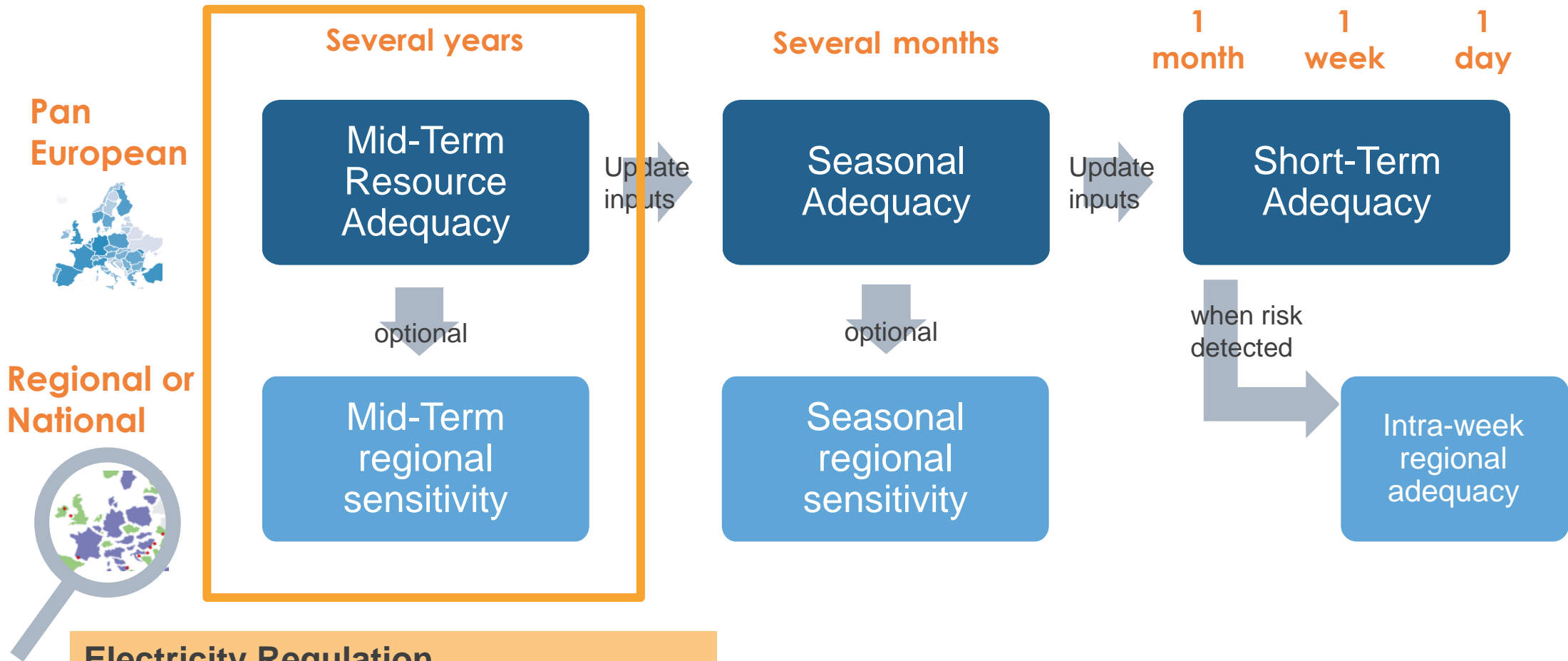


Methodology for the European resource adequacy assessment

European Network of Transmission System Operators for Electricity (ENTSO-E)

Electricity Coordination Group - 22 November 2019

Ensuring resource adequacy in all time horizons & regional scopes



Electricity Regulation

- Extend and replace MAF as of 2021
- Enhanced ambitious probabilistic methodology

European Resource Adequacy Assessment

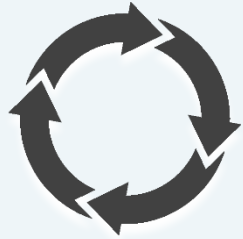
Three main methodology packages (to be delivered by ENTSO-E):

- ① Methodology for the European Resource Adequacy Assessment (ERAA)
- ② Methodology for:
 - Cost of New Entry (CONE)
 - Reliability Standards
 - Value of Lost Load (VoLL)
- ③ Methodology for calculating the maximum entry capacity for cross-border participation to Capacity Mechanisms

European Resource Adequacy Assessment :

A basis for enhancements of market design and integration & security of supply

Methodologies to be developed within 6 months after entry into force



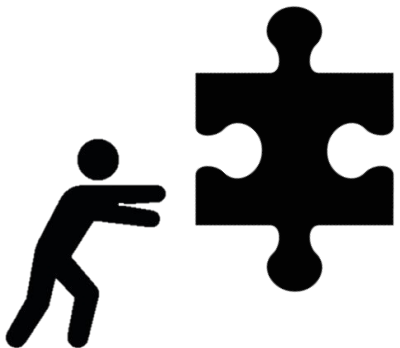
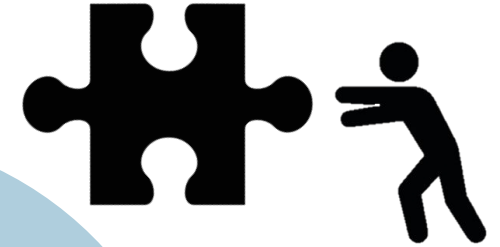
One adequacy methodology for European, regional and national assessments



Common adequacy indicators as a basis for regionally coordinated national security of supply standards



Pan-European and national assessments complementing each other in a consistent approach



European Resource Adequacy Assessment

What are the differences with current methodologies?

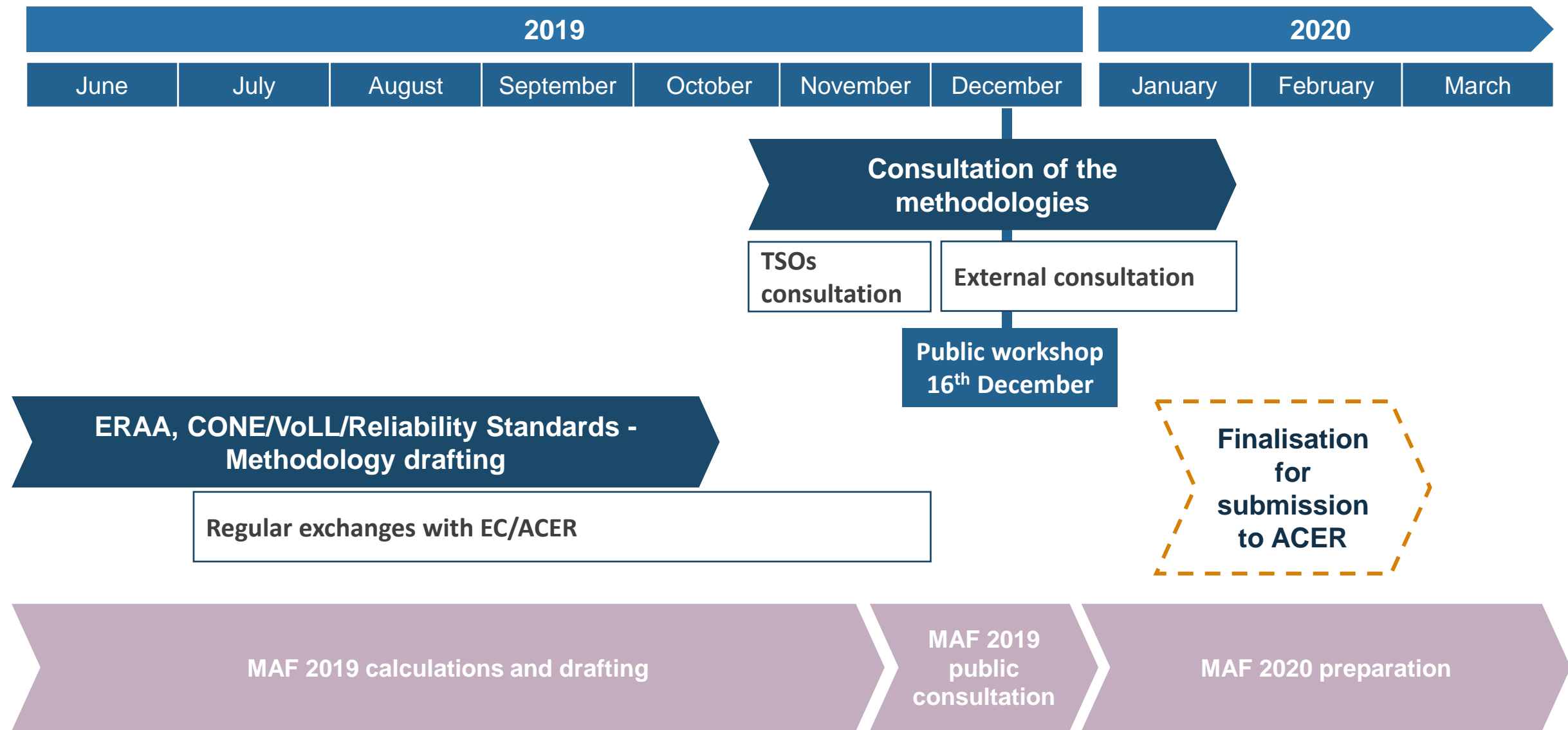
Current Approach (MAF 2019)

- Probabilistic market modelling
- 7 years ahead - 2 simulated years
- Bottom-up approach and expectations of commissioning / decommissioning
- No explicit CM considerations
- NTC approach, flow-based only tested
- No sectoral integration

Target Approach

- ☒ Probabilistic market modelling
- ☐ 10 years ahead - annual granularity
- ☐ Economic viability of generation assets, integrated in the model
- ☐ Integrated consideration of CM
- ☐ Compliance with FBMC when available
- ☐ Sectorial integration (P2X consideration)

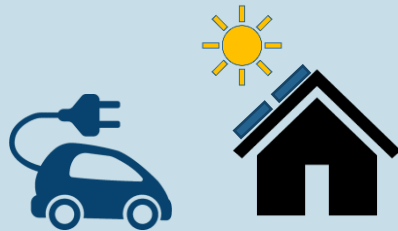
Resource Adequacy methodologies – Timeline



European Resource Adequacy methodologies: stay tuned and have your say!

European
Resource
adequacy
assessment
(ERAA)

Value of Lost
Load (VOLL)



Cost of new
entry (CONE)



Reliability
standard (RS)

▶ 4 December 2019 - Public consultation on all methodologies opens for 8 weeks

▶ 16 December – Stakeholder workshop on the Resource adequacy methodologies



Thank you for your attention
