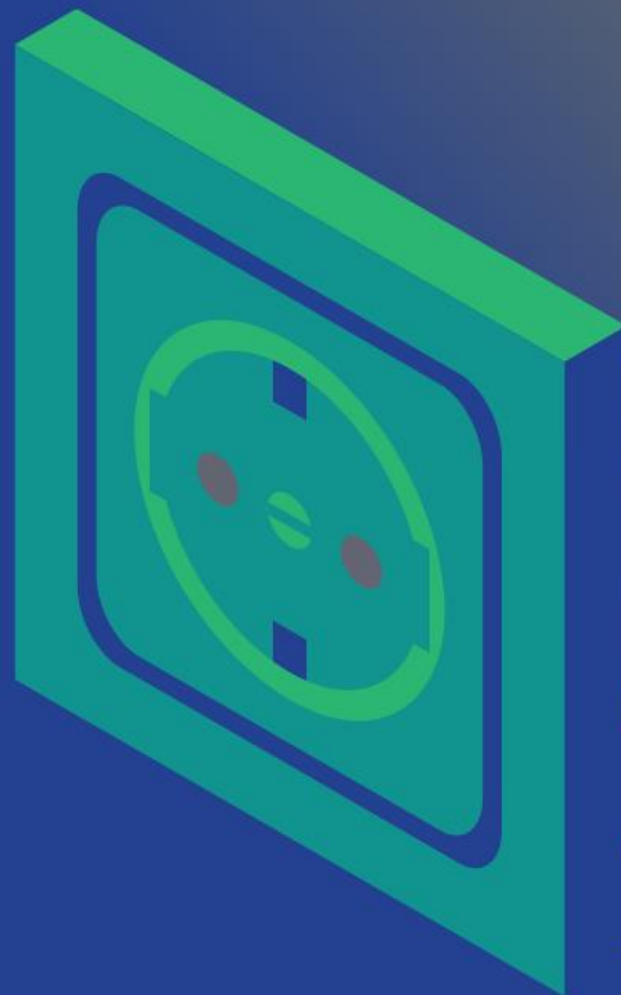




CURRENT

Enabling Network Technology
throughout Europe



ACCELERATING THE ENERGY TRANSITION

MOVING TOWARDS A COORDINATED APPROACH

TEN-E AND EUROPEAN GRID INFRASTRUCTURE

21 SEPT | 11-12 CET

Agenda

Welcome by currENT Board Member, **John Fitzgerald**

Introduction and moderator – **Pat Cox**, Former President of the European Parliament

Raphael Sauter, European Commission DG ENER

Shadow rapporteur **Erik Bergkvist**, Member of the European Parliament (S&D)

Dimitrios Chaniotis, Senior advisor RTE & Vice Chair of System Development Committee ENTSO-E

John Fitzgerald, Board member CurrENT & CEO SuperNode

Discussion plus questions from the audience moderated by **Pat Cox**



currENT: Who We Are

currENT is the key industry association representing innovative grid technology companies operating in Europe.

Our members are taking Europe's power network to the next level – developing and supplying innovative technologies that optimise and maximise use of the existing grid.



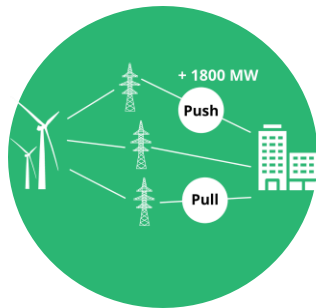
We achieve our common goal by

- 1 Generate awareness** – of new grid enhancing technologies, the opportunities and challenges, and increasing awareness of the benefits of new technology. We wish to bring new game changing solutions to the table.
- 2 Move policy** – we contribute to future-proof regulatory frameworks that speed up the adoption of alternative proven solutions for the benefit of all Europeans.
- 3 Enhance technology** – we introduce, and where needed, trial new technologies; learning from each other through European benchmarking.
- 4 Engage** – in acting collectively through our association we stand up for the principles of transparency and stakeholder interaction.



currENT Technologies

Hardware, software and associated protocols applied to existing and new transmission facilities that increase the network's operational transfer capacity, and maximise the efficiency of grids



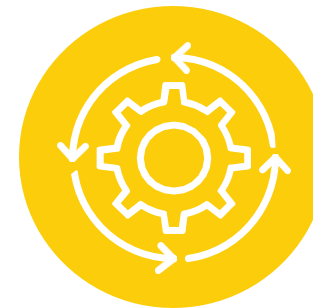
**Modular Power
Flow Control**



**Dynamic Line
Rating**



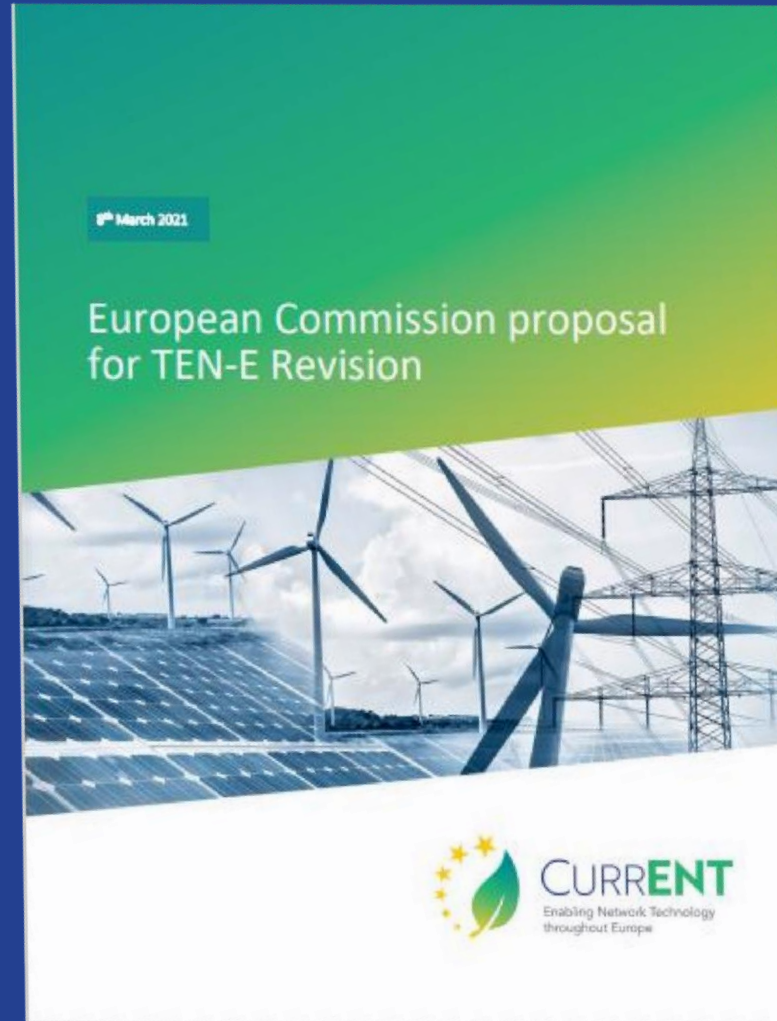
**Superconductor
Cable Systems**



**Innovative
Sensors**



currENT response to TEN-E Proposal



Moderator



Pat Cox

**Former President of the
European Parliament**



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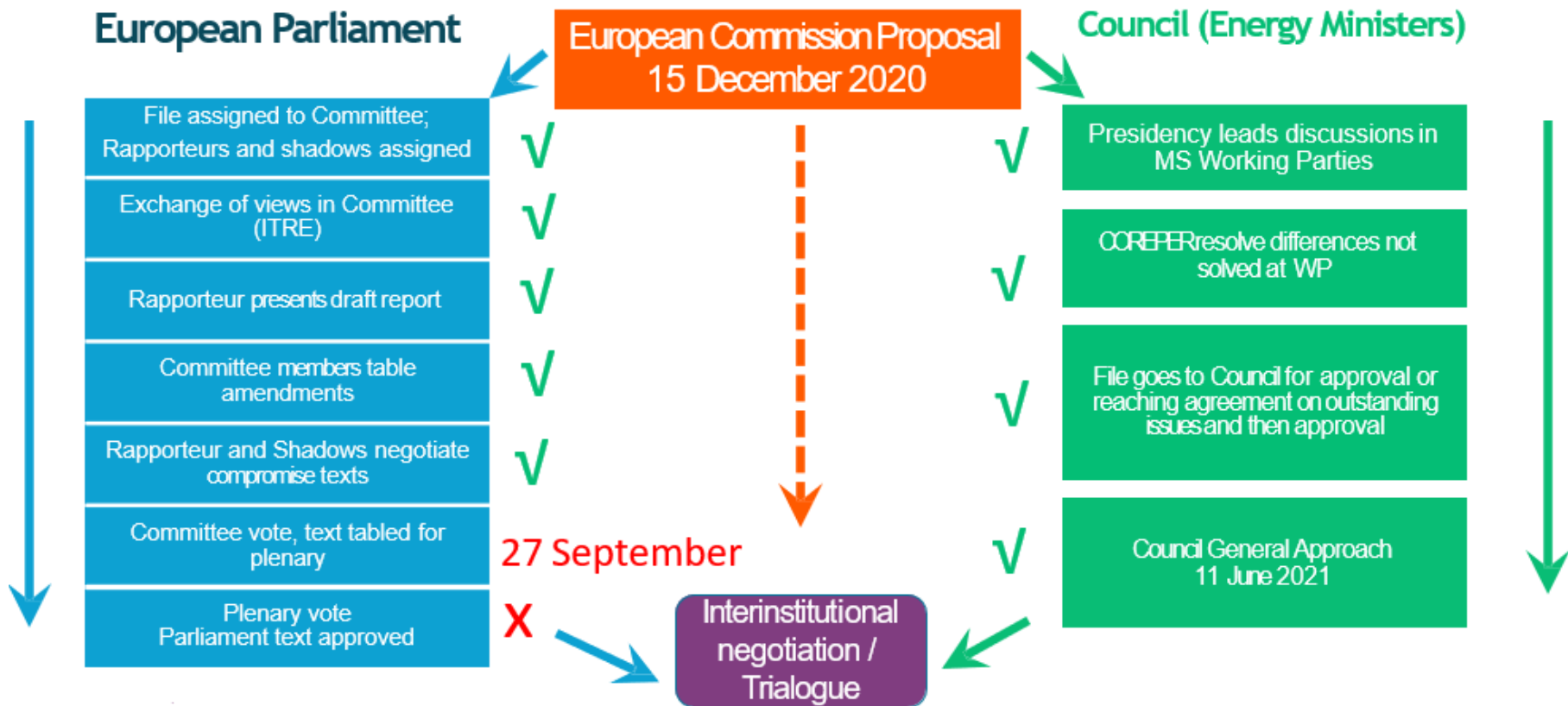
Discussion plus questions from the audience moderated by **Pat Cox**

Moderator
Pat Cox



Trans-European Networks for Energy

Moderator
Pat Cox



View from the European Commission



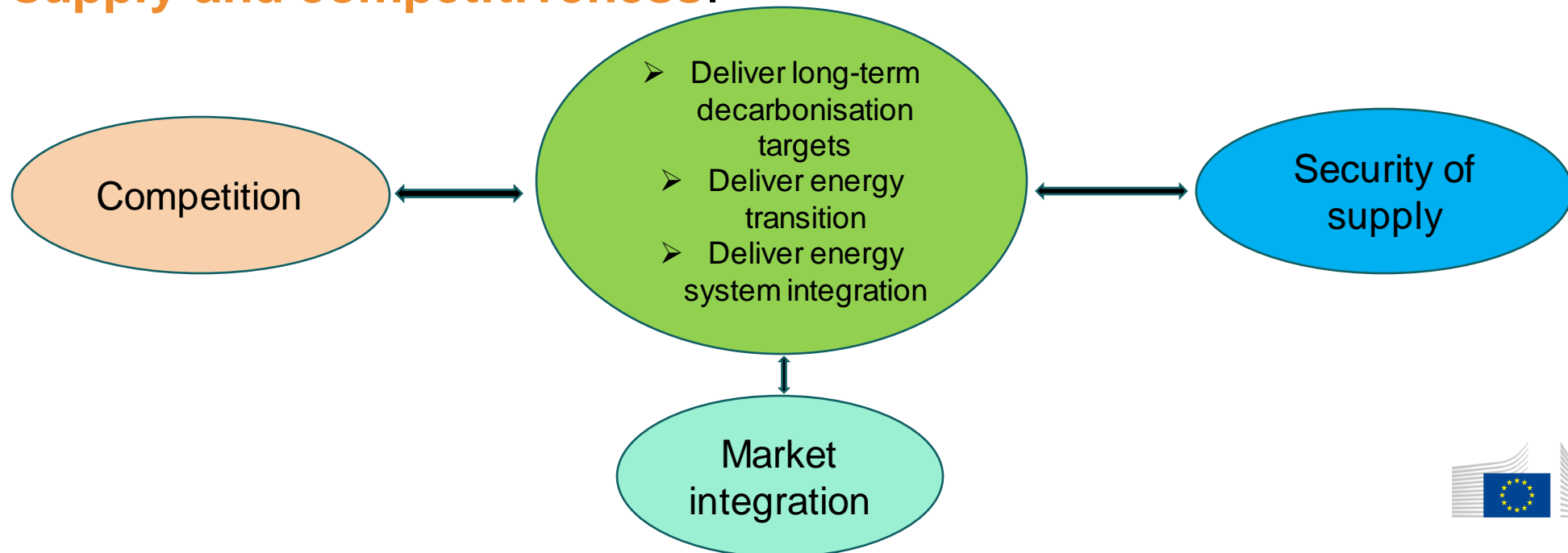
Raphael Sauter

**Team Leader, Unit C4 DG
ENER, European
Commission**



TEN-E: a central instrument for cross-border infrastructure planning for the Green Deal

- Revised TEN-E proposal: fit for the infrastructure needs of the clean energy system of the future focusing on the (upgraded) **2030/ 2050 climate and energy targets**, the **climate neutrality objective** and **technological developments** whilst ensuring contribution to market **integration, security of supply and competitiveness**.



Full alignment of infrastructure with the EGD



- Increased focus on **offshore grids** covered under four new priority corridors reflecting Europe's sea basins and building on **regional cooperation strengths**;
- Scale-up of **smart electricity grids**
- **Exclusion of fossil fuel infrastructure**
- Support for new and repurposed **dedicated hydrogen networks and electrolyzers** above 100 MW
- Scope extended to **projects connecting the EU with third countries (PMIs)**.

Strengthened EU planning governance

- Creates an **optimal and efficient integrated infrastructure planning** on the basis of **scenarios** that are fully in line with the latest Union decarbonisation targets and Commission scenarios; identifies **infrastructure needs** based on the energy efficiency first principle.
- Introduces **oversight from the Commission** on the main inputs to the TYNDPs and **strengthens role of ACER**
- Ensures coordination in long-term planning and development of offshore and onshore electricity grids – introduces **integrated offshore network development plans** on the basis of Member States commitments on offshore renewable generation per each sea basin, with the support of the Commission.

View from
the
European
Parliament



Erik Bergkvist

**Shadow Rapporteur and
Member of the Progressive
Alliance of Socialists and
Democrats (SWE)**



**View from
ENTSO-E**



Dimitrios Chaniotis

**Senior advisor RTE & Vice
Chair of System Development
Committee ENTSO-E**



View from Industry



John
Fitzgerald

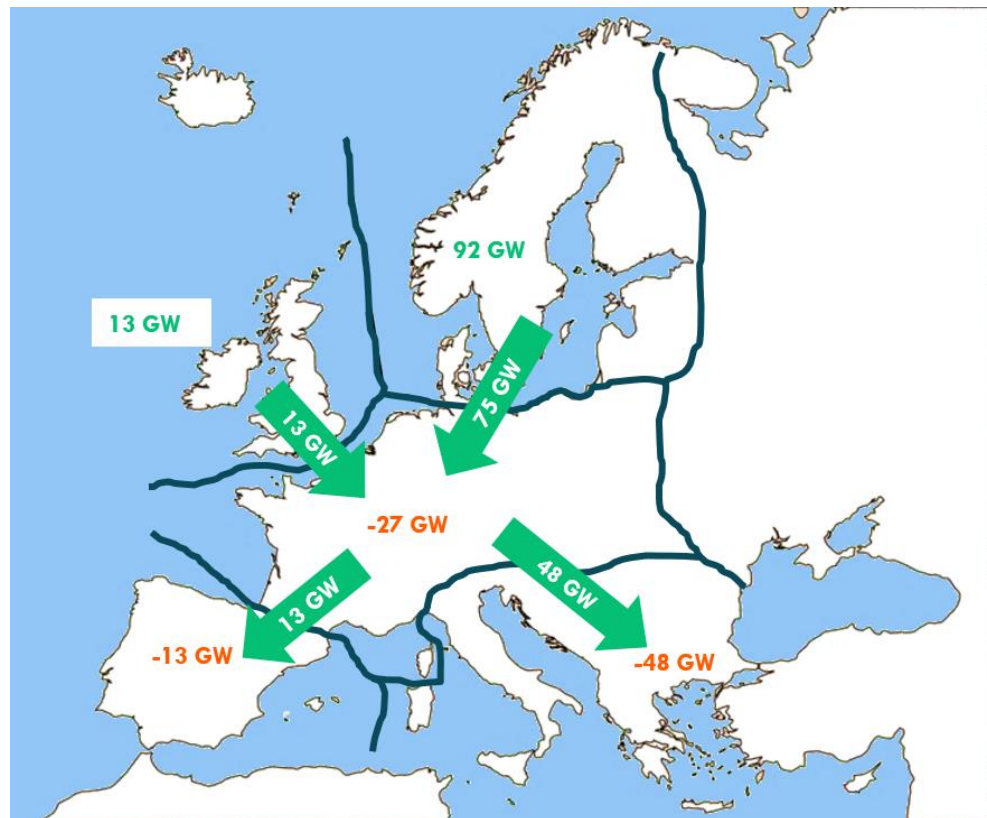
**currENT Board Member
and CEO of SuperNode Ltd**



WINTER AFTERNOON/HIGH WIND CASE

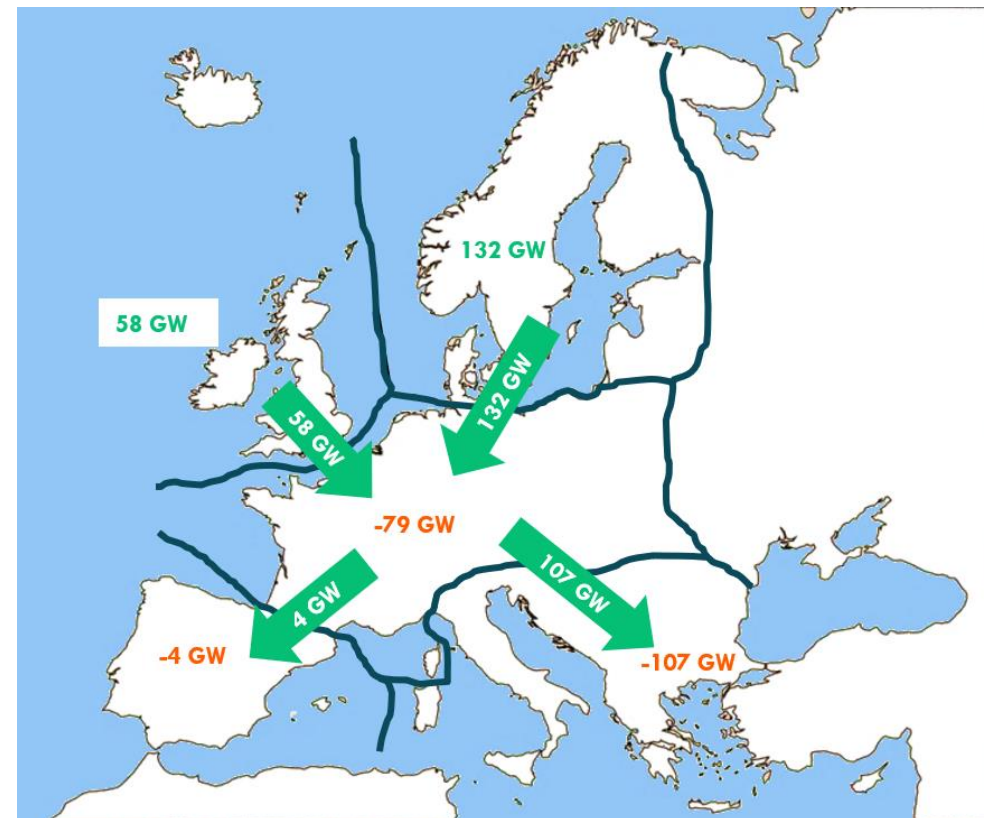
Business as Usual approach results in a cost of energy premium of €1.2 Trillion / 15% ¹

Business as Usual / Nationalistic Grids



3,180 GW of Generation and Storage

Pan-European Grid



2,900 GW of Generation and Storage

¹ Based on Winter Summer Cases average Cost of Energy over 30 years

CHINESE APPROACH TO NEW GRIDS



Accelerating the Energy Transition webinar series

Cybersecurity, Digitalisation, and the Electricity Grid in Europe

How Dynamic Line Ratings Optimise the Grid

The Role that Direct Current (DC) Grids Can Play

Optimised Power Grids for a Clean and Green Future

Massive Renewables Uptake through enhanced grids: A transatlantic perspective

Working Group for Optimising Power Grids: Aligning Incentive Regulation with Public Interest





contact us

info@currenteurope.eu

www.currenteurope.eu



currENT response to TEN-E

1. Closer monitoring of Energy Efficiency First and Do No Significant Harm principles

currENT strongly supports the proposal's ambition to apply selection criteria that reward efficiency and flexibility in line with the Energy Efficiency First and Do No Significant Harm principles. However, we would like to highlight the need for the implementation of the EEF principle to be closely monitored and regularly reported on by the relevant authorities, including ACER.

2. Innovation in grid infrastructure is a no regrets option that will boost Europe's competitiveness

The new European framework for infrastructure planning must recognise the contribution of innovative technologies and should fairly reflect the value of these solutions in the project selection processes.

3. Offshore infrastructure requires a change in governance structure

currENT proposes that the offshore infrastructure planning should move away from the project by-project approach towards a more ambitious comprehensive approach that is coordinated by an independent European entity and incentivises greater use of innovative transmission technologies.



currENT response to TEN-E

- Recognise the value of flexible solutions in the project selection processes, as these can be delivered quickly;
- Start with the low hanging fruits, optimise existing grids first and establish new infrastructure in accordance with a coordinated decarbonisation plan, using available technologies built in;
- Accelerate the uptake of innovative solutions for PCI projects, while facilitating and encouraging the participation of SME's and the private sector;
- TEN E must reflect a 2050 pathway and plan, support the technologies needed and encourage the necessary grid innovation that will be needed to deliver a cost effective European electricity infrastructure;
- Align the TEN E regulation with European long term policy objectives and ensure that these are prioritized.
- Increase transparency in network development with a focus on early stages of project selection and evaluation;
- Strengthen the roles of ACER and the Commission and enhance the effectiveness of consultation processes

