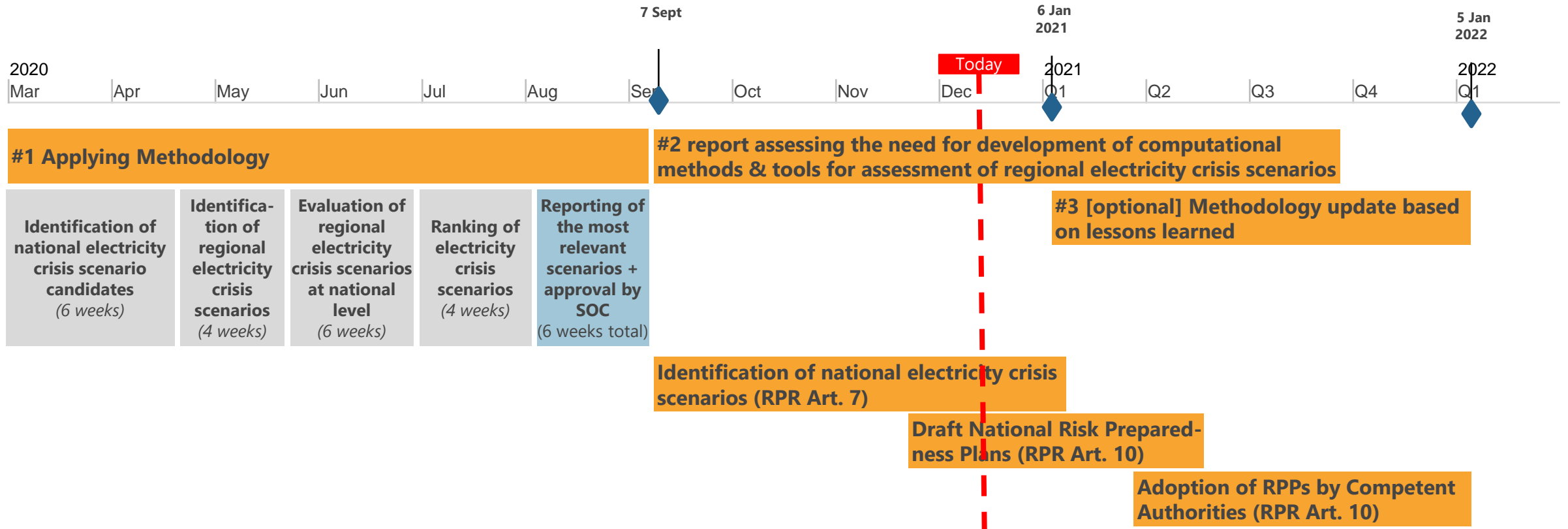


Risk-preparedness Regulation Implementation (2020 and 2021)



*Security of Supply Coordination Group - 9th Meeting of Sub-Group for Electricity
Energy Community, 11 December 2020*

Project timeline status



Regional crisis scenarios (1/2)

31 regional scenarios, grouped into 10 categories

ID	Topical groupings	Name of the scenario
1	Cyber attack	Cyber attack – entities connected to power grid
2		Cyber attack – entities not connected to power grid
3	Attack	Physical attack – critical assets
4		Physical attack – control centres
5		Threat to key employees
6		Insider attack
7	Extreme weather	Solar Storm
9		Storm
10		Cold Spell
11		Precipitation and flooding
12		Winter Incident
16		Multiple failures caused by extreme weather
28		Heatwave
29		Dry period

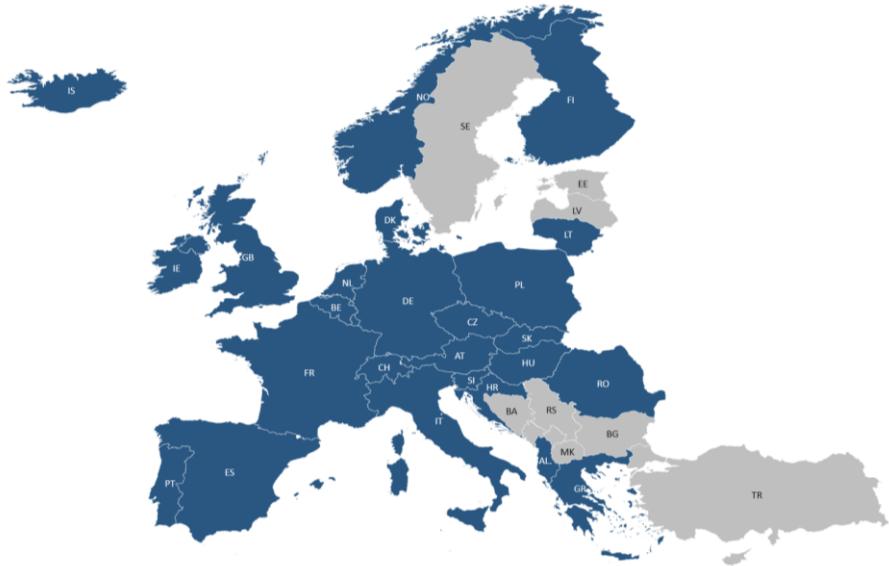
Regional crisis scenarios (2/2)

ID	Topical groupings	Name of the scenario
8	Natural disaster	Volcanic eruption
30		Earthquake
31		Forest fire
27		Pandemic
13	Fuel shortage	Fossil fuel shortage (incl. natural gas)
14		Nuclear fuel shortage
20	Human-related	Human error
23		Strike, riots, industrial action
25	Market rules	Unforeseen interaction of energy market rules
21		Unwanted power flows
15	Technical failure	Local technical failure with regional importance
17		Loss of ICT systems for real-time operation
18		Simultaneous multiple failures
22		Serial equipment failure
19	Other	Power system control mechanism complexity
24		Industrial/nuclear accident
26		Unusually big RES forecast errors

Scenarios evaluation on national level

Submissions:

- 24 timely submissions
- 2 delayed submission



All submissions provided were taken into final analysis

Top 15 scenarios

- 3 related to ICT systems (incl. cyberattacks)
- 4 related to extreme weather
- generation fuel shortage also

Cyberattack - entities connected to power grid

Heatwave

Physical attack - critical assets

Storm

Dry period

Fossil fuel shortage

Cold Spell

Insider attack

Winter Incident

Multiple failures caused by extreme weather

Physical attack - control centres

Threat to key employees

Pandemic

Loss of ICT systems for real-time operation

Cyberattack - entities not connected to power grid

ECG likely to recommend amendments to the 7th September 2020 „Identification of Regional Electricity Crisis Scenarios”

As of 7th of September, the ECG is working on gathering and coordinating proposals to amend the ENTSO-E Report. These comments can be expected in their final form in January 2021.

Expected timeline for recommendation's receipt

- End of December 2020/January 2021
- The Regulation nor the Methodology do not specify deadline for the ECG to submit their recommendations to the ENTSO-E

Upon receipt of the ECG recommendation for amendments

- ENTSO-E to review the recommendations
- ENTSO-E to decide whether to implement changes
- Recommendations might lead to amendment of both the Report and the Methodology

“Report assessing necessity to develop computational methods and tools to assess likelihoods and severity of regional electricity crisis scenarios”

As indicated in the Article 8.2 of the Risk Preparedness Methodology, the ENTSO-E is mandated to publish a report assessing need to develop necessary, specialized tools for the regional crisis scenarios assessment. The report is to be published the latest on 7th September 2021

Methodology, Article 8.2

No later than 12 months following the publication of the report as described in Article 15, ENTSO-E shall publish a report assessing whether there would be the need for the development of necessary computational methods and tools to be used as a pan-European method for the assessment of regional electricity crisis scenarios.

“Report assessing necessity to develop computational methods and tools to assess likelihoods and severity of regional electricity crisis scenarios” – timeline

TASK	WHEN	PARTICIPANTS
1. Gather comprehensive stakeholder feedback on the Methodology and its first implementation	December 2020 – February 2021	ECG, SOC, TSO's (via TSO SPoCs), RSCs / RCCs
2. Gather information on probability & impact evaluation methods used	December 2020 – February 2021	TSO (via TSO SPoCs)
3. Propose and agree with stakeholders the optimal way to address all other identified concerns	February 2021 – May 2021	SOC, ECG, ACER
4. Prepare report, assessing a need for additional computational methods and tools (Methodology, Article 8.2)	March 2021 – June 2021	SOC approval
5. Implement changes / extensions to the Methodology (if required)	September 2021 – June 2022	SOC approval, ACER approval

Thank you for your attention!