

NEC's Digital ID Solution

Airport Authority of India (AAI)

Revolutionizing air travel in India

India is on track to surpass all other nations and claim the title of the world's most populous country by the end of 2024. Over the past decades, the Indian subcontinent has been undergoing a rapid transformation across all industry sectors, powered by the soaring aspirations of its citizens, and the sheer size of its consumer market. It is set to become the third-largest economy on the planet by 2030.

As more Indian citizens can afford domestic and international air travel, India is also poised to become a popular air travel destination for the world. Thanks to initiatives like Ude Desh ka Aam Naagrik (UDAN), Hindi for "Let the common citizens of the country fly", air travel is becoming more accessible and affordable, connecting remote towns and bustling cities through a huge network of 453 routes and 70 airports, including two water aerodromes and nine heliports.

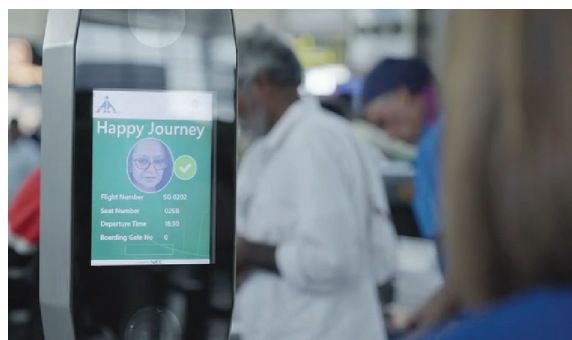
Within the next decade, the air travel experience in India is projected to be accessible to a staggering 827 million citizens. To address the challenges of increasing air passengers, congestion, overcrowding, passenger inconvenience and the need for physical distancing, the Airport Authority of India (AAI) collaborated with NEC. Through the deployment of the Digital ID solution, multiple airports in the country now offer an intelligent, safer, and touchless boarding system. This partnership has revolutionized the passenger experience, ensuring convenience and enhancing safety standards throughout the air travel journey in India.



The solution: NEC's Digital ID

NEC's state-of-the-art Digital ID solution is powered by NEC I:Delight platform and is integrated with Société Internationale de Télécommunications Aéronautiques (SITA), the world's leading IT provider to the air transport industry.

The solution processes the travellers' biometric information for seamless entrance to the airports, check-in, security, and boarding. Leveraging NEC's successful identification track record at international airports such as Frankfurt and Narita, NEC introduced biometric boarding under the DigiYatra initiative (Government of India's initiative for digital processing of passengers at airports) at four airports in Varanasi, Pune, Kolkata, and Vijayawada.



How it works

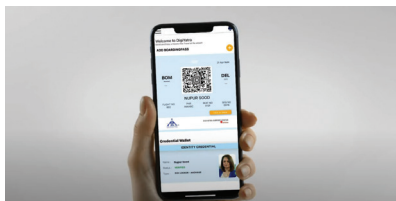
Passengers are simply required to register their information, including a selfie, on the DigiYatra app or at unmanned kiosks located outside and inside the airports. This registration process effectively replaces the need for physical documents, as their face becomes their boarding pass. Once registered, individuals can effortlessly navigate the airport experience by using NEC's Digital ID solution to enter the airports, check-in, go through security, and board the plane, without the hassle of carrying physical documents, passports, or boarding passes.

A top concern when embarking on this project is user privacy and security. The solution is designed so that passengers can opt-in to provide biometric data, ensuring individual privacy preferences are respected. Stringent data protection measures, encryption, and access controls secure the data. Backed by blockchain technology, the solution gives individuals total privacy and control of their personal information, while making data shareable on a trusted network, and ensuring the security of identity transactions. The project aims to offer user confidence and control over personal information during biometric boarding.

World's most accurate face recognition technology

NEC's face recognition technology has been ranked several times as the world's most accurate face recognition technology in vendor tests conducted by the US National Institute of Standards and Technology (NIST) *. It has also clinched the top spot in 2020 and 2022's report, Frost and Sullivan Radar for Biometrics. NEC has also been recognized as one of the most influential expert companies in The Biometric Digital Identity Prism, a framework by Acuity Market Intelligence and FindBiometrics.

Traditional access control systems can be prone to error, which can lead to long lines and frustrated customers. By using biometrics and face recognition, NEC i:Delight solutions are able to provide an accurate match almost instantaneously. This is particularly important in high-traffic areas, especially airports.



The benefits

Enhanced passenger experience

The airport experience is now simplified for all travelers, offering a seamless and hassle-free journey from check-in to boarding, without the need for multiple document verifications and manual processes.

Cost savings

Digitization allows for lower operational costs for airports and airlines, reducing the need for manual document checks and streamlining passenger flow.

Enhanced security standards

NEC's Digital ID solution accurately verifies passenger identities, reducing the risk of fraudulent activities and unauthorized access, and delivering a safer and more secure travel experience for all passengers.

Improved system performance

Digitizing the current manual processes helps bring greater efficiency to airport operations, reducing human errors and enhancing overall system performance.



Aryama Sanyal

Airport Director (General Manager),
Lal Bahadur Shastri International Airport

"It's a real game changer, let me tell you. With DigiYatra, we have reduced the timing to less than 50%, maybe 40%. So previously, what used to take 10 seconds, now we are taking maybe 4 seconds, and I feel very proud that Varanasi International Airport has become the pioneering airport to start DigiYatra supported by NEC, and we are forging ahead. The data showed that we had covered 56% of the passengers travelling to our airport by DigiYatra."

Changing the way the world flies

India's airports are not the first travel hubs to benefit from NEC's biometrics solutions. NEC and SITA technology has already been deployed in 16 airports globally, and growing, with more than 3,000 biometric touchpoints, creating frictionless journeys for thousands of travelers daily. Passenger check-ins can now be completed in a mere 3.56 seconds, an astonishing 94% faster than the older technologies.

In line with the Indian government's digitalization drive

NEC's partnership with the AAI is aligned with the broader vision of supporting the government's digitalisation drive across a range of government-wide citizen services. The integrated solution ensures that customers enjoy a faster and improved airport experience, while airlines also benefit from lowered tarmac fees and regulatory fines. With this Digital ID solution, air travel is now convenient, efficient, and safe for all Indian citizens and, in the future, for tourists flying into the country.

"We are providing convenience and a smooth process for airport operators. It allows them to process more passengers per day, thereby implementing for better productivity and all this but with better safety and security."



Aalok Kumar

President & CEO,
NEC Corporation India

NEC's Digital ID solution sets a milestone in changing how people fly in India. As India continues to witness rapid growth and change, this innovation paves the way for an improved air travel experience for every citizen – Ude Desh ka Aam Naagrik or "Let the common citizens of the country fly" indeed.

The future vision of Digital ID management includes expanding its implementation to international travel. The goal is to create a globally interconnected biometric system that allows for seamless and secure travel across borders. By integrating biometric data with international passenger databases and collaborating with airports worldwide, the project aims to enable travelers to use their biometric information for identity verification at airports internationally.



* The evaluation results do not represent recommendations by the US government for specific products.