Initial high-level proposal for implementation & testing timeline for Go-Live Phase 1 iCAROS

Fine-tuning workshop iCAROS

16 June 2020 | Elia

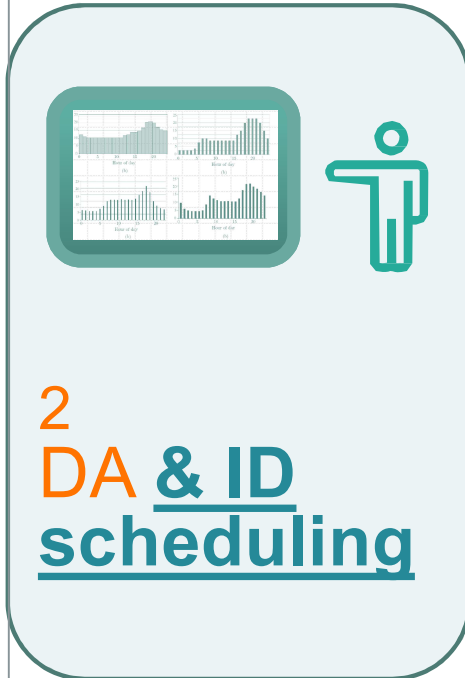# iCAROS = Integrated Coordination of Assets for Redispatching and Operational Security

FOCUS Phase 1 Icaros for PGM & ESD ≥ 25 MW and no splitting of roles (OPA & SA = BRP)

Business Scope

Exchange of operational data [from LT to realtime]

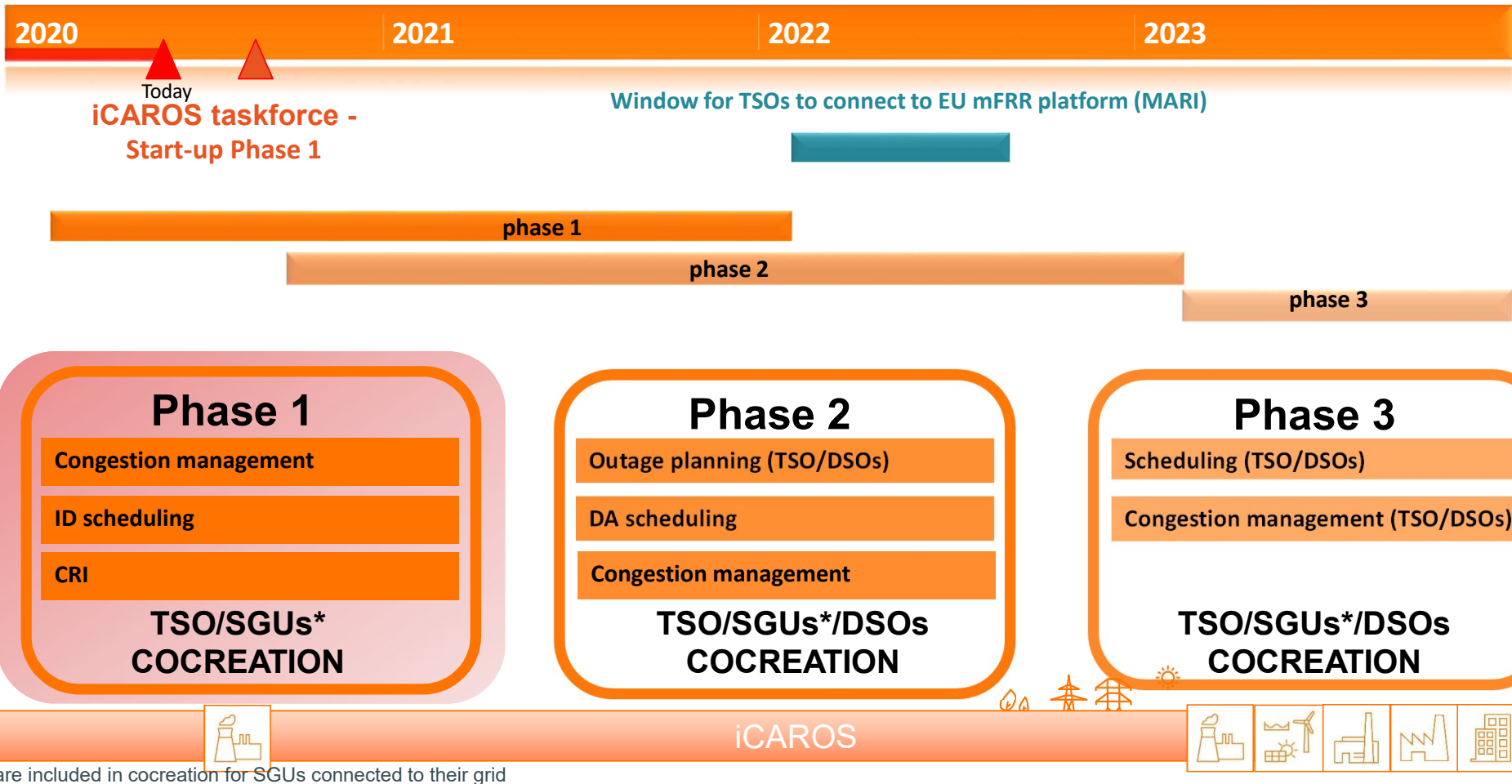**1**
Outage Planning

2
DA **& ID scheduling**

3
Congestion management

iCAROS phased implementation

→ Phasing reflects operational prioritization and is cocreated with SGUs & DSOs
→ no big bang but safeguarding operational robustness

2020	2021	2022	2023

Today

iCAROS taskforce - Start-up Phase 1

Window for TSOs to connect to EU mFRR platform (MARI)

phase 1

phase 2

phase 3

Phase 1

Congestion management

ID scheduling

CRI

TSO/SGUs* COCREATION

Phase 2

Outage planning (TSO/DSOs)

DA scheduling

Congestion management

TSO/SGUs*/DSOs COCREATION

Phase 3

Scheduling (TSO/DSOs)

Congestion management (TSO/DSOs)

TSO/SGUs*/DSOs COCREATION

iCAROS

* CDSOs are included in cocreation for SGUs connected to their grid

iCAROS phase 1: Interaction Scheduling Agent – Elia

1. ID Scheduling

2. Congestion Risk Indicator

3. Bidding of Redispatching energy bids

4. Activation of Redispatching energy bids

ID Scheduling

Current process

– IntraDay Production Program Request (IDPCR)

– Production Program delivered on Power Plant level in intraday (on unit level in DA)

Current interaction

– BRP sends IDPCR to Elia via Probid application

– Elia update of Production Program after activation or notification of Forced Outage

– Interface: BRP System to Elia System

Future process

– Intraday Schedule amendment

– Elia can send AD HOC request to return to schedule, in case a deviation of the Schedule might cause a significant congestion risk

– Exact rules to define the level of schedule information exchange will be communicated during WS of 7/10/2020

Future interaction

– Scheduling Agent sends Schedule amendment to Elia via new Scheduling application (and vice versa)

– Elia sends to Scheduling Agent newly valid daily Schedule, including possible amendment after activation

– Interface: SA System to Elia System (Objective to extend with User interface in iCAROS phase 2)

ID Scheduling

Future interaction

– Message format to be confirmed

– **Possibly** based on ENTSOe CIM: SCHEDULE DOCUMENT

Congestion Risk Indicator

Current process

– Each day Elia determines the "Red Zones" as part of the management of congestion risks for the Belgian grid.

Current interaction

– Red Zones are published on Elia.be

– Elia sends Red Zone information to CIPU contract holders and BSP's with mFRR contract, via Probid application.

– Interface: Elia System to BRP system

Future process

– Elia will calculate Congestion Risk Indicator

Future interaction

– To be defined

Bidding of Redispatching energy bids

Current process

– Same implicit energy bid used for Redispatching and non-contracted mFRR Energy Bids DPsu.

– Redispatching energy bids on Power Plant level, calculated based on reserved energy bid (on unit level) and production program.

Current interaction

– Only explicit submission of market based prices by BRP

Future process

– Explicit bidding for redispatching energy bids

– Exact rules to define the level of redispatching energy bids exchange will be communicated during WS of 7/10/2020

Future interaction

– Scheduling Agent submits redispatching energy bids (volumes & prices only valid for redispatching energy bids) to Elia via existing BMAP application

– Interfaces:

  – Scheduling Agent System to Elia System

  – Scheduling Agent can connect via user interface (Similar to current situation)

Similar for mFRR bids

Bidding of Redispatching energy bids

Future interaction

– Message format to be confirmed

– **Possibly** based on ENTSOe CIM: BID DOCUMENT

Similar for mFRR bids

Activation of Redispatching energy bids

Current process

- Same implicit energy bid used for Redispatching and non-contracted mFRR Energy Bids DPsu.

- Redispatching energy bids on Power Plant level, calculated based on reserved energy bid (on unit level) and production program.

Current interaction

- Elia sends Redispatching activation request to BRP via Probid application on Power Plant level

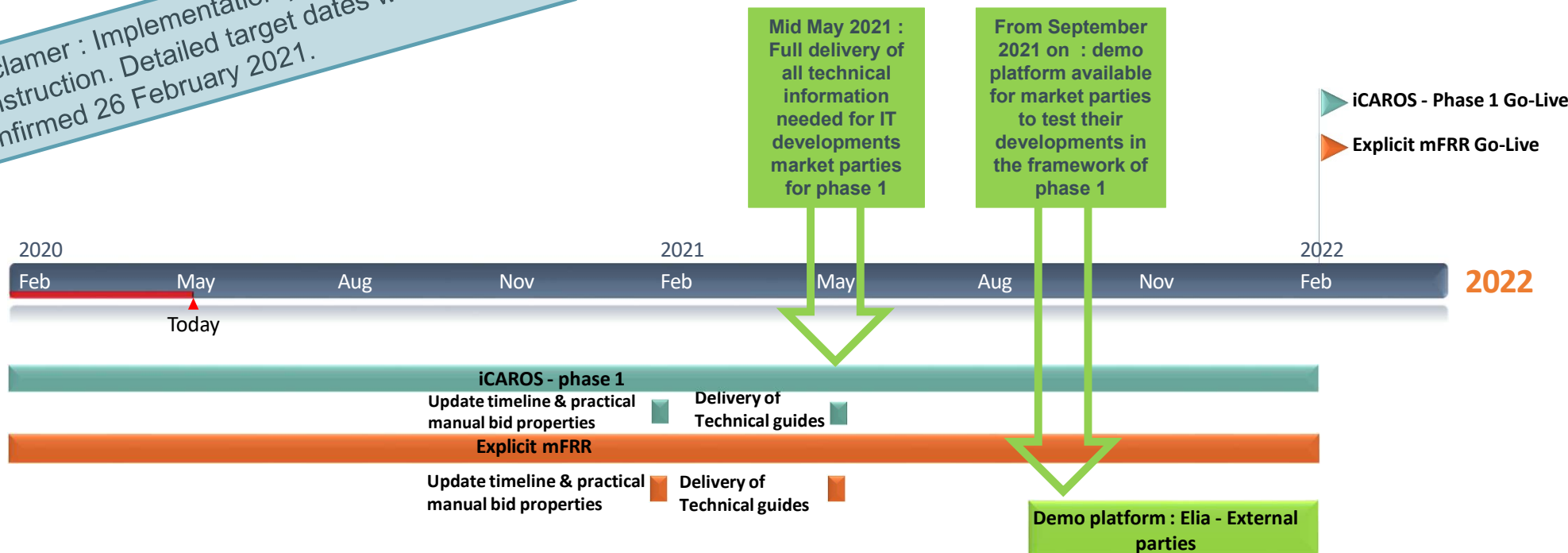- Interface: Elia System to BRP system

Future process

- Explicit bidding for redispatching energy bids

- Exact rules to define the level of redispatching energy bids exchange will be communicated during WS of 7/10/2020.

Future interaction

- Elia sends activation request for a redispatching to the Scheduling Agent via new Selection & Activation application

- Interface: Elia System to Scheduling Agent System

Mid May 2021 : Full delivery of all technical information needed for IT developments market parties for phase 1

From September 2021 on : demo platform available for market parties to test their developments in the framework of phase 1

▶ iCAROS - Phase 1 Go-Live

▶ Explicit mFRR Go-Live

2020				2021				2022
Feb	May	Aug	Nov	Feb	May	Aug	Nov	Feb

2022

Today

iCAROS - phase 1

Update timeline & practical manual bid properties

Delivery of Technical guides

Explicit mFRR

Update timeline & practical manual bid properties

Delivery of Technical guides

Demo platform : Elia - External parties

Demo platform : Interoperability testing between Elia applications and External applications of Scheduling Agent and BSP. Done in test environment with test data.

Next steps

- **16/06/'20** : Fine-tuning workshop iCAROS - Initial presentation of timeline to MP's – request for feedback

- **Summer period 2020** : Review of comments made during Fine-Tuning workshop iCAROS on planning and testing => updated implementation & testing timeline

- **07/10/'20** : Fine-tuning workshop iCAROS - Second presentation of timeline to MP's – request for feedback

- **26/02/'21** : Presentation of timeline to MP's & manual 'bidding properties'

- Full delivery of Technical guides **Mid May 2021**

- **September 2021 – February 2022** [~5 months before Go-Live] period in which demo environment will be available for MP and test sessions will be organized

Disclamer : Implementation planning is still under construction. Detailed target dates will be final confirmed 26 February 2021.

Feedback and follow-up

Feedback, comments and suggestions on presented initial high-level proposal for implementation & testing timeline for Go-Live Phase 1 iCAROS

are kindly requested by sending it to Viviane.Illegems@elia.be by 1st July 2020.

Follow-up via next iCAROS taskforce on October 7th 2020.

iCAROS Program Manager **Viviane Illegems**
Design architect outage planning, scheduling, congestion **Caroline Bosschaerts**

Thank you.