

FEDERAL REPUBLIC OF NIGERIA
NIGERIA DIGITAL IDENTIFICATION FOR DEVELOPMENT
PROJECT
TERMS OF REFERENCE
CONSULTANCY SERVICES FOR PROJECT MANAGEMENT
SUPPORT FOR ID4D ECOSYSTEM

1. Introduction

- 1.1** Nigeria's pressing development challenges require a robust system which allows government and service providers to verify individuals' identity on demand. As the Federal Government of Nigeria (FGN) helps people in Nigeria rise out of poverty and achieve greater prosperity, identification is critical to deliver key services inclusively and effectively—such as basic financial access, health, education, and social safety nets—and ensure the country's economic, social, and political progress. Existing ID systems, comprising the national ID system and civil registration (CR), suffer from low coverage across the population. The CR system also remains primarily paper based, lacking a centralized archive, and without the ability to link to the national ID system.
- 1.2** The FGN intends to harmonize the existing ID ecosystem to develop a foundational ID system which can be leveraged to improve service delivery. A national strategy for identification, called the *Strategic Roadmap for Developing Digital Identification in Nigeria*¹, has highlighted the need for a minimalist, foundational, and ecosystem-based approach to identification in the country. The *Strategic Roadmap* was approved by the Federal Executive Council of Nigeria (FEC) in 2018,² and is being implemented in the framework of the Nigeria Digital ID4D project,³ with technical and financial support from the World Bank, French Development Agency (AFD), and European Investment Bank (EIB). The *Strategic Roadmap* is intended to offer a credible pathway for the FGN to develop identification at a low cost and fast pace. It proposes a modified approach to developing identification by leveraging the FGN's existing institutions, capacities, and systems.

¹ NIMC. 2018. *A Strategic Roadmap for Developing Digital Identification in Nigeria*. Abuja, Nigeria: Federal Executive Council.

https://www.nimc.gov.ng/docs/reports/strategicRoadmapDigitalID_Nigeria_May2018.pdf

² NIMC. 2018. "FEC Approves Implementation of Strategic Roadmap for Digital Identity Ecosystem in Nigeria." Abuja, Nigeria: NIMC Press Release. <https://www.nimc.gov.ng/fec-approves-implementation-of-strategic-roadmap-for-digital-identity-ecosystem-in-nigeria/>

³ World Bank. 2020. *Nigeria - Digital Identification for Development Project (English)*. Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/250181582340455479/Nigeria-Digital-Identification-for-Development-Project>

- 1.3** Aligned with this Strategic Roadmap and the FGN’s National Strategic Action Plan for CRVS (2018–2022), the Nigeria Digital ID4D project has been conceptualized with the primary objective to increase the number of persons with a national ID number, issued by a robust and inclusive foundational ID system, that facilitates their access to services. The project will bring coverage of digital ID in Nigeria to 85% of the population and 97.5% of adults by the end of 2027. In addition, the project will actively build links to the financial sector to support access to digital financial services for all ID holders.
- 1.4** The term “NIMS”, used henceforth in this document, includes the complete IT solution for the National Identity Management System including application software, IT infrastructure, and the data centre as well as the disaster recovery centre facilities for hosting the NIMS solution.

2. Project Governance and Functions of the National Identity Management Commission (NIMC)

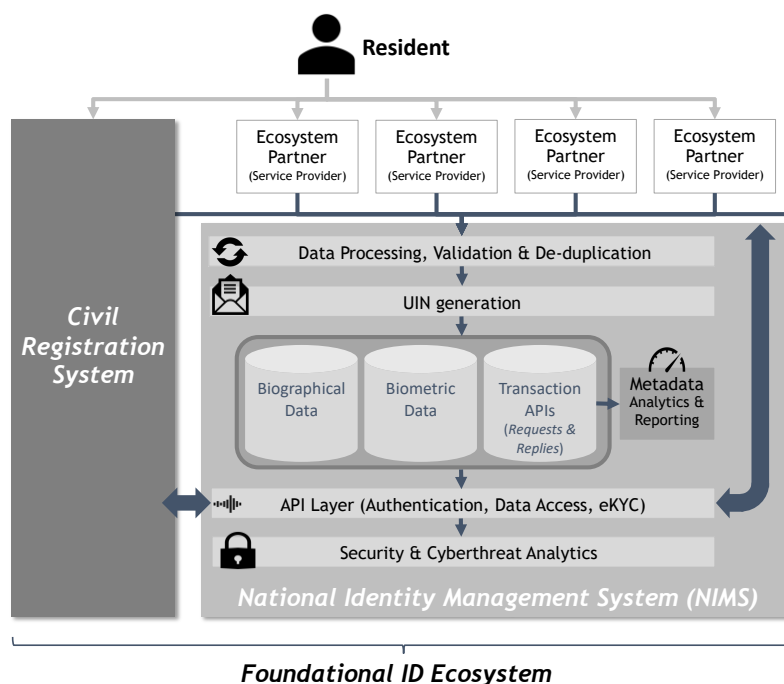
- 2.1** In order to achieve the objectives of the *Strategic Roadmap* and the Nigeria Digital ID4D Project, the Government of Nigeria has established a Project Steering Committee; a Project Implementation Unit (PIU) housed within NIMC; and an Ecosystem Strategic Coordination Unit (ECSU) reporting to the Steering Committee to manage implementation of the project. The selected consultant is expected to work in close coordination with the PIU and ECSU, and follow any guidance given by the Steering Committee.

3. Need for a robust and inclusive foundational ID system

- 3.1** The NIMS has thus been conceptualized with the following aims:

- a) Be robust, in that it ensures the unique identification of individuals and the issuance of a unique NINs and has the necessary technical and legal underpinnings to function reliably and effectively safeguard individuals’ rights and their personal data, including implementation of privacy-by-design principles;
- b) Be inclusive, such that all individuals have access to a NIN that will provide them with an official proof of identity from birth;
- c) Be foundational, in that it is linked by design and practice to the CR and can be used by functional registers for identity authentication purposes; and
- d) Facilitate access to services for individuals and effective service delivery in the public and private sectors by being able to reliably authenticate a person’s identity.

3.2 The indicative overall architecture of the NIMS is shown below:



Source: World Bank.

3.3 The NIMS and the *Roadmap* implementation will adhere to the ten Principles on Identification for Sustainable Development, which outline the key features ID systems need to maximize benefits for development while mitigating the risks

3.4 The NIMS and the *Roadmap* implementation will adhere to the four Pillars of Inclusion:

- i) The NIMS will be accessible to all persons in Nigeria, regardless of their origin, citizenship, or legal residency status, as well as all Nigerians residing abroad, and accordingly all such persons will be eligible to receive a NIN.
- ii) No person eligible for enrolment into the NIMS shall be prevented from obtaining a NIN due to an inability to produce a physical breeder document.
- iii) No person eligible for enrolment shall be prevented from obtaining a NIN due to an incapacity to provide the required biographic or biometric data.
- iv) All NIMC services shall be equally accessible to all NIN holders.

4. Overview of Scope of Work

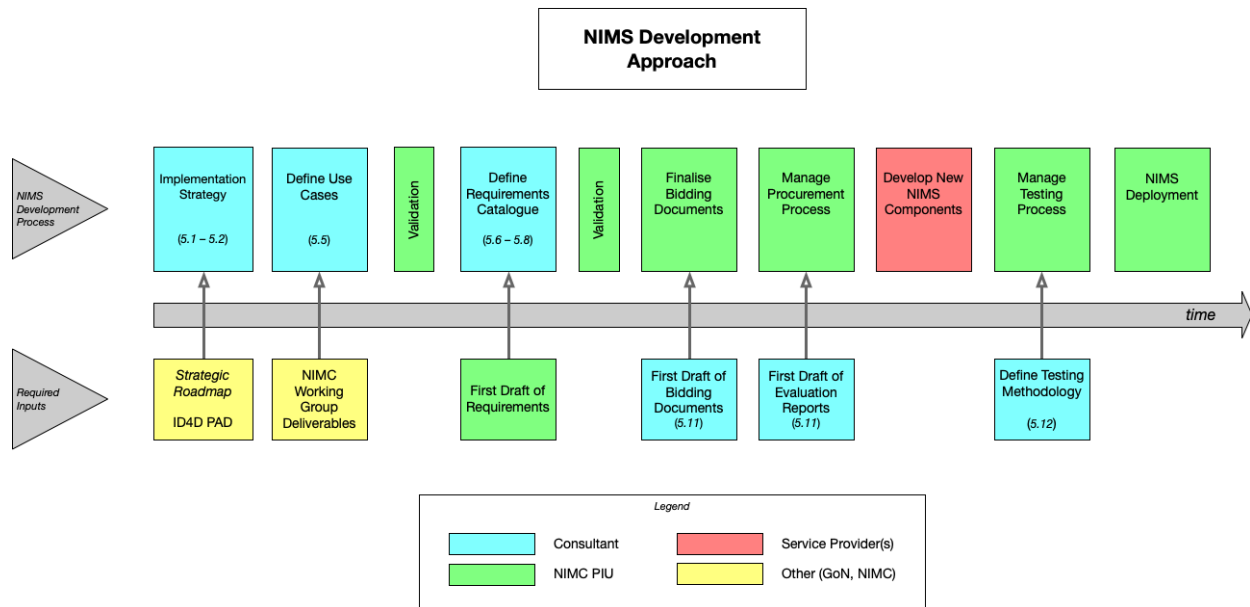
The objective of this consultancy is to define a set of artefacts that that will become the basis for the implement the enrolment ecosystem. The consultant shall work in close collaboration with the Project Implementation Unit (PIU) housed within NIMC and the Ecosystem Coordination Strategic Unit (ECSU), as appropriate, within the framework of the *Strategic Roadmap*, Nigeria Digital ID4D Project Appraisal Document, and any guidance given by the project's Steering Committee.

Specifically, the scope of work for the consultant shall include the following:

1. Supporting NIMC to prepare the required bidding documents; manage procurement and technology acquisition processes; and select any service provider(s) for implementing and managing the NIMS.
2. Supporting NIMC in the areas of project monitoring for the implementation of the NIMS, including technical assistance to NIMC for implementation and post-implementation monitoring, verification, testing, validation of NIMS system implementation as per the bid specifications.

For activities concerning increasing capacity of the NIMS to rollout the enrolment ecosystem, it should be noted that the implementation itself will be carried out by NIMC, acting through its PIU, and with support from additional service provider(s) that will be procured and licensed on the basis of the requirements and other artefacts developed through this consultancy. To this end, for all activities related to NIMS upgrades, the consultant shall work closely in association with and take guidance from the NIMC PIU, as well as relevant competent teams within NIMC as appropriate, throughout the duration of this assignment. Figure 1 details the roles and responsibilities of the various actors involved in developing the next version of the NIMS.

Figure 1: NIMS Development Approach: Roles and Responsibilities



5. Detailed Scope of Work

The detailed terms of reference for the scope of work items mentioned above, are as follows:

5.1 Supporting NIMC to prepare the required bidding documents; manage procurement and technology acquisition processes; and select service provider(s) for implementing and managing the NIMS

- (i) Although the NIMC PIU will be responsible for managing the process of procuring service provider(s) to implement the various ICT solutions required to increase the capacity of the NIMS, the consultant shall provide the PIU with technical support and inputs throughout this process.
- (ii) Based on the implementation strategy, and detailed functional and technical requirements specifications, the consultant shall prepare the required bidding documents (including EOI, RFQ, RFP, etc., as appropriate) for selection of the service provider or service providers to implement and manage the NIMS system.
- (iii) The consultant shall prepare the bidding documents conforming to the World Bank procurement guidelines, including ICB procurement guidelines if necessary.
- (iv) The bidding documents shall include inter-alia contain the following details:

- Description of the project background and context
- Scope of the services requested and what is not included in scope
- Project objectives, addressing aspects related to availability, service levels, efficiencies, security and resilience factors, flexibility, scalability and cost.
- List of key stakeholders along with roles and responsibilities
- Scope of work, roles and responsibilities of service provider. Functional and technical requirements specifications for implementation of the NIMS
- Procurement, supply, installation, and commissioning of IT infrastructure components
- Implementation of information security management systems and infrastructure monitoring & management systems;
- Testing and benchmarking
- Documentation and training
- Operations support and maintenance
- IT helpdesk and support services
- System and database administration
- Operational requirements
- Acceptance criteria & system and security audit requirements
- Commercial specifications & bid process requirements, including:
 - Bidders' eligibility and pre-qualification
 - Bid process activities
 - Bid formats and submission requirements
 - Bid evaluation criteria and process
 - General terms and conditions for bidding
 - Payment terms
- Legal and contractual specifications
- Service Level Agreement (SLA) based on service-level goals and objectives. The SLA should provide the following:
 - SLA terms and definitions
 - SLA calculation principles and metrics

- Calculation of downtime and uptime
 - Audit compliance
 - Service levels during peak hours and extended business hours
 - Service level enforcement, penalties
 - Issue resolution time
- (v) The consultant shall undertake the following activities as part of bid process management:
- Support the NIMC in conducting pre-bid conferences Compile responses to bid queries and clarifications, and make presentations before the evaluation committee
 - Design the bid evaluation criteria
 - Evaluation of bids, conduct briefings and presentations to the NIMC evaluation committee
 - Evaluation of the commercial bids
 - Compile the evaluation reports and recommend the best bidder
 - Evaluation of Bill of Materials (BOM)
 - Support NIMC in negotiations and closure
 - Support the NIMC in contract finalization with the selected bidder.
- (i) The consultant shall submit comprehensive bid evaluation reports, consisting of eligibility evaluation, technical evaluation, and commercial evaluation.

Deliverable: D11

- 1. Bid documentation for selecting a service providers for implementing and managing the NIMS**
- 2. Bid evaluation reports consisting of technical and commercial evaluation**

5.2 Supporting NIMC in the areas of project monitoring, including implementation and post-implementation monitoring, verification, testing, validation of NIMS system implementation as per the bid specifications.

- (i) Although the NIMC PIU will be responsible for project management and implementation of the NIMS, the consultant shall provide the PIU with technical support and inputs throughout this process.

- (ii) The consultant shall support the NIMC management team and the PIU in providing project implementation monitoring services of the NIMS implementation till the commissioning and Go-Live of the NIMS system.
- (iii) The consultant shall report directly and shall be accountable to the NIMC and PIU. The consultant shall provide guidance to the service provider or service providers implementing the NIMS (or its various components) in terms of the work to be completed at each phase and shall be responsible for suggesting mid-course corrections.
- (iv) The consultant shall be responsible for monitoring adherence to timelines and shall ensure timely completion of work as per the project plan. The consultant shall assist NIMC in overseeing the entire NIMS implementation.
- (v) The consultant shall also undertake the user acceptance testing of the application software (on behalf of NIMC), by preparing test cases, and imparting training to the NIMC-designated testers, documenting the defects, and troubleshooting its resolution with the service provider(s).
- (vi) The consultant shall undertake testing to confirm the operational performance levels of the NIMS biometric systems are in line with the requirements for biometric accuracy, for de-duplication and authentication.
- (vii) The consultant shall be responsible for certifying the completion of implementation and readiness of NIMS to Go-Live.
- (viii) The consultant shall bring onboard the necessary resources for providing project monitoring services as per the requirements of the project.
- (ix) The scope of work of the consultant shall also include the following:
 - Review and validation of detailed project plan, including plan for procurement, installation, and commissioning, and Go-Live, prepared by the service provider(s) and implementation partners, through use of industry-standard project management and monitoring tools.
 - Scrutiny and verification of the complete Bill(s) of Materials, and providing necessary recommendations/ assistance to NIMC for sign-offs.
 - Verification and monitoring of the procurement, installation, configuration, and commissioning activities of the Service Provider/ implementation partners related to the various hardware, system software, and networking components of the NIMS, and providing the necessary management reports to NIMC on these activities.
 - Verify the software agreements and licenses, including software updates, and upgrades are procured as per the Bill(s) of Materials.
 - Reviewing the deliverables of service provider(s) and recommending approvals on deliverables to NIMC.

- Design the parameters and methodology for load and stress testing of application software and proposed IT infrastructure conforming to attributes such as throughput and response times, scalability, integration, and interoperability, in an industry-standard testing lab environment.
- Prepare methodology, framework, and procedures for measurement of SLA parameters and user satisfaction, and recommend industry-standard tools for SLA monitoring.
- Ensure knowledge transfer and training to the NIMC-designated officials on the SLA monitoring tools.
- Prepare Terms of Reference and methodology for engaging 3rd Party auditors for undertaking system, networking, security audits, etc.
- Verify and validate the Standard Operating Procedures put in place by the service provider(s).

Deliverable: D12

Project implementation monitoring reports, covering the following:

- 1. Periodic project monitoring reports provided on a bi-weekly basis**
- 2. Project implementation progress presentations to NIMC**
- 3. Review and validation the detailed project plans prepared by the service provider(s), and ensuring finalization thereof**
- 4. Review and validation of all project deliverables prepared by the service provider(s) and other implementation partners, for conformance to bid specifications, and ensuring finalization of the same.**
- 5. Acceptance testing methodology and procedures for the NIMS**
- 6. Certification of operational performance levels of NIMS biometric systems**
- 7. Certification of NIMS readiness to Go-Live**
- 8. Terms of Reference (TOR) for selection of agencies for 3rd party audits.**

6. Deliverables and Timelines

The deliverables for the consultant and the corresponding timelines based on the scope of work as detailed above are as follows, with the T representing the commencement date of the consultancy.

Deliverable No.	Deliverable	Timelines (in weeks)
D11	1. Bid documentation for selecting a Service Provider for implementing and managing the NIMS	T + 20 weeks
	2. Bid evaluation reports consisting of technical and commercial evaluation	As per bidding timelines
D12	Project implementation monitoring reports	Based on project implementation progress

7. Professional Qualifications of the Consulting Firm and its Key Personnel

The professional qualifications and experience requirements for the consulting firm and its key personnel are given below. The consultant firm shall take the complete responsibility to bring in other resources (not mentioned below) as and when required to execute this consultancy assignment.

Sl. No		Experience of Consulting Firm
1	Consulting Firm	<ul style="list-style-type: none">The firm must be a reputed and experienced company operating in the field of project management and IT Consultancy and Advisory practice having a registered office in Nigeria for the last 5 years.

		<ul style="list-style-type: none"> • Must have completed a minimum of 5 consultancy assignments of a similar nature related to design of IT systems (application software and hardware), and preparation of RFP and bid process management for selection of system integrator/ service provider, for the government/ public sector. • Must have at least 10 full time consultants on its rolls for the last one year. • Experience and knowledge of the geographically diverse conditions in Nigeria • Experience working and partnering with various stakeholders such as governments, non-governmental organizations, local communities. • Must demonstrate inclusion of the following resources in the core team: <ul style="list-style-type: none"> ▪ Project Manager with a procurement specialization ▪ Requirements Analyst for ICT systems ▪ Principal Architect ▪ Procurement Advisor with commercial and legal specializations • Must demonstrate access to resources with specialist skills in the following areas: <ul style="list-style-type: none"> ▪ Cybersecurity ▪ Biometric technology ▪ IT infrastructure (networking, data hosting, cloud services, etc.)
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Sl. No	Key Position	Qualification and Professional Experience Required
1	Project Manager	10 years' experience with at least 6 years of experience in the following areas:

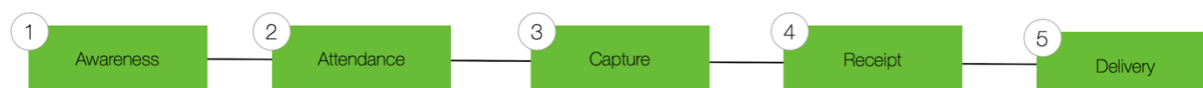
	<p>(IT Systems)</p> <p>Shall be responsible for preparation of RFP for selection of Service Provider</p>	<ol style="list-style-type: none"> 1. Preparation of FRS and RFP for at least 2 completed IT project in a large Government/ Enterprise environment (with a consultancy cost of at least USD 100,000) 2. Experience of the preparation and evaluation of 2 significant procurements (value 1 million USD). 3. Experience in end-to-end application development life-cycle 4. Experience in database, storage, networking and security architectures 5. Experience in working on large-scale distributed and heterogeneous IT systems <p>Good verbal, written communication, and documentation skills</p>
2	Requirements Analyst	<p>Must have at least 5 years' experience in defining requirements & benefits for stakeholders that can be included in a procurement process for organisations to bid against.</p> <p>Must have experience of the preparation and evaluation of 2 significant procurements (value USD 1 million).</p> <p>Must have experience in delivering requirements artefacts:</p> <ul style="list-style-type: none"> ○ Capturing requirements. ○ Defining business processes. ○ Defining and delivering use cases. ○ Defining functional design. ○ Defining bid documents in order for bidders to respond. <p>Must have experience in evaluating bid responses.</p> <p>Must have good verbal, written communication, and documentation skills</p> <p>Must possess an MSc in an IT related subject.</p>
3	Principal Architect	<p>Must possess experience as an enterprise architect for the implementation of at least one large-scale project (with overall project value greater than USD 10 million)</p> <p>10+ years in software engineering and/or product development experience, including design and development of major</p>

		<p>software and/or systems architecture.</p> <p>Experience of the preparation and evaluation of 2 significant procurements (value 1 million USD).</p> <p>Must possess an MSc in an IT related subject.</p> <p><u>Other requirements</u></p> <ol style="list-style-type: none"> 1. Comprehensive knowledge of overall software architecture and software engineering methodologies, principles and practices. 2. Ability to communicate technical requirements in a manner that allows bidders to respond accordingly. 3. Ability to develop reference architectures for organisations to bid against. <p>Good verbal, written communication, and documentation skills</p>
4	Commercial and legal procurement advisor	<p>Must be able to provide sound commercial and legal advice to the procurement team throughout the procurement process from RFI to contract award.</p> <p>Must have at least 5 years' experience in a similar role and participated in at least 2 significant procurements (value USD 1 million).</p> <p>Must have advised on at least 1 private/public partnership procurement.</p> <p>Must have good verbal, written communication, and documentation skills</p> <p>Must have an MSc with a focus on legal and/or commercial matters.</p>

Annex A – Description of the NIMS Enrolment Process

End-to-end enrolment process

The enrolment process includes a series of steps; some the individual must do and some that occur in the background and are invisible to the individual. From the perspective of an individual these steps are reasonably straightforward and illustrated in the following diagrams as five sequential green boxes.



However, from the perspective of the enrolment partners, the process is more complex. For example, all management information events must be comprehensively captured, including exceptions and errors and processes invisible to the individual. This allows for analysis of the end-to-end process for planning the rollout across Nigeria and measuring progress against a plan and for future improvement, innovation, billing and audit.

The end-to-end enrolment process from the perspective of the enrolment partner can be understood in terms of the following steps:

- *Readiness.* Enrolment partners must have set up enrolment locations, stations and trained enrolment field agents as per NIMC Standard Operating Procedures (SOPs).
- *Awareness.* Consider the impact of a campaign to ensure that individuals of a specific demographic, within a region are made awareness that the enrolment location is open for business.
- *Attendance.* Individuals must not only be aware that the enrolment centre is open for business but must also attend. What factors will ensure high attendance? How can constraints to attendance be alleviated? How can enrolment centres be brought as close as possible to individuals?
- *Capture.* Consider how the BIO-G/M attributes will be captured which may vary according to the enrolment location i.e. building rental or enrolment bus/tent; capital costs of equipment; power, staff to operate and maintain the enrolment booths; assisted service for those individuals who are illiterate or require help; exception handling, such as when BIO-G/M cannot be collected (e.g. disabled persons)).
- *Receipt.* What individuals receive as a receipt of attendance and successful capture.
- *Transmission & storage.* The modalities of transmission whether this is over a mobile network or by delivery of hardware.
- *Comparison and validation.* Handled by NIMC backend.
- *Delivery.* Successful personalization of a basic authenticator in the field and delivery of a NIN to the individual (happy path); Failure of delivery of a NIN to the individual

(exceptions). Examples of exceptions include BIO-G/M are lost before transmission to central store; individual cannot be located or contacted; etc.

This overall enrolment process from the perspective of the enrolment partner is illustrated in the following diagram.

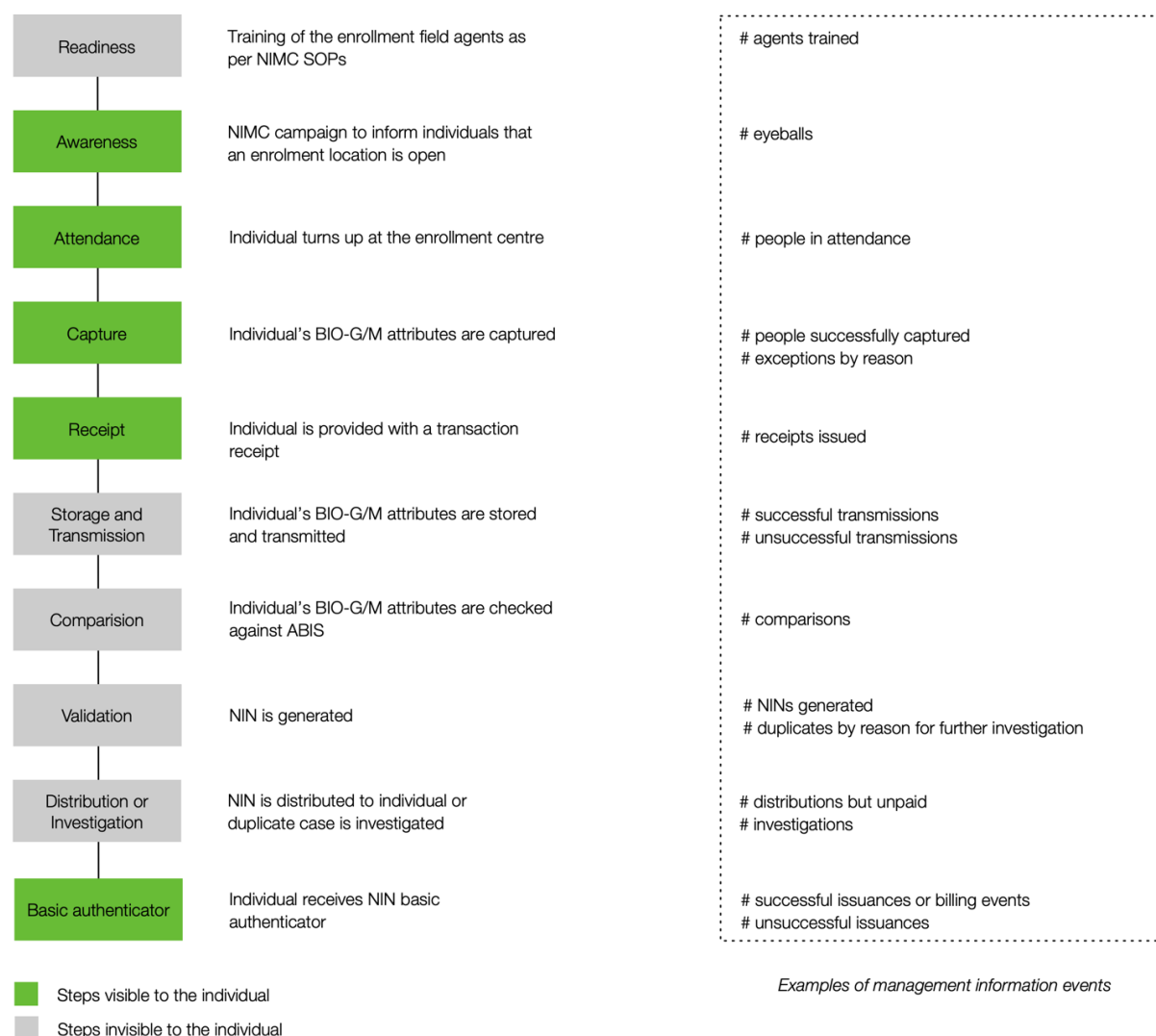


Figure 2 – Enrolment process and examples of management information events

The intention is for real-time delivery of NINs whenever possible as this eliminates the logistical costs of repeated interaction with the individual in order to collect data, issue a NIN, and deliver the basic authenticator. In cases where communication with the NIMC server is possible during data capture, all of the above could potentially be accomplished in real time and without having to recontact the enrollee. However, the project must also account for situations where real-time NIN generation is not possible (e.g., poor connectivity with NIMC server, potential delays in deduplication at NIMC back-end).

