



ICAO

International Civil Aviation Organization

**Twenty Fifth Meeting of the Communications/
Navigation and Surveillance Sub-group (CNS SG/25) of
APANPIRG**

Video Tele-conference, 18 October – 22 October 2021

Agenda Item 7: Automation

7.2 Other automation related issues

FUTURE PLAN FOR ATM AUTOMATION SYSTEM IMPLEMENTATION IN INDIA

(Presented by India)

SUMMARY

This paper presents the future plan for ATM Automation system implementation in India. This paper also provides the list of airports where procurement planning is already initiated and the classification of types of Automation System being procured / implemented.

1 INTRODUCTION:

1.1 Mission of AAI for ANS is “To achieve highest standards of safety and quality in air traffic services by providing state of-the-art infrastructure for total customer satisfaction”.

1.2 ICAOs Global vision for future of ANS is “to achieve an agile, safe, secure, sustainable, high performing and interoperable global air navigation system”

1.3 In its quest to fulfil its mission & ICAOs vision; AAI has been aggressively upgrading its CNS/ATM facilities.

1.4 Presently, a total 44no. of ATM Automation systems are installed within India at major Airports. Most of these are on the verge of completing their usable operational life. AAI is facing severe problem of hardware obsolescence, lack of advanced software features in current system and incompatibility of current system with new technology hardware.

1.5 The ATM Automation system installed at major Airports like Delhi, Mumbai, Chennai, Kolkata, HIAL & BIAL are handling major portion of air traffic of India FIR. Also, all the sectors like the area/oceanic control, approach control and TWR control are present at these airports.

1.6 The ATM Automation systems installed at other Airports are classified into three types as indicated below :

1.6.1 CAT-B : ATM Automation system for Airport with Aerodrome Control Service and Procedural Approach (without any surveillance input)

1.6.2 CAT-C : ATM Automation system for Airport with Aerodrome Control Service and Approach Control Service (with/without surveillance input)

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1.6.3 CAT-D: ATM Automation system for Airport with Aerodrome Control Service, Approach (with Surveillance) and Lower ACC

1.7 The future procurement / implementation plan for ATM Automation system depends upon the need, which can broadly be divided into two types :

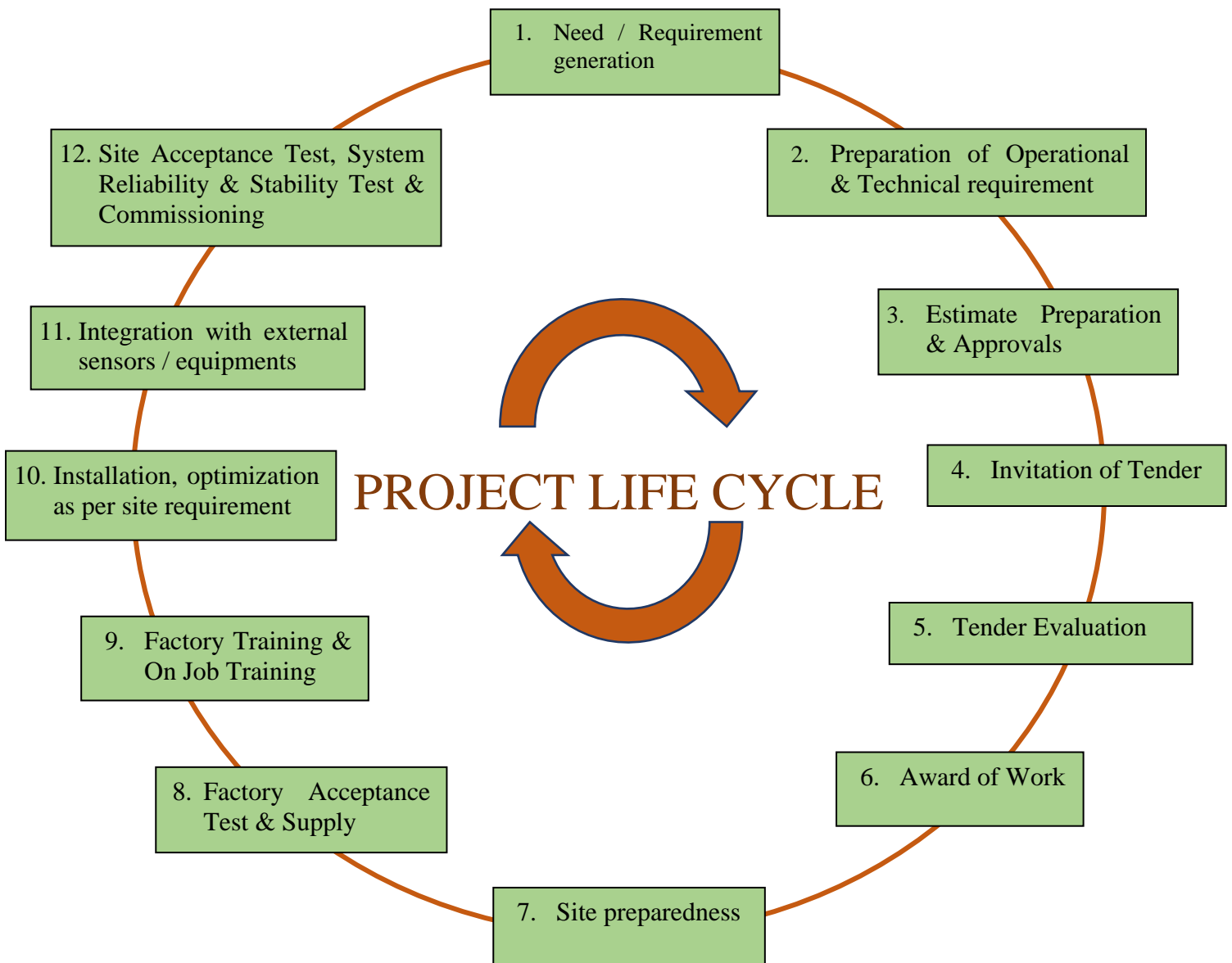
1.7.1 Replacement of existing system as it is old and nearing its usable operational life (eg. Mumbai, Hyderabad, Bangalore etc.).

1.7.2 Fresh or new requirement due to :

- Construction of new airport at a place where significant aircraft movements are anticipated (eg. Navi Mumbai, MOPA etc.).
- Increase in traffic at an airport necessitating requirement to upgrade ATC Automation system functionality

2 FUTURE PLAN OF IMPLEMENTATION

2.1 Implementation of a project involves methodical planning & timely execution of various inter-related activities. Various processes involved in AAI for implementing CNS/ATM projects are :



2.2 Presently following projects related to ATM Automation System are under procurement :

2.2.1 Global open tender for procurement of ATM Automation system and ASMGCS for Mumbai, Navi -Mumbai, HIAL, BIAL and MOPA (without ASMGCS) is invited on 23.09.2021. System under procurement will have provision of various safety nets (CLAM, MSAW, STCA, APW etc.), decision support tools (AMAN/DMAN, TBS, MINSEP, NTA etc.)

2.2.2 ATM Automation system for new ATC building at Kolkata Airport is planned to be procured as a turn-key project along with other ANS facilities..

2.2.3 ATM Automation system for 38 Airports is also planned and budgetary quote is requested from the prospective bidders. List of these airports is indicated below :

- **CAT B (Airports)** : Gaya, Khajuraho, Bhavnagar, Bhuntar, Rajkot, Aurangabad, Dimapur, Hubli, Rajahmundry, Tirupati,
- **CAT-C (Airports)** : Raipur, Ranchi, Vadodara, Bhopal, Madurai, Trichy, Indore, Vijayawada, Coimbatore, Imphal, Calicut, Cochin, Udaipur, Kannur, Dehradun, Surat
- **CAT- D (Airports)** : Varanasi, Ahmedabad, Bhubaneswar, Jaipur, Ahmedabad, Guwahati, Trivandrum, Nagpur, Mangalore, Agartala, Amritsar, Lucknow

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the massive upgradation of ATM Automation infrastructure in India; and
- b) discuss any relevant matter as appropriate
