UiO : Scandinavian Institute of Maritime Law
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Legal framework for electricity market design offshore

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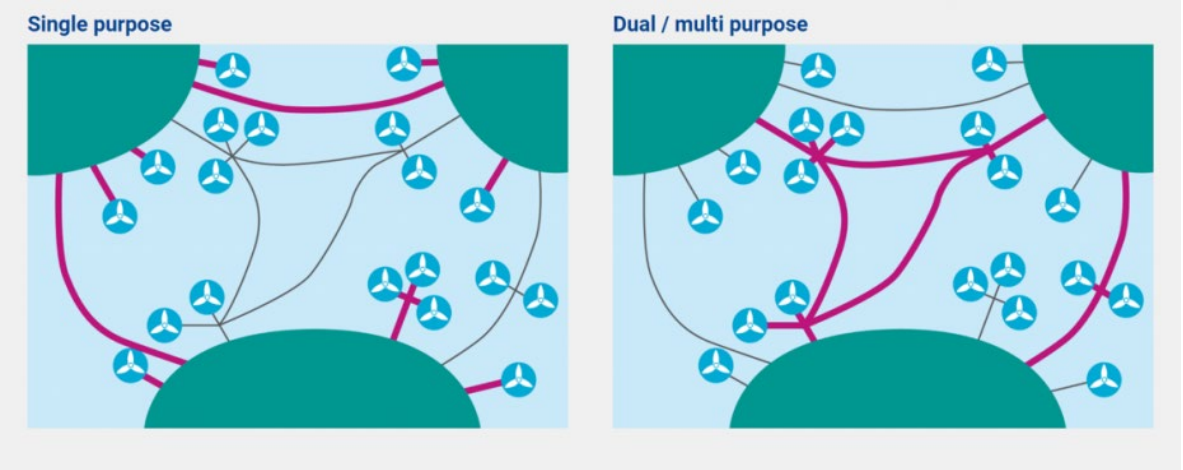
I – A changing offshore grid landscape

- **Distinction between alternative grid configurations:**
  - **Radial connection**: single purpose.
  - **Hybrid projects**: hybrid solutions could also extend **from dual purpose solutions to multipurpose solutions** (across sectors, with offshore consumption)
  - **Energy hubs / energy islands**
  - **Meshed grid**



- **But many remaining uncertainties: “de-risking” through law**

  - Which **vision** to apply? Within which timeframe?
    - More planning needed
    - See:
  - **Legal definition**
    - Hybrids, energy islands: which jurisdiction? Which legislation to apply on which part of the assets?
    - Can develop under today’s legislation, but not clear enough to provide certainty for investors and regulators.
  - Legal regime **around the North Sea (EU – Norway – UK)**:
    - Harmonisation
    - Bilateral / multilateral agreements
  - How to address the **EEA backlog**.

II – A choice of regulatory approach

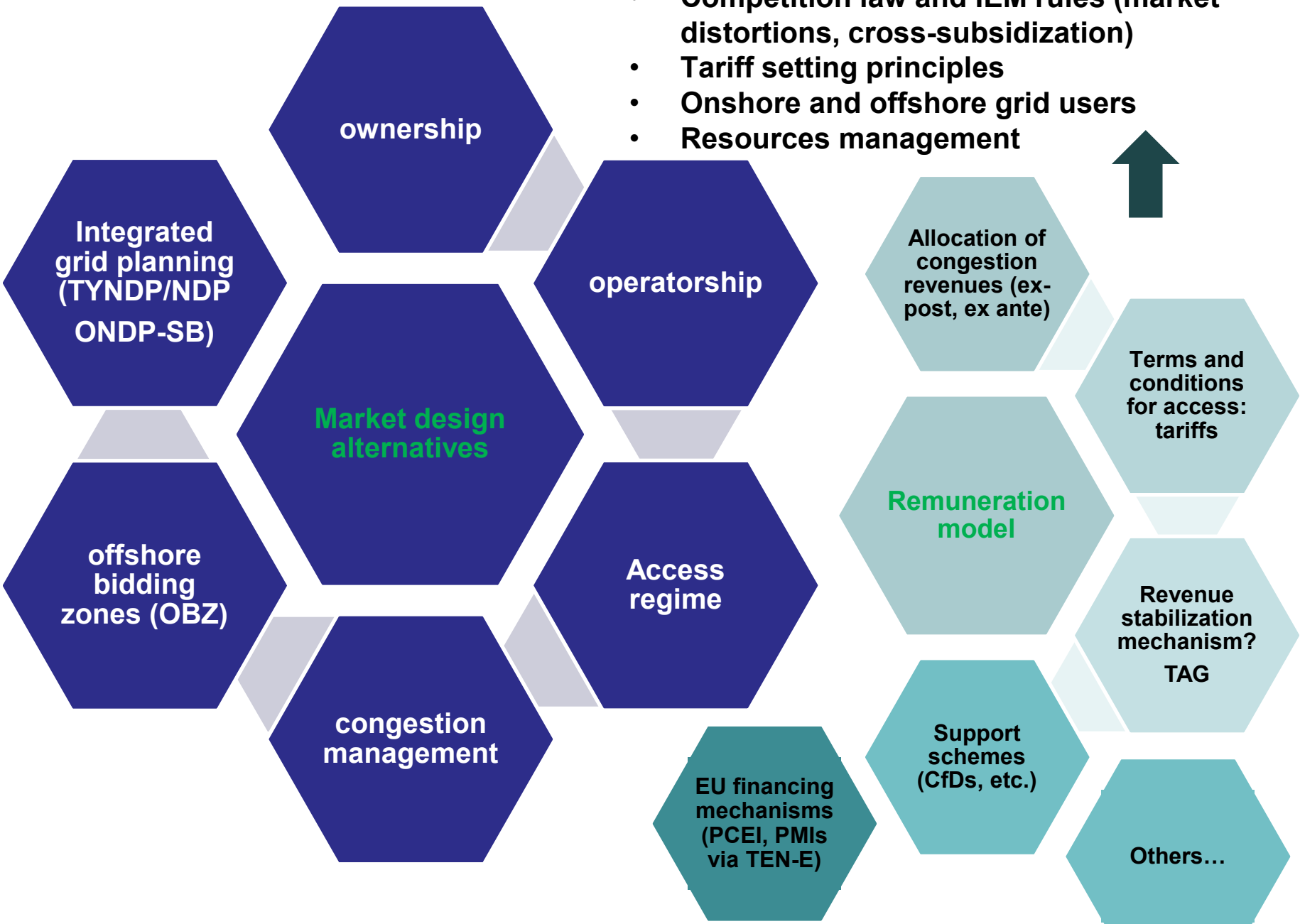
- **Only one energy system:**
  - Same rules onshore and offshore?!
  - Is there a need for a dedicated regime for hybrid projects?
- **Anticipatory investments**
- **Gradual development of the rules: different options**
  - Preserve investments for the first projects.
  - Need for legal certainty on key points, guidance on other ones (hard law/soft law)
  - Connection of new infrastructures will change cost benefits allocation model for pre-existing projects. How to reflect that?
  - Dynamic regulation requires regulatory supervision: which regulatory authorities to involve?

- **Urgent need for clarification, and cooperation**

III - The building blocks of electricity market design legislation offshore

- Distinction between:
  - **Market design** alternatives
  - **Cost and revenue sharing** models

- Market and system functioning (flow-based vs hybrid market coupling, balancing, interop.)
- Competition law and IEM rules (market distortions, cross-subsidization)
- Tariff setting principles
- Onshore and offshore grid users
- Resources management



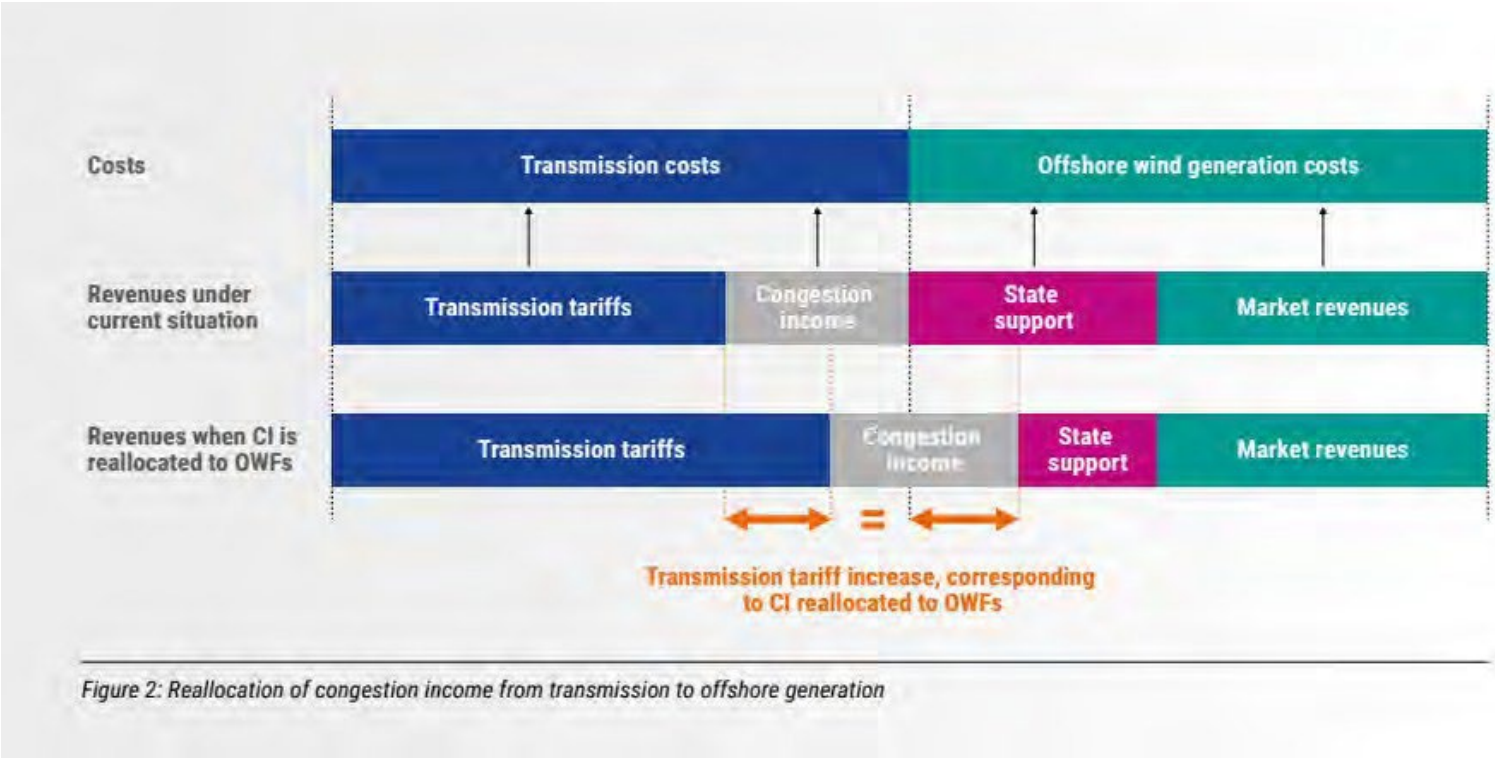


Figure 2: Reallocation of congestion income from transmission to offshore generation

Source: ENTSO-E

Urgent to recognize and act with targeted regulatory changes:
- That a dedicated framework is needed for offshore hybrid projects
- Generation is not out of scope but is the scope. The vast majority of these projects will be built to connect wind energy

Otherwise targets and plans for offshore wind deployment will be violated

EC proposal (2020):

align incentives for TSOs and OWDs; reallocate a share of the CI, which in most cases constitutes the allowed revenues of TSOs to recover their costs, alongside network tariffs. Pre-allocation of Financial Transmission Rights (FTRs) to OWFs.

EC proposal (2023, EMD reform): TAG

Contrary to IEM principles? (tariff settings, X-subsidies, indep. NRAs, RES remuneration rules)

Conclusions

- Still a work in progress, with more innovation to come (flexibility vs foreseeability in the regulatory approach) and several scenarios on the table.
- Preserve the integrity of the energy system and of the internal energy market.
- Refrain from short-sighted national approaches, but ensure cost-efficient, resource efficient and mutually beneficial solutions.
- Need for a common regulatory approach to market design offshore, opening for the possibility of connection new production (eg hydrogen) and consumption (eg electrification, energy hubs).

= a future proof market design with offshore wind

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Thank you for your attention!

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