

#SESARdelivers



SESAR modernisation & benefits From innovation to deployment

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#SESARdelivers



SESAR Joint Undertaking
*delivered **130+** solutions*



*More than **50%**
deployed*



*Nearly **40%**
under
industrialisation*



More innovation in the pipeline

Digital European Sky programme

78

projects in operation

Connected and automated ATM



Air-ground integration and autonomy



Multimodality and passenger experience



9

flagships

Capacity-on-demand and dynamic airspace



Aviation Green Deal



U-space and urban air mobility



EUR 600

million investment

Artificial intelligence for aviation



Virtualisation and cyber-secure data sharing



Civil/military interoperability and coordination



Make Europe the most efficient & environmentally-friendly sky to fly in the world by 2045

Next SESAR Solutions to deploy by 2035



**ALERTS FOR REDUCTION
OF COLLISION RISKS ON
TAXIWAYS & RUNWAYS**



**OPTIMISING AIRPORT AND
TMA ENVIRONMENTAL
FOOTPRINT**



**DYNAMIC AIRSPACE
CONFIGURATION**



**INCREASED
AUTOMATION SUPPORT**



**TRANSFORMATION TO
TRAJECTORY-BASED
OPERATIONS (TBO)**



**VIRTUALISATION
OF OPERATIONS**



**TRANSITION TOWARDS
PERFORMANCE OF
AIR-GROUND
CONNECTIVITY
(MULTILINK)**



**SERVICE-ORIENTED
DELIVERY MODEL
(DATA-DRIVEN AND
CLOUD-BASED)**



**CNS OPTIMISATION,
MODERNISATION
AND RESILIENCE**



**ENABLE INNOVATIVE
AIR MOBILITY (IAM) AND
DRONE OPERATIONS**



Master Plan implementation – new exploratory and industrial research calls

SESAR JU launches
EUR 254 million
in research calls to shape the future of
European air traffic management



EUROPEAN PARTNERSHIP

 Co-funded by
the European Union

sesar
JOINT UNDERTAKING



EXPLORATORY RESEARCH CALL

Fundamental research

EUR 10 M

Applied research (WA2)

EUR 14 M



INDUSTRIAL RESEARCH CALL

Industrial research

EUR 230 M

TOTAL AMOUNT = EUR 254 M



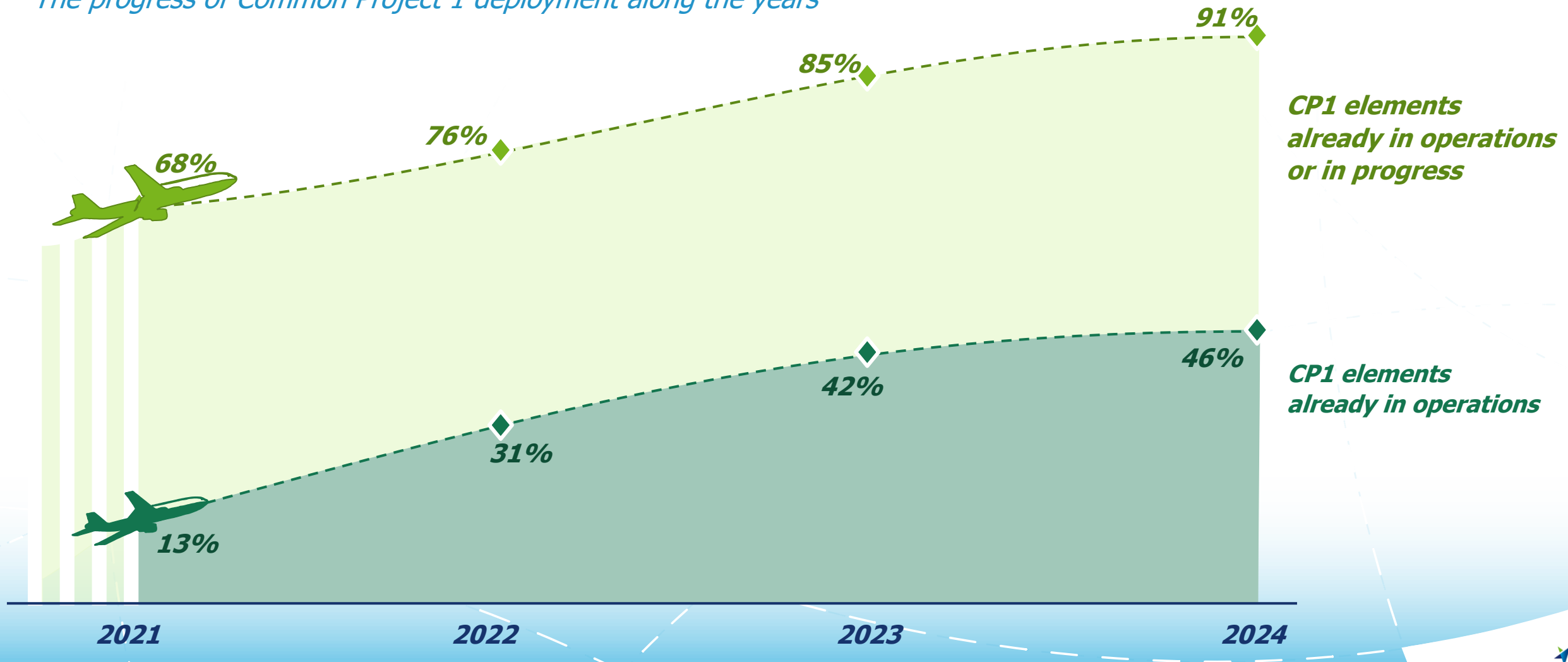
***SDM has supported
stakeholders in
completing
318 projects so far***



+100 Partners over 35 Countries

Deploying Common Project 1 as the baseline for the evolution of ATM in Europe

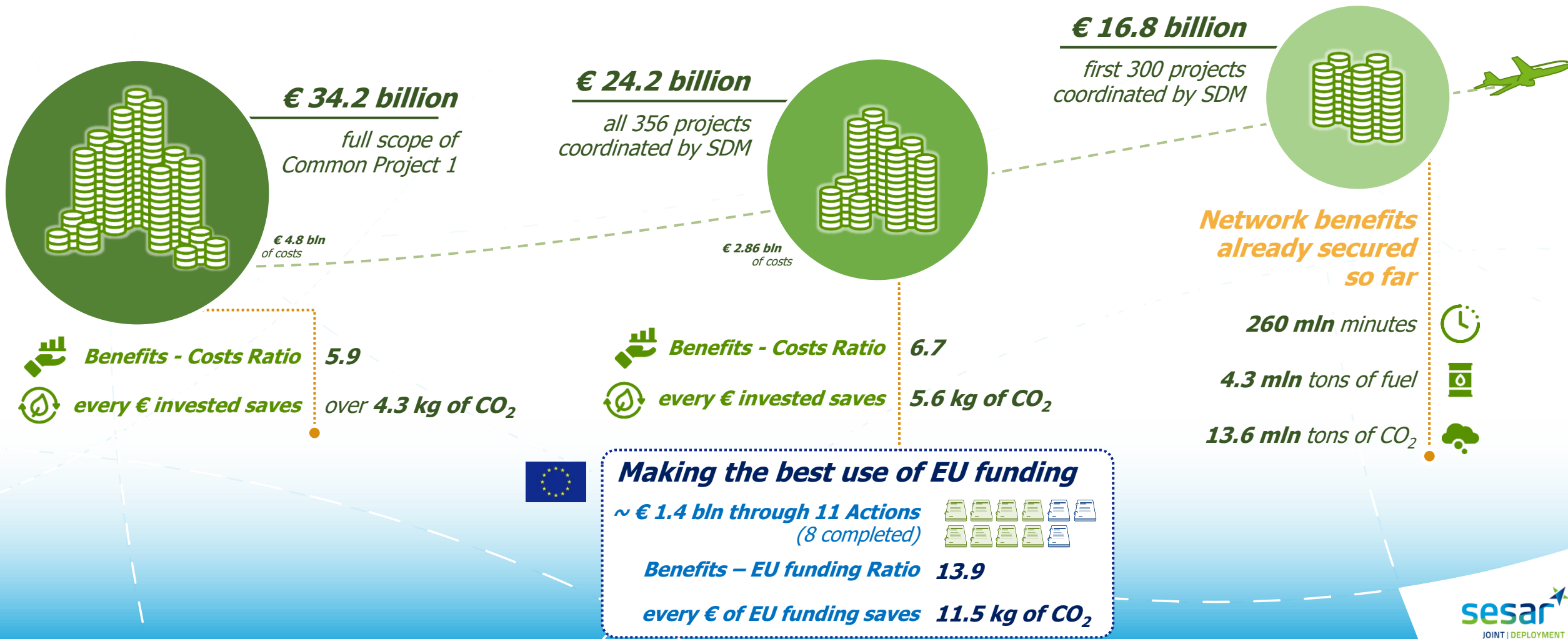
The progress of Common Project 1 deployment along the years



The performance benefits of CP1 deployment

Benefits of deploying Common Project 1 are massive and greatly outweigh its costs.

Already **by 2023**, every € invested in CP1 returned **benefits for over € 1.5**, and the **numbers keep rising**



CLEAN ATM and GREEN CNS – the two major ATM multistakeholder initiatives under CEF 2

IN EXECUTION
(October 2023 and 2024)

CLEAN ATM 1 and 2

**CP1 DEPLOYMENT: SYNCHRONISED
MODERNISATION OF ATM**

12 Projects covering 20% of CP1

over **€ 295 mln** overall investment
deploying **AOP** and **AOP-NOP**,
cross-border **FRA**, and **SWIM**



GREEN CNS

IN EXECUTION
(October 2024)

**INTEGRATED MODERNISATION
OF THE EUROPEAN NETWORK FOR CNS**

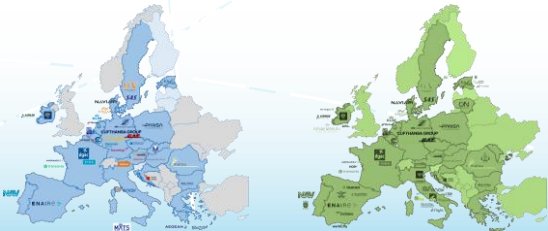
- **4 COM, NAV and SUR** projects
- around **€ 80 mln** investment,
supporting **DLS + AOC offload**,
SBAS+PBN and **ADS-B** deployment



CLEAN ATM 3 and GREEN CNS 2

JUST SUBMITTED
(January 2025)

- Other **7 multistakeholder projects**, for a **total investment of over € 270 mln**
- Kickstarting **Initial Trajectory Information Sharing**, the **first gateway towards TBO**
- Boosting both the **evolution of the European CNS infrastructure** and the **U-Space adoption**



Demonstrating the value of working together

#AsOne team on #SESARdelivers



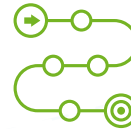
Departure management



High-performing information exchange



*Airspace management/
Use of airspace*



*Short-term capacity and flow
management*



Free route



Collaborative network operations plan



Cross-border free route



Airport operations plan



Network collaborative management



Civil-military collaboration

Efficient Free Route Airspace for Europe

In brief

Controller tools and harmonised infrastructure for implementing free route airspace across Europe



Benefits

5 million tonnes less fuel
=15 million tonnes less
carbon dioxide by 2030



Excellent **cooperation**
between different
stakeholders from
across the community.



EU funding is essential

Shorter, more **predictable,**
stable trajectories.



A new era of Civil-Military collaboration

In brief

Tools, processes and procedures to allow military and civil traffic to share the skies ensuring safety, security, efficiency and flexibility



Benefits

Better coordination
between **civil and military**
Airspace Users



The Airspace remains a
common resource,
and can be flexibly
used **for military or**
civil purposes



Improved **airspace**
capacity, less congestion
and less need
for flight diversion
(less fuel and CO₂)



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