

Supporting  
European  
Aviation



# 4DT NETWORK CONOPS

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# Why (Main objectives)

- This CONOPS is **essential pre-requisite for iNM**, in order to provide to INDRA a visibility at conceptual level what is expected concerning the management of 4D trajectories.
- This CONOPS will be the **baseline for drafting of operational/user requirements** for iNM.
- It is also needed as **indication for other Stakeholders** (ANSPs, AUs, Airports) what is expected from their side in terms of updated or new processes and corresponding system improvements.
- This CONOPS might be used by all Network actors **to drive their planning and investments** for achieving a common goal for cooperative trajectory management at Network level.

# Required improvements

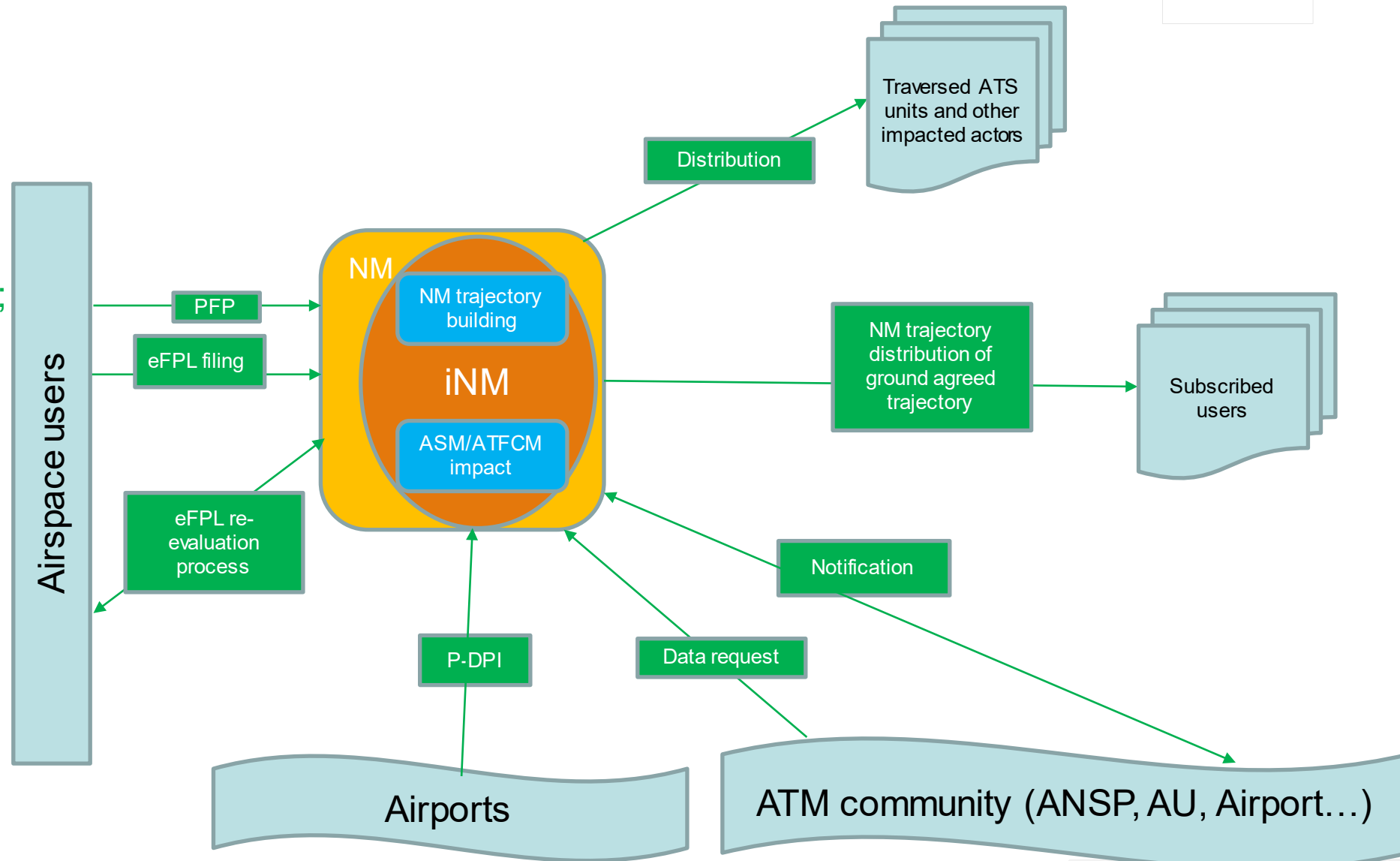


- Network 4DT CONOPS groups the trajectory management process into **three clusters** as:
  - Pre-departure phase;
  - Departure preparation phase;
  - Flight execution phase;
- Besides these three clusters, this document also addresses the identified improvements of the **other trajectory management processes** (VFR flight planning, OAT flight planning, Flow and airspace data exchanges, Adverse Weather, flight planning for new entrants).
- The main goal of this CONOPS is **to establish a common agreed trajectory** that can be shared, revised and used by all Operational Stakeholders.

# Stakeholder components in pre-departure phase

## Main building blocks:

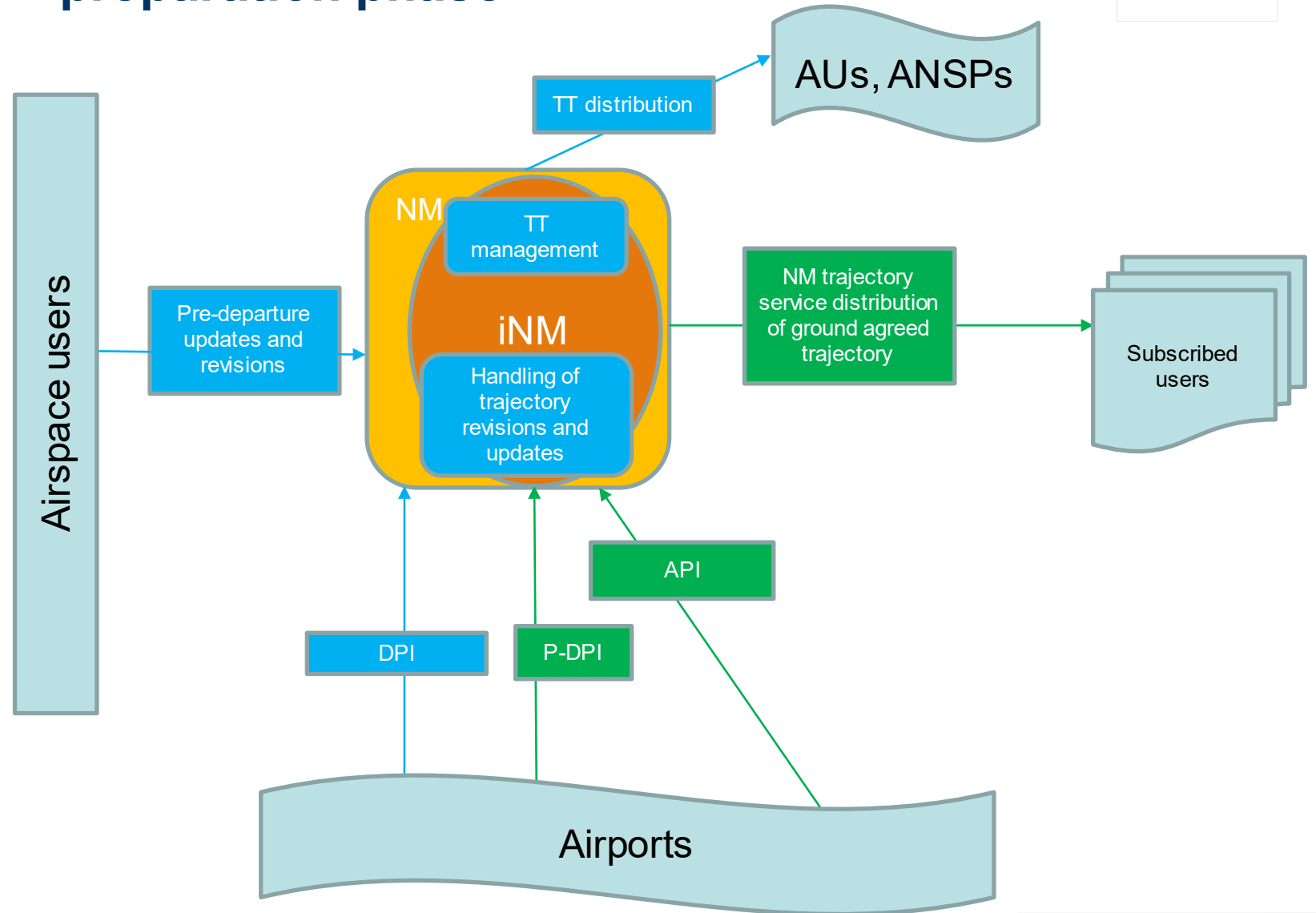
- the FF-ICE planning service;
- the CP1 mandated FF-ICE service (filing, trial, data request, notification and publication services);
- Production of ground agreed trajectory;
- P-DPIs;
- NM trajectory building process (enhancement in comparison with the existing one);
- ATFCM/ASM impact pre-departure (enhancement in comparison with the existing one);



*in blue* - enhancements of existing process  
*In green* - new trajectory management processes.

# Stakeholder components in departure preparation phase

- Main building blocks:
  - Pre-departure updates and revisions;
  - Distribution of Target times;
  - Reception and integration of Predicted Departure Planning Information (P\_DPI) and Departure Planning Info (DPI);
  - Reception and integration in the ground agreed trajectory of Arrival Planning Information (API);



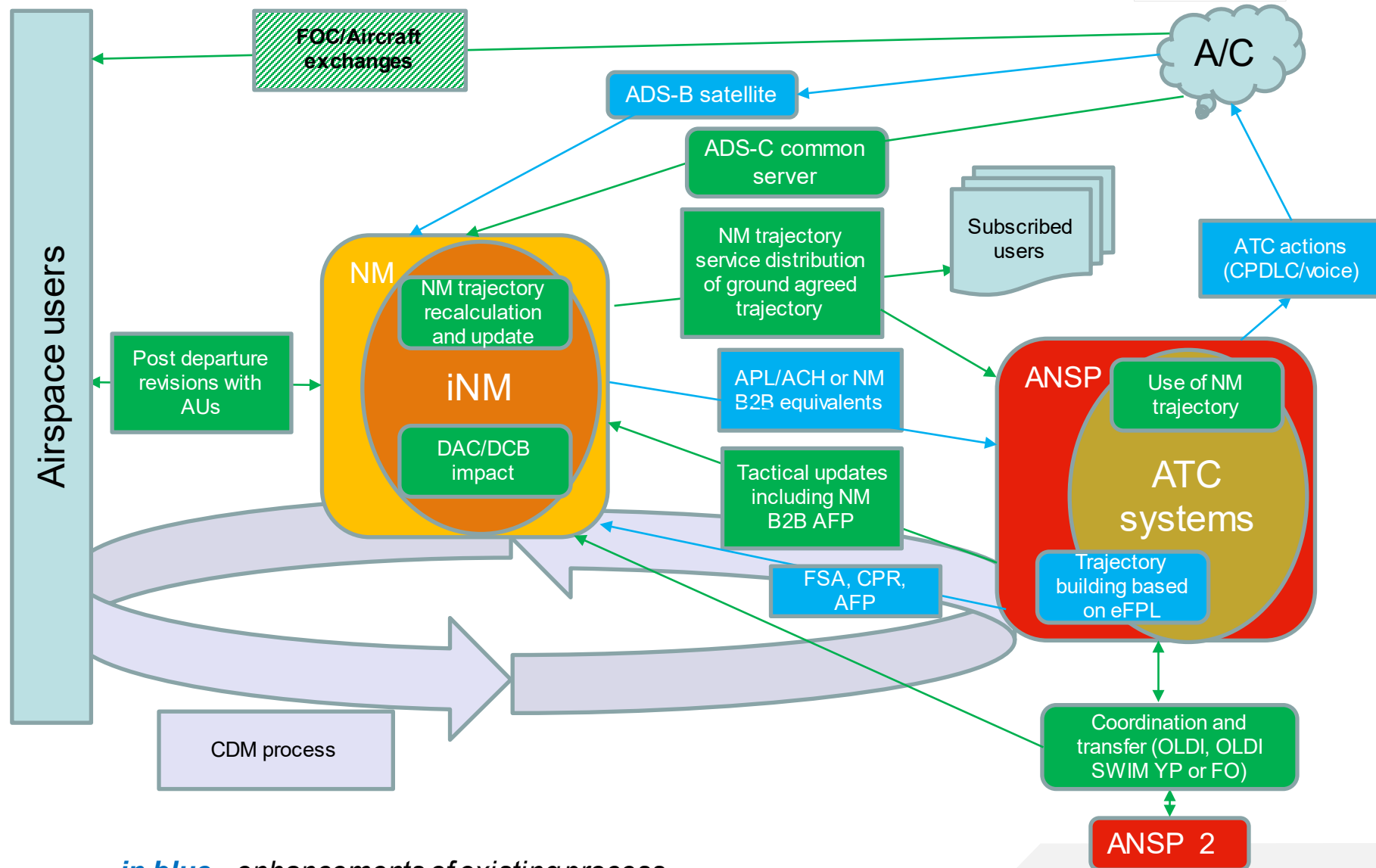
*in blue* - enhancements of existing process  
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# Stakeholder components in flight execution phase



## Main building blocks:

- Post dep. revisions with AUs;
- Application of EPP to NM trajectory;
- NM trajectory distribution/sharing, including NM trajectory service; (enhancement in comparison with the existing one);
- ATC Trajectory construction including the utilisation of NM trajectory service ( by certain extend and within specified limitations) or ATC Trajectory construction based on eFPL distribution;
- Post departure ATC trajectory revisions and feedback to NM (the outcome of coordination and transfer process supported by different technical means, tactical instructions updates. Sharing of tactical updates via different means.
- DAC/DCB impact in post departure;
- CDM process for trajectory revisions;



*in blue* - enhancements of existing process  
*in green* - new trajectory management processes.

# Other Trajectory management processes



- The cluster covers:
  - Centralised VFR flight planning;
  - Improved OAT ( iOAT);
  - Trajectory management in adverse weather;
  - Enhanced NM B2B data exchanges;
  - Flight Planning for new entrants;

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