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# Status of NAT Vision Implementation

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# The Vision



# Vision

- 'vɪʒ.ən
- **an idea or mental image of something**
- *Cambridge Dictionary*



# Vision

Through collaboration, **we** lead the way in the provision of safe Oceanic Air Traffic Management Services by leveraging emerging technologies in the North Atlantic in order to realize maximum efficiencies and ensure optimized seamless airspace provision.



# NAT ~~2030~~ Vision High-Level Principles



- a) Respond to changing traffic profiles in a safe, efficient and sustainable manner based on agreed performance based measurable criteria. Meet, and where possible, exceed the NAT Safety Targets.
- b) Enhance and develop the NAT airspace to safely and effectively integrate all anticipated airspace users, while aligning with the Global Air Navigation Plan (GANP) and Global Aviation Safety Plan (GASP), as required.
- c) Utilise operational and technological developments to improve safety, service delivery and efficiency of operations.
- d) Implementations should be based on business analysis encompassing safety, service and environmental benefits, cost and practicality.
- e) Include all stakeholders, and, when relevant, military authorities, in a collaborative decision making process to effect change.



# NAT ~~2030~~ Vision Goals and Objectives



Goals	Objectives
<p>Goal 1 - Ensure as far as possible that all <b>NAT</b> developments are implemented in the context of “seamless boundaries”, <b>within the NAT and with adjacent regions</b></p>	<p><del>Take full account of the other regional environments such that we have seamless operational boundaries</del> All stakeholders will be engaged in the development and implementation of the Development Roadmap to ensure all operational and technical capabilities are appropriately Exploited implemented in a seamless manner</p>
<p>Goal 2 - Enhanced resilience and predictability of the NAT wide operations</p>	<ol style="list-style-type: none"><li>1. Weather and other operational impacting events are managed through appropriate and agreed plans with minimum of operational impact.</li><li>2. That operations consistently adopt across the NAT, new advanced tools to enhance proactive management of potentially operational impacting events.</li><li>3. The NAT Contingency procedures shall be continually reviewed to take account of the developing understanding of advancements in aircraft/new entrants technical resilience.</li><li>4. Resilience of communications infrastructure is ensured.</li></ol>



Goals	Objectives
<del>Goal 3—Continued cooperation with all adjacent regions and industry wide stakeholders to achieve seamless boundaries (repeated)</del>	<del>All stakeholders will be engaged in the development and implementation of the Development Roadmap to ensure all operational and technical capabilities are appropriately exploited</del>
Goal 4 - <del>The</del> NAT operations take account of both the prevailing and forecast operational and stakeholders capabilities, and implements proportionate performance based outcomes	<ol style="list-style-type: none"><li>1. New technology will be supported by an agreed Concept of Operations and a safe and cost effective solution</li><li>2. The NAT will optimise utilisation of current capabilities whilst ensure all new developments do not inadvertently impact prevailing capabilities</li><li>3. The development roadmap will be continually validated to ensure it remains relevant</li></ol>
Goal 5 - The NAT technology roadmap is aligned to the <del>predicted</del> practical capabilities <del>that will exist to 2030</del>	Maximised benefits from available technologies
Goal 6 - Safety, Service, Value and Environment benefits are measurable using representative metrics and are part of not only the business case for all developments but are used to monitor the NAT performance.	Performance based metrics and meeting the NAT safety targets, including TLS, as well as any other future performance targets



# NAT ~~2030~~ Future Roadmap



# Roadmap

- 'rəʊd map
- **a plan or strategy intended to achieve a particular goal.**
- *Oxford Dictionary*



*All the potential areas of improvement, with corresponding priority, feasibility and timeline, would integrate the eANP as the **NAT Future Roadmap**, not until 2030 but in a rolling 10 year period. (2023-2033, ...)*

*This would be considered separate from the NAT Vision, addressed only at the SPG level.*



# Roadmap Proposed Changes

- *Goal 1*
- **1-2 Prepare for ATN B2**
  - *On the Roadmap but no discussion so far on potential benefits or if its something to pursue, only an update so far on current status. Too soon to be listed?*
- **1-3 Reduce the footprint of the OTS (lateral, vertical and time period)**
  - *Timeline should probably be updated beyond 2026*



# Roadmap Proposed Changes

- *Goal 1*
- 1-5 Only apply speed restrictions when needed for separation (OWAFS) (work already in progress)
  - *Waiting for OCR in 2024 but in practical terms is complete (stated as implemented). At what point is an item removed from the Roadmap?*
- 1-6 Discontinue oceanic clearances
  - *Update to 2024*



# Roadmap Proposed Changes

- *Goal 1*
- **1-7 Strategic vs Tactical control/Reduced conflict probe horizon**
  - *Propose to remove. Oceanic control should be both strategic and tactical, with probe horizon being an ATC tool to serve that objective. Currently it's already implemented and there is no clear purpose in removing the strategic part of conflict probing and detection or to define a specific limit.*
- **1-8 Dynamic Airborne Rerouting Procedure DARP**
  - *Are current limitations to the use of DARP in the NAT? If not, propose to remove*



# Roadmap Proposed Changes

- *Goal 1*
- **1-9 Consider RVSM above FL410**
  - *Propose to update timeline. Work is not NAT specific, and will take much longer than 2023*
- **1-10 Consider formation flights**
  - *Does a project from a stakeholder immediately qualifies as a part of the NAT Roadmap? Discussions in all groups do not provide clear indication that it's an intended way forward and part of the NAT Roadmap*
  - *Same rationale for 1-11 SELF-SEPARATION. Only initiative in the past had no consequence in operations and no discussed new initiatives for the future. Propose to remove.*



# Roadmap Proposed Changes

- *Goal 2*
- **2-7 Ensure systems cybersecurity and resilience.**
  - *Attributed to NAT groups. Discussions at all groups indicate expertise is not there to address the issue. Seems to be more national responsibility with limited updates provided to ICAO.*
- **2-8 Consider space weather factors as part of contingency procedures.**
  - *Included in Doc 006. Propose to remove as it is completed.*



## Main points:

- *Separate Vision from Roadmap*
  - *Vision, High Level Principles, Goals, Objectives, at SPG level*
  - *Roadmap at IMG/SOG/EFFG level*
- *Make the Roadmap a dynamic 10 year document*
- *Criteria to add an element to roadmap (discussion, agreement, or just what might be eventually a project, e.g. Formation flights)*
- *Items to be worked by NAT groups or also outside structure as part of Roadmap (e.g. cybersecurity)*
- *Global or other Regions issues as part of Roadmap (e.g. RVSM 410)*



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**THANK YOU**