eu-LISA Industry Day

Practical interoperability of API-PNR systems and EU systems

IDEMIA

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Introduction

API and PNR must not be forgotten from the interoperability reflexion at EU level

IDEMIA's experience of API-PNR system development:

- IDEMIA has been a legacy provider of identity and security solution for governments for some years now, in particular in the EU, both at national and central level (VIS-BMS, SIS II, EES).
- In the last 4 years, IDEMIA has developed a traveller analytics solution to help governments deploy API and PNR solutions.
- With the experience of the French solution in particular, we now know what it takes to deploy such complex risk analysis solutions:
  - Flexibility and adaptability to each specific government services business needs (what and how each agency/service wants to detect a risky traveller)
  - **Interoperability with existing national and central systems** (that know the travellers under different identities)
  - **Complexity of collecting data from various air carriers** and their underlying data providers (DCS and GDS)

The last two points are somewhat also applicable to what's in store for other EU systems:

- Web service for carriers to check in EES the remaining authorised length of stay
- Web service for carriers to check in ETIAS if a traveller has a valid travel authorisation
- Interoperability regulation (ESP, CIR, shared BMS, MID, etc.)

API and PNR was studied by the High Level Expert Group on information systems and interoperability's Final Report of May 2017:

- Recommendations 5.7 "Carrier communication"

It's however not explicitly quoted in the Interoperability proposal of Dec 2017:

- The recommendations of the HLEG should be further discussed with the various actors, in particular with technology suppliers and system integrators who might provide valuable insight on what's practically feasible.

1. Practical timeline for visa holders travelling by air

Quite a journey for the traveller

Booking
H-2 months

Remaining length of stay check
Any time

Visa request
H-1 month

Last minute booking (i.e. go-show)
H-3 hours

Check-in (or no-show)
H-2 hours

Bag drop
H-2 hours

Security access
H-1 hour

Border control
H-1 hour

Boarding
H-30 minutes

Take-off (or gate-closure or taxi)
H

Border control
H+2 hours

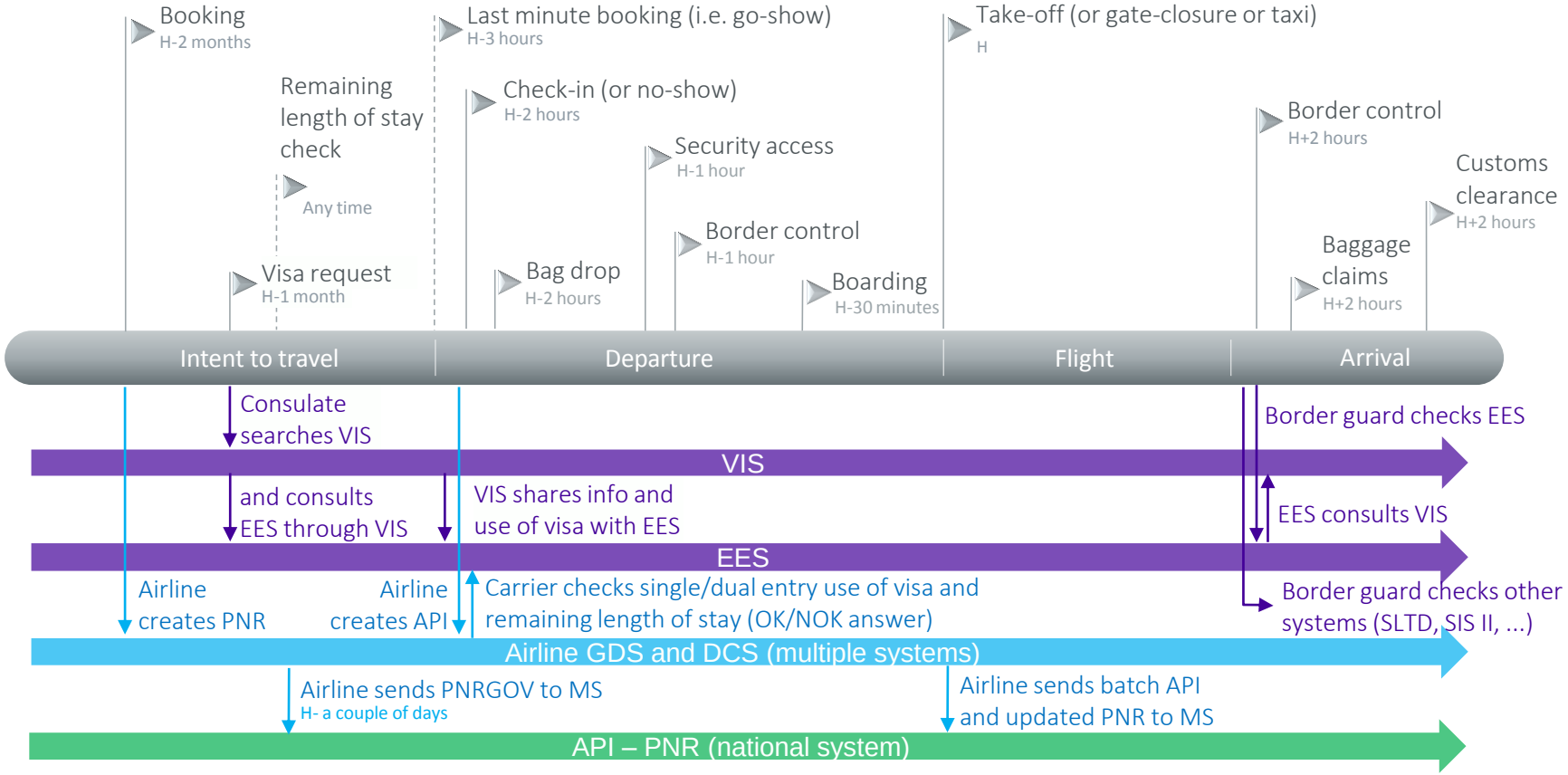
Baggage claims
H+2 hours

Customs clearance
H+2 hours

Intent to travel | Departure | Flight | Arrival

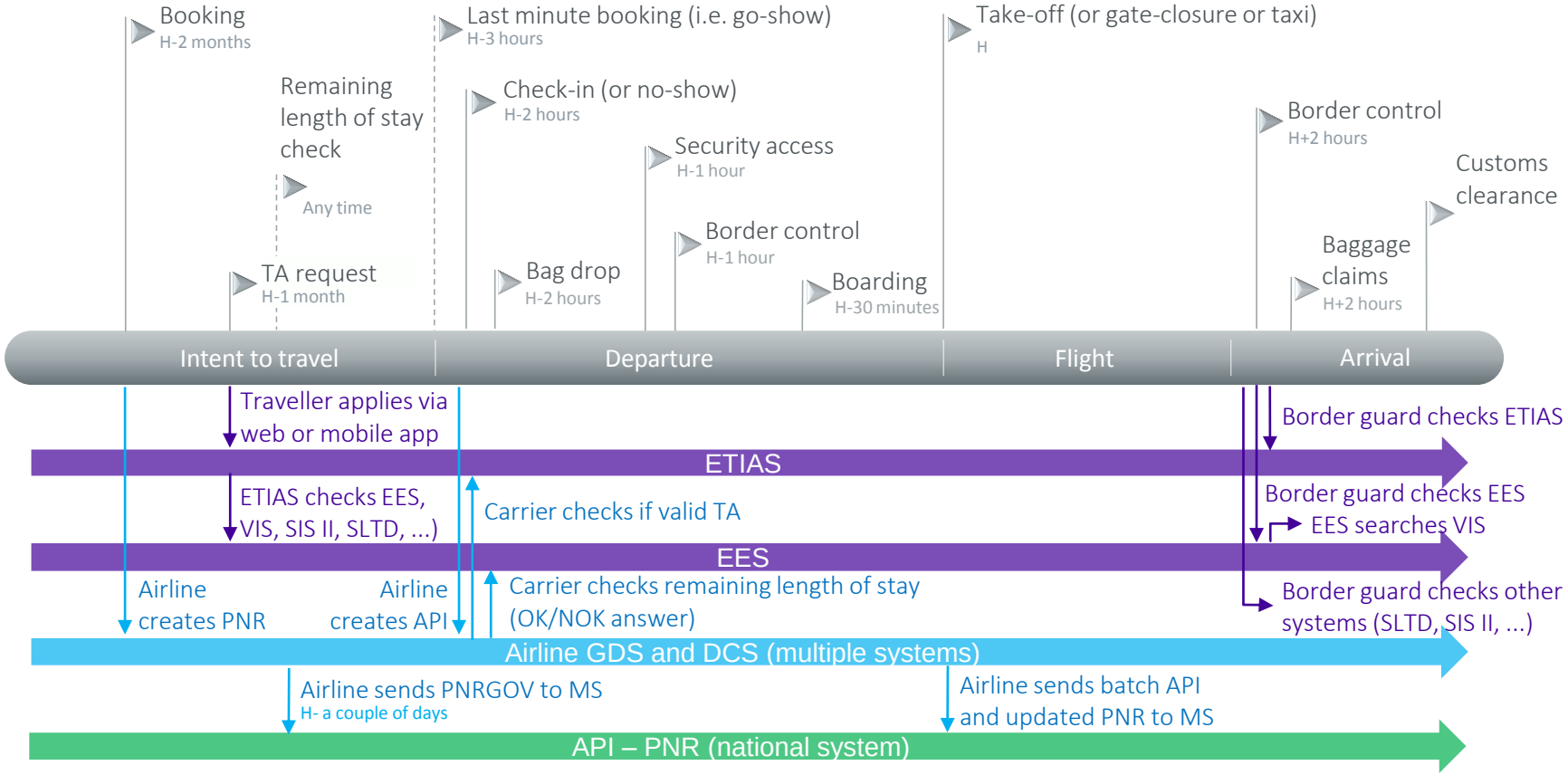
1. Practical timeline for visa holders travelling by air

A lot of system interactions at play behind the scene



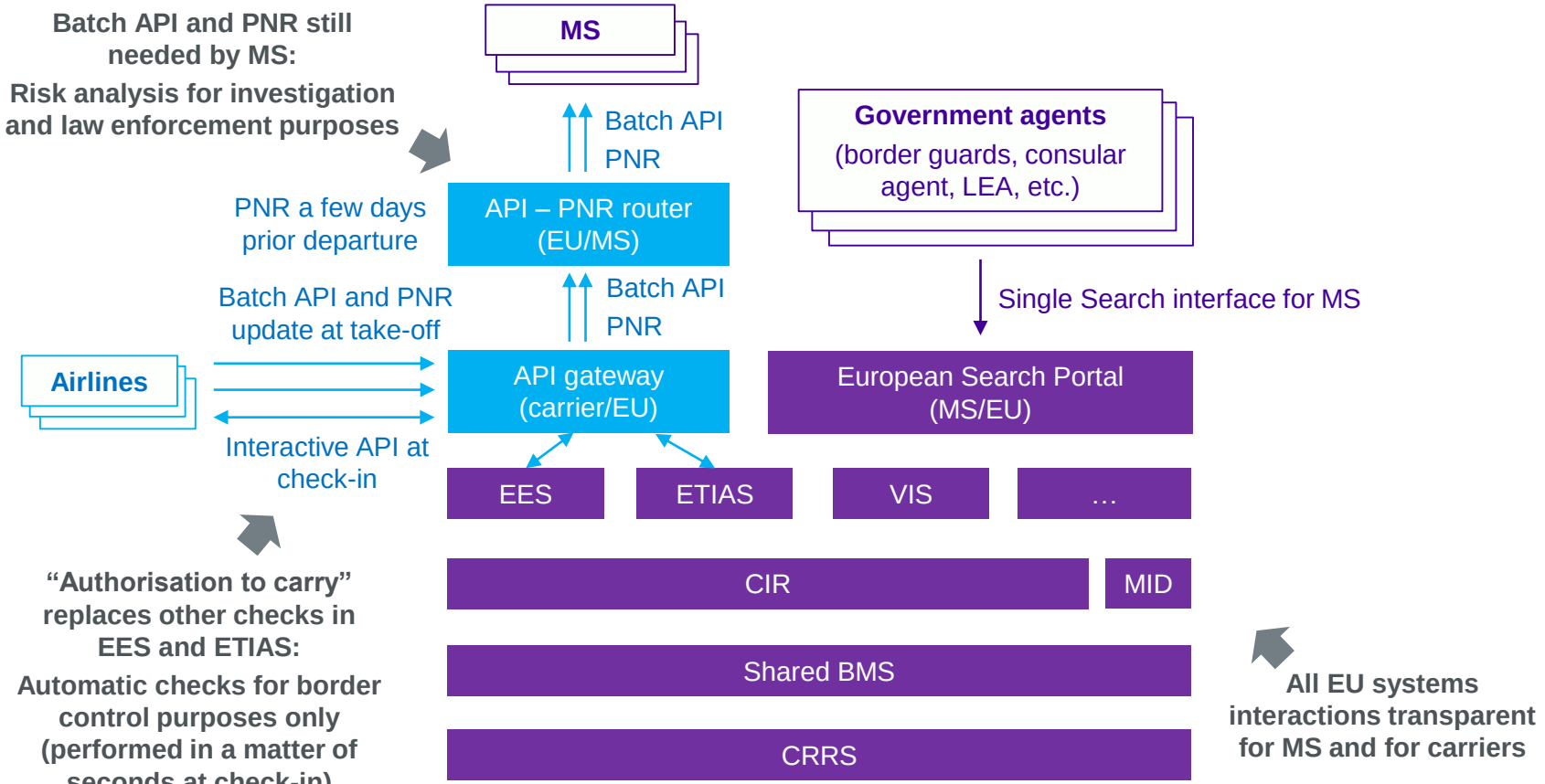
1. Practical timeline for visa exempt travelling by air

Similar system interactions with ETIAS instead of VIS



2. System Interoperability

Many similar system interactions call for interoperability and single interfaces



3. A few questions and recommendations

Many open practical implementation choices require further discussion with the industry

Will carriers ask EES and ETIAS about travellers (based on the MRZ of the TD) whenever they want, or only when attempting to check-in a would be traveller, that is by also sending the flight / boarding pass information?

In the latter case, this would more or less be equivalent to sending an individual API to the EU to ask for an authorization to carry, which is an "Interactive API".

- Recommendation to replace checks of valid TA, use of single/dual entry visa and remaining length of stay by a simple "autorisation-to-carry" request from carriers, similar to Interactive API.
- Shifts responsibility back to the EU => only one OK/NOK question asked.
- Data exchanged via a carrier/EU gateway

What about land and sea?

- Recommendation to not forget about practical ways to embark maritime and land carriers

Do carriers have to check if TA valid in ETIAS and with remaining length of stay in EES?

- Recommendation for single interaction with EES enabled by ETIAS updating EES upfront, like VIS.
- General recommendation for interoperability of systems 'behind the scenes", with one single window for MS, one single window for carriers and one single window for travellers.

Will carriers still have to send batch API and PNR to individual MS?

- Recommendation to create a router to also send this batch API and PNR to MS for investigation and law enforcement purposes

Each existing and each new system development is a challenge in itself. Bringing all these systems together overtime will be a very ambitious challenge.

- Recommendation to include tech suppliers and system integrators early in the reflexion to design something that is practically feasible.

CONTACT

Emmanuel Wang
VP Programs, API & PNR
Public Security

emmanuel.wang@idemia.com

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