

LANDMARK<sup>TM</sup> ITS (integrated territorial system)

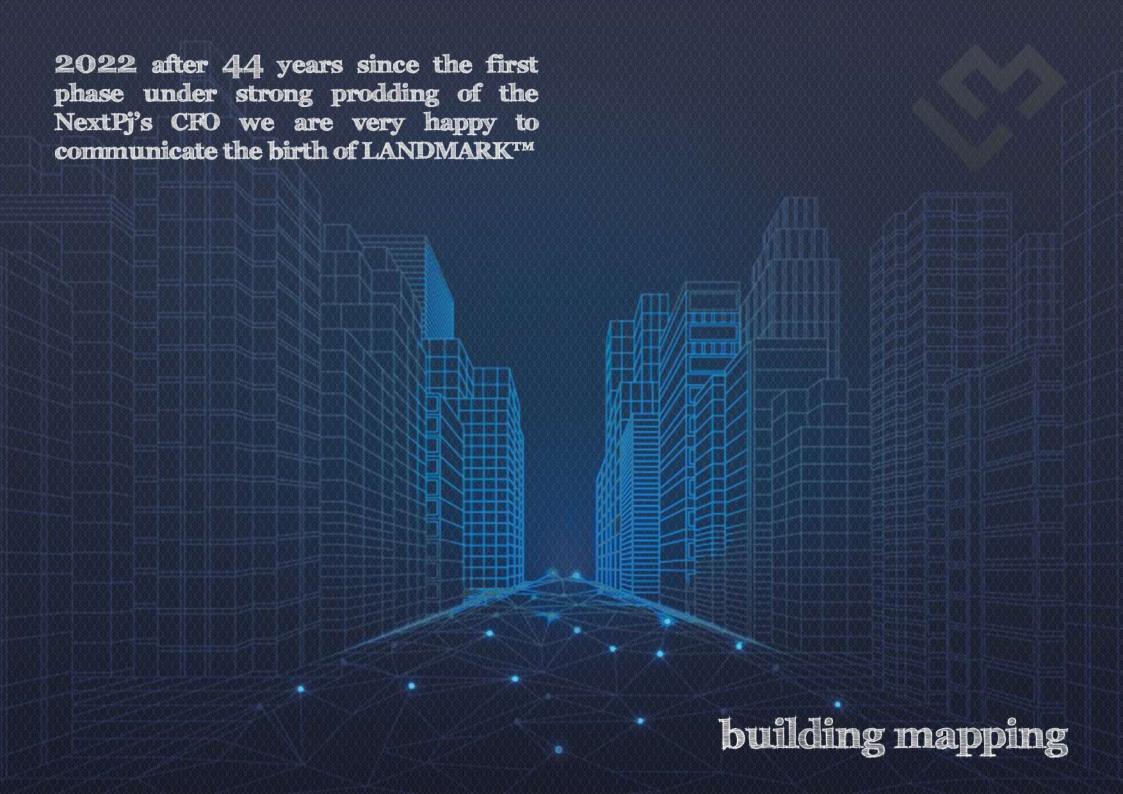


The full interoperability between public bodies and their information bases, the improvement of interaction between citizens and the public administration through new multidisciplinary communication technologies, the digitalisation of processes and documents as the basis for the progressive dematerialisation of documents, are extremely topical issues, and are at the heart of NEXT's IT development plan for the public administration.

The "Nigeria Land Use Act" is currently the instrument used as an inventory of real estate in the national territory, since 1978 this system has managed the properties and for this reason it now needs a strategic and structural enhancement.

The LANDMARK™ project, seen as a new "integrated territorial system" [ITS], fits in perfectly with the prospects for improving the tools for managing public administration data, and for sharing them with citizens, government administrations and economic operators.

With the definition of new cadastral inventory modules, at the basis of the [LANDMARK<sup>TM</sup>] system, and in particular with the introduction of the logical entity Buildings (i.e. with a specific and objective valuation of the building), the intention is to increase the current cadastral information base, which at the moment essentially consists of fragmentary information of a general nature without any historical-design and historical-maintenance reference.



The new database of the Archive of Buildings will make it possible to digitize and use all the information contained in the current cadastral archives, associating it with the new concept of building entity, geographical data and census information, reprocessed and aggregated, with a consequent increase of the information content available. The introduction of the new ITS [LANDMARK™] designers and end users.

will also activate new additional value services that will benefit not only public administrations but also

A terroforming action of the country system that will generate value in the short period of time in terms of data diffusion and why not also in terms of development and security. Forty-four years after the first phase of development with the Land Use Act, is IDEA of NEXT that it is time to enter in a Country system 4.0, and in order to achieve this goal NEXT presents its ITS "integrated territorial system".



[LANDMARK™], a real national catalogue of real estate, which intersects information and projects and makes the different geo-referenced information from all over the country interoperable, surveying millions of urban properties and millions of rural properties (land). The new system is practically an evolution of the current cadastral cartographic system, a sort of new national catalogue of real estate that can intersect different geo-referenced information, making them interoperable and superimposable.

In practice, at the click of a mouse we will have all the data, both for a specific building and for an entire geographical area, aerial images of the area, property units surveyed by specific cadastral category, classified according to the number of rooms, the annuity value, and the services connected to it. It will be possible to compare classifications and carry out searches by means of overlapping "levels" that can be activated or deactivated as desired, as in the case of cadastral maps, to view census data, information from the Observatory of the Real Estate Market, high-resolution digital orthophotos, road maps, etc.

Nigeria has the potential to achieve in the short term the full integration and digitization of the country system and thus, in this specific case, the full integration of cadastral, topographic and geodetic data into a single data model. [LANDMARK<sup>TM</sup>], coordinates common processes to accommodate any peculiarities of the country system in this regard to have a single data model for easier access and sharing of geo-information.

All this by means of a real ledger of the building. Digital building file [DBF] is the single dossier containing all the information about the building, from permits and authorizations to static plans, installations, extraordinary maintenance and modifications. All this and more is [LANDMARK<sup>TM</sup>].





## LANDMARK<sup>IM</sup> therefore

- Allows the display of the Geo-location of the area or property.
- It certifies the boundaries.
- · Indicates historical and environmental constraints.
- Indicates urban planning restrictions (distances from boundaries, maximum building height, building colors, etc.);
- Indicates the intended use, i.e., indicates the authorization of the specific property by indicating the use for which it was built and referring to the regulations concerning the category of assignment.

## In this section we can indicate as macro categories:

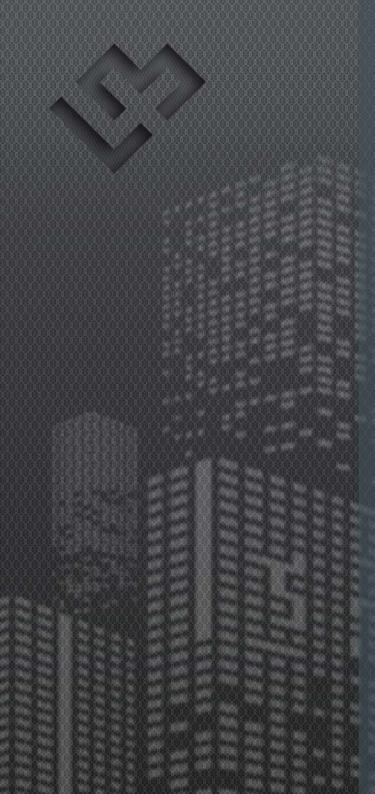
- · residential;
- tourist accommodation;
- commercial (shops, etc.);
- production and management (factories, offices, banks, hospitals, public administration buildings).
- rural (intended for agricultural use).
- presents certification of materials
- quality marks and guarantees (ICMQ, CE, IMQ, ISO).
- Indicates the construction company:
- company presentation;
- company certificates;
- · corporate insurance.



- Archives the construction phases such as destructive tests of the materials used and historical archives of laboratory results e.g., of cast specimens, strength of iron in accordance with the structural design etc...
- It archives plant designs and certificates:
  - electrical design,
  - mechanics,
  - structural,
  - architectural integrations and interactions, and therefore the study of the impact of the building on the general urban context;
- Archive energy classification:
  - electrical consumption
  - water consumption and type of water supply
  - use or non-use of alternative energies
- Archive authorisations and document archive:
  - Construction authorisations;
  - Declaration of accessibility;
  - Authorisation of design adjustments and/or modifications during construction phase
- Indicates the legal status of the property (judicial block, bank mortgage, foreclosure, etc.).
- Indicates rights of third parties (bodies, institutions, family rights)
- File a historical property view, a general overview that can summarize the history of a particular property or area.
- It presents a sheet of dimensional values for the purpose of applying service charges (rubbish, service infrastructure charges).







As a concluding message from the NEXT Services and Technologies Department, we would like to reiterate how innovation and interpolation of institutional and organizational systems and infrastructures for managing cadastral data can in the short term generate sustainable development and tangible improvements in social realities.

We consider this transition not an option, but a social, economic and structural necessity. The recent crises have underlined how the social mesh and especially the link between territory and population now needs a gradual implementation of an organizational type, crises do not only generate problems but also opportunities, and therefore a systemic awareness of the problem that now requires a solution for the next challenges.

We hope in the not too distant future that vital institutions such as the Office of the Surveyor-General of the Federation (OSGOF) will work as a catalyzer and through leadership and in collaboration with relevant agencies such as NASRDA, NGSA, AGIS, etc.. we will be able to routinely and comprehensively share data agencies such as NASRDA, NGSA, AGIS, etc.. we will be able to routinely and comprehensively share data and information increasing the accuracy of forecasts and common operational solutions in order to maximize the benefit to users, businesses and the nation.

Given the massive institutional, legal, technical, and administrative changes that contribute to the achievement of this objective, we are aware that moving in this direction requires considerable efforts from both the economic and legislative points of view. Our contribution with the ITS [integrated territorial system] LANDMARK<sup>IM</sup> therefore aims to be a starting point towards a society which - we hope - can become data-driven, making the areas, whether rural or residential, the center of a social process that will make our splendid nation an excellence recognized and valued throughout the world.





7, Abagbon Odeku Street - Victoria Island - LAGOS FEDERAL REPUBLIC OF NIGERIA Phone: +234 09019706302 / 08092211112 info@nextpj.com www.nextpj.com