



# ID4AFRICA2019

18-20 June | Johannesburg | South Africa



## Report on: Advances in Technologies & Processes ID4Africa 2019, Day 2: InF3, InF7 and InF11

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### InF3: ADVANCED SECURE CREDENTIALS

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*This session explored innovations that offer attractive options for the modernization efforts of a nation's credentials since physical credentials are still required even in a digital world. The session was moderated by R. Rajeshkumar of Auctorizium Pte Ltd.*

*Comprehensive Solutions for Biometric Identity Documents (e-passports, e-IDs, BioID System)* by Piotr Machado of PWPW was the first topic presented during the session. Machado mentioned that the secure credentials issuance process of today's ID systems has experienced a major revolution in terms of technological advances and has also led to major diversification in terms of available modes of options for credentials to match global trends and the needs of the population. He highlighted the fact that biometric identification can be effectively used for offline verification and that the popular match-on-card solution provides a better verification tool without directly accessing sensitive biometric data, hence helping with data privacy and protection – which is a major issue of global concern.



The second topic for the session was on *State-of-the-Art color Personalization Technologies for Polycarbonate IDs* by Dr. Aweke Lemma of Veridos. The presentation centered on color images for polycarbonate IDs and informed participants of the two personalization technologies that fit the needs of ID personalization. He mentioned the POLYCORE ID and CLIP ID solutions as advancements in color personalization technologies developed to enhance ID card durability, convenience and protection against forgery.



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Nicolas Jaouen of Infineon was the third speaker and spoke on the topic 'Can I Just Use any Chip in my Electronic Passport?'. He mentioned that chips are an integral part of all secure electronic documents, especially passports, and deserve to be critically thought through from the onset of any e-ID project. He then touched on the key performance factors that must be critically considered in making a choice for a chip for any ID or e-passport projects. These include interoperability, robustness, performance, and security.



The session closed with a topic on *Modernization of Public Service in Algeria* by Prof. Abderrazak Henni of the Ministry of the Interior, Local Government and Spatial Planning, Algeria, and ID4Africa Ambassador for Algeria.

He mentioned advances made by Algeria in modernizing its documentation systems in order to provide better public service for the population. He explained that the reforms have been challenging but the nation is now reaping

the benefits. There is a digitalized central registry that have leveraged for registration and issuance of National ID Numbers (NINs) that can be found on any state issued document and also added that the national ID cards are polycarbonate and ICAO compliant.

## InF7: ADVANCES IN BIOMETRICS & MOBILITY

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*The session focused on cutting-edge innovations in biometric technologies and applications with special attention to mobile platforms that are driving new paradigms for identity management. Dr. Michiel van der Veen, Director, Innovation & Development, National Office for Identity Data, Ministry of Interior and Kingdom Relations, The Netherlands was Moderator for this session.*

*Secure, Ubiquitous and Efficient Identity Solutions in 21st Century in Nigeria* by Tunji Durodola of NIMC kick-started the session by explaining how Nigeria's National Identity Management Commission (NIMC) has positioned itself in the provision of secure and efficient 21<sup>st</sup> century identity solutions. Nigeria as he said, has made remarkable advances in its identity management – after harmonizing almost all the silo databases, it now has one ID for all that can be authenticated on multiple devices through the deployment of a Mobile ID App for efficient and convenient service delivery. Mr. Durodola mentioned the 'classic card' as the next thing for NIMC. He said that is the next generation National eID Card with a dual-interface (contact and contactless) and has an in-built DESFire Emulation.

In conclusion, he said the classic card phase of the national identity programme would still engage the private sector and focus on the development of local talent to provide practical solutions required today by Africa, for Africans.



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Then came the topic: *Towards Mobile Government* by Julien VINTROU of NXP Semiconductors.

He explained that the world is moving rapidly towards the provision of mobile ID (mID) and that governments have begun the deployment of NFC smartphone based enrolment application and the benefits are enormous. He mentioned key among the benefits as convenience, security, privacy, flexibility and cost reduction.

Credence ID's Robert Garrigan spoke on the topic *Mobile Identification is not just about Mobile Devices*. Garrigan began by mentioning the huge investments governments and private sector ID players in many countries are making with the sole objective of strengthening their legal identification systems including civil registries, national IDs, voter registries etc, but most often focus much on 'just' mobile hardware.

He said just a mobile device is woefully inadequate for the ambition of providing biometric mobile ID services to citizens. He admitted that although mobile devices or hardware are required for the provision of citizen-centric mobile ID services, the key consideration in making a choice must be settling on leading-edge tools that allow the project owners to efficiently push software to deployed devices and analysis of transactional data that provides intelligence back to the stakeholders and sponsors.

*Multimodal Biometrics and Mobility* was the final topic for the session and was delivered by Graham Saunders of NEC, Africa. He emphasized that biometrics have become critical for identity management and the question of which is the best biometric lingers on and quickly added that experience has shown in the real world that all biometrics are needed.



## InF11: INTEROPERABILITY, STANDARDS & SCALABILITY

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*This session addressed the subject of interoperability and the delivery of biometrics and identity services over the cloud. Presentations aimed at illustrating use cases of advanced technology in real world contexts pertinent to the African environment. The session was moderated by Dr. Jean Salomon of JSCP Consulting.*

*A Tale of Two IDs: Interoperability, Scalability and Standards*, was the start topic by Christophe Malgorn of HID Global. On this topic, Malgorn mentioned that the two IDs he referred to in the title as being the move to polycarbonate ID and the emerging mobile ID. He said polycarbonate leads to more robust, higher physical security cards, allows for advanced security elements, high definition personalization and automation, whilst the emerging mobile IDs are secured, convenient and allow



for remote issuance and administration, easy enrolment and cost-effective deployment. Both IDs he said work to complement each other to fully meet the identification interoperability, scalability and standards yardstick. He went on to mention for instance that citizens' government-issued credentials on smartcards can be extended to a mobile ID offering additional functionality, security and privacy options.

Malgorn concluded the topic by intimating that mobile IDs would not fully replace physical cards today and called on the industry players to rather issue physical cards with a mobile ID for added value.

*Biometrics as a Service (Baas): An economical approach to customer identification - An African healthcare case study* was the second topic for the session and was delivered by Dr. David Benini of Aware. He emphasized the critical need for collecting biometrics to enable the delivery of secure and convenient services to the people. His case study was on patient ID and noted that patient misidentification is a serious problem and can mostly be attributed to text-based biographic registration, time constraints in physical medical records search and duplicate medical records. Those shortcomings are what he said biometrics address; hence the introduction of an advanced technology known as 'Software as a Service' (SaaS) which he said is a cloud-based enterprise software and is a natural fit for 'Biometrics-as-a-Service' (Baas).

Dr. Benini mentioned that, the SaaS when followed through for biometric patient registration allows for mobile remote healthcare and automated workflow.



*An African Standard for a Global BioMetric ID* by Hof RETIEF – BioRugged, discussed how Africa today can be described as 'Identityless' since there is no unique and common ID for Africans. Each country on the Continent he noted, issues an identity card that is not interoperable with others. Recent developments within the ECOWAS region was mentioned as a good initiative towards standardizing the cards and making them ICAO compliant among the 15 member states. Although the ECOWAS initiative was lauded, Retief

was quick to add that a strong biometric authentication would require a complex infrastructure which he said the Aadhaar model would work better for a pan-African ID system. He referred to that as "Federated All-African UID" – with wide range benefits such as:

- ✓ no country exposing data of citizens
- ✓ ID cards become optional, lowering investment costs
- ✓ Verifiable transaction ID making a simple digital signature possible in Africa

He concluded by saying that the proposed UID system can cater for over 1.3 billion people, that India has proven it works, and that it is now up to Africa to take it to the next level.

*Digital Identity as an Enabler of Interoperability among African Governments* by Chimezie Emewulu of Seamfix Limited was the last for the session.



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Mr. Emewulu mentioned the ‘overdose’ of biometrics within the African continent – explaining that almost every government is collecting one mode of biometrics or the other, and attributed that to the lack of interoperability among African governments ID systems – silos.

He said in this 4<sup>th</sup> industrial revolution, governments must rather focus on building digital ID systems.

Digital identity he emphasized, enables interoperability for the benefit of government agencies and citizens. He called on African governments to ensure interoperability by creating data standards and addressing issue of multiple data sources to ensure safe and holistic inclusive economy and Government and further enhance better collaborations and movement among countries within the African Union.

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