Supporting European Aviation

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EUROCONTROL NETWORK MANAGER USER FORUM 2023

iNM –A Digital Journey

2-3 February 2023

CONSORTIUM COORDINATOR sesar DEPLOYMENT MANAGER

FOUNDING MEMBER sesar JOINT UNDERTAKING

NETWORK MANAGER

iNM - Supporting European Aviation

iNM

managing

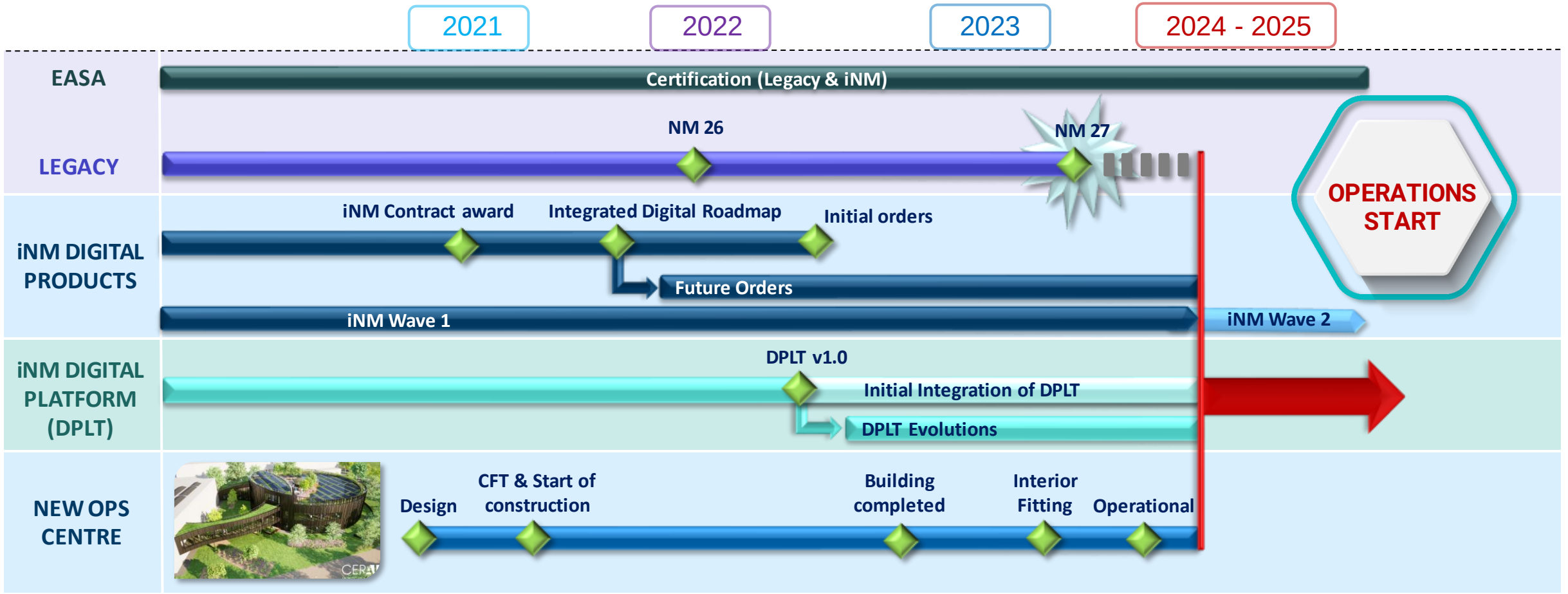
13,8 Million flights

by 2030

Network Manager

DIGITAL TRANSFORMATION
WHY iNM?
SYSTEM OBSOLENCE

Today’s Agenda



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Paving the Way to iNM – NM Release 27

2-3 February 2023

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NM27.0

Role of NM27.0 in iNM Digital Journey

- Providing compliance(**CP1**) and securing transition time to iNM

- **After NM27.0** until iNM transition, only **technical** release every six months to maintain existing NM services

NM27.0

Key NM27.0 deliveries to spot

- **NMP Flow:** Introduced mandatory Cherry-pick(MCP) regulation support, traffic counts & overall load monitoring dashboards/count features
- **NMP Flight:** Moved towards maturity state, mainly improved usability and adapted AO feedbacks
- **Advanced FUA:** Introduced capability for FMPs locally to update RAD-AUP RSs, local flexibility
- **GRRT:** Improved significantly Rerouting tools/algorithms & monitoring, major changes to provide more RR opportunities
- **Occupancy CASA** prototype will be available for operational use in live trials
- First phase of improved **Operational Air Traffic (iOAT)** flight planning has been introduced

NM27.0

Next Steps to know more about NM27.0 !

Join us for the Webinar on 16th March!

- NM27.0-RN updates published at the first week of each month
- Test: OPT Test:15/2-30/3
- PreOPS Validation: 21/3 onwards
- Technical OPS-Migration: 27/4-2/5

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The New Network Manager Operations Centre

2-3 February 2023

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Facts & Figures

- 15 months construction time
- 5.000 m² in total
- Flexible space
- 1 large & 4 smaller operational rooms
- 5 meeting rooms
- Visitor gallery
- Recreation area for operational staff
- Eco certification level “Excellent”
- Electrochromic glass

Construction in record time

August 2021

September 2021

October 2021

November 2021

December 2021

January 2022

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February 2022

March 2022

April 2022

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May 2022

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June 2022

July 2022

August 2022

September 2022

October 2022

November 2022

December 2022

January 2023

Interior layout

Ground floor

Ground floor

Ground floor

Ground floor

Ground floor

Ground floor

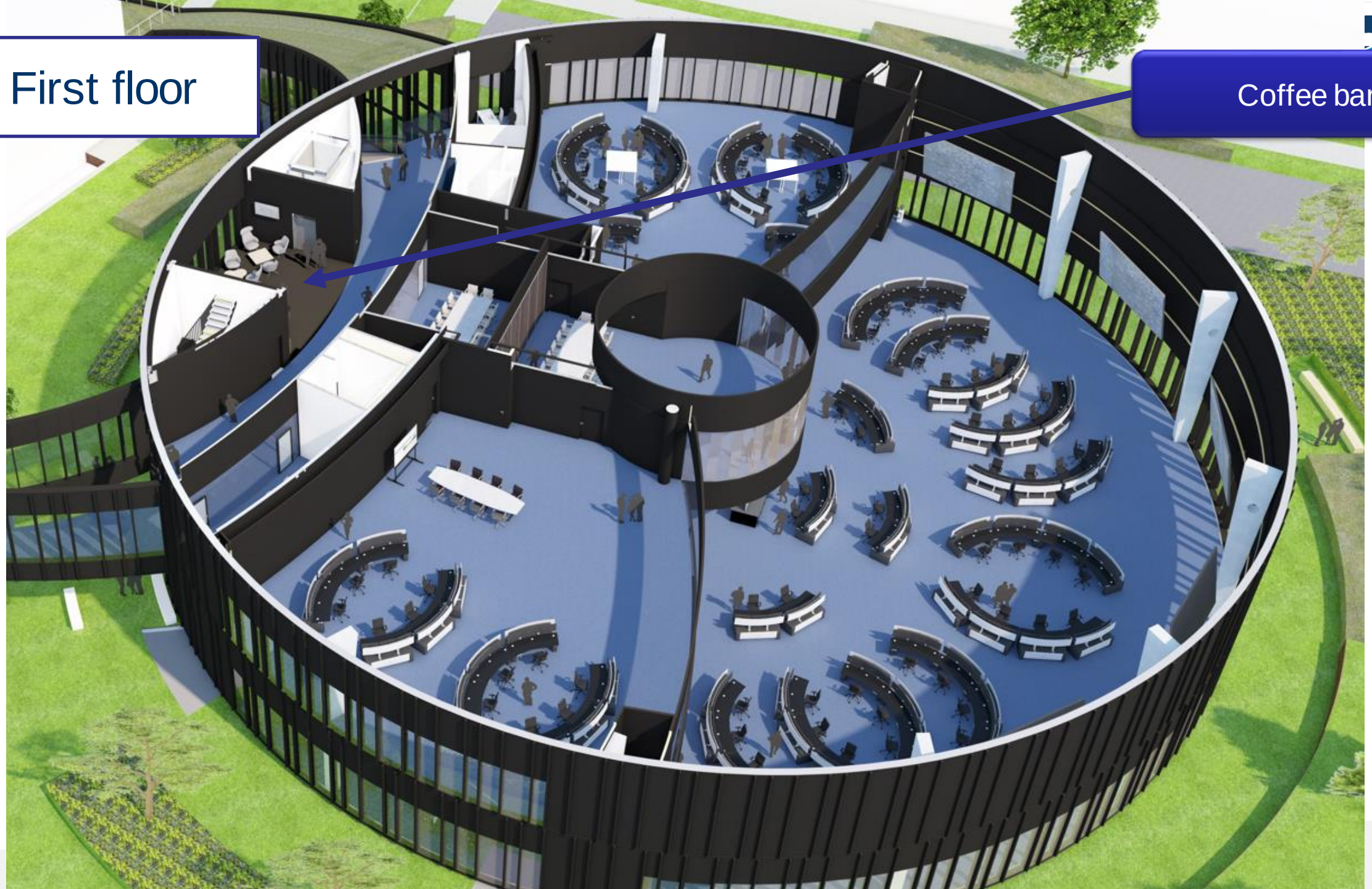
First floor

First floor

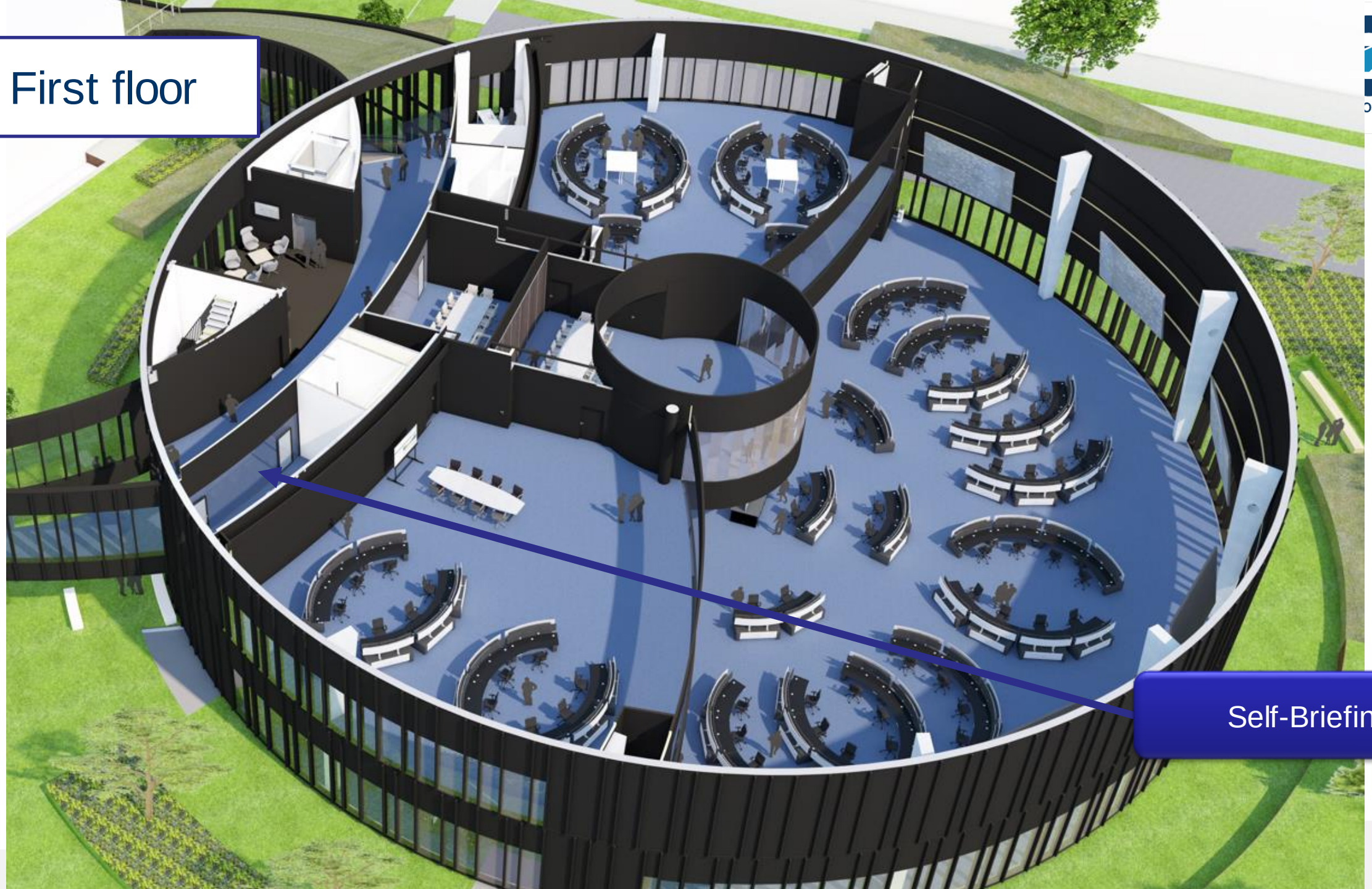
First floor

First floor

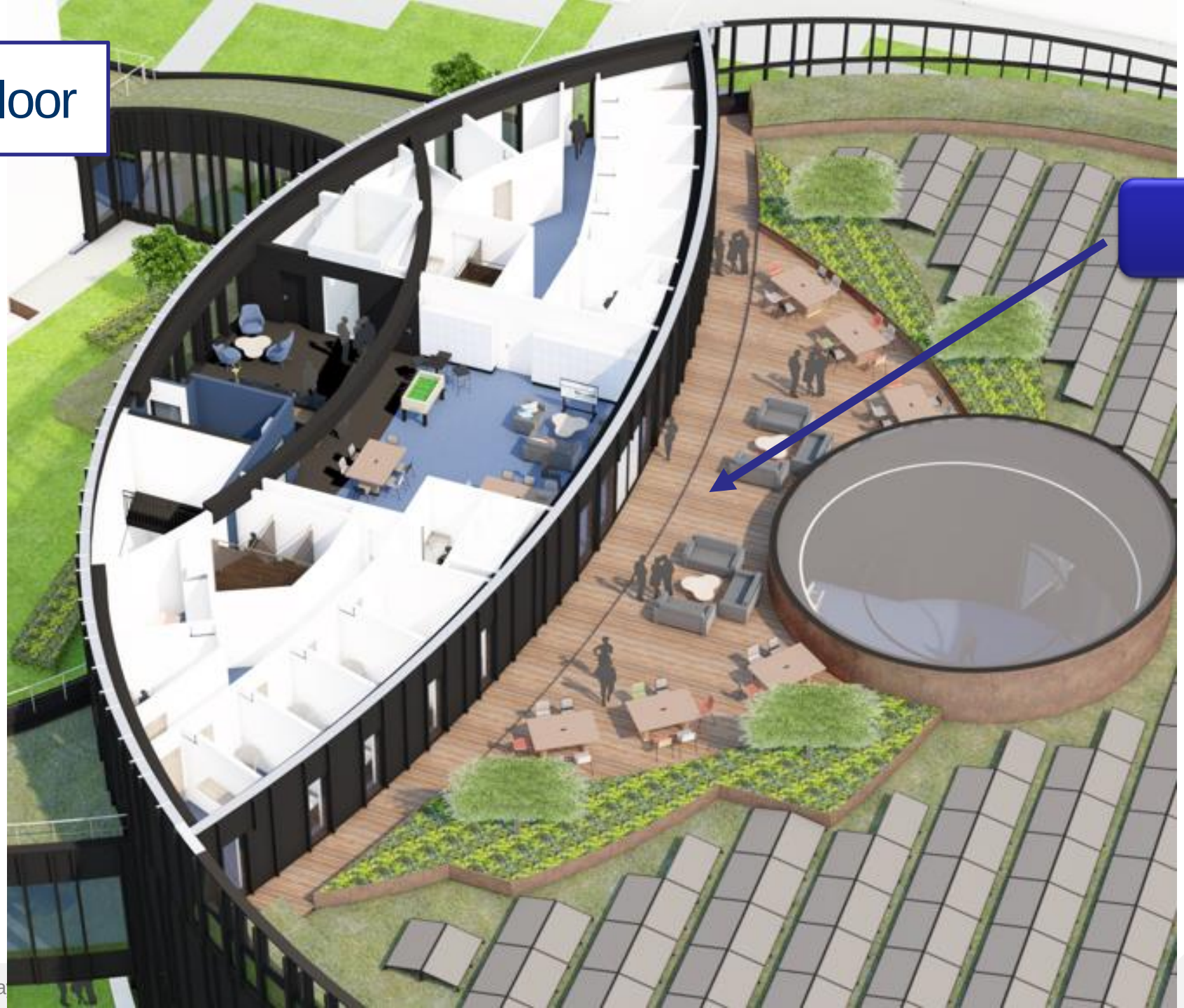
First floor



First floor

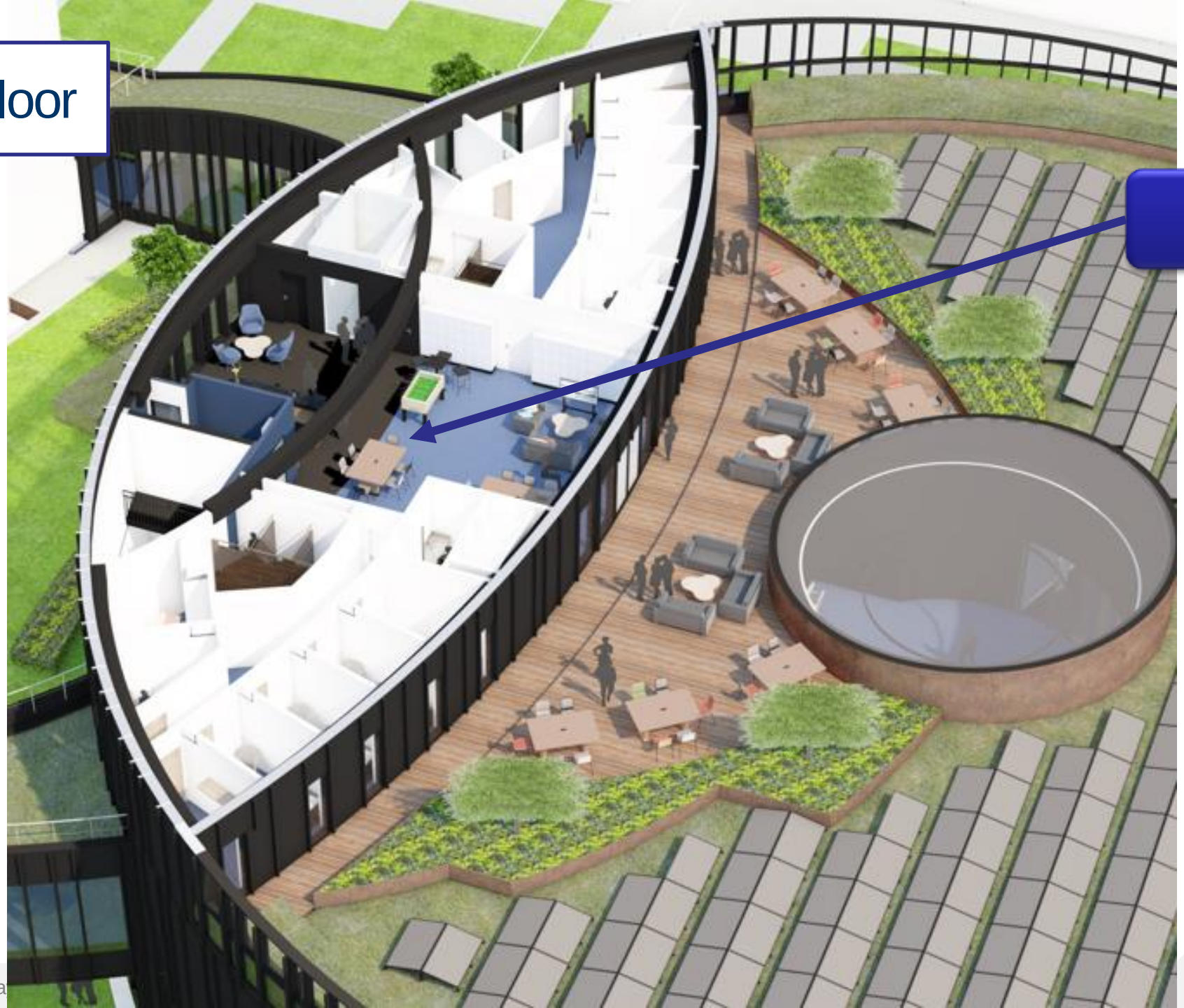


Second floor



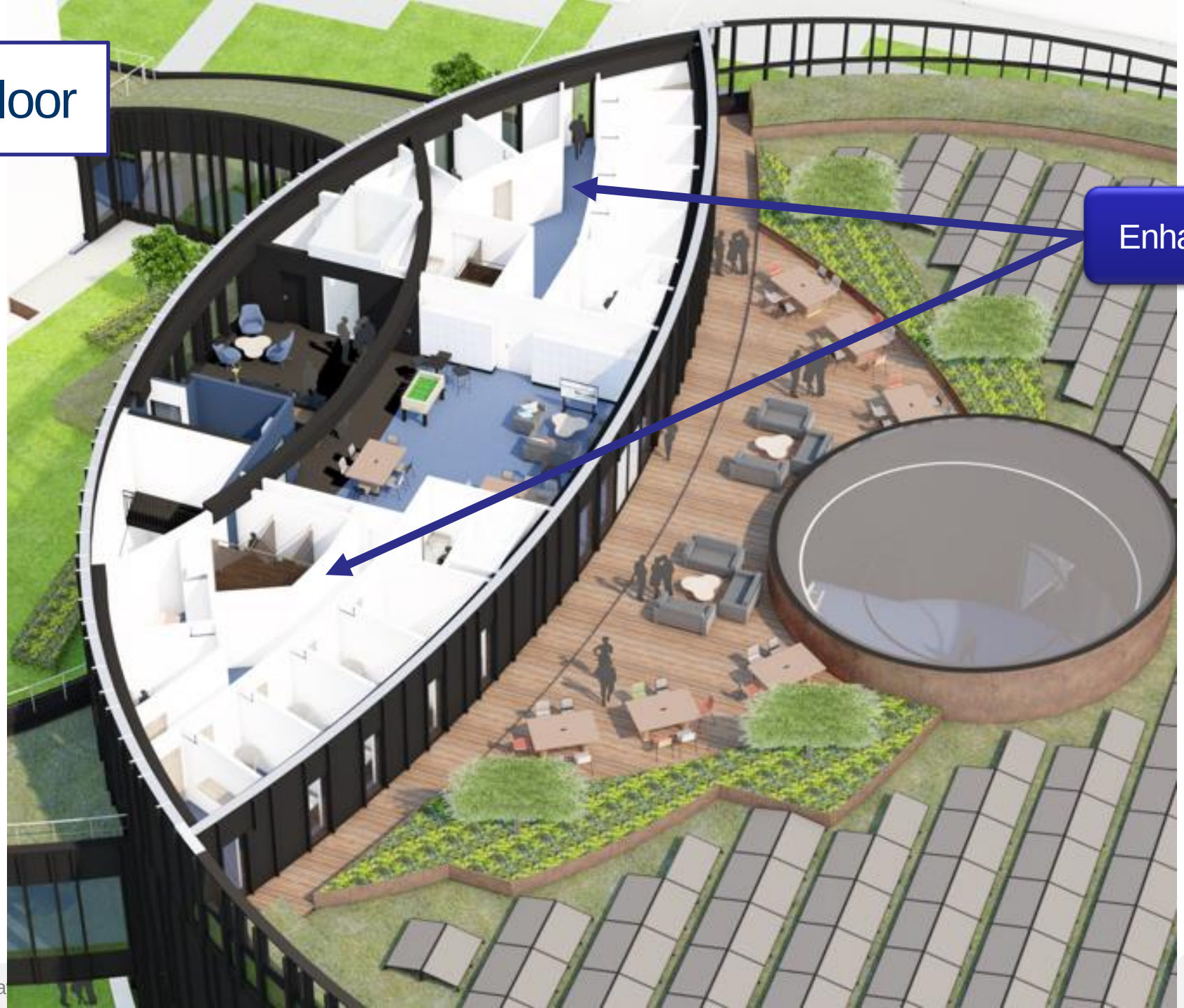
Terrace

Second floor



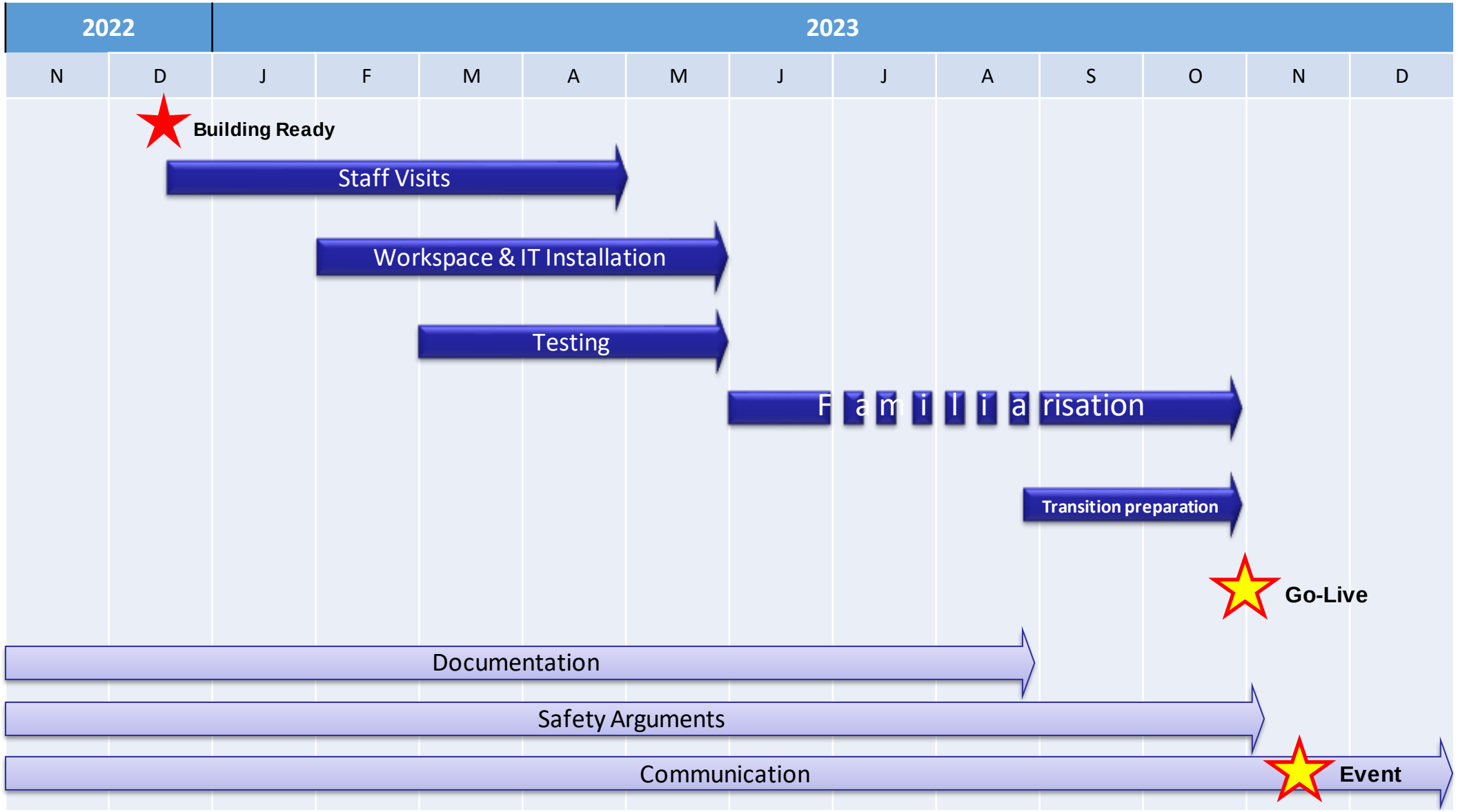
Lounge Area

Second floor



Enhanced Rest Facilities

Transition Plan


2022
2023
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Building Ready
Staff Visits
Workspace & IT Installation
Testing
Familiarisation
Transition preparation
Go-Live
Documentation
Safety Arguments
Communication
Event

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The iNM Programme Planning

2-3 February 2023

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Milestones

GOING LIVE…

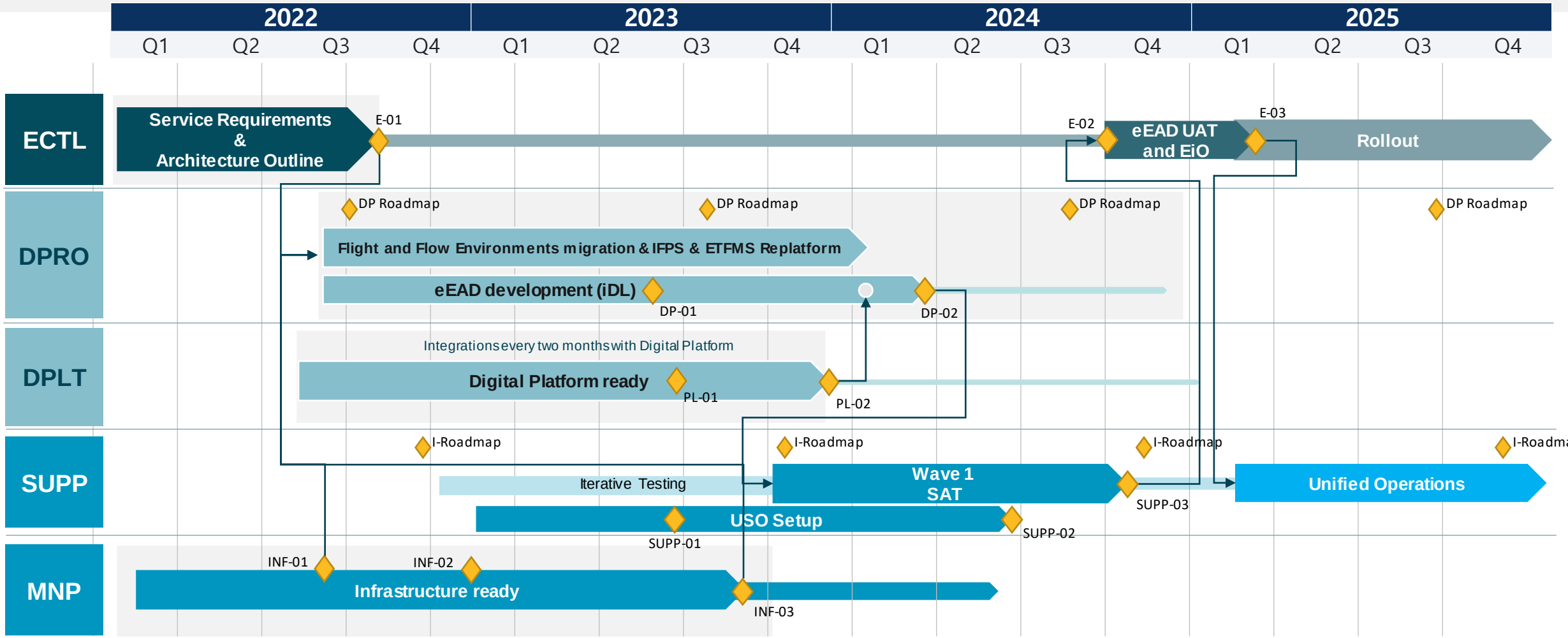
START OF OPERATIONS

15 MAY 2025

SHADOW OPERATIONS

29 NOVEMBER 2024

iNM Programme Waves – Wave 1



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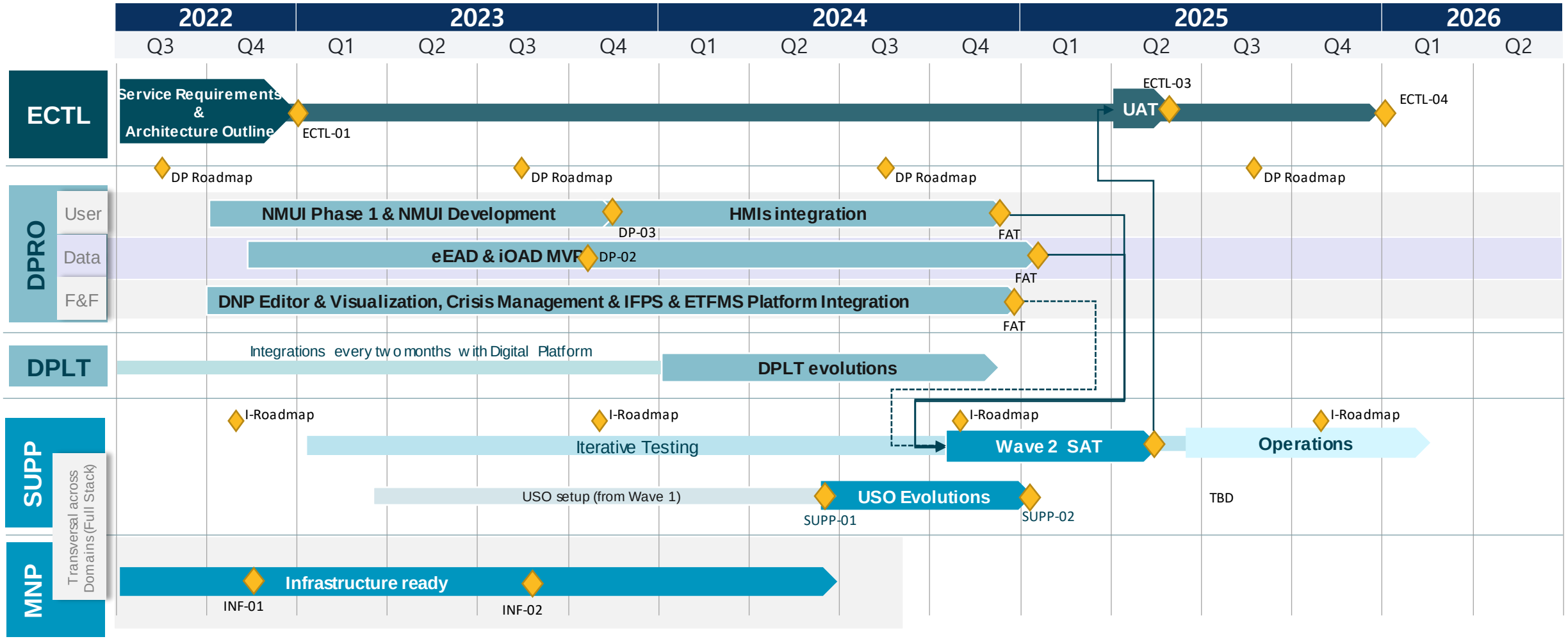
iNM Programme Waves – Wave 2



Legend

Indra | ATOS/ACE | OSM/ATOS

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iNM Master Programme Plan – Introduction

…Responsibilities of the Parties

	1 Definition	2 Development	3 Testing and entry into operations
EUROCONTROL	• Provides Service Requirements • Approves Architecture	• Validates system requirements	• Executes UAT • Create End User Operational procedures • Execute certification process • Conduct entry into operations • Operational roll-out
DPRO&DPLT (INDRA)	• Proposes solution architecture • From requirements, estimates the sizing of environments	• Develops system requirements • Develops software and integration activities	• Support testing activities
SUPP&MNP (ATOS/ACE)	• Design underlying infrastructure inc. Cloud enablement • Establish release processes • Design Bridge and Global monitoring	• Iterative testing of digital products • Launch ITIL, DevSecOps, release processes • Launch Bridge & Monitoring capability.	• Integrate, deploy software • Execute SAT • Support entry into operations

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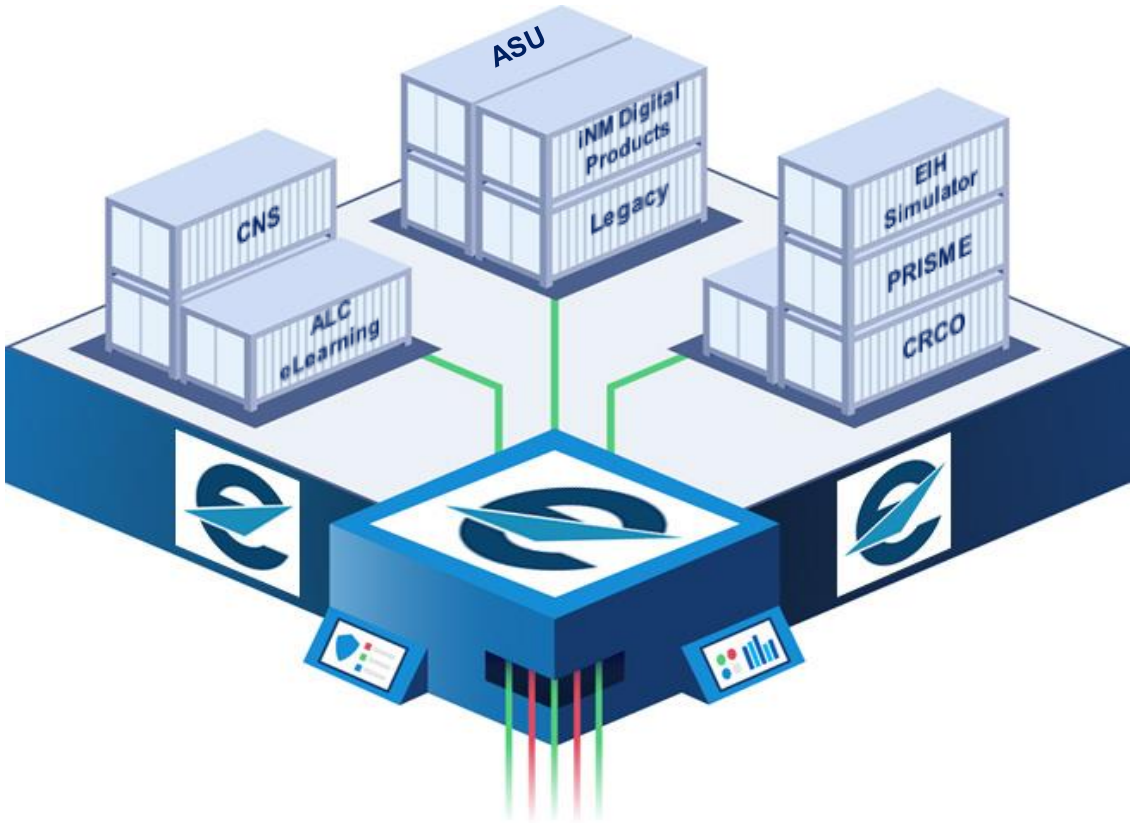
DIGITAL PLATFORM



The Digital Platform is a technical layer that enables development, deployment, hosting, operations and governance of the Digital Products.

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The iNM Programme

Business View

2-3 February 2023

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iNM PROGRAMME **WAVES**

WAVE 1

Initial IDL
Limited to AIS Data Maintenance

Digital NOTAM
CP1 compliant, early adopters only

WAVE 2

Partial IDL
Integrating EAD

IFPS & ETFMS re-platforming

Dynamic Network Plan
Editor & Viewer

Crisis Management
EVITA, AIREP, Portal

NMUI
New NM User Interface built on NMP consultations

WAVE 3+

Full IDL
Integrating CACD

Airspace Management

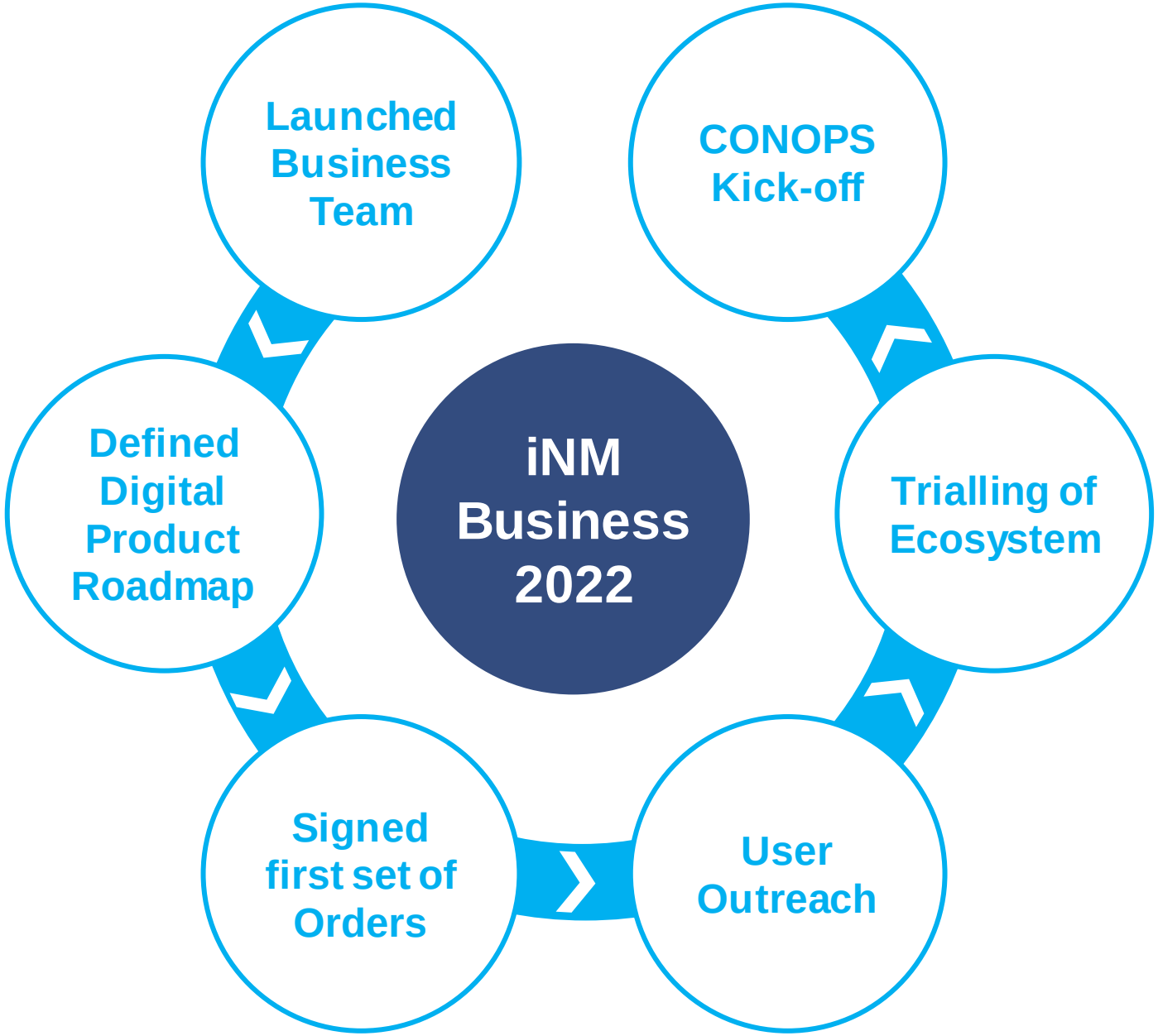
Network Performance
Simulation & Network Impact

Integrated Flight & Flow
Single flight view

NMUI evolutions
CHMI & EHMI replacement

Data Services
Business Intelligence

WHAT'S BEEN **ACHIEVED**?



WHAT'S **HAPPENING NEXT?**

01 Integrated Data Layer

02 DNP & CRISIS

03 NM User Interface

IDL - INTEGRATED DATA LAYER
What will be delivered?

Brand new EAD

Ready for the Digital World!

Introducing

- Full Digital NOTAM and ePIB
- Meteo in PIB (OPMET)
- AIXM 5.1.1 format
- A modern User Interface

IDL - INTEGRATED DATA LAYER

How will it happen?

Smooth Transition

Business Continuity

- User consultations
- Early adopters 2024
- Gradual migration of EAD clients
- Training and certification
- End of two years transition in 2027

DNP & CRISIS

What will be delivered?

From Daily to Dynamic, Interactive and Visual

Dynamic Network Plan

- Enhanced Editor
- New Interactive Viewer

Integrated and Coherent CRISIS Management Tools and Resources

Crisis Management

- EVITA & AIREP
- CRISIS PORTAL
- NARRATOR+

NMUI – NM USER INTERFACE
What will be delivered?

Designed **with Users for Users**

- Single entry point to NM
- Leveraging on NMP (Flight & Flow)
- New Information Hub, bringing Relevant Data at a glance
- Fresh & Consistent Look & Feel
- Tailored to User's Tasks

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Questions ?
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