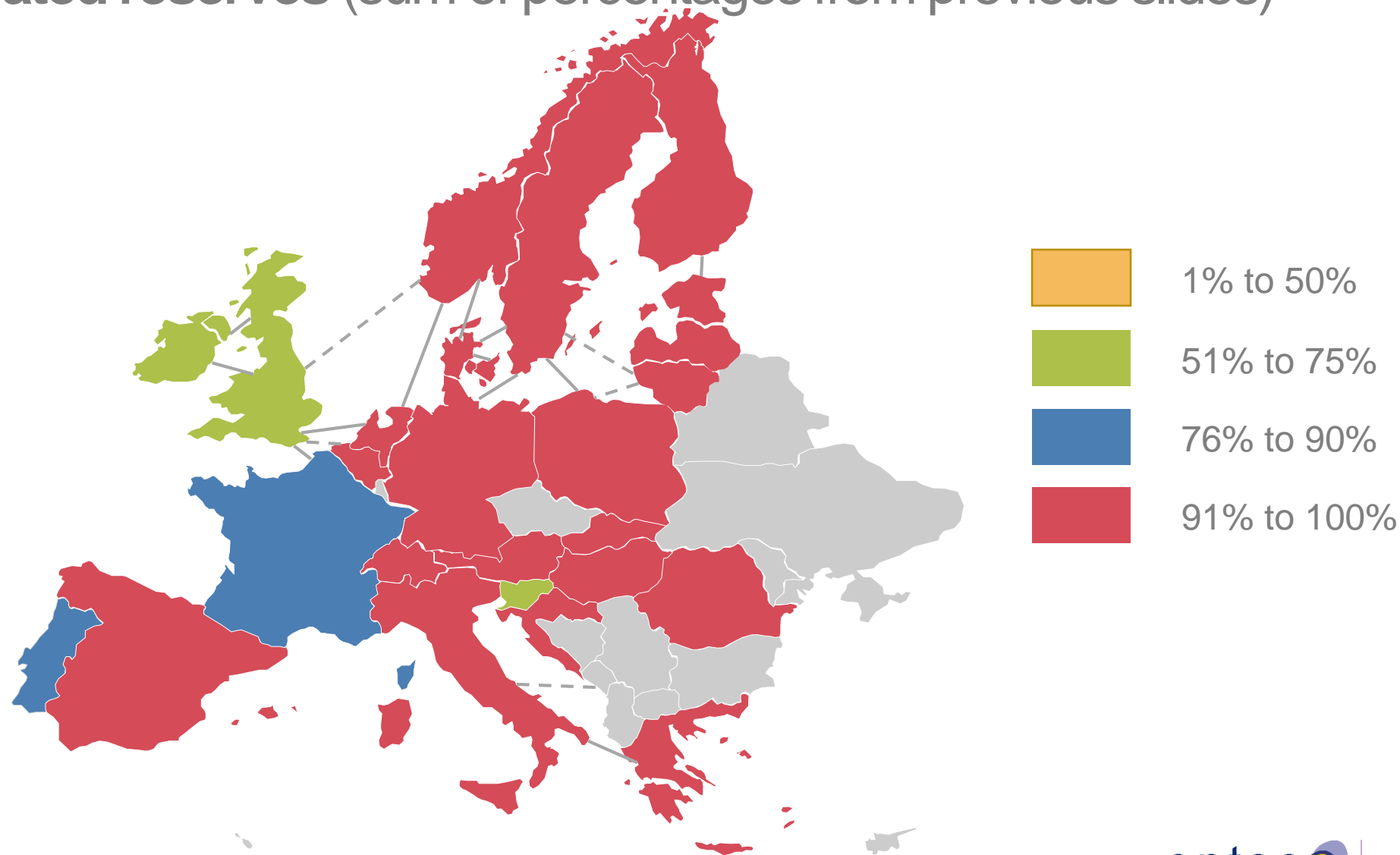
# P-SCH-30-15



# P-SCH-15-15



# Estimation by TSOs of how much manual standard products cover usage of manually activated reserves (sum of percentages from previous slides)



**⚠** It should be clear that the results must be interpreted with caution: some TSOs almost fully rely on mFRR, others only on aFRR (hence percentages have different meanings for different TSOs)

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# Question regarding financial settlement of ramps

- Proposal was to settle DA products with ramps, while SCH are proposed to be block settled. Question was about satisfaction of TSO with this first proposal.
- The answers from countries are:

OK	Not OK, prefer block (DA) & Block (SCH)	Not OK, prefer ramps (DA) & ramps (SCH)	Not OK, modification of ramp settlement
11	3	5	2

- Settlement of ramps (“BSP defined” or “pre-defined” and “blocks”) to be discussed in relationship with pricing and activation algorithms. Hence can still be subject to changes.
- most important topics reported:
  - Inadequacy between physical delivery (from BSP) and the XB exchange. Possible concern for the connecting TSO

# Question regarding duration of the products

- Proposal was to define a min and max duration for each of the DA and SCH products. The attribution of a value or range to this characteristic allows the bids to be comparable between each other.
- The answers from TSO are ... spread ! Indeed these answers show the link between activation duration and ISP duration as well as Intraday XZ gate closure time, pricing and activation algorithms. It means that where TSOs have low XZ GCT, the proposed standard products are estimated to be activated for a too long time (min and max delivery are too long), and vice versa. At the moment these values are not harmonized while CBA or studies are still pending to investigate the harmonization.
  - The overall trend (not unanimous) is to make the products longer or shorter than what is proposed as starting point.
  - the values of requested modification varies from decreasing the duration of activation by 15 minutes, to increasing the duration of activation up to at least 1 hour (next XZ GCT)
- The sequential activation of standard products is not foreseen as the best solution... and will possibly rise new constraints (start/stop G.U. a lot of times for short periods), while reducing the liquidity of different products.

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# Conclusions and proposals

## USE OF PRODUCTS

- The three DA products are clearly needed and will be used by TSOs.
  - High interest for a P-DA product with 15' Full Activation Time (discussions on minimum and maximum duration ongoing).
  - P-DA-10-10/25 and P-DA-5-5/20 immediately follow
- SCH RR (P-SCH-30-15) products are clearly needed and used mainly by those TSO who are member of TERRE project.
- also DA products could be activated in the same way as SCH when the timing allows for it.

# Conclusions and proposals

## SETTLEMENT OF RAMPS

- regarding the question of settlement, the answers are not unanimous among TSOs. Many TSOs are in favour of the proposed approach but about half of the responding TSOs are not in line with the starting point (DA with ramps, SCH with blocks). Other solutions (all settlement with blocks ... with ramps ... ) are proposed while possible concerns for the proposed starting point (e.g. pre-defined or BSP-defined ramps or blocks) have been raised. The topic is therefore further to be discussed in parallel with discussions on pricing and activation algorithms.

It is proposed to let this (settlement of ramps) topic open and discuss it in deep with stakeholders based on both stakeholder and TSO proposals, while stating that this might still change and highlighting concerns raised by TSOs.

# Conclusions and proposals

## DURATION OF PRODUCTS

- the duration of products is the most important problem and shows a lack of consensus between TSOs at the moment. Indeed an input to succeed to converge of this value is XZ GCT (which have not been harmonised at the moment), ISP duration with lower importance and pricing or activation algorithm. The requirements for modification from TSOs collected in this survey follows opposite targets (request to increase or decrease) in line with local current values and balancing rules. We identified at least two options to go further in the discussions with stakeholders but none of them is completely satisfactory.

- **A solution could be to increase the number of standard products.** It allows the TSO to fulfil their needs in adequacy with intraday markets ... but in the meantime it is in the opposite requirement of ACER and stakeholders, it will reduce the liquidity of markets by increasing number of products, while endangering the integration of European balancing market.
- **Another solution would be to let the minimum and maximum delivery period being defined by each BSP when offering the bid.** It require the TSO to send a power need combined with a duration activation when requesting power, and the algorithm to select the adequate bids. This solution makes the products less comparable between each other, but have the advantage to allow the larger competition between BSP. At least the maximum (and probably the minimum as well) duration will converge if GCT and ISP are harmonised in Europe. It could be seen as a transitory solution, even if it is once again opposite to ACER request and views.

# Conclusions and proposals

## GENERAL OBSERVATIONS

- Second draft set of standard products confirm the adequacy with TSO usage, while some adjustments are still needed for some products characteristics to reach the full adequacy.
- A few TSO rise concerns with potential liquidity for each of the products defined (standard product seem to be offered by the BSPs). Nevertheless for those TSOs who highlight the expected liquidity problems (due to duration of products), the issue is very important: even if products fits their needs, they do expect BSP will not be able to provide such bids. This point should be further discussed with stakeholders. If confirmed by BSPs, the use of specific product or evolution of standard ones should be investigated.
- the concerns raised in the previous slides can also be in favor of fixing some characteristics (settlement of ramps, duration) per COBA, the time for TSO to go ahead in harmonization of processes like XZ GCT. This solution have the advantage to facilitate the introduction of RIM ... but report important discussions for introduction of EIM.

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# Next steps

26/10

- telco
- improvements

27/10

- Diffusion ENTSOE

29/10

- Market committee information

12/11

- Launching MC written approval for discussions with stakeholders

13/11 &  
27/11

- discussions with ACER, stakeholders during BCG and GSB meetings

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# MC approval

**1- WGAS ask MC to approve this draft set of standard products to be presented as a basis for discussion with stakeholders during the coming months. This includes :**

- the products and their characteristics, focusing the discussions on open topics
- the discussion around principles for settlement of ramps (blocks, predefined ramps, ramps defined by BSP)
- the discussion about duration of products and the possible solution to reach a compromise
- Algorithm concept (continuous or clearing)
- The potential liquidity

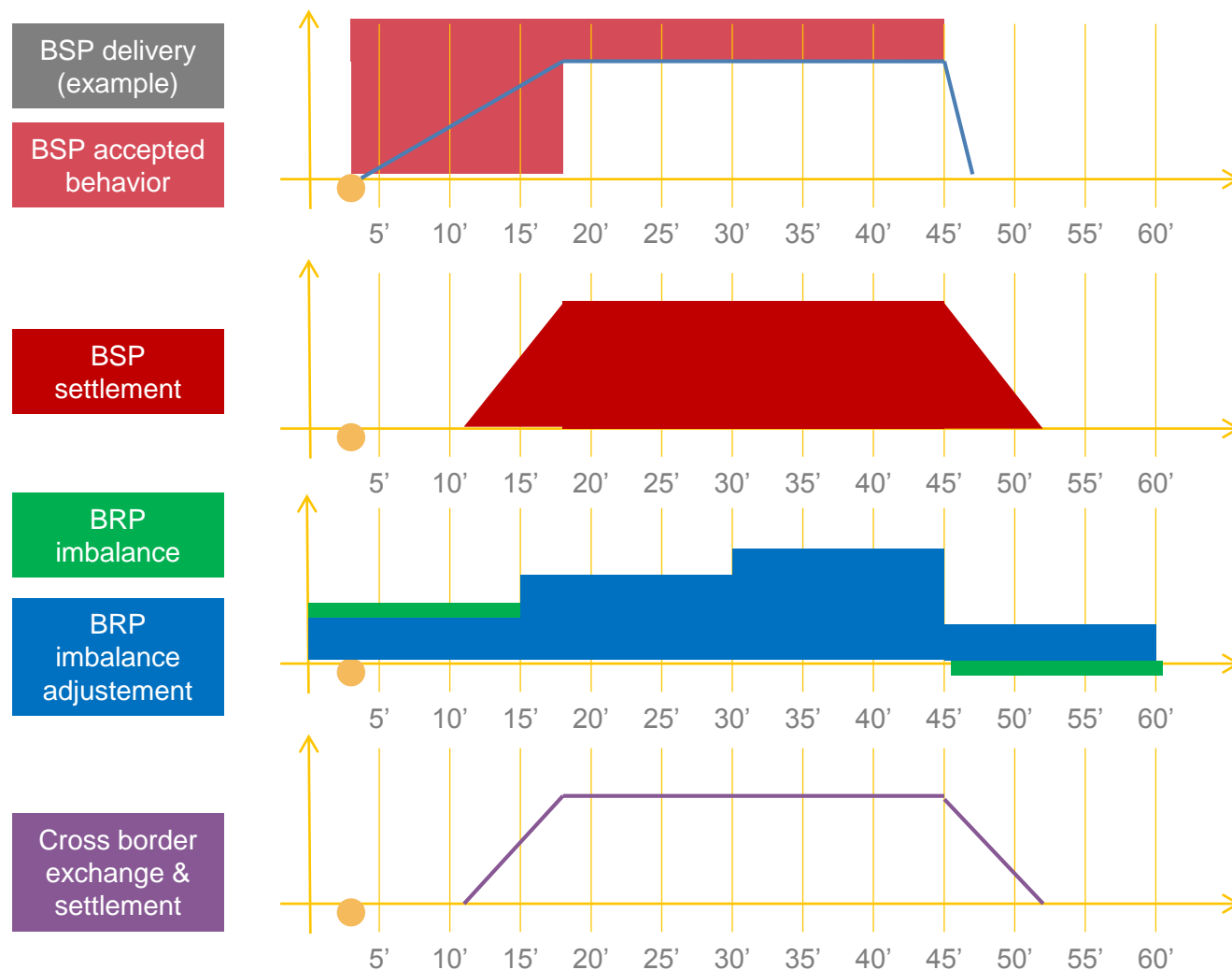
**2- WGAS ask MC to allow the diffusion to ACER, EC and stakeholders of maps showing the possible use of products per TSO,**

- A disclaimer will be joined with the maps, alerting of an estimation on interest and possible ratio of use
- ACER, EC and stakeholders are pushing ENTSOE to show these maps, while it provide an additional information to define COBA.  
Moreover this information help BSP to identify the interest from TSO to develop the relevant flexibilities

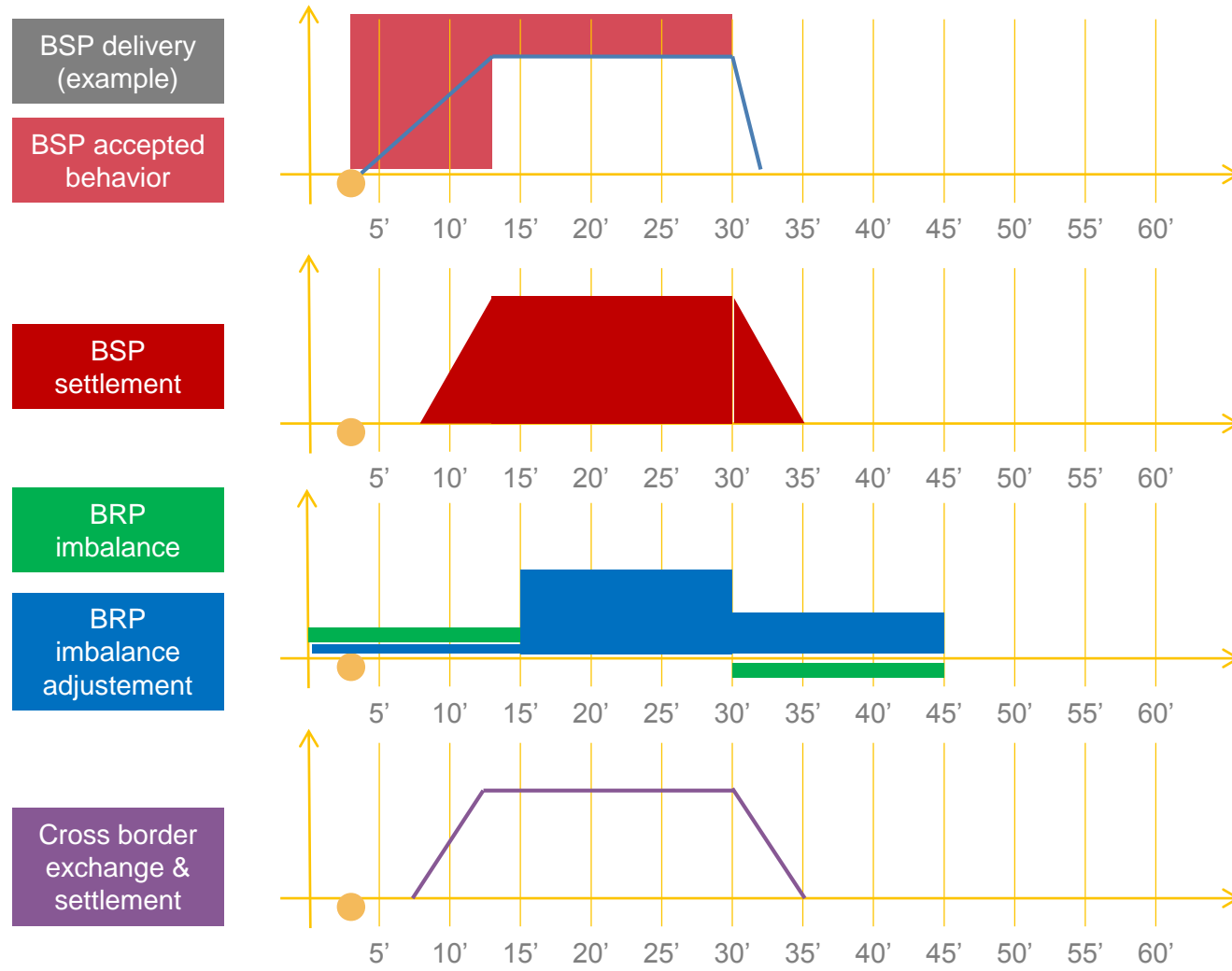
# APPENDIX

- Physical and financial flows associated with standard products

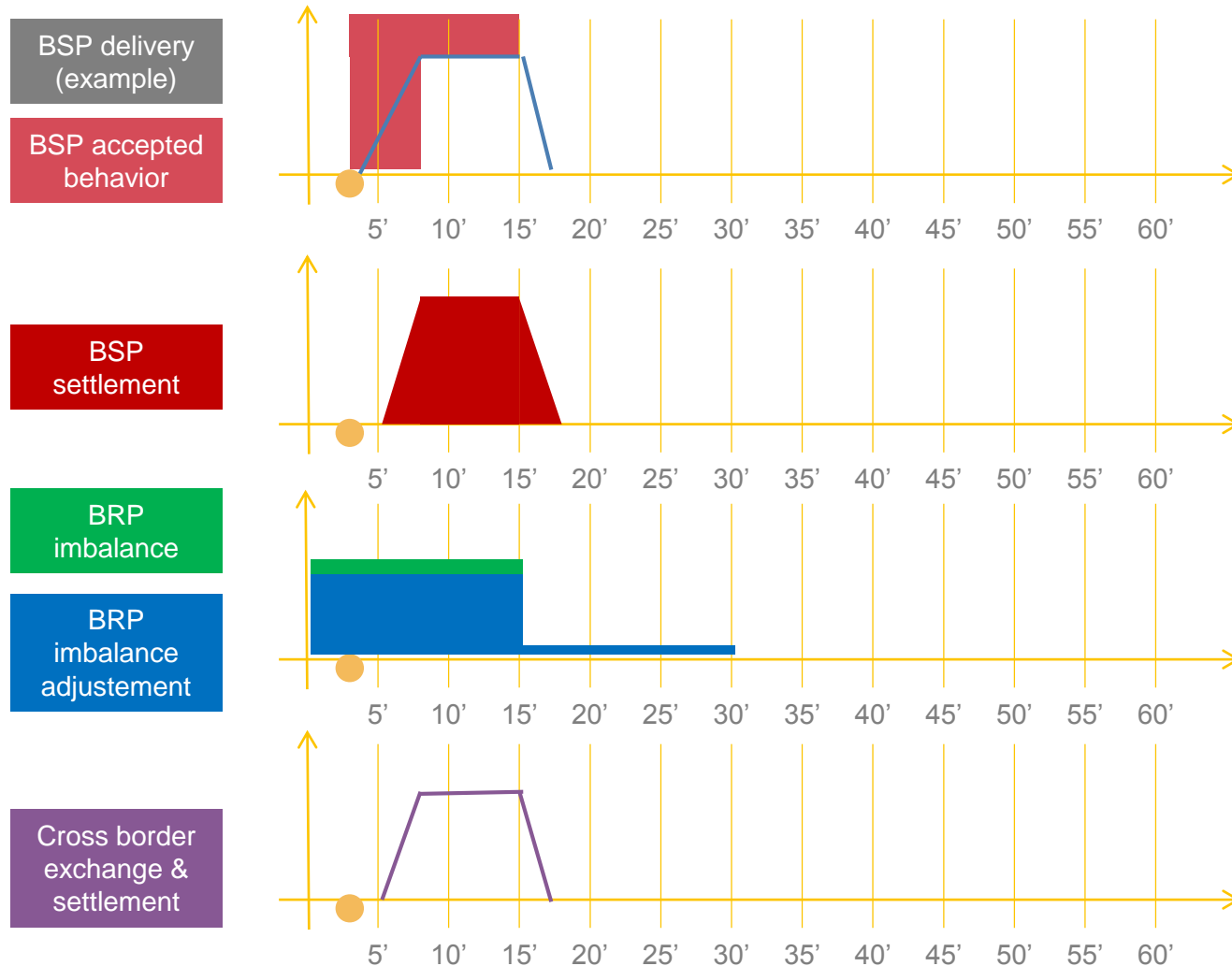
# P-DA-15-15/30 - example



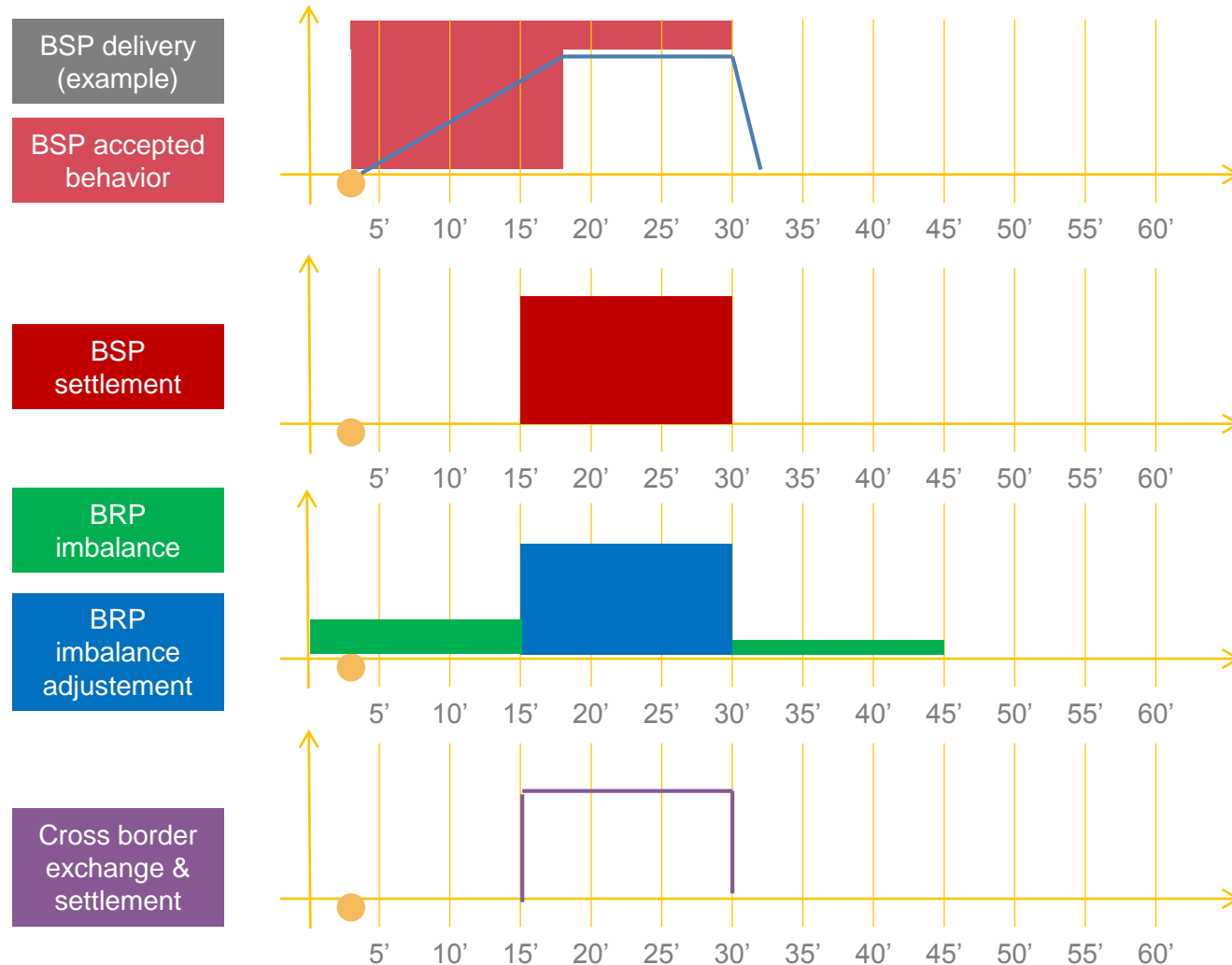
# P-DA-10-10/25 - example



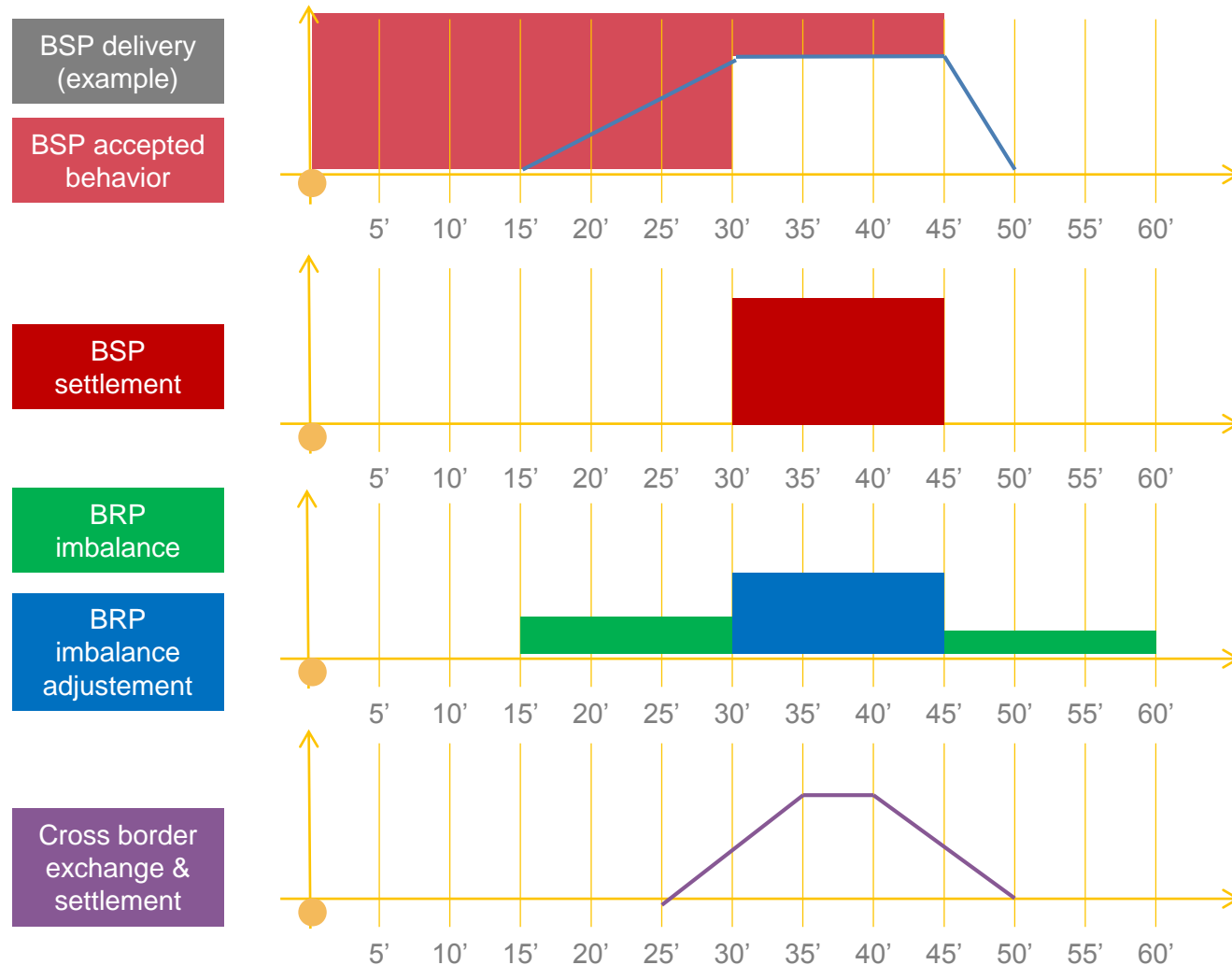
# P-DA-5-5/20 - example



# P-SCH-15-0/15 - example

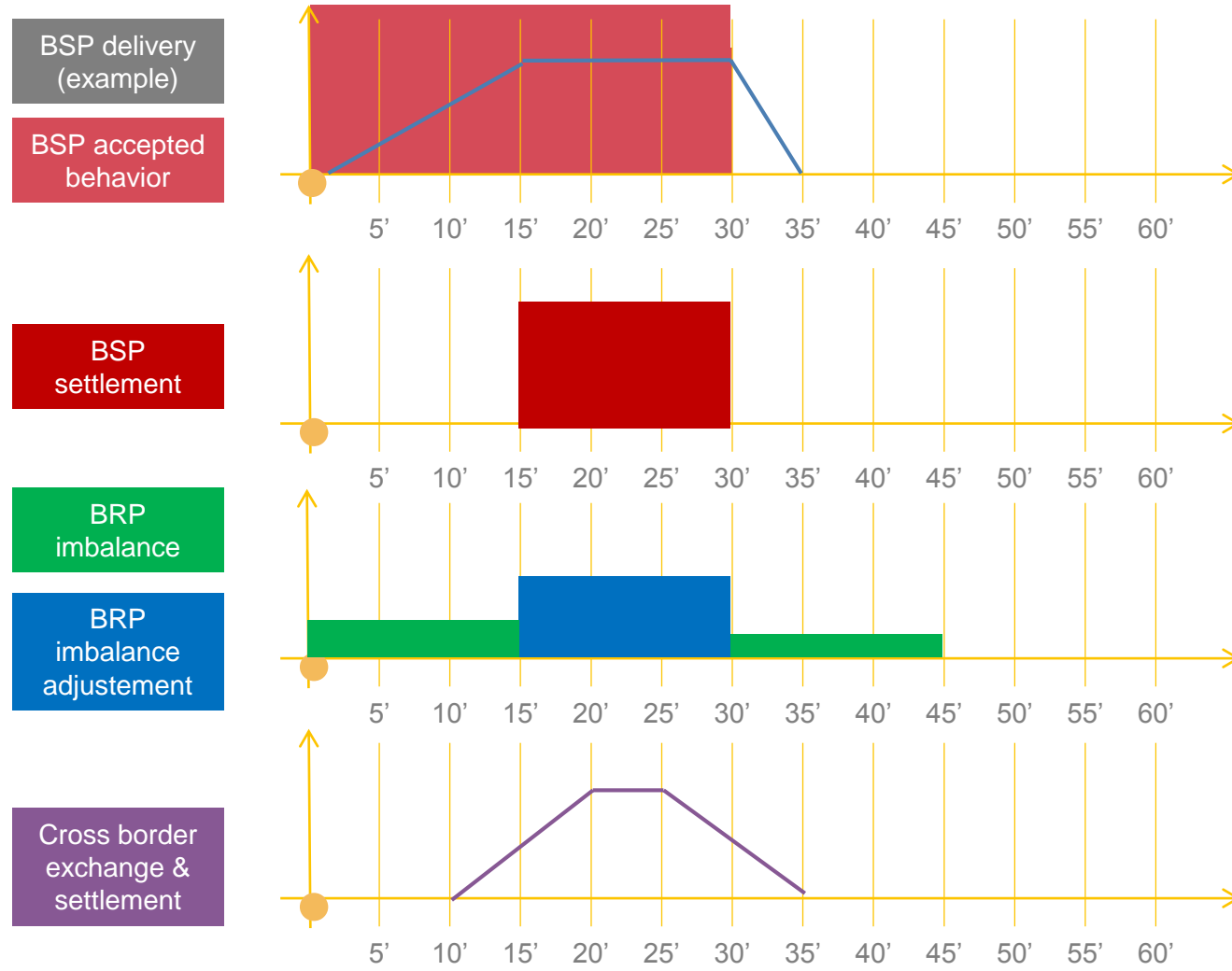


# P-SCH-30-15 - example





# P-SCH-15-15 - example





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