



Strategic Plan 2017 - 2020

Flight Plan 2020

Air Carriers and Air Force
WORK DOCUMENT

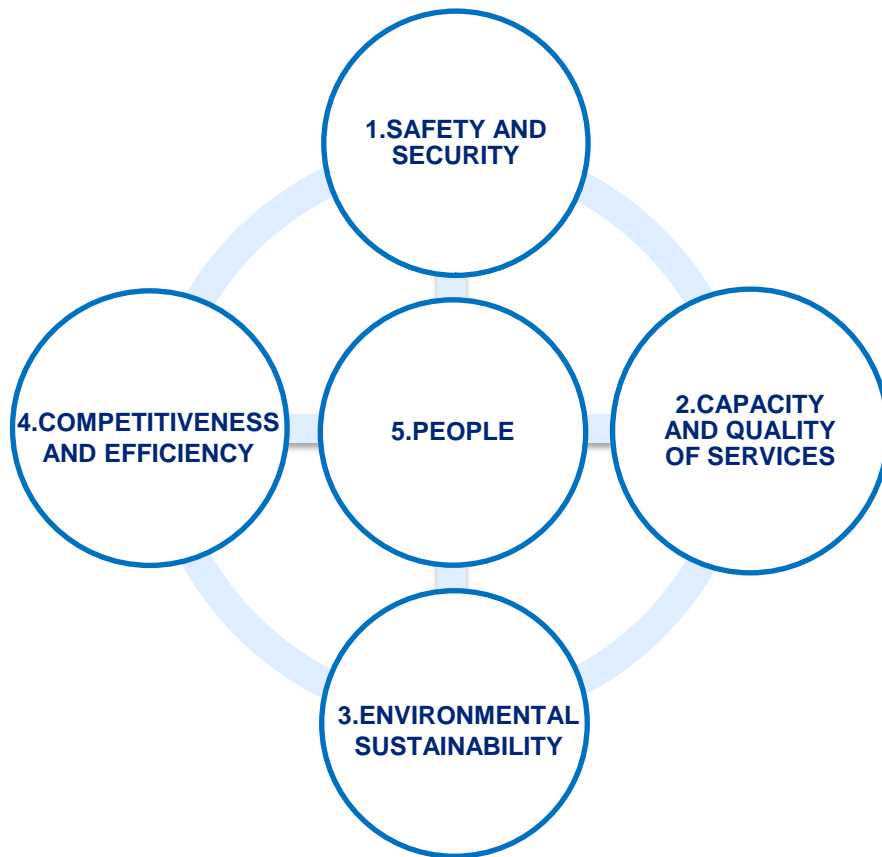


Flight Plan
2020



ENAIRe Strategic Objectives

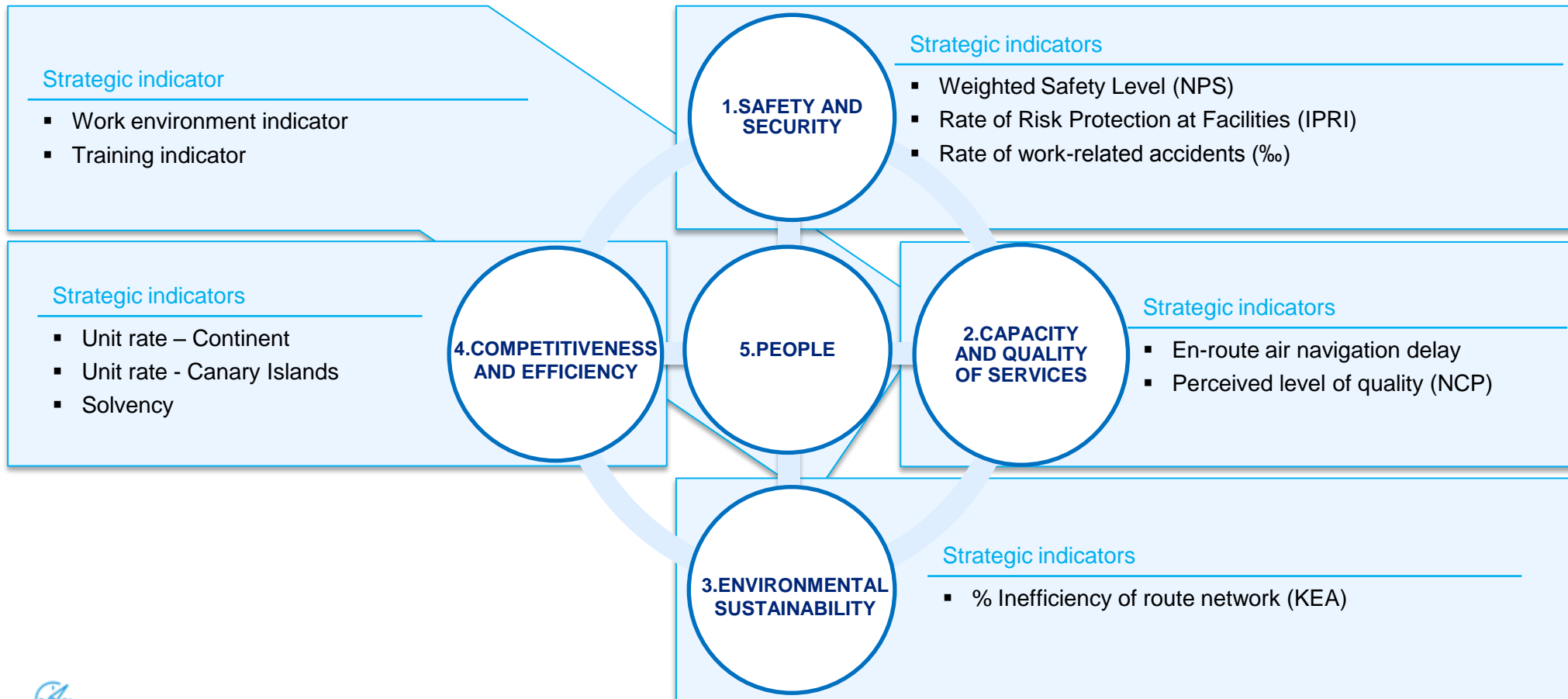
To make its Vision into a reality, ENAIRe establishes **5 strategic objectives**:



1. To increase **safety and security levels** in its three main axes: Safety, Security and Occupational Risk Prevention.
2. To increase the system's **capacity** and improve the **quality of services** in order to cope with flights demand and satisfy customers needs.
3. To contribute to the **environmental sustainability** of air transport, minimising the impact flights have on the environment.
4. To ensure the company's financial and **economic viability** and improve its **competitiveness**.
5. To promote the **motivation and commitment of the people** who form the ENAIRe professional team as the driving force for change within the organisation.

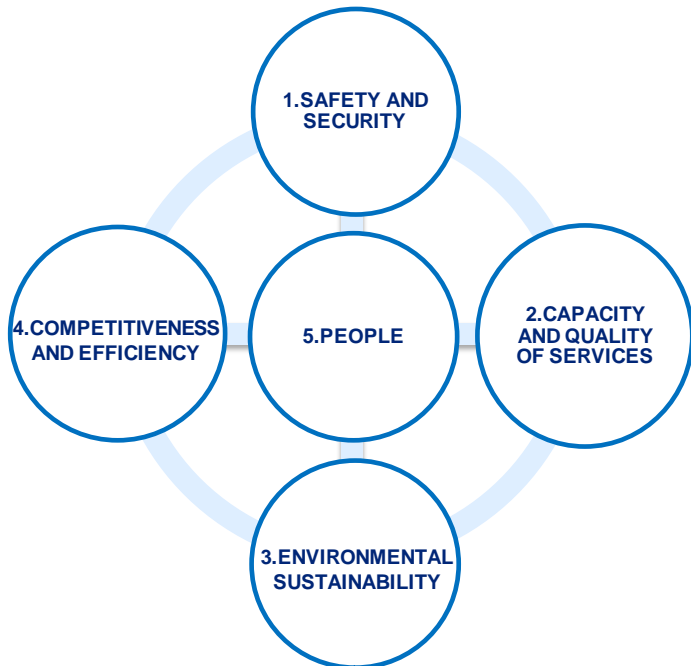
Strategic indicators

Fulfilment of the strategic objectives will be assessed using the following strategic indicators:



Action plans

To fulfil the Strategic Objectives, 20 plans have been established.



SAFETY AND SECURITY	<ul style="list-style-type: none"> PS1. Safety Plan PS2. Security Plan PS3. Occupational Risk Prevention Plan PS4. General Contingency Plan
CAPACITY AND QUALITY OF SERVICES	<ul style="list-style-type: none"> PCC1. Airspace Capacity and Efficiency Plan PCC2. Technology Modernisation Plan PCC3. Technical Services Development Plan PCC4. SYSRED Development Plan PCC5. Customer Service Plan
ENVIRONMENTAL SUSTAINABILITY	<ul style="list-style-type: none"> PSM1. Environmental Sustainability Plan
COMPETITIVENESS AND EFFICIENCY	<ul style="list-style-type: none"> PCE1. Commercial and International Business Development Plan PCE2. Business Management Improvement Plan PCE3. Digital Transformation Plan
PEOPLE	<ul style="list-style-type: none"> PP1. People Development Plan PP2. People Conciliation and Motivation Plan
TRANSVERSAL PLANS	<ul style="list-style-type: none"> PT1. Corporate Social Responsibility Plan PT2. Single European Sky Convergence Control Plan PT3. Communication and Media Plan PT4. Innovation Plan PT5. Air Navigation Master Plan

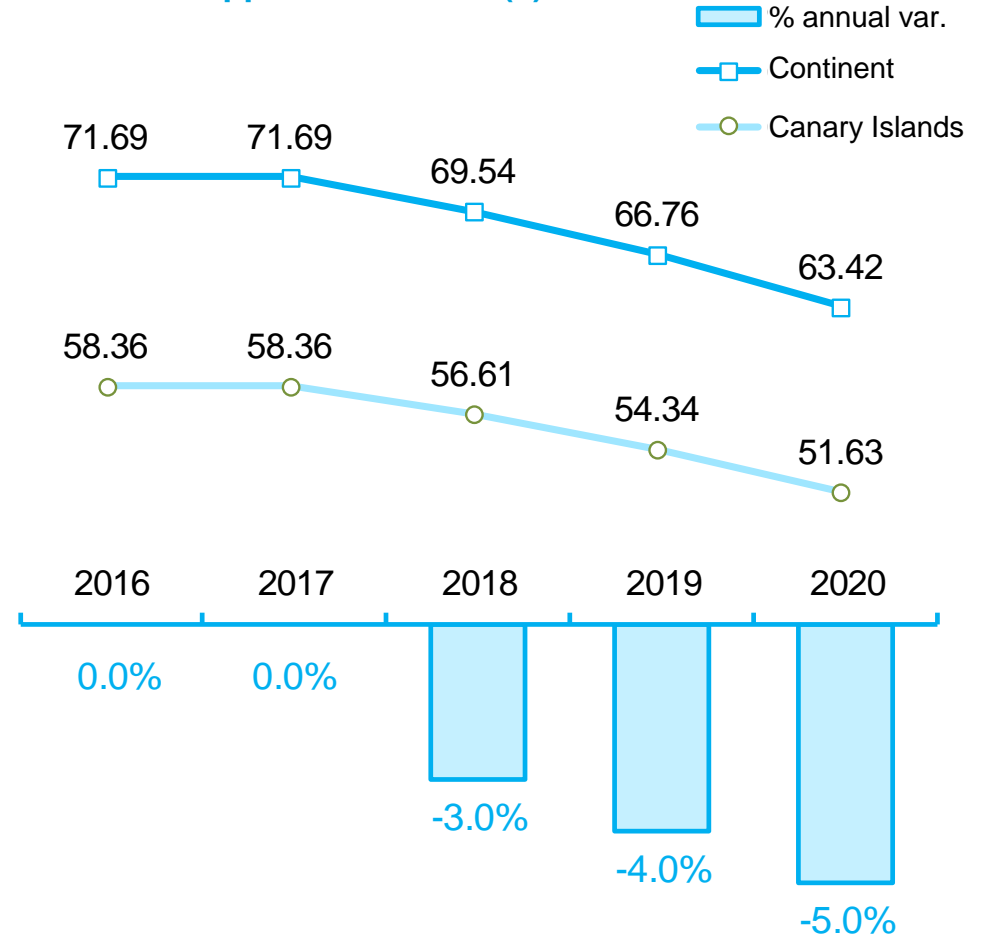
Competitiveness and Efficiency Results

EVOLUTION OF UNIT RATES

ENAIRe will reduce its unit rates by **11.5%** between 2018 and 2020

Savings for air carriers
and therefore, an
improvement to the
competitiveness of
Spanish air transport:
€184 M

Evolution of applied unit rates (€)



TRANSFORMATION MAP

2016

2020

Traffic

300,000 more flights in 2020

From 1.9 million flights to 2.2 million flights

+ 16%

Investment

€300 million of investment in 4 years

Safety

3.67
Weighted safety level

9% + Safer

3.35
Weighted safety level

Capacity and Quality

0.36
Route delay in min/flight

33% + Flights on-time

0.24
min/flight

67.7%
Perceived quality

11% + Valued

75%
Perceived quality

People

Low
Work environment

+ Committed

- Good work environment
- ENAIRE corporate campus

Sustainability

4.03%
Route inefficiency

13% + Ecological

3.50%
Route inefficiency

-190,000
Tn of CO2

Competitiveness and efficiency

2nd lowest
unit rate

11.5% + Competitive

- Lowest unit rate
 - ↑ Provision of international services
- 19% improvement in solvency

Improved Competitiveness
Spanish Air Transport System

€343 million of savings

- Unit rate (€184 M)
- Delays (€134 M)
- Route efficiency (€25 M)

Annex I. Customer Service Plan

PCC5. Customer Service Plan

Strategic objective: To enhance customer orientation in order to improve the perception of the quality of the service provided by ENAIRe.

←

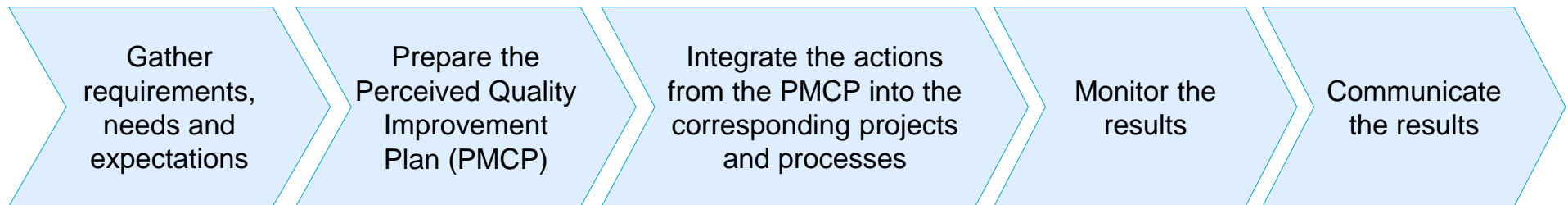
To incorporate our customer requirements into our project planning and the service provision processes.

↓

To raise staff awareness about the importance of focussing their work on customer satisfaction.

↘

To improve the mechanism for communicating results and feeding them back to the customer in order to enhance their perception of ENAIRe.



PCC5. Customer Service Plan

PCC5.1. Services for air carriers Programme

Main lines of action required by companies and pilots

- Contribution to savings in fuel / flight time:
 - ✓ En-route **directs**
 - ✓ Extend **Continuous Descent Operations (CDO)**

- Improvements to service quality:
 - ✓ Improved **approach management**
 - ✓ Improved **management of Low Visibility Procedures (LVP)**

- Improvements in airspace:
 - ✓ Review of the **most inefficient routes**
 - ✓ Proposals for the **use and design of airspace** provided by the companies
 - ✓ Deployment of **PBN manoeuvres**

- Technological renovation projects
 - ✓ Implementation of **clearances via data link (DDCL)**

Annex II. Airspace Capacity and Efficiency Plan

ATM Capacity Programme

- General objectives
- En-Route environment
- Aerodrome environment

PCC1. Airspace Capacity and Efficiency Plan

PCC1.1. ATM Capacity Programme

GENERAL OBJECTIVES

- To respond to the **needs for capacity and efficient quality of service** in an **increasingly demanding** environment.
- **En-Route Environment (Airspace):** Commitment to levels of delay in the Single European Sky during the RP2 period (2016-2019) and forecast for RP3.
- **Aerodrome Environment:** Conditions established in the Document on Airport Regulation (DORA and Aena-ENAIRe Capacity Group), conditions of the Aena-ENAIRe Services Agreement and RP2 and RP3 targets (Arrival ATFM delay per flight).

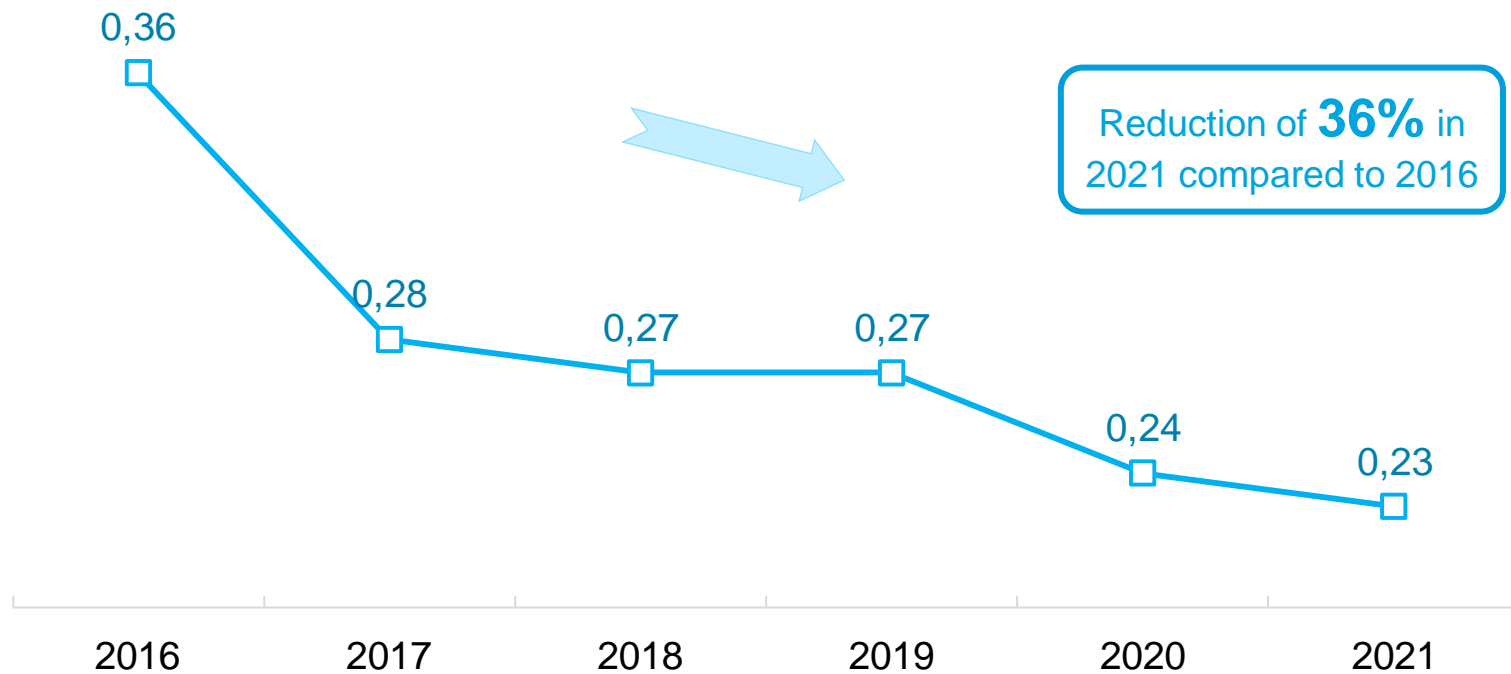
The ATM Capacity Programme will respond to the capacity and quality of service demands in the short- and medium-term

PCC1. Airspace Capacity and Efficiency Plan

PCC1.1. ATM Capacity Programme

EN-ROUTE ENVIRONMENT OBJECTIVES

ENAIRe en-route delay (minutes per flight)



Note: the objectives in the period 2017-2019 are fixed within the Single European Sky (Spain and Portugal joint Performance Plan)

PCC1. Airspace Capacity and Efficiency Plan

PCC1.1. ATM Capacity Programme

EN-ROUTE ENVIRONMENT MAIN ACTIONS

1. Airspace actions

- Redesigning of en-route airspace and improvements to the sectorisation of Madrid (BAMBI), Barcelona (PONENT, BALSE), Palma (MENORCA), Seville, and the Canary Islands.
- Redesigning of the Madrid, Barcelona, and Palma TMAs

2. Improvements to operational procedures

- Implementation of simultaneous independent approaches at Madrid airport
- Implementation of approach procedures based on advanced navigation (Barcelona, Palma, Malaga, Tenerife Sur, Ibiza)

3. Technological Modernisation

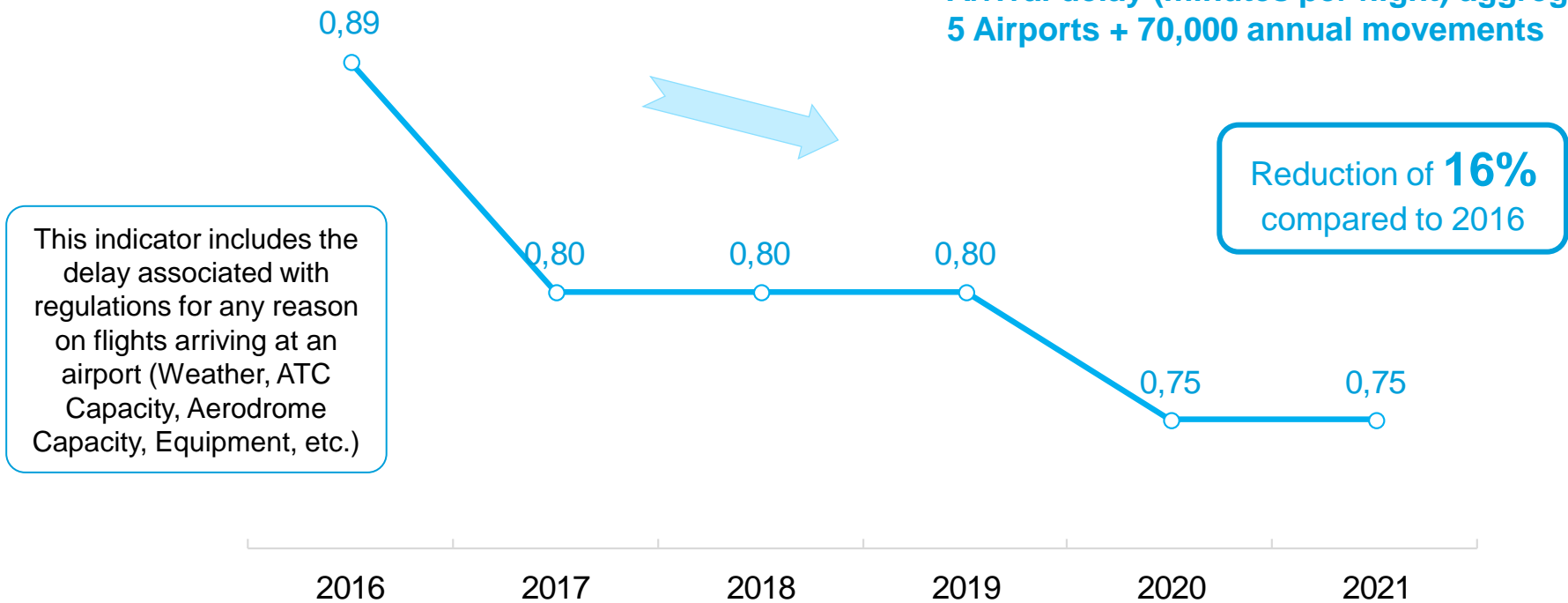
- Improvements to the air traffic management system (SACTA), in joint development with the UK ANSP (NATS) and German ANSP (DFS): iTEC.
- Voice over IP digital support (in all premises)
- Controller pilot Data Link communications

PCC1. Airspace Capacity and Efficiency Plan

PCC1.1. ATM Capacity Programme

AERODROME ENVIRONMENT OBJECTIVES

Arrival delay (minutes per flight) aggregated for 5 Airports + 70,000 annual movements



This indicator includes the delay associated with regulations for any reason on flights arriving at an airport (Weather, ATC Capacity, Aerodrome Capacity, Equipment, etc.)

Note: the objectives in the period 2017-2019 are fixed within the Single European Sky (Spain and Portugal joint Performance Plan)

PCC1. Airspace Capacity and Efficiency Plan

PCC1.1. ATM Capacity Programme

AERODROME ENVIRONMENT MAIN ACTIONS

1. Control tower actions

- Additional taxiing position at the Palma tower
- Optimisation of positions at the Madrid and Barcelona towers

2. Improvements to operational procedures

- Improvement of handover procedures between the tower and control centre at:
 - Madrid, Barcelona, Palma, Gran Canaria, Malaga

3. Technological Modernisation

- Electronic Flight Strips in all premises
- Implementation of Data Link for clearances in Madrid, Barcelona and Palma.
- Improvement of surveillance systems on the surfaces at Madrid, Barcelona, and Palma
- Finalisation of CDM implementation process at the Madrid, Barcelona, and Palma airports
- Integration of other airports to the Eurocontrol network in real time (advanced tower concept):
 - Tenerife Sur, Gran Canaria, Malaga

Airspace Efficiency Programme

- General objectives
- Actions
- Expected benefits

PCC1. Airspace Capacity and Efficiency Plan

PCC1.2. Airspace Efficiency Programme

ACTIONS

Expansion of Free Route Airspace

- **Extension of Free Route Airspace (FRASAI)** to Brest
- Implementation of **direct segments** in Spanish airspace by the end of 2017
- Implementation of **Free Route** operations in Spanish airspace from 2020 onwards

Flexible Use of Airspace (FUA)

Civil-military coordination to allow more flexible options for airspace users:

- Increase in **availability on routes** affected by military activity
- **Implementation/modification of routes** that cross military zones
- **Optimisation of military zones** that allow the marking of more direct routes.

Improvement to the efficiency of the route network

Implementation of **new routes and modifications to current ones** that allow more direct and efficient flight plan routes, aligned with the Eurocontrol European plan and user needs.

Route Environment

New flight procedures via instruments in the inbound and departure stages

Implementation of **new inbound, departure and approach procedures** (conventional and satellite-based), in order to improve the efficiency of the airport surroundings and guarantee continuity of service at the airports.

Aerodrome Environment

PCC1. Airspace Capacity and Efficiency Plan

PCC1.2. Airspace Efficiency Programme

EXPECTED BENEFITS



environmental

2017-2020 Forecast

60,546 tn fuel saved

190,720 tn CO2 saved

5,504,179 nm saved

economic



€25.35 M
via fuel savings

Operations



Facilitate flight planning by reorganising the route availability document (RAD) and the aeronautical publication (AIP)

Performance-based Navigation Programme (PBN)

- General objectives
- Expected benefits
- PBN deployment

PCC1. Airspace Capacity and Efficiency Plan

PCC1.3. Performance-based Navigation Programme (PBN)

GENERAL OBJECTIVES

RNAV 5 routes

Inbound and departure procedures based on GNSS in terminal areas (RNAV1/RNP1)

Approaches based on GNSS (RNP APCH) with vertical guidance (APV)

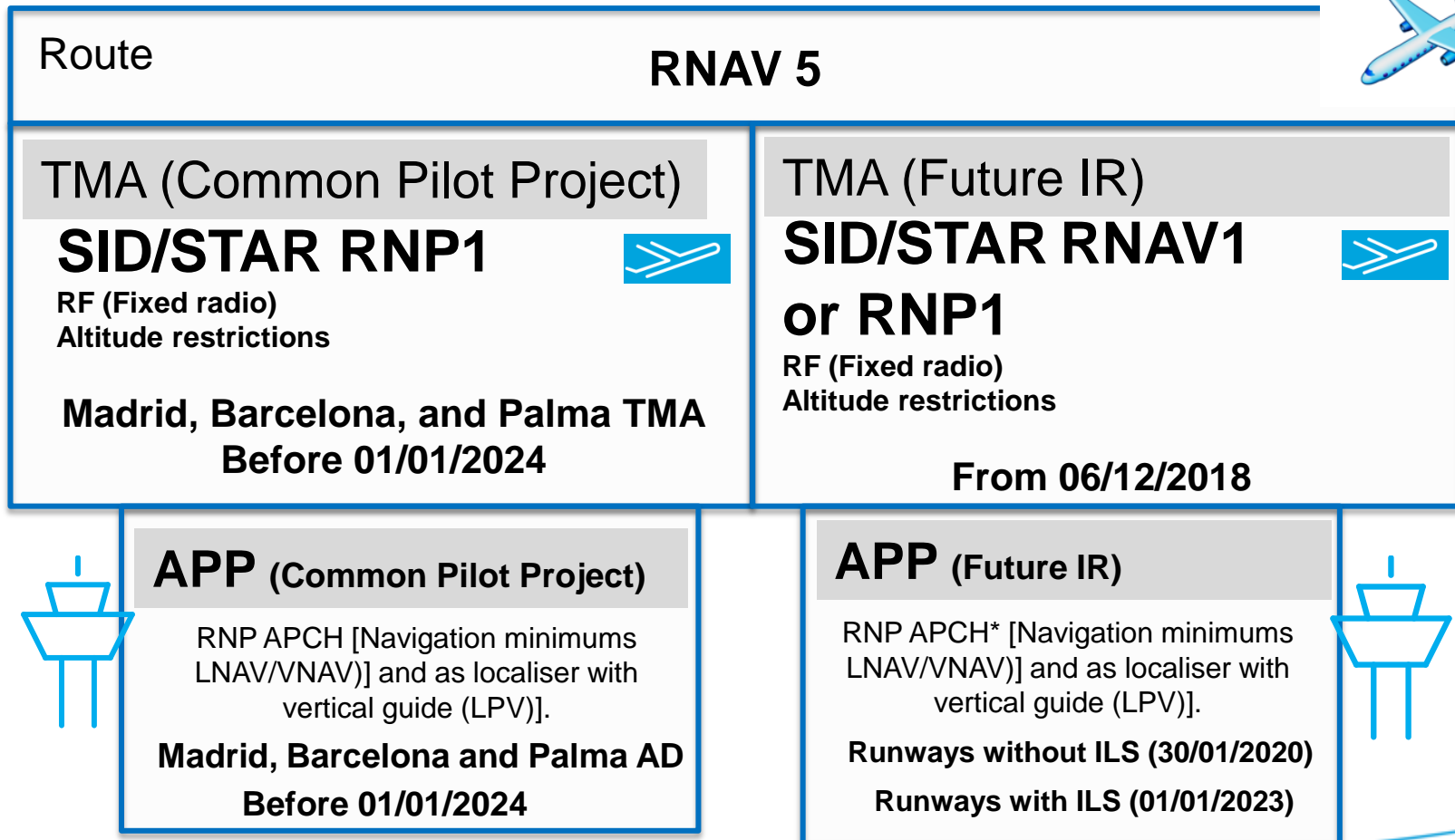
- Mandatory use of RNAV 5 en-route
- Increase in **RNP1 large-scale TMA procedures** (Madrid, Barcelona and Palma)
- **Rest of TMAs** from 6/12/2018 SID/STAR RNAV1 and RNP1
- Deployment plan for RNP APCH approaches adapted to the most **demanded scenarios by users and the PBN National Plan**
- Alignment with the next **European Regulation (PBN IR)** on the obligation to have satellite-based manoeuvres in all instrumental runways without procedures or with non-precision procedures
- **Satellite-based Approaches in Palma de Mallorca, Barcelona, and Madrid** in compliance with the Pilot Common Project (PCP)
- Visual thresholds and thresholds with obstacle penetration in the visual phase of the approach (VSS) are not included in the scope of the Plan

The concept of Performance-based Navigation (PBN) is an evolution from traditional air navigation based on terrestrial radio aids that takes advantage of the capacity of aircraft navigation systems through the use of satellite navigation (GNSS)

PCC1. Airspace Capacity and Efficiency Plan

PCC1.3. Performance-based Navigation Programme (PBN)

PBN DEPLOYMENT



Weather Information Improvement Programme

- General objectives
- Expected benefits

PCC1. Airspace Capacity and Efficiency Plan

PCC1.5. Weather information improvement programme

GENERAL OBJECTIVES

To improve air traffic management in all weather conditions by:

- Improving AEMET predictability
- Improving coordination protocols
- Developing ENAIRe internal measures in collaboration with AESA, AENA and EMA

The Programme for the improvement of weather information aims to provide the system with improved tools that will allow to take better operational decisions.

PCC1. Airspace Capacity and Efficiency Plan

PCC1.5. Weather information improvement programme

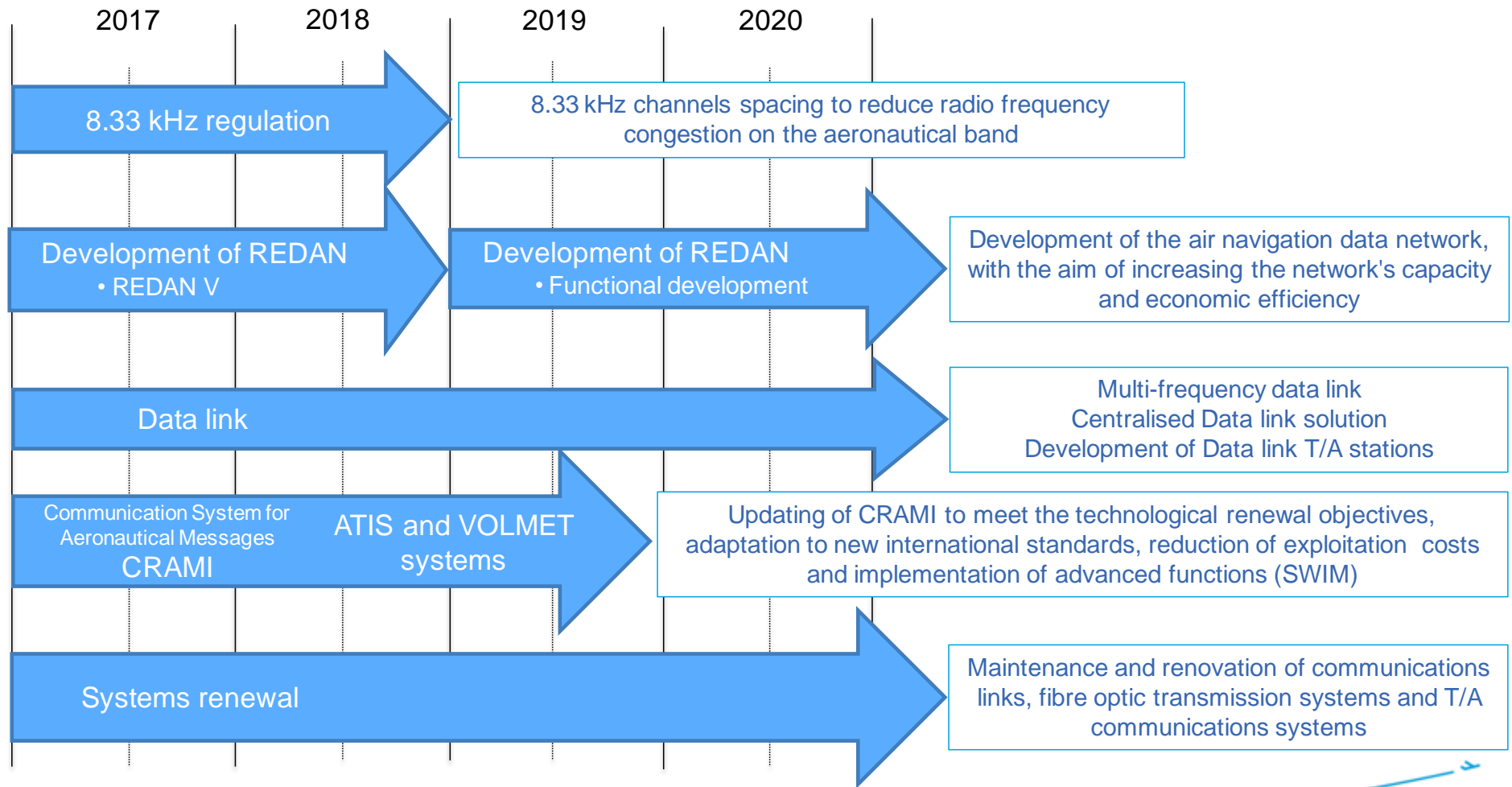
EXPECTED BENEFITS

- **Actions in case of storms**
 - Design of storm forecast tool for TMA.
 - Document on adverse severe weather conditions due to storms.
 - Actions document in case of large-scale diversions.
- **Improvement to predictions and information**
 - Weather briefing tool for Heads of Operations Room.
 - Improvement of interaction with the forecaster.
 - Presence of the forecaster in the ACC.
 - Improvement of weather presentation on the radar screen.
 - Modification of the geographic range of the weather information products: coverage of critical areas of operation.
 - AEMET: Creation of tools for detecting severe meteorological phenomena in accordance with real ENAIRe needs.

Appendix III. Technology Modernisation Plan

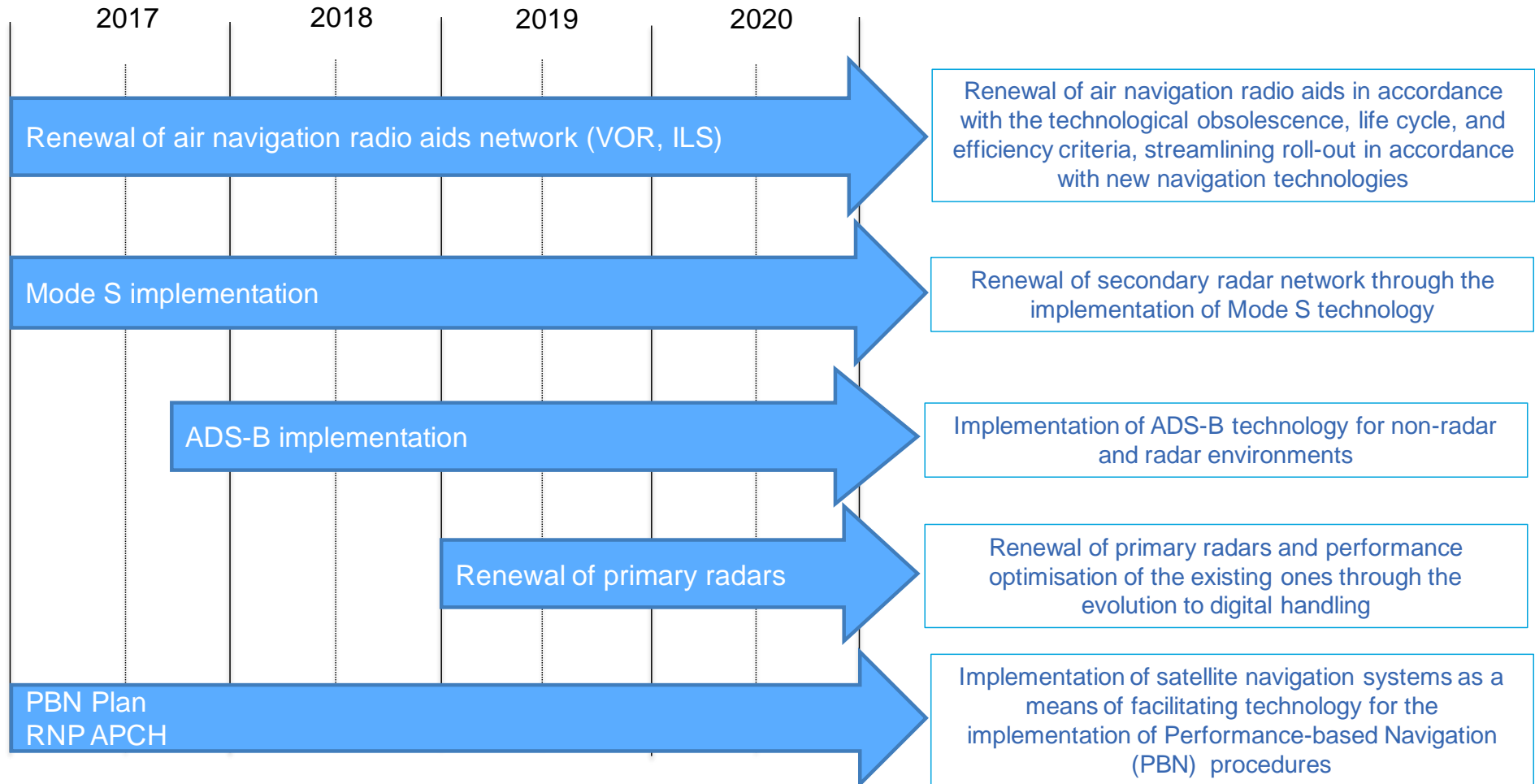
PCC2. Technology Modernisation Plan

PCC2.1. Communications Programme



PCC2. Technology Modernisation Plan

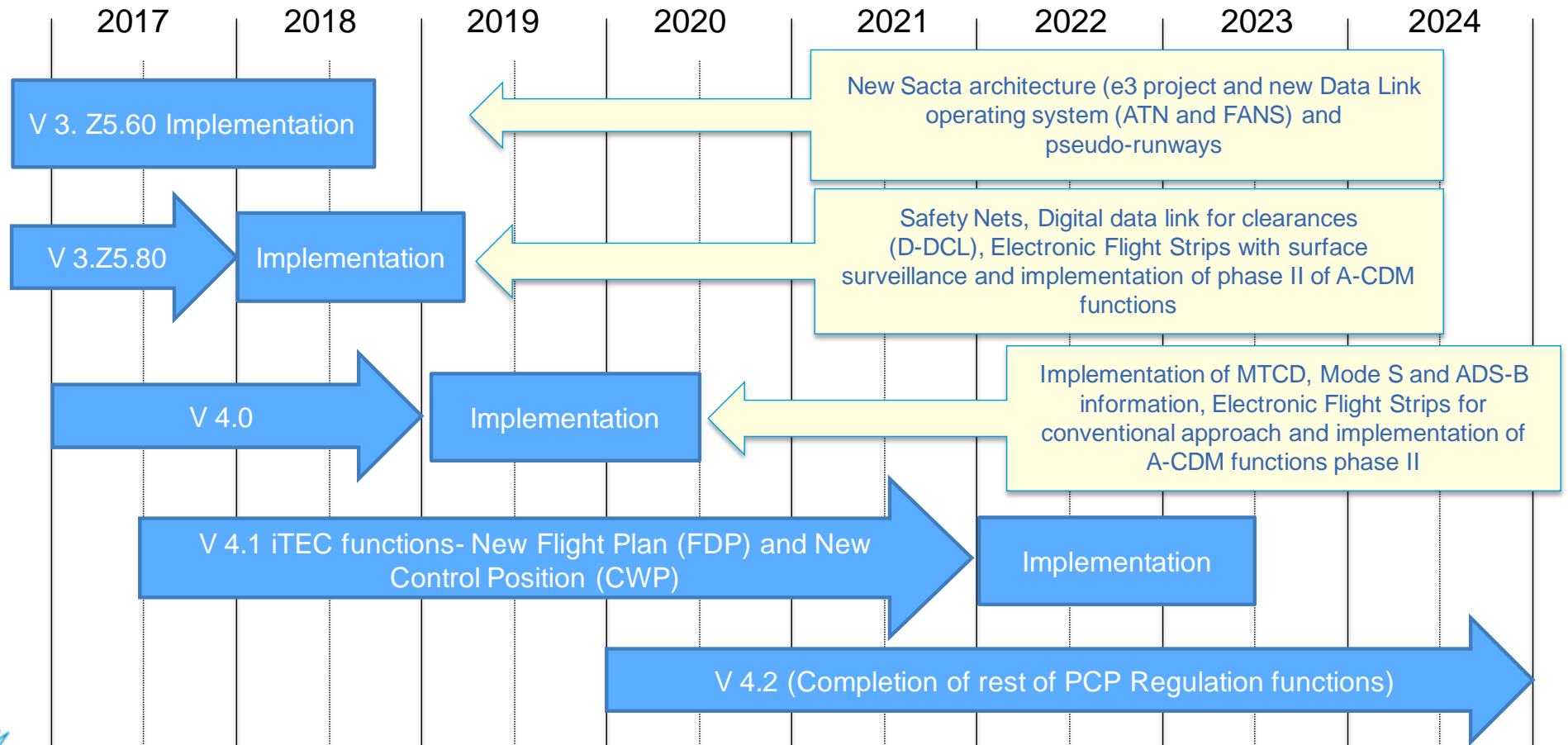
PCC2.2. Navigation and Surveillance Programme



PCC2. Technology Modernisation Plan

PCC2.3. Automation Programme

DEVELOPMENT OF AIR TRAFFIC MANAGEMENT SYSTEM



Annex IV. People Development Plan

Excellency in Control Programme

- General objectives

PP1. People Development Plan

PP1.3. Excellency in Control Programme

The aim of this programme is to **place the control service provided by ENAIRe and its professionals amongst the best ones in Europe**, applying best internal and external practices to provide solutions in the areas identified for improvement.

Areas:

- Selection	- Dynamic management of operations rooms
- Training	- Tools
- Authorisation	- Internal communication
- Procedures	- Systems
- Phraseology	- Airspace
	- Etc.