



ICAO



2023  
ICAO **TRIP**  
SYMPOSIUM

MONTREAL, CANADA | 12 - 14 SEPT 2023

---

# Michael Schriek

Federal Office of Administration (BVA), Germany

# API and PNR data

---

01

Characteristics of PNR and API data

02

Data formats

03

Using PNR & API data

04

Combining PNR & API data

05

Working Groups

# Characteristics of PNR and API data



# PNR

## *Passenger Name Record*

- Booking data
- Lower quality
- Early availability
- Format: PNRGOV
- Batch transmission (all at once)



# API

## *Advance Passenger Information*

- Check-in data
- Higher quality
- Late availability
- Format: PAXLST
- Batch (all passengers at once) or iAPI (one passenger, immediate response from Border Control)



## 02 Data formats

```
function(scope, element, attr, ngSwitchController) {
  var switchExpr = attr.ngSwitch || attr.on,
      selectedTranscludes = [],
      selectedElements = [],
      previousElements = [],
      selectedScopes = [];

  scope.$watch(switchExpr, function ngSwitchWatchAction(value) {
    var i, ii;
    for (i = 0, ii = previousElements.length; i < ii; ++i) {
      previousElements[i].remove();
    }
    previousElements.length = 0;

    for (i = 0, ii = selectedScopes.length; i < ii; ++i) {
      var selected = selectedElements[i];
      selectedScopes[i].$destroy();
      previousElements[i] = selected;
      $animate.leave(selected, function() {
        previousElements.splice(i, 1);
      });
    }

    selectedElements.length = 0;
    selectedScopes.length = 0;

    if ((selectedTranscludes = ngSwitchController.cases['!' + value]) || ngSwi
    scope.$eval(attr.change);
    forEach(selectedTranscludes, function(selectedTransclude) {
      var selectedScope = scope.$new();
      selectedScopes.push(selectedScope);
      selectedE
```

## PNRGOV

```

UNA:+.?* '
UNB+IATB:1+1A+BVAC+201228:0816+0003+++X'
UNH+1+PNRGOV:11:1:IA+281220/0816/RJ/125'
MSG+:141'
ORG+1A:MUC'
TVL+281220:0940:281220:1340+AMM+FRA+RJ+125'
EQN+2'
SRC'
RCI+1A:ZZUU66::061220:1520+1G:JPGRV9:O'
DAT+700:281220:0721'
ORG+1A:MUC+99999992:SWI1G2400+AMM+1G:AMM+T+JO+00001GRM'
TIF+DALE:I+ROKASMR::1'
REF+:2005AE7E0001CFED'
SSR+CTCE:HK:1:RJ:::::ROKAS.DALE//GMAIL.COM'
SSR+CTCM:HK:1:RJ:::::009627555547775'
SSR+DOCS:HK:1:RJ:::::/C/NLD/VUURR4T/NLD/03SEP91/M/30NOV21/DALE/ROKAS'
TKT+5125592850753:T:1'
DAT+710:061220'
...

```

- EDIFACT (plain text), XML (rarely used)
- Mostly used in version 11, 13, or 15
- Standard is defined jointly by Industry, Governments and Organizations
- Collected in RES (Reservation System) by airlines or data providers
- Standard – but not fully standardized! Contains free text fields
- Reduced data quality for various reasons (customer supplied data, no checks, ...)

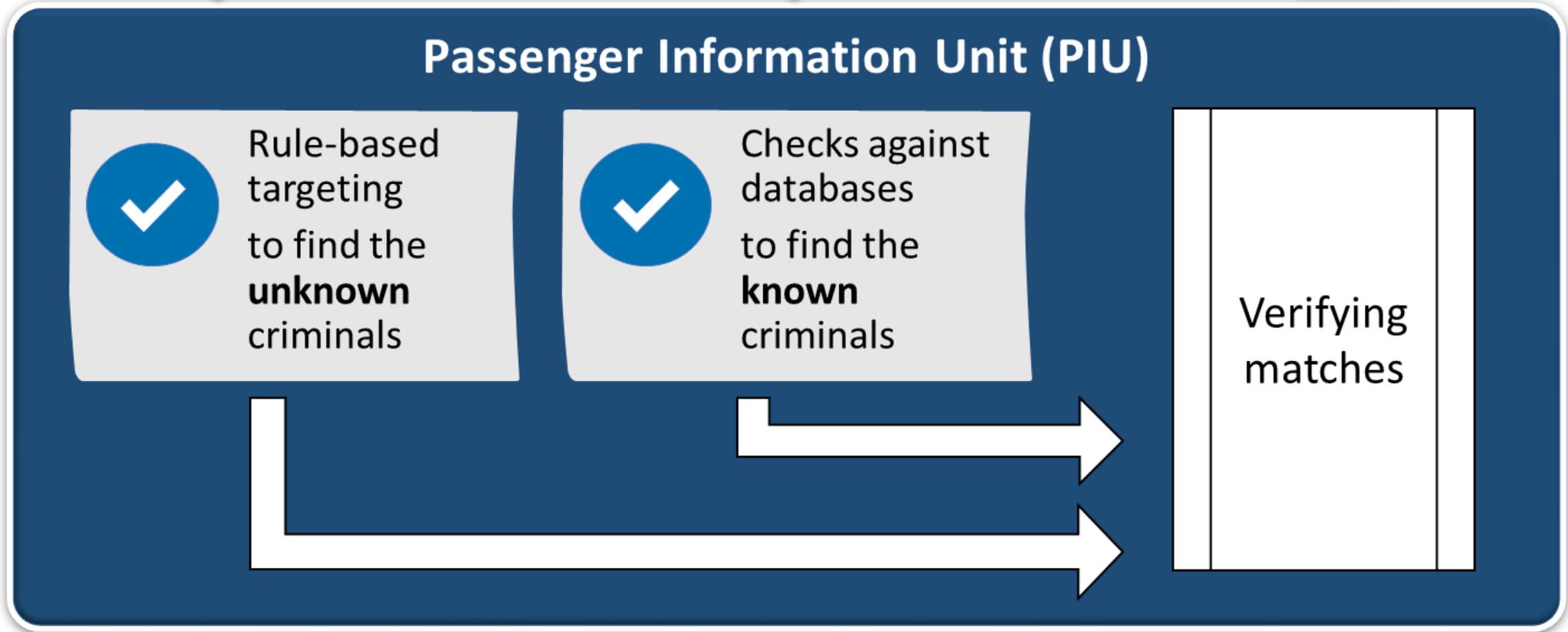
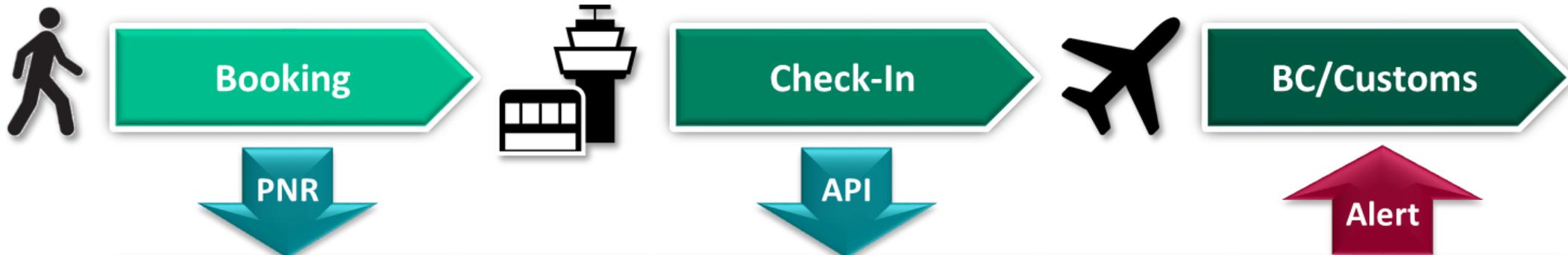
## PAXLST

```
UNA:+.?*'  
UNB+UNOA:4+1A:GA+BVAAPIS+220331:1500+1A98601730++APIS'  
UNG+PAXLST+GREATAIRLINE:GA+BVAAPIS+220331:1500+1A98601731+UN+D:02B'  
UNH+1+PAXLST:D:02B:UN:IATA++02'  
BGM+745'  
TDT+20+GA1337'  
LOC+125+FRA'  
DTM+189:2203311700:201'  
LOC+87+LHR'  
DTM+232:2203311740:201'  
NAD+DDU+++DALE:ROKAS'  
ATT+2++M'  
DTM+329:910903'  
LOC+178+ZAG'  
LOC+179+LHR'  
NAT+2+LTU'  
RFF+AVF:09B6PS'  
DOC+P:110:111+123491404'  
DTM+36:270328'  
...
```

- EDIFACT (plain text), XML (rarely used), JSON (upcoming)
- Mostly used in version 02b or 05b
- Collected in DCS (Departure Control System) at airport counter or via mobile/web app
- High data quality – in general only passport data
- Used also for iAPI (immediate response from Border Control)

# 03 Using PNR & API data





# 04 Combining PNR & API data





## Identification of Movement

A passenger on a specific flight



### Flight Details

Origin, destination, scheduled time of departure/arrival, flight number

### Personal Details

Name, gender, date of birth, nationality

### Travel Document



### Booking Information + Data Delivery

Booking reference, single reservation, data delivery ID

### Ticket Number

PNR & API

PNR



## Identification of a Person

Collating all flights of the same person



### Personal Details

Name, gender, date of birth, nationality

### Travel Document



### Booking Information

Booking reference, booking system

PNR & API

PNR

# 05 Working Groups





# Working Groups



Meet twice a year (Spring and Fall):

## **PNRGOV Working Group**

24 October 2023

## **PAXLST Working Group**

25 October 2023



Membership open to IATA and A4A Members, Government Representatives and IATA Strategic Partners



## **IATA Headquarters**

Montreal, Canada

# Thank You

