Norwegian ID Centre

ID Day 2018

The need for secure identification
– an overall perspective

www.nidsenter.no

WENCHE BJØRNGAARD

Host and Head of Communications
Norwegian ID Centre

THOR KLEPPEN SÆTTEM

State Secretary for the Minister of Justice, Public Security and Immigration

TONE OPDAHL

Manager
Norwegian ID Centre

EUROPE

SOFIA BOTZIOS

OSCE

OVERVIEW OF ODIHR's WORK IN IDENTITY MANAGEMENT AND FREEDOM OF MOVEMENT

What is the OSCE and how does it work?

Politico-military

One of the three dimensions of security

Norms and activities related to Human Rights, Democracy and Rule of Law

Links Human Rights with institutional and political systems

Human

Human Rights are of direct and legitimate concern to all participating States

Human Dimension commitments are politically binding

Economic & environmental

Norwegian ID Centre

Office for Democratic Institutions and Human Rights
OSCE ODIHR

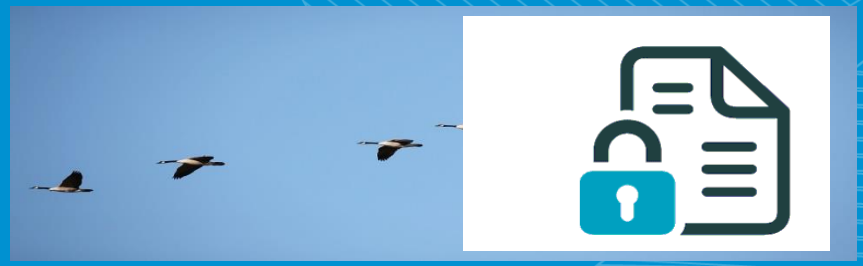
OSCE Commitments on Freedom of Movement

Participating States "will respect fully the right of everyone to freedom of movement and residence within the borders of each State, and to leave any country, including his/her own, and to return to his/her country."

(Vienna, 1989)

The importance of secure documents

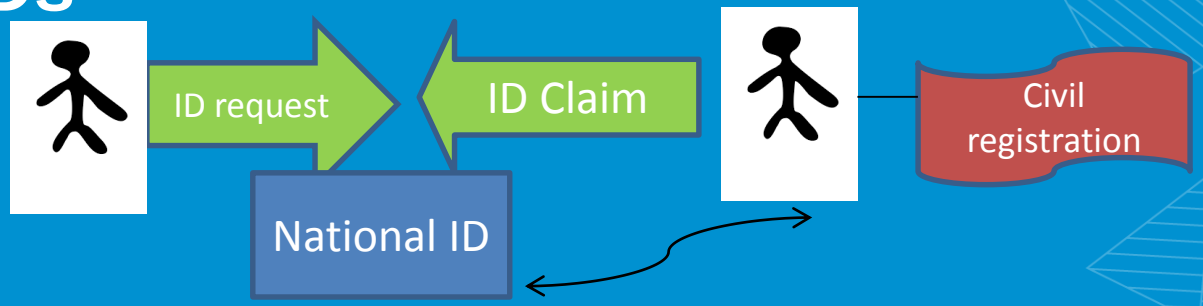
To travel freely, visit or settle in another country or be **able to develop human contacts, safe and secure travel documents <u>are necessary.</u>**



Improvements in security of travel documents has a positive effect on freedom of movement, but also keeps out threats such as the movement of terrorist groups.

Compendium on Good Practices in Identity management

Examines practice of interaction between civil registration systems and systems for issuance of travel documents and national IDs



Helps participating states to compare their systems and spot weaknesses in security of documents

Compendium as Culmination of OSCE work on identity management

2013 Expert Roundtable to examine link between Travel Document Security and Civil registration Processes

Main recommendations = to develop a Compendium

Link to UNSCR 2178 – prevention of cross border movement of terrorists groups

Legal and Technical support and training to various PSs to strengthen Identity Management Systems

What next for ODIHR?

Continuation of dissemination of Compendium and findings

Continuation of support to Participating States when requested

Work on examining equal access to civil registration and IDs or travel documents for women and men in the OSCE area.

ZORAN DJOKOVIC

Independent consultant

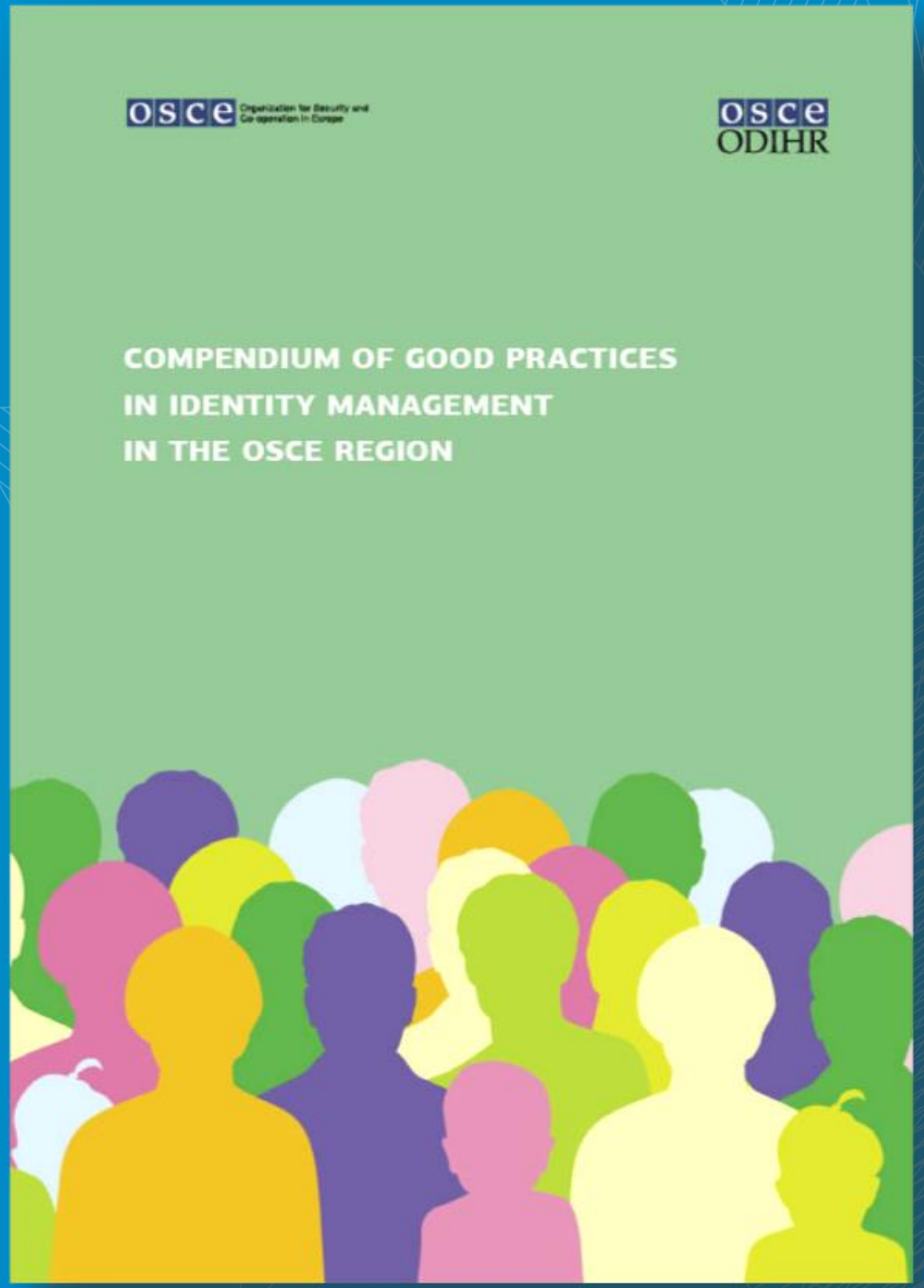
Goals of the Compendium

Mapping identity management models in the OSCE region

Sharing the latest trends in the OSCE region

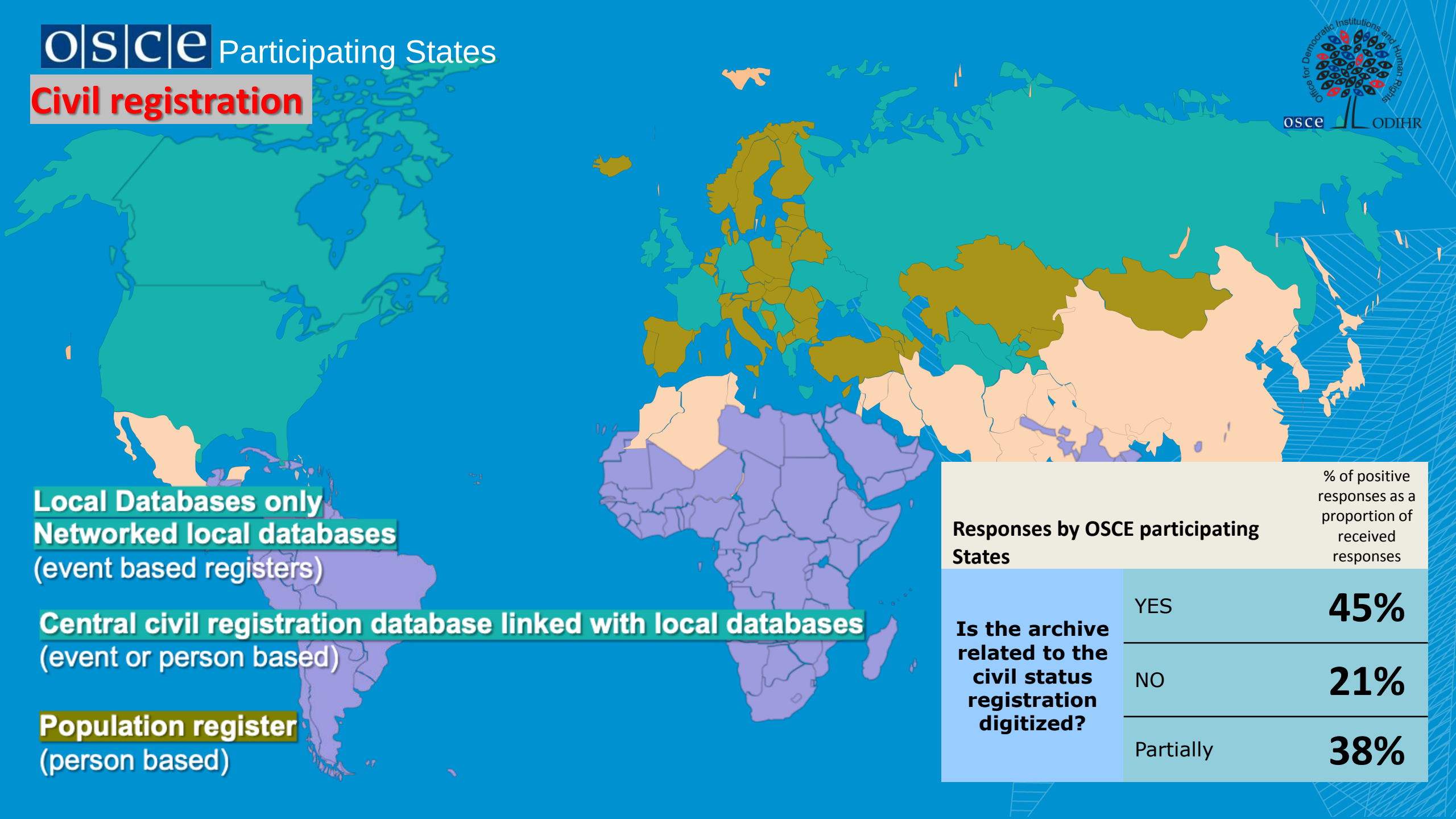
Measures for prevention identity related fraud

Good practices in advancing identity management infrastructure



OSCE Participating States

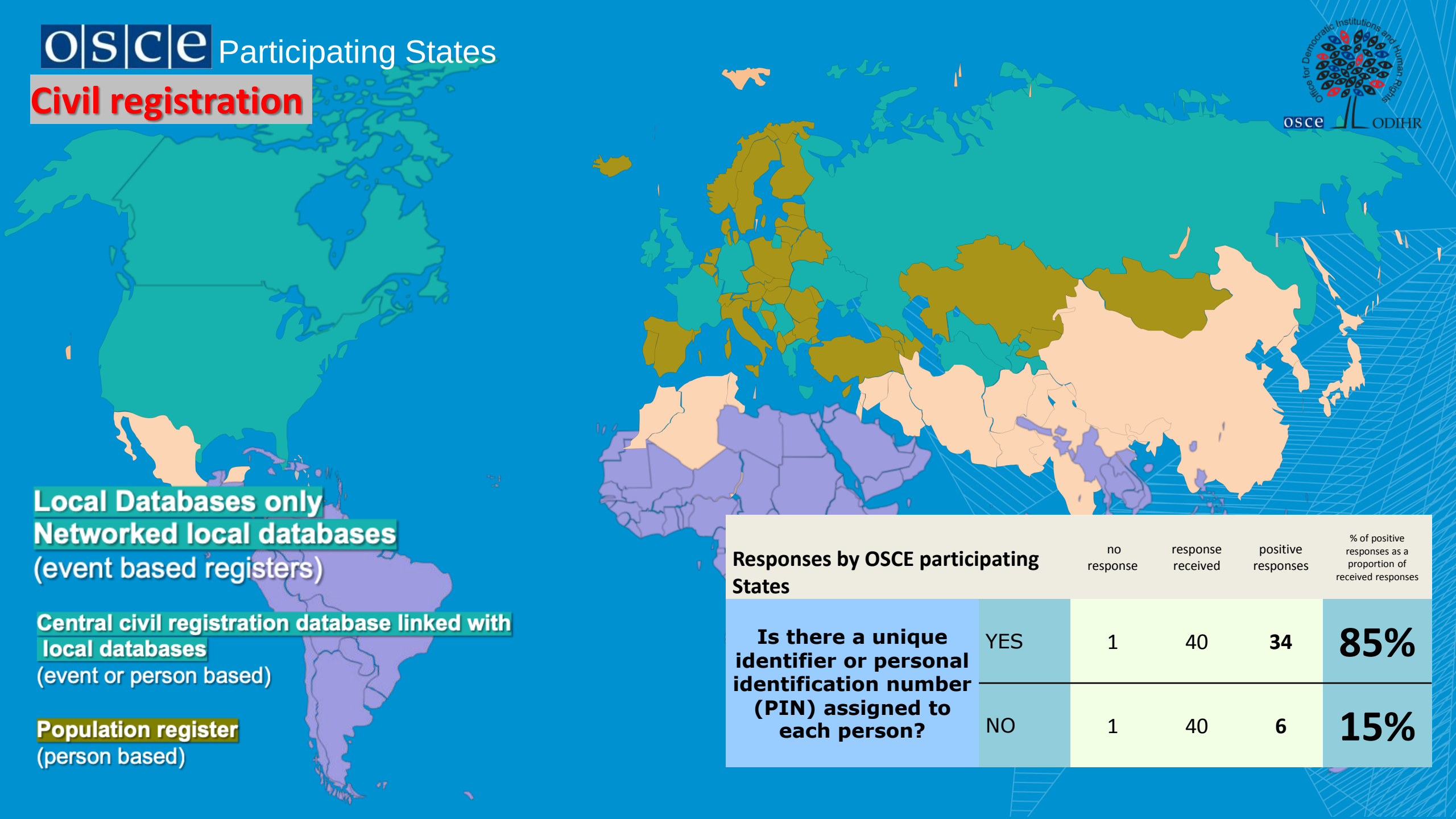
Civil registration



Responses by OSCE participating States		% of positive responses as a proportion of received responses
Is the archive related to the civil status registration digitized?	YES	45%
	NO	21%
	Partially	38%

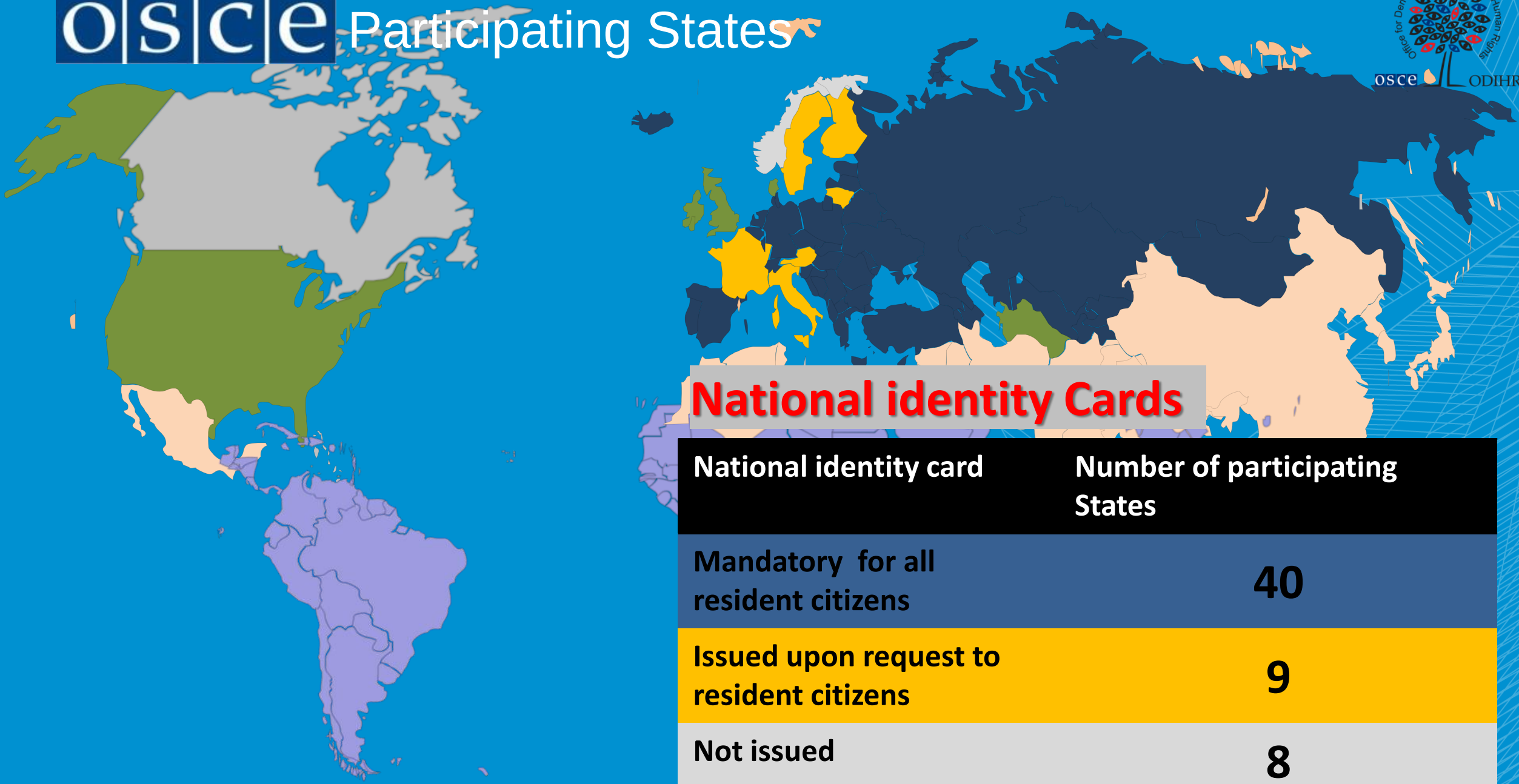
OSCE Participating States

Civil registration



Responses by OSCE participating States		no response	response received	positive responses	% of positive responses as a proportion of received responses
Is there a unique identifier or personal identification number (PIN) assigned to each person?	YES	1	40	**34**	**85%**
	NO	1	40	**6**	**15%**

OSCE Participating States



National identity Cards

National identity card	Number of participating States
Mandatory for all resident citizens	40
Issued upon request to resident citizens	9
Not issued	8

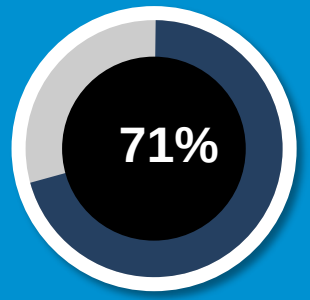
National Identity Cards

- Documentary evidence requirements
- Identity verification

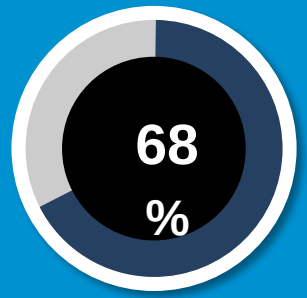
Mandatory online identity verifications in the civil register

(based on the responses from 41 OSCE participating States)

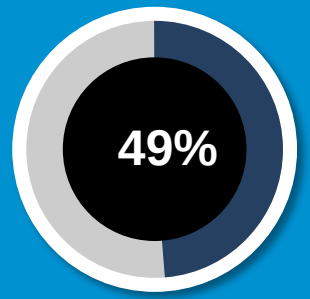
Birth records

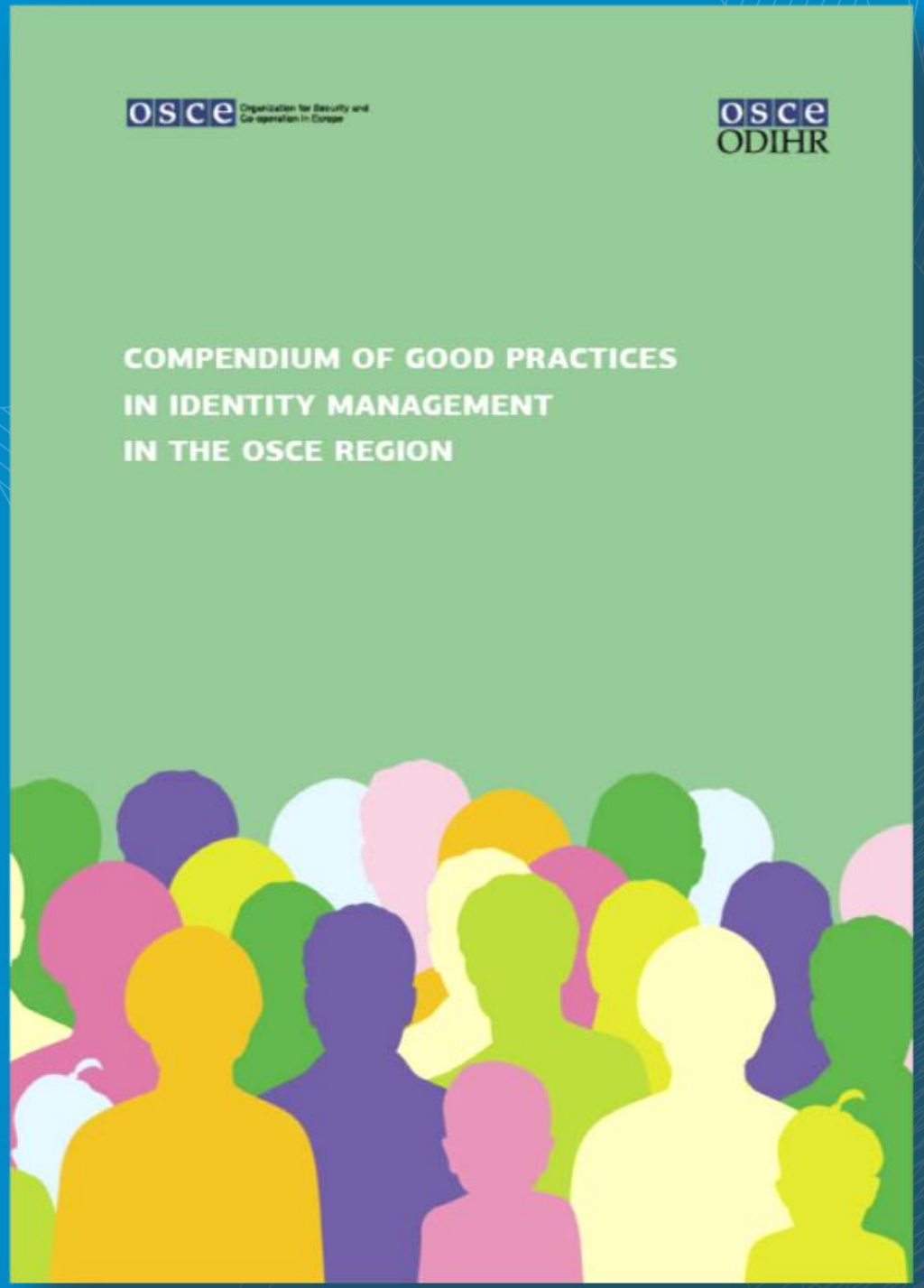


Deceased persons



Marriage records





National Identity Cards

Verification of the link between an identity and a natural person for the first-time applicants (minors and adults)

Social footprint

Biometric identifiers in database

Responses by OSCE participating States		no response	response received	positive responses	% of positive responses as a proportion of received responses
What personal biometric information is stored in the database?	Digital photo	9	32	**31**	**97%**
	Digitized signature	9	32	**29**	**91%**
	Fingerprint	9	32	**13**	**41%**

Biometric identifiers on the document

Responses by OSCE participating States		% of positive responses as a proportion of received responses
Electronic biometric information stored on document:	No biometric information stored	**28%**
	Digital photo	**72%**
	Fingerprint	**38%**
	Digitized signature	**59%**

OSCE ODIHR

Civil identification

Document renewal

Responses by OSCE participating States		no response	response received	positive responses	% of positive responses as a proportion of received responses
Automatic and mandatory online verification	Match between presented national identity card/travel document data and the data in the national identity card/travel document database	0	41	33	80%
	Biometric match (photo match or fingerprint match)	0	41	23	56%
	Signature match against the signature on file	0	41	7	17%

Responses by OSCE participating States		no response	response received	positive responses	% of positive responses as a proportion of received responses
Mandatory verification in paper records	Match between presented national identity card/travel document data and the data in the national identity card/travel document database	0	41	8	20%
	Biometric match (photo match or fingerprint match)	0	41	3	7%
	Signature match against the signature on file	0	41	10	24%

Responses by OSCE participating States		no response	response received	positive responses	% of positive responses as a proportion of received responses
Verification conducted only in case of doubt	Match between presented national identity card/travel document data and the data in national identity card/travel document database	0	41	5	12%
	Biometric match (photo match or fingerprint)	0	41	8	20%

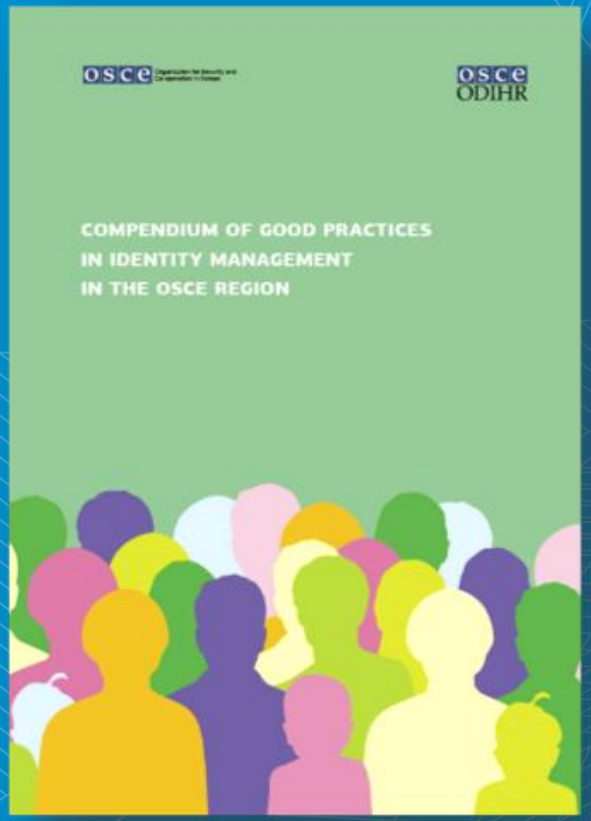
Office for Democratic Institutions and Human Rights
osce ODIHR

Civil identification

Identity Management of resident non-citizens

Responses by OSCE participating States		no response	response received	positive responses	% of positive responses as a proportion of received responses
Unique identification number assigned to resident foreign nationals	YES	8	33	**25**	**76%**
	NO	8	33	**8**	**24%**

Responses by OSCE participating States		no response	response received	positive responses	% of positive responses as a proportion of received responses
Do you require resident foreign nationals to provide fingerprints at some point during their stay or upon entry?	YES	8	33	**27**	**82%**
	NO	8	33	**6**	**18%**



Download at:

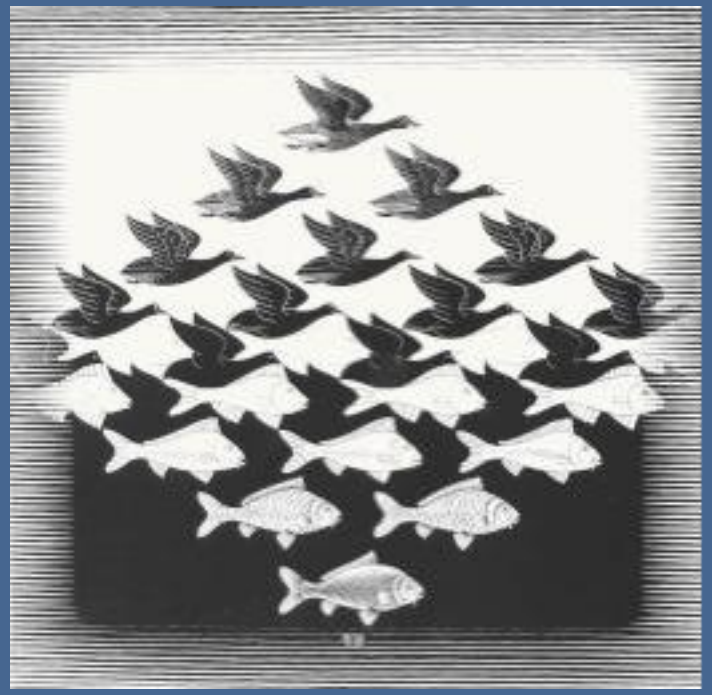
www.osce.org/odihr/registration

Office for Democratic Institutions and Human Rights
osce ODIHR

FONS KNOPJES

National Office for Identity Data
Ministry of the Interior and Kingdom Relations
Netherlands

National Office for Identity Data
Ministry of the Interior and Kingdom Relations



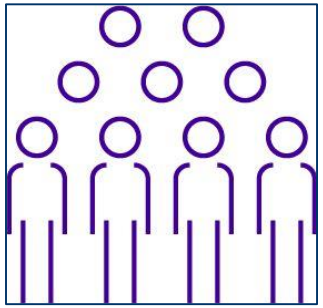
Vision International Identity Management

November 15th 2018
Fons Knopjes
Senior Research & Development Advisor

Agenda

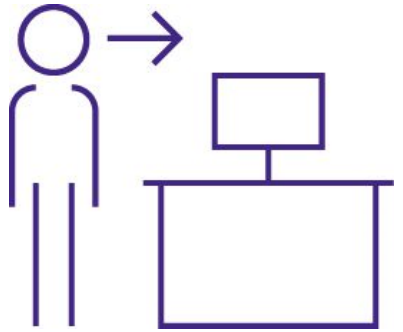
- *NOID*
- *ID infrastructure*
- *Figures*
- *International picture*
- *The Netherlands*
- *Borderless identity*
- *Conclusion*
- *Movie future*

NOID core business



ID management

ID generation



ID Verification
@municipality

Identity infrastructure

	Origin identity	Use identity	Control identity	End identity
Registrations				
Tokens (Documents)				
Processes				
Expertise				

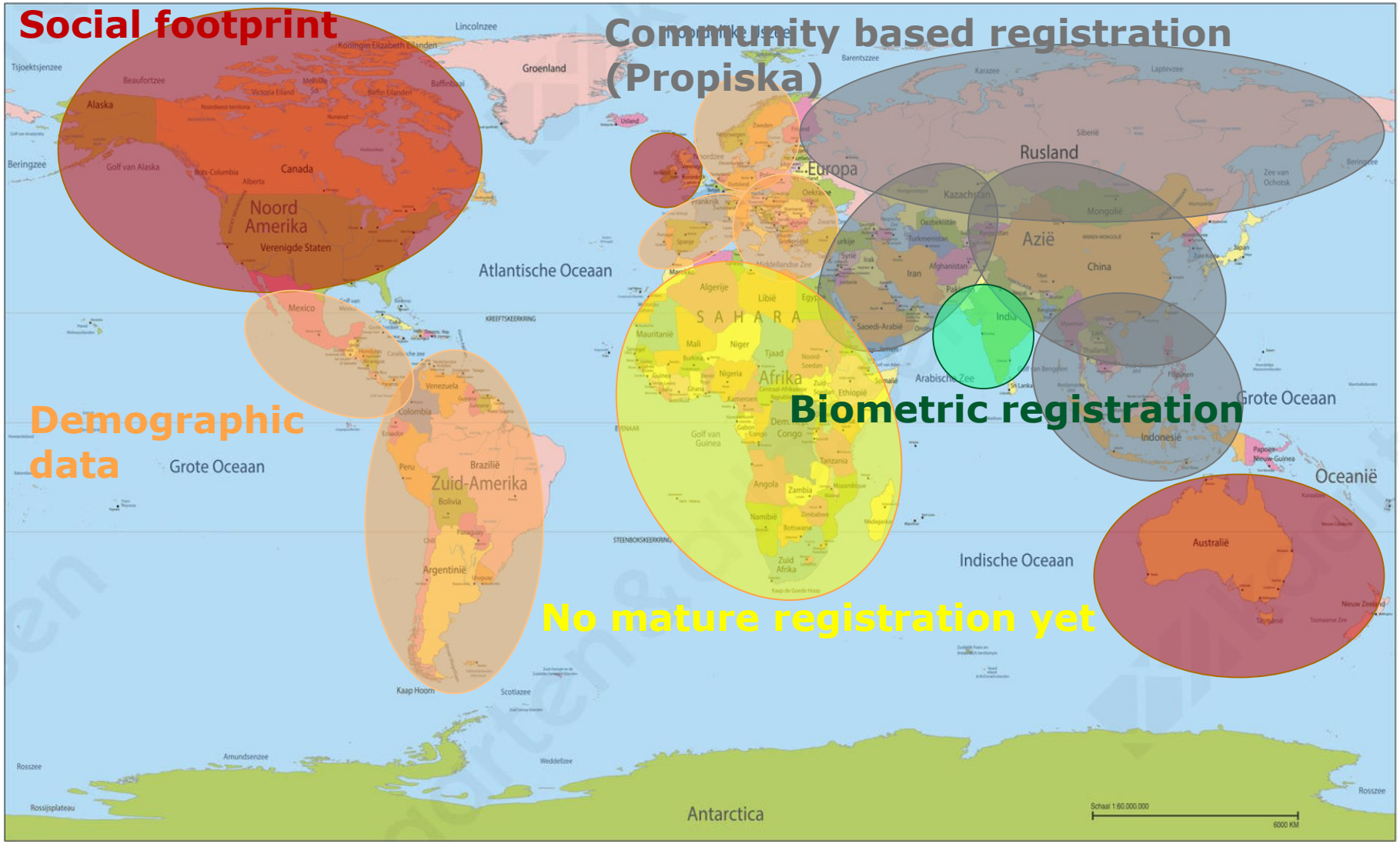
Population Growth

	2017	2030	2050
World	7,55 mld	8,55 mld	9,77 mld
Norway	5,3 mlj	5,96 mlj	6,8 mlj

Traveller Growth

	2016	2035
World	3,8 mld	7,2 mld

Source Population Growth: UD Department of Economic and Social Affairs
https://esa.un.org/unpd/wpp/publications/Files/WPP2017_KeyFindings.pdf
Source traveller Growth: IATA
https://www.iata.org/pressroom/pr/Pages/2016-10-18-02.aspx


Social footprint
Community based registration
(Propiska)
Demographic
data
Biometric registration
No mature registration yet
Noord
Amerika
Verenigde Staten
Canada
Alaska
Groenland
Europa
Rusland
Azië
China
India
Afrika
SAHARA
Zuid-Amerika
Brazilië
Argentinië
Australië
Oceanië
Atlantische Oceaan
Grote Oceaan
Indische Oceaan
Antarctica

Global / EU *(identity)*

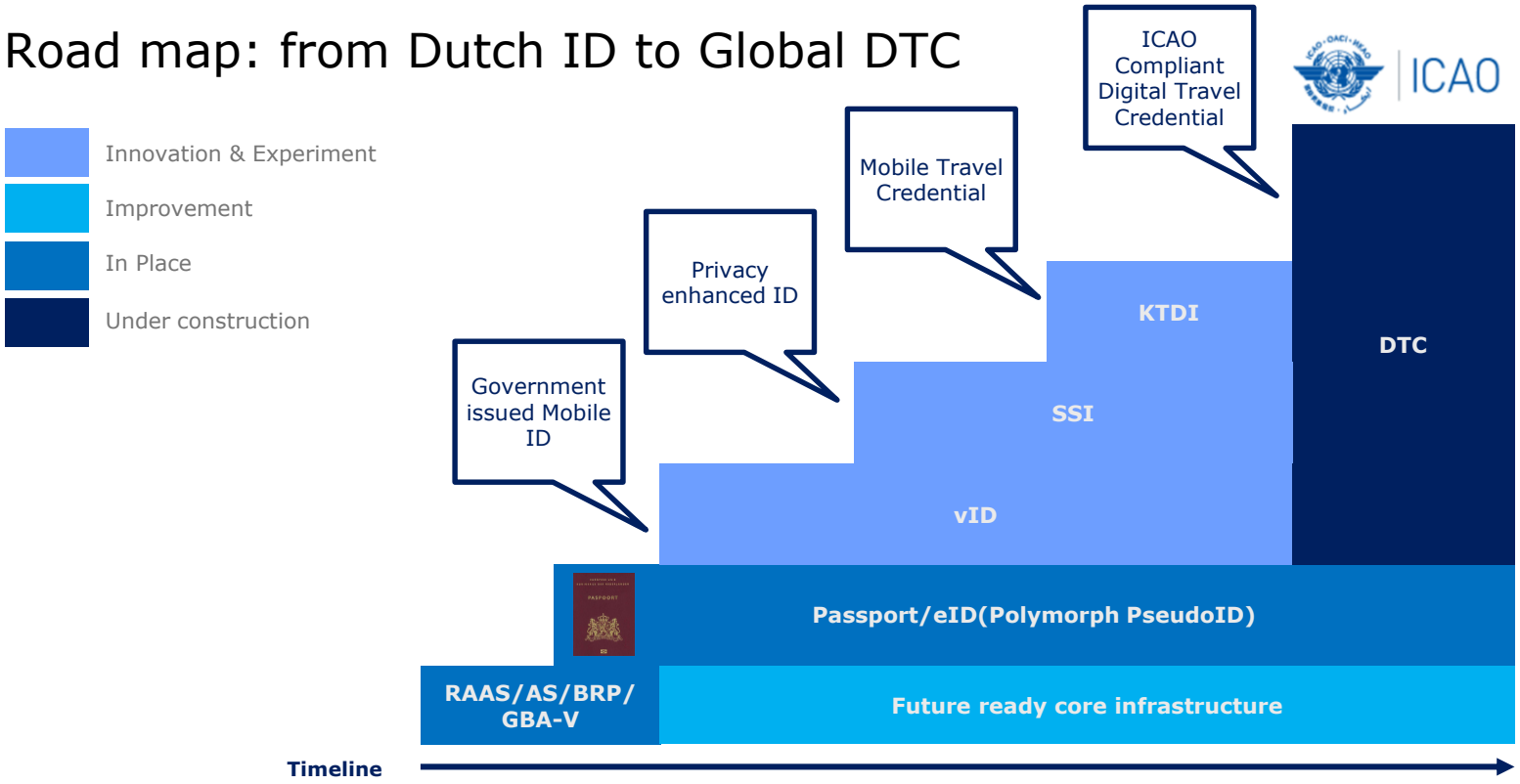
Impact content

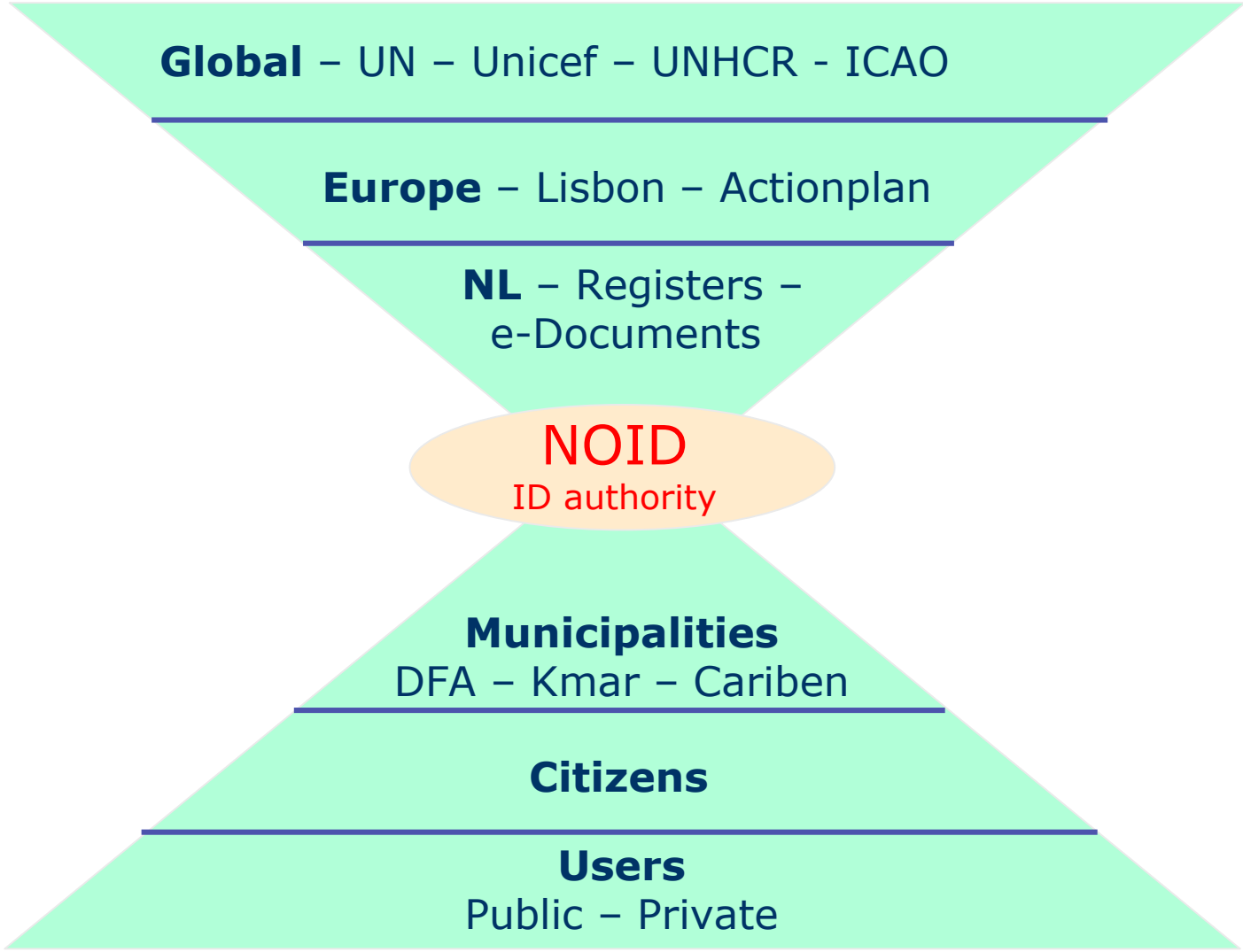
- Scaling
- Regionalization
- Digitization and use of technique
- Biometric
- Speed and flexibility
- Standardisation
- Changing verification techniques
- Terrorism
- Single Digital Gateway
- GDPR

Administrative impact

- Universal declaration of human Right
- Declaration of Right of child
- UNHCR declaration
- ICAO TAG/TRIP program
- Lisbon Agreement
- Action plan EC 12-2016
- FRONTEX

Road map: from Dutch ID to Global DTC




Global – UN – Unicef – UNHCR - ICAO
Europe – Lisbon – Actionplan
NL – Registers –
e-Documents
NOID
ID authority
Municipalities
DFA – Kmar – Cariben
Citizens
Users
Public – Private

Requirements for borderless identity

- *Implement ID management processes according to standards for*
  - *Biometric interoperability*
    - *ISO standards of the subcommittees 27 (IT security techniques) and 37 (Biometrics)*
    - *ISO Standards of the technical committee 68 on financial services*
  - *Biometric Security*
    - *For example using ISO/IEC IS 24745:2011 – Biometric information protection*

Requirements for borderless identity

- *Scalability and proportionality*
  - *Implement processes according to standards*
    - *ISO/IEC DIS 30124 – Code for practice for the implementation of biometric systems*
  - *Choosing biometric modes to reach scalability and proportionality*

- *Face for identity verification (1:1), as it is convenient (available and well accepted)*

- *Fingerprint for identification (1:N), as it is scalable (distinctive and unalterable)*

Implementation of Borderless Identity

- *Concepts and infrastructure*
  - *More and more recognised that the concept of identification is:*
    - *Relative: evidence of identity, no proof of identity*
    - *Quantitative: face and fingerprint have their own merits*
    - *Dynamic: to increase of decrease the evidence of identity*
- *Digital ID infrastructure take over the paper based processes*

Implementation of Borderless Identity

- *Roles and processes*
  - *ID management processes will be accepted if they offer balance between:*
    - *Privacy and trust (front office = back office)*
    - *Control and facilitation (unconstrained ID verification)*
  - *Roles and mandates regarding ID management still need clarification*
    - *Established international organisations for standards*
    - *Ad hoc international platform to coordinate ID processes*
    - *Quality assurance to accredit the processes and certify the actors*

Conclusion

- *Achieve borderless ID is an ambitious goal requiring to build bridges with the international partners to:*
  - *Share a vision of ID management in the XXIst century*
  - *Translate the vision into ID management concepts*
  - *Implement these concepts in adequate ID management processes*

ANDREAS WOLF

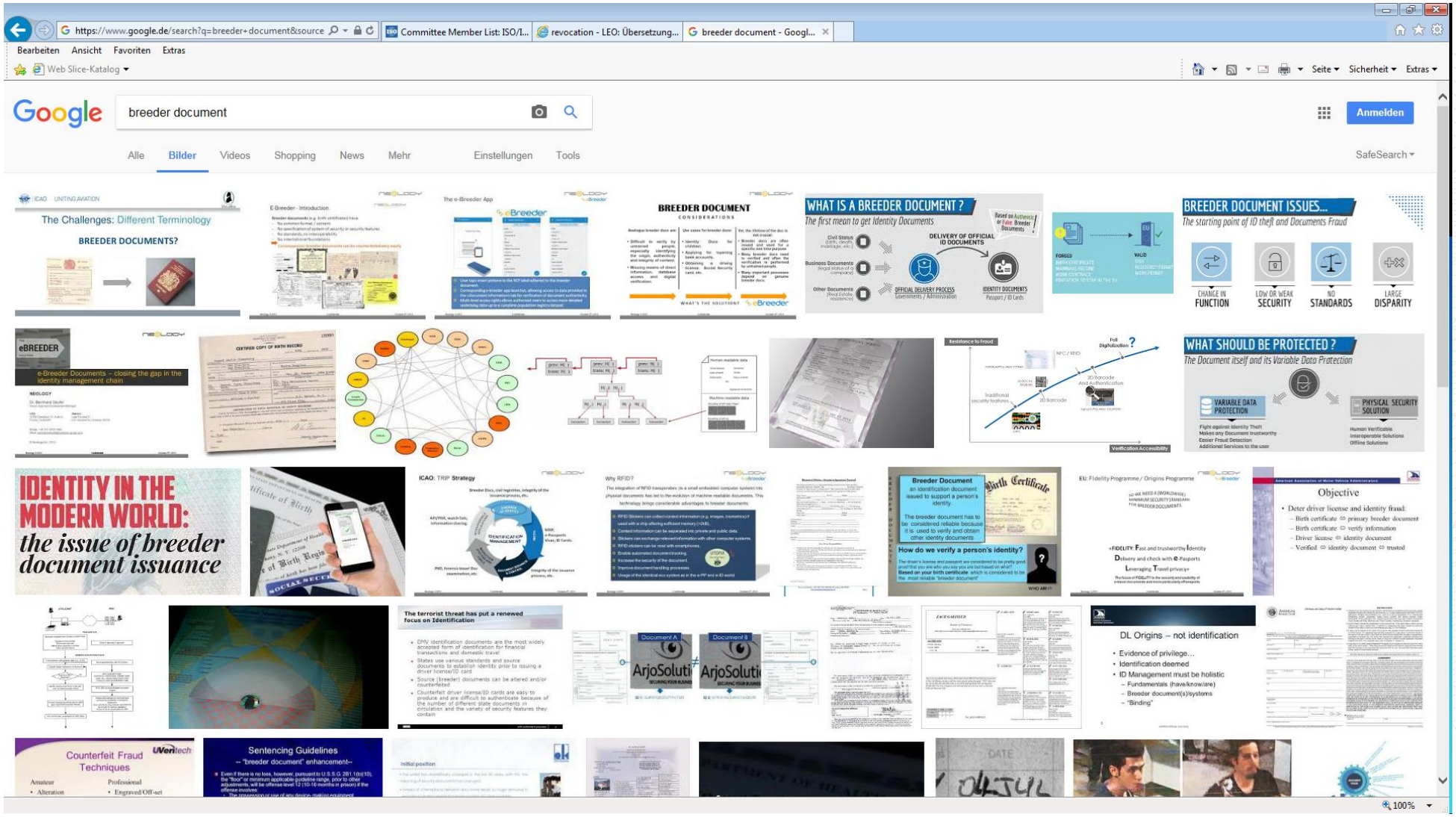
Bundesdruckerei GmbH
Germany

Breeder Documents: CEN/TC 224/WG 19 and the harmonization of birth certificates in Europe

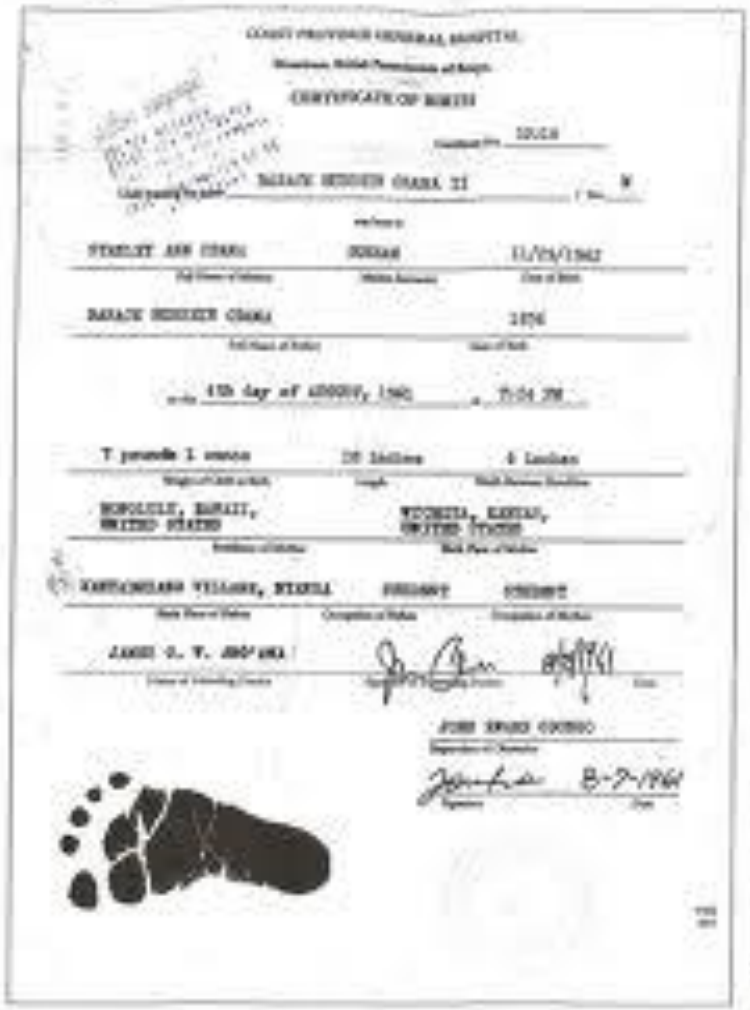
Dr. Andreas M. Wolf

Convenor, CEN/TC 224/WG 19 Breeder Documents

What happens when you search the Web for *breeder document*?



By the way, you will get ~500,000 results.



www.buch-sokrates.de

What are Breeder Documents?

- In Germany, “Breeder Documents” are civil status documents
- Register extracts from civil status registers
- Marriage certificates
- Partnership certificates
- **Birth certificates**
- Death certificates
- Copies from the register of death declarations

An attempt to define Breeder Documents

Evidence of identity (EOI), sometimes mentioned as **breeder documents** in a physical representation form, refers to a single or a set of evidence that can be used to provide confidence to the claimed identity. Trust of evidence of identity needs prudential assessment by an authority or a service provider before such evidence of identity can be accepted for identity verification or eligibility evaluation purposes.

Yang et.al.: Towards standardizing trusted evidence of identity. Proceedings of the 2013 ACM workshop on Digital identity management. https://www.researchgate.net/publication/262362997_Towards_standardizing_trusted_evidence_of_identity

Why do we need harmonization of breeder documents? Doesn‘t it work as it is?

EU Position: Registration of Identity

EUROPEAN
COMMISSION

Brussels, 16.10.2018
COM(2018) 696 final

REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

on the implementation of the Action Plan to strengthen the EU response to travel document fraud

EU Position: Registration of Identity

Regarding **Research & Development activities** on breeder documents and document verification including mobile technologies, the Commission financed three main projects in the framework of the Horizon 2020 programme for Secure Societies: **ORIGINS**, which finished mid-2017, **FIDELITY** concluded in 2015 and ARIES launched in 2016. These research projects address aspects related to combating ID fraud, protection of existing identities, image morphing and fingerprint spoofing. Follow-up activities include continuity of the ORIGINS project through the **European Committee for Standardisation (CEN) WG19 on breeder documents standardisation**; a consortium on an image morphing research program; the SIRIUS project aiming at capturing standardised reference data from documents and ENLETS Mobile, which looks into new developments and shares good practices on mobile solutions for front line law enforcement officers.

Issues to be addressed by harmonized breeder documents

- Read and understand documents issued in other (all?) countries.
- Verify validity and authenticity of a document and its content.
- Do this automatically, with low effort, inexpensive and simple.
- Bind the document to its holder.
- Avoid any patented technology.
- Consider and accept national legal and cultural context needs.
- Be aware that the cryptographic technology will change during the lifetime of a breeder document.
- Be aware that the transition and co-existence of old and new documents will take decades.

Winners

- Europeans not living in their country of birth.
- Migrants from other countries whose identity may be determined faster.
- All who need a reliable ground truth to prove their identity.
- Individuals to be identified and authorities/organizations to determine or verify that identity.

Losers

- Fraudsters. Of all kind.
- It will take time until the new system takes effect.
- The advantages do not take effect during one legislative period.
- This is not a short term project!

How to proceed?

Identify best practices,
harmonize,
standardize.

History and work schedule of WG 19

- **Established by CEN/TC224 Decision 2016/2030:**
  "CEN/TC 224 approves the creation of a Working Group dedicated to the standardization of Breeder Documents and invites AFNOR to start the process of the creation of the group, considering the importance of the topic for European standardization, by the end of January 2017."

- **Standardization of Breeder Documents for Europe:**
  "CEN/TC224/WG19 is leading standardization activities specifically for Europe in the field of Breeder Documents. It includes, but is not restricted to, data collection, application, issuance and renewal processes."

Members of WG 19

- Part of CEN/TC224 “Personal identification, electronic signature and cards and their related systems and operations”.
- 37 registered experts from Austria, Finland, France, Georgia, Germany, the Netherlands, Norway, Spain, Switzerland, UK, and ANEC.
- Secretariat: Sobhi Mahmoud (DIN)
- Convener: Andreas Wolf (DIN)
- Next meetings:
  - 7th meeting: 05-12-2018 – 06-12-2018 in Teddington (UK)
  - 8th meeting: 06-03-2019 – 07-03-2019 in Madrid (ES)
  - 9th meeting: 25-06-2019 – 26-06-2019 in Munich (DE)
  - 10th meeting: 23-09-2019 – 24-09-2019 in Helsinki (FI)

The project

TS on “Personal identification – Secure and Interoperable European Breeder Documents“

- The text work is ongoing.
- Jens Urmann (DIN) works as Editor.

Additional action items of WG 19

- Preparation of a roadmap covering all topics which might become important when standardizing breeder documents within the next two to ten years.
  - Inclusion of biometric data?
  - If yes, which modality or modalities?
  - Block chain or other distributed ledger technologies?
- Cooperation with stakeholders
  - EU Commission (DG HOME, JRC, …)
  - ICAO (NTWG, ICBWG)
  - ISO/IEC JTC 1/SC 17/WG 3
  - Relevant research projects

Biometrics

- For sure a good breeder document needs a close binding between the document and its holder.
- Which biometric characteristic? Fingerprint? DNA? Something else?
- How to protect privacy wrt. biometric data? What about acceptance of biometric technology?
- How to encode and secure biometric data?
- Consider data format, storage, access control, ageing.

State of the art

- As already mentioned: The FP7 research projects
  - FIDELITY
  - ORIGINS
- are a starting point for the WG 19 project.

Scalable validation and verification of harmonized breeder documents

Harmonized layout

BIRTH CERTIFICATE
GEBURTSURKUNDE/CERTIFICATE DE NAISSANCE

01. DOCUMENT NUMBER D001456BABCD123

02. PLACE OF BIRTH
Brandenburg

03. DATE OF BIRTH
15.12.1990

04. SEX OF THE CHILD
F

05. SURNAME OF THE CHILD
Mustermann

06. FORENAMES OF THE CHILD
Erika, Maria, Sophia

07. SEX OF THE FIRST PARENT
F

08. SURNAME OF T. F. P.
Mustermann

09. FORENAMES OF T. F. P.
Katharina

10. BIRTH NAME OF T. F. P.
Schmidt

11. SEX OF THE SECOND PARENT
M

12. SURNAME OF T. S. P.
Mustermann

13. FORENAMES OF T. S. P.
Jakob Thomas

14. BIRTH NAME OF T. S. P.
-

15. NAME OF THE ISSUING AUTHORITY
Standesamt Mitte

16. DATE OF ISSUANCE
22.12.1990

17. PLACE OF ISSUANCE
Berlin

18. DATE OF BIRTH OF THE FIRST PARENT
31.12.1965

19. PLACE OF BIRTH OF T. F. P.
Hamburg, Germany

20. CITIZENSHIP OF T. F. P.
German

21. CREDENTIAL NUMBER OF T. F. P.
D0012345XYZ1234

22. DATE OF BIRTH OF THE SECOND PARENT
01.02.1960

23. PLACE OF BIRTH OF T. S. P.
Wien, Austria

24. CITIZENSHIP OF T. S. P.
Austrian

25. CREDENTIAL NUMBER OF T. S. P.
AUT98765ABCDEFG

26. NAME OF THE ISSUING OFFICER
Klaus Mueller

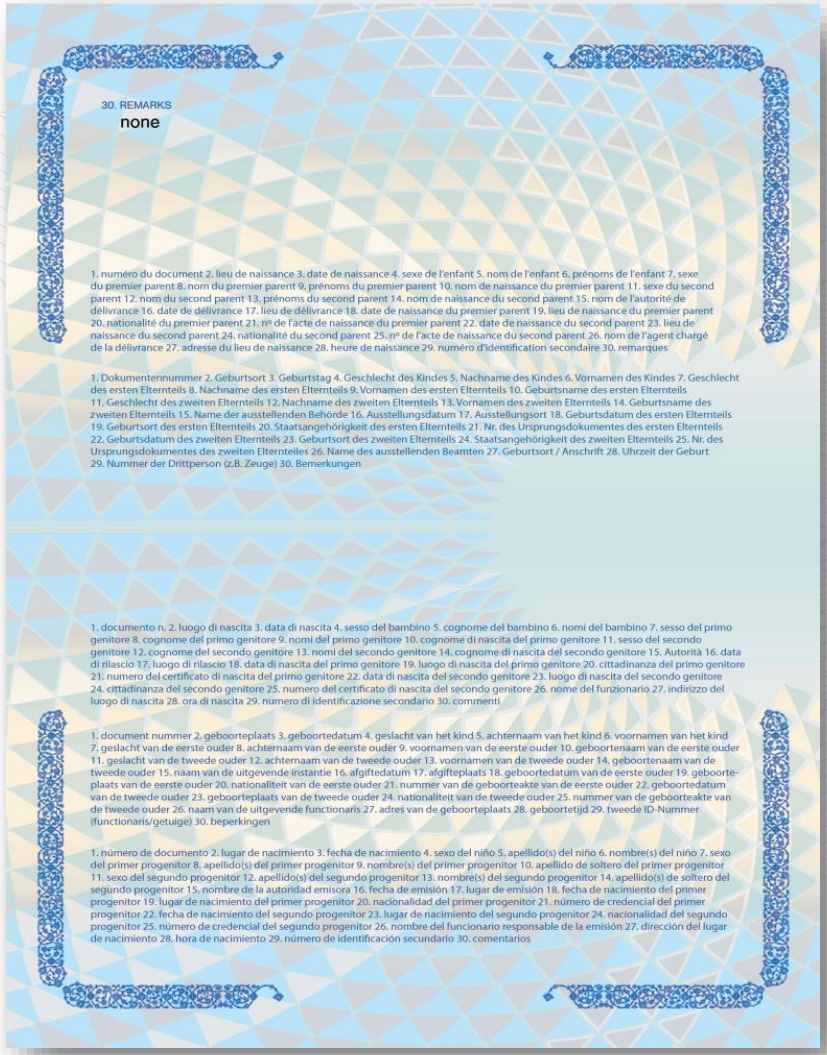
27. BIRTH PLACE ADDRESS
Zentralkrankenhaus, Musterstr. 1, 12345 Brandenburg

28. TIME OF BIRTH
21:00

29. SECONDARY IDENTIFICATION NUMBER
123456789ABCDE

Signature/Unterschrift/Signature

ZENTRALKRANKENHAUS 12345 BRANDENBURG



30. REMARKS
none

1. numéro du document 2. lieu de naissance 3. date de naissance 4. sexe de l'enfant 5. nom de l'enfant 6. prénoms de l'enfant 7. sexe du premier parent 8. nom du premier parent 9. prénoms du premier parent 10. nom de naissance du premier parent 11. sexe du second parent 12. nom du second parent 13. prénoms du second parent 14. nom de naissance du second parent 15. nom de l'autorité de délivrance 16. date de délivrance 17. lieu de délivrance 18. date de naissance du premier parent 19. lieu de naissance du premier parent 20. nationalité du premier parent 21. nº de l'acte de naissance du premier parent 22. date de naissance du second parent 23. lieu de naissance du second parent 24. nationalité du second parent 25. nº de l'acte de naissance du second parent 26. nom de l'agent chargé de la délivrance 27. adresse du lieu de naissance 28. heure de naissance 29. numéro d'identification secondaire 30. remarques

1. Dokumentennummer 2. Geburtsort 3. Geburtstag 4. Geschlecht des Kindes 5. Nachname des Kindes 6. Vornamen des Kindes 7. Geschlecht des ersten Elternteils 8. Nachname des ersten Elternteils 9. Vornamen des ersten Elternteils 10. Geburtsname des ersten Elternteils 11. Geschlecht des zweiten Elternteils 12. Nachname des zweiten Elternteils 13. Vornamen des zweiten Elternteils 14. Geburtsname des zweiten Elternteils 15. Name der ausstellenden Behörde 16. Ausstellungsdatum 17. Ausstellungsort 18. Geburtsdatum des ersten Elternteils 19. Geburtsort des ersten Elternteils 20. Staatsangehörigkeit des ersten Elternteils 21. Nr. des Ursprungsdokumentes des ersten Elternteils 22. Geburtsdatum des zweiten Elternteils 23. Geburtsort des zweiten Elternteils 24. Staatsangehörigkeit des zweiten Elternteils 25. Nr. des Ursprungsdokumentes des zweiten Elternteiles 26. Name des ausstellenden Beamten 27. Geburtsort / Anschrift 28. Uhrzeit der Geburt 29. Nummer der Drittperson (z.B. Zeuge) 30. Bemerkungen

1. documento n. 2. luogo di nascita 3. data di nascita 4. sesso del bambino 5. cognome del bambino 6. nomi del bambino 7. sesso del primo genitore 8. cognome del primo genitore 9. nomi del primo genitore 10. cognome di nascita del primo genitore 11. sesso del secondo genitore 12. cognome del secondo genitore 13. nomi del secondo genitore 14. cognome di nascita del secondo genitore 15. Autorità 16. data di rilascio 17. luogo di rilascio 18. data di nascita del primo genitore 19. luogo di nascita del primo genitore 20. cittadinanza del primo genitore 21. numero del certificato di nascita del primo genitore 22. data di nascita del secondo genitore 23. luogo di nascita del secondo genitore 24. cittadinanza del secondo genitore 25. numero del certificato di nascita del secondo genitore 26. nome del funzionario 27. indirizzo del luogo di nascita 28. ora di nascita 29. numero di identificazione secondario 30. commenti

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1. número de documento 2. lugar de nacimiento 3. fecha de nacimiento 4. sexo del niño 5. apellido(s) del niño 6. nombre(s) del niño 7. sexo del primer progenitor 8. apellido(s) del primer progenitor 9. nombre(s) del primer progenitor 10. apellido de soltero del primer progenitor 11. sexo del segundo progenitor 12. apellido(s) del segundo progenitor 13. nombre(s) del segundo progenitor 14. apellido(s) de soltero del segundo progenitor 15. nombre de la autoridad emisora 16. fecha de emisión 17. lugar de emisión 18. fecha de nacimiento del primer progenitor 19. lugar de nacimiento del primer progenitor 20. nacionalidad del primer progenitor 21. número de credencial del primer progenitor 22. fecha de nacimiento del segundo progenitor 23. lugar de nacimiento del segundo progenitor 24. nacionalidad del segundo progenitor 25. número de credencial del segundo progenitor 26. nombre del funcionario responsable de la emisión 27. dirección del lugar de nacimiento 28. hora de nacimiento 29. número de identificación secundario 30. comentarios

Harmonized data content

based on the 2013 draft ICCS Convention recommendations

Mandatory data records

1 Document number
2 Place of birth
3 Date of birth
4 Sex of the child
5 Surname of the child
6 Forenames of the child
7 Sex of the first parent
8 Surname of the first parent
9 Forenames of the first parent
10 Birth name of the first parent
11 Sex of the second parent
12 Surname of the second parent
13 Forenames of the second parent
14 Birth name of the second parent
15 Name of the issuing authority
16 Date of issuance
17 Place of issuance

Recommended data records

18 Date of birth of the first parent
19 Place of birth of the first parent
20 Citizenship of the first parent
21 Credential number of the first parent
18 Date of birth of the second parent
19 Place of birth of the second parent
20 Citizenship of the second parent
21 Credential number of the second parent
26 Name of the issuing officer
27 Birth place address
28 Time of birth
29 Secondary identification number
30 Remarks

Durability and physical security

FIDELITY provides mandatory and optional features for breeder documents to achieve

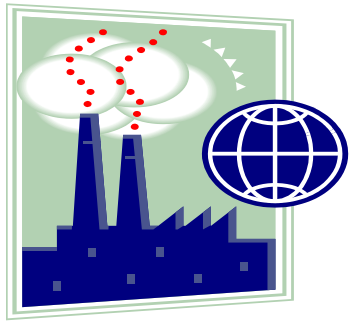
- life-long durability
- security against manipulation and fraud
- machine readability to facilitate (automated) processes

FIDELITY suggests to

- produce breeder documents centrally
- with a standardized number scheme
- personalize breeder documents locally

Durability and physical security

Pre-production



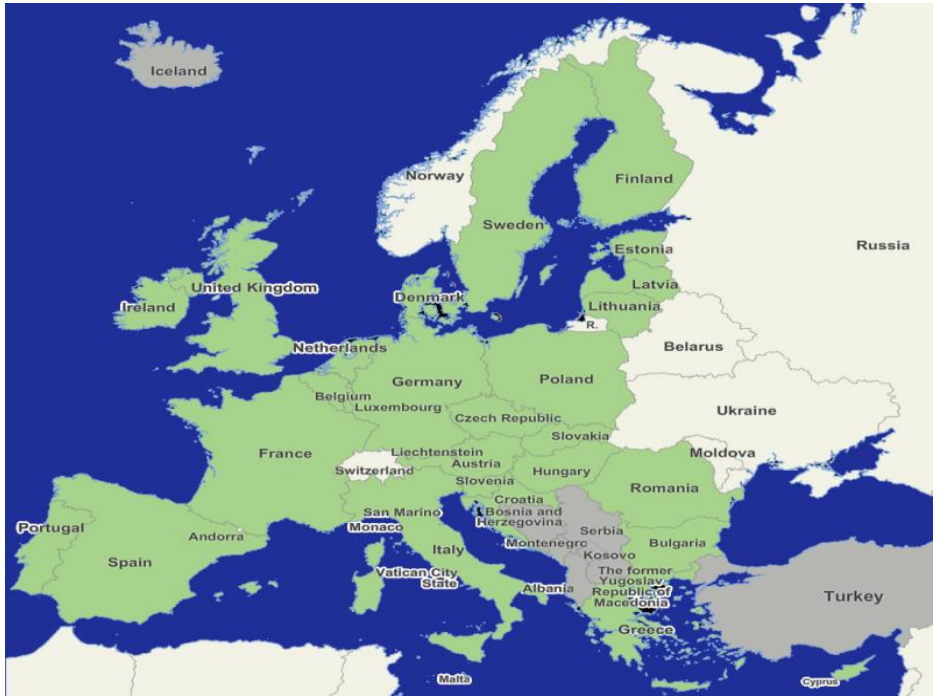
Centralized production of pre-personalized documents containing:

- Unique number
- Optical security features
- Double ID-3 format

Final personalization at the local authorities

Personalized document handed out to the citizen

Establish a Europe-wide harmonized numbering system



http://europa.eu/about-eu/countries/index_en.htm

Example: 15 digits

ABC 1A3B5 XY67Z89

- Consecutive number
- Issuing authority
- Country code, 3 characters

- Use three-letter country codes as defined in ISO/IEC 7501
- Every pre-personalized document has a unique number
- Establish a EU wide tracking system

Machine readability

Use two 2D barcodes

- QR Code or DataMatrix or other standardized 2D barcode

The barcodes contain

- The unique number printed at the time of pre-personalization
- The unique number (again), mandatory data records, and (optionally) biometric template data

Scalable verification and validation

Here: server content creation

Issuing authority

Hash of content
+
document status

Generated
At issuer
Issued
Lost/stolen
Revoked
Outdated
…

Centralized or national or local server

- Contains anonymized data and document status
- Identity tracking is prohibited
- Privacy by design

CEN Technical Specification Personal identification - Secure and interoperable European Breeder Documents

26.06.2018

Document scope

- Guidance to generate, manage, and use secure and interoperable breeder documents in Europe
- A framework in which citizens retain the control of breeder document data and use them to support identity proofing and verification
- Provides methodologies to assess and increase the level of trust in breeder documents
- Specifies methods for defining physical and logical/digital representations of a secure breeder document, securing breeder document processes, and linking the document to its legitimate holder
- Considered document types: birth certificates, marriage certificates, death certificates
- Considered management processes: registration, issuance, renewal, inspection/verification, and revocation
- Specific considerations: first-time application, later-in-life registration of an identity, and content update

We are on the right track to secure and interoperable European Breeder Documents, but have not arrived yet.

A lot of things have to be done. Supporters and contributors are welcome.

Thank you for your attention.

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Bundesdruckerei GmbH
Technology | Principal Scientist Biometrics
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Telefon: +491723656222

NORWAY

KNUT IVARSON ØVREGÅRD

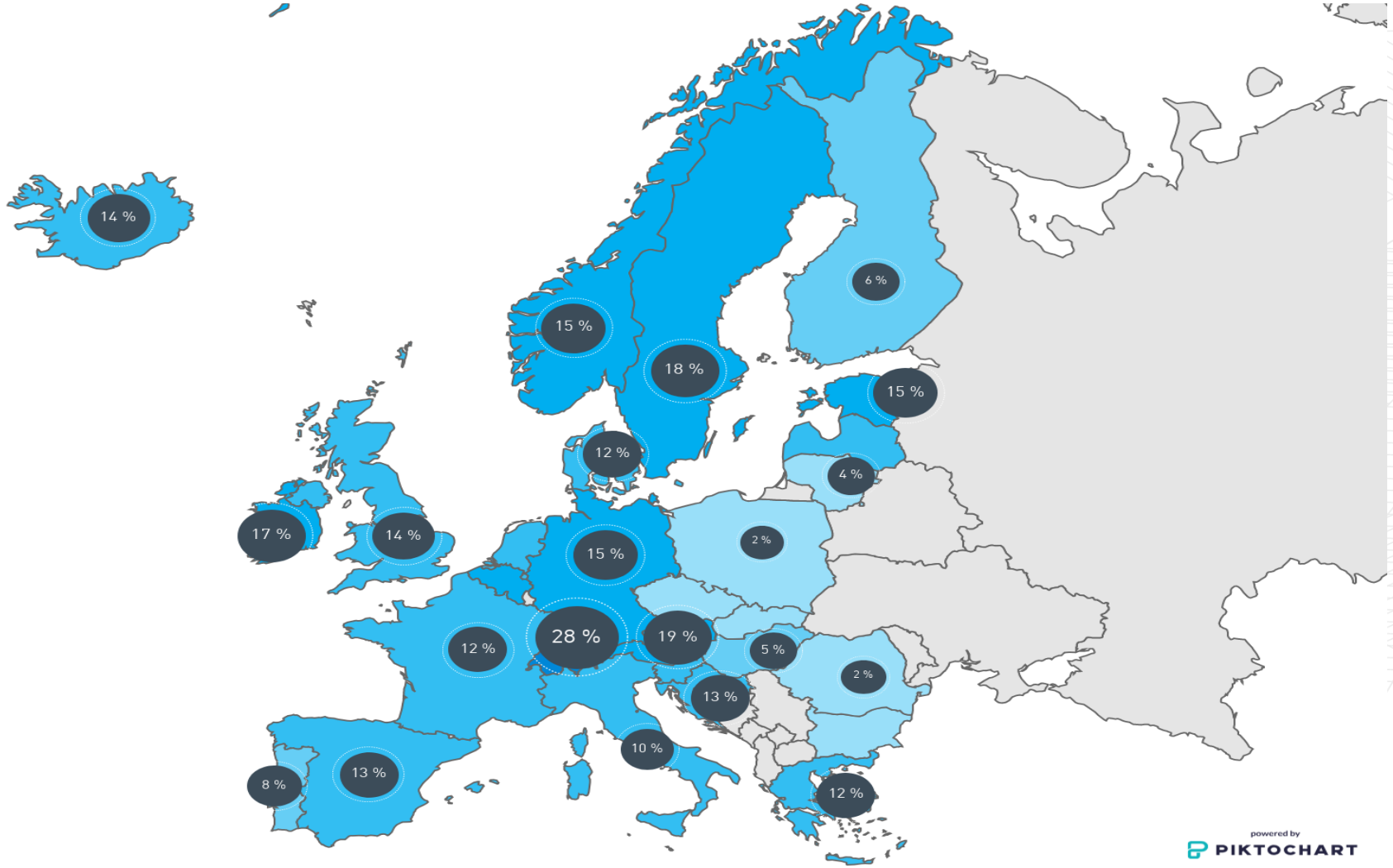
Norwegian ID Centre

TOWARDS A HOLISTIC ID MANAGEMENT

Knut Ivarson Øvregård
Norwegian ID Centre

Foto:Thinkstock

Registered identities born in a foreign country



Norwegian ID Centre

A chain is only as strong as its weakest link!

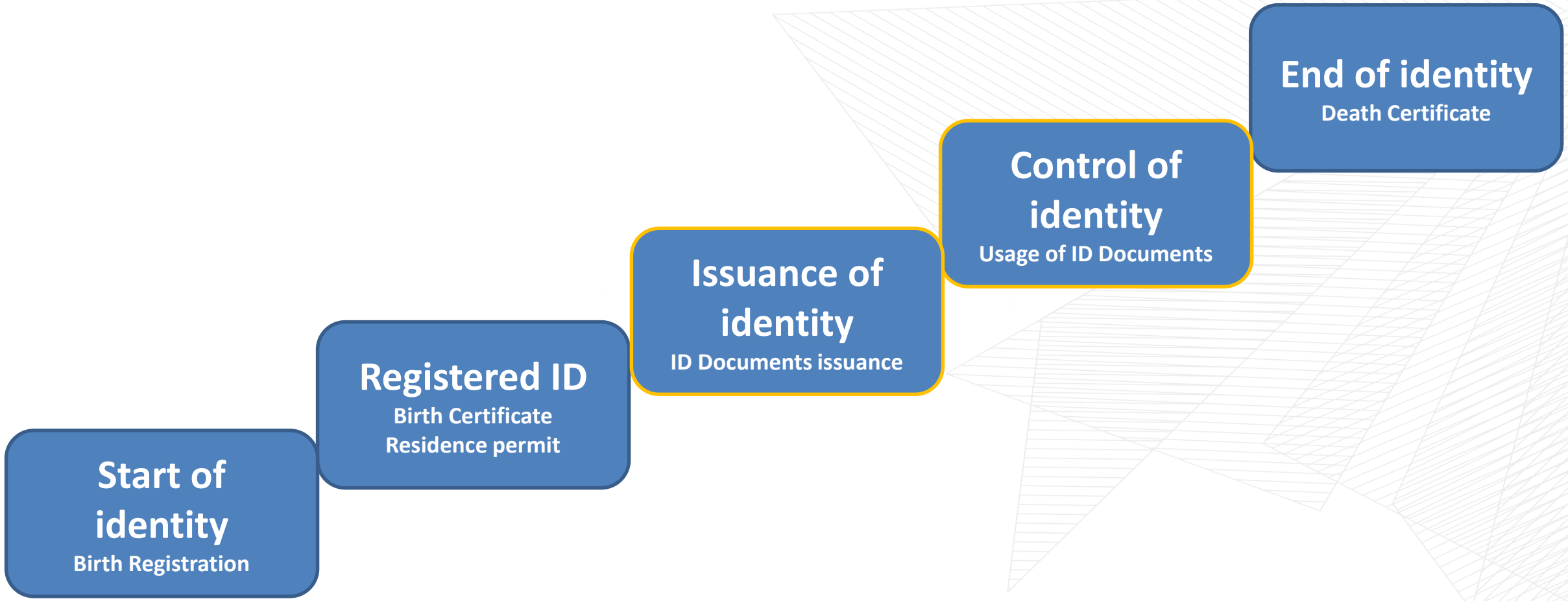
ICAO

Changes in fraudulent methods

FRONTEX

- Increasing abuse of EU / EEA documents
- Imposters are increasing
- Increasing abuse of wrongly issued genuine documents

The identity chain



Consequences of a weak identity chain

NORGE NOREG
NORWAY
PASS
PASSPORT

How to strengthen the identity chain

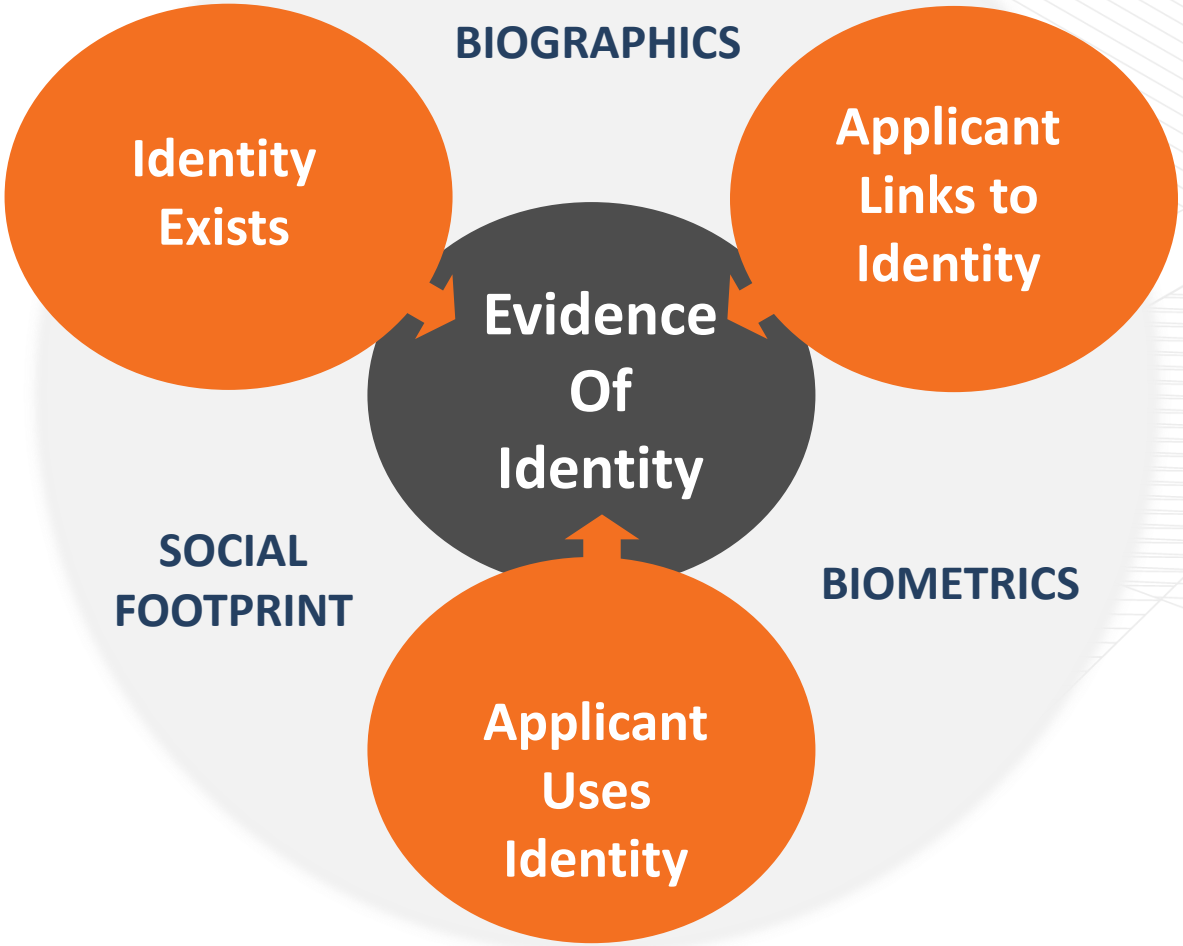
ICAO TRIP Guide on
EVIDENCE OF IDENTITY

ICAO Security and Facilitation

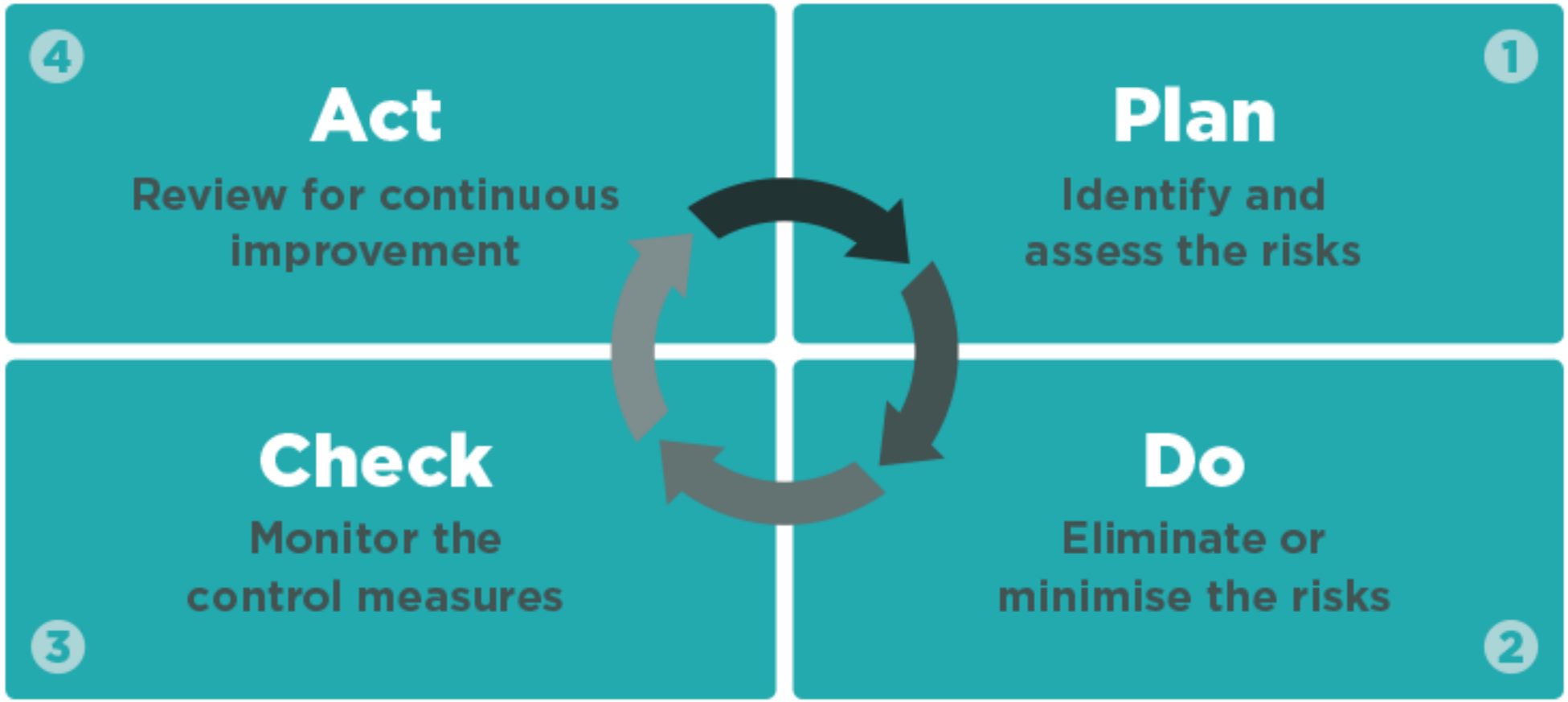
Norwegian ID Centre

Evidence of Identity

Circle of Trust



What about risks?



Summary and conclusions

- Fraudsters will always attack the weakest link
- We must always consider identity-related risks before determining the level of control
- A reference standard is required to rely on other players' identity checks

Everything is about trust

Thank you for your attention!

Knut.ovregard@nidsenter.no

AFRICA

Joseph Atick

ID4Africa & Identity Counsel

Making Everyone Count

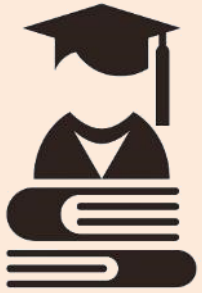
The Multidimensional Challenge of the Last Billion

Dr. Joseph J. Atick

Executive Chairman, ID4Africa

18 October 2018, The Biometric Institute Congress, London

WB: 1.0 B people have no way to prove who they are. They have difficulty accessing:



Appreciating the Challenge

1 Billion

Data From:
Findex, UNICEF, UNSD, World Bank, ID4Africa

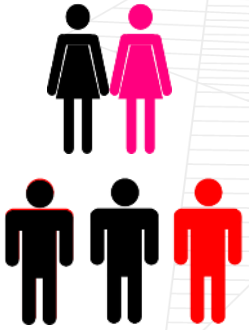
Rural → **450 M**

300 M in Africa

Sub-Saharan Africa → **500 M**

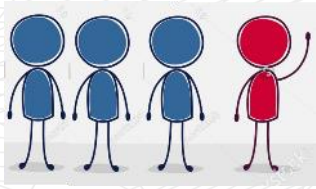
200 M in ECOWAS ZONE

Low Income Countries (LIC) → **300 M**



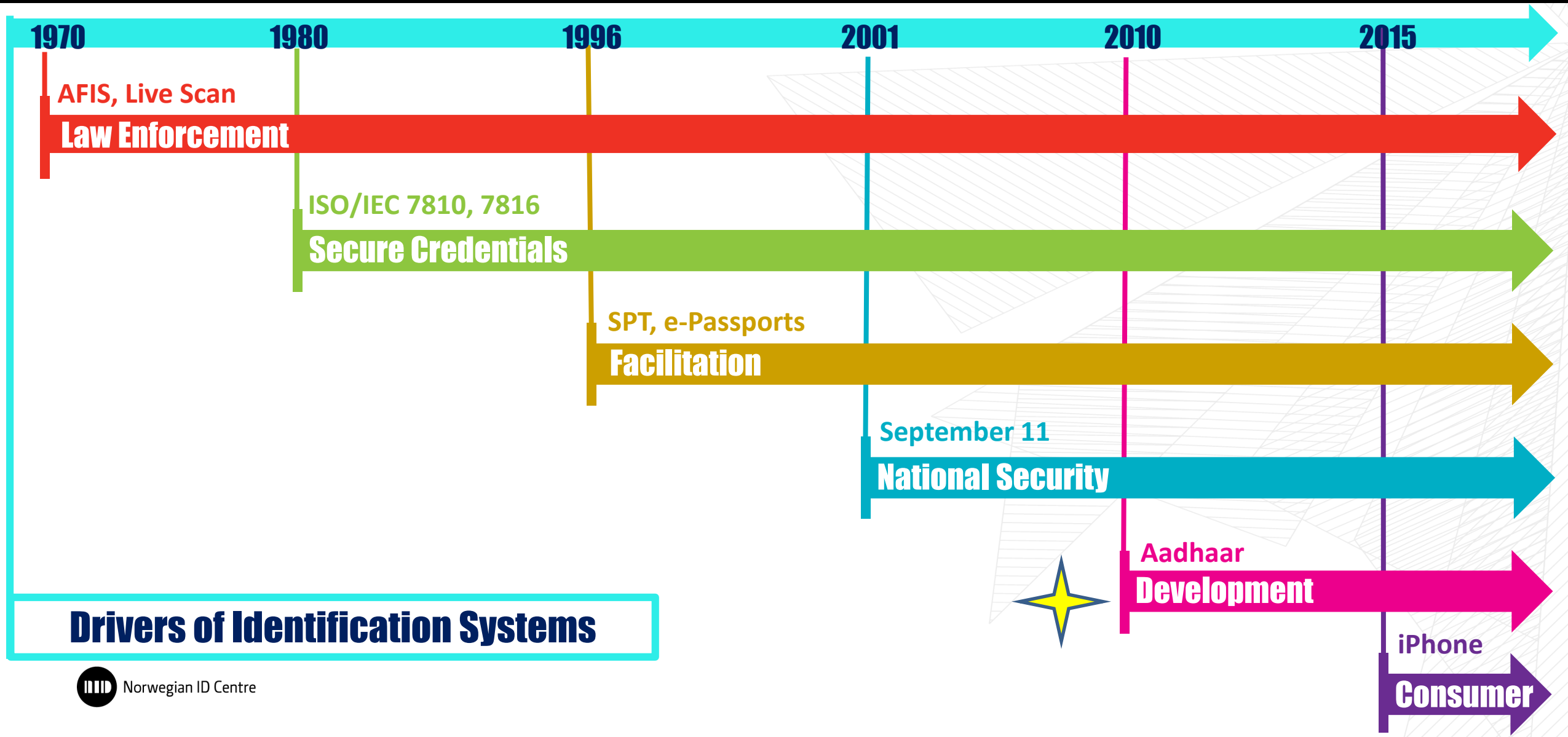
Compare ROW: 1 in 18-20

Children → **500 M**



125 M < 5yrs in Africa
No Birth Certificate

ID4Dev: Historical Context



Norwegian ID Centre

ID4Dev: Road to Aadhaar

PAN Card Project

NOT A TRUE DEVELOPMENT PROGRAM

- Tax collection & not social inclusion.
- Attempts were made over a decade before Aadhaar.

FAILED

Andrapradesh

FIRST ID-BASED LARGE SCALE DEV. PROGRAM

- Iris enrolled > 60M social assistance beneficiaries.
- Demonstrated: strong ROI & feasibility. Functional ID limited to 1 program using proprietary not standards based platform.

LIMITED SUCCESS

Aadhaar

FIRST ID-BASED LARGE SCALE DEV. PLATFORM

- Multipurpose foundational identity, minimal identifiers, standards based.
- Featured an innovative procurement strategy that cut down licensing cost by a factor of 5!

SUCCESS

Aadhaar: Evolution of Opposition

In 2009

Wil FAIL

"No way to distinguish 1 billion people uniquely apart"

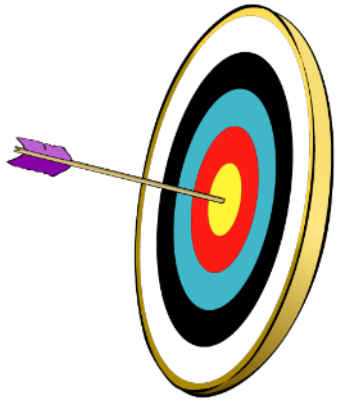
Proof Positive

- Scientific mobilization: 10 fingers + 2 iris enough to produce a unique signature to differentiate 1 in Billion.
- Today performance data: biometrics work in real world & in scale.

By 2014

USELESS

Today: There is enough data to prove the contrary



See next slide

By 2018

DANGEROUS

Remains a legitimate concern

- SCI ruling: Wake-up call.
- Need safeguards to ensure foundational ID systems **DO NO Harm** by design.
- Concerns about privacy & human rights violations must be addressed.

Demonstrable Benefits of ID Systems

1

2

3

4

5

6

Birth of a Movement & an Initiative

Back in 2014

Feasibility & ROI established already: NOT A Challenge.

Extent of remaining challenges revealed in number of assessments in collaboration with World Bank.

Led to birth of 2 ID-4-all sister initiatives

Born in 2014

Born in 2015

Promoting responsible adoption of robust identification systems 4 development & humanitarian action.

ID4Africa: Broad Participation

BOARD

Robert Palacios

Group Thematic Leader

Founding

WORLD BANK GROUP

Niall McCann

Lead Electoral Advisor

Founding

UNDP

Cornelius Williams

Associate Director & Global Chief Child Protection

unicef for every child

Alan Gelb

Senior Fellow

Founding

Center for Global Development

Samatar Omar Elmi

Senior ICT Officer

AFRICAN DEVELOPMENT BANK GROUP
GROUPE DE LA BANQUE AFRICAINE DE DÉVELOPPEMENT

Ambassadors

- 1/country
- Selected competitively from individuals nominated (many/country) by their institutions.
- Important link between the Movement & in-country identity stakeholders.

Norwegian ID Centre

ID4Africa: The Movement

The Stakeholders

INST.

INDIV.

Norwegian ID Centre

Activities

THE ANNUAL MEETING

- THE AMBASSADORS PROGRAM
- THE ANNUAL IDENTIFICATION SURVEY
- PUBLICATIONS
  - Almanac
  - Annual Report
  - Newsletters
- OUTREACH AND TARGETING
- ID4AFRICA MOBILE APPLICATION

Development Outcomes

Developmental Outcomes

ID4Africa activities in 2018/2019 are designed to promote this set of developmental outcomes

- Responsible identity lifecycle right from the start
- Inclusive society leveraging efficient ID-enabled service delivery
- Trust in the end-to-end democratic process
- Better care through secure identification of patients, health workers & data
- Free & secure movement of people
- Innovation to solve Africa's identification challenges

Assessing Where Africa is

- **With exception of South Africa**, still do not have harmonized identity ecosystems with total coverage of population linked to civil registration & that are used for service delivery.

South Africa

- **Progress is being made**

Liberia

Tanzania

Côte d'Ivoire

Nigeria

Malawi

Kenya

Morocco

Sierra Leone

Ethiopia

Rwanda

Senegal

Namibia

- **Significant challenges remain:** ID4Africa tracks the challenges annually through its engagement channels.

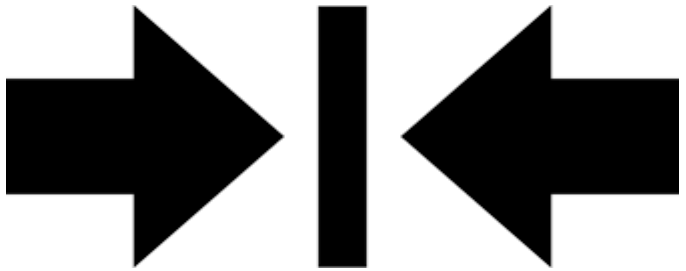
Data presented below from

Norwegian ID Centre

AFRICAN GOVERNMENT ID SURVEY 2017
Understanding Africa's Identification Needs

iD4Africa
AMBASSADORS PROGRAM

Iconography



Constraints

Challenges

Opportunity 4 Action

Severe Constraints

Rural, Sub-Saharan, LIC

- Difficult geographic accessibility.
- Low network connectivity.
- Weak governance & low numbers of administration points.

Social Norms re: Women & Children

- Registration policies often disadvantage women (UN Study 2016).
- Children often not priority.

Points of Contact Fragmentation

- **Health & Education (good POC)**, often don't participate on NID management decisions.
- Population systems are not interconnected.

Absence of Total Birth Registration

- Undermines registration efforts.
- Population remains invisible from the start.

If you care about

the poor,

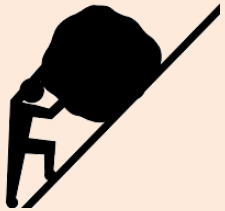
gender equality

children

Africa

You would join the search for the missing Billion

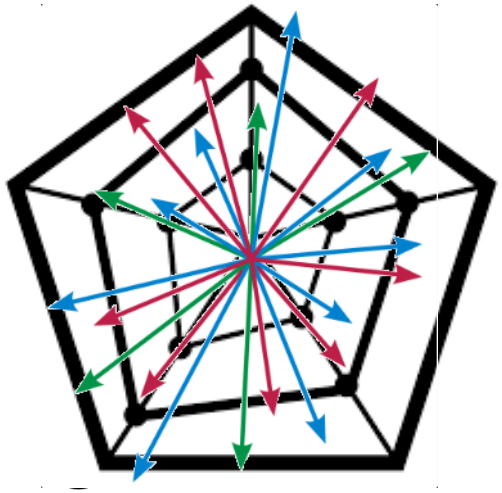
The Multi-dimensional Challenge of Inclusion



Objective 2030 (Variant of SDG 16.9):

Robust*, responsible legal identity for all 1 B that empowers them to exercise their rights, be included in development, and holds them accountable for their action in society.

*Robust & responsible comes from linking CI with CR within a life cycle approach, safeguarding ID data & protecting privacy.



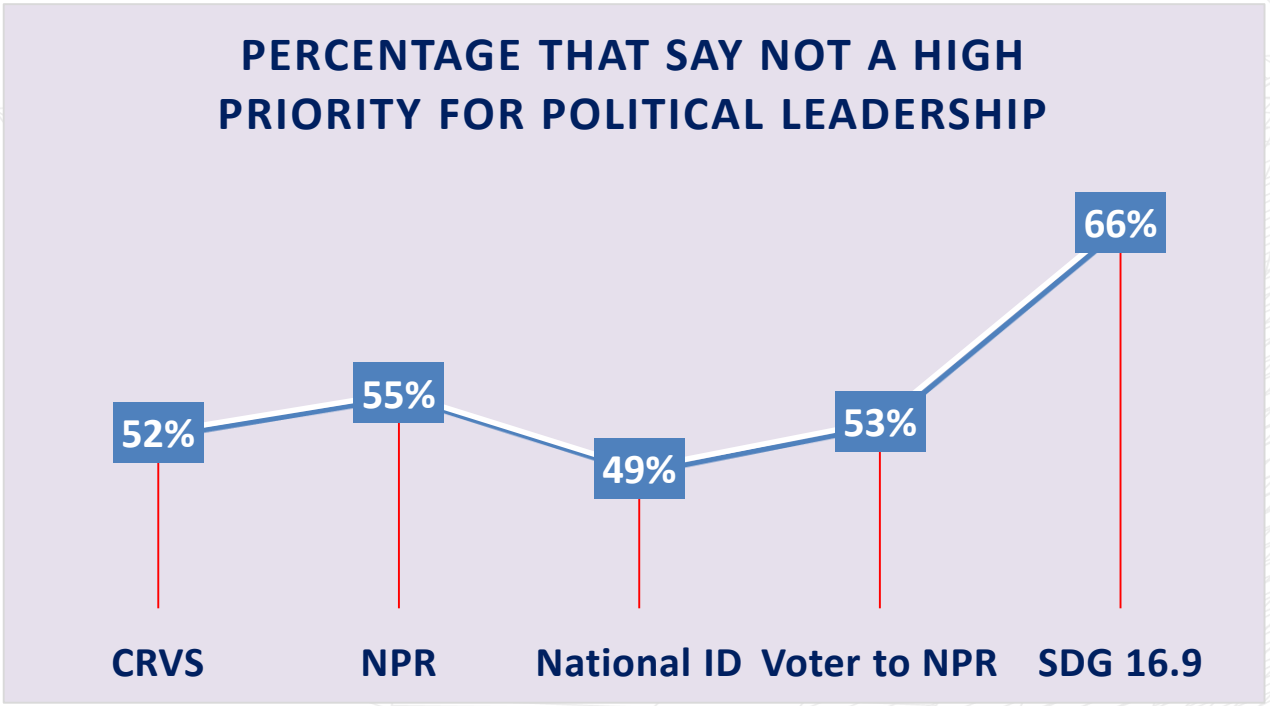
Requires progress along multiple dimensions to see genuine results.

Will present a rank-ordered set of recommended actions to inform the development agenda subject to stated constraints.

1. Turn Political Won't to Will

Political Will & Awareness

- Strong commitment for ID systems & legal identity is lacking.
- Big disconnect between political and technical wills.
- Political establishment : "*prefers knee-jerk projects or short duration campaigns with media coverage instead of systematically planned institutionalized and sustainable projects.*"



Direct engagement with political leadership including opposition is needed

Campaigns to mobilize public opinion & sensitize politicians

Example: Political Will Building Campaign

ESTONIA · PERU · Org. of American States · Latin America and Caribbean Council · KENYA · SIERRA LEONE

ETHIOPIA · GUINEA · COTE D'IVOIRE · MADAGASCAR · CAMEROON · CENTR. AFRICAN REP. · MAURITANIA · CHAD · SOUTH SUDAN · MAURITANIA · NIGER

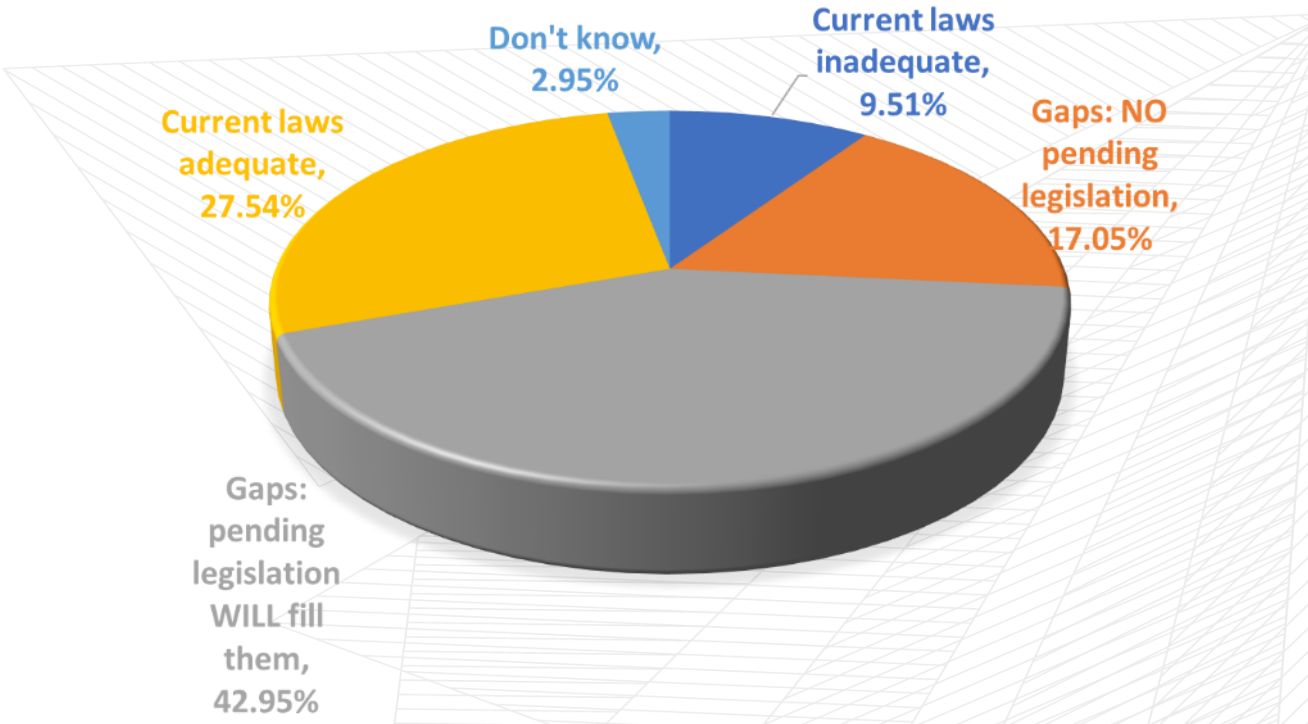
CHAD · MALI · GHANA · SOUTH SUDAN · DJIBOUTI · MAURITANIA · LIBERIA · SENEGAL · ESWATINI (SWAZILAND) · MALAWI · SOUTH AFRICA · NIGERIA

ESTONIA · KENYA · NIGERIA

2. Front Load Legal & Regulatory Work

- **Only 1 in 4 African Officials think** current laws are adequate to cover identity mandates including privacy.
- **Outdated or incomplete laws**
- **Many attribute current situation to**:
  - Legislators Lack of familiarity with identity matters.
  - Lack of systematic guidance on needed legal frameworks

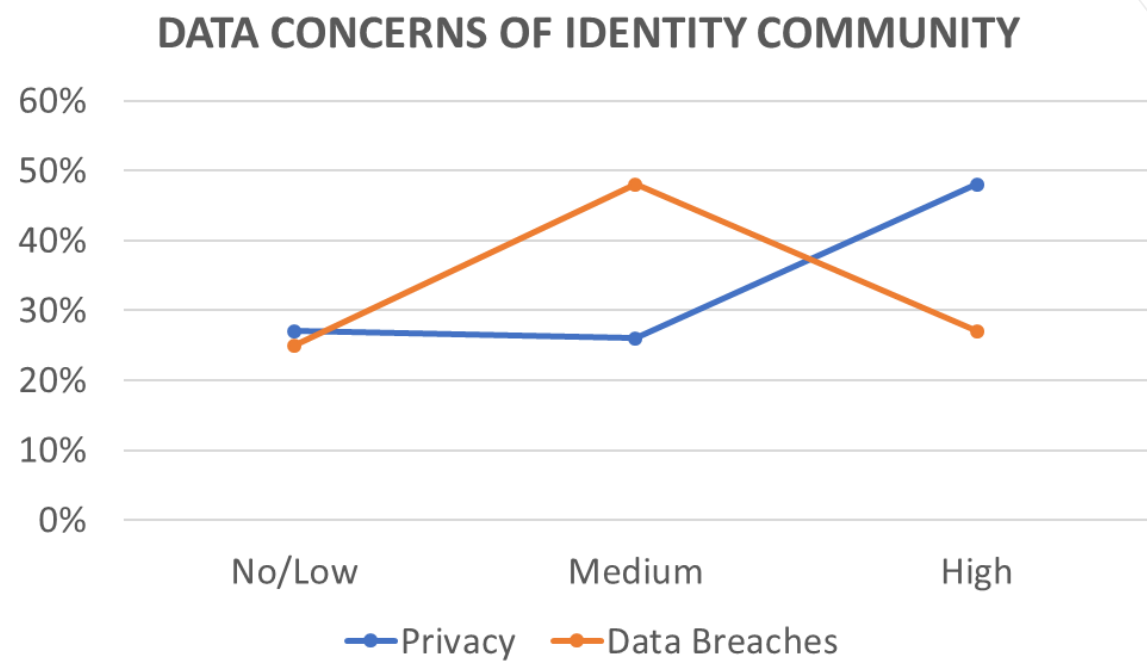
Insist on commitment to develop legal & policy frameworks early on as part & parcel of financing project implementation.



Legal framework must be first priority after political will.

The Aadhaar experience in this regard is NOT good one to follow.

Privacy & Data Protection Must Be @ Core



> 80% have high or medium concerns about Privacy & Data Security

Privacy and Data Protection was the number one topic that respondants to the Annual Survey said should dominate the development agenda for the next 24 months.

Good news: DPOs from half dozen African countries are now collaborating with ID4Africa to sensitize the identity stakeholders about data protection matters.

Data Protection is More Than Legal Frameworks

- **Privacy by design**
- **Data minimization & anonymization of transactions**
- **Tokenization & sector specific Unique ID numbers**

Need good knowledge transfer across legal, technical & institutional domains

Types of Data:

1. **Enrollment Data**
2. **Data Exhausts**: byproduct of identity-facilitated use
3. **Linkage facilitated by the UIN**
4. **Online & offline persona linkage.**

3. Clarify Institutional Arrangements

- **Lack of National level steering body**
  - Survey **1 in 2 African countries** do not have it & not planned.
- **Institutional mandates need revision**
  - Turf, competing priorities & mandates.
  - Security often at odds with development agenda.
  - Calls to establish independent commissions as custodians of national identity assets including civil registration have not been uniformly successful.
- **Politicization** Absent a national strategy with buy-in from all stakeholders, ID Systems get invariably politicized. **Recent example Ghana**.

Strategy document for ecosystem development should be first deliverable of a National Identity Steering committee representing all stakeholders.

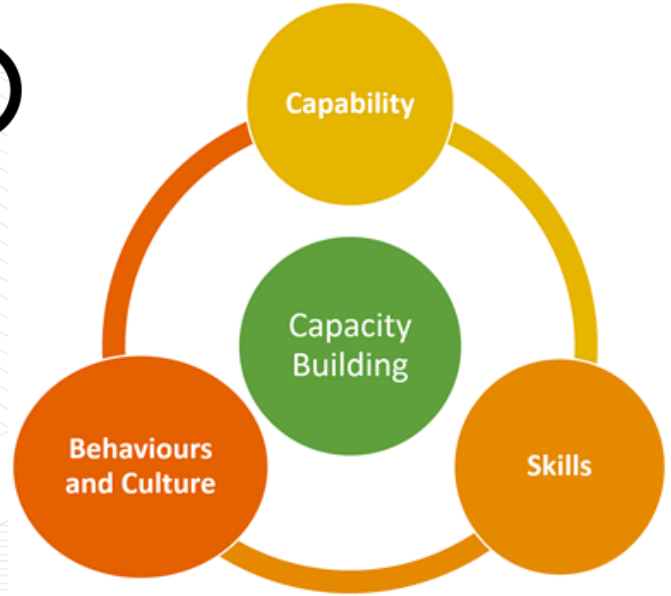
4. Help Nations Invest in Capacity

Capacity

- Continues to be one of the most important structural gaps.
- Qualified individuals lured into private sector or by development agencies through better compensation.
- Not just HR, includes information management & data processing capacity

Africa is asking for help (Rated No. 1)

1. **Capacity Building**
2. **Knowledge Exchange**
3. **Technical Manuals**
4. **Technical Assistance**
5. **Financial Assistance**

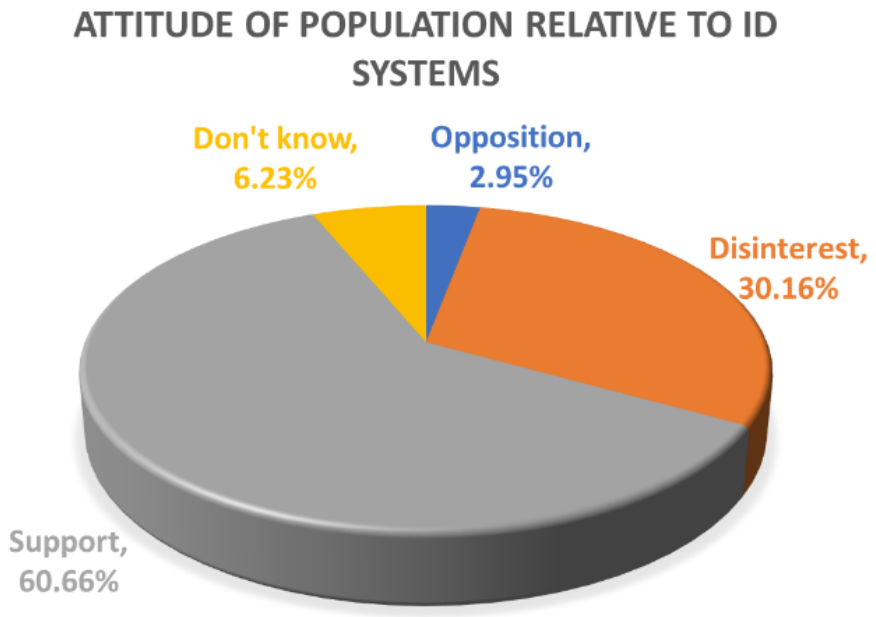


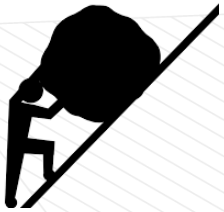
- More emphasis on training & ownership as part of procurement.
- South-South exchange.
- Attendance at conferences that build **community & culture** (e.g. ID4Africa AM).
- Scholarships for study aboard conditioned on return to country.
- Investments in information management.

Norwegian ID Centre

5. Make Inclusion Less Difficult

Significant portion of population does not to care or does not want to be included.





Reason appears to be Accessibility Challenges relative to perceived value

Top 5 reasons inclusion in ID systems in Africa remains low (2018 Survey):

1. Complex enrollment procedures
2. Lack of awareness by the general public
3. Not enough registration points
4. Inadequate funding
5. Lack of use cases for ID

- **Simplify enrollment process & reduce breeder doc requirements (Easy)**
- **Collect only minimal mandatory data (4 uniqueness) (Fast)**
- **Use proximity centers for improved access (Accessible)**
- **Inclusion should not cost the public (Free)**

6. Make Inclusion More Rewarding

- **Identity that is Not used does not contribute to a country's development**
- **Greatest incentive is linking to useful services**

- **Africa lacks experience with ID enabled use cases**
  - ID cards often remain an end in themselves.

- **Encourage development of identity systems within ecosystem approach**
- **Prioritize leading use cases: Elections*, social protection, financial inclusion**
- **Encourage development of open APIs for scalability of inclusion (like EU PSD2)**
- **Invest in public awareness campaigns about utility of ID & how to get it**

(*In 2015 $1.5 B spent on one-off voter registration exercises)

7. Make Virtual Identity Viable Option

Building virtual identity platform

- Proving to be difficult in Africa
- Population demands physical credential
- ID systems continue to be dominated by offline considerations
- Lack of pervasive online connectivity infrastructure
- **Immature cloud & lack of trust in it**

Virtual identity can lower the cost of inclusion

Requires omnipresent online authentication services

ID Systems continue to be heavily materialized leading to

	Anglophone	Francophone
Already implemented an ID program	88%	82%
Programs with an ID Document?	95%	88%
Intends to launch a new ID program in next 24 months?	58%	66%
Issue ID card	90%	82%
Issue mobile ID in addition	56%	63%
Establish online identity authentication services	76%	59%

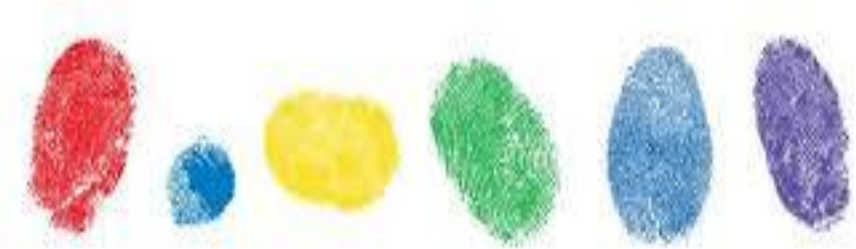
8. Support Harmonization Through Standards

Pathways to harmonization

1

Reuse of Legacy Data

- Most exercises of linkage of existing databases have met with partial success or failure.
- Reasons
  1. Identity data is not standardized
  2. Non uniform Business practices.
  3. **Data quality problems.**



Norwegian ID Centre

2

Fresh Start

- Cheaper to reenroll than to leverage existing assets?
- *Harmonization: the coordinated capture of new identifying data by diverse groups of stakeholders following same standards & the deployment of this data (federated, centralized, mix, etc) through online authentication services for all to use.*

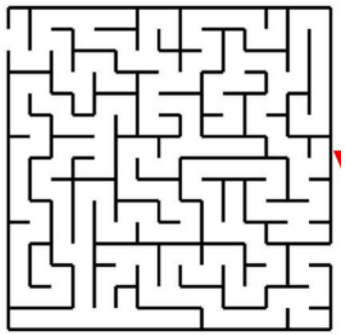
9. Support Initiatives to Lower Design Risk

High risk process that strikes fear in the hearts of government architects

Today ID System Development

Complex branching process that includes choices of path & direction, may have multiple entry & exits and dead ends.

Maze (Wiki Dictionary)



Where it needs to be

Process with no dead ends, which while it may have twists and turns you cannot get lost. You just trust that the path will lead you to where you need to be.

Labyrinth (Wiki Dictionary)

Initiative: From the Maze to the Labyrinth

Norwegian ID Cen...

10. Nurture Healthy Industry Practices

- **Practices of few rogue vendors taint whole industry & raise customer concerns:**
  1. Vendors lock-in
  2. Cost overruns
  3. Speed of implementation
  4. Service by vendors

Rank ordered concerns of officials relative to industry practices from recent survey

TANZANIA

The National Newspaper

DAILY NEWS

TANZANIA AUGUST 22, 2018

GOVT RECOVERS OVER 20BN/- IT'S THE MONEY FROM THREE OUT OF SEVEN FIRMS THAT CONTRACTED WITH NIDA

- **Fear of vendor lock-in** is leading to **MOSIP** (Modular Open Source Identity Platform) and **Open Standard APIs**
- **SIA industry code of Ethics (October 2017). More is needed**
  1. Signed by small fraction of the industry.
  2. Encourage in field industry leadership on what the Code means in terms of operational behavior.
  3. Explore adding monitoring, enforcement & sanction mechanisms.

Norwegian ID Centre

VYJAYANTI DESAI

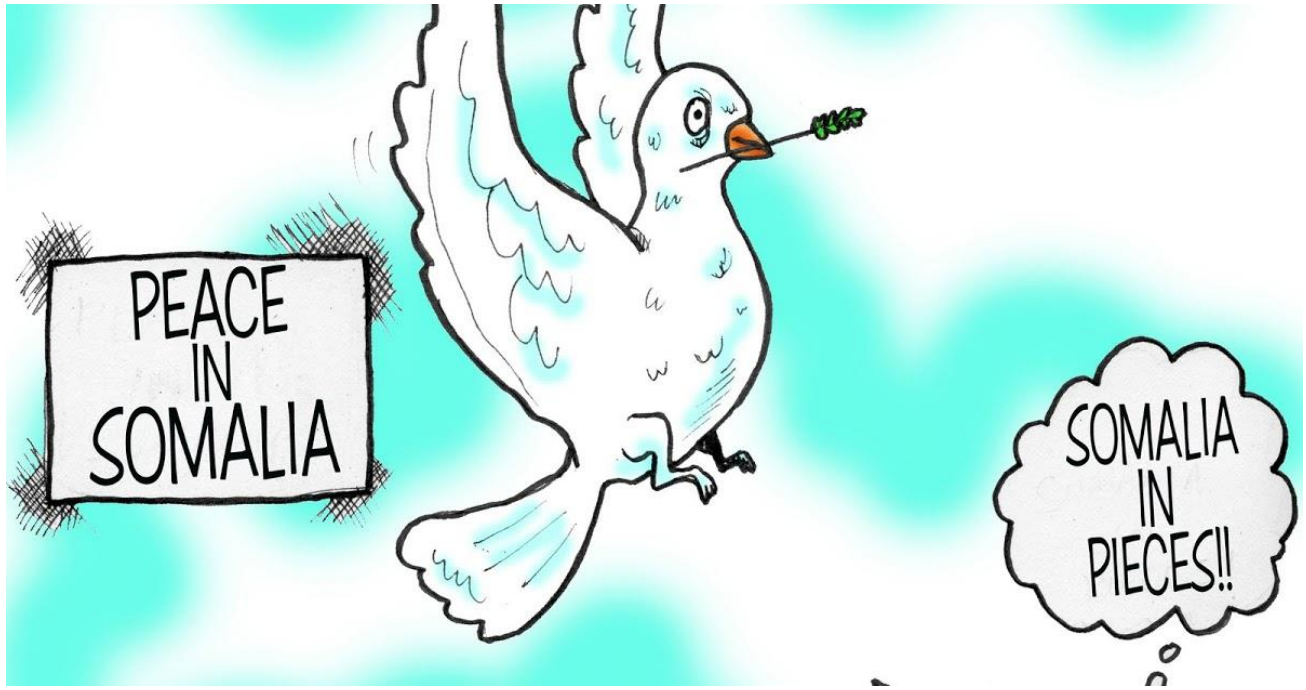
Identification for Development (ID4D)
World Bank Group

VEBJØRN HEINES

Norwegian Ministry of Foreign Affairs

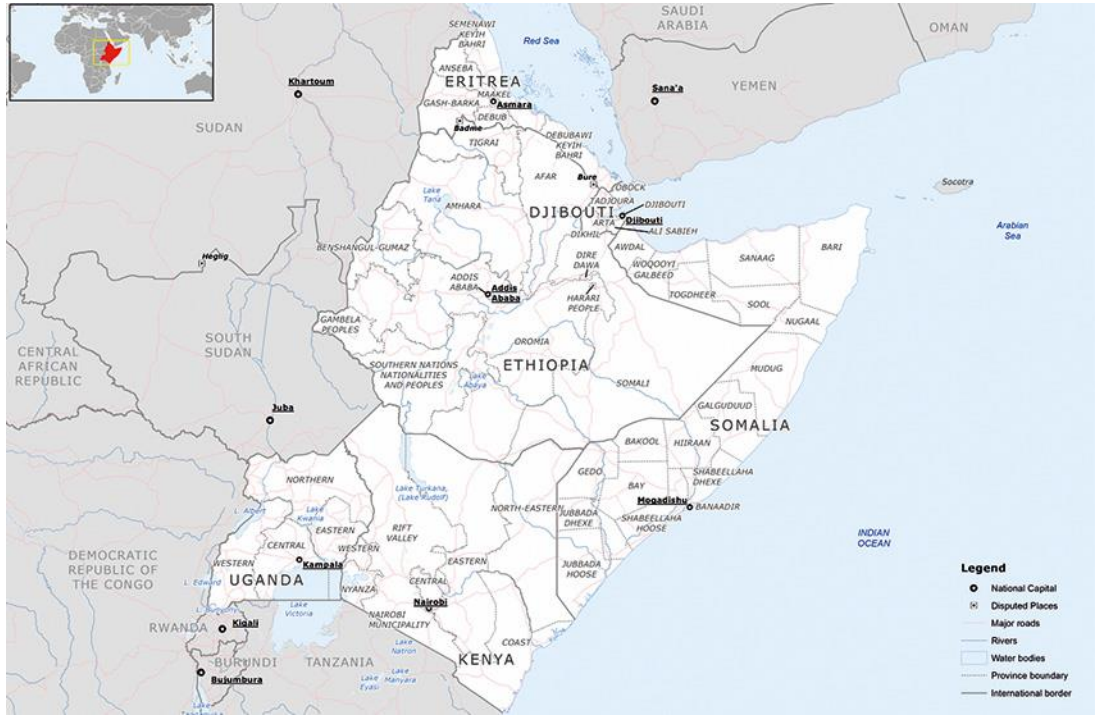
Somalia

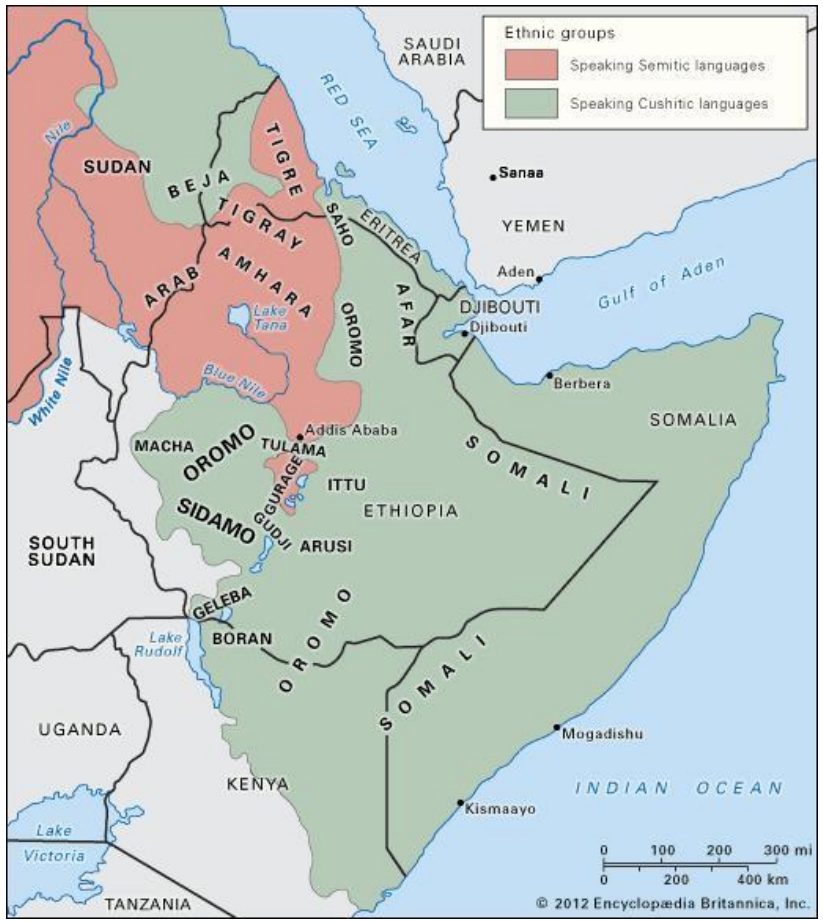
Supporting institutions in a fragile state



SOMALIA
MAMA WHAT IS FAKE NEWS?
THIS IS NOT
17
CAI / NYTS

Nations, borders, peoples and identity





A small anecdote about three brothers…

Key developments

- 2012 Provisional Constitution
- 2013 Compact – New Deal
- 2016/17 Elections
- May 2017, London Conference
- 2018 Transition Plan

Norway’s engagement

- Large diaspora
- Humanitarian support
- Support for Peace Processes
- Special Financing Facility (SFF)
- Bilateral Stabilisation Program
- Economic Reforms
- Constitutional Review
- Natural Resources
- **Immigration** – building relations, trust, institutions and reaching agreements

Challenges

- Security
- Lack of trust
- Lack of capacity to lead/coordinate
- Overlapping initiatives/projects
  - Large scale humanitarian projects
  - Elections – voter registration
  - Bank ID
  - National ID

ANETTE BAYER FORSINGDAL

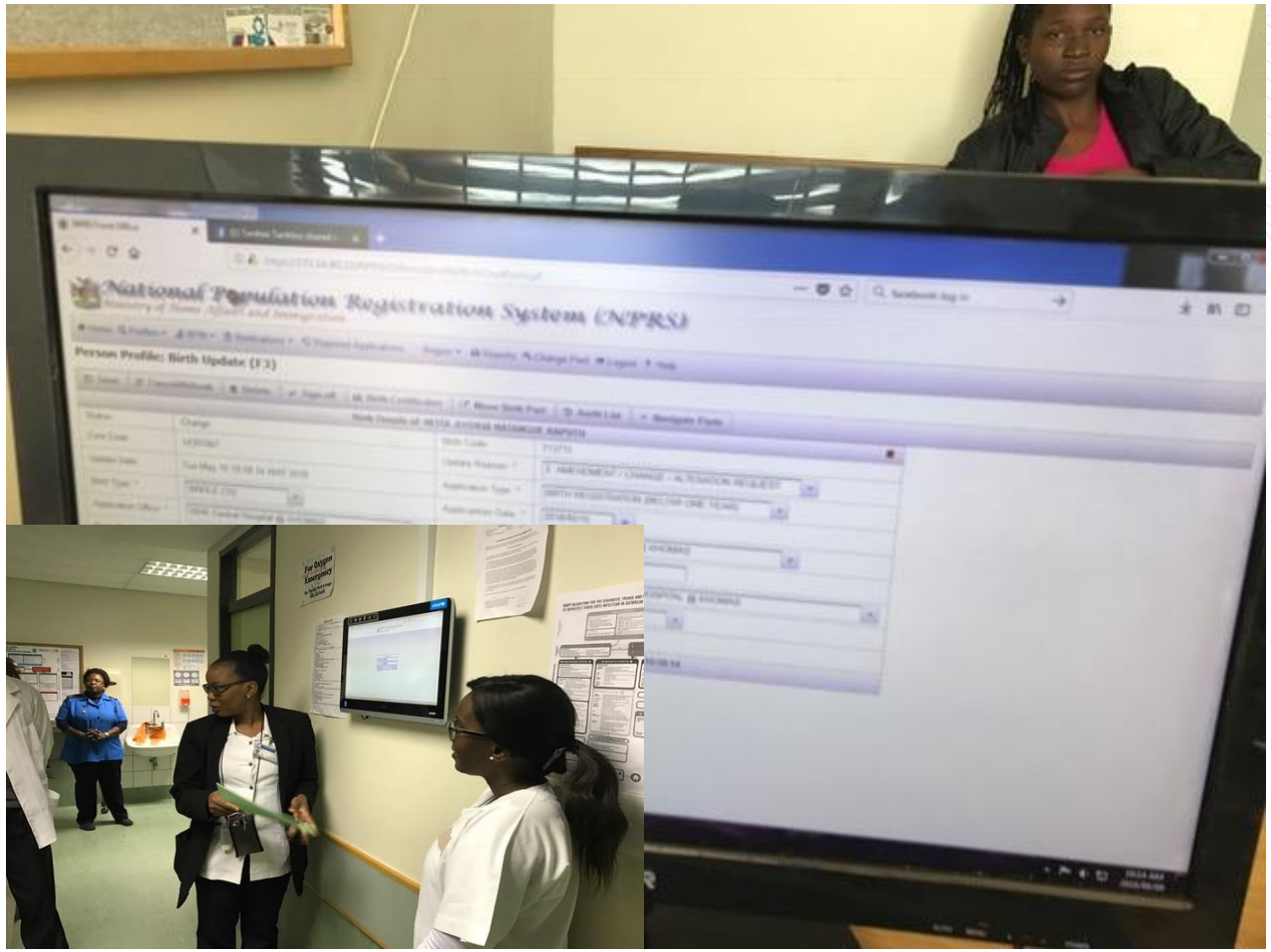
Department of Civil Registration
Ministry of Home Affairs and Immigration
Windhoek, Namibia

NAMIBIA: REFORMING CIVIL REGISTRATION THROUGH DIGITALISATION AND INTER-MINISTERIAL PARTNERSHIPS

Namibia on the world map

Population (2016):2 324 388 (urban: 1 112 868, rural 1 209 643)

Aim of presentation



- To share the Civil Registration reform initiatives in Namibia
- Persisting challenges in order to achieve a universal, timely and accurate Civil Registration

Key Stakeholders in the Civil Registration and Vital Statistics System

Ministry of Health and Social Services

Namibia Statistics Agency

NAMPOL

Ministry of Home Affairs and Immigration

Office of the Judiciary

Civil Registration Reform Initiatives

Vision: Universal, Trustworthy and Accurate National Population

Interministerial CR strategy and corporation

MOUs

Assessments

Organisational Structural review

(Access to services)

(How and where?)

Review administrative processes (barriers)

Case Management Systems

Legal Reform / building of capacity/ knowledge

Digital Reform

Setting up new systems/ automating historical records

Human capacity and development

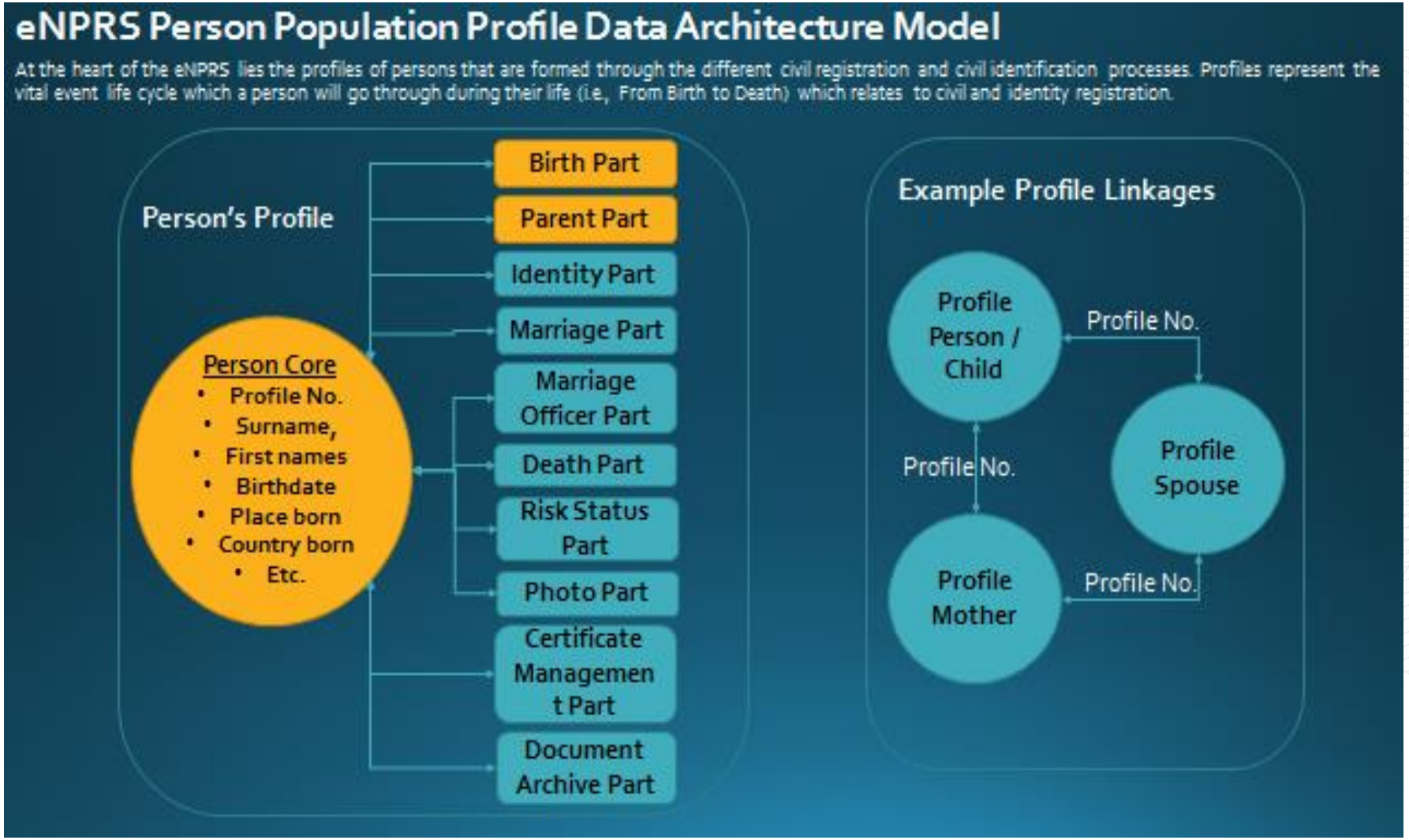
Change management

CR

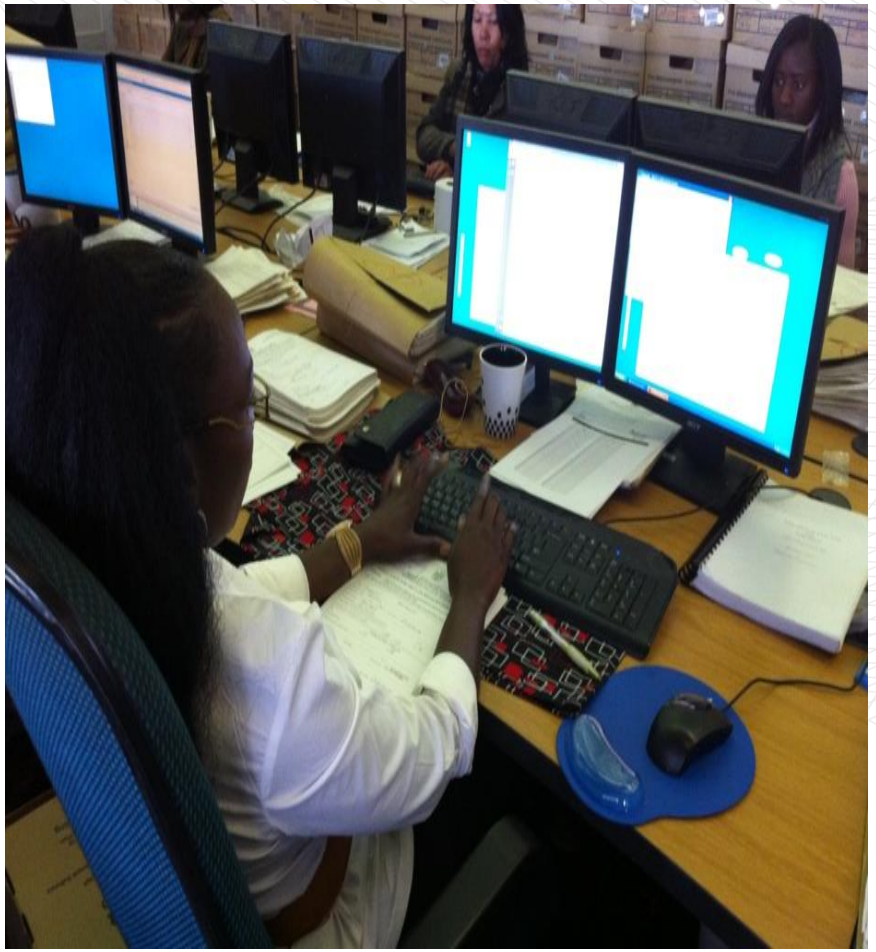
a cornerstone in **Social Protection**

Production of accurate and timely demographic statistics

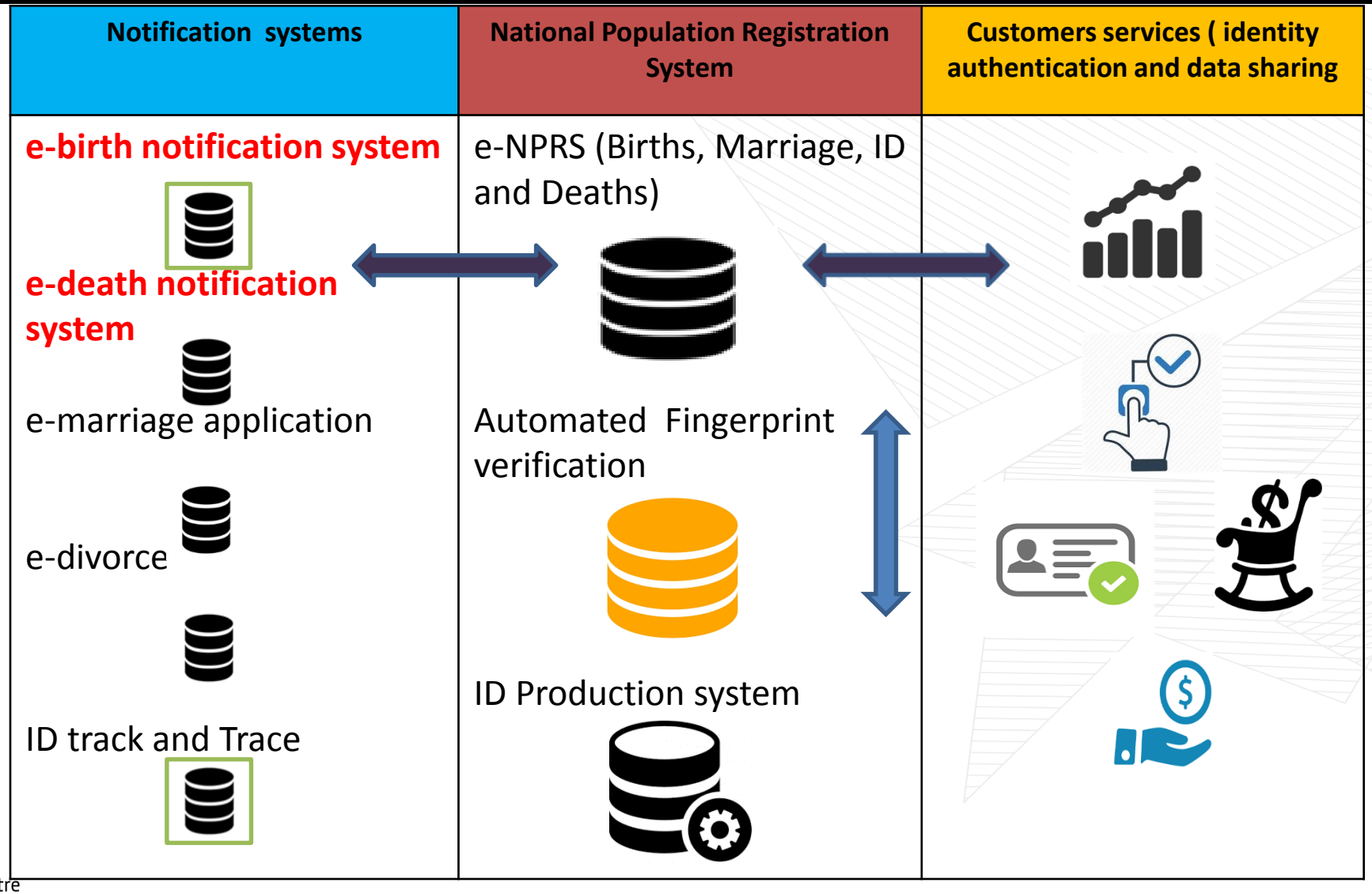
E-National Population Register



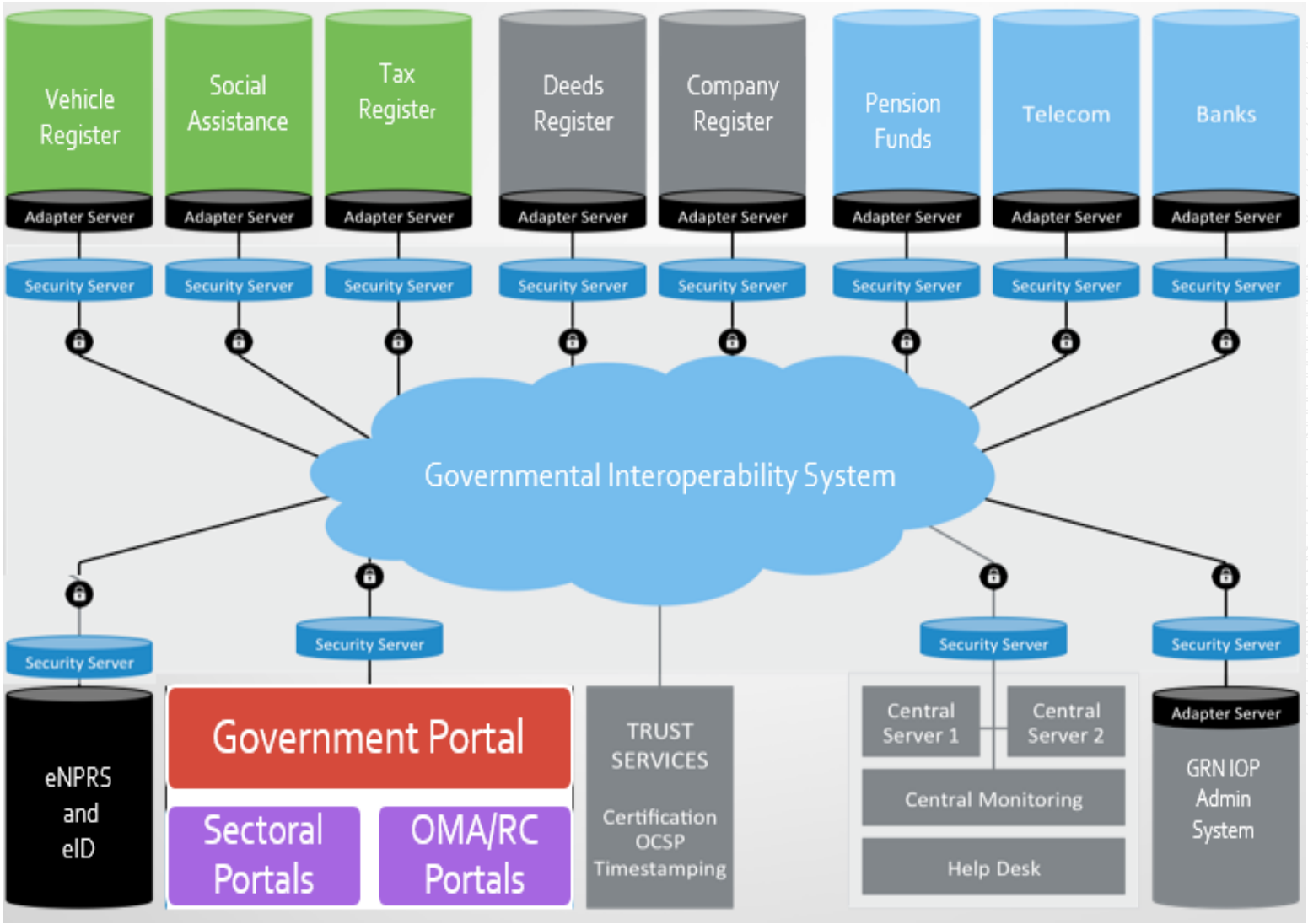
8 years of digitalising historical records (15 000 000 pieces of papers)



Vision: Civil Registration (foundation register for data sharing and compilation of demographic statistics)

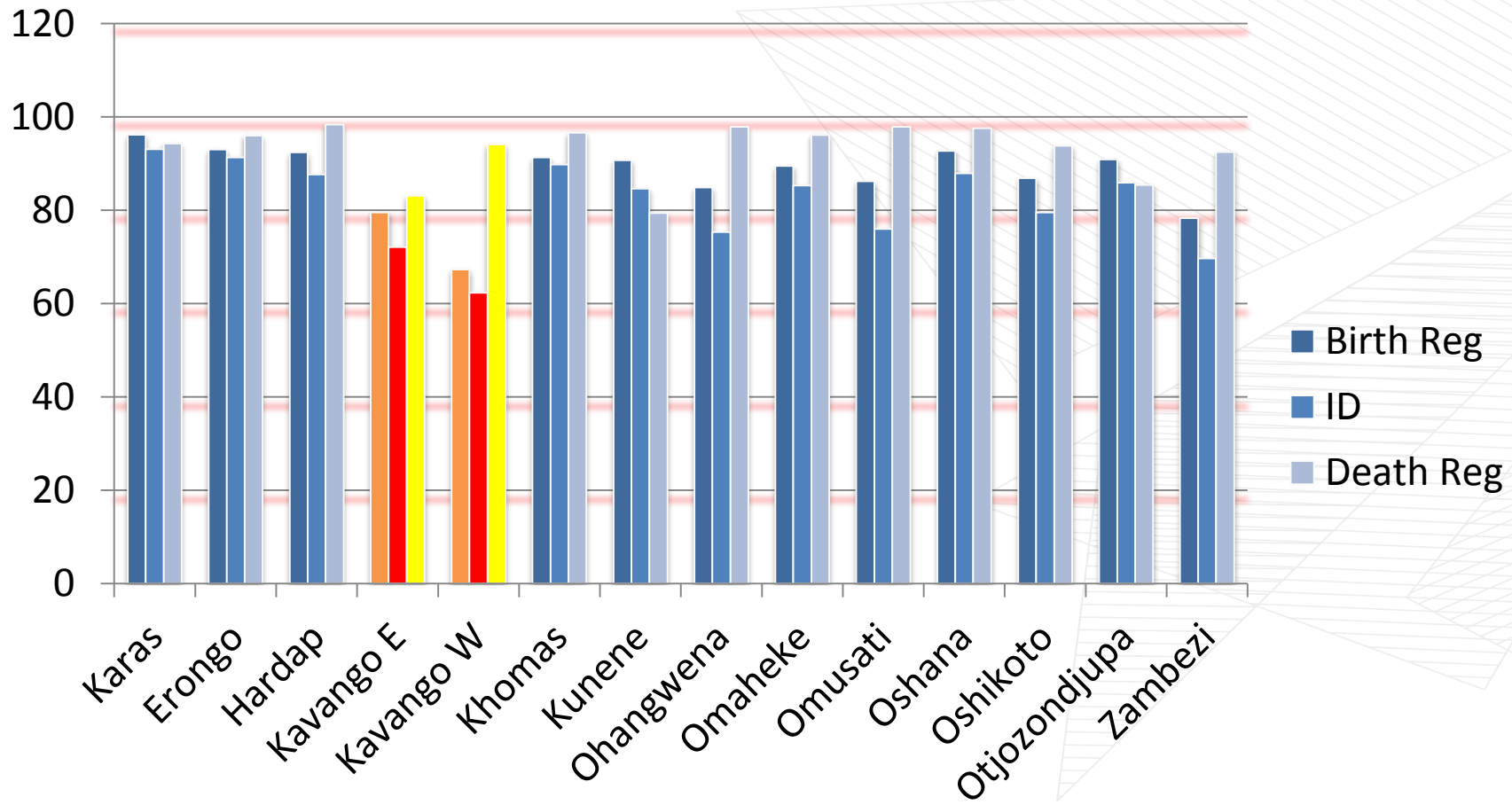


Government of Namibia (GRN) Interoperability (IOP) System Model (OPM)



Norwegian ID Centre

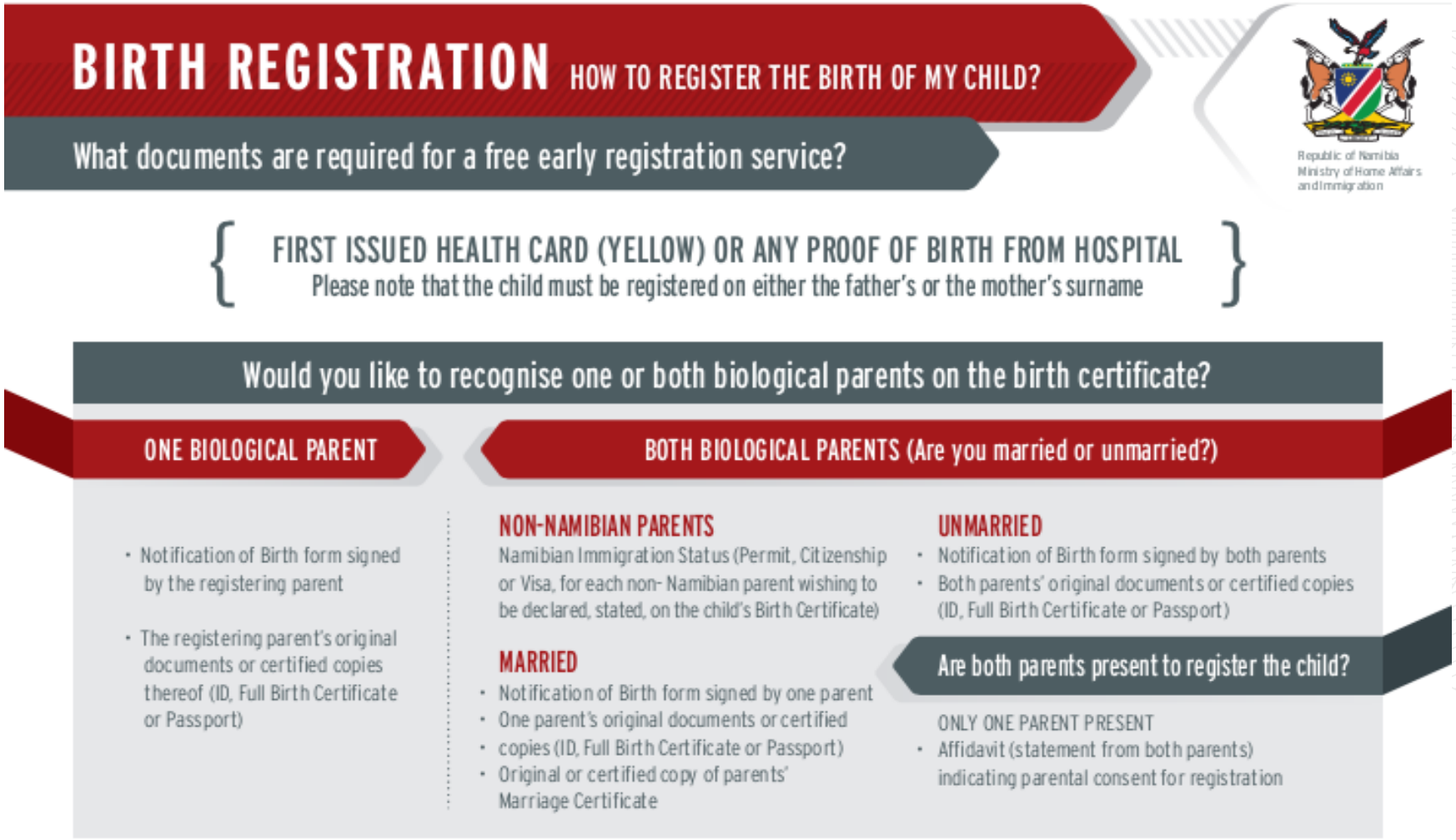
Birth, ID and Death registration coverage



Key Challenges

- Strengthening capacity and corporation across various institutions/departments/borders
- Low Legal capacity / project management capacity
- Case management easily overshadows the project initiates,
- Late registration of birth

Thank You


BIRTH REGISTRATION
HOW TO REGISTER THE BIRTH OF MY CHILD?
What documents are required for a free early registration service?
Republic of Namibia
Ministry of Home Affairs and Immigration
FIRST ISSUED HEALTH CARD (YELLOW) OR ANY PROOF OF BIRTH FROM HOSPITAL
Please note that the child must be registered on either the father's or the mother's surname
Would you like to recognise one or both biological parents on the birth certificate?
ONE BIOLOGICAL PARENT
• Notification of Birth form signed by the registering parent
• The registering parent's original documents or certified copies thereof (ID, Full Birth Certificate or Passport)
BOTH BIOLOGICAL PARENTS (Are you married or unmarried?)
NON-NAMIBIAN PARENTS
Namibian Immigration Status (Permit, Citizenship or Visa, for each non- Namibian parent wishing to be declared, stated, on the child's Birth Certificate)
MARRIED
• Notification of Birth form signed by one parent
• One parent's original documents or certified
• copies (ID, Full Birth Certificate or Passport)
• Original or certified copy of parents' Marriage Certificate
UNMARRIED
• Notification of Birth form signed by both parents
• Both parents' original documents or certified copies (ID, Full Birth Certificate or Passport)
Are both parents present to register the child?
ONLY ONE PARENT PRESENT
• Affidavit (statement from both parents) indicating parental consent for registration

PANEL DISCUSSION

LARS PETTER HENIE

Norwegian Ministry of Foreign Affairs

Thank you for your attention!

www.nidsenter.no