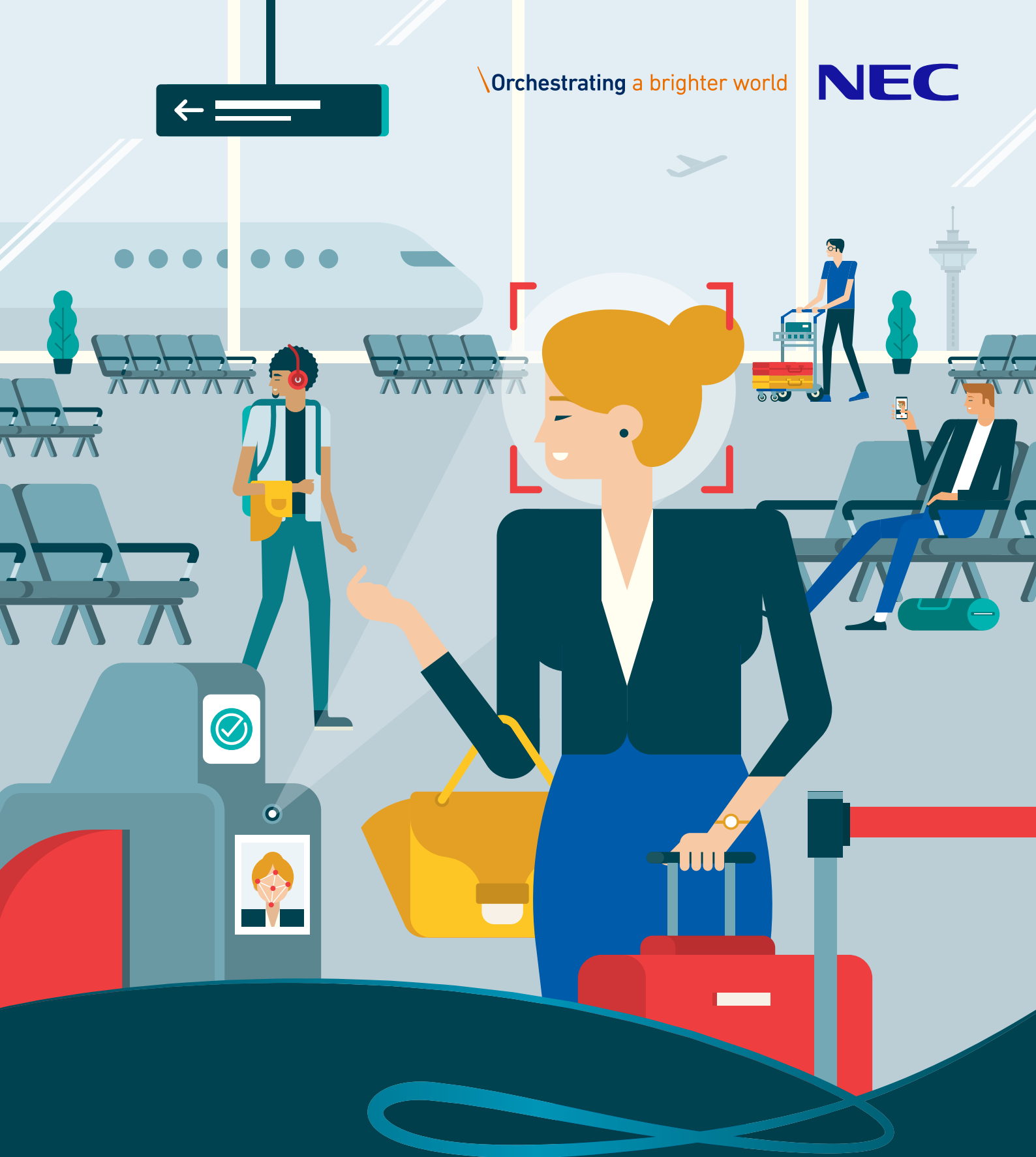


Orchestrating a brighter world

NEC



# Taking off with Digital Identity

HOW A SINGLE ID WILL TRANSFORM AIR TRAVEL

# WHY IT IS UNPLEASANT TO FLY NOW

When travelling, the journey is often as important as the destination. We want the trip to be safe, secure, and seamless. We want to be treated with the best service so that our business trips and holidays will be enjoyable.

More people are flying today, and airports are struggling to cope with the load. With heightened security threats, passengers are asked to go

through more checks and screenings. All this leads to a poor flying experience.

As passenger numbers increase steadily, the problem will grow. As many as 7.8 billion passengers will travel in 2036, a near doubling of the 4 billion air travellers in 2017, according to the International Air Transport Association (IATA).



# SAFER TRAVELS, BETTER TRAVELS

For each stakeholder in the aviation industry, the challenges of balancing efficiency with security are manifold:

With a seamless, efficient and secure experience, passengers can proceed through the previous “bottlenecks” at an airport without fuss. This brings enormous benefits for all stakeholders involved.

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| <p><b>Airports</b></p>                                  | <p>A crowded airport is difficult to navigate for passengers, limiting time spent on retail and entertainment. Adding new terminals or upgrading existing infrastructure, involves huge costs.</p>   | <p>Smoother transits for busy airports, as passengers choose self-service and frictionless travel through Digital Identity. This ensures better management of assets and resources along with saving infrastructure costs</p>  | <p><b>Airports</b></p>                                  |
| <p><b>Governments</b><br/><i>(Border Control)</i></p>  | <p>Governments are concerned about safety and security at border and immigration control, while seeking to protect airports from potential risks. Authenticating more passengers with legacy processes is time consuming and labour-intensive.</p>   | <p>Reduced fraud and criminal activity, with a robust face recognition and document verification system. With Digital Identity in place, officers can focus on passengers who require additional checks, instead of performing random inspections on travellers.</p> | <p><b>Governments</b><br/><i>(Border Control)</i></p>  |
| <p><b>Airlines</b></p>                                 | <p>Airlines need to provide excellent customer service, while ensuring safety and security, keeping cost low in-light of increased competition. Delays at touchpoints mean flight delays. Incomplete or incorrect passenger advanced passenger information brings additional losses. Upon arrival, unauthorised passengers are deported back, at a cost to airlines.</p> | <p>Improved experience for passengers, who can be identified early and provided with personalised service. Especially for VIP customers, the ability to understand their preferences better will lead to customer loyalty.</p>                                       | <p><b>Airlines</b></p>                                 |



**Why NEC** Not all biometrics technologies are the same. NEC's high-quality algorithms have been proven in numerous deployments worldwide in a variety of settings, including aviation. A trusted vendor, we deliver real-world performance using the latest cutting-edge technologies.

|  |   |  |
|--|---|--|
|  <p><b>Fast and accurate</b><br/>(NIST)</p> |  <p><b>Proven</b><br/>Over 700 Systems across 70 countries</p> |  <p><b>Trusted Partner</b><br/>Deployment at over 25 Airports</p> |
|--|---|--|

# Seamless travel with Digital Identity

## 1. Getting Ready

After making a booking, a traveller gets started on her journey with her smartphone, where she opts-in to register her face and passport along with her travel information such as flight information.

## 2. Check-in

Information entered earlier is verified along with the passenger and passport using face recognition at the airport. From here, her face is her ID for all checkpoints.



## 3. Bag Drop

At a self-service kiosk, she scans her face to confirm her identity and the information is tagged to her bags, which she drops off at the kiosk.



## 4. Border Control & Security

At immigration/border control, facial recognition is used to check the passenger's identity against the Government databases.



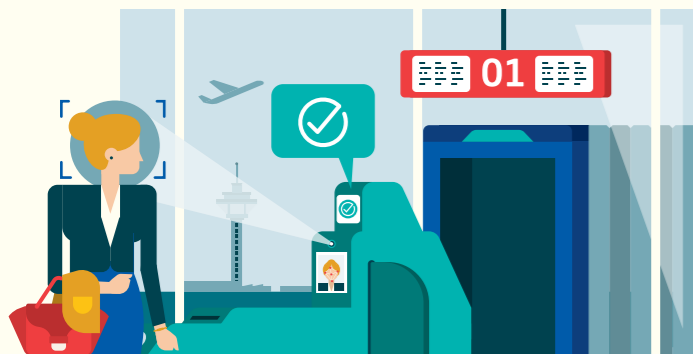
## 5. Shopping & Leisure

With less time queuing, passengers can relax and enjoy their time until departure. Passenger is automatically identified when she approaches an airline lounge or retail shops, where she can receive customised service. Again, no need for documents.



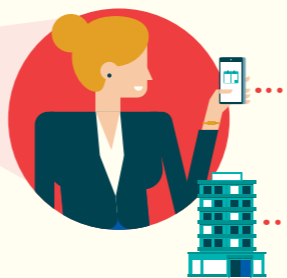
## 6. Boarding

With a face scan at the gate, she gets the greenlight to board a plane. This ensures only the right passengers get on the plane.



## 7. Beyond the Airport

Once she lands at the destination, this Digital Identity can also be extended for secure identity management based on face recognition across hotels check-ins, car rental and theme park entry.



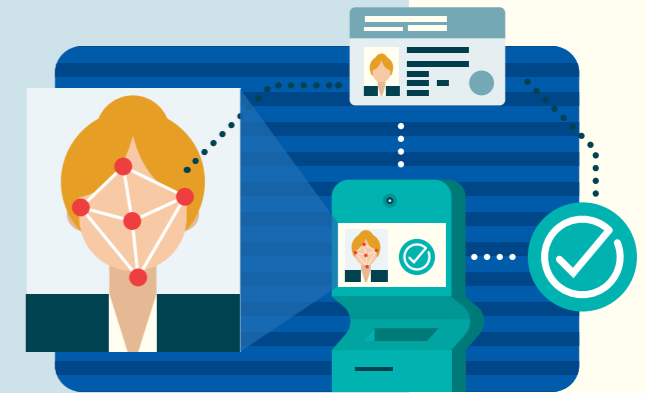
## KNOWING YOUR PASSENGER

Airports and airlines have to be ready for the passenger growth, while watching operational costs, finding new revenue streams and improving passenger flow by offering a seamless experience.

If passengers can identify themselves digitally and physically with a Digital Identity for all stakeholders, they can enjoy a frictionless trip through the checks. This way, the flow of passengers at the airport would be seamless, efficient and secure.

**NEC Digital Identity technology** enables a passenger's biometrics (facial recognition, for example) and travel information to be captured on a single record. This can then be used as a trusted token to identify him to each stakeholder easily. In future, this token can also be tied to a trusted National Digital ID making it more secure.

At every step of the journey – whether during self-bag-drop, at border control or aircraft boarding – a passenger can simply complete a facial scan without having to provide his passport or boarding pass. *His face is his ID.*



### SEAMLESS

Repetitive processes are eliminated, touchpoints are reduced and queues are shortened.

### EFFICIENT

Instant verification cuts the time spent on manual ID checks, reducing manpower demands and boosting capacity at airports.

### SECURE

Biometrics offers improved security. Face recognition with liveness detection now spots spoofing.

One ID makes it harder to cross borders under a false identity, reducing crime.

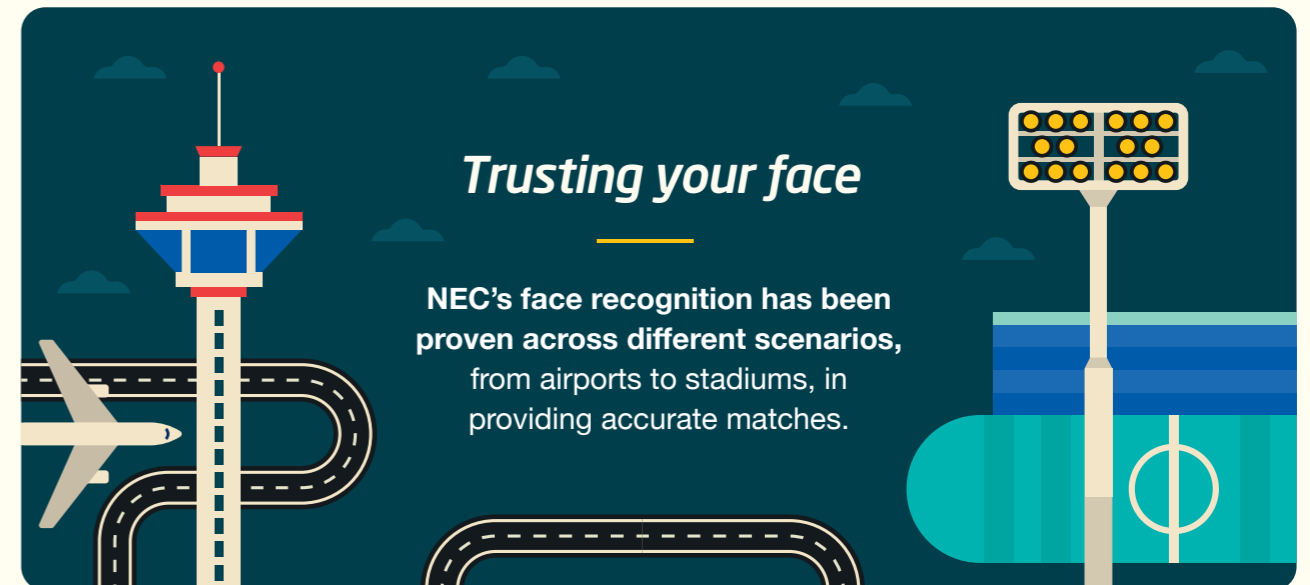
### MANAGING THE DIGITAL IDENTITY

Behind the simplicity of the experience is a sophisticated ID management system that has to be set up to store, secure and process the IDs as a traveller passes through various checkpoints in his journey.

With each stakeholder, the data is shared on a need-to-know, authorised-to-know basis, ensuring the private data is protected.

## Trusting your face

NEC's face recognition has been proven across different scenarios, from airports to stadiums, in providing accurate matches.



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