



5th E.DSO-ENCS-ENTSO-E Event on Cybersecurity “European energy grids’ security in a radically changed landscape”

23 November 2022, 10H00 – 15H30



Welcome

Sonya Twohig

Secretary General, ENTSO-E



Opening

Roberto Zangrandi

Secretary General, E.DSO



Guidelines for participants

Video and audio

- Video and audio is allowed only for Online Speakers or Panellists.
- Online Speakers will be asked to switch video and audio OFF when not talking.

Participants Questions

- Participants can place their questions directly through [Sli.do](https://sli.do) by using the code **#2102419** or by scanning the QR code.
- Indicate your name and company/institution when posting your question.
- The Moderator will select a couple of questions and ask the relevant speakers or panellists to comment.
- Chat and raise the hand feature for online tool will not be used.





Keynote Address: “The War in Ukraine: Strategic impact on European energy grids and EU vision”

Moderated by

Roberto Zangrandi

Secretary General, E.DSO

Agenda

10:00	10:10	Welcome from organising Associations E.DSO, ENCS and ENTSO-E Opening– Sonya Twohig , Secretary General, ENTSO-E
10:10	11:00	Opening Session <i>“The War in Ukraine: Strategic impact on European energy grids and EU vision”</i> Lorena Boix Alonso , Director for Digital Society, Trust & Cybersecurity, DG CONNECT, European Commission Paula Pinho , Director for Just Transition, Consumers, Energy Efficiency and Innovation, DG ENER, European Commission Evangelos Ouzounis , Head of Policy Development and Implementation Unit, ENISA Tahir Kapetanovic , Head of System Operation, Austrian Power Grid, Chair of System Operations Committee, ENTSO-E Robert Lee , Founder and CEO, Dragos (<i>recorded video</i>) <u>Moderator</u> : Roberto Zangrandi , Secretary General, E.DSO
11:00	11:15	Coffee break
11:15	12:30	Panel Discussion I <i>“Cyberattacks and strategies compromising the European grids”</i> Jean François Montagne , Chief Information Security Officer, Enedis Grzegorz Bojar , CIO, PSE, ICT Committee member, ENTSO-E Anjos Nijk , Managing Director, ENCS Aurelio Blanquet , Secretary General, EE-ISAC <u>Moderator</u> : Ivan Štefek , CISO, ČEPS, StG ICT Security Convenor, ENTSO-E
12:30	13:00	Testimonial from ENTSO-E on Synchronisation Gianluca Guidarelli , Principal Engineer Infrastructure, Swissgrid, Ukraine Synchronisation Task Force IT Work Stream Leader, ENTSO-E
13:00	14:00	Lunch Break
14:00	15:15	Panel Discussion II <i>“Network Code on Cybersecurity”</i> Olivier Clément , Head of Cybersecurity Anticipation & External Affairs, Enedis, Chair of the Expert Group, EU DSO Entity Tomáš Svoboda , Head of Cybersecurity Department, ČEZ Distribuce Daiga Dege , Business Security Specialist ,ENTSO-E Stefano Bracco , Knowledge Manager, ACER <u>Moderator</u> : Maarten Hoeve , Director Technology, ENCS
15:15	15:30	Closing Remarks Michaela Kollau , Policy Officer, Unit B4 “Security of Supply”, EC DG Energy



Keynote Address: “The War in Ukraine: Strategic impact on European energy grids and EU vision”

Lorena Boix Alonso

Director for Digital Society, Trust & Cybersecurity

DG CONNECT, EC



Keynote Address: “The War in Ukraine: Strategic impact on European energy grids and EU vision”

Paula Pinho

Director for Just Transition, Consumers, Energy Efficiency
and Innovation

DG ENER, EC



Keynote Address: “The War in Ukraine: Strategic impact on European energy grids and EU vision”

Evangelos Ouzounis

Head of Policy Development and Implementation Unit

ENISA



Keynote Address: “The War in Ukraine: Strategic impact on European energy grids and EU vision”

Tahir Kapetanovic

Head of System Operation, Austrian Power Grid

Chair of System Operations Committee, ENTSO-E



Keynote Address: “The War in Ukraine: Strategic impact on European energy grids and EU vision”

Robert Lee

Founder and CEO

Dragos



 COFFEE BREAK



Panel Discussion I: “Cyberattacks and strategies compromising the European grids”

Moderator:

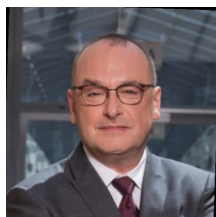


Ivan Štefek
ČEPS, ENTSO-E



Jean François Montagne
Enedis, E.DSO

Anjos Nijk
ENCS



Grzegorz Bojar
PSE, ENTSO-E

Aurelio Blanquet
EE-ISAC





Testimonial from ENTSO-E on Synchronisation

Gianluca Guidarelli

Principal Engineer Infrastructure, Swissgrid,
Ukraine Synchronisation Task Force IT Work Stream
Leader, ENTSO-E

Key Success Factors

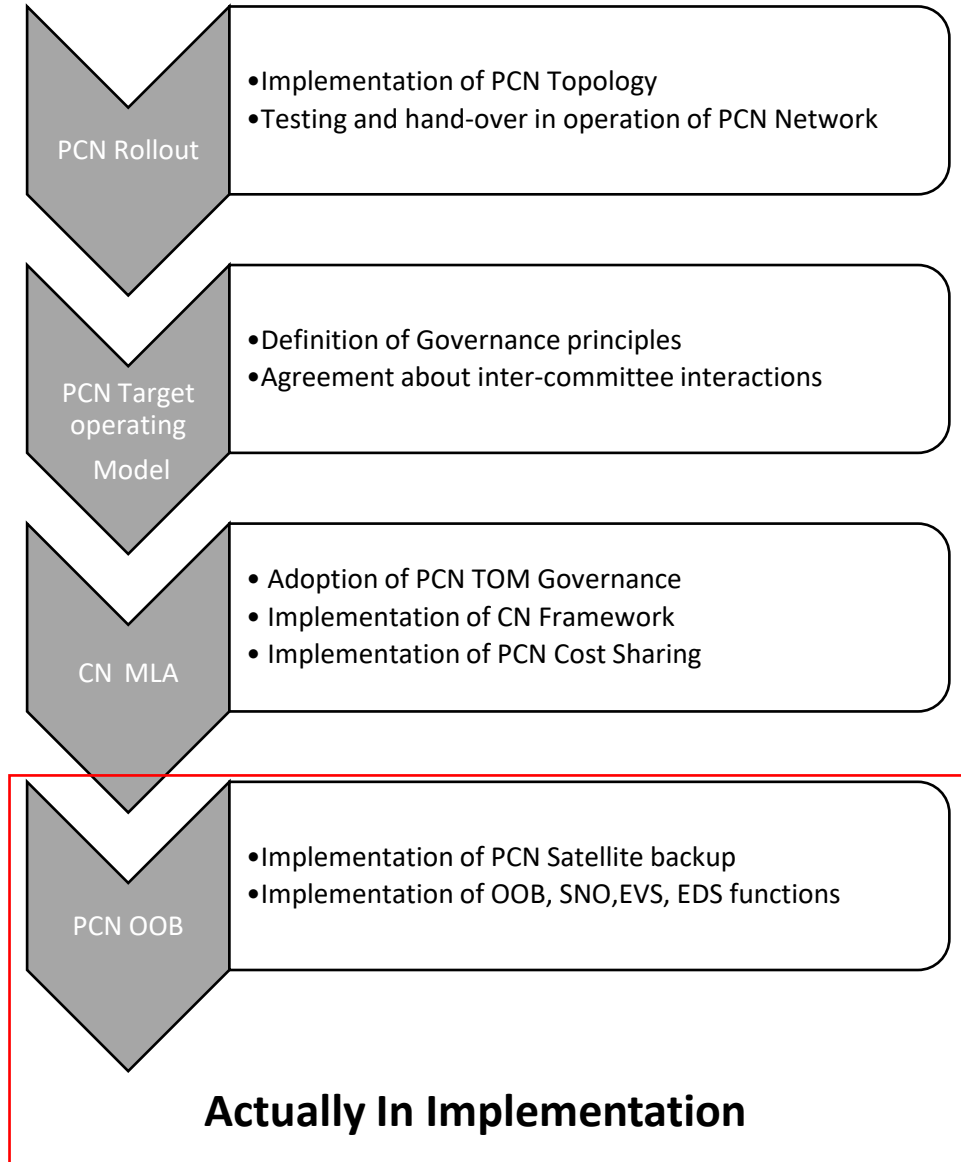
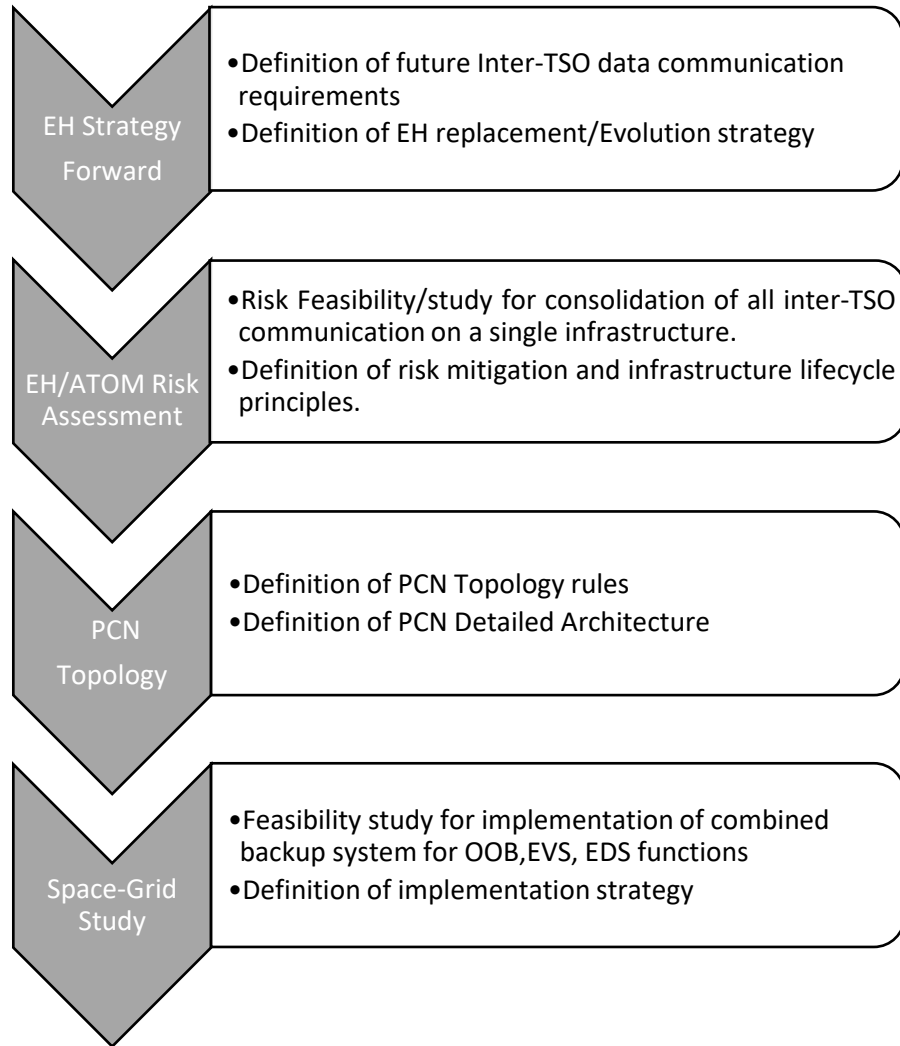
Good Luck

Skill and Resources

Preparation



Electronic Highway Replacement Actions



Ukrenergo Connection Key Enabling points

PCN



Network Type

- Multiservice MPLS Backbone

Coverage

- All ENTSO-E TSO
- Other TSOs NGSO, TEIAS, UKRENERGO
- RSCs

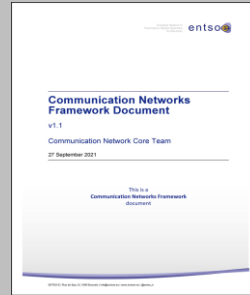
Network Capability

- L3 VPN
- L2VPN; EVPN
- User Service provision

Scope

- All Inter-TSO, RSC Traffic
- Potential extension to other organization
- Leverage of infrastructure costs

CN MLA



MLA Architecture

- Separation of Technical topic in CN Framework
- Flexibility to extend to additional Users/service without amendment

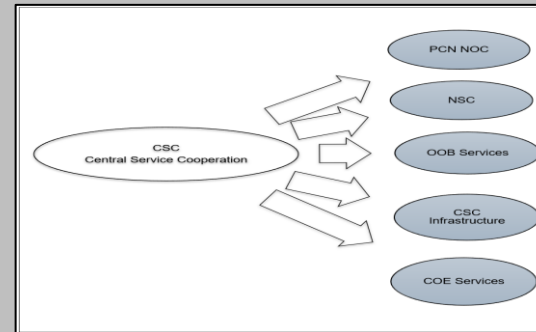
Budget/Finance

- Funded outside ENTSO-E Membership fee
- Custom cost sharing mechanism
- Contribution proportional to the service consumed

Governance

- CN Participant (Involved in Governance)
- CN External Users (Service User's)
- ENTSO-E (Support)
- Ownership TSOs

Central Operation Entity



Organization

- TSOs consortium to seamless provide PCN services.
- Funded by CN MLA budget
- Reporting to CN MLA Governance

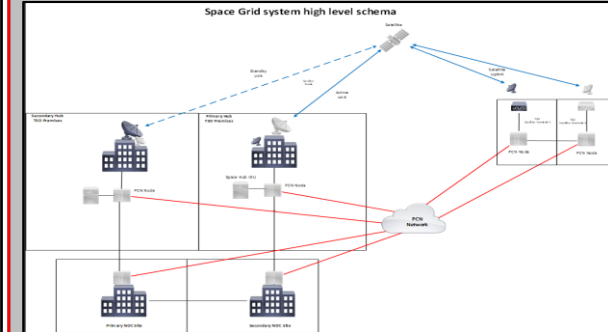
Service Scope

- NOC
- NSC
- SNO;OOB
- EVS

Benefit

- Sharing of service role among minimum 2 organization
- Leverage of system and knowledge
- Easy extension to other service
- Possibility to operate for multiple MLAs

Space-Grid Study*



Target

- Implementation of PCN Satellite Backup
- Fulfill NC-ER obligation

Service Scope

- Emergency Network Management
- Emergency Voice System
- Emergency Data Communication

Integration strategy

- Seamless integration in PCN routing
- Implementation of Emergency voice capability for control center
- Automatic failover in case of failure

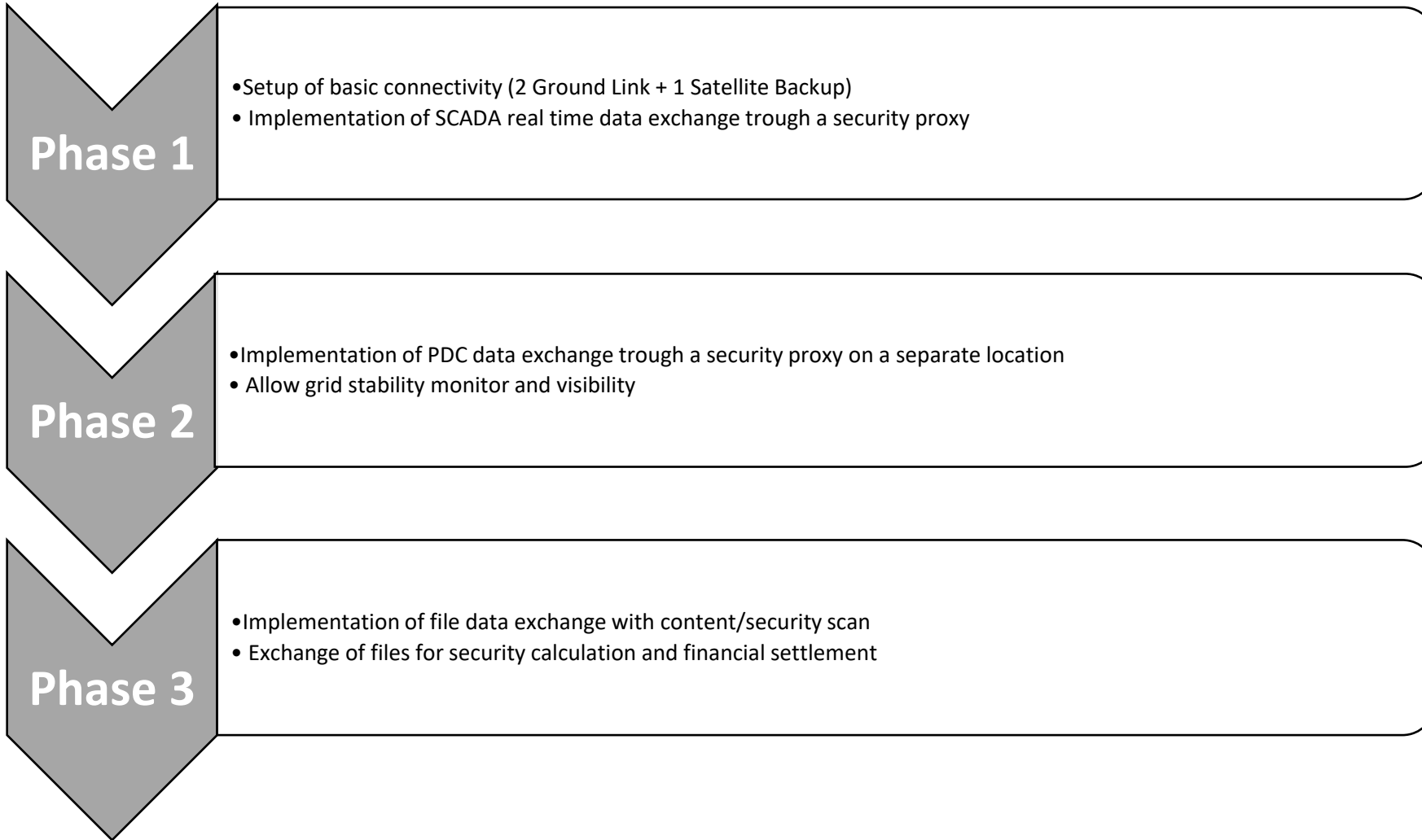
Coverage

- All Inter-TSO, RSC Traffic
- Potential extension to other organization

Under Implementation

*Project is in implementation under the PCN OOB Name

Task Force Phases



Ukraine Synchronization Success Factors Summary

Infrastructure	The availability of common basis infrastructure (PCN) allows quick implementation of new emerging requirements
Legal Framework	The availability of a clear governance and legal framework allow quick service onboarding and clear cost sharing
Service Provider	The presence of service providers covering all the skills required allow quick service implementation and operation
Emergency Scenarios	The availability of pre-existing emergency scenarios allows to plan resources and skills and to speed up the implementation in case of Emergency

The Ukraine Emergency Synchronization success is the result of multiple years of works and cooperation among all the ENTSO-E TSOs in setting up a common infrastructure and mutualizing-skills, infrastructure and resources.



LUNCH BREAK



Panel Discussion II: “Network Code on Cybersecurity”

Moderator:



Maarten Hoeve
ENCS



Olivier Clément
Enedis, EU DSO Entity

Daiga Dege
ENTSO-E



Tomáš Svoboda
ČEZ Distribuce, E.DSO

Stefano Bracco
ACER





Closing Remarks

Michaela Kollau

Policy Officer, Unit B4 “Security of Supply”

DG Energy, EC



*Recording and slides available on
organisers' websites*

www.edsoforsmartgrids.eu

www.entsoe.eu

www.encs.eu