

# AAI STARTUP POLICY

## Introduction

The National Civil Aviation Policy 2016 (NCAP) has a target to enable 30 crore domestic flight ticketing by 2022. This is expected to further rise to 50 crores by 2027. Similarly, international ticketing is slated to increase to 20 crores by 2027 and cargo volumes are likely to increase to 10 million tons by 2027. This fantastic growth rate in passenger traffic shall create an increasing load over airport infrastructure. Innovations will play a central role in mitigating some of these challenges as capacity additions are slower and harder to achieve. Moreover, as passengers demand better and more efficient services, it is imperative for Airports to deploy new and creative solutions to respond to the new age tech savvy passenger.

The San Diego International Airport opened its Innovation Lab in 2016. Housed in a former commuter terminal, it serves as a place for innovators inside and outside of the organization to develop, test and deploy new ideas. The lab since its inauguration has promoted several innovations which have been eventually deployed at the airport as well as other airports in the USA. Airports all over the world are increasingly working with startups to drive higher passenger satisfaction scores, sustainability and efficiency in operations. Singapore, Munich, Dubai, Copenhagen, Amsterdam are amongst those airports at the forefront of the innovation revolution. Inculcating a culture of innovation is critical to be at the cutting edge of technology. In India, Mumbai International airport (MIAL) has taken the first step in this direction by setting up an Innovation Lab with a dedicated team to drive innovation infusion. Similarly, Bangalore International Airport Limited (BIAL) has made rapid strides in this direction by setting up a co-innovation Centre in collaboration with Accenture.

Airport Authority of India has recently set up a Civil Aviation Research Organization (CARO) at Hyderabad. This center will provide researchers access to relevant equipment's as well as mentorship support for Applied research. While this will tremendously boost in-house research capabilities within AAI, it will also serve as a fulcrum for interactions with startups and other innovators towards driving improvements in ANS and airport operations.

Currently, no formal mechanism exists for startups to approach Airport Authority of India with their innovative ideas/ services. Moreover, within the entrepreneur community, there happens to be very little information on various airport processes and priority areas. This combined with lack of private funding and prohibitive costs for developing some of the airport relevant solutions are major impediments for generating and deploying new ideas. Devolution of powers to the airports to drive innovations as well as a structured reward and recognition matrix will go a long way in improving team morale and seed a culture of innovation within the organization.

The Airports Authority of India (AAI) Startup Policy lays down the guidelines to help Airport Authority of India as well as startups in relevant domains interact with one another. Through a reward and recognition matrix, it lists out steps towards inculcating a culture of innovation

within AAI as well as onboarding startups to drive innovation at airports. This will ultimately help the airports across India become future-ready.

## 1. Innovation Pathways: Vision & Objectives

**a) Vision:** Create a culture of innovation at Airports Authority of India (AAI) by harnessing internal and external sources for 'best in class' passenger experience, operational efficiency, profitability and sustainability of AAI managed Airports.

**b) Objective:** The policy aims to achieve the following objectives-

- i. Deliver a framework & mechanism for interaction of AAI with internal and external stakeholders that catalyse innovation at airports
- ii. Leverage technology for addressing challenges and enhancing delivery of services to passengers
- iii. Identify and solve for bottlenecks which prevent adoption of innovative products/ services at Airports
- iv. Develop an enabling mechanism for grooming ideas into effective pilots which translate into eventual commercialization

## 2. Policy

To drive the various objectives identified above, the policy covers the following

- a) **Innovation Adoption Strategy** - Categorizing AAI roles and functions and defining the appropriate strategy for each category
  - a. Idea stage innovation seeding
  - b. Focus on Pilots
  - c. Enabling Deployment
- b) **Institutional Implementation Framework** for startups/innovation promotion
- c) **AirInnovationHub (AIHub)** – Online platform for information disbursement, call for applications, review and interactions
- d) **Seeding a culture of Innovation** – Other Key Initiatives within AAI

## 3. Definitions

For all purposes in the policy below mentioned definitions will be used-

- **Startups-** Startup means an entity, incorporated or registered in India:
  - Upto a period of seven years from the date of incorporation/registration or upto ten years in case of Startups in Biotechnology sector
  - As a private limited company or registered as a partnership firm or a limited liability partnership
  - With an annual turnover not exceeding Rs. 25crore for any of the financial years since incorporation/registration

- Working towards innovation, development or improvement of products or processes or services, or if it is a scalable business model with a high potential of employment generation or wealth creation

Provided that an entity formed by splitting up or reconstruction of an existing business shall not be considered a 'Startup'.

- **Incubator:** An organization designed to support Startup companies during the early stages to help develop a scalable business model through business support resources and services such as physical space, capital, coaching and mentoring, common services including corporate and legal services and providing networking opportunities. Any entity funded or registered under any central or state government initiative support incubation shall also be considered as an incubator for this policy. For instance, Technology Business Incubator (TBI) under Department of Science & Technology, Atal Incubation Centre under NITI Aayog.

The incubator entity must be a registered entity falling under one of the following categories:

- a) Society (under The Societies Registration Act, 1860)
- b) Section 8 Company (under The Companies Act, 2013)
- c) A Company (under The Companies Act, 2013)
- d) Limited Liability Partnership (under The Limited Liability Partnership Act, 2008)
- e) Public Charitable Trust (under The Indian Trusts Act, 1882)

The incubator entity should facilitate at least 3 months of in person or virtual interactions between its incubatee and mentors when in operation.

- **Startup Agency:** The external agency on boarded by Airport Authority of India (AAI) to provide the requisite domain knowledge and support in the implementation of the startup policy. The Startup Agency would be identified through an RFP process.

#### 4. AAI Innovation Strategy

AAI's mandate encompasses very diverse set of work functions. It ranges from complex technology intensive functions guided by strict protocols such as air traffic management to services like provision of intra-terminal green transport where greater flexibility exists in terms of the solution involved. Work profile of AAI can be broadly categorized into 2 groups depending on the level of customizations possible.

**Category I:** Medium level of customizations possible: For e.g Airside Operations, Baggage Handling, Safety & Security systems, Cargo Management, Passenger Delight, Robotics etc.

**Category II:** High level of customization possible: For e.g. IT & Data Management Systems, Landside-Operations, Waste Management, Renewable Energy etc.

While innovations are possible across all functions, typically higher the flexibility and customizations possible, greater is the possibility of directly onboarding startups and innovators into the delivery process. Moreover, there is typically a linear relationship between degree of customizations and the number of startups already working in the field.

Thus, different approaches are necessary to drive innovation across all the 2 identified buckets.

i. **Focus on Pilots:**

Category I functions primarily on the Operational aspects like Airside Operations, Baggage Handling, Safety & Security systems, Cargo Management, Passenger delight would require an initial exposure to the existing processes followed by product refinement and pilot testing at a few airports.

It is necessary for the startups to closely study the existing 'As Is' state to develop the right product/service fit. Moreover, it is also necessary to test the product at select airports to gauge the efficacy of the product/service. This initiative will need to be driven by the airports with oversight from the Central Headquarters team.

Since the delivery of the pilot may require purchase of critical equipment/ infrastructure as well as focused competencies to ensure its implementation, higher degree of funding support would be required depending on the nature of the project.

a. **Idea 2 POC Grants:**

Startups with solutions to identified Category I functional areas will be eligible. Pilot testing typically involves higher costs as the product/ service needs to be tested under real-world conditions at a few locations. Moreover, the cost of product fitment and development is often high due to the requirement of raw materials and purchase of specialized equipment. An **Idea to Proof of Concept (Idea 2 POC) grant upto Rs. 2 crores per startup** is proposed.

Startups will be judged basis the following criteria

- a) Relevance in terms of AAI's core mandate
- b) Potential incremental value add/ savings
- c) Innovativeness of idea
- d) Team capability in terms of ability to deliver
- e) Willingness of team to dedicate resources for the POC
- f) Criticality of problem that the startup is trying to serve

The grant would be applicable to the following set of startups/ innovators

- a) Entities which are recognized as Startups as per the definition of Department of Industrial Promotion & Policy (DIPP) as on the date

of the application and are working in Category I related functional areas

- b) Startups/ Innovators which received AAI Idea stage grant and have demonstrated capability and willingness for converting the idea into a Proof of Concept.

Problem areas in Category I functions will be identified by airports. Startups would be invited to share their solutions through a call for applications. Startups can also upload their innovative solutions in the Category I functional areas even if it is not directly addressing an identified problem if they believe it will benefit the airports.

The evaluation will follow a 3 tier structure. The first level of evaluation will be done by the Champion Airport team in collaboration with a partner. The partner could be a local incubator, a local research institute, angel network etc. The Startup Agency will help in developing partnerships with the relevant partners. The approved startups will be sent to the Startup Agency for the second level evaluation. The startup agency will be responsible to undertake due diligence in terms of team compatibility, business proficiency. The startup agency will send the application for a detailed technical examination to sector experts identified by the startup agency. The sector experts may be drawn upon from within AAI or outside and a specific budget would be allocated to the Startup Agency for the same. If all conditions are satisfied, the application will be sent to CHQ for final approval. Besides evaluating the overall application, each level of evaluation will also comprise of an assessment of the cost breakup given by the startup and the essentiality of the mentioned cost breakup to developing the pilot.

At the time of assigning the grant, specific deliverables along with timelines shall be defined. Follow on payments will be based on the satisfactory achievement of the defined deliverables.

Those who are awarded the Idea to POC grant, will need to set up their pilot at one or more airports.

IP rights emanating from the work carried out under the scheme can be retained by the innovator/entrepreneur. However, the first right of refusal for commercialization of validated POCs will be with Airports Authority of India. The commercial production/application must be set up with airports under Airports Authority of India. Commercialization of the POC outside of AAI Airports will be permitted with the approval of the Airports Authority of India.

A contractual agreement between AAI and the startup shall be signed at the time of on-boarding. The contractual agreement shall lay down the modalities of usage of IP on a case to case basis including commercialization outside of AAI and the loyalty fees accruable to AAI.

## 5. Re-imagining Procurement- For ease of procurement from Startups

Airports Authority of India (AAI) needs to ensure highest standards of quality of product/service offering as well as highest standards of product/ service delivery. To achieve this, AAI procurement process follow a guideline which sometimes becomes unfavorable for startups.

There are several key areas, especially in Category II, like aspects of renewable energy, waste, ground transportation etc.. where startups have infused a great deal of new energy and are flourishing. Several startups working in these fields have proven themselves to be competent in delivering high quality products/ solutions. However, because of unfavorable qualification criteria, they are often unable to directly compete in the bidding/ tender processes. These are sectors where startups need to be encouraged by creating a level playing field in terms of procurement processes. List of sectors under Category II where procurement from startups will be focused upon will be mentioned in operational guidelines. To improve ease of procurement from startups, AAI will follow a three- pronged approach-

- [Relaxation of procurement norms for Startups](#)- Government has released several notifications with an aim to promote procurement from startups. These notifications include waiving of prior turnover and prior experience norms for Department of Industrial Policy and Promotion (DIPP) recognized startups. Government has also notified to relax Earnest Money Deposit (EMD) for recognized startups. AAI will implement these notifications to promote procurement from startups. Also, following provisions will have to be satisfied by startups for procurement –
  - Start-ups shall confirm to meet the technical requirements of the product. However, it shall not be necessary to meet the required PTR, prior turnover/ net worth& EMD criteria.
  - Start-ups shall be considered for relaxation only for those items/ products for which they are recognized as a “Start-up”. Otherwise, they shall need to meet the required technical/ experience and Financial criteria.
  - If a start-up confirms to meet the technical requirements of the product, capacity and capability assessment shall be carried out through demonstration route, as follows, based on below mentioned guidelines:
    - Design review along with shop survey shall be carried out to assess the supplier’s capability to manufacture and test the product, within the normal delivery schedule.
    - Similarly, assessment shall also be carried out to ascertain whether the works of the supplier under consideration have the capacity to

manufacturer and deliver the items of the required quantity, value and within the normal delivery schedule.

- Considering the assessed capacity to manufacture the product, Start-up entities may be qualified for only a corresponding limited quantity of products.

This capacity and capability assessment will be done by the empaneled startup agency in consultation with AAI's team of the concerned department (department which has come up with the tender). AAI may also charge a nominal fee from the startup for this scrutiny. This nominal fee will be decided depending upon the time and level of scrutiny required. However, in no case will this fee be higher than Rs 50,000.

- [Simplified procurement through online call for Counterbidding](#)-For startups which have satisfactorily completed incubation cum funding program (for Category I functions) and have demonstrated innovativeness, a system of counter bidding may be deployed for procurement. They would need to submit an online proposal detailing out the uniqueness of their product, the value add for airport etc. This online process will be hosted on the AirInnovationHub (AIH- mentioned in point-10 of policy).

Such startup proposals will need to be forwarded to the empaneled startup agency for due diligence by respective Champion Airport teams where the pilots are conducted as part of Idea 2 POC grant. If it is accepted by the empaneled startup agency, it will be forwarded to CHQ for final approval to be opened up for counter bids.

Based on the accepted proposals, received from the startup, external startup agency will coordinate with the concerned department to create an RFP. Based on the RFP, AAI will call for bids from other parties for the procurement within a fixed timeline. Bids received from other parties will have to match or better the technical performance of startup' product. Those bidders who will be able to match the technical part with lower financial bids will be called along with the startup (with original proposal) to go for second round of bidding. The bidder with the lowest bid, after the second round of bidding, will be selected. This process will be time bound and will be closed within a month of receiving the initial proposal.

Moreover, the Government E-Marketplace (GeM) has simplified procurement processes for ministries and PSUs by developing an online marketplace of suppliers. Inclusion of startups on GeM has recognized them as an important supplier of innovative products to government. AAI is a major procurer of products on the GeM platform and will promote procurement of products from startups registered on GeM. For this, in addition to other initiatives, AAI will provide trainings to its officials

about the “bidding route” present in GeM, specially made to procure innovative products from suppliers.

- [Information marketing to increase greater participation](#)-Low participation of startups in the procurement processes is often due to lack of information. To improve penetration of information of the various initiatives aimed at increasing participation of startups in the procurement process, AAI will use social media campaigns, SMS campaigns and other offline mediums of marketing to make information available to startups more easily.

Moreover, AAI will also conduct “Startup information conclaves” to promote its initiatives among stakeholders of the startup ecosystem. These conclaves will be conducted once in six months at Champion Airports (mentioned in section-8: AAI Startup Policy Implementation Framework) which would be open for all startups working in relevant focus sectors.

AAI will create a grievance redressal team to cater to the complains related to procurement specially from startups. This team will also provide training to the AAI’s officials at the airport with regards to creating tenders which are innovation friendly.

## 6. IP

IP rights emanating from the work carried out under the scheme can be retained by the innovator/entrepreneur. However, the first right of refusal for commercialization will be with Airports Authority of India. The commercial production/application based on the idea must be set up with Airports Authority of India controlled airports.

Commercialization outside of AAI controlled airports will be permitted with the approval of AAI.

A contractual agreement between AAI and the startup shall be signed at the time of on-boarding. The contractual agreement shall lay down the modalities of usage of IP on a case to case basis including commercialization outside of AAI and the loyalty fees accruable to AAI. The startup agency in consultation with CHQ will help in drafting the IP agreement with the startup.

## 7. Exit Clause for Non – Performing projects

At the time of selection, a memorandum of understanding will be signed between the startups/ innovators and Airport Authority of India. The MoU will enlist roles and responsibilities as well as defined deliverables. Follow on funding will be basis the satisfactory completion of the

defined deliverables. Due to the changing nature of technology and its unpredictability, there would be provision for a change in deliverables from time to time. The team at Champion Airport in consultation with the Startup Agency will be responsible for evaluating the satisfactory performance of the startups availing Idea 2 POC grant.

Any machinery or equipment purchased, utilizing the Idea to Proof of Concept (Idea2POC) grant would be considered the asset of Airport Authority of India.

The startups would need to submit utilization certificates to justify the fund allocation. The differential amount for which utilization certificates are not available, would need to be returned back by the startups to AAI.

Fund allocation will be done in tranches and fulfilment of agreed deliverables would be considered for follow on fund distribution.

## 8. AAI Startup Policy Implementation Framework:

AAI will create a 3- tiered structure, a champion airport team (CAT) at identified airports, sector experts team and a Central oversight committee constituted at the Central Headquarter (CHQ) level for implementation of the startup policy. The Central Oversight Committee will comprise of a team of 4 -5 members drawn from Research & Development team (R&D), Business Development (BD), Information Technology (IT), Finance of AAI. Concerned Member, Airports Authority of India, will head the CHQ level Central Oversight Committee (CHQ Team). This team will be supported by a startup agency. The startup agency will comprise of individuals with experience of the startup ecosystem. Further details regarding the empaneled agency are given in point 9 of the policy.

Central Oversight Committee will be majorly responsible for leading discussions on strategy for embedding innovation at airports. They will also be the final evaluators of the viability of ideas/ proof of concept applications.

AAI will designate 10 airports as "Champion airports". These Champion airports would be designated based on existing passenger footfall, maturity of local startup ecosystem and regional inclusiveness. In addition, 4 ANS hubs would also act as Champion Airports. Details of these Champion airports and ANS hubs will be mentioned in operating guidelines of the policy. The Champion Airports would constitute a designated Champion Airport team for the implementation of the startup policy. This team will be headed by the respective Airport Director and would comprise of 2-4 nodal officers designated by the Airport Director. They would also be ably supported by the empaneled startup agency in the discharge of their duties as per the AAI Startup Policy. The Champion Airport team will be responsible for sourcing of ideas/ innovations, conducting an initial evaluation about the idea/ innovation and recommending them to the Central Oversight Committee for consideration. The Champion Airport team will manage space for the startups to sit and work besides providing any other facilitation which is relevant.

## 9. AAI Startup team:

Innovation and startup promotion require focused efforts as well as the relevant skillsets. Hence an AAI startup team is necessary to ensure the AAI Startup Policy is executed in the right spirit. In Phase 1, 4 resources would be necessary who would be based out of Delhi and Hyderabad. Subsequently, each of the champion airports will have a dedicated resource. The startup team will report directly to Concerned Member, AAI.

An RFP will be floated for hiring of the agency which will provide the relevant resources needed for the discharge of duties of the AAI Startup Policy.

Roles and responsibilities of the startup agency shall involve the following

- outreach strategies of the various initiatives relevant for startups including social media, marketing and events.
- Assisting in evaluation of startups in terms of procurement as well as monetary incentives i.e monthly assistance and Idea 2 POC funds
- Assisting in developing IP contracts between selected startups and AAI
- Coordinating with other departments and airports for the benefit of startups and effective implementation of policy
- Coordinating with other departments to identify priority areas and problems that can be solved by startups
- Ensuring timely payments as well as assisting in evaluation of progress made by startups/ innovators
- Devising new strategies and initiatives for promoting innovation and startups
- Forging the right partnerships with external stakeholders like incubators, funds, corporates as well as other government departments/ states.

## 10. AirInnovationHub (AIH):

Information regarding the various outreach activities as well as processes involved in Airport functions is critical to invite startups to share their ideas/ products with AAI. Similarly, it is also essential to ensure transparency in the application and onboarding process for startups.

An Information dissemination platform- AIRINNOVATIONHUB (AIH) will be developed by AAI which will have the twin objectives of relevant information dissemination as well as serving as an online platform for implementation of the various elements of this Startup Policy. This may be in the form of a microsite created within the existing Airport Authority of India official webpage or may be integrated with the R&D Hub website.

A query resolution cell will also be made to provide information about the innovation activities/programs being run by the AAI and will be integrated with AIH with help of Toll free number and chat interface. This cell will be based at Champion Airport level.

## 11. Boost to Innovation culture-

To ensure continuous improvements and sustainability of efforts towards onboarding of new technologies/innovation or startups within the functioning's of Airport Authority of India, there is a need to develop a culture of innovation within the organization. For this objective, the below mentioned organizational level initiatives will be taken up-

### i. Best Practices sharing mechanism-

To improve larger scale adoption of internal innovations, AAI will develop a best practice sharing mechanism.

Innovations at the airports will be divided into 4 pillars and the best innovative airport/s in each category will be awarded "Best Innovative Airport" for that category in a yearly competition organized by the CHQ. Airports will be able to submit their innovations in each category which will be subject to a rigorous evaluation mechanism. The best innovations will be showcased centrally.

This mechanism will not only promote innovation adoption but will also increase interaction among airports of different regions thus catalyzing generation of new ideas.

Innovation categories, evaluation parameters and other details will be elaborated in the operational guidelines of the policy

### ii. Solve for Airports-

AAI will partner with other Aviation Partners including those from outside of India, to organize hackathons/ Grand challenges. Winners of the challenge will get an opportunity to work with the 3-tiered structure of AAI or with partner aviation authority to implement their solutions which have a global reach.

### iii. Innovation Wall-

AAI is blessed with prime infrastructure space as well as a target audience which includes C-Suite executives, heads of government etc. With the objective of increasing commercialization of AAI's innovative solutions/products and cross-domain adoption of its innovations, an Innovation wall will be made at Champion Airports. These innovation walls will showcase the key innovations/products developed in Innovation Factories of AAI or internally within the teams of AAI. Innovation walls will make use of new age information display systems such as AR/VR tools or interactive display screens to show selected innovations in the best possible way.

## 12. CONCLUSION

The popularity of air travel is increasing at a rapid pace among Indians aided by the emergence of low-cost airlines as much as the speed of travel. This is leading to higher stress at the airport with increased work towards managing passenger traffic, cargo, the vehicle for pick-up & drop,

trolley management, baggage handling and cleanliness among few of the key issues. Thereby, AAI welcomes innovations and Startups from both within AAI as well as from outside to work with AAI to build, design and deploy cutting-edge innovative solution across different verticals of the Airport. AAI through this policy aims to support such innovation and Startups through pilot opportunities, cash grants, incubation offer, relaxed procurement and most importantly by providing access to information relevant for innovating.