Cross border digital identity in the EU

Oslo, 1 June 2017

European Commission
Directorate-General MIGRATION and HOME AFFAIRS
Unit B3 – Information Systems for Borders and Security

What this presentation will explain

- **What are the information systems used at EU level in the area of migration.**
- **What is a person's digital identity in those systems?**

PART 1

Introduction on Identity

Identity

Why do we care about identity?

- Legislation is person-centric
- Most (if not all) administrative processes start by establishing the identity of the requester and/or recipient of a measure

Identity

One person ≠ One Name?

- Homonyms and homophones
- Transliterations
- Change of civil status

One person ≠ One Travel Document (Passport)

- More than one regular passport
- Passports do not carry the history of the identity (in case of change) with them.
- Passports can be lost – stolen – forged – counterfeited.

Identity

1 Person -> 1 Set of Biometric identifiers

Depends…

- **Identifiers:** facial image, fingerprint set, iris scan
- **Identifiers can be "strong" or "weak"**
- **Risk of "not recognising" the real owner of his/her own biometrics** => FRR, typically ~1%
- **Risk of "confusing" the real owner with another person** => FAR, typically 0,01%

Identity

Conclusion

- Establishing the identity is essential though not a trivial process. Difficulty is much higher for TCN's than for EU citizens.
- For (adult) EU citizens: identity can be established with Name, First Name, Date (& Place) of Birth, Gender + Digital picture.
- For (adult) TCN's: same as EU citizens + a "strong" biometric identifier.
- For both: use of the "identity triangle"

Identity triangle Example

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ThirdCountryNational
Live facial image
Live fingerprints (1..10)

1:n search
1:1 fingerprint verification
1:1 facial verification

1:1 facial verification

Schengen MasterList

Passive Authentication

VIS Database
facial image of VisaHolders
Fingerprints (10) of VH

EES/VIS

1:1 (token) verification

EES Database
- Facial image
- Fingerprints (4) VE only

eMRTD
- Chip with facial image

PART 2

Current Information Systems in the area of Home Affairs

This presentation is about

SIS (partially)
VIS (visa-required)
EES (proposed)
ETIAS (proposed)

No EU systems

Border control/mgt

Surveillance

Eurodac
(partially)
EUROSUR

Long-term

Long-term visas
Residence permits

Irregular migration

Short-Term
("90/180 rule")

Short-term stay
visa-required
visa-exempt

Regular entry

Irregular entry

EURODAC

European Commission

Original purpose of Eurodac (started in 2003) is to enable EU States to determine the responsibility for examining an asylum application by comparing fingerprint datasets.

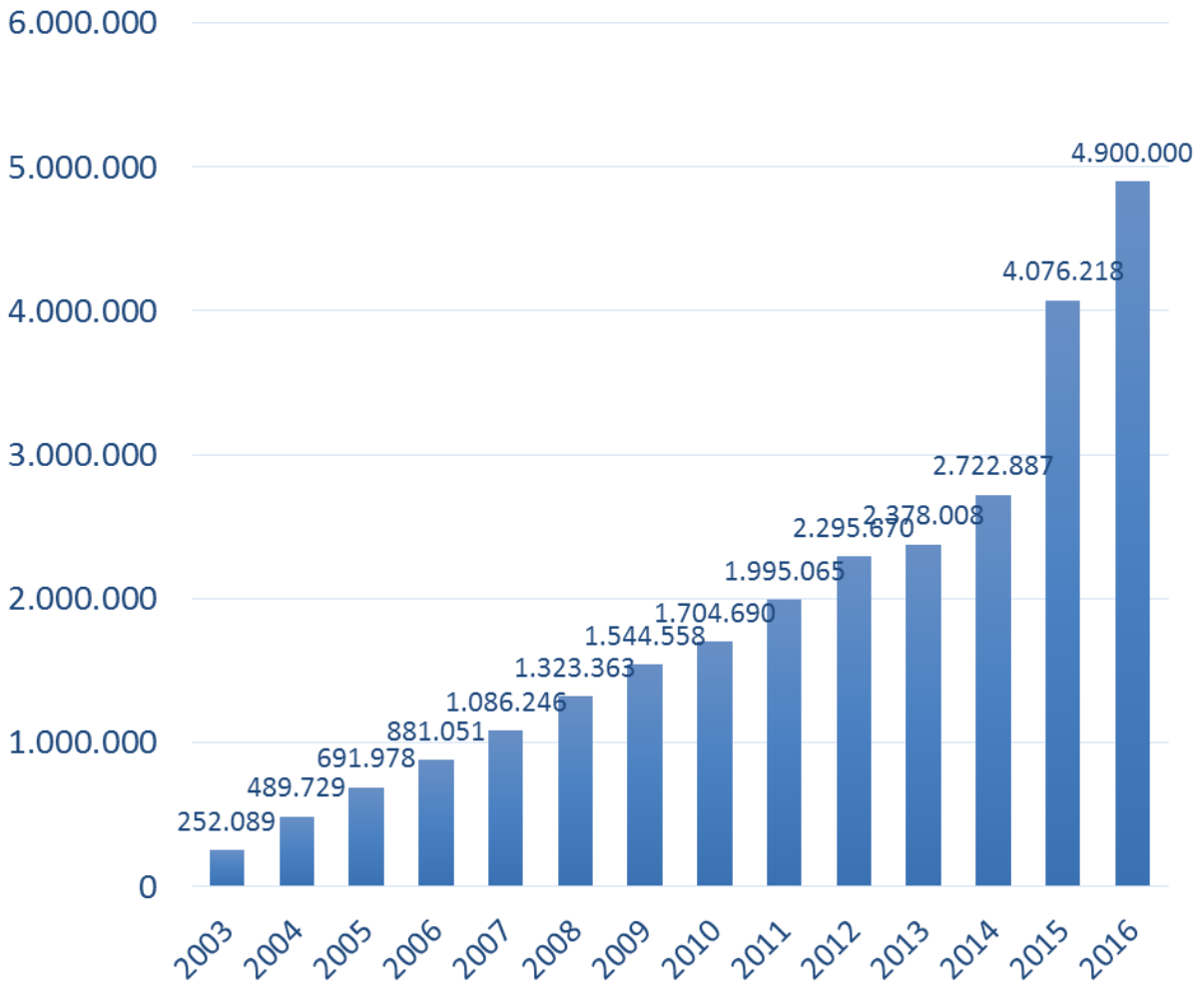
Recast Regulation (EU) No 603/2013, getting into force On 20/07/2015. This evolution:

- **ensured compatibility with the latest asylum legislation**
- **allowed law enforcement access to Eurodac under strictly limited circumstances**
- **set new time limits for fingerprint data to be transmitted**

EURODAC

European Commission

- Massive influx of immigrants / refugees in 2015 => Eurodac capacity pressures
- Traffic of the system has exponentially increased
- Since Feb. 2016 & following the EU-Turkey agreement, a decrease has been observed



EURODAC

- A proposal for a **new Eurodac Regulation is currently under consultation** as part of the new Dublin IV proposal.
- The **new Eurodac** Regulation:
  - Expands the purpose of Eurodac to facilitate returns and help tackle irregular migration
  - Minors over 6 shall be registered (now >14)
  - Expands the data model such as names, dates of birth, nationalities, identity details or travel documents, and facial images of individuals
  - Allows storing and searching data belonging to third-country nationals

Schengen Information System

Schengen Information System (SIS II) is a large scale IT system that:

- Supports **external border control** and **police cooperation** in the EU Member States.
- enables the competent authorities to **enter** and consult alerts on certain categories of **wanted** or **missing persons** and **objects**.

Human required in order to determine that a **hit** on an individual or an object, subject to an alert, has been generated.
The **hit** shall be communicated by the **SIRENE Bureau** of the executing Member State to the **SIRENE Bureau** of the issuing Member State.

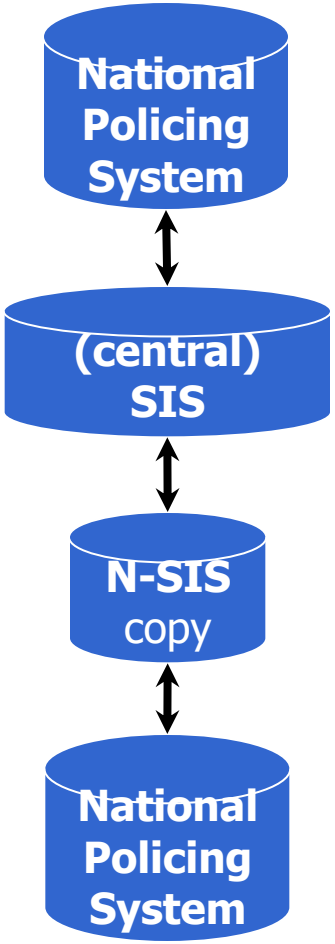
The **SIRENE Bureaux** of the Member States are responsible for any **supplementary information exchange** and coordination of activities connected to SIS alerts.

Schengen Information System

European Commission

Borders | Customs | Police | Justice

3 billion searches in 2015



SIS provides information to police, border guards, customs and judicial authorities on people and objects that are sought by the Member States.

More than 877 000 alerts on persons entered in SIS (19/05/17).

The alerts:

- Arrest for extradition: ~35.000
- Refusal of entry or stay in the Schengen area: ~487.000
- Missing persons: ~31.000 (adults); ~60.000 (minors)
- Persons to assist with a judicial procedure: ~112.00
- Persons for discreet or specific checks: ~77.000
- Lost, stolen, invalidated objects

Schengen Information System

Different categories of **identity** in SIS:

- **Confirmed identity:** a confirmed identity means that the identity has been confirmed on the basis of genuine ID documents, passport or by statement from competent authorities;

- **Not confirmed identity:** a not confirmed identity means that there is not sufficient proof of the identity;

- **Misused identity:** a misused identity (surname, forename, date of birth) occurs if a person, entered in SIS, uses the identity of another real person. This can happen, for example, when a document is used to the detriment of the real owner – **159 misused identities in SIS**

- **Alias:** Alias means an assumed identity used by a person known under other identities **– 354 987 aliases in SIS**

Schengen Information System

- Among next major changes to SIS: roll-out of an **automated fingerprint identification system (AFIS):** will help to reliably **identify** persons entering the Schengen area under **false identities**. Go live in **2018**.
- **New SIS legal framework** currently under negotiation:
  - Provides for a **mandatory fingerprint search** if the identity of the person cannot be ascertained in any other way;
  - New alert category "**unknown wanted person**" allowing the creation of an SIS alert on the basis of fingerprints and/or palm prints. Currently alerts can only be created on the basis of **alphanumeric data** and **fingerprints** are only used to **confirm the person's identity.**

Visa Information System

European Commission

VIS Description

- Large-scale IT system for the **exchange of data** on **short-stay visas** between Schengen States
- Supports the **common EU visa policy** as well as the **migration** and **border management** policy by:
  - Preventing "**visa shopping**"
  - Assisting in the fight against **irregular migration**
  - Contributing to the prevention of **threats to internal security**
  - Bringing **transparent and faster procedures** for bona fide travellers

Business description

Mrs. X

Consulate 1

Application

Identification

Mrs. X
=
Mrs. Y

10 fingers

VIS

BMS

Consulate 2

Mrs. X

Border

1, 2 or 4
fingers

Verification

PART 3

Two proposed Information Systems in the area of Home Affairs:

Entry/exit (EES) and

European Travel Information and Autorisation System

EES Purpose

EES: *system to register entries and exits of all Third Country Nationals(TCN) in the Schengen area.*

- Improve quality and efficiency of controls at external borders.
- Help MS deal with increasing traveller's flows without an increase of the number of border guards.
- Systematically identify overstayers
- Reinfoce internal security and fight against terrorism.

EES applies to TCN's only *(both VE and VH)*

- ✘ Not linked to "migrant crisis",
- ✘ Not an anti-terrorism tool.

Control Process - Entry

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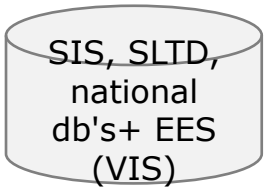
1. Read Passport

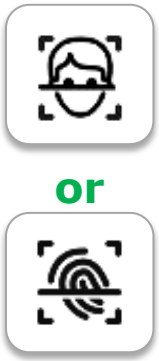
2. Check watchlists and EES (VIS)

3a. Verify vs EES (VIS)

4. Check entry conditions and grant/refuse access



✓ EES



90/180 day rule

3b. Verify VH(VIS) Identify VE (EES + VIS)

3c.Enroll and create new individual file in EES

✖ EES

and

EES Data

Biographical data: (*=Machine Readable Zone of Travel Document)
1. First names*
2. Surnames*
3. Date of birth*
4. Current nationalities*
5. Sex*

Travel document data:
7. Travel document number*
8. Travel document type*
9. Travel document country code*
10. Expiry date of travel document*

Biometrics :
6. **Facial image** (from eMRTD or taken live)

For Visa-exempt
6'. **Four fingerprints**

Data for visa-holder may be retrieved and imported directly from VIS

VISA-related data:
For short stay visa
11. VISA sticker number
12. Type of visa
13. VISA expiry date
14. Date of end of maximum duration of stay authorised by the visa (updated at each entry)
15. At first entry: number of entries and authorised period of stay (as indicated on the visa sticker)

For touring visa
16. VISA sticker number
17. Type of visa
18. VISA expiry date

Individual file

At each entry/exit
19. Date and time of entry
20. Entry authoriser authority
21. Entry BCP
22. Date and time of exit
23. Exit BCP

Entry/Exit records

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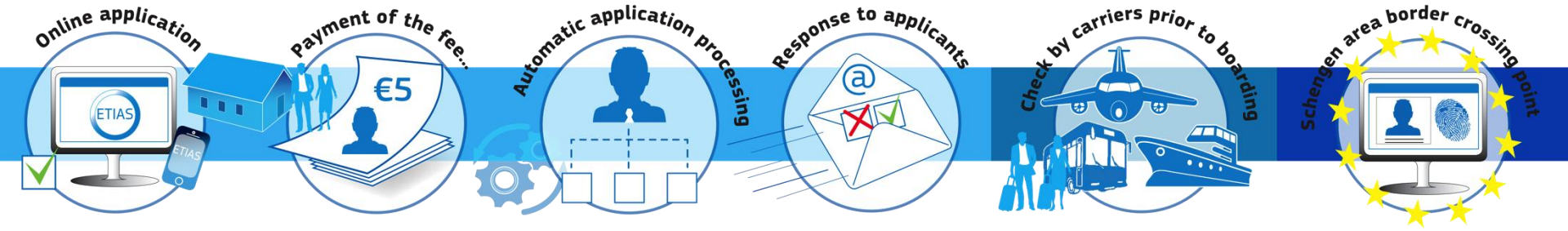
How will the ETIAS system work?



ETIAS application

European Commission

Biographical data(*)
First name, Surname
Surname at birth, if different
Other names
Date, place and country of birth
Current nationality
Sex
First name(s) of the parents

Travel document data
Type of travel document
Passport number
Country of issuance
Date of expiry of validity

Contact details
Home address
Email address
Telephone number

Education and occupation
Pre-determined list

Member State of first intended entry

Background questions
1. Threat to public health: infectious disease?
2. Convicted of a serious crime?
3. Recently been present in a war zone?
4. Previously been refused entry/visa, ordered to leave?

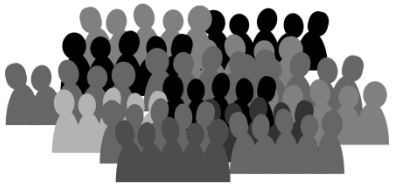
Additional information asked to some applicants for manual processing

Data collected on the application
IP address

Data created by Central System
Application number
Status information (request made)
Date & time of submission
Payment completion and reference

(*) There is a specific case for TCN who are family members of EU citizen

Decision-making process



Incoming applications
(≈39 million per year or
107,000 per day – estimation for 2020)

Automated processing

Databases

***Estimate**:*
95% of applications

?

Yes

Escalation

In case of a hit or uncertain identity.

***Estimate**: 5% of applications (≈5 300 per day)*

Manual processing (Central Unit)

Yes

Notification

Notification of the decision to the applicant

?

Escalation

In case MS possess more information.

***Estimate**: 1-2% of applications (≈2 100 per day)*

Yes / No

Manual processing (MS)

VIS, EES and ETIAS

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	Before travelling	At the border	Entry conditions
	VIS	**EES**	
Visa Holders	**Controls visa issuance**	**Duration of stay + place of entry**	✓ **valid visa (VIS)** ✓ valid passport, ✓ remaining duration of stay (EES) ✓ Schengen Border Code conditions (sufficient resources, no threat to public order,..)
Identity manage-ment	Checked passport data + 10 fingerprints	Re-uses VIS data + facial image	
	ETIAS	**EES**	
Visa Exempt	**Controls travel authorisation**	**Duration of stay + place of entry**	✓ **valid ETIAS**, ✓ other conditions like above
Identity manage-ment	Declared passport data	Checked passport data **4** fingerprints + facial image	

PART 4

Evolution of how Identity is managed

Data in SIS, VIS, Eurodac

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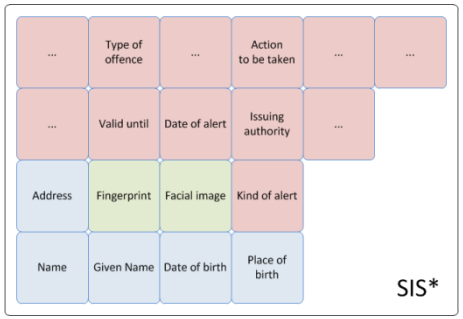
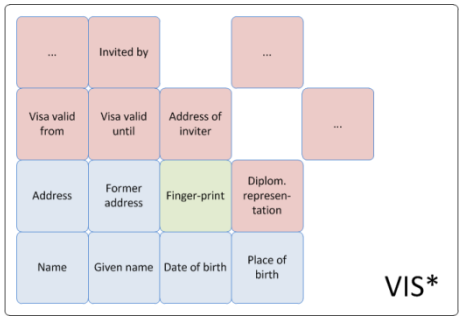
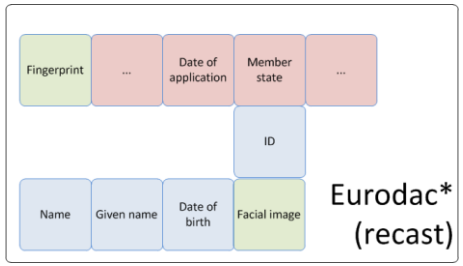
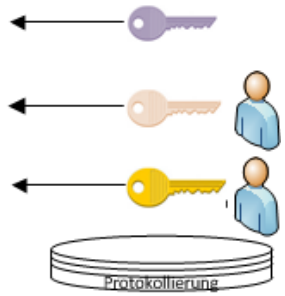
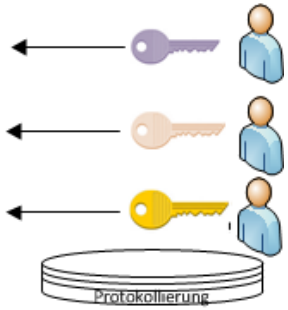
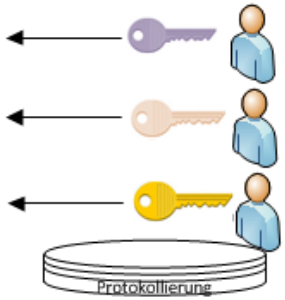












ID data

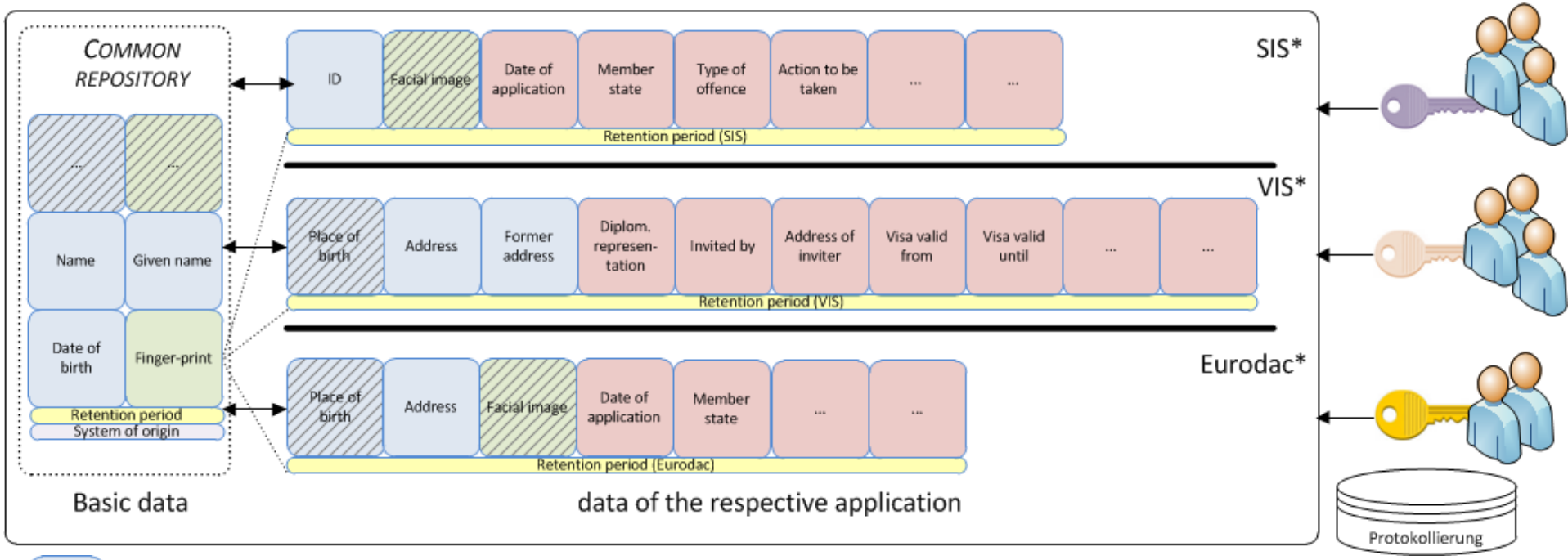
biometric data

application specific data

*much simplified

Integrated Identity Mgt

European Commission



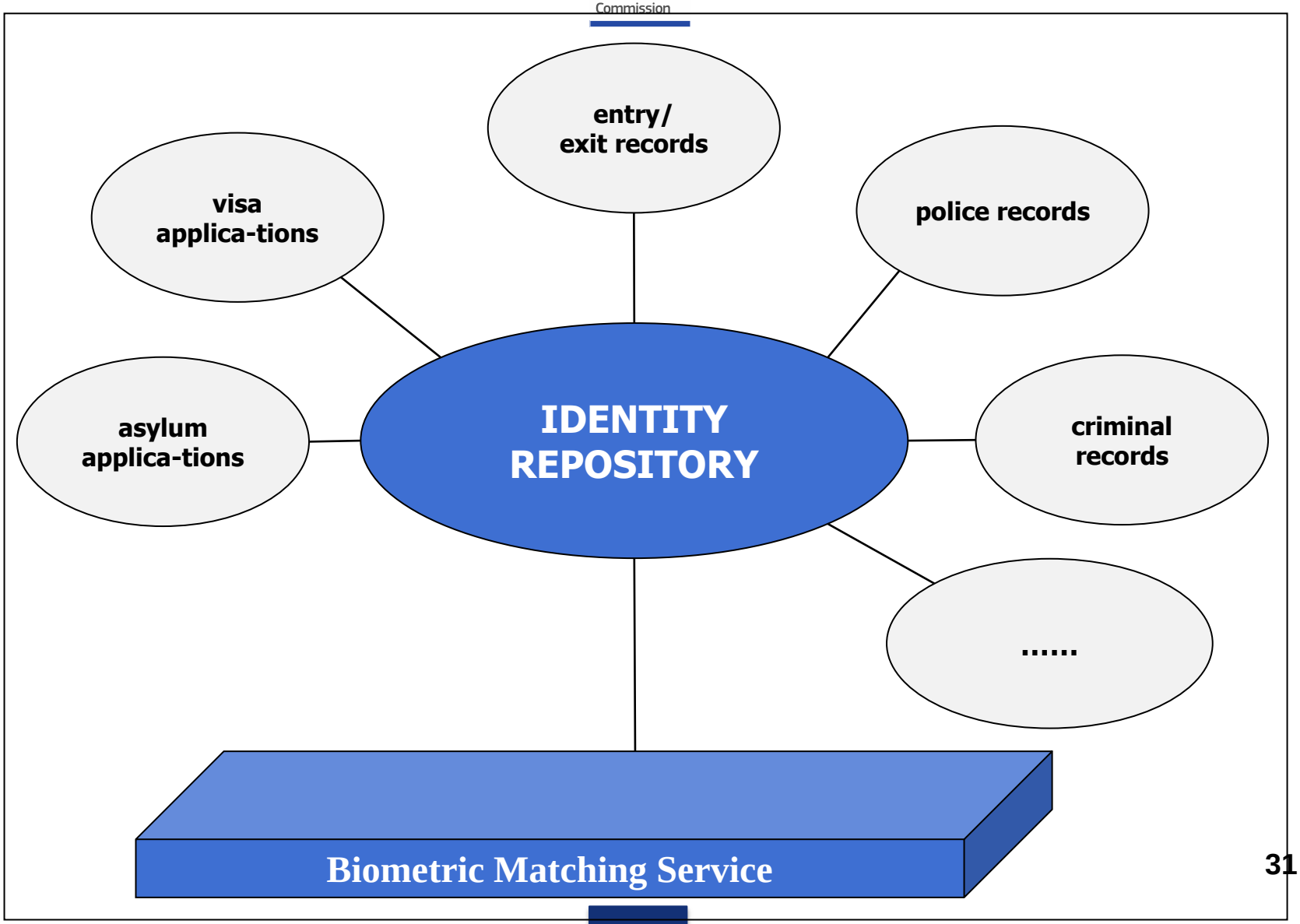
ID data

biometric data

application specific data

*much simplified

Integrated Identity Mgt (2)



PART 5

What to take with you?

- **What are the information systems used at EU level in the area of migration.**
  - *Currently Eurodac, SIS, VIS. All three systems will evolve significantly within the next five years.*
  - *Additionally EES and ETIAS will be built.*
- **What is a person's digital identity in those systems?**
  - *Whenever possible, use the "identity triangle" with an identity check using more than one biometric identifier.*
  - *Identity is essentially based on a match with a biometric reference sample.*
  - *The identity will increasingly be managed "across" the different systems.*

Thank you

Information:
http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/borders-and-visas/smart-borders/index_en.htm

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Abbreviations

BCP	*Border Control Posts*
FI	*Facial Image*
FP	*Fingerprints*
SBC	*Schengen Border Code*
TCN	*Third Country National*
VSN	*Visa Sticker Number*