



R2D2

Reliability, Resilience and Defense
technology for the grid



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A graphic element consisting of a white semi-circular arc with a small green dot centered above it.

R2D2

Resilience as a new paradigm for power systems and electricity markets

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**Reliability, Resilience and
Defense technology for the grid**



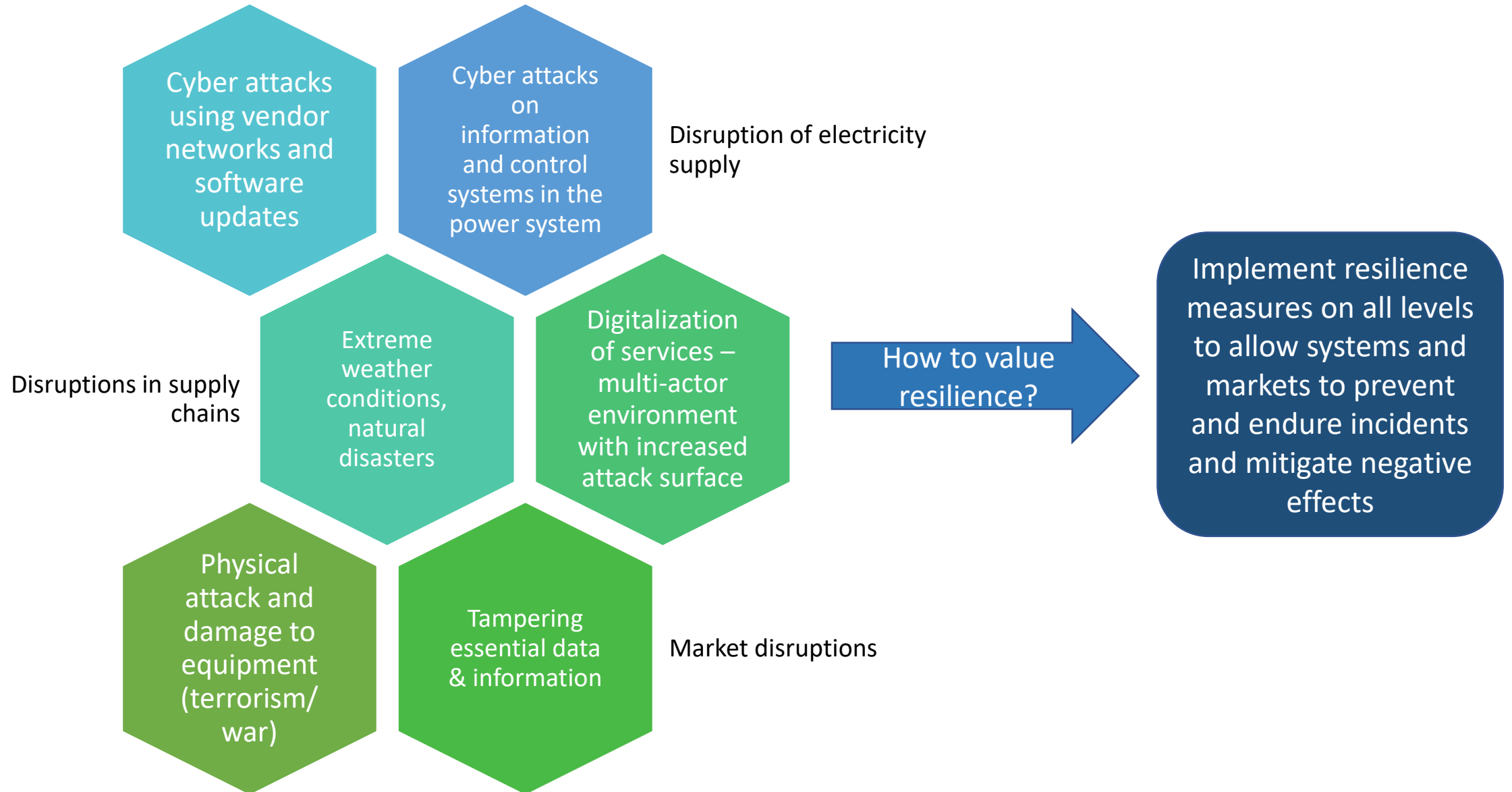
Challenges for contemporary power systems

Secure operation of power systems and well-functioning electricity markets are prerequisites for secure and continuous supply of electricity

Even when these conditions are expected to be met, external factors may influence or disrupt electricity supply by posing threats to both power system and electricity markets

These factors may be natural or man-provoked and due to the power systems structure, their effects can be easily spread to neighbouring systems

The consequences of such incidents could have economic, social and environmental impacts on whole regions



Legislative & Institutional aspects

- Implementation of a complex legislative framework
 - Implementation of requirements from CEP (Risk-preparedness Regulation and Network code on cyber security)
 - Horizontal framework (NIS Directive/ NIS 2 Directive; ECI Directive/ CER Directive)
- Competence of authorities
 - Establishment of authorities that will monitor the implementation of measures and support critical entities for enhanced resilience

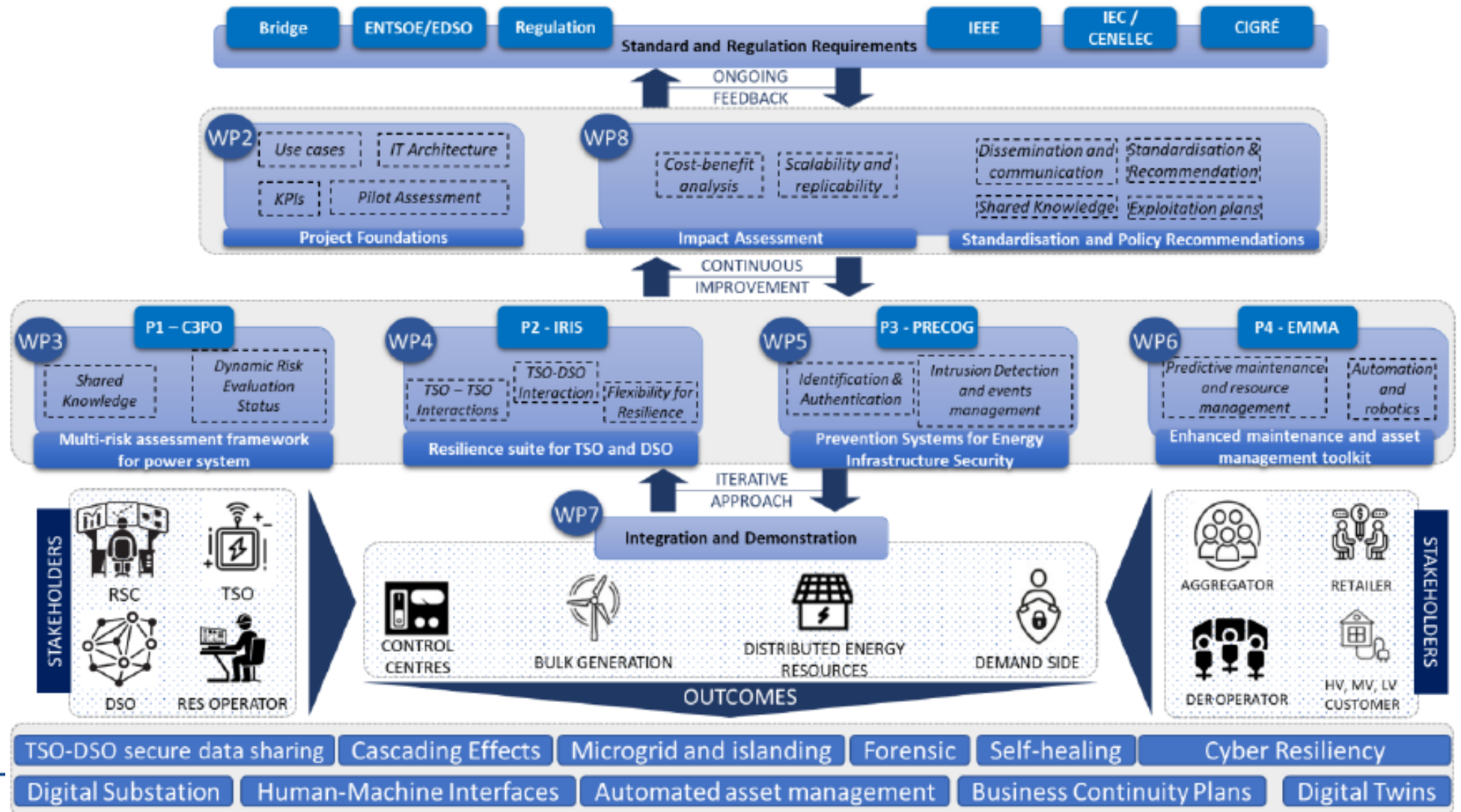
Critical entity aspects

(TSOs, DSOs, NEMOs, producers, suppliers, market participants providing aggregation, storage, demand response)

- Implementation of tools and strategies to respond to threats
- Assessment of risks to systems from information technology (IT) and operational technology (OT) perspective and implement measures for their mitigation
- Implementation of legislative obligations, recommendations and technical standards/best practices from competent authorities and relevant EU/International entities



R²D² project will develop tools and solutions to improve resilience of EPES





THANK YOU!

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