









# UAE's NANP Progress

Second Meeting of the RANP/NANP Task Force  
(RANP/NANP TF/2)

(Cairo, Egypt, 17 - 19 February 2025)



## Update Since Last Meeting

- Recalling that the RANP/NANP Task Force was established by MIDANPIRG, through Decision 20/12:
  - MIDANPIRG DECISION 20/12: RANP/NANP TASK FORCE That,
    - a) RANP/NANP Task Force be established to ensure alignment of the MID Region Air Navigation Strategy and MID ANP Vol III with the latest edition of the GANP and assist States developing NANPs;
    - b) the terms of reference of the RANP/NANP Task Force be developed during the first meeting of RANP/NANP Task Force; and
    - c) States support the RANP/NANP Task Force through: i. assignment of Focal Point to contribute to the work of the Task Force; and ii. sharing states' experience and provision of required data in timely manner.
- Recalling that MIDANPIRG, through Conclusions 20/9 and 20/11, urged States to implement the **Performance-Based Approach (PBA)** and provide the ICAO MID Office, with relevant data necessary for the development of the MID Region Air Navigation Report – 2024. As a follow-up action to the above-mentioned Conclusions, the ICAO MID Office issued State Letter Ref.: AN 1/7 – 24/185 dated 28 November 2024 to collect the following information and updates from MID States:
  - a) update on the status of implementation of the priority 1 ASBU Threads/Elements;  
  - b) progress achieved in the implementation of the PBA and development of State NANP, by completing the Questionnaire at Appendix 4A; and  
  - c) State's major achievement(s)/success story(ies) in the air navigation field in 2024 (Total of 8 success stories).  



## NANP Development

- The meeting noted that, although Kuwait, Saudi Arabia and UAE have used the recommended ICAO 6 step approach for the development of their NANP, they used different methodologies for the implementation of the PBA and they endorsed different structures/layouts of the NANP.
- The meeting noted that the NANP is dynamic; it could be a combination of multiple documents, a web portal, a phone application, etc.
- The meeting agreed on the importance of automated processes/tools for the development and implementation of NANP; and monitoring and reporting purpose.
- The meeting recalled that the GANP & NANP Workshop (Cairo, Egypt, 5-8 March 2023) identified the following challenges related to the implementation of PBA:
  - a) Lack of understanding of the performance based approach and its benefits and necessary coordination between all stakeholders at National level; b) Lack of automated tools to collect the data necessary for the measurement of the ANS Performance (KPIs);
  - c) Lack of historical data in some States; d) Lack of human and financial resources in some States; e) Lack of guidance related to the implementation of the 6 step approach and development of the NANP.



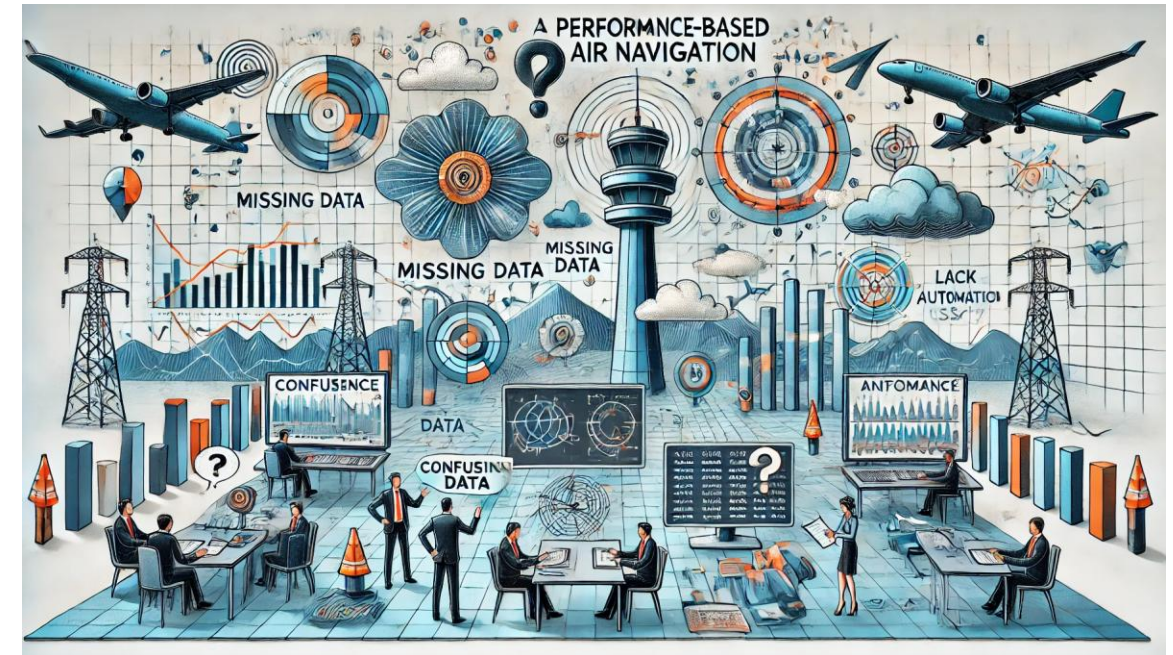




# Challenges in UAE's NANP Development Using PBA

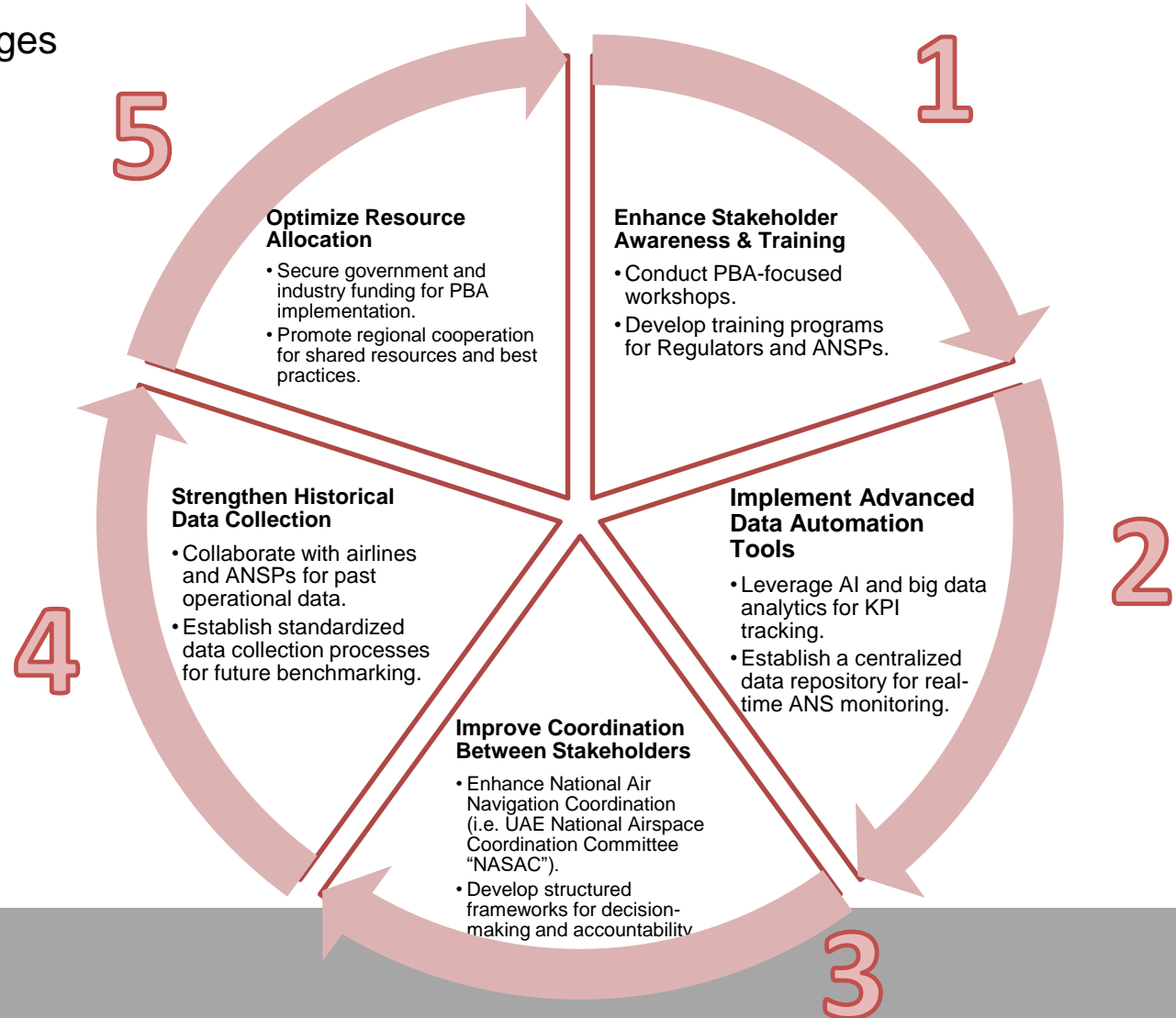
## Key Issues Faced

- **Lack of Understanding of PBA Concepts**
  - Stakeholders may not fully grasp the benefits and requirements of PBA.
  - Resistance to change from traditional prescriptive approaches.
- **Absence of Automated Tools for KPI Measurement**
  - Limited tools to track ANS performance.
  - Data collection remains manual, leading to inefficiencies.
- **Insufficient Historical Data**
  - Limited availability of past performance metrics.
  - Challenges in establishing reliable benchmarks.
- **Coordination and Stakeholder Engagement**
  - Complexity in aligning various aviation stakeholders (GCAA “The ANSP/Regulator”, airports, ANSPs, airlines, military).
  - Potential conflicts in prioritization of airspace and capacity planning.
- **Resource Constraints**
  - Need for financial investment in automation, training, and infrastructure.
  - Shortage of skilled personnel to manage data-driven performance analysis.



# Mitigation Strategies for Effective NANP Implementation

Addressing UAE's Challenges

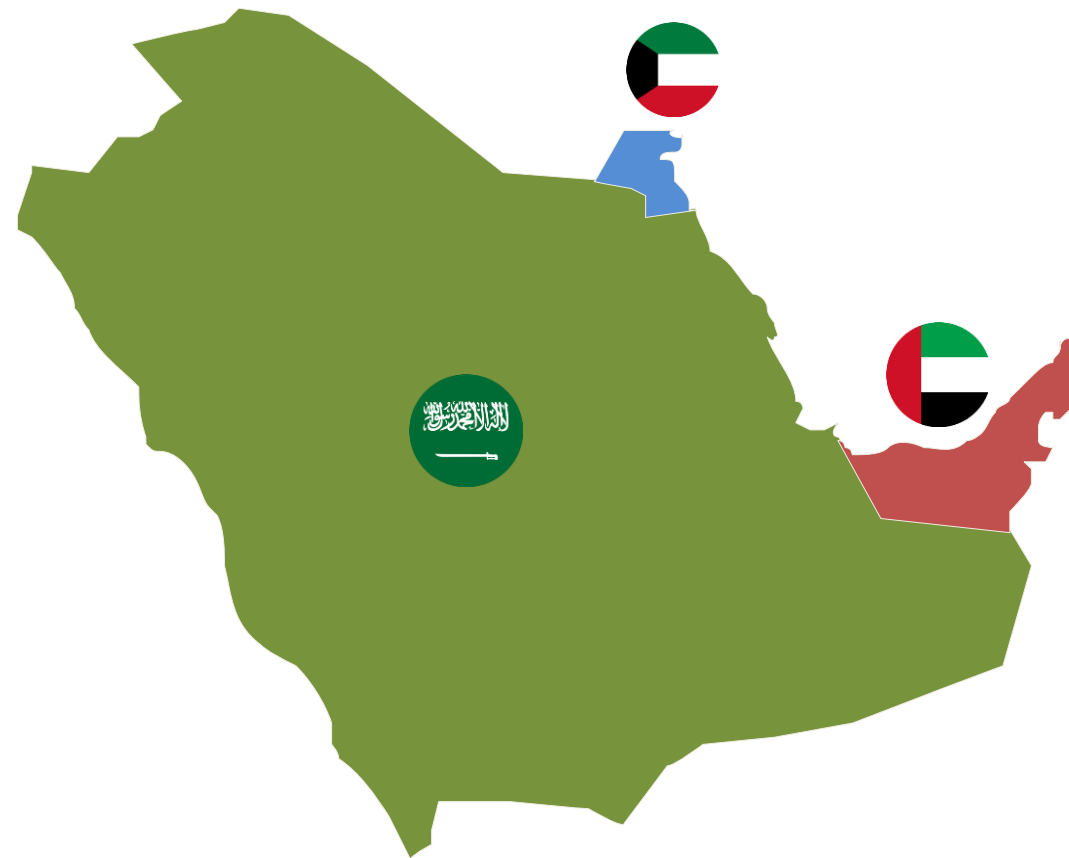




## Alternative Methodologies for Different States

Customizing NANP Development Based on National Needs:

- **Kuwait, Saudi Arabia, and UAE Approaches**
  - Different methodologies used for **PBA**.
  - Variability in structure and format (e.g., documents, web portal, mobile app).
- **Options for NANP Structuring:**
  - *Centralized Document-Based Approach:*
    - Traditional method, easier to reference but less flexible.
  - *Digital & Web-Based Portals:*
    - Dynamic, regularly updated, allows for interactive KPI monitoring.
  - *Mobile Application for ANS:*
    - Real-time updates and accessibility for stakeholders.
- **Tailoring NANP to National Priorities**
  - *Traffic Volume Considerations:*
    - High-traffic states (e.g., UAE) may require real-time dynamic monitoring.
  - *Regulatory Framework Adaptation:*
    - Align with national aviation policies while maintaining ICAO compliance.
  - *Integration with Future Technologies:*
    - Adoption of AI, blockchain for aeronautical data integrity.

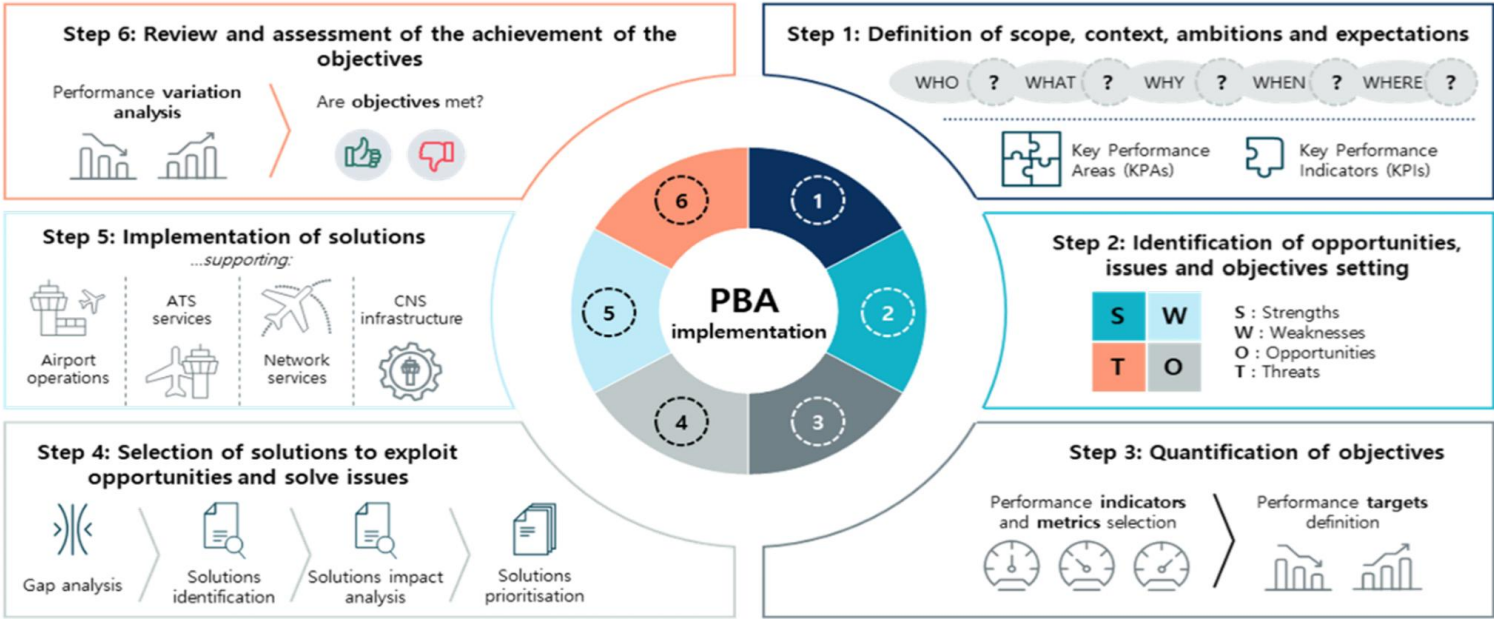




# Understanding ICAO's 6 step PBA

The ICAO Performance-based approach defines 6 steps starting with a clear definition of the scope, context and general ambitions or expectations

## PBA as a performance management process



Source: ICAO Doc 9883 © ALG Illustration

The NANP development process should refer to the ICAO PBA





# Moving Forward – UAE's Roadmap for NANP Development

	Short-term Actions (1-2 Years)	Medium-term Actions (3-5 Years)	Long-term Actions (5+ Years)
Stakeholder Engagement	<ul style="list-style-type: none"> <li>Build awareness and align all stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>Scale up the use of <b>automated decision-support tools</b></li> <li>Monitor <b>National Carriers' fleets &amp; airports expansion plans</b></li> </ul>	<ul style="list-style-type: none"> <li>Achieve a fully <b>data-driven, adaptable NANP</b></li> <li><b>Rebranded Update</b></li> </ul>
KPI Tracking	<ul style="list-style-type: none"> <li>Develop a <b>data strategy</b> for automated KPI tracking</li> </ul>	<ul style="list-style-type: none"> <li>Maintaining UAE's <b>NANP alignment with regional air navigation strategies</b></li> </ul>	<ul style="list-style-type: none"> <li>Integrate <b>AI-based forecasting</b> for traffic and capacity management</li> <li>Adoptions of <b>historical data &amp; machine learning</b> aspects for future forecast</li> </ul>
Testing	<ul style="list-style-type: none"> <li>Conduct a <b>pilot implementation</b> in a controlled environment</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of lessons learned</li> <li>Formulation of enhanced future versions</li> </ul>	<ul style="list-style-type: none"> <li><b>Sandbox testing environment</b></li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>Continuous monitoring through <b>NASAC</b></li> </ul>	<ul style="list-style-type: none"> <li>Establish <b>cross-border collaboration</b> for best practice sharing</li> </ul>	<ul style="list-style-type: none"> <li><b>Integration with adjacent ANSPs NANPs &amp; MID ANP</b></li> </ul>
Publishing	<ul style="list-style-type: none"> <li><b>Finalize Draft (0) &amp; publishing</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Enhanced version rolled out for publication</b></li> </ul>	<ul style="list-style-type: none"> <li>Become a <b>regional leader in performance-based air navigation planning</b></li> </ul>

Ultimate Goal









## Q&A



**Thank You**