ENC Implementation Approach

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Oct 2016

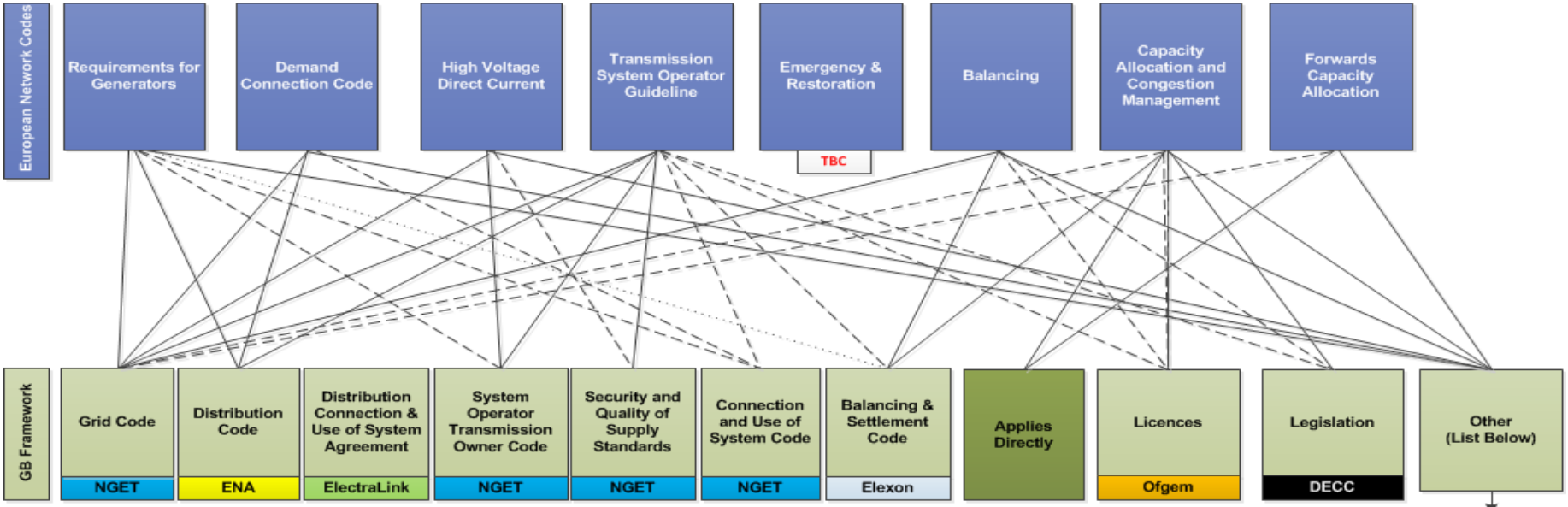
ENC Implementation Approach

Agenda

- Current approach
- Alternative options
- Assessment Criteria
- Next Steps

ENC Implementation Approach

Current Approach – Multiple Interactions to manage



Requirements for Generators	Demand Connection Code	High Voltage Direct Current	Transmission System Operator Guideline	Emergency & Restoration	Balancing	Capacity Allocation and Congestion Management	Forwards Capacity Allocation
Responsible 800W≥ New Generators TSO's Manufacturers of Generator Equipment NGET	**Responsible** Directly Connected Demand New Demand Side Response Providers Scottish TO's DNO's NGET	**Responsible** Interconnectors DC Connected Offshore Generators OFTOs NGET	**Responsible** Generators DNO's Interconnectors Scottish TO's OFTO's NGET	**Responsible** Anticipated same as TSOG	**Responsible** Interconnectors Balancing Service Providers (BSP) Balance Responsible Parties (BRP) DNO's NGET	**Responsible** Interconnectors NEMOs Generators Suppliers Elexon DNOs	**Responsible** Interconnectors NEMOs
Accountable NGET ENA	**Accountable** NGET ENA	**Accountable** NGET	**Accountable** NGET *ENA*	**Accountable** Anticipated Same as TSOG	**Accountable** NGET *Elexon* *Interconnectors*	**Accountable** NEMOs Interconnectors *NGET*	**Accountable** Interconnectors *NGET*

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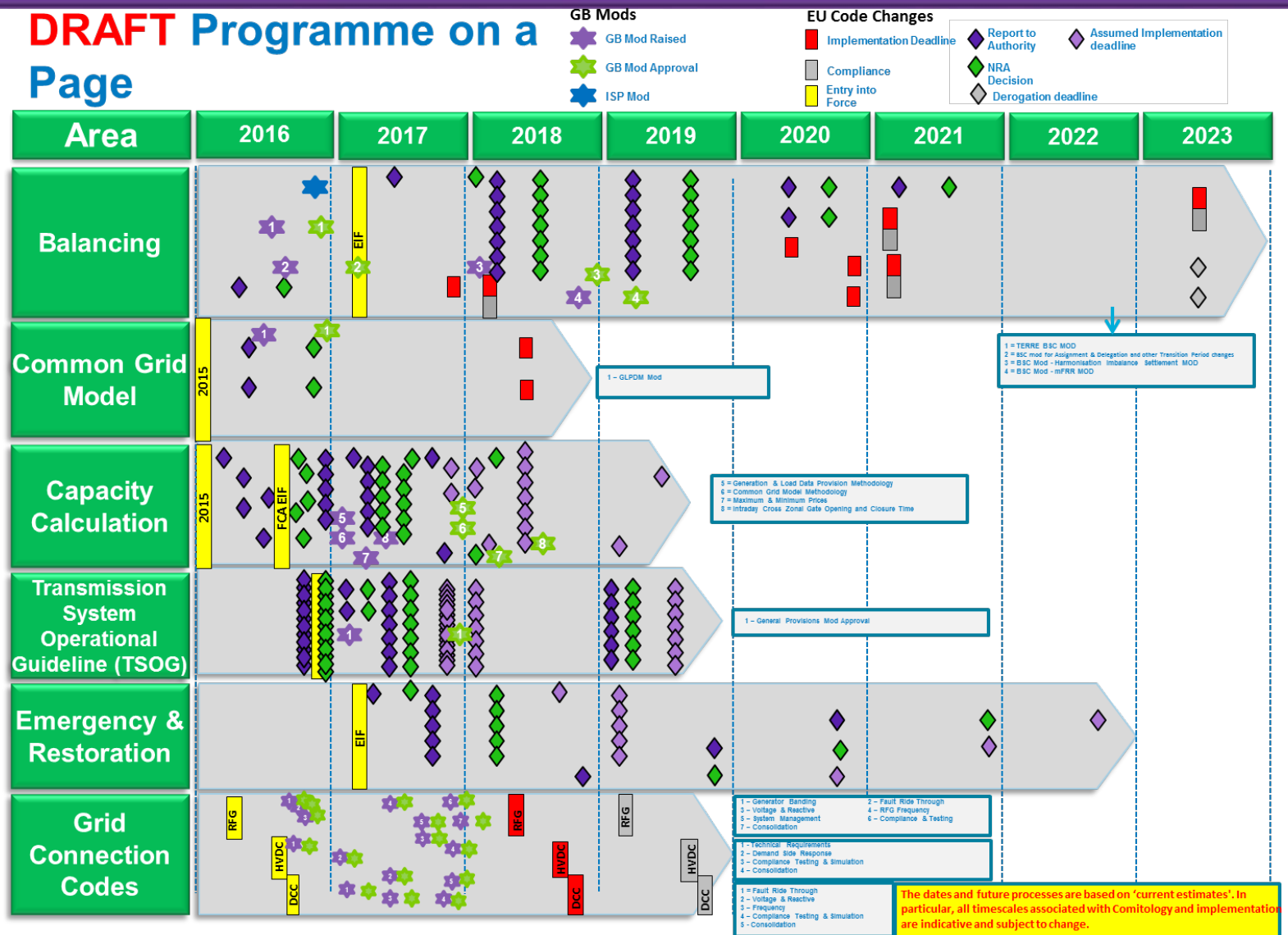
Current Approach – Many interacting deadlines



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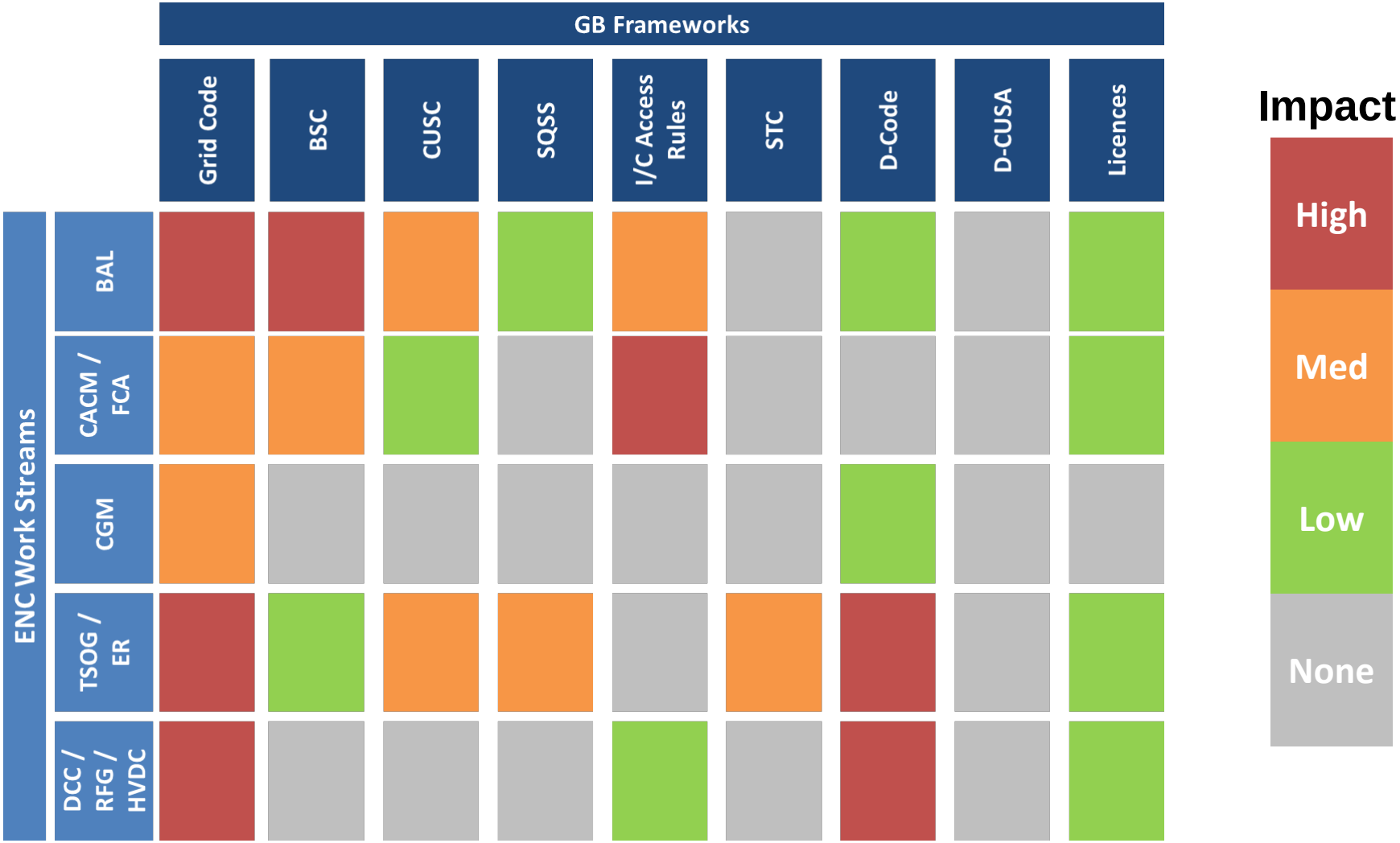
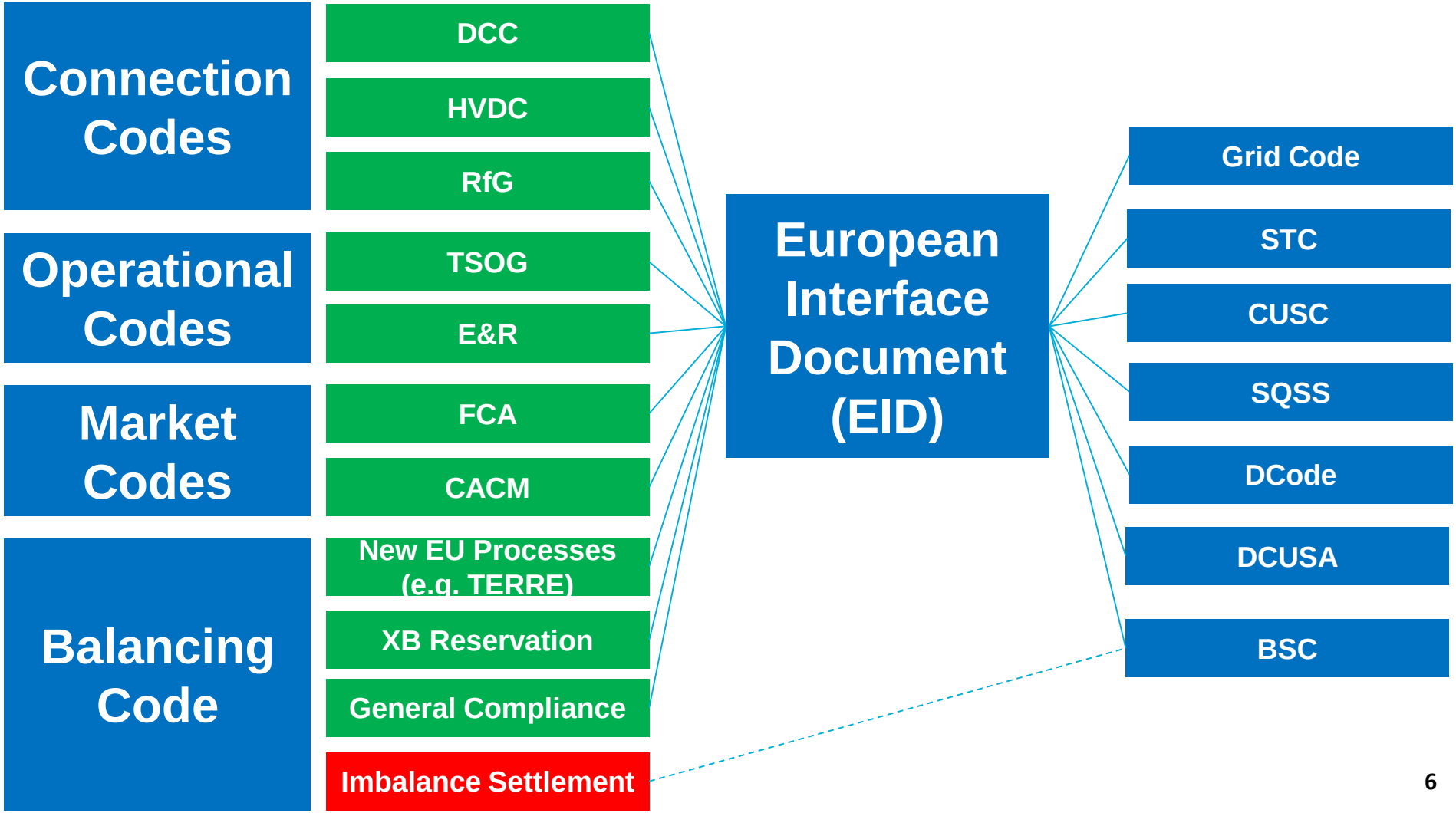
Current Approach – Large scale change to GB frameworks



European Network Codes Implementation

Alternative Options – Full EID



European Network Codes Implementation

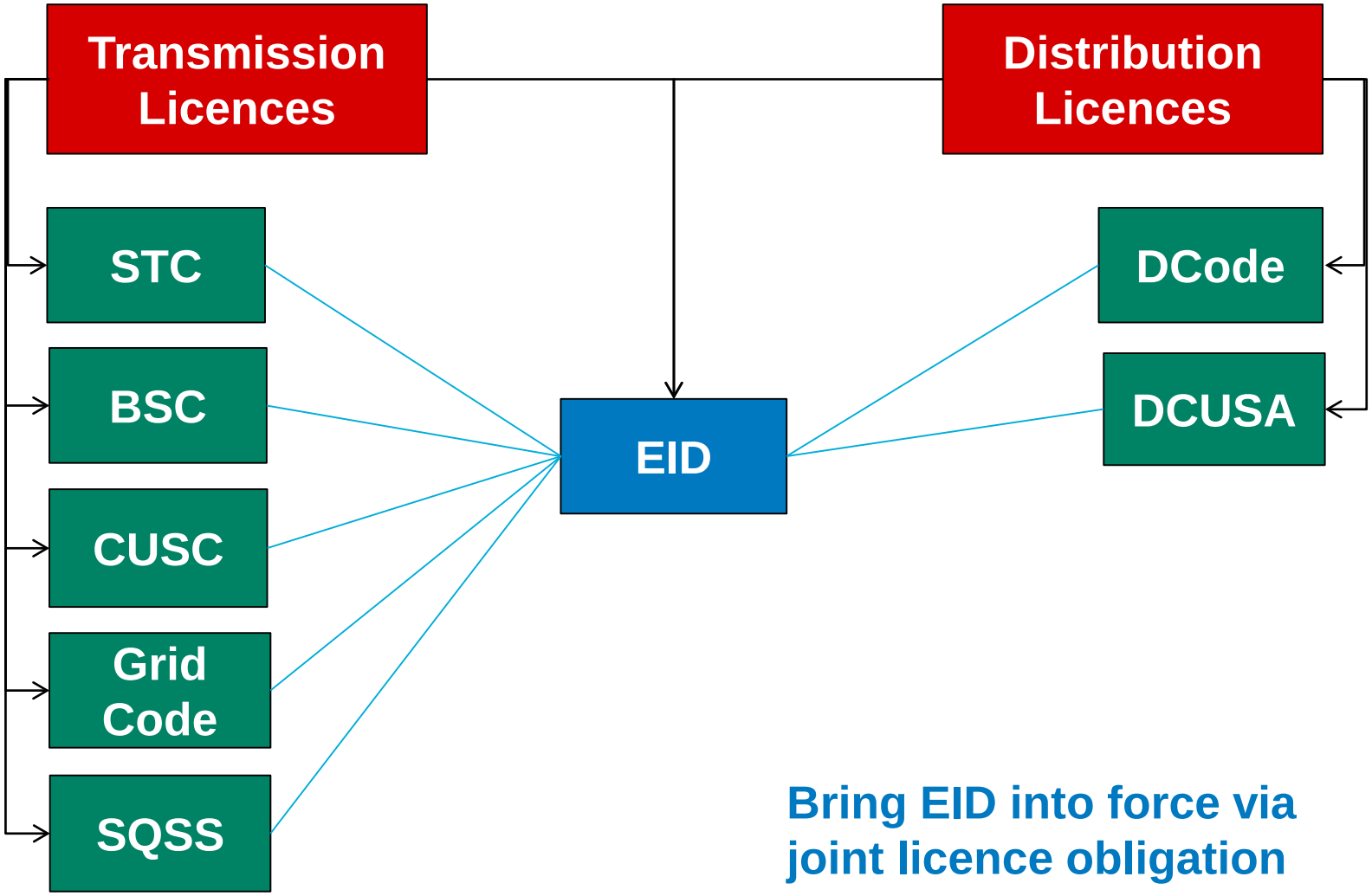
Alternative Options – Full EID – Pros / Cons

- ✓ **Compliance**
- ✓ **Future changes**
  - ✓ Easier to Integrate methodologies published after EIF and turn areas of the ENCs on or off
- ✓ **Ease of implementation**
  - ✓ ENCs without an obvious GB equivalent (e.g. CACM & FCA)
  - ✓ Facilitates managing interactions between ENCs
- ✓ **Accessibility**
- ✓ **Governance**
  - ✓ compatible with CGR3 & CACOP
  - ✓ Reflect European governance

- ✗ **Licence changes**
  - ✗ EID brought into existence via licence modifications
- ✗ **Greater Coordination required**
  - ✗ Reference to GB codes and EID would be required when the authority makes decisions
- ✗ **GB Code changes still required**
  - ✗ Some GB code changes would still be required (Imbalance Settlement)
  - ✗ Cross-referencing from EID to existing GB codes would still be required

European Network Codes Implementation

Alternative Options – Full EID – Framework for delivery



Bring EID into force via joint licence obligation

European Network Codes Implementation

Alternative Options – Full EID – "Code" Administration

CUSC	Grid Code	STC	SQSS	DCode	DCUSA	BSC	EID
nationalgrid				ena energynetworks association	ElectraLink	ELEXON	TBC

Code Administration Code of Practice: Principle 13

"Code Administrators will ensure cross Code coordination to progress changes efficiently where modifications impact multiple Codes"

European Network Codes Implementation

Alternative Options – Are there any intermediate options?

- Is there a ‘half-way house’?
- Can licence changes be avoided?
- Is there something that is easier to implement?
- Concept of an EID-Lite..

Current Approach

EID-Lite

Full EID

European Network Codes Implementation

Alternative Options – EID-Lite Variants

- What could be considered as an EID-Lite?
  1. Append only relevant EID sections to corresponding GB codes as content similar
  2. Create new EID covering all new EU processes and append to only one existing GB code
  3. Append same new EID to all existing codes (i.e. the same content duplicated across the different GB codes)
  4. Incorporate most of the new EU processes into a new non-legally binding document that references to existing GB codes and EU legislation

Current Approach	EID-Lite	Full EID

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Assessment Criteria

- Assessment criteria have been developed in order to assess the different options:

Ease of use	Governance & Licence	Timescales	Implementation & Compliance
Users	Changes required	Re-work	Compliance demonstration
TSO/DNOs	Consistency across users	Can all GB/ENC follow same solution	Coordination of changes
Number of documents	Ease of future changes	Timescales	Ability to undo changes
Guidance notes required	Code governance direction of travel		