

Improved land management, a key factor for a stable and protective social economic development

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SUMMARY

Land is critical to the economic, social, and cultural development of inclusive and sustainable social-economic growth. Land administration and management are key in providing a stable basis for well-planned and organized social economic development that also contribute to protect the environment, and also the most vulnerable population.

Ivory Coast has had difficulties in managing property titles in urban areas for many years. Manual processing of requests, the complexity of the procedures and the overall structural inadequacy of the land administration chain have been leading to delays and errors, undermining the effectiveness of the administration and endangering the security of property rights for citizens.

The Ministry in charge of Construction and Urban Planning has taken concrete actions to address this issue and provide rapid responses to the urgency of the situation. In addition to reforms that will simplify the administrative procedures, a project named SIGFU, operated by IGN FI, has been set up to implement an Integrated Urban Land Management System for Greater Abidjan and Assinie. It aims to speed up the issuance of administrative acts, secure urban property rights and improve Ivory Coast's ranking in terms of key land-related indicators.

Over time, this project strives to reduce the current processing time for ACD request files by a factor of 10, to issue 60,000 "Arrêtés de Concession Définitive" (permanent land titles) and to increase direct and indirect revenue from the issue of titles. Other beneficial results of the project are expected to include a reduction in disputes between citizens, improved urban planning and a new impetus for the real estate market.

In addition to the technical components such as base maps surveying, adjudication, data conversion, system development, change management is an essential cross cutting issue that includes communication activities within the main stakeholders, training sessions and public awareness. The objective is to modify in depth the working habits and the perception of public services to the users.

The project started mid-2021 and will end mid-2023.

It should be noted that the SIGFU project is being carried out at the same time as the street addressing project (PADA), also carried out by IGN FI in the Abidjan district, and is part of a coherent approach to production, capitalization and use of cadastral data, to consolidate on the long run a real Multi Usage Cadaster.

1. INTRODUCTION

To improve land management in urban areas, the Ministry of Construction, Housing and Urban Planning (MCLU) has started to take concrete actions in 2017 to provide rapid responses to the emergency situation. The digitalization of state registers and village guides has been completed in the Abidjan district and the inventory of the Ministry's plans and maps has been initiated. An Inter-ministerial Committee for the Regulation of Activities in the Land Tenure Chain, which brings together all the actors in the land tenure chain, has been created to initiate reforms within the administration.

In order to implement this transformation within the Administration, the Ministry has chosen in 2018 to develop a Master Plan for the Simplification and Digital Transformation of Urban Land Tenure. This study, led by the Permanent Secretariat for Simplification and Digital Transformation of the MCLU, and carried out by IGN FI with the technical assistance of the BNETD, marks the Minister's desire to implement the reforms undertaken.

The master plan came out with a strategy based on an ambitious project named SIGFU (Système Intégré de Gestion du Foncier Urbain in french – Urban Integrated Land Administration System) for massive digital transformation of processes and documents and the development of a Land Administration System. This paper will describe the project, its objectives, components and first results.

2. MASTER PLAN

The objective of the Master Plan is to set the trajectory for modernizing the land chain over the next five years and to propose short-term actions to improve the time required to issue deeds and secure property titles. The challenge is to set up an integrated information system for urban land management that promotes data sharing and offers an efficient, high-quality service to users.

The priority objectives on which the Master Plan is based correspond to the direction defined by the administration within the framework of a strategic reflection in harmony with the NDP 2016-2020. They are the following:

- Serve users quickly and efficiently.
- Secure the land and reduce fraud, conflicts and disputes.
- Improve visibility and transparency.

- Improve tax revenues.
- Have a common and standardized framework.
- Improve the country's position in the former and last Doing Business ranking.

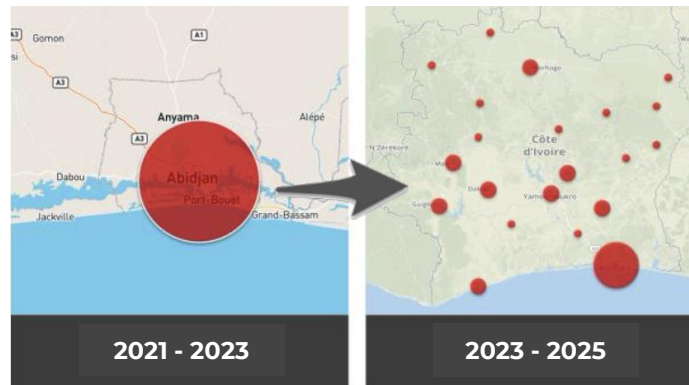
The breakdown of these objectives and the analysis carried out by IGN FI during the Master Plan study led to a definition of the target that the land chain modernization initiative should aim for. This target is characterized by:

- The deployment of the Land Information System within MCLU integrating the secure and automated processing of procedures;
- The sharing of a common base of information between all the actors of the land chain (literal and spatial information) within a centralized and secured database;
- The establishment of a unique land identifier for all actors in the land tenure chain to facilitate the security of transactions;
- The development of a regulatory framework adapted to the objectives of rapid and efficient delivery of administrative acts;
- The inclusion of all land professionals (notaries, bankers, surveyors, urban planners, architects and real estate developers);
- Access for users to a simple and exhaustive portal for consulting information and managing administrative procedures.

The scenario chosen by the Interministerial Committee for the Regulation of Land Tenure Activities is called "Massive titling and regularization of liabilities". It corresponds to an ambitious target, in line with the expectations of users and the challenges facing the Administration.

This scenario is built around nine functional and innovative projects, which are based on international standards and which each form a structural component of the overall system. The projects are interdependent and the success of each of them determines the overall success of the Master Plan.

The action plan is spread over five years, with an intermediate stage after two years. The proposed phasing is as follows:



3. KEY OBJECTIVES AND RESULTS

Objectives

1. **Simplify** procedures and give users visibility on the follow-up of the procedures they have undertaken;
2. **Digitize** information, set up an end-to-end digital processing system and ensure the conservation, sharing and **exchange** of information for multiple uses;
3. **Organize** services and automate processing to increase the quality, efficiency and **productivity** of the land chain;
4. Achieve a target quantity of ACDs (**issuance of ACDs**);
5. Reduce the time required to process **titling files**;
6. Reduce the number of **land disputes**;
7. **Coordinate** processing with state entities (DGI, Prefects) and local authorities (Districts, town halls, etc.);
8. **Increase** direct revenues and broaden the land tax base.

Expected results

- Significant improvement in customer service through digital technologies
- 60,000 additional ACDs by 2020
- A land chain resolutely based on end-to-end digital processing
- Standardization of texts and land procedures
- Interoperability of information systems
- The provision of tools for the prevention and management of environmental risks and natural disasters in urban areas

- Massive titling of new housing estates and regularization of existing land tenure

4. TASKS AND PRODUCTS

The works planned within the framework of the execution of this project are:

- The acquisition of aerial photographs and the production of geographical reference information (urban digital cartography, orthophotos, DEM) on the Grand-Abidjan and Assinie, according to the technical specifications of all the beneficiary administrations, in this case, five (5) centimeters of precision and geometrical resolution as regards the photographs;
- The establishment of new land reference infrastructures and the densification of geodetic works in Abidjan and surroundings;
- The dematerialization of state documentation, urban plans and topographic maps and the creation of an urban land database;
- The implementation of innovative integrated systems for the management of the unique identifier of parcels and geographic information on land and urban areas, the automated processing of land-related documents by the actors in the land chain and the monitoring of requests for administrative documents from users;
- The transfer of techniques, skills and technologies to national structures and actors. Several technical workshops, organized with the Cadastre and Land Registry services, have recently made it possible to establish a harmonized technical standard and a distribution of work between the SIGFU project and those in progress in these administrations.

Three common principles govern the work that will be done, namely, the pooling of resources, the harmonization of techniques and the interoperability of the systems that will be deployed.

To this end, a working group set up within the framework of the Inter-ministerial Committee for the Regulation of Land Tenure Activities will be responsible for ensuring that these guiding principles are effectively taken into account during the implementation of the project.

5. BUILDING BLOCKS

Sub-projects

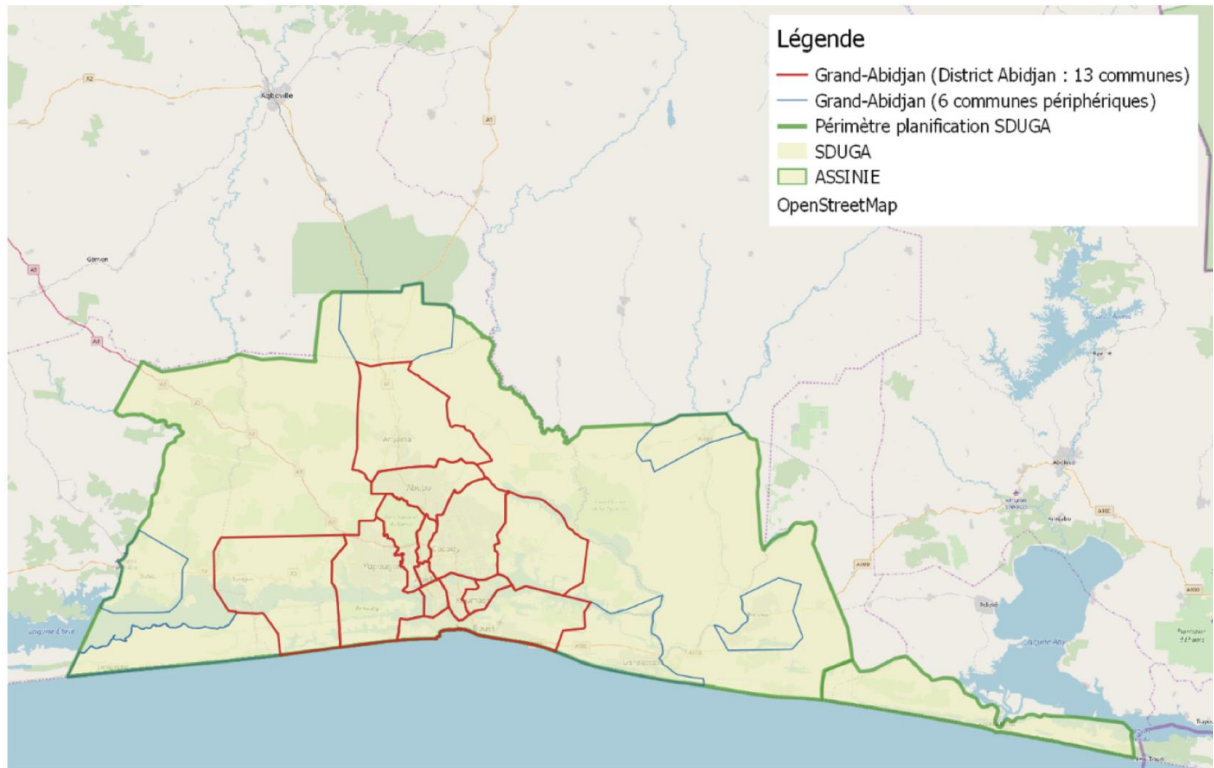
#	Projects	Purpose
1	User Services	Provide users with modern public attention centers and portals (web and mobile) for the general public and professionals to initiate and track requests for administrative acts.
2	Data conversion	Dematerialize state documentation, restore and digitize topographic plans and integrate them into a secure database.
3	Standardization and Process Reengineering	Optimize, adapt and simplify the procedures for issuing deeds and managing urban land, leading to the revision of existing regulations and the adoption of new ones.
4	Integrated Land Information System	Develop a management system integrating all spatial and textual urban land data in a single database, a common base for urban land administrations in order to automate the end-to-end processing of administrative acts.
5	IT Infrastructure and Equipment	Deploy a new state-of-the-art technology infrastructure to ensure reliable, integrated processing and high availability of urban land data.
6	Unique Land Parcel Identifier	To define a unique identification system of the plots, recognized by the administrations intervening in the field of the land in Côte d'Ivoire in order to rationalize and secure the management of the land on the whole national territory.
7	Geodetic reference frame	To institute a single harmonized regulatory and reference framework for topographic and cartographic work in order to ensure the processing of subdivision, parcelling, land development and sectoral cadastral parcel delimitation procedures and to correlatively improve the land security index.
8	Geographic Information Repository	To make available to the actors of the land, within the framework of an approach of mutualization of the resources, the basic geographical information (Digital Terrain Model, LIDAR, Orthophotos, Urban Data) produced, according to the international norms and standards, at the end of a campaign of aerial photographs on the Great Abidjan and Assinie.
9	Change Management	Conduct a communication campaign aimed at the general public and professionals and ensure a transfer of skills to the stakeholders

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#	Projects	Purpose
		and administrations involved, with the aim of matching the skills with the new tools developed.

Geographical extension



6. PROGRESS / FIRST RESULTS

The SIGFU project has been in the execution phase by the operator IGN FI till August 2021. The full technical production capacity has been reached since month 6, in accordance with the ramp-up plan.

The teams deployed are composed of international experts, technicians and operators, mobilized in a production center located in the administrative city. The IGN FI team currently has 200 people on site. It is associated with the DMISSA teams, comprising more than 80 people working in permanent contact with those of the operator.

The SIGFU production center was inaugurated by Prime Minister Patrick Achi on August 18, 2021. The first Steering Committee meeting took place on May 20, 2022, under the authority of the Minister of Construction, Housing and Urban Planning, Mr. Bruno Koné.

The completion rate is 78% as of end of February 2023. The completion date of all activities is scheduled for the end of July 2023, for a total duration of 24 months.

The SIGFU project has 98 deliverables. Their completion is staggered throughout the 24 months of the project. Some of them, of a structural nature, are already well completed and others bring achievements with important impacts for the users from January 2023.

- The new national geodetic reference frame has been established and will be in use as soon as the application order is published.
- 20,000 converted ACDs files have been delivered, as well as all digitized subdivision plans.
- A new application for managing the Land and Housing Database (BDFH) has been in production since April 2022.
- The IT tools for the generalization of the massive titling reform in the context of subdivision approval were delivered in November 2022.
- A new application for the reception, processing and follow-up of ACD requests (New SGFH or NSGFH) went into operation on January 1, 2023.
- The operational version of the online information and services web portal for the general public went online on January 19. It provides users with practical information on the services available and a reliable status of their requests.

Technical production is ongoing, with 65 000 ACD files already digitized, 655 000 parcels vectorized from subdivision plans, 100% of greater Abidjan covered by aerial photos, and high-resolution 3D digital mapping established over 2700 km².

7. PERSPECTIVES

Ultimately, the project will reduce the current delays in issuing administrative acts (ACD, approval of subdivisions, etc.), increase the current volume of administrative acts issued, and drastically reduce litigation and disputes. In addition, it will facilitate the mobilization of internal financial resources through the considerable increase in direct and indirect State revenues.

The outlook for the next terms can be broken down into two phases:

First Quarter 2023

- Deployment of digital tools and e-services for public and professional users
- Delivery and production of the Land Information System.
- Completion of aerial photography.
- Completion of the digitization of UFA files and implementation of the final production of parcel and cartographic data.
- Implementation of the training program

Second quarter 2023

- Finalization of the Land Information System integrating all the procedures of the land chain.
- Completion of the production of technical data (files, plans, 3D cartography, DTM, orthophotos).
- Completion of the training program and the transfer of skills in general
- Implementation of the maintenance and support program

BIOGRAPHICAL NOTES

Loïc Daniel is SIGFU project manager for IGN FI.

Jean-Philippe Lestang is Deputy General Manager in charge of development for IGN FI.

Nassirou MBOW is head of DMISSA (Direction de la Modernisation, de l'Informatisation, de la Simplification et de la Sécurisation des actes) for MCLU (Ministère de la Construction, du Logement et de l'Urbanisme).

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