

# Energy Networks Association

## DFES Standardisation- Workstream 1B, Product 2

For Publication:  
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# Summary of Proposals

The WS1B Product 2 team includes the 6 DNOs and NGENSO. These parties have agreed to:

- Greater standardisation of DNO produced DFES and DFES publications going forward.
- Greater alignment of DFESs and the GBFES through improved NGENSO-DNO feedback and alignment processes.
- Publication of DFESs in Q4 each year.

These slides provide further details of the proposals. The proposals have also been shared with the ON Advisory Group.

To support access to DFES, it is proposed to create and support an ENA webpage with links to network company publications (similar to SWRR)

## What is DFES and what is used for?

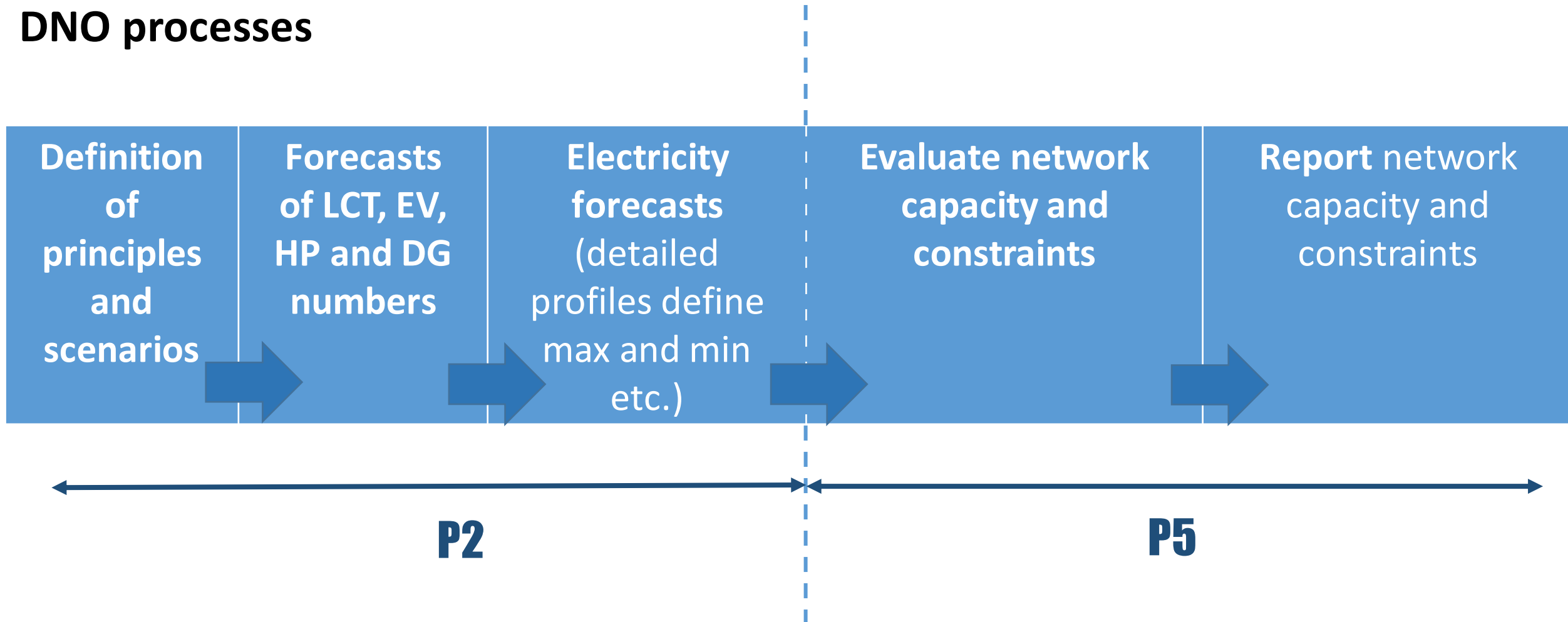
- A set of credible scenarios describing future development of demand and generation technologies at the regional level. These scenarios captures uncertainties by incorporating a wide range of the key factors impacting the demand and generation growth.
- DFES provides regional data at granular level to wide range of stakeholders to identify necessary investments and groundwork required to facilitate transition to a low carbon network.

## Why do we need standardisation?

- Deliver consistency and improvement in forecasting network demand and generation growth as well as in identifying networks needs and providing solutions to them.
- A standardised transparent approach will help industry participants identify network issues and develop mitigations

# P2 and P5 interface

## DNO processes



# Objectives

Objective A: Establish the same high level framework for DFES between all DNOs

**Complete**

Objective B: Identify a common process for the DFES standardisation

**Complete**

Objective C: Identify elements (assumptions, profiles and limits) subject to standardisation

**Complete**

Objective D: Identify a common timeline and process for FES/DFES cycle

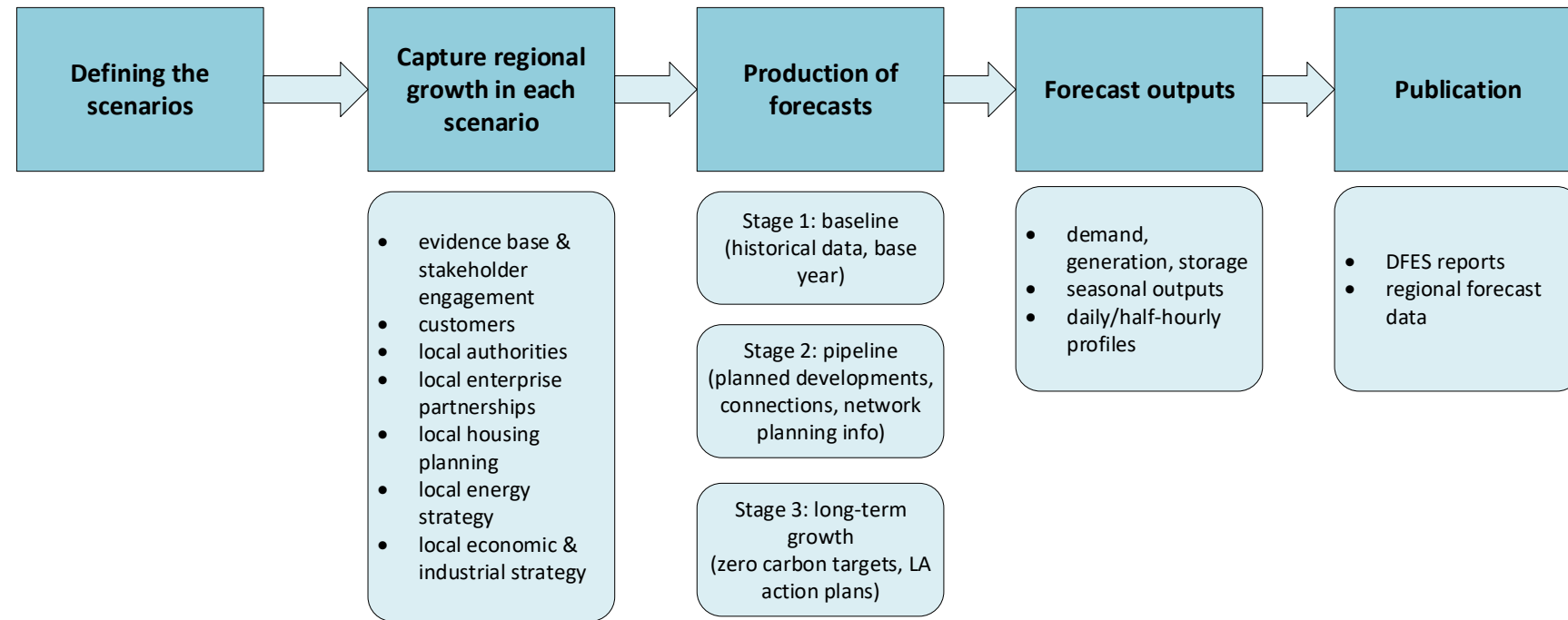
**Complete**

Objective E: Identify a mechanism to update tools, assumptions and processes in each cycle

**Complete**

# Objective A: Establish the same high level framework

- All DNOs confirmed that they are following a similar framework for their DFES publication
- All DNOs have adopted common set of building blocks (BB) for their DFES publication



## Objective B: Criteria for the Standardisation Process

### The proposed process should:

- gives the opportunity to check the detailed assumptions if there is any **major differences** between license area and nationwide trends
- provides a **feedback loop** required to debate and update the data, models and forecast employed by each network company
- allows enough **flexibility** to DNOs to engage with local stakeholders and capture local ambitions and targets in their forecast
- be **achievable** and provides a foundation in such that **further standardisation** could be introduced if necessary.

# Objective B: Candidates for the Standardisation Process

Level of Standardisation 

DNOs Flexibility 

Common Scenario Framework Model	Initial Alignment & Feedback Model	Fully Integrated FES/DFES Process
<ul style="list-style-type: none"> <li>• The same scenario framework as the GBFES</li> <li>• Greater flexibility for DNOs to adjust their own levers and assumptions</li> <li>• Could lead to greater differences between national and license area trends</li> <li>• Does not require additional resource</li> </ul>	<ul style="list-style-type: none"> <li>• The same scenario frameworks as the GBFES</li> <li>• The same high-level assumptions as the GBFES</li> <li>• A process to review and address differences and take appropriate actions to update models, assumptions and data.</li> <li>• Resource intensive process</li> </ul>	<ul style="list-style-type: none"> <li>• All processes/models are the same</li> <li>• High degree of interaction between the ESO and DNOs</li> <li>• Much greater alignment and consistency</li> <li>• May prevent each DNO from capturing and reflecting local targets and trends</li> <li>• Much more resource intensive process</li> </ul>



# Objective C: Standardisation subjects

## High-level Assumptions

- Based on FES Scenario Framework Assumptions
- Adopting all relevant assumptions for their scenario framework

## Profiles

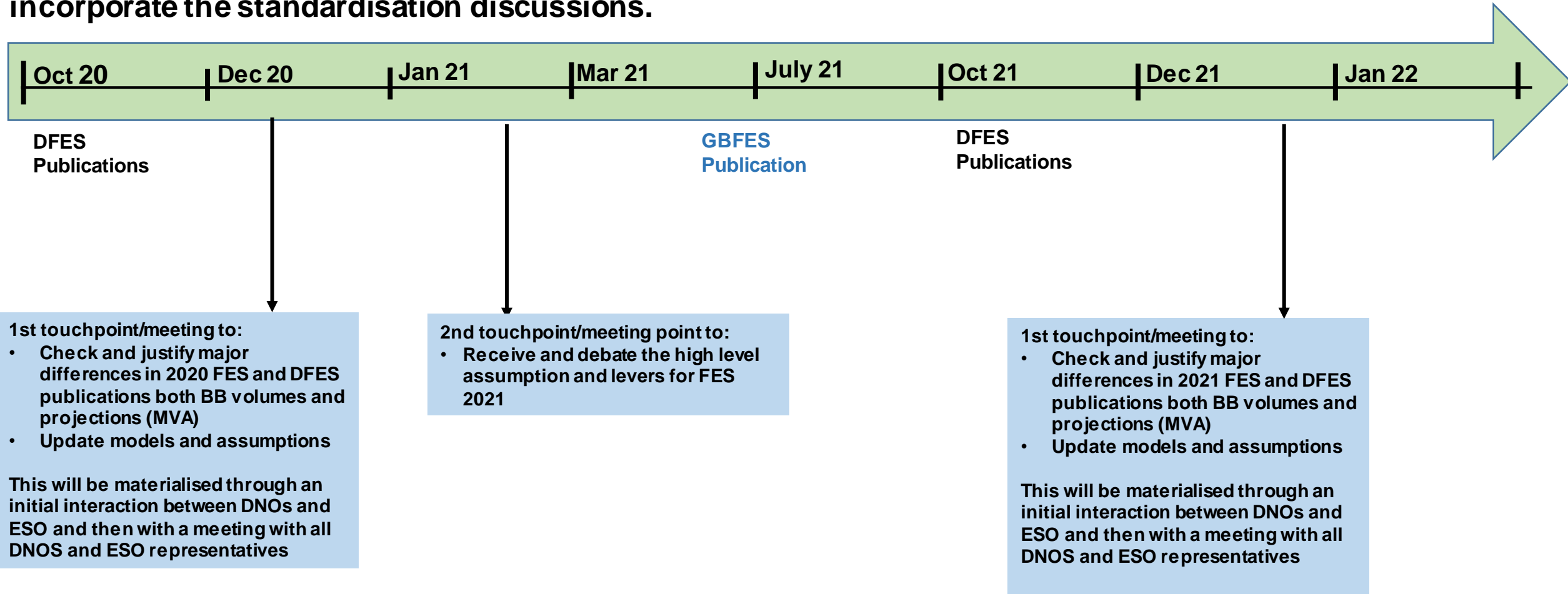
- Profiles are region specific and should not be subject to standardisation.
- Profiles should be compared and debated.
- Profiles will be publish in the FES/DFES document.

## Forecast Starting point

- Best estimate of the building blocks based on different records
- Demand and generation measurement according to P2/7 and week 24 documents and processes

# Objective D: Common timeline and process for FES/DFES cycle

The existing timeline for FES/DFES coordination between ESO and DNOs can be employed to incorporate the standardisation discussions.



## Objective E: Identify a mechanism to update tools, assumptions and processes after each cycle

- It is suggested to adopt a framework to reflect local/regional differences. The assumption framework should allow local variation subject to providing proof such legislation or track record of local authorities.
- For the comparison, it is required that all network companies (DNOs and ESO) provide their projection of different BBs (volumes and MW) for each GSP.
- It is required that all network companies (DNOs and ESO) provide the modelling data they used to forecast different technologies (building blocks) if there is a divergence between DNO and ESO forecasts.
- Following the comparison, assumptions and models would be updated to improve future forecasts.

# Supplementary Slides

## Objective B: Initial Alignment and Feedback Model Process

- **Single Scenario Framework** for GBFES & DFESs (common scenario names, 2x2 formats, building blocks and GB **wide assumptions**)
- Strong interaction between ESO and DNOs following GBFES & DFES publications to ensure assumptions and models reflect best available information
- DFES scenarios considers **latest regional targets** and stakeholder inputs while retaining the same high level assumptions as GBFES
- Where regional targets and stakeholder inputs **diverge** from GBFES, there will be a process to review and address differences and take appropriate actions to update models, assumptions and data

# Objective C: Standardisation subjects

## ❑ Assumptions and levers defining the scenarios: FES Scenario Framework Assumptions

There are 73 assumptions in four themes (Political, Economic, Social and Technological) and 13 categories in FES2019:

- Political-Support and incentives,
- Political-Targets, Regulation, legislation and constitutional issues
- Economic-Commodity prices
- Social-Residential behaviour

Theme	Category	Assumption number	Assumption name	Description	Community Renewable	Two Degree	Steady Progression	Consumer Evolution	Community Renewables description	Two Degrees description	Steady Progression description	Consumer Evolution description
Political	Support and incentives	1.1.1	Support for low carbon solutions	The level of support mechanisms available for low carbon solutions	High	High	Low	Low	High level of incentive support to encourage low carbon solutions required to meet the carbon budgets	High level of incentive support to encourage low carbon solutions required to meet the carbon budgets	Low support as the focus is on reducing short-term costs	Low support as the focus is on reducing short-term costs

All DNOs are agreed to adopt relevant assumptions for their scenario framework. In the case of any divergence from these assumptions, DNOs will justify and publish their assumption in DFES publication

## Objective C: Standardisation subjects

### ❑ Profiles

- It was agreed that profiles for different technologies are region specific (due to differences in the customer behaviour, network status, climate) and should not be subject to standardisation
- The profiles are expected to have the same form and shape and a relatively similar peak value. The shape and peak might be slightly different from region to region
- For further transparency, it was agreed to publish profiles in the DFES document
- It should be highlighted to DFES stakeholders that profiles are defined for network planning purpose.

## Objective C: Standardisation subjects

### ❑ DFES forecast Starting point

- For some building blocks, DNOs don't have the exact baseline volume. In these cases, DNOs use their best estimate based on different records they have
- There should also be consistency in measuring our demand/generation baseline for the forecast.

This can be achieved by ensuring the same fundamentals are employed to establish our baseline (ER P2/7 and Week 24).



# Objective D: Common timeline and process for FES/DFES cycle

- Timeline assumes GBFES publication in July with DFES publications sometimes between October to December, where all DNOs do not necessary publish in the same month.
- If any changes in modelling or assumptions is concluded after the comparison of DNOs and ESO data, the corrections should be captured in the next publication of FES/DFES.

