

**Ministry of Civil Aviation**

**Airports Economic  
Regulatory Authority of India**

**Stakeholders' Consultation  
Meeting**



**Formulation of Performance Standards of Major Airports relating to Quality, Continuity and Reliability  
of Service and Associated Activities**

10 September 2025

# Agenda of discussion

- 1 Background
- 2 Proposed Performance Standards Summary
- 3 Categorization of Airports
- 4 Parameter details and its monitoring mechanism
- 5 Rebate and Incentive Mechanism along with tariff adjustment
- 6 Framework – Assessment Timelines
- 7 Monitoring of Airport Performance Parameters via Third-Party Assessor

**01**

# **Background**

# Current framework of airport performance standards in India

India's airport ecosystem already reflects a strong commitment to **airport performance standards** through:

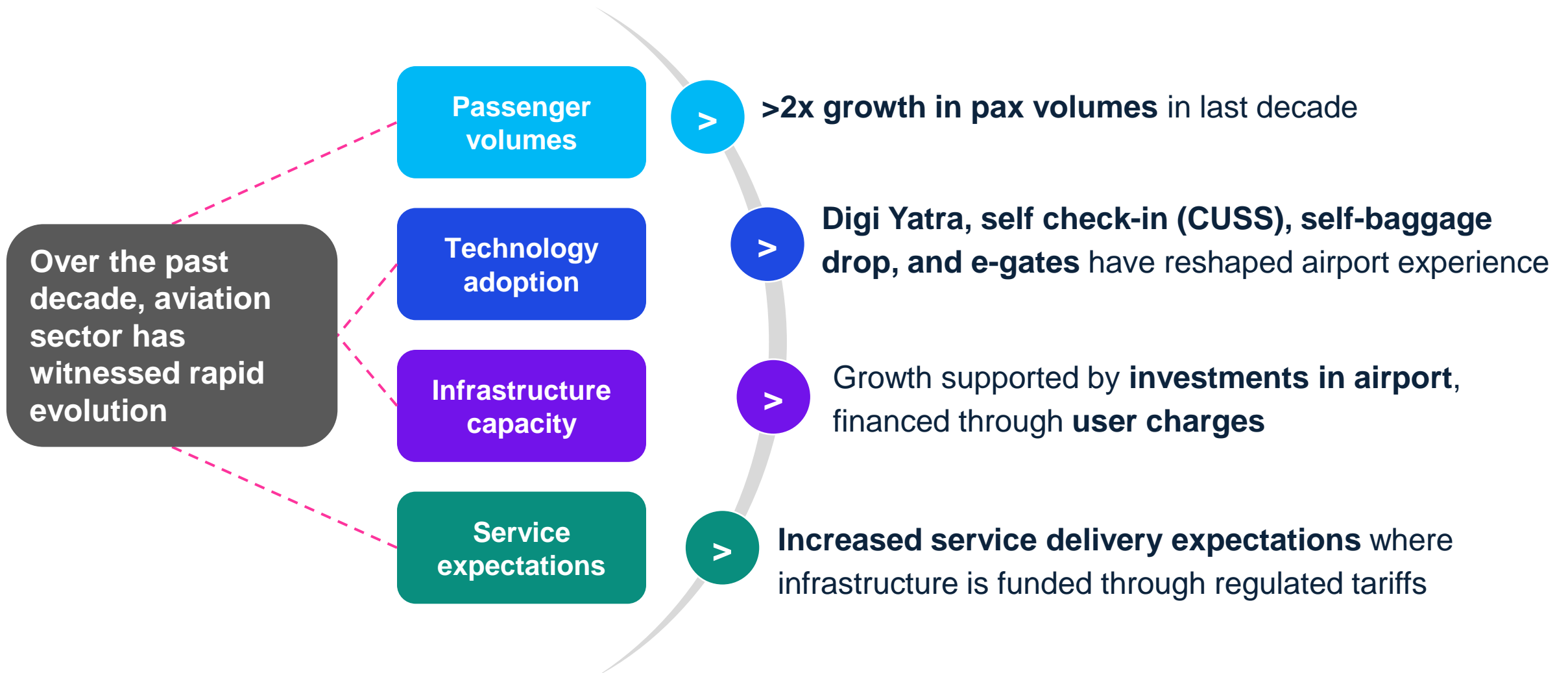
- a. Existing AERA Guidelines of 2011
- b. Various concession frameworks

Existing Guidelines (2011) of AERA	Mumbai and Delhi Airport	Bangalore and Hyderabad Airport	6 AAI PPP airports	Other Greenfield airports
Guidelines provides objective (16) and subjective (34) parameters	OMDA provides objective (23) and subjective (23) parameters	Concession Agreement (CA) provides subjective parameters (18)	CA provides objective (27) and subjective (34) parameters	like NIA, Mopa (Goa) and Bhogapuram follow varied standards based on their respective CA

These standards are, however, **diffused, non-centralized** and differ in regulatory, procedural or operational terms

There is a need for **uniform national level framework for performance standards** at major airports

# Need for alignment of Performance Standards with changing aviation dynamics



# Policy Response & Regulatory Action

**MoCA's Directive:** In response to evolving passenger expectations and tariff-linked infrastructure upgrades, MoCA has decided to establish uniform performance standards at all major airports.



# Legislative Mandate – AERA Act, 2008

1. The Parliament enacted the ***Airports Economic Regulatory Authority of India Act, 2008*** to establish AERA as a statutory body for regulating tariffs and charges for aeronautical services and monitoring airport performance standards.
2. Chapter VII of the Act outlines the role of the Central Government in prescribing performance standards for major airports.
  - *51 (1) Power to make rules. — (1) The Central Government may, by notification in the Official Gazette, make rules for carrying out the provisions of this Act*
  - *51 (2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely: —*
    - “*51 (2) (f) the performance standards relating to the quality, continuity and reliability of the service to be monitored under clause (d) of sub-section (1) of section 13;*”

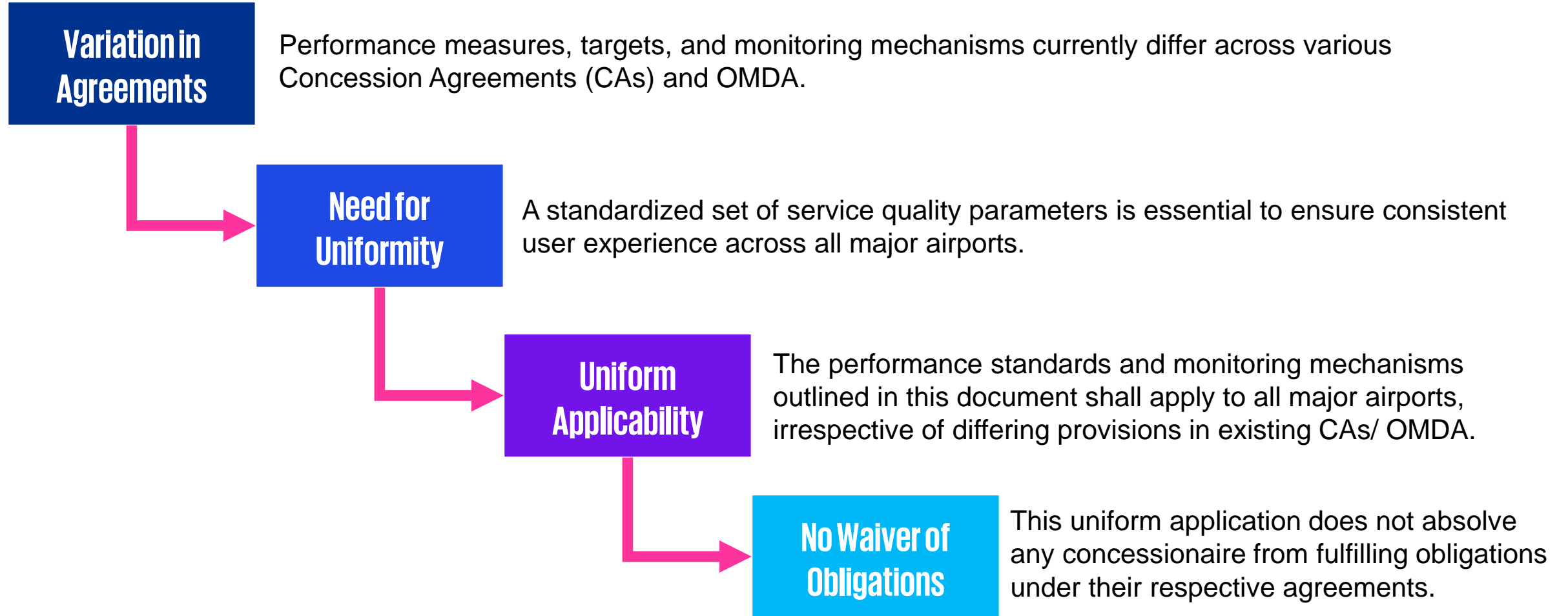
# Legislative Mandate – AERA Act, 2008

Chapter III of the AERA Act, 2008 titled “**Powers and Functions of the Authority**” further details the functions of the AERA in respect of performance standards of major airports as:

- “13 (1) (a) (ii) to **determine the tariff** for the aeronautical services **taking into consideration** — the service provided, its **quality** and other relevant factors;”
- “13 (1) (d) to **monitor the set performance standards relating to quality, continuity and reliability of service** as may be specified by the Central Government or any authority authorized by it in this behalf;”
- “14 (1) (a) Where the Authority considers it expedient so to do, it may by order in writing—call upon any service provider at any time to furnish in writing such information or explanation relating to its functions as the Authority may require to access the performance of the service provider;”
- “14 (4) The Authority shall have the power to issue such directions to monitor the performance of the service providers as it may consider necessary for proper functioning by service providers.”

Thus, as per Section 51 of the AERA Act, 2008, MoCA will make rules on performance standards relating to the quality, continuity and reliability of the service which shall be monitored by AERA and taken into consideration while determining tariffs for aeronautical services as per Section 13 of the AERA Act, 2008.

# Application of Uniform Performance Standards across airports



**02**

# **Proposed Performance Standards Summary**

# Review of Policies, Guidelines, Agreements and Benchmarking

1

## AERA Documents

- AERA Act, 2008: Focused on Performance Standards and monitoring.
- AERA Guidelines

2

## Concession Agreements

Pertaining to performance standards, measurement mechanism, frequency, damages, termination provisions

- OMDA Delhi / Mumbai
- Bangalore / Hyderabad
- 6 AAI PPP Airports
- Navi Mumbai / Bhogapuram
- Noida
- Mopa (Goa)

3

## International benchmarks

- CAA (UK) - Heathrow
- Malaysia - Kuala Lumpur
- ACCC (Australia) – Brisbane, Sydney, etc.

4

## Other Documents

- National Civil Aviation Policy (2016)
- ICAO principles
- ACI ASQ Parameters
- IATA Service Quality Standards and Framework

**Reviewed National and International Policies, Guidelines, Agreements, and Regulatory Documents to ensure holistic integration of good practices into the framework**

# Airport Visits

 **8 Airports were visited**

Indira Gandhi International Airport, Delhi	Kempegowda International Airport, Bengaluru
Rajiv Gandhi International Airport, Hyderabad	Netaji Subhash Chandra Bose International Airport, Kolkata
Sardar Vallabhbhai Patel International Airport, Ahmedabad	Jaipur International Airport, Jaipur
Thiruvananthapuram International Airport, Trivandrum	Jay Prakash Narayan International Airport, Patna

## Activities Performed

- 1 Terminal Visit
- 2 Infrastructure and Facility assessment
- 3 Passenger Feedback Survey
- 4 Stakeholder Meetings
- 5 AOCC Visit

**Airport visits & passenger surveys were conducted to identify performance parameters across the passenger journey map, observe processes, & capture satisfaction drivers**

# Aligning and Enhancing Performance Standards

## Comprehensive

Cover all aspects of passenger touchpoints at airports in performance standards

## Future Ready

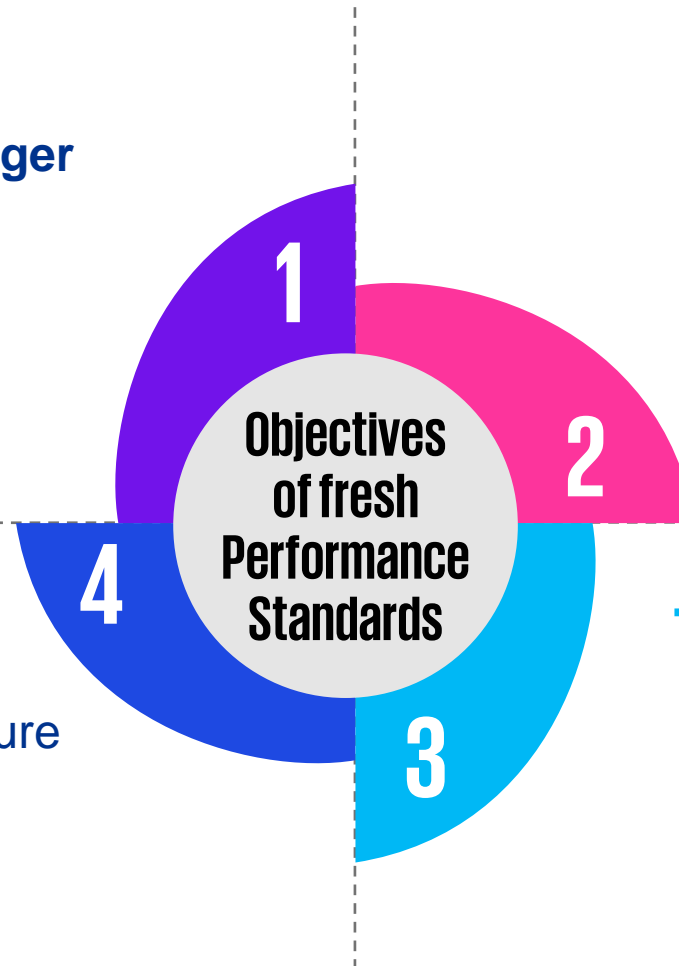
- Include **Digi-Yatra, Immigration E-gates, self check-in (CUSS)** in performance standards
- Include emerging new technologies such as **Self-Baggage drop (SBDs)**
- Incentives along with rebates

## Reliable

Ensure reliability of data capture in the monitoring mechanism

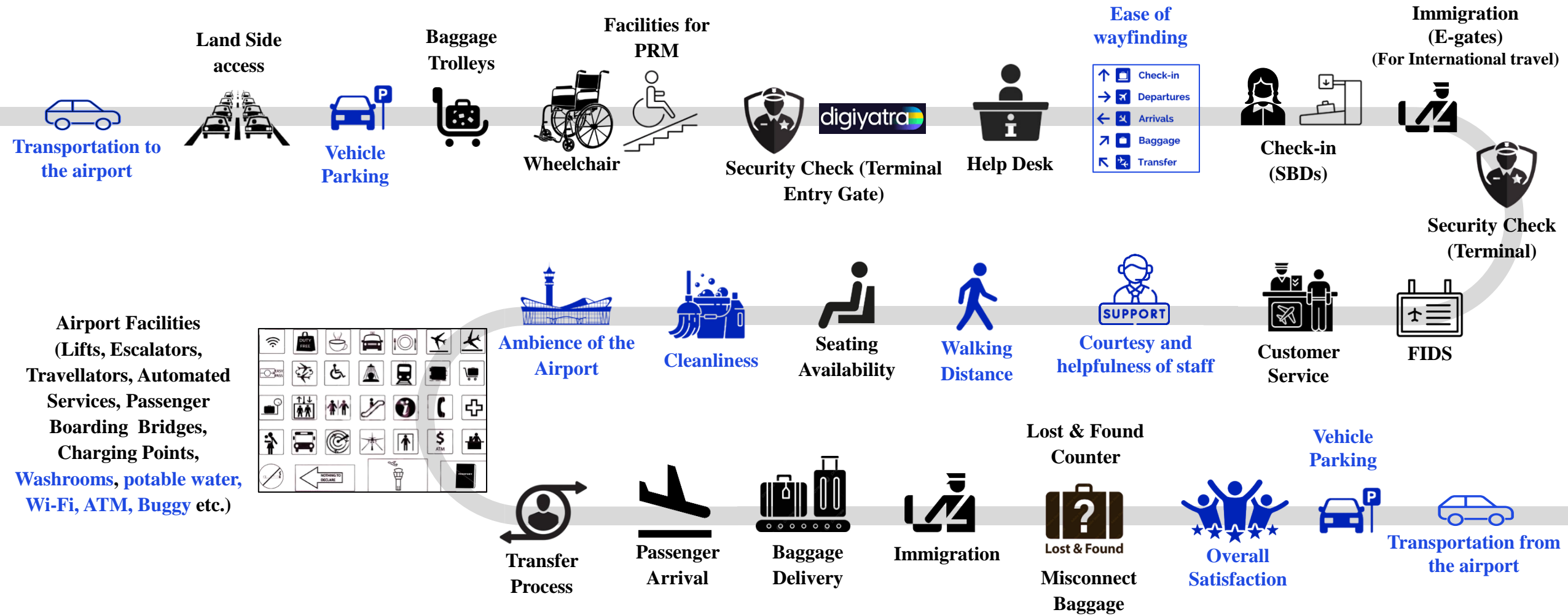
## Technology enabled

- Leverage technology to enhance monitoring and service quality
- Immediate and
  - In phased manner



In the event of a service deficiency, a rebate will be applied through a reduction in the User Development Fee (UDF) payable by passengers.

# Parameters Identified across Passenger Journey Map



\* Add on Airport facilities include Medical Facilities, Digital Information Centers, Cloak Room, Sensory rooms, Baby care rooms, etc.

\* Objective Parameters  
\* Subjective Parameters

# Parameters Summary

Proposed Service Parameters			
Objective Parameters (Quantifiable)		Subjective Parameters (Qualitative)	
Airport Core Processes (Wait Time)	6	Passenger Convenience	16
Airport Facilities (including for PRM passengers)	8	For PRM Passengers	2
Customer Service / Grievance Redressal System	1*		
Other Parameters (For Information Gathering)	17		
<b>Total Objective Parameters</b>	<b>32</b>	<b>Total Subjective Parameters</b>	<b>18</b>
<b>Total Parameters = 50</b>			

*The parameter "Help Desk" comprises three sub-parameters: (i) Help Desk Counters located at Check-in, SHA and Arrival with necessary infrastructure (ii) Availability of Personnel at all Helpdesks (iii) Percentage (%) of written complaints uploaded on Air-Sewa within specified time*

**03**

# **Categorization of Airports**

# Categorization of Airports

	Category A > 6 mppa	Category B < 6 mppa
<b>For Performance Monitoring</b>	<b>PPP/ JVC: Existing:</b> Delhi, Mumbai, Bangalore, Hyderabad,, Ahmedabad, Lucknow , Guwahati, Jaipur <b>Greenfield:</b> Navi Mumbai, Noida	<b>PPP/ JVC airports:</b> Trivandrum, Mangalore <b>Greenfield:</b> Bhogapuram, Mopa (Goa)
	<b>AAI:</b> Chennai and Kolkata	<b>AAI:</b> Bhubaneshwar, Indore, Dehradun, Patna, Calicut, Amritsar, Varanasi, Coimbatore, Raipur, Trichy,
	<b>Civil Enclave:</b> Pune, Goa	<b>Civil Enclave:</b> Srinagar, Port Blair, Chandigarh
	<b>State:</b> Cochin	<b>State:</b> Kannur, Nagpur, Shirdi
<b>Total airports</b>	15	20

Ease of Regulation and Performance Measurement

Uniformity in Technology-Driven Passenger Facilitation

Cost optimization

Operational Complexity and Infrastructure Requirements

Consistency in Customer Services and Accessibility



# Parameters Distribution Across Airport Categories

Category of Parameters	Category A Airports	Category B Airports
<b>Objective Parameters</b>		
Airport Core processes	6	6
Airport Facilities (including for PRM passengers)	8	7
Customer Service / Grievance Redressal System	1	1
Other Parameters (for Information gathering only)	17	13
<b>Total Objective Parameters</b>	<b>32</b>	<b>28</b>
<b>Subjective Parameters</b>		
Passenger Convenience	16	14
For PRM Passengers	2	2
<b>Total Subjective Parameters</b>	<b>18</b>	<b>16</b>
<b>Total no. of Parameters</b>	<b>50</b>	<b>44</b>

# Modified objective parameters for Category B airports are Security Check (Terminal Entry Gate), Check-in, Security Check (Terminal), Immigration / Emigration, Seating Availability (at Boarding gates)

\* Optional objective parameters for Category B airports are MCT, misconnect passengers and baggage, Availability of Baby care and sensory rooms

^ not applicable objective parameters for Category B airports are land side assess, Passenger Boarding Bridges Utilization, Availability of Cloak Room / Extended Baggage Storage and cargo services

^ not applicable subjective parameters for Category B airports are transportation between terminals and buggy services

**04**

# **Parameter details and its monitoring mechanism**

**4.1**

# **Objective Parameters**

# List of Objective Parameters

1

## Airport Core Processes (Wait Time)

- 1) Security Check (Terminal Entry Gate) – Traditional and Digi-Yatra
- 2) Check-In: Business, Economy and Self-Bag Drop
- 3) Immigration / Emigration
- 4) Security Check (Terminal) - Departure Pre-embarkation
- 5) Baggage Delivery – Domestic and International
- 6) Passenger Arrival – Domestic and International

2

## Airport Facilities (including for PRM passengers)

- 1) Uptime of Flight Information Display System (FIDS)
- 2) Uptime of Lifts, Escalators and Travellators
- 3) Uptime of Automated Services
- 4) Availability of Passenger Boarding Bridges (Domestic / International)
- 5) Availability of Baggage Trolleys
- 6) Seating Availability (at Boarding gates)
- 7) Facilities for PRM Passenger
- 8) Availability of Wheelchairs (Pre-booked)

3

## Customer Service / Grievance Redressal System

- 1) Help Desks
  - a. Help Desk Counters located at check-in, SHA and arrivals with necessary infrastructure
  - b. Availability of Personnel at all Helpdesks
  - c. Percentage (%) of written complaints uploaded on Air-Sewa within specified time

**Assessment for all Objective Parameters that are linked to Rebates and Incentives will be conducted every month.**

# List of Objective Parameters

4

## Other Parameters for Information Gathering

- 1) Minimum Connect Time (MCT) - Transfer Process
- 2) No. of Misconnect – Passengers and Baggage
- 3) Land Side Access
- 4) Passenger Boarding Bridges Utilization
- 5) Availability of Medical Facilities
- 6) Availability of Digital Information Centers
- 7) Availability of Cloak Room / Extended Baggage Storage
- 8) Lost and Found Services - Availability of Personnel and Percentage of complaints resolved
- 9) Availability of Baby care rooms
- 10) Availability of Sensory rooms
- 11) Availability of Operational Charging Points
- 12) Availability of Wheelchairs (Not Pre-booked)
- 13) Uptime of Digi-Yatra and Immigration e-gates
- 14) Cargo Services
- 15) Operational Resilience
- 16) Technology - Percentage (%) of passengers using Digi-Yatra, SBDs & Immigration E-gates
- 17) Sustainability - Green Accreditation of Airport as per MoCA guidelines (once notified)

**For Objective parameters under Information Gathering where Rebates or Incentives do not apply, assessment will be conducted once a year to begin with**

**4.2**

**Objective  
Parameters - Airport  
Core Process**

# Airport Core Process – Departure journey

S. No.	Performance Parameter	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
O1(a)	Security Check (Terminal Entry Gate) - Traditional	Waiting Time (mins) in Queue (from entry in queue to presenting to CISF Staff)	95% < 10 mins	90% < 10 mins
O1(b)	Security Check (Terminal Entry Gate) – Digi-Yatra	Waiting Time (mins) in Queue (from entry in queue to presenting at Digi-Yatra gate)	95% < 5 mins	90% < 5 mins



Fig 1: Security Check (Terminal Entry Gate) - Traditional

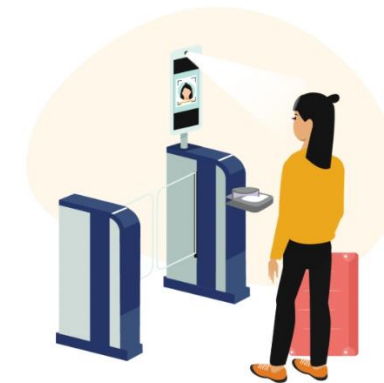


Fig 2 : Security Check (Terminal Entry Gate) – Digi-Yatra

# Airport Core Process – Departure journey

S. No.	Performance Parameter	<u>Measures</u>	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
O2(a)	Check-In	Waiting Time (mins) in Queue (from entry to presenting to staff for check-in)	Economy: 95% < 20 mins Business: 95% < 5 mins	Economy: 90% < 20 mins Business: 90% < 5 mins
O2(b)	Check-In (Self-Baggage Drop)	Waiting Time (mins) in Queue (from entry to presenting to SBD counters)	SBDs: 95% < 5 mins	SBDs: 90% < 5 mins

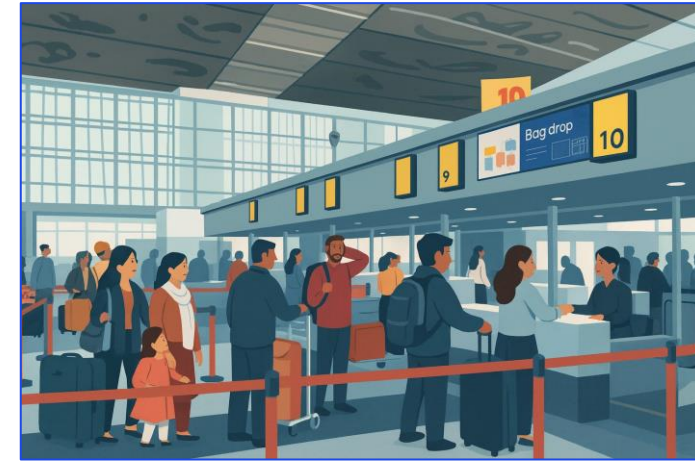


Fig 3: Check-in



Fig 4: Check-In (Self-Baggage Drop)



# Airport Core Process – Departure journey

S. No.	Performance Parameter	<u>Measures</u>	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
O3	Immigration / Emigration	Waiting Time (mins) in Queue (from entry in queue to presenting to immigration officer)	95% < 12 mins	90% < 12 mins
O4	Security Check (Terminal) - Departure Pre-embarkation	Maximum waiting time (from entry in queue to presenting to security staff for frisking)	95% < 10 min	90% < 10 min



Fig 5: Immigration/ Emigration



Fig 6: Security Check (Terminal) - Departure Pre-embarkation



# Airport Core Process – Arrival journey

S. No.	Performance Parameter	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
O5(a)	Baggage Delivery (Domestic)	Time for bag delivery from aircraft arrival (chocks - on) for 95% of domestic flights	First Bag: 15 mins Last Bag: 35 mins (For Code C) Last Bag: 45 mins (For Code E)	First Bag: 15 mins Last Bag: 35 mins (For Code C) Last Bag: 45 mins (For Code E)
O5(b)	Baggage Delivery (International)	Time for bag delivery from aircraft arrival (chocks - on) for 95% of international flights	First Bag: 15 mins Last Bag: 45 mins (For Code C) Last Bag: 50 mins (For Code E)	First Bag: 15 mins Last Bag: 45 mins (For Code C) Last Bag: 50 mins (For Code E)



Fig 7: Baggage Delivery



# Airport Core Process - Arrival journey

S. No.	Performance Parameter	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
O6(a)	Passenger Arrival (Domestic)	Time taken from chocks on to entry in the terminal building for 95% of domestic flights	First Passenger: 95% < 15 mins	First Passenger: 95% < 15 mins
O6(b)	Passenger Arrival (International)	Time taken from chocks on to entry in the terminal building for 95% of international flights	First Passenger: 95% < 15 mins	First Passenger: 95% < 15 mins



**4.3**

**Objective  
Parameters - Airport  
Facilities**

# Airport Facilities – Passenger amenities

S. No.	Performance Parameter	<u>Measures</u>	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
O7	Uptime of Flight Information Display System (FIDS)	% of time operational	98%	98%
O8	Uptime of Lifts, Escalators and Travellators	% of time operational	98%	98%
O9	Uptime of Automated Services	% of time operational	98%	98%
O10	Availability of Passenger Boarding Bridges (Domestic / International)	% of aircraft movements served to meet airline request	90%	90%
O11	Availability of Baggage Trolleys	% of time available	100%	100%
O12	Seating Availability (at Boarding gates)	% of departure Peak Hour Passengers	70%	50%



# Airport Facilities - PRM passengers

S. No.	Performance Parameter	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
O13	Facilities for PRM Passenger (Checklist is given as per MoCA guidelines for PRM passengers, 2022)	% time availability of assistance for PRM	100%	100%
O14	Availability of Wheelchairs (Pre-booked)	<u>% time availability of assistance for PRM</u>	100% within 20 mins	100% within 20 mins



*Fig 8: Availability of wheelchairs*



**4.4**

**Objective Parameters -  
Customer Service /  
Grievance Redressal  
System**

# Customer Service / Grievance Redressal System

S. No.	Performance Parameter	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
O15(a)	Help desks (Help Desk Counters located at check-in, SHA and arrivals with necessary infrastructure)	% time availability at Check-in, Security Hold Area (SHA), and Arrivals, equipped with the necessary infrastructure	100%	100%
O15(b)	Help Desks (Availability of Personnel at all helpdesks)	% time availability of Personnel	100%	100%
O15(c)	Help Desks (Percentage (%) of written complaints uploaded on Air-Sewa within specified time)	<u>% of written complaints uploaded on Air-Sewa within specified time</u>	100% within 24 hours	100% within 24 hours

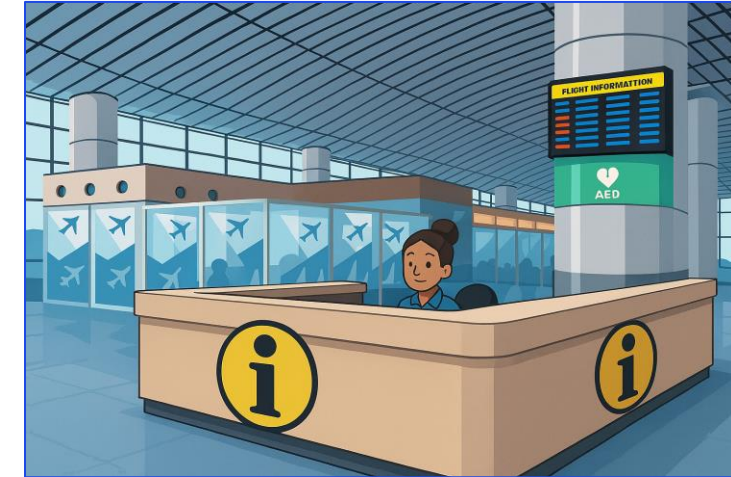


Fig 9: Customer Service/ Grievance Redressal System



# 4.5

## Objective Parameters - Other Parameters (for Information Gathering)

# Other Parameters – Information Gathering

S. No.	Performance Parameter	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
O16	Minimum Connect Time (MCT) - Transfer Process	Minimum Connect times (mins)	Domestic to Domestic: 60 mins Domestic to International: 75 mins International to Domestic: 75 mins International to International: 60 mins	Optional
O17(a)	Misconnect - Passengers	No. of misconnect passengers per 1000 passengers	10	Optional
O17(b)	Misconnect - Baggage	No. of misconnect baggage per 1000 baggage	20	Optional
O18	Land side access	Travel time on terminal frontage road (mins)	95% of vehicles < 10 mins	Not Applicable



# Other Parameters – Information Gathering

S. No.	Performance Parameter	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
O19	Passenger Boarding Bridges Utilization	% of aircraft movements using boarding bridges out of total eligible flights	90%	Not Applicable
O20	Availability of Medical Facilities	% time availability of assistance for patients	100 %	100 %
O21	Availability of Digital Information Centers	% of time operational	100%	100%
O22	Availability of Cloak Room / Extended Baggage Storage	% of time available	100%	Not Applicable
O23(a)	Lost and Found Services	% time availability of Personnel at Lost and Found Services Counter	100%	100%
O23(b)	Lost and Found Services	% of complaints resolved	100% within 7 Days	100% within 7 Days



# Other Parameters – Information Gathering

S. No.	Performance Parameter	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
O24	Availability of Baby care rooms	% of time available	100%	Optional
O25	Availability of Sensory rooms	% of time available	100%	Optional
O26	Availability of Operational Charging Points	% of operational charging points relative to the no. of peak-hour departing passengers	20%	20%
O27	Availability of Wheelchairs (Not Pre-booked)	% time availability of assistance for PRM	100% within 30 mins	100% within 30 mins
O28	Uptime of Digi-Yatra and Immigration e-gates	% of time operational	99%	99%



# Other Parameters – Information Gathering

S. No.	Performance Parameter	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
O29	Cargo Services	Average dwell time	For imports, max processing time of 24 hours For exports, max processing time of 8 hours	Not Applicable
O30	Operational Resilience*	-	Submission of Operational Resilience Plan	No change
O31(a)	Technology	Percentage (%) of passengers using Digi-Yatra	Information gathering	Information gathering
O31(b)	Technology	Percentage (%) of passengers using SBDs		
O31(c)	Technology	Percentage (%) of international passengers using Immigration E-gates		
O32	Sustainability	Green Accreditation of Airport as per MoCA guidelines (once notified)		

\* Rebate is applicable if disruption on account of default by Airport Operator

**4.6**

**Measurement  
Mechanism –  
Objective  
Parameters**

# Inclusion of **Technology** in Measurement

## Queueing Times

- Immediate: Performance assessed through manual review of recorded CCTV footage
- Future: Automated Queue Time Management System through AI Camera analytics, APOC

## Baggage Delivery

- Airport Operators: First and last bag times recorded using barcode scanners of baggage tags.
- Third-Party: Assessment conducted during peak hours for Dom and Intl flights.
- Future: Measurement through tech-solutions such as 360-degree scanning/ video solutions

## Wheelchairs

- Wheelchair requests raised via help desks and kiosks logged into a centralized system
- System generates service tickets, tracks fulfillment in real-time, and records time taken.

## Air Sewa

- Written complaints received via website, app, registers, or email etc. to be uploaded on Air Sewa portal.
- Third-party assessors verify upload timelines for Performance Tracking

# Measurement mechanism – Queue Time

## Parameters for which queuing time is to be assessed:

- Security Check (Terminal Entry Gate) - Traditional
- Security Check (Terminal Entry Gate) – Digi-yatra
- Check-in
- Immigration / Emigration
- Security Check (Terminal) - Departure

- **Measurement Mechanism:** Queuing time of a passenger is recorded every 10 minutes during the “sample hour”, which is the **hour one to two hours prior the busiest hour** of the selected day for each terminal.

$$\text{Queuing Time Formula: } Q = B - A$$

Where,

- **A** = Time passenger joins the queue after the measurement period begins
- **B** = Time passenger presents boarding pass/ID or reaches Digi-Yatra biometric gate
- **Data source:** Measured by third-party assessor through manual review of recorded CCTV footage; measurement of 80% queues
- **Fallback Option:** If CCTV footage is unavailable, manual on-site measurement may be conducted by the assessor.
- **Frequency:** Measurement during the selected ‘Sample Hour’ for 7 selected days of a month



# Measurement mechanism – Example for Queue Time

## 1. Computation of queue time during a sample hour:

Sample Hour	14:00 – 15:00 hours					
Measuring time	14:00	14:10	14:20	14:30	14:40	14:50
Passenger joins the respective queue (A)	14:02	14:10	14:26	14:35	14:40	14:58
Passenger shows the boarding pass / Identification document to the security personnel (B)	14:09	14:19	14:32	14:39	14:56	15:02
Queuing Time (Q)	7 mins	9 mins	6 mins	4 mins	16 mins	4 mins

## 2. Computation of performance score for the queuing parameter in a month

Particulars		Terminal 1	Terminal 2	Terminal 3	Total airport-wide
No. of Passenger processed within Target Queuing Time during the month	A	48	97	74	219
Total no. of Passengers measured during the process during the month	B	50	100	80	230
Performance Percentage for the proposed parameter for the month	$C = \frac{A}{B} \times 100$	$\frac{48}{50} \times 100 = 96\%$	$\frac{97}{100} \times 100 = 97\%$	$\frac{74}{80} \times 100 = 92.5\%$	$\frac{219}{230} \times 100 = 95.2\%$



# Measurement mechanism - Uptime of Assets

- **Available time:** Available time is calculated based on actual operational hours, excluding planned maintenance. For each asset, available time is computed and then summed across all assets.
- **Downtime Measurement:** Downtime is the period an asset is unavailable for use, excluding planned maintenance and non-operational hours. Total downtime is the sum of downtime for all included assets.

$$Total\ Available\ Time_j = \sum_{k=1}^n T_{k,j}$$

- **Uptime or Performance** is calculated as one minus the ratio of total downtime to total scheduled time across all assets and expressed as percentage.

$$Total\ downtime_j = \sum_{k=1}^n U_{k,j}$$

$$Uptime_{i,j} \text{ or } Performance_{i,j} = 100 \times \left( 1 - \frac{\sum_{k=1}^n U_{k,j}}{\sum_{k=1}^n T_{k,j}} \right)$$

- **Data source:** SCADA System, IT logs, Maintenance logs (if SCADA not available) provided by the airport etc.



# Measurement mechanism – Example of uptime of assets

Computation of performance score for the uptime of assets in a month

Particulars		Asset 1	Asset 2	Asset 3	Total
Operational hours	A	540 hours	540 hours	540 hours	1620 hours
Planned Maintenance time	B	20 hours	15 hours	5 hours	40 hours
Total Available time	C = A – B	520 hours	525 hours	535 hours	1580 hours
Total Downtime	D	5 hours	7 hours	8 hours	20 hours
Uptime (in %) / Performance score for the month		$100\% \times \left(1 - \frac{20}{1580}\right) = 98.7\%$			



**4.7**

# **Subjective Parameters**

# List of Subjective Parameters

## For Passenger Convenience

Cleanliness of the overall Airport*	Availability of Basic Facilities at the Airport (including Wi-fi)*	Courtesy and Helpfulness of Airport Staff*	
Ease of Wayfinding within the Airport*	Transportation between the Terminals	Ambience of the Airport	
Transportation to / from the Airport	Flight Information Display System (FIDS) Location throughout the Airport	Walking distance within the Terminal	
Availability of free Buggy Services	Availability of free Potable Water	Value for Money	
Services of Udan Yatri Café*	Bank / ATM facilities or Money Changers	Vehicle Parking at the Airport	Overall Satisfaction with the Airport

## For PRM Passengers

Person with reduced mobility (PRM): Airport Infrastructure	PRM Passenger: Overall Satisfaction with the Airport
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Monthly surveys will be conducted by the third-party assessor for subjective parameters linked to rebates/incentives; others will be surveyed annually.

# Passenger Convenience

S. No.	Subjective Parameters	Questions Asked	Types of Passengers	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
S1	Cleanliness of the overall Airport	How satisfied are you with the cleanliness of the overall airport including the terminal, toilets / washrooms, etc.?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	90%
S2	Availability of Basic Facilities at the Airport (including Wi-fi)	How would you rate the availability of basic facilities at the airport, such as an adequate number of washrooms, Wi-Fi, ATMs, signage to helpdesks, overall seating, and operational charging points?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	90%



# Passenger Convenience

S. No.	Subjective Parameters	Questions Asked	Types of Passengers	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
S3	Courtesy and Helpfulness of Airport Staff	Have you sought assistance from any Airport staff during your time at the Airport (e.g., staff at the customer helpdesk, or other service points)?	Arriving, Departing and Connecting passengers	Information Gathering	Yes / No	Yes / No
		If yes, how would you rate the courtesy and helpfulness of that particular airport staff?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	90%
S4	Ease of Wayfinding within the Airport	How would you rate the ease of finding your way within the overall airport premises?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	90%



# Passenger Convenience

S. No.	Subjective Parameters	Questions Asked	Types of Passengers	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
S5	Transportation between terminals	If you have travelled between different terminals today, how would you rate the availability and wait times of shuttle services or other transportation options between the terminals?	Connecting passengers (applicable to airports with multiple airports)	% of passengers rating the parameter as 4 or 5	90%	90%
S6	Ambience of the Airport	How would you rate the overall ambience of the airport, considering factors such as comfort, temperature, congestion, noise levels, and the aesthetics of the exterior?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	90%
S7	Transportation to / from the Airport	How satisfied are you with the available transportation options, considering the number of choices, their availability, and wait times?	Arriving and Departing passengers	% of passengers rating the parameter as 4 or 5	90%	90%

# Passenger Convenience

S. No.	Subjective Parameters	Questions Asked	Types of Passengers	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
S8	Flight Information Display System (FIDS) Location throughout the Airport	Are Flight Information Display Service (FIDS) System available at various locations throughout the airport, such as the check-in area, boarding gates, baggage claim areas, food courts, lounges, and arrival halls?	Arriving, Departing and Connecting passengers	Information Gathering	Yes / No	Yes / No
		If they are not, where do you think FIDS System should be added to better serve passengers?	Arriving, Departing and Connecting passengers	Information Gathering	Passenger to fill the response	Passenger to fill the response
		If they are, how satisfied are you with FIDS availability and placement?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	90%



# Passenger Convenience

S. No.	Subjective Parameters	Questions Asked	Types of Passengers	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
S9	Walking distance within the terminal	How satisfied are you with the walking distances within the terminal?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	Not Applicable
S10	Availability of free Buggy Services	If you have availed the buggy service at the airport, how would you rate the waiting time and ease of access to buggies at specific buggy points within the terminal?	Arriving, Departing and Connecting passengers (applicable to airports where buggy service is available)	% of passengers rating the parameter as 4 or 5	90%	Not Applicable
S11	Availability of free potable water	How satisfied are you with the availability and accessibility of free potable water at various locations throughout the airport — such as check-in areas, boarding gates, baggage claim zones, and food courts?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	90%

# Passenger Convenience

S. No.	Subjective Parameters	Questions Asked	Types of Passengers	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
S12	Value for Money	How would you rate the value for money of the services such as food and beverage, retail, duty free, lounge, car park and taxi services at the airport?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	90%
S13	Services of Udan Yatri Cafe	If you have availed food services at the Udan Yatri Cafe, how would you rate your experience in terms of food quality and service?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	90%
S14	Bank / ATM facilities or money changers	If you have availed any facilities such as bank services, ATMs, or money changers during your visit to the airport, how would you rate the facility?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	90%



# Passenger Convenience

S. No.	Subjective Parameters	Questions Asked	Types of Passengers	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
S15	Vehicle Parking	Have you used the parking facilities at the airport? If yes, how satisfied are you with the parking facilities and the time required to find a parking spot at the airport?	Arriving and Departing passengers	% of passengers rating the parameter as 4 or 5	90%	90%
S16	Overall Satisfaction with the Airport	How would you rate your overall experience at the airport today, taking into account the ease of check-in, security check, immigration / emigration, and transfer process?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	90%



# For PRM Passengers

S. No.	Subjective Parameters	Questions Asked	Types of Passengers	Measures	Proposed Target (For Category A Airports)	Proposed Target (For Category B Airports)
S17	Person with reduced mobility (PRM): Airport Infrastructure	Did you take PRM/ / wheelchair services at the airport? If yes, thinking about the lifts, PRM toilets, PRM signage, dedicated PRM lanes, how would you rate the accessibility of the airport infrastructure for PRM or those requiring wheelchairs?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	90%
S18	PRM Passenger: Overall Satisfaction with the Airport	How would you rate the assistance provided for PRM or those requiring wheelchairs?	Arriving, Departing and Connecting passengers	% of passengers rating the parameter as 4 or 5	90%	90%



**4.8**

**Measurement  
Mechanism - Subjective  
Parameters**

# Measurement mechanism – Survey based questionnaire

## 1. Survey Interviews:

- Minimum 400 passenger interviews monthly.
- Includes both departing and arriving passengers.
- Representation of both domestic and international passengers
- Survey questions available in various languages

## 2. Score Calculation:

- Simple average of individual scores
- Boarding pass scanning to ensure authenticity

## 3. Interview Locations:

- Departing pax: Gate or gate area before boarding
- Arriving pax: Arrivals concourse before leaving terminal

## 4. Passenger Selection:

- Random and unbiased selection
- No demographic bias

## 5. Interview Timing:

- Conducted in each terminal
- Busiest hour for dom. and intl. determined as per flight schedule

Rating scale:



- Extremely Poor (1)
- Poor (2)
- Average (3)
- Good (4)
- Excellent (5)

**05**

# **Rebate and Incentive Mechanism**

# Framework – Rebate and Incentive Mechanism

1	2	3		5	6
Rebate applicability	Incentive Eligibility	Incentive Offsetting Mechanism		Reduction in tariffs	Carry-Forward of Incentives
		Rebates for Persistent Non-Compliance	Rebates for Occasional Non-Compliance		
<p>Rebates are applicable when airport fails to meet the performance targets</p> <p><b>Total rebate: 5%</b></p> <ul style="list-style-type: none"> <li>Obj. – 4%</li> <li>Subj.– 1%</li> </ul>	<p>Incentives earned when airport exceeds defined performance targets</p> <p><b>Total incentive: 1.25%</b></p> <ul style="list-style-type: none"> <li>Obj. – 0.6%</li> <li>Subj.– 0.65%</li> </ul>	<p>For parameters where performance falls below target for <math>\geq 3</math> months, such rebate <b>cannot be adjusted against the earned incentives.</b></p> <p>This ensures that consistent under-performance is addressed.</p>	<p>For parameters where performance falls below target for <math>&lt; 3</math> months, such rebate <b>can be adjusted against the earned incentives</b></p>	<p>Rebate after adjustment of incentives used to:</p> <p><b>Reduce tariffs (UDF/ landing charges)</b></p>	<p>If total earned incentives exceed the rebates, the surplus incentive carried forward to the next evaluation period</p>

# Proposed Rebate – Airport Core Process

S. No.	Parameters	Rebate	
		Parameter-wise	Sub-Total
O1(a)	Security Check (Terminal Entry Gate) - Traditional	0.25%	
O1(b)	Security Check (Terminal Entry Gate) – Digi-Yatra		
O2(a)	Check-In – Economy class	0.25%	
O2(a)	Check-In – Business class		
O2(b)	Check-In (Self-Baggage Drop)		
O3	Security Check (Terminal) - Departure Pre-embarkation	0.25%	
O4	Immigration / Emigration	0.25%	
O5(a)	Baggage Delivery (Domestic)	0.25%	
O5(b)	Baggage Delivery (International)	0.25%	
O6(a)	Passenger Arrival (Domestic)	0.15%	
O6(b)	Passenger Arrival (International)	0.15%	
<b>Objective Parameters - Airport Core Process: Total Rebate</b>			<b>1.80%</b>



# Proposed Rebate – Airport Facilities

S. No.	Parameters	Rebate	
		Parameter-wise	Sub-Total
O7	Uptime of Flight Information Display System (FIDS)	0.25%	
O8	Uptime of Lifts, Escalators and Travellators	0.25%	
O9	Uptime of Automated Services	0.25%	
O10	Availability of Passenger Boarding Bridges (Domestic / International)	0.15%	
O11	Availability of Baggage Trolleys	0.25%	
O12	Seating Availability (at Boarding gates)	0.25%	
	<b>Objective Parameters - Airport Facilities</b>		<b>1.40%</b>
O13	Facilities for PRM Passenger (As per Checklist)	0.25%	
O14	Availability of Wheelchairs (Pre-booked)	0.25%	
	<b>Objective Parameters - Airport Facilities for PRM Passenger</b>		<b>0.50%</b>
	<b>Objective Parameters - Airport Facilities: Total Rebate</b>		<b>1.90 %</b>



# Proposed Rebate – Customer Service/ Grievance redressal system

S. No.	Parameters	Rebate	
		Parameter-wise	Sub-Total
O15(a)	Help desks (Counters located at check-in, SHA and arrivals)	0.10%	
O15(b)	Help Desks (Availability of Personnel at all helpdesks)	0.10%	
O15(c)	Help Desks (Percentage (%) of written complaints uploaded on Air-Sewa)	0.10%	
<b>Objective Parameters - Customer Service/ Grievance redressal system: Total Rebate</b>			<b>0.30%</b>



# Proposed Rebate – Passenger Convenience

S. No.	Parameters	Rebate	
		Parameter-wise	Sub-Total
	Subjective Parameters - Passenger Convenience		
S1	Cleanliness	0.25%	
S2	Courtesy and Helpfulness of the airport staff	0.25%	
S14	Availability of basic necessary facilities (including Wi-fi availability)	0.15%	
S15	Overall Satisfaction with the Airport	0.35%	
	<b>Subjective Parameters - Passenger Convenience: Total Rebate</b>		<b>1.00%</b>



# Proposed Incentive – Objective Parameters

S. No.	Performance Parameter	Measures	Lower threshold	Upper threshold	Max Incentive
O1(a)	Security Check (Terminal Entry Gate) - Traditional	Waiting Time (mins) in Queue (from entry in queue to presenting to CISF Staff)	96% < 10 mins	99% < 10 mins	0.15%
O1(b)	Security Check (Terminal Entry Gate) – Digi-Yatra	Waiting Time (mins) in Queue (from entry in queue to presenting at Digi-Yatra gate)	96% < 5 mins	99% < 5 mins	
O2(a)	Check-In	Waiting Time (mins) in Queue (from entry to presenting to staff for check-in)	Economy: 96% < 20 mins Business: 96% < 5 mins	Economy: 99% < 20 mins Business: 99% < 5 mins	0.15%
O2(b)	Check-In (Self-Baggage Drop)	Waiting Time (mins) in Queue (from entry to presenting to SBD counters)	SBDs: 96% < 5 mins	SBDs: 99% < 5 mins	
O3	Security Check (Terminal) - Departure Pre-embarkation	Maximum waiting time (from entry in queue to presenting to security staff for frisking)	96% < 10 min	99% < 10 min	0.15%
O4	Immigration / Emigration	Waiting Time (mins) in Queue (from entry in queue to presenting to immigration officer)	96% < 12 mins	99% < 12 mins	0.15%
<b>Total incentive – Objective parameters</b>					<b>0.60%</b>

# Proposed Incentive – Subjective Parameters

S. No.	Topics	Measure	Lower threshold	Upper threshold	Maximum Incentive
S1	Cleanliness	% of passengers rating the parameter as 5	90%	95%	0.15%
S2	Availability of Basic necessary facilities (including Wi-Fi Availability)	% of passengers rating the parameter as 5	90%	95%	0.15%
S3	Courtesy and Helpfulness of the Airport Staff	% of passengers rating the parameter as 5	90%	95%	0.10%
S13	Services of Udan Yatri Cafe	% of passengers rating the parameter as 5	90%	95%	0.05%
S16	Overall Satisfaction with the Airport	% of passengers rating the parameter as 5	90%	95%	0.20%
<b>Total incentive – Subjective parameters</b>					<b>0.65%</b>

# Total Proposed **Rebate and Incentive**

S. No.	Parameters	Rebate
		Sub-Total
1	Total Objective Parameters Rebate	4.00%
2	Total Subjective Parameters Rebate	1.00%
3	<b>Total Overall Rebate</b>	<b>5.00%</b>

S. No.	Parameters	Rebate
		Sub-Total
1	Total Objective Parameters Incentive	0.60%
2	Total Subjective Parameters Incentive	0.65%
3	<b>Total Overall Incentive</b>	<b>1.25%</b>



# Framework – Rebate Application: Adjusted in tariffs

## Rebate application mechanism: Revision in tariffs

- (a) **Scenario 1:** If the User Development Fee (UDF) is applicable on Domestic and International passengers, then the UDF charges will be reduced.
- (b) **Scenario 2:** If UDF is not applicable for Domestic Passengers, then landing charges will be reduced.

For e.g., UDF and Landing charges comprise 50% and 40% respectively of the total aeronautical revenues for a particular year:

Aeronautical charge	Adjusted Rebate applicable on aero revenues	Scenario 1 – UDF applicable			Scenario 2 – UDF not applicable		
		Charge	Rebate applicable on only UDF charges	Revised charges	Charge	Rebate applicable on only landing charges	Revised charge
Landing Charge	1.6%	400	0%	400	400	$\frac{1.6\%}{40\%} = 4\%$	384
UDF – Domestic		500	$\frac{1.6\%}{50\%} = 3.2\%$	484			
UDF – International		1000	$\frac{1.6\%}{50\%} = 3.2\%$	968			

**06**

# **Framework – Assessment Timelines**

# Assessment Timelines

## Monthly Assessment Report:

- Compares actual performance against defined targets
- Determine parameter-wise rebates and incentives
- Report for a particular month finalized by end of next month.

## Biannual Tariff Adjustment and Rebate Compliance Order: Issued for a six-month Review Period

- Compilation of all Monthly Assessment Reports.
- Total Adjusted Rebate amount after offsetting for incentives.
- Revised aeronautical tariffs for all airports due to rebate applicability

Review Period (6 months)	
Review Period 1	February 1 to July 31
Tariff Adjustment and Rebate Compliance Order release	September 15
Revision in Aeronautical Tariffs	From October 1 onwards till March 31
Review Period 2	August 1 to January 31
Tariff Adjustment and Rebate Compliance Order release	March 15
Revision in Aeronautical Tariffs	From April 1 onwards till September 30

**07**

# **Monitoring of Parameters through Third-Party Assessor**

# Monitoring of Parameters through Third-Party Assessor



## Independent Oversight

1

- Appoint third-party assessors to ensure independent, transparent, and unbiased monitoring
- Mechanism for avoiding conflicts of interest from self-assessment by airport operators



## Data Collection responsibility

2

- Develop airport-specific performance measurement plans based on AERA's guidelines.
- Collect and analyze data through recorded CCTV footage, passenger surveys, manual checks, etc.

# Summary

# Summary of Performance standards and monitoring mechanism



## Summary

1

**Passenger-Centric Approach** covering all touchpoints in passenger journey

2

**Leverage technology** for reliable and transparent measurement mechanism

3

**Balance between rebate and incentives:** Moving from rebate-only to a dual model of rebates and incentives to improve service excellence.

4

**Aligning airport charges with level of service:** Performance-linked financial model will directly impact the User Development Fee, ultimately reducing airfares.

## Vision for Excellence

Establishing comprehensive, reliable, future-ready and tech-enabled performance standards.

**Thank You**