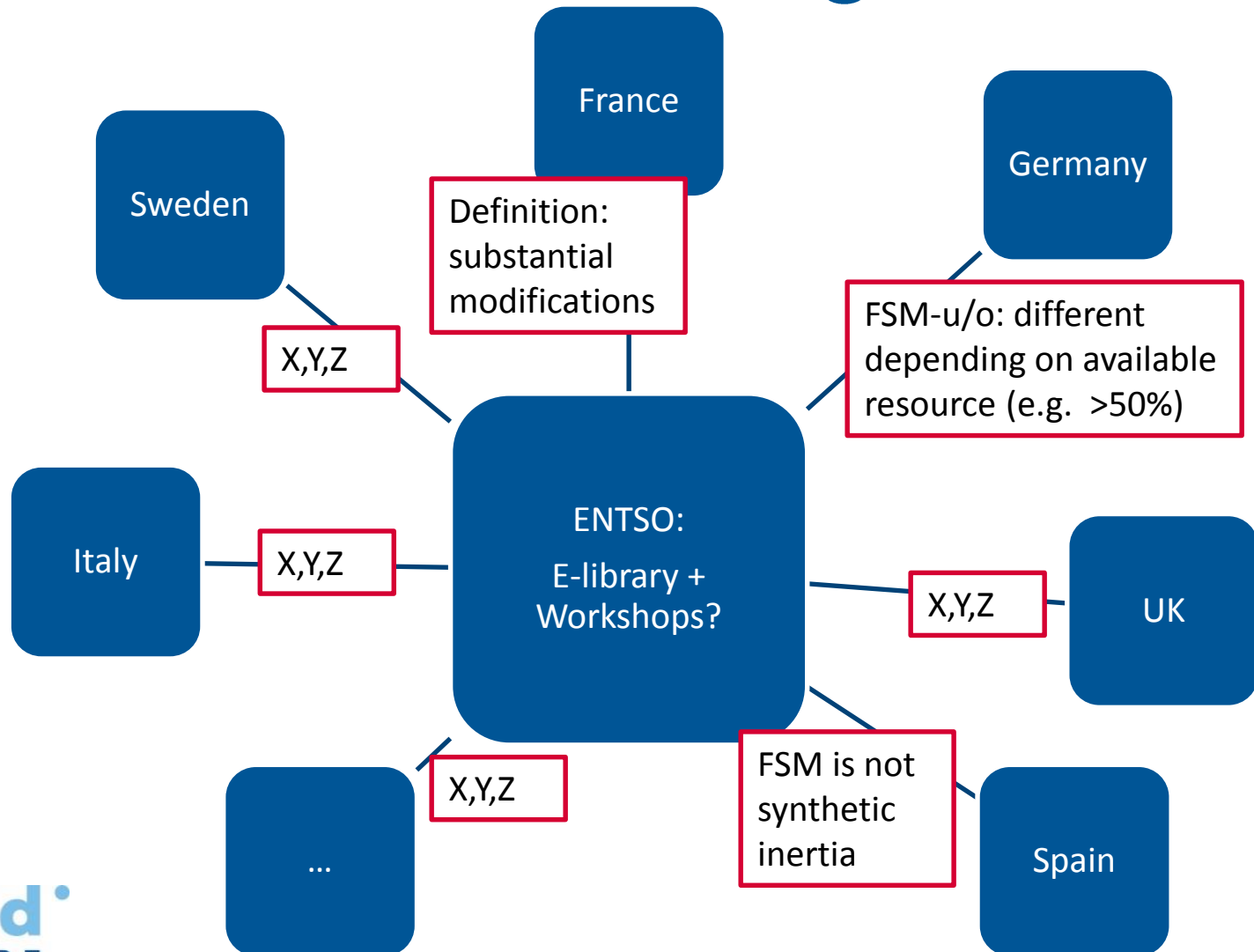


# RfG Implementation— some issues

Daniel Fraile

# RfG Implementation: Best practice exchange?



# Role of certification– Legal clarifications (RfG)

- Related articles: 41-43 & 47-49
- Affected parties: generators, RSO and 3<sup>rd</sup> party certifiers
- Question 1: If Plant level certification is required (beyond EqCe), who shall bear the costs?
- Question 2: if a failure is encountered after positive compliance assessment by 3<sup>rd</sup> party, who is responsible?

# Future System Requirements

- Fast fault expert group:
  - Outcome draft IGD HPoPEIPS: Not addressing current RfG implementation
  - Focused on future technologies (e.g. grid forming inverters)
- Recommendations
  - IGD should not rush into new requirements (not well understood)

# Future System Requirements

- Recommendations

*(WindEurope letter response to IGD consultation)*

- IGD should not rush into new requirements (not yet well understood)
- Minimum technical specifications should be technology neutral where possible (do not focus on Virtual synchronous Machines)
- System requirements must be based on transparent system studies and firmly established system design criteria
- System studies need to be complemented by simulations and real tests

# Two wishes...

- Better understanding of what's happening across EU MSs- *Exchange platform*
  - Many benefits from exchanging experience
    - Legal & administrative questions,
    - Technical aspects,
    - Organizational aspects
- Longer term visibility of EU-wide activities (consultations, surveys, events, IGDs, expert groups, etc.)

# Backup

**Wind**<sup>•</sup>  
**EUROPE**

[windeurope.org](http://windeurope.org)



WindEurope, Rue d'Arlon 80  
1040 Brussels, Belgium



# Role of certification in the IGD

- Project Certificates

*Type B-D generators – use of equipment certificates (EqCs)*

As part of the evidence against which compliance is assessed as detailed below, use of EqCs issued by an authorised certifier is allowed.

Generators can proof evidence of compliance by project certificates for PGMs (e.g. wind or pv plants). Such project certificates can be based on existing type certificates or / and EqCs. Several EqCs may be assessed jointly and extended by missing parts to form full type certificates, providing proof of evidence of compliance for complete generating units as wind turbines, PV inverters etc. Both shall be issued by authorised certifiers.



# Role of certification in the IGD

- Type certificate: a valid option

## **Compliance basis on unit type level:**

As units forming PPM, OPPM and sometimes also PGM and as those are manufactured by volume production (series manufacturing) it makes sense not to repeat prototype testing in each project. Corresponding type certificates can be reused for all PPM projects using the same type of units. Such type certificate can prove compliance with EU regulation 2016/631, 2016/1388 and 2016/1477 including the Member state's specific national requirements certification schemes and test procedures ought to be defined and should - where applicable - refer to existing standards.