European Commission

2030- 2050

SMART & SUSTAINABLE
EU AVIATION

Evolution of the European CNS infrastructure

WAC. 22 June 2022

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DG MOVE

Mobility and Transport

Enlarged CNS Advisory Group

Mandate:

- Develop recommendations to ensure the best possible **organisation, management and implementation** of a CNS infrastructure, based on the high-level principles endorsed by the High level group on SES implementation (May 2020)

Composition:

- Experts from 7 European organisations
- Enlarged in June 2021 with representatives from CANSO, IATA/EBAA, ACI, ICB chair and EGHD chair (PSOs)
- Chaired by DG MOVE

Methodology

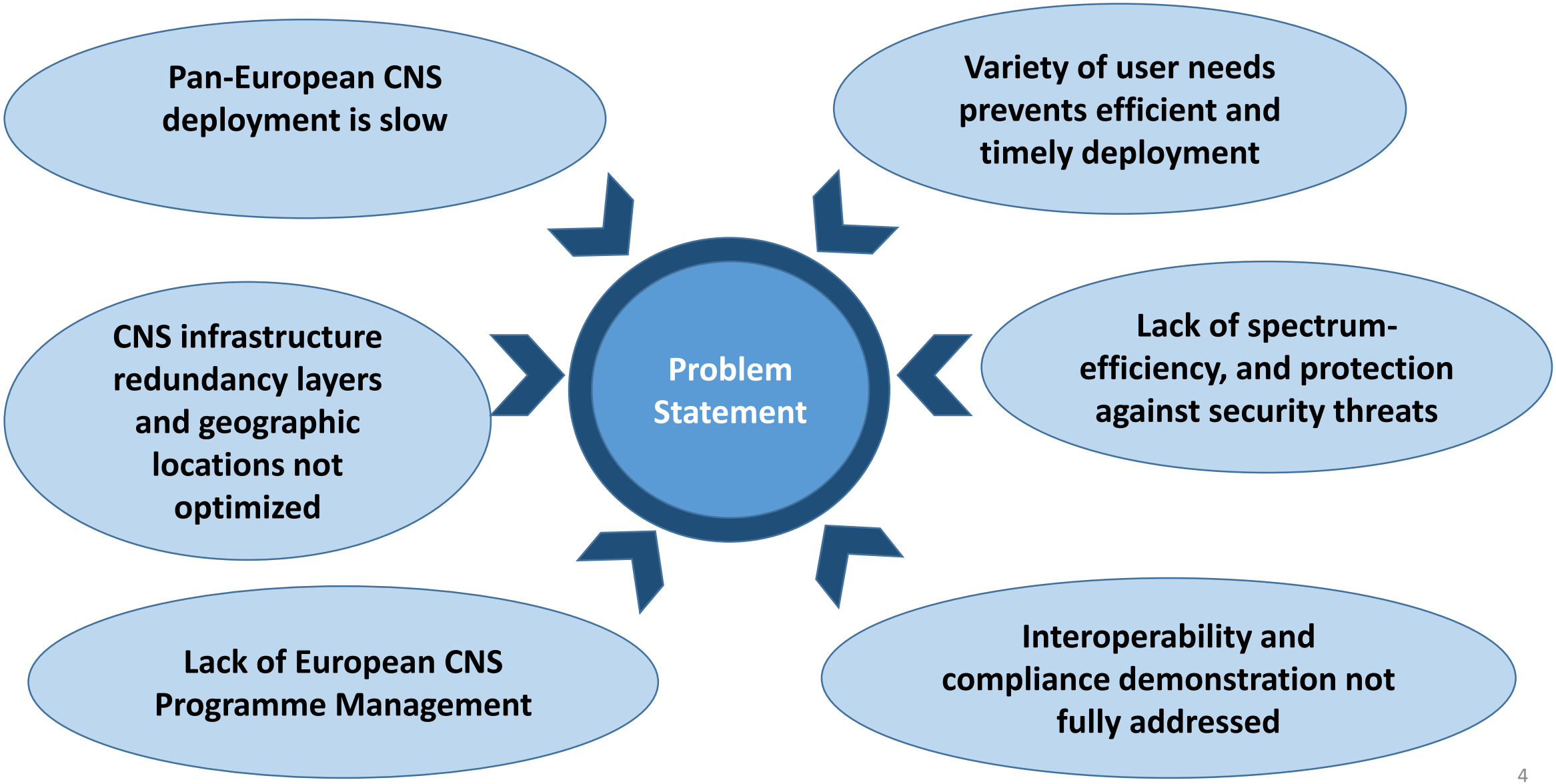
Problem Statement

12 Recommendations

18 Actions

Consultation with stakeholders at expert level
(CNS workshops)

Problem statement



Recommendations

- ❑ CNS evolution plan with decision milestones.
  - ✓ Cost efficiency: Rationalisation not compromising safety and security
  - ✓ Service oriented and performance based
  - ✓ Integrated CNS+ Spectrum
  - ✓ Reduce green house emissions
  - ✓ Security
  - ✓ Human dimension
  - ✓ Global dimension
  - ✓ Civil Military dimension

- ❑ Demonstrate interoperability of air-ground-space infrastructure before deployment

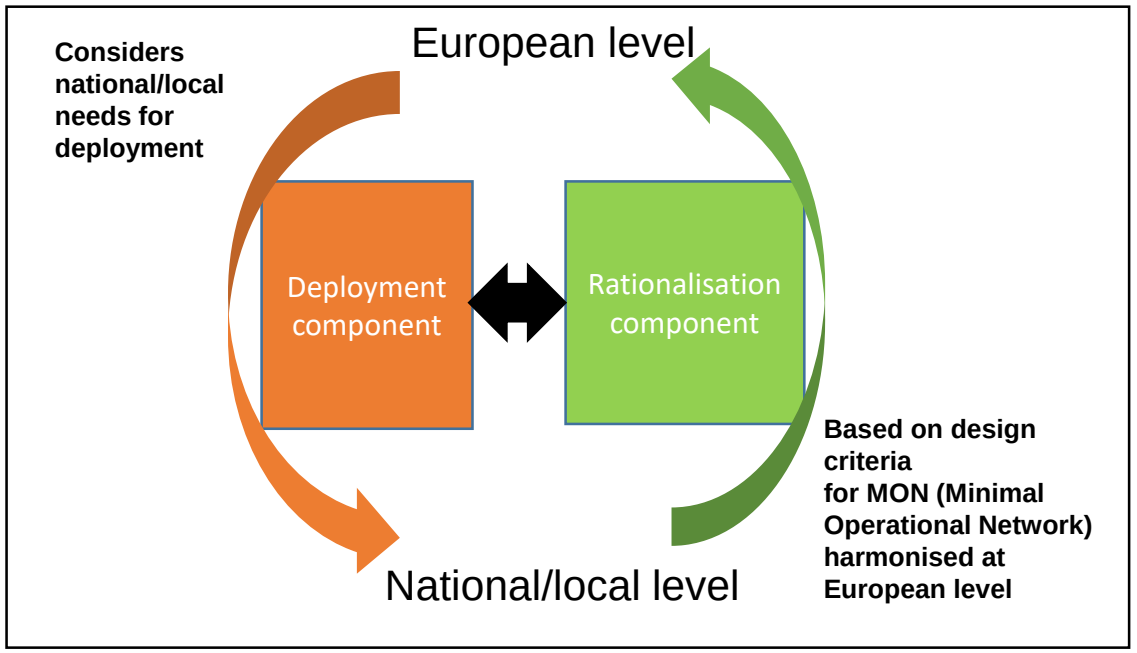
- ❑ Business case and incentives scheme

- ❑ Smarter approach on regulations

- ❑ CNS programme manager

CNS evolution plan

CNS Infrastructure: Airborne + Terrestrial + Satellite infrastructure



COMMINCATION

- From basic datalink (VDL-2) towards Future Communication Infrastructure enabling advanced datalink
- Towards Internet Protocol backbone and SWIM

NAVIGATION

- Rationalised conventional infrastructure
- Towards PBN and GBAS

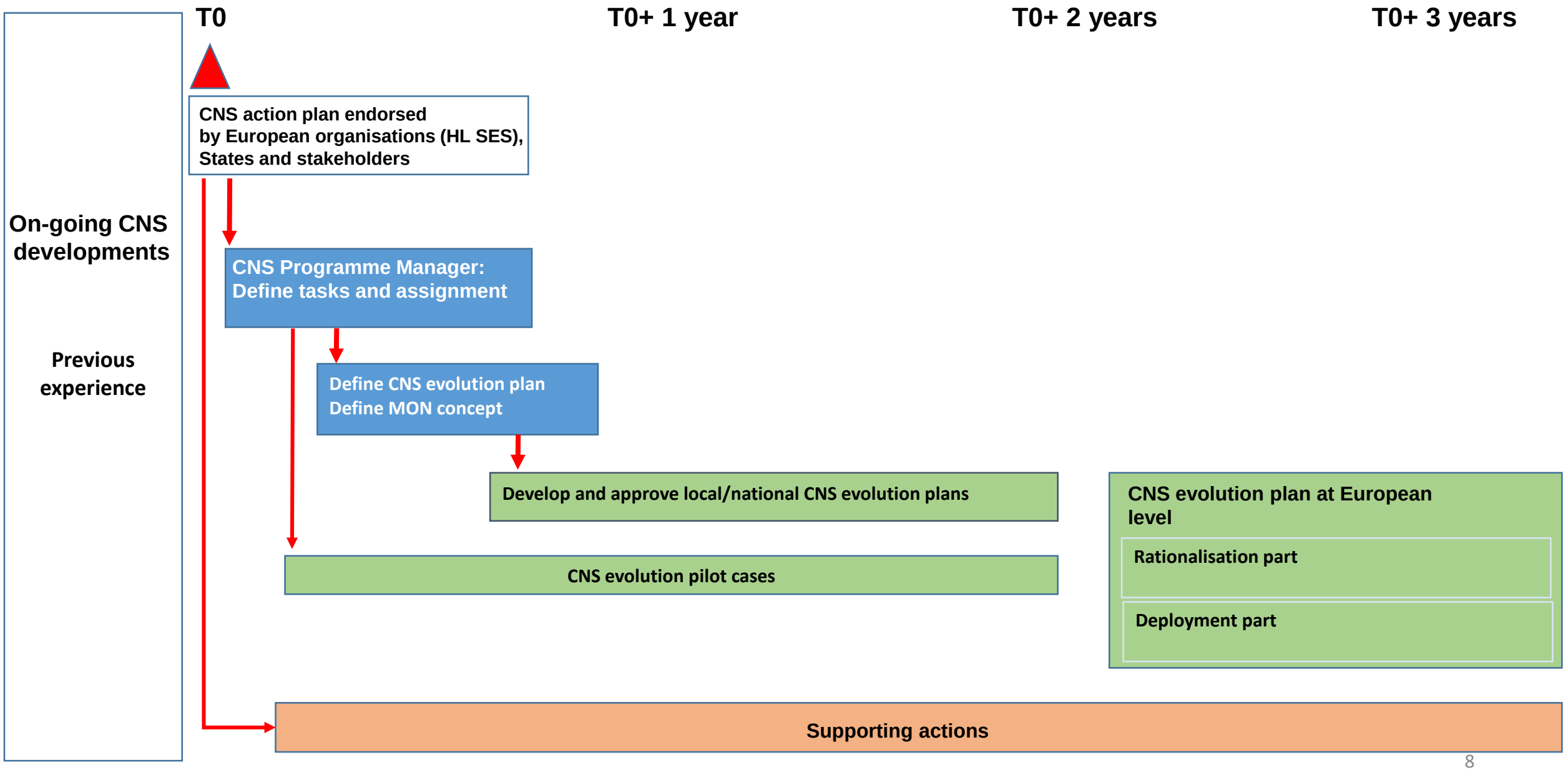
SURVILLANCE

- Towards optimal mix of systems (e.g. radars and ADS B)

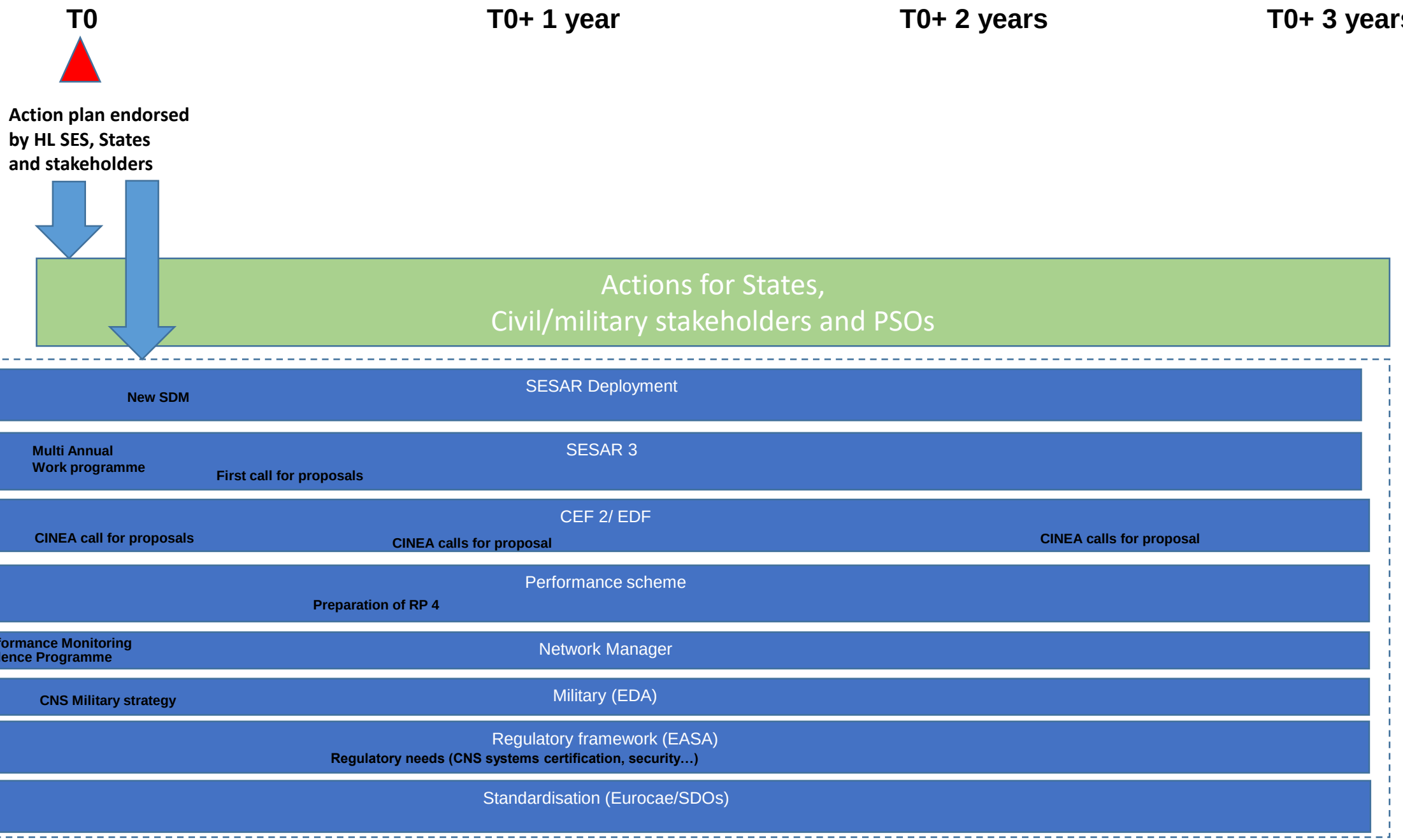
From a patchwork of national systems towards a European approach

Back up slides

CNS Action Plan: next steps



Next steps: Integrate the CNS Action Plan into work streams of all actors.



Proposal for tasks of a CNS Programme Manager

Prepare & manage CNS Evolution Plan

- deployment and rationalisation
- MON design criteria
- decision-making milestones
- align European and local plans
- maintain, monitor plan, keep risk register (anticipate issues)

Cooperative processes

- consultation
- decision-making processes
- responsive to unique needs and limitations of actors

Support stakeholders

- EC (incentives schemes, long-term EU Spectrum Strategy)
- Stakeholders (local business cases, design MON, local rationalisation)

Ensure drivers are incorporated to CNS Evolution Plan

- Performance-based
- Spectrum, environment, safety, and security
- Local and European dimension
- air-ground-space synchronisation

Coordination tasks

- SJU (single innovation cycle)
- SDOs (close maturity gap, end-to-end interop tests)
- EASA (certification/approval)
- ICAO, FAA (global interoperability)

CNS workshop on 28 April 2022

- A well-attended event: 420 people connected. 520 registered.
- Speakers: Experts from enlarged CNS Advisory Group

Appropriateness of the consultation process	**86 % agree** / 14 % disagree
Support to the CNS Programme Manager function	**90 % agree** / 10 % disagree
Clear description of the Actions	**57 % agree** / 43 % disagree
Clear responsibility for the Actions	**41 % agree** / 59 % disagree
Effectiveness of the Action Plan to make progress in CNS	**80 % agree** / 20 % disagree