



ICAO

Twenty Eighth Meeting of the Communications/ Navigation and Surveillance Sub-group (CNS SG/28) of APANPIRG



Bangkok, Thailand, 01–05 July 2024



Agenda Item 11: Capacity Building, including Human Factors and Air Traffic Safety Electronics Personnel (ATSEPs) related training

**(WP- 34 Supervisory and managerial Roles of ATSEP
Presented by IFATSEA)**



SUMMARY

This paper presents the **human factors issues and their counter measures pertaining to ATSEP while playing the supervisory and managerial roles.**

This paper presents an attachment on the topic for considering **to be added** in the regional ATSEP human factor guidance material **as an additional chapter.**

**2021**

The Ad-hoc work group of experts from Eight (8) member states (China, Hong Kong China, India, Indonesia, Japan, Republic of Korea, Singapore, and Thailand) and **One International Organization namely International Federation of Air Traffic Safety Electronics Associations (IFATSEA) was established in April 2021** in response to the Conclusion APANPIRG/31/15-Addressing Human Factor Issues of ATSEP recommended by CNS SG/24 meeting and subsequent to the action taken up by the ICAO APAC Office through the State Letter Ref.: T 3/9.9- AP022/21 (CNS) dated 26 January 2021 on subject Addressing Human Factor Issues of ATSEP.



2022

The Ad-hoc work group has deliberated extensively and presented the updates regularly in the subsequent CNS SG meetings.



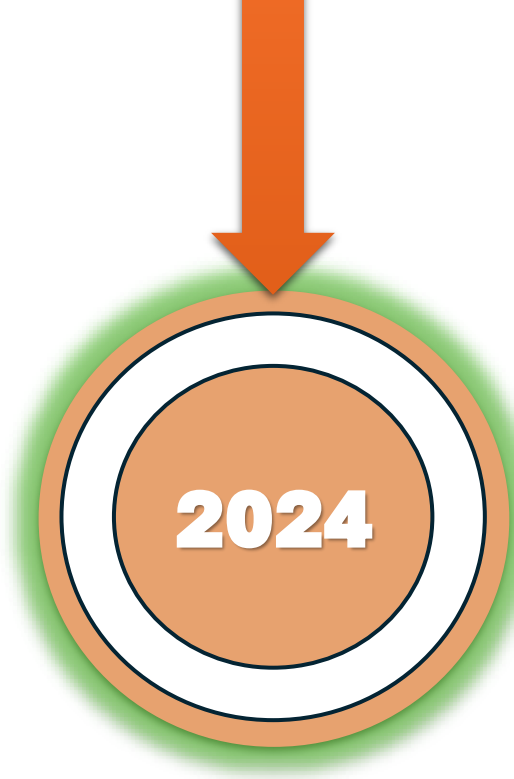
2023

Finally, the **Ad-hoc group** has presented the **regional guidance material** after receiving the comments from **APAC states in CNS SG/27** meeting for adoption. The meeting has adopted the guidance material, and the **guidance material was published through a state letter** Ref: T 8/2.15 – AP137/23 (CNS) dated **20th September 2023**.



2023

Further, in the meeting, **Hong Kong China suggested and IFATSEA agreed to update the guidance document's contents** continuously.



Accordingly, and as per the action point **27/13 of CNS SG/27** an additional chapter is proposed on **supervisory and managerial roles of ATSEP (Engineers)** who work with ANSP and coordinate with service providers and ensure their performance **within the scope of activities as defined in DOC 10057.**

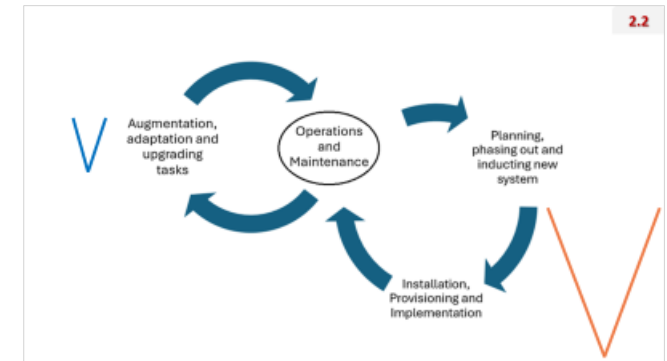
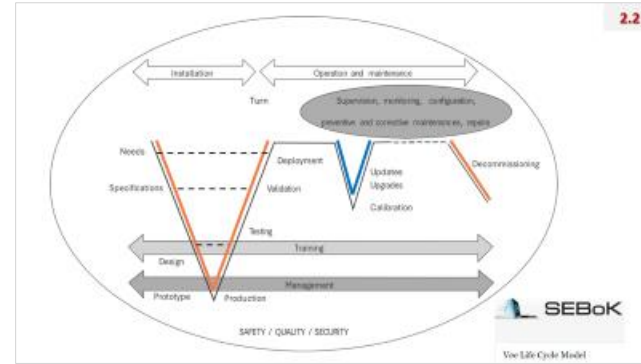
Topic relevance with the existing guidance material

- (3) People Resourcing,
- (4) Job, Role and Skills Analysis and Competency Modelling,
- (5) Knowledge Management, Talent Management, Learning and Development,
- (6) Induction of New Systems and Maintenance Philosophy, and
- (9) Behavioural and Role Specific Competencies.



Information added to this proposed chapter.

Reference of DOC 10057 is taken for the scope of activities of ATSEP. The supervisory roles and managerial roles are analyzed keeping the operation and maintenance tasks in the centre.



The **roles and key activities** performed are briefly **listed with examples**. And the **specific responsibilities** of ATSEP towards the contractors, suppliers and service providers are listed.

2.3

Table 1: Supervisory roles and managerial roles

Supervisory roles	Managerial Roles
overseeing the daily activities Immediate Problem-Solving	Strategic Oversight high-level decisions Risk Management
close and direct interactions monitor individual performance.	focus on the big picture. evaluate the overall performance.
assign specific tasks. ensure that the team adheres.	develop the project plan. allocate resources.
communicate daily instructions. facilitate communication within the team.	communicate with stakeholders. prepare detailed reports.
Tactical Decisions Quality Control	Strategic Decisions Innovation

2.3

Table 2: Activities and examples

Role	Activities	Examples
Supervisory roles	Technical supervision -Compliance -Quality control	Oversee the installation and testing.
	Project Coordination -Ensuring milestones -Liaison	Function as a liaison between different parties.
	Resource management -Material availability -human resources for assigned tasks	Monitor and manage inventory levels.

2.3

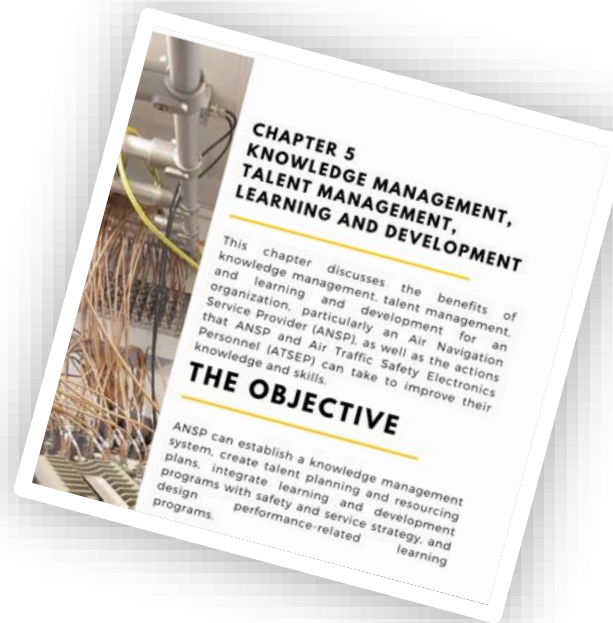
Managerial roles		
	Strategic Planning -Project plan -Risk management	Define the scope of projects. Engage with stakeholders in project planning. Identify and mitigate project risks.
	Contract Management -Cost estimation and fund provision -Procurement of services and goods -Cost negotiation -Contract performance compliance -Fund management	Manage the procurement process. Select contractors and suppliers. Prepare detailed cost estimates for the project. Track and monitor project expenses.
	Relationship Building -Stakeholders relationship	Build and maintain strong relationships with stakeholders.
	Training and Development -Team development -knowledge and skill update	Organizing and conducting workshops or seminars. Implementing on-the-job training programs

2.3

Table 3: Specific responsibilities

Stakeholder	Specific responsibilities
Contractor	Selection and awarding Contract performance compliance. Regulatory compliance
Suppliers	Selection and awarding Timely delivery of right material Adherence to the specifications
Service providers	Service level agreements. Performance Compliance Regulatory compliance

Human factor issues, actions to be taken by ANSP & ATSEP, **benefits** to ANSP & ATSEP, **most influential counter measures**, human factor issues addressed, and resilience and **cost benefits** are presented in this proposed new chapter.



Most Influential Countermeasures

Pro-active procurement and replacement policies in managing the out-lived equipment will reduce the stress among the key stake holders of ANSP due to their safety commitment.

Roadblocks on procurement process can be reduced by **training selected ATSEP on government compliance requirements by experts having background on the financial regulation.**

Train ATSEP on the Engineering module as per DOC 10057 that suits the ANSP roles on projects and procurements.

Most Influential Countermeasures

Training on factory and site acceptance tests of major systems for verifying the performance of the system compliance of user requirements and tender terms and conditions.

Developing **competency for preparing upcoming complex CNS/ATM systems specifications.**

Developing **skills for preparing detailed project reports and technical reports.**

3.1

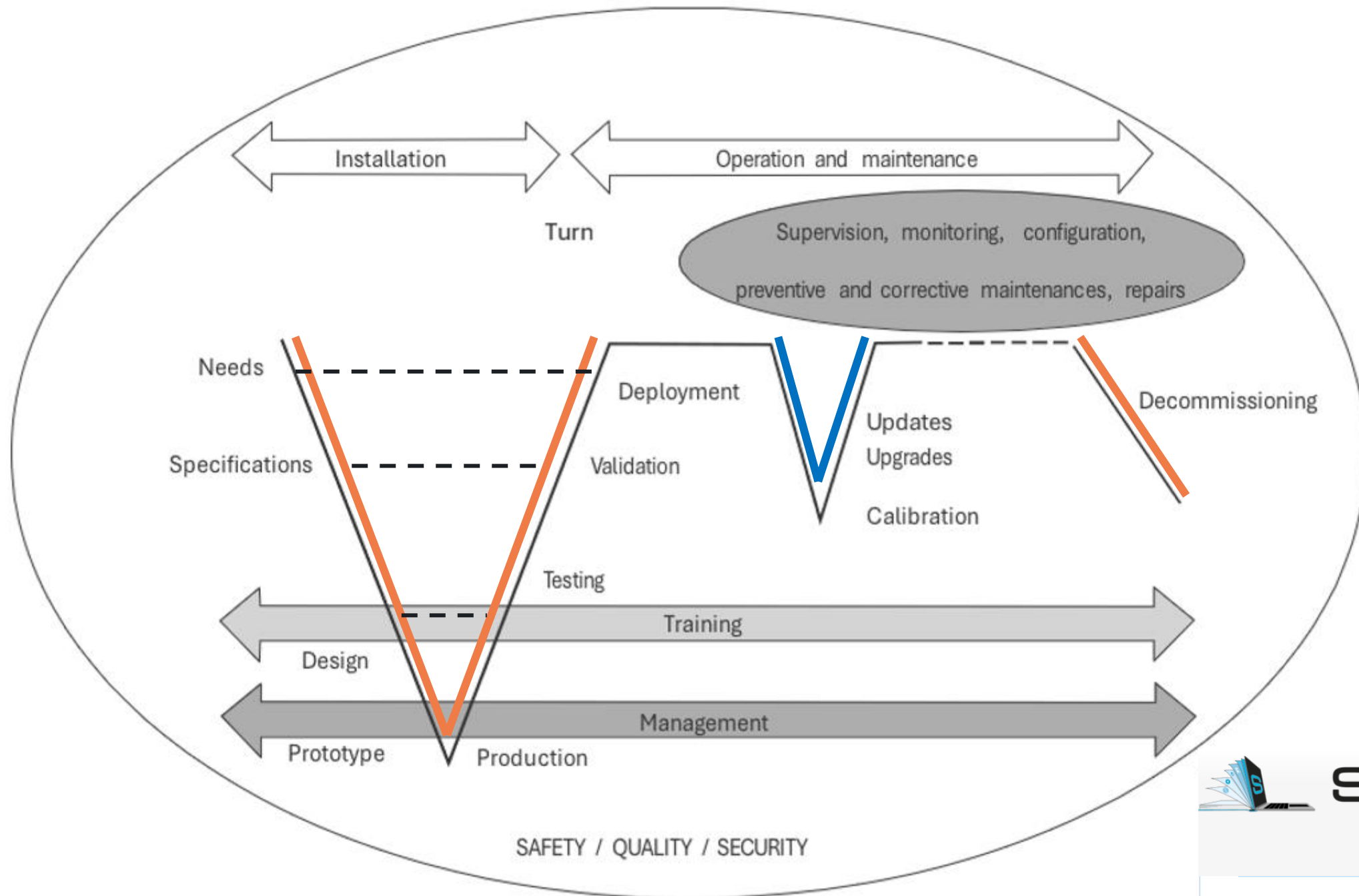
The meeting is invited to:

- (a) note the information on the proposed new chapter.**
- (b) approve for the addition of this chapter into the guidance material.**

(Ad hoc review – update / integrate into RGM - Comments)

- (c) discuss any other matter as appropriate**

Reference slides

**SEBoK**

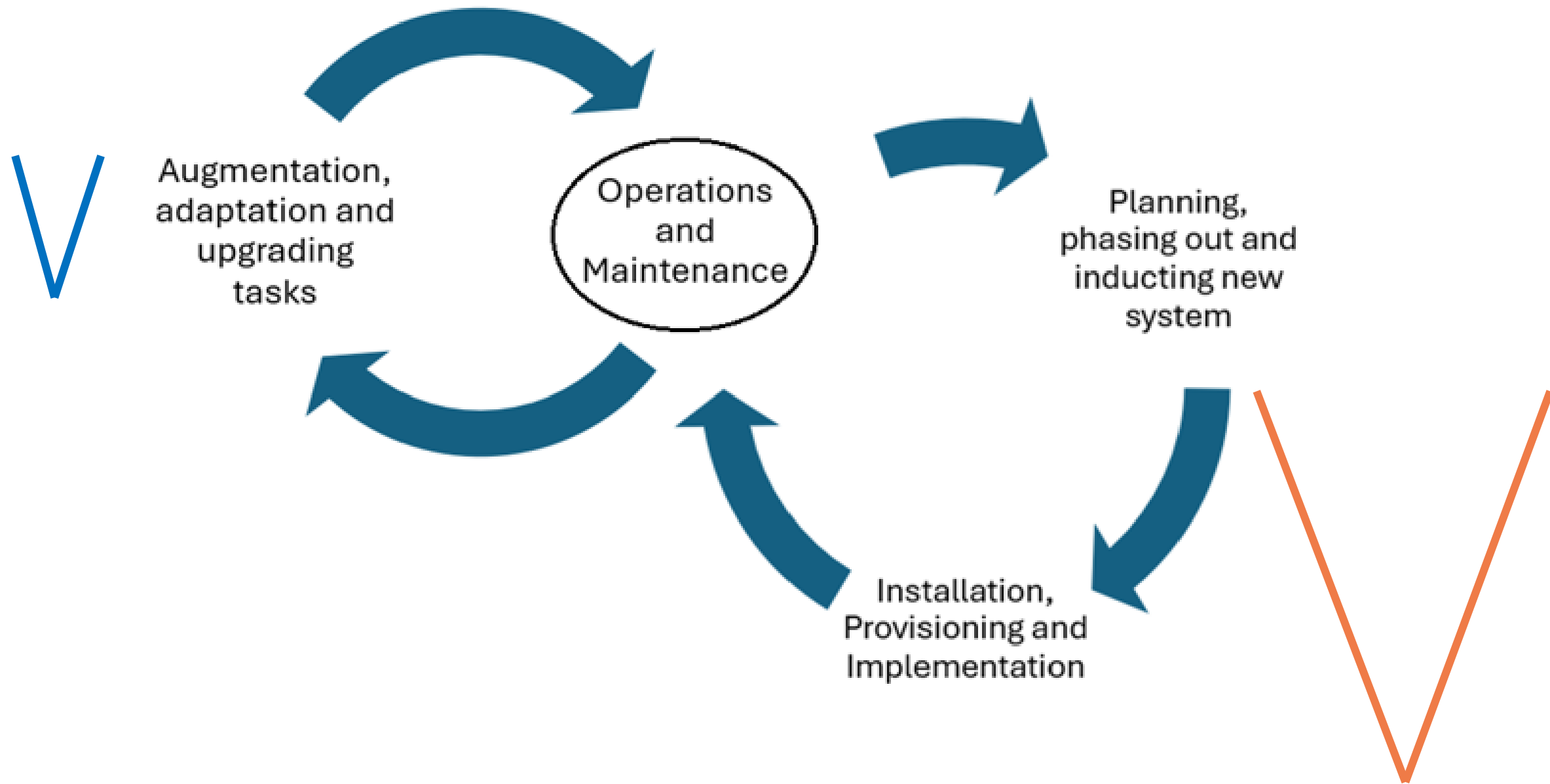


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Managerial roles	<p>Strategic Planning</p> <ul style="list-style-type: none"> -Project plan -Risk management <p>Contract Management</p> <ul style="list-style-type: none"> -Cost estimation and fund provision -Procurement of services and goods -Cost negotiation -Contract performance compliance -Fund management <p>Relationship Building</p> <ul style="list-style-type: none"> -Stakeholders relationship <p>Training and Development</p> <ul style="list-style-type: none"> -Team development - knowledge and skill update 	<p>Define the scope of projects. Engage with stakeholders in project planning. Identify and mitigate project risks.</p> <p>Manage the procurement process. Select contractors and suppliers. Prepare detailed cost estimates for the project. Track and monitor project expenses.</p> <p>Build and maintain strong relationships with stakeholders.</p> <p>Organizing and conducting workshops or seminars. Implementing on-the-job training programs</p>
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