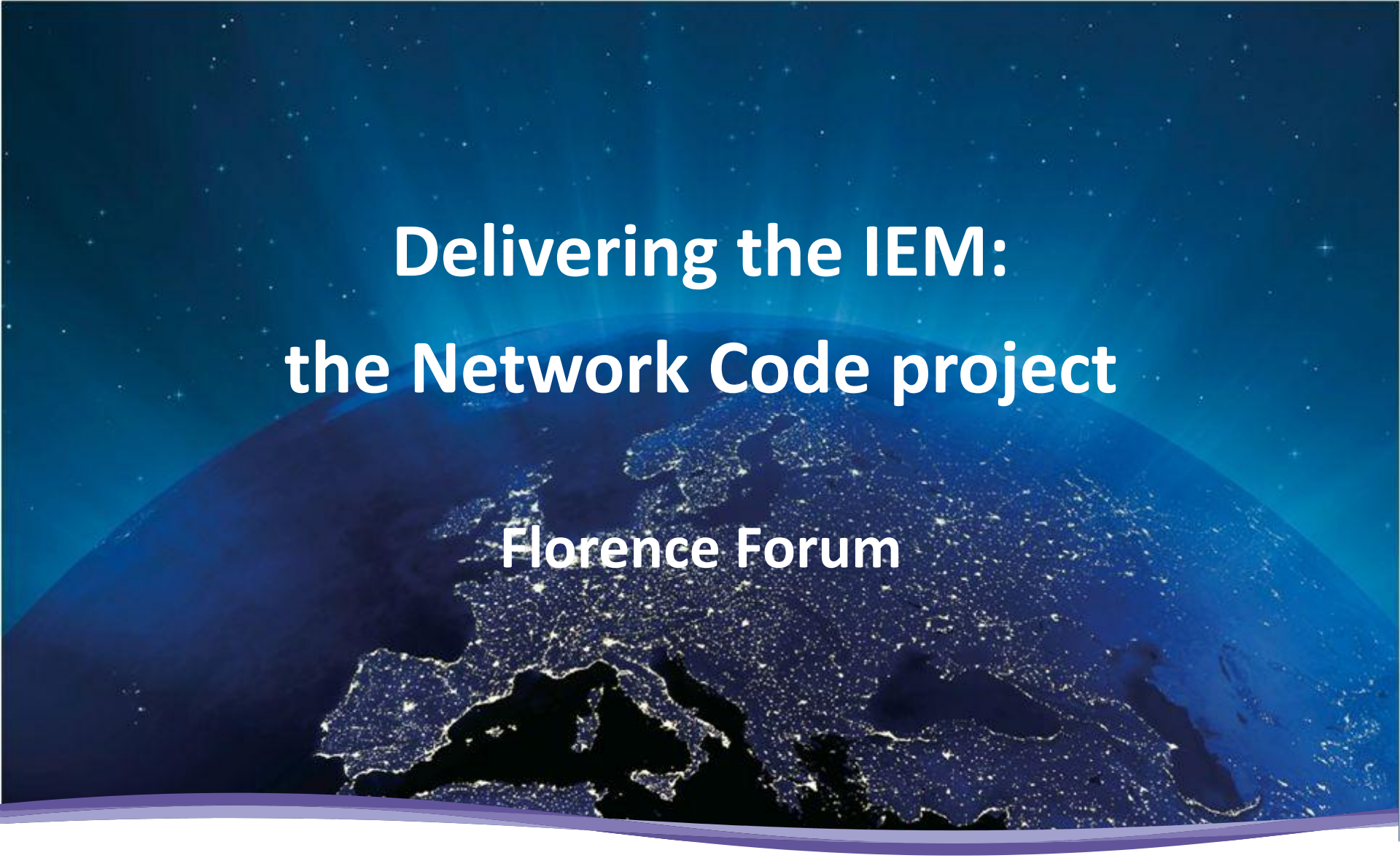


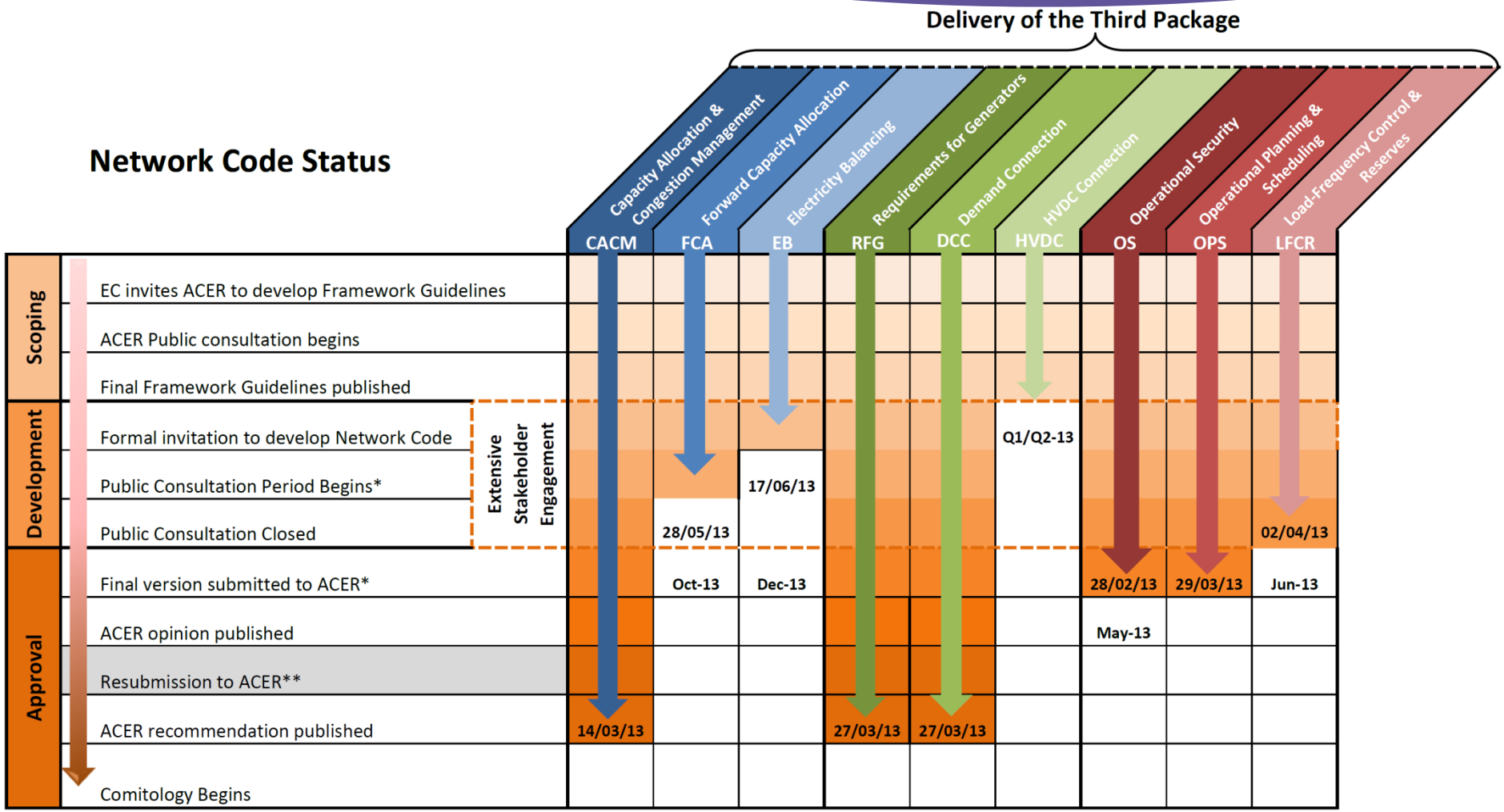
Delivering the IEM: the Network Code project

Florence Forum

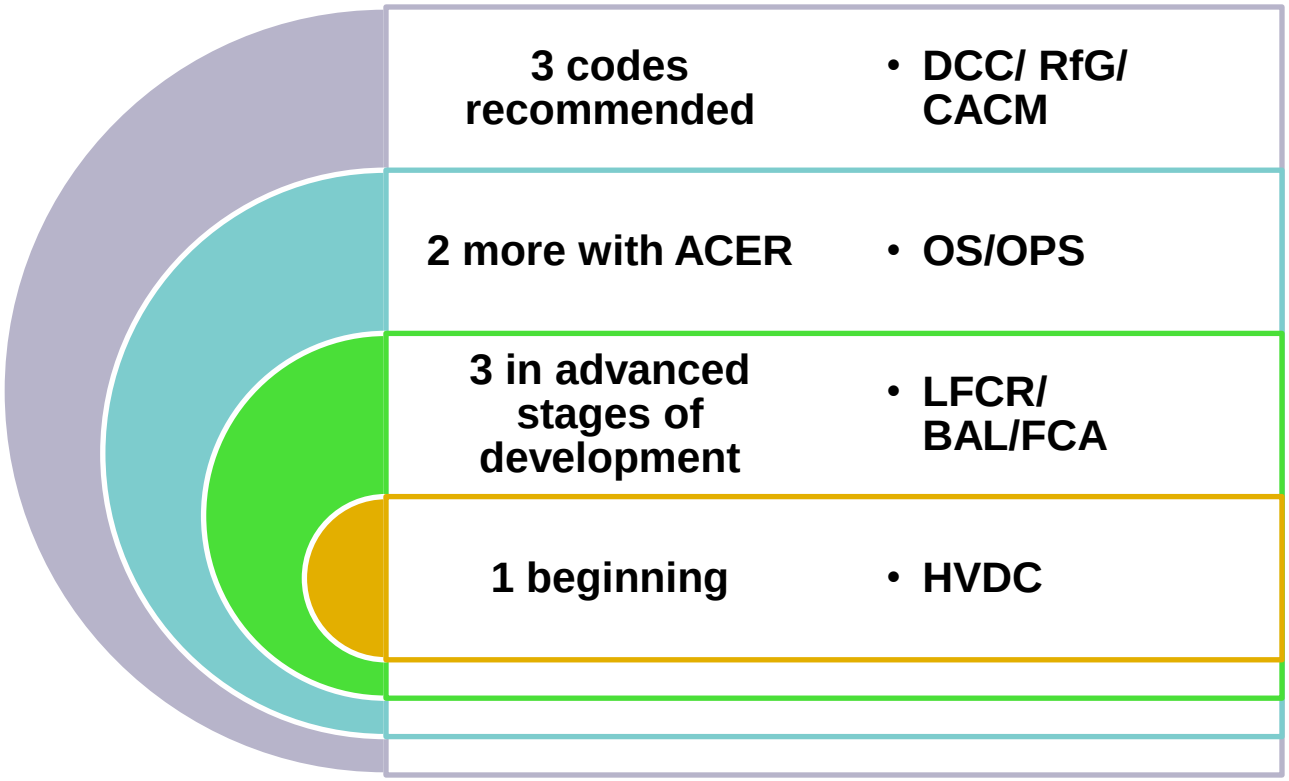
entsoe

Reliable Sustainable Connected

A challenging project – progressing well



With 8 codes at an advanced stage



A robust & transparent process

Feedback on ENTSO-E stakeholder engagement has improved consistently	• Content disagreements inevitably remain, but process is open & transparent.
ENTSO-E has explained how codes fit together	• Via a vision paper • And is managing consistency between codes.
EC/ACER/ENTSO-E working closely together	• Recognising a shared vision of an IEM as soon as possible.

Providing a sound basis for a smooth Comitology

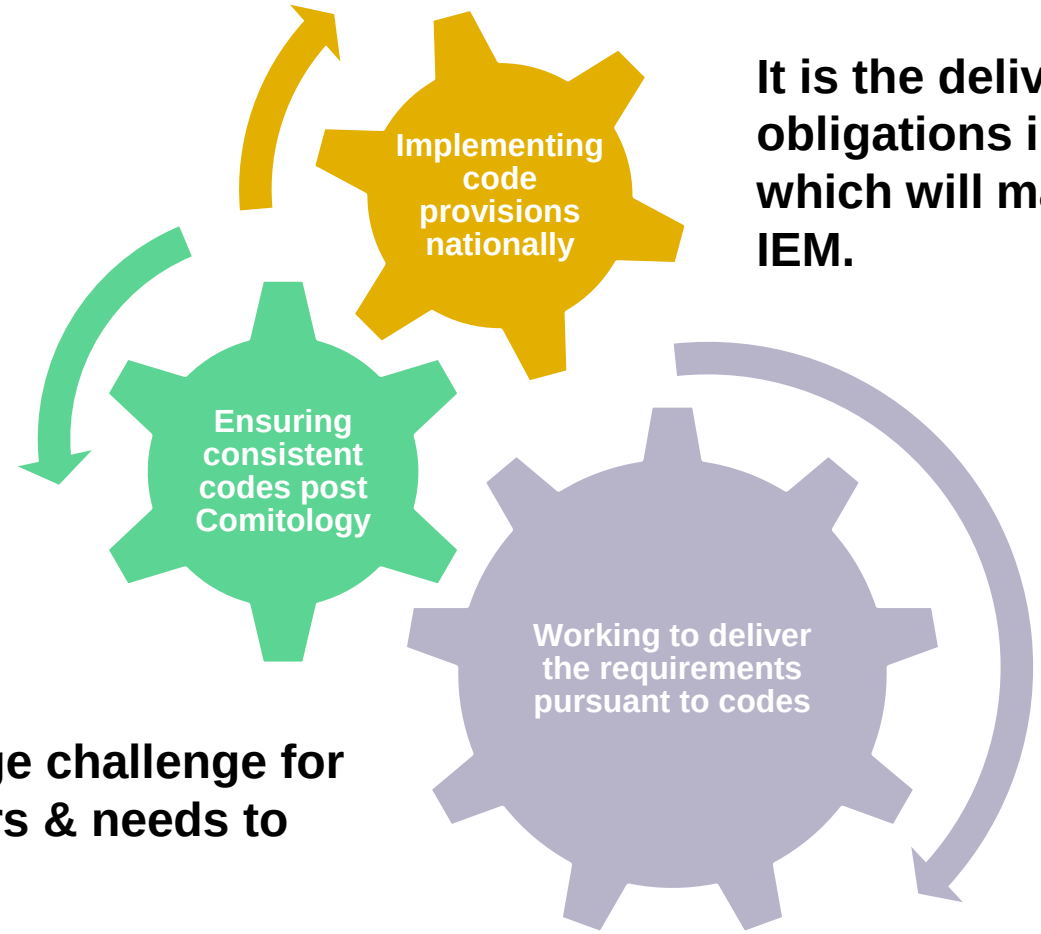
Codes represent a balance of views and seek to strike a pragmatic balance. Not everyone will ever be happy & we will not have got everything right.

But changes to 1 code can impact on all codes and have unintended consequences.

It is important to deliver the benefits to customers (e.g. CACM 5bn/annum, EB 3bn/annum) quickly

ENTSO-E will support the Comitology process wherever possible, though feels large changes are best handled via amendments.

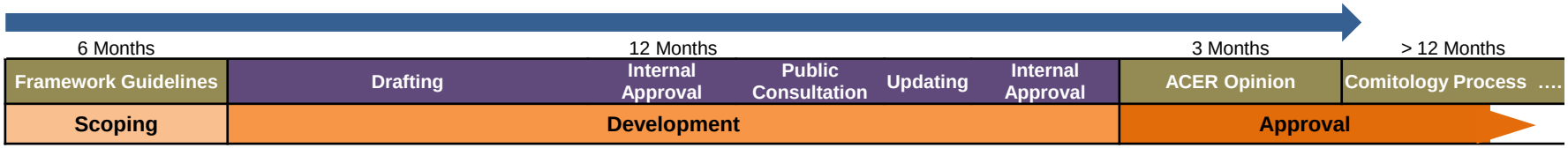
Meaning we must focus on implementation



It is the delivery of the obligations in the codes which will make or break the IEM.

Which is a huge challenge for all stakeholders & needs to begin now.

Network Code on:
Capacity Allocation and Congestion Management



CACM translates the vision for a pan European target Model into a binding set of rules.

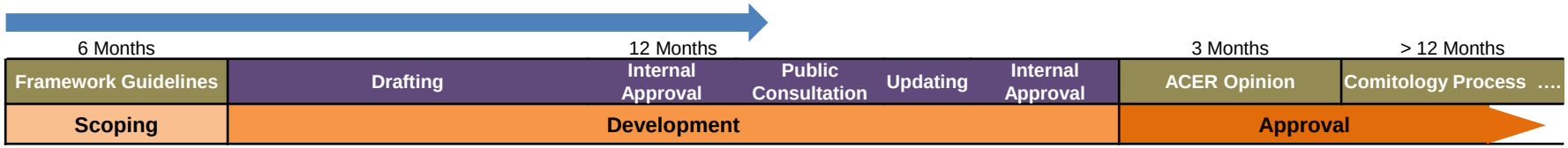
- **The NC CACM covers capacity calculation, bidding zones, day ahead markets and intraday markets and is the core of a competitive pan European market. The EC estimates annual benefits at 5 billion euro.**

- **An ACER recommendation to adopt the network code was provided in late March. That recommendation indicated eleven areas where ACER felt the network code needed to be improved.**

- **ENTSO-E responded to the recommendation alerting the EC about the potential effects of the Agency's suggested changes in four areas – capacity calculation, regional auctions, redispatching & timings.**

- **ENTSO-E is working with the EC and ACER to proceed to start the adoption process as soon as possible.**

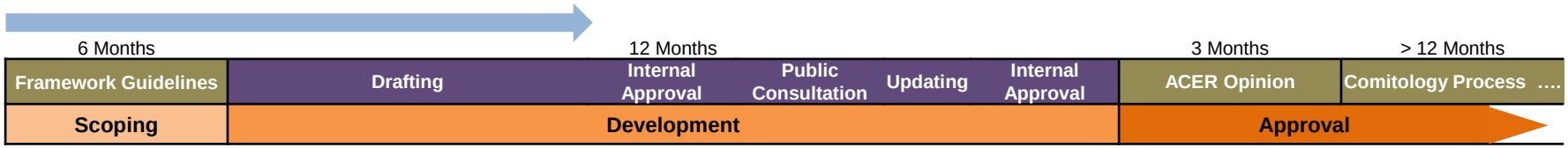
Network Code on:
Forward Capacity Allocation



To set rules for calculating and buying capacity in timescales before day ahead and for hedging price risk between bidding zones.

- **The NC FCA is the outstanding piece in the market design jigsaw. It is being developed later than the NC CACM but is closely linked to it and completes the Target Model.**
- **ENTSO-E is consulting on the network code from 28 March until 28 May.**
- **The forwards code requires considerable harmonisation – e.g. the establishment of one single set of auction rules and one single allocation platform.**
- **The code has been drafted to allow flexibility in the regulatory choice of LT hedging products (PTRs/FTRs/financial markets) taking into account market parties' needs.**

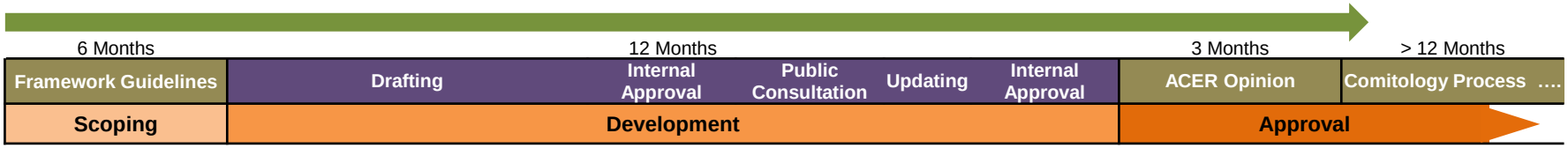
Network Code on:
Electricity Balancing



To define the basis for the development of a pan European balancing market capable of enhancing security of supply, facilitating the increase of greater volumes of renewable energy and promoting competition.

- **The NC EB is one of the most important codes still under development, linking codes in all other areas.**
- **It builds on a Target Model for balancing which sees an incremental approach, based on cost benefit analysis, to move away from national markets.**
- **It outlines the way in which all parties will be able to participate in balancing markets and the way that products and prices will be set.**
- **There have been 3 stakeholder workshops as well as bi-lateral meetings and the first public workshop on 7 May (held jointly with LFCR).**
- **The code will be consulted on in the Summer and will be submitted by the end of the year.**

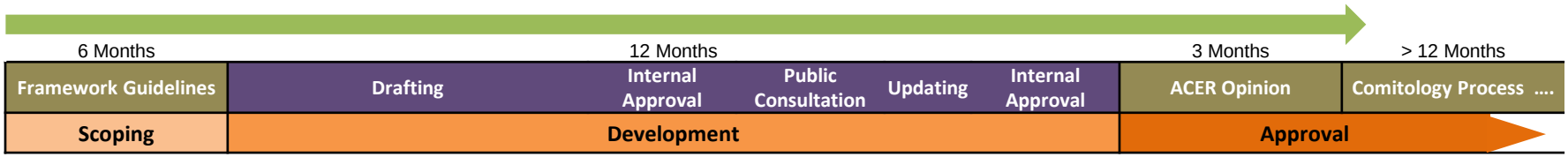
Network Code on:
Requirements for Generators



The NC RfG provides a set of coherent requirements for generators (of all sizes) in order to meet the future power system challenges.

- **ENTSO-E engaged extensively with stakeholders to develop a response to the points raised in ACER's Reasoned Opinion.**
- **ACER recommended the adoption of the code on the basis of the additional justifications. The code will shortly enter the Comitology process.**
- **The code represents a coherent package of requirements, applied in a proportionate manner in order to help ensure future system security.**
- **Much work is needed to implement the network code and set parameters at national level. TSOs are currently starting this work.**

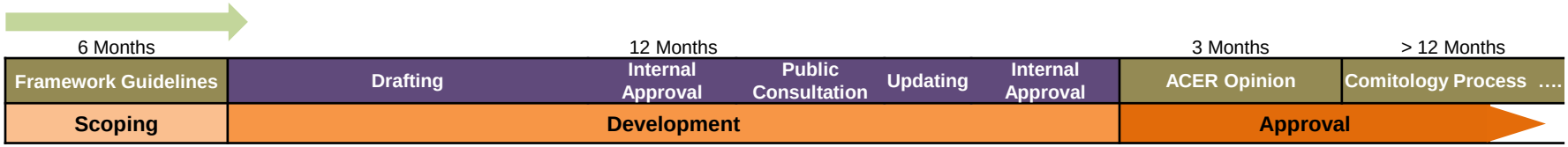
Network Code on:
Demand Connection



The DCC sets requirements for new demand users and DSO connections and enables demand side response measures supporting system security.

- **ACER provided an opinion and recommendation to adopt the code on 27 March 2013 after a period of constructive discussion.**
- **The DCC is an important code in kick starting the emergence of the Demand Side Response and enabling a cost effective energy transition. ENTSO-E views the DSR provisions of DCC as vital.**
- **ENTSO-E strongly feels that the DCC code is the right vehicle through which to make DSR provisions a reality.**
- **The synergies between DCC and NC RfG mean there are strong arguments for running the Comitology process in parallel.**

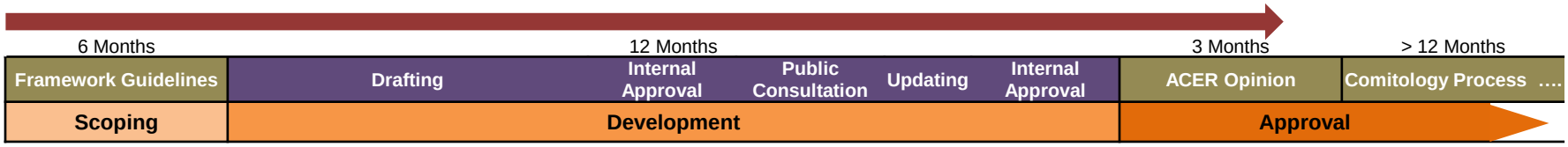
Network Code on:
HVDC Connection



To set pan European requirements for HVDC connections and DC connected generation.

- **The NC HVDC is tackling a new area in which few if any standards currently exist.**
- **But it is an area which will be vital for realising all of Europe's energy policy objectives in the future and where a pan European approach will be particularly beneficial.**
- **A formal mandate has been received. ENTSO-E will develop the HVDC code by 1 May 2014; working with stakeholders at all stages.**
- **In order to discuss the Preliminary scope of the code, ENTSO-E has issued a Call for Stakeholder Input. Feedback is requested by means of a public consultation and a public workshop with Stakeholders on 23 May.**

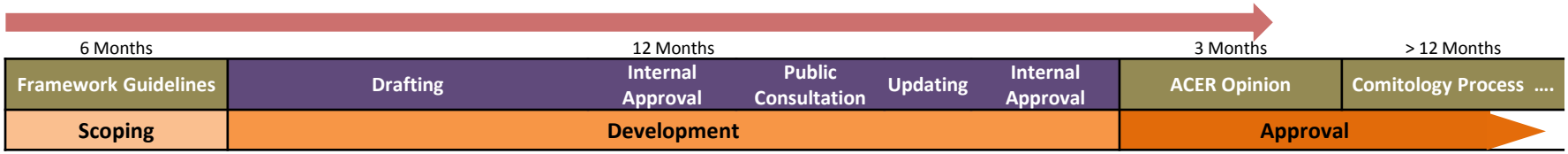
Network Code on:
Operational Security



To set common rules for ensuring the operational security of the pan-European power system.

- **The NC OS was the fourth NC submitted to ACER on 28 February and is currently being assessed.**
- **The code will enhance pan European operational security by introducing common approaches and sharing best practice.**
- **The NC OS facilitates the coordination of system operations and forms the basis for the subsequent codes on Operational Planning & Scheduling, Load Frequency Control & Reserves.**
- **The NC OS also serves as "umbrella" for all system operation codes and as such refers to the future needed provisions for Emergency and Restoration (code not planned yet) and contains provisions for training (code not planned yet)**

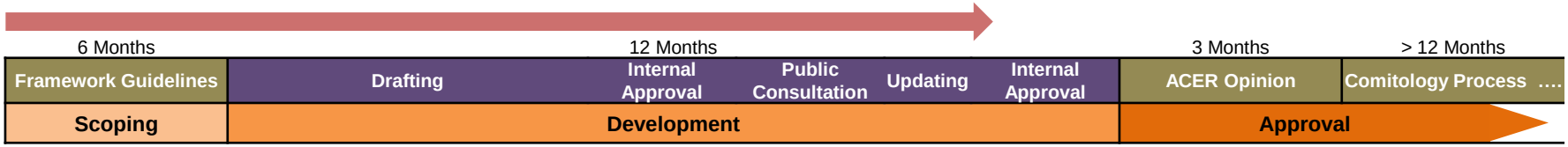
Network Code on:
Operational Planning & Scheduling



Sets requirements for assessing the adequacy and operational security of the grid and for planning outages required by TSO's and grid users when they have cross-border impacts.

- **The NC OPS was the fifth network code submitted to ACER on the 29th March.**
- **The code was developed substantially in light of stakeholder comments to improve readability and address those concerns.**
- **The NC OPS will optimise the planning phase of system operations.**
- **The code aims to deliver operational security in a effective way.**

Network Code on:
Load Frequency Control and Reserves



To set out coordinated and clearly specified load frequency control processes and rules regarding the levels and location of reserves (back-up) which TSOs need to hold.

- **Around 1300 comments were received after public consultation.**
- **The synergies with the balancing network code are being carefully managed and were explored at a workshop on the 7th of May.**
- **The code is now being updated in light of stakeholder feedback which covered several important issues.**
- **Key areas of focus are the respective roles of TSO/regulators, regulatory consultation and approvals, and the framework for TSO coordinated decision-making**

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