Day 2, Thursday, 27 April, 2017 16:30 – 18:30
eID4Africa inF8
Cross Fertilization between e-ID & e-Gov

- **Alain Ducass** (energeTIC & Secure Identity Alliance): Does African e - Gov need e - ID, what for and when?

- **Luis Alberto Bullón Salazar**: The e - Government experience of Peru: Pertinent for Africa ?,

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- **Vasilis Koulolias** (eGovlab) : Open innovation and building blocks in next generation of public service delivery

- **Joby Mathew** (HID Global): The co - existence of secure physical and mobile IDs • •

- **Prof. Lourino Chemane** Mozambique eGovernment and Communication Infrastructure Project (MEGCIP)

**eID4Africa inF8
Cross Fertilization
between e-ID & e-Gov**

**Alain Ducass
SIA expert,
Chairman of "energeTIC"**
dedicated to energetic and digital transformation of Africa with a global vision
after 40 years as a French Civil servant in various Ministries & Agencies, incl. Prime minister office
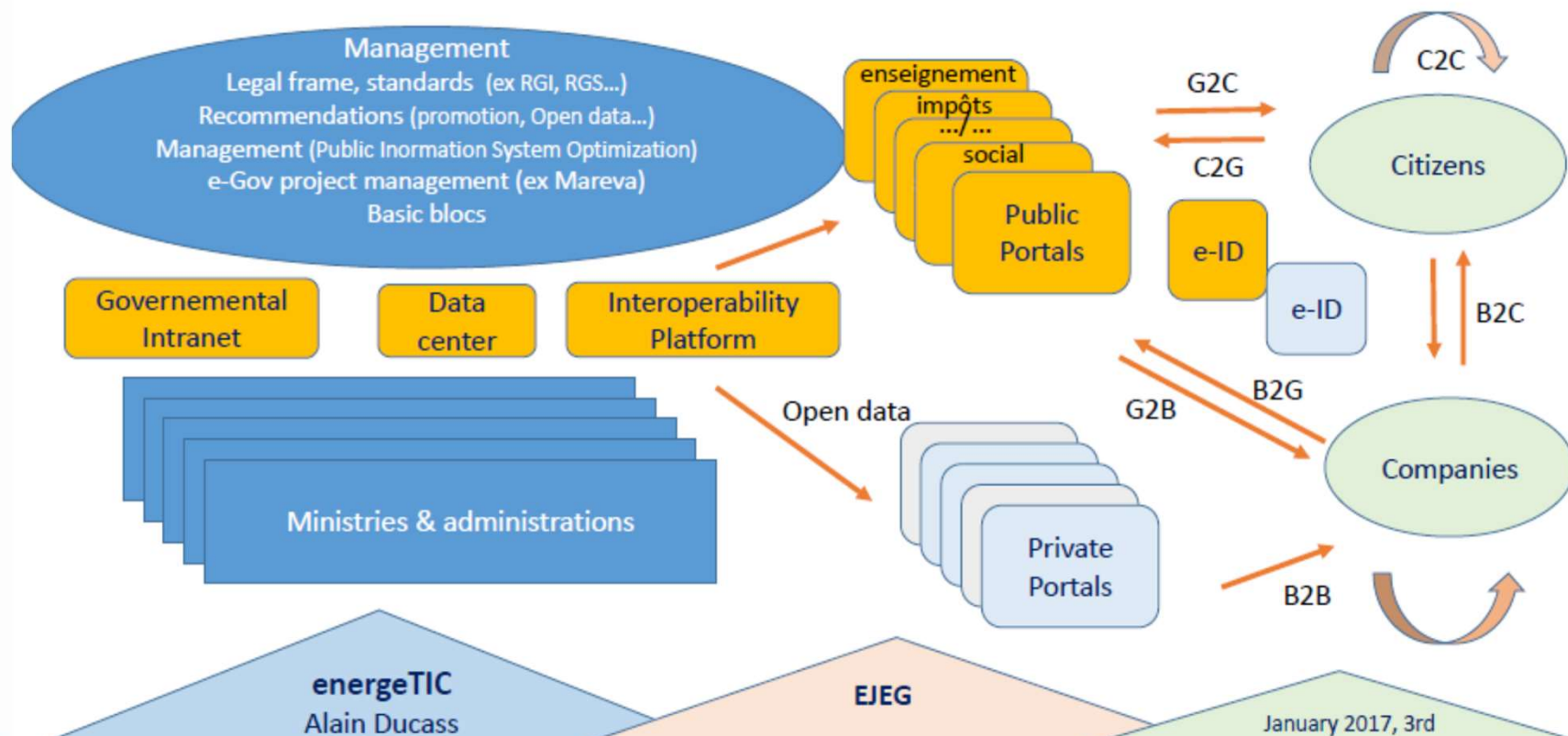
Does African e-Gov need e-ID, what for and when?
1) Overview of African e-Gov
2) Overview of African e-ID
3) Correlations between e-ID & e-Gov
4) Technical links between e-ID & e-Gov
5) Where to find valuable resources ?
6) The floor to the other speakers

e-ID is a key block of brick to build up e-Gov (Cf. EJEG)
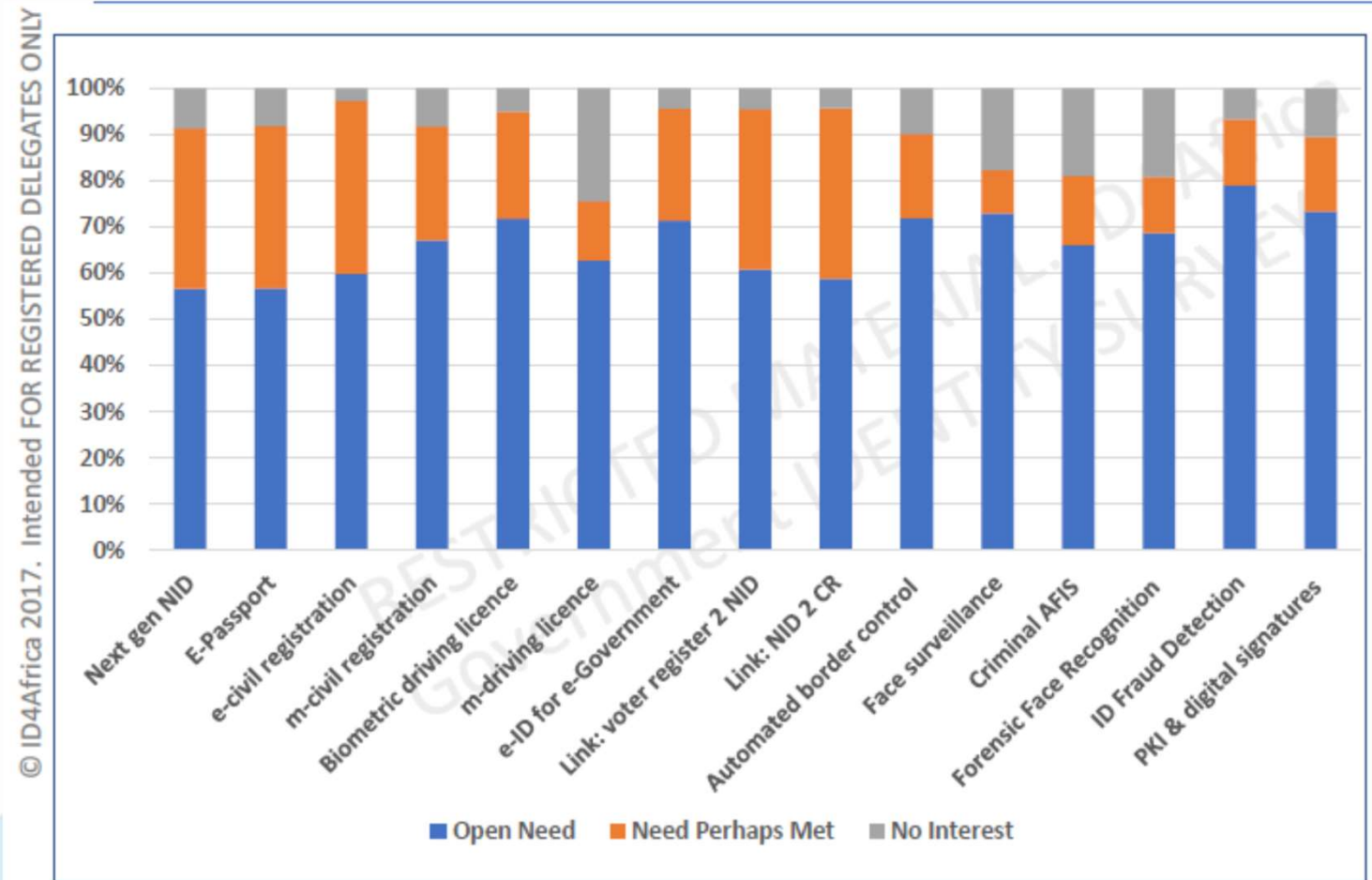

Chart of an e-Gov strategy & action plan

e-Gov is a key application from e-ID

From the ID4Africa's survey,
it appears four main categories of needs:
- e-Gov
- e-documents
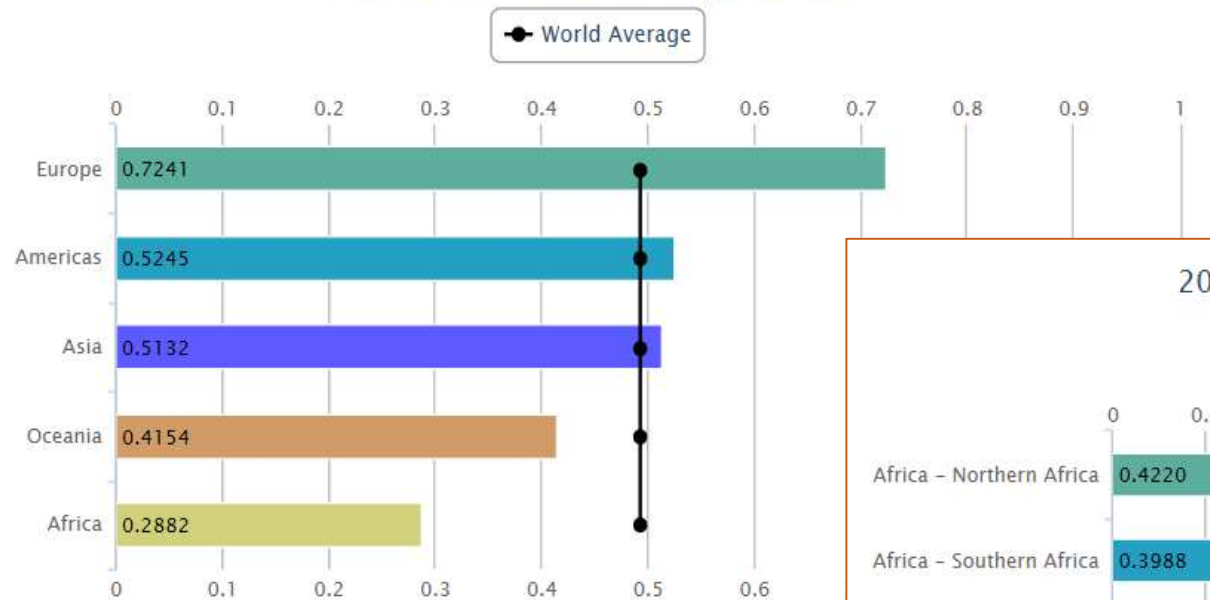- Registers
- Cybersecurity

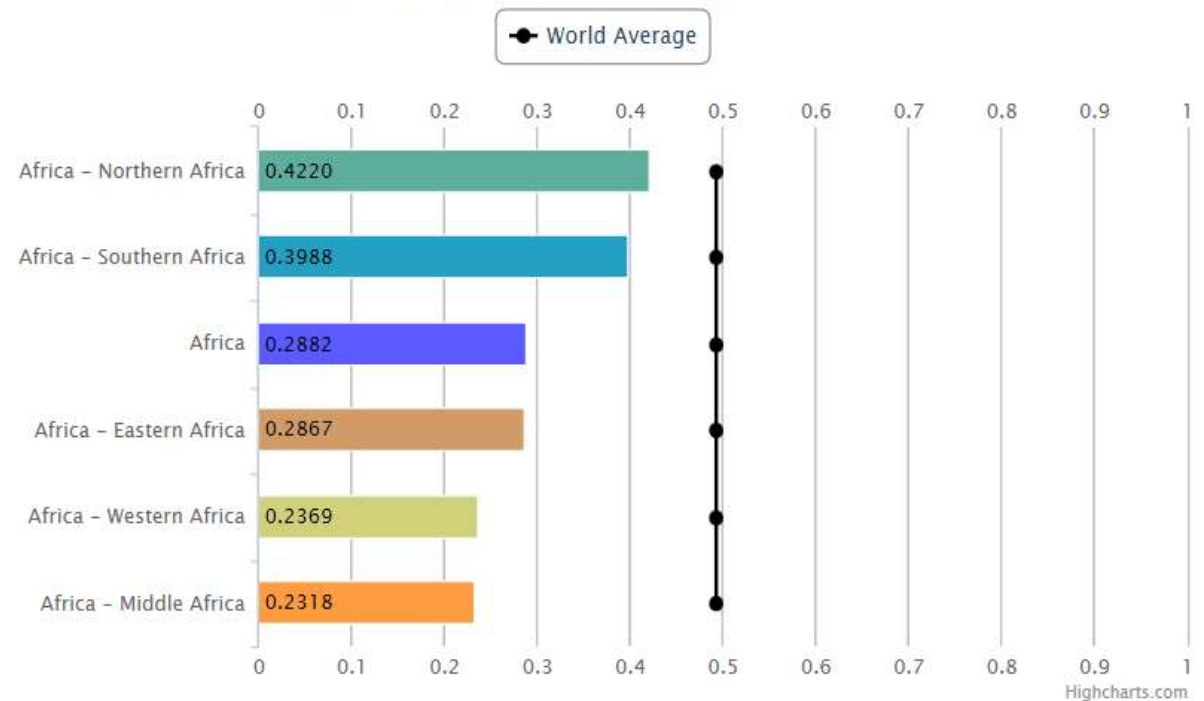So, e–Gov is a key factor for e-ID

Let us look at African e-Gov

Chart categories: Next gen NID, E-Passport, e-civil registration, m-civil registration, Biometric driving licence, m-driving licence, e-ID for e-Government, Link: voter register 2 NID, Link: NID 2 CR, Automated border control, Face surveillance, Criminal AFIS, Forensic Face Recognition, ID Fraud Detection, PKI & digital signatures

Legend: ■ Open Need ■ Need Perhaps Met ■ No Interest

UN eGov Development Index 2016

2016 E-Government Development Index

— World Average

Region	Index
Europe	0.7241
Americas	0.5245
Asia	0.5132
Oceania	0.4154
Africa	0.2882

2016 E-Government Development Index

— World Average

Region	Index
Africa – Northern Africa	0.4220
Africa – Southern Africa	0.3988
Africa	0.2882
Africa – Eastern Africa	0.2867
Africa – Western Africa	0.2369
Africa – Middle Africa	0.2318

Highcharts.com

eIF4Africa ;   Windhoek

African geography & eGov Development Index 2016
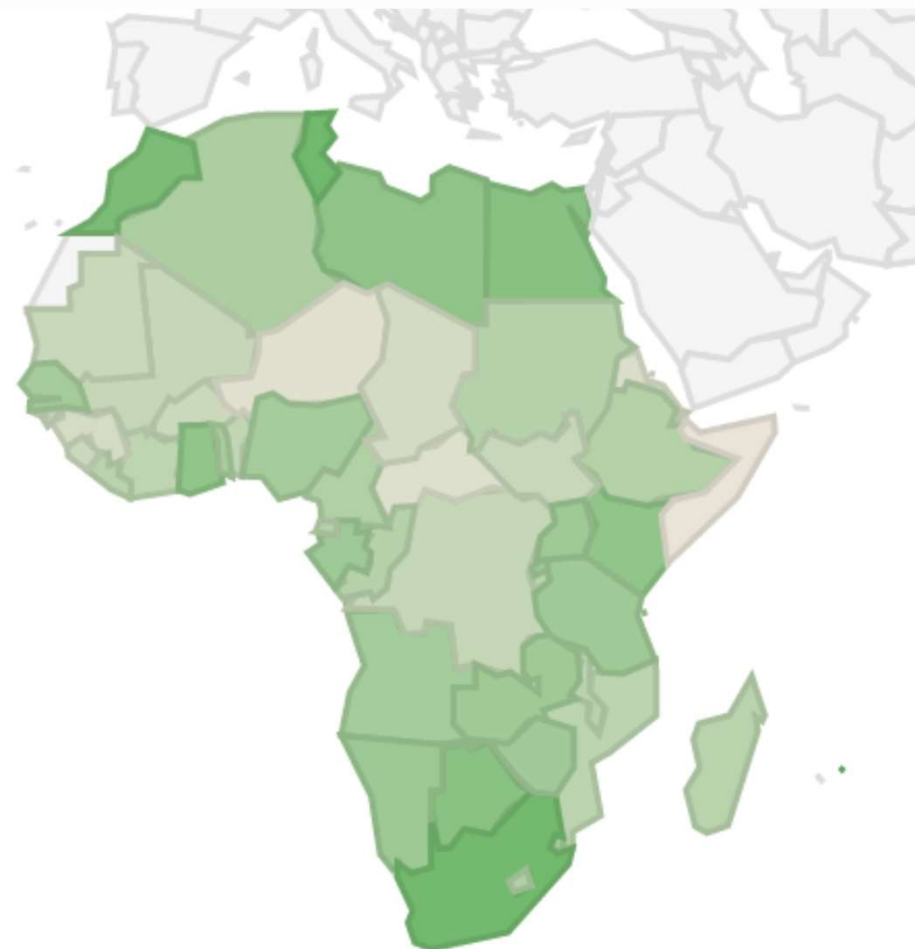
African countries' egdi evolution from 2014 to 2016

- Algeria 136 -> 150

- Angola 140 -> 142

- Benin: 180 -> 177

- Bostwana 112 -> 113

- Burkina Faso 178 -> 185

- Cameroon 144 -> 155

- Comores 177 -> 176

- Congo 160 -> 162

- Congo RDC 183 -> 180

- Cote d'Ivoire 171 -> 175

- Ethiopia 157 -> 157

- Gabon 131 -> 129

- Ghana: 123 -> 120 ;

- Guinea: 190 -> 187

- Kenya 119 -> 119

- Lesotho 153 -> 154

- Madagascar 155 -> 163

- Malawi 166 -> 166

- Mali: 181 -> 182

- Mauritania 174 -> 184

- Mauritius 76 -> 58

- Morocco 82 -> 85

- Mozambique: 164 -> 172

- Namibia 117 -> 125

- Nigeria: 141 -> 143

- Rwanda: 125 -> 138

- South Africa: 93 -> 76

- Senegal: 151 -> 144

- Sierra Leone 186 -> 186

- Swaziland 138 -> 136

- Tanzania 146 -> 130

- Togo 162 -> 147

- Tunisia 75 -> 72

- Uganda 156 -> 128

- Zambia 163 -> 132

- Zimbabwe 126 -> 134

Overview of the African e-ID

In 2014 « Bearing point »
analyzed the 17 African
biometric registers
but most country did not implement them between
2014 & 2016

(source = Bearing Point, CIO Mag n° 35, mars 2015)

For 2017, we gathered some information on e-ID card
but not on e-ID

For 2018, we hope the ID4Africa community to build
and feed an e-ID index such as the e-Gov index

Correlation between e-Gov & e-ID cards in Africa

	Without e-ID cards	With e-ID cards
Decreasing EGDI	Algeria, Burkina, Cameroon, Madagascar, Mauritania, Mozambique, Namibia, Rwanda, Zimbabwe	
Stable EGDI	Angola, Benin, Botswana, Comores, Congo(s), Côte d'Ivoire, Ethiopia, Gabon, Guinea, Kenya, Lesotho, Malawi, Morocco, Sierra Leone, Swaziland	Ghana, Mali, Nigeria,
Increasing EGDI	Mauritius, Senegal, Tanzania, Togo, Tunisia, Uganda, Zambia	South Africa,

With the data we collect, countries with e-ID cards,
do not increase their EGDI more than the others

# Correlation between e-Gov & e-ID in Europe

It is the same in Europe: the ten most advanced European countries in the field of eGov,

all have e-ID but not always e-ID cards

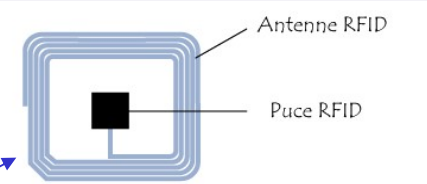| Rank	country	Solutions
1	United Kingdom	Gov.UK verify
5	Finland	
6	Sweden	
7	Netherland	
9	Denmark	
10	France	France connect
13	Estonia	e-ID Card
15	Germany	e-ID Card
16	Austria	
17	Spain	e-ID Card

Red mandatory ;

Yellow partial information ;

Green : optional

BETA

GOV.UK VERIFY
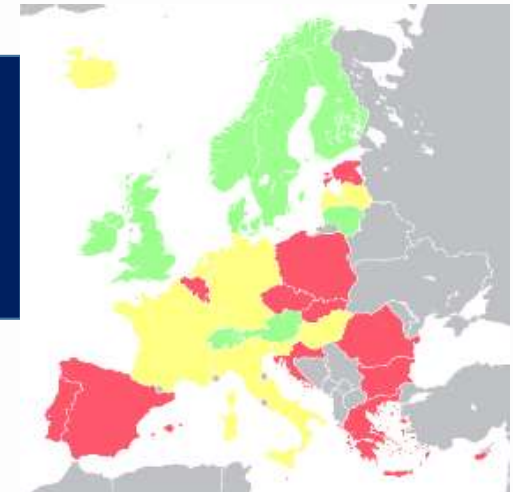
e-ID does not mean biometric card

RFID
Papier
Mixte
Carte Sim
Carte à puce
Carte sans contact
Puce sous-cutanée
Adresse électronique
Avatar
Cookie
…/…

Antenne RFID

Puce RFID

On distingue 3 catégories d'étiquettes RFID :

- Les étiquettes en lecture seule, non modifiables,
- Les étiquettes « écriture une fois, lecture multiple »,
- Les étiquettes en « lecture réécriture ».

Health Card (contact)

gov. eID (contactless)

Bank ID (contact)

Corporate ID (contact)

ID + password
+ strong ID (eg. 3DSecure…)
Ex the Ivoirian tax office implemented
e-declaration & e-paiment of taxes
With strong authentification

```
HTTP/1.1 200 OK
Cache-Control: private
Content-Type: text/html
Set-Cookie: PREF=ID=5e66ffd215b4c5e6:
TM=1147099841:LM=1147099841:S=0f69MpW
Bs23xeSv0; expires=Sun, 17-Jan-2038 1
9:14:07 GMT; path=/; domain=.google.c
om
```

Exemple d'une réponse HTTP de google.com,
qui met en place un cookie avec des attributs.

Big issues such as e-finance need various e-ID

En Côte d'Ivoire,

The Ivoirian tax authority (Direction générale des impôts) got a success for its first of e-declaration & payment of taxes, with a strong e-IDs for:

- the companies

- the appropriate persons within the companies

- the banking accounts & banks

- the various type of taxes.

This result has been reached with the help of Ansut, Expertise France and IKA conseils.

e-Gov & e-ID are not limited to persons but also to things (IoT))

	Business	Consumer
Siloed connectivity	**Machine to machine** (M2M) • Connected cars • Point of sale • Smart meters • Remote health • Alarms monitoring	**Wearables & Connected objects** • Activity trackers • Fitness gadgets • Smart lighting …
Interconnected connectivity	**Industrial Internet** • Supply chain optimization • Product performance improvment	**Smart home** • Home appliances connected and remotely controlled through the Internet

Smart infrastructure

Connected city

Secured city

Smart agriculture

INNOVATION

SUSTAINABILITY

Smart working

Smart energy

Smart care

Smart water

ECOSYSTEM

Smart government

Smart mobility
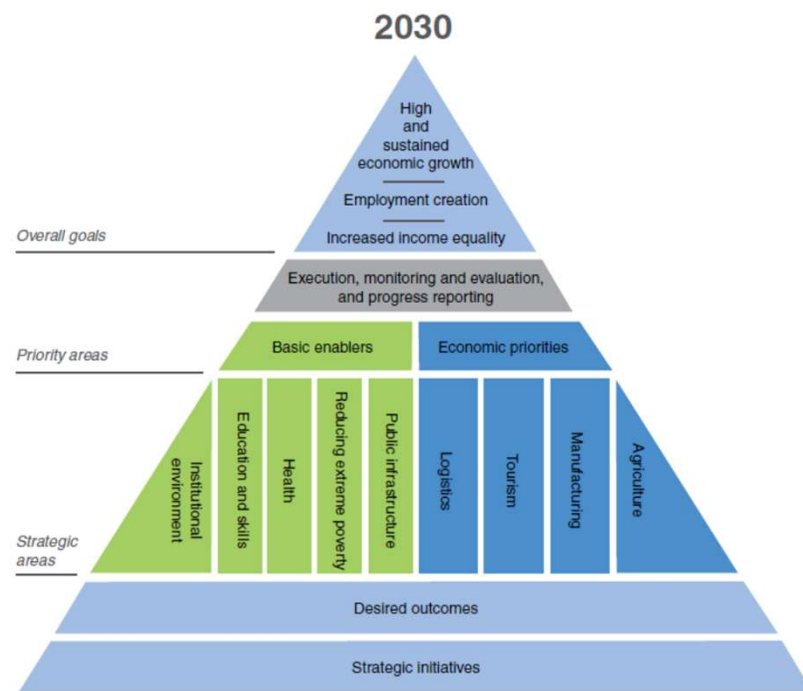
COMPLIANCE

Education

Smart building

Smart retail

Sources =
Idate & ATOS,
IT Forum Lomé
March 31th 2017

e-ID takes time as well as e-Gov
both short and log term issues have to be taken in account
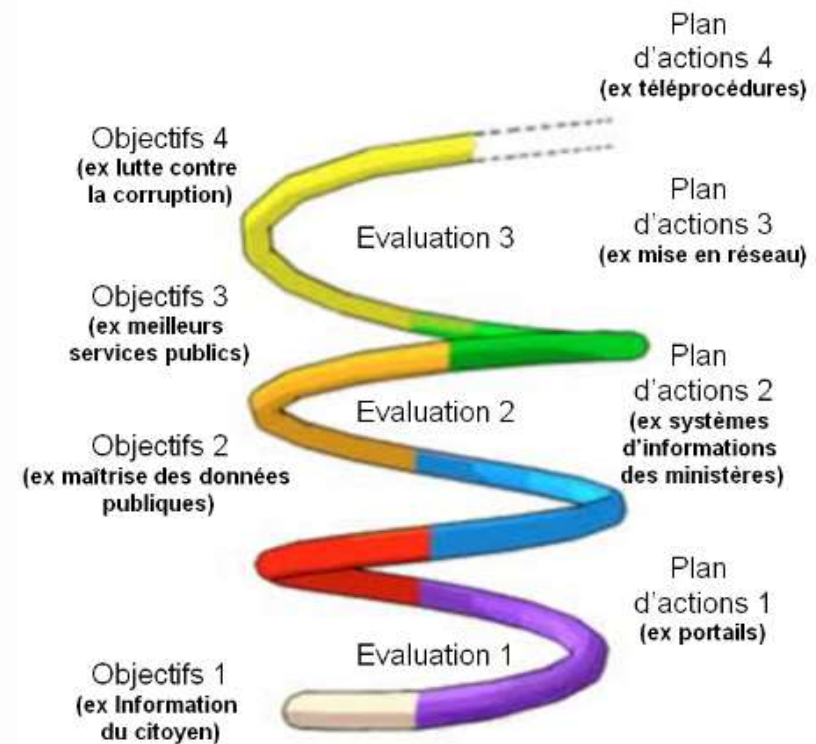
On the left extract from the Namibia e-ID report

On the right, extract for the REGNUM masters

international recognition is necessary for e-ID & for e-Gov

The Worldbank guide only focuses on American standards. It does not include the strong potentiality brought by the **EU e-IDAS regulation for** international recognition of eGov.

Règlement (UE) n ° 910/2014 du Parlement européen et du Conseil du 23 juillet 2014 sur l'identification électronique et les services de confiance pour les transactions électroniques au sein du marché intérieur et abrogeant la directive 1999/93/CE
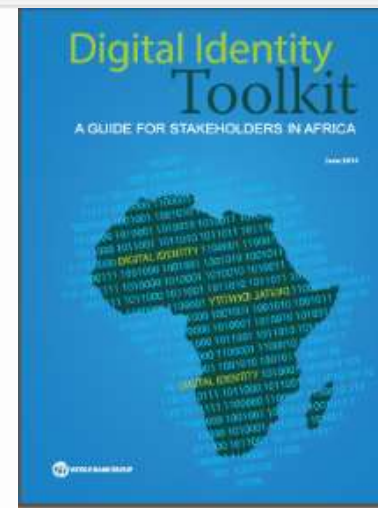
Let us imagine :

How much the African travel from a country to an other one, and how useful it can be if their national e-ID would be recognized by other African countries, not only for travel documents ?

how an e-IDAS compliant e-ID would simplify acces for African students into European Universities or any public services !

REALITÉS INDUSTRIELLES

L'Union numérique européenne

ANNALES DES MINES

LES MAQUIS DE LA RUE DES FINANCES

Ressources on e-ID for e-Gov in Africa

1. **The Worldbank digital identity toolkit**

2. **The EU e-IDAS regulations**

3. **International private bodies such as**
   - **GSMA**
   - **Secure identity alliance**
   - **ID4Africa**

4. **Publications** such as the electronic journal of eGov or « realités industrielles »

5. **International experts** in the field of e-ID and in a larger field with a global view.

6. **To my point of view, a secured social network** is needed to foster the activity of the virtual communities of African leaders, including e-ID communities, which is allowed by e-ID and will contribute to open silos !
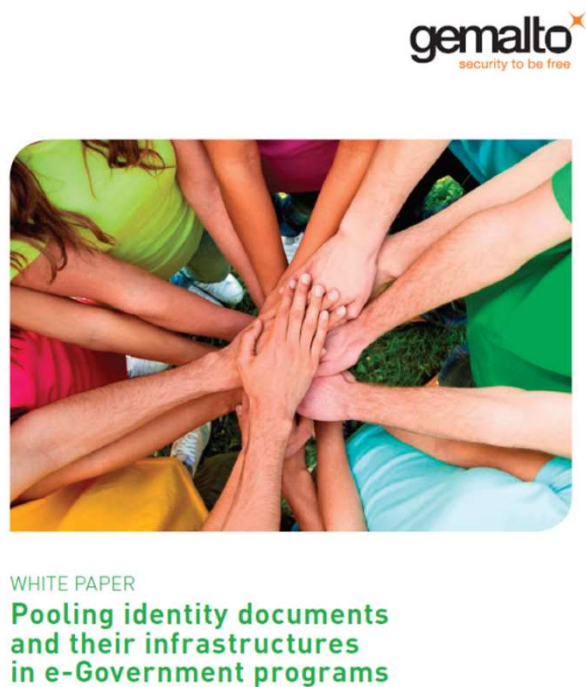
Secure identity Alliance

Many producers and users are providing valuable information about e-ID for e-Gov but they are not always convergent

The Secure Identity Alliance is trying to analyze them and make a synthesis available

African governement could participate on a multiple stakeholders approach.

SECURE IDENTITY ALLIANCE
https://secureidentityalliance.org/

Cross Fertilization between e-ID & e-Gov

Thank you for your attention!

Now let us move to the other speakers

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