

Presented at the FIG e-Working Week 2021,
21-25 June 2021 in Virtually in the Netherlands

SMART SURVEYORS FOR LAND AND WATER MANAGEMENT CHALLENGES IN A NEW REALITY



eWORKING WEEK 2021
20-25 JUNE

Tarek Zein
Hansa Luftbild AG
11239

Fit-For-Purpose Land Administration In Ethiopia - Ten Years of Success

24 June, 11:00 – 12:30

ORGANISED BY



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Ethiopian Land Certification

Land registration and certification followed two fast and inexpensive stages

- Stage 1: First level land certification (1 USD per parcel) paper-based containing parcel size and landholders' details (20 million plots registered and certified)
- Stage 2: Second level land certification (6 USD per parcel) with the spatial cadastral land boundaries and landholders' details including women as (joint) landholders (at least 20 million plots registered and certified)

Both stages are fit-for-purpose land administration (FFP-LA) approaches



Ethiopian Land Certification

Second level land certification carried out under

- Ethiopian Land Administration Strengthening Program (ELAP)
- Responsible and Innovative Land Administration Project (REILA I & II), and
- Land Investment for Transformation (LIFT) Program

Mass registration achieved the 20 million+ parcels



Ethiopian Land Certification

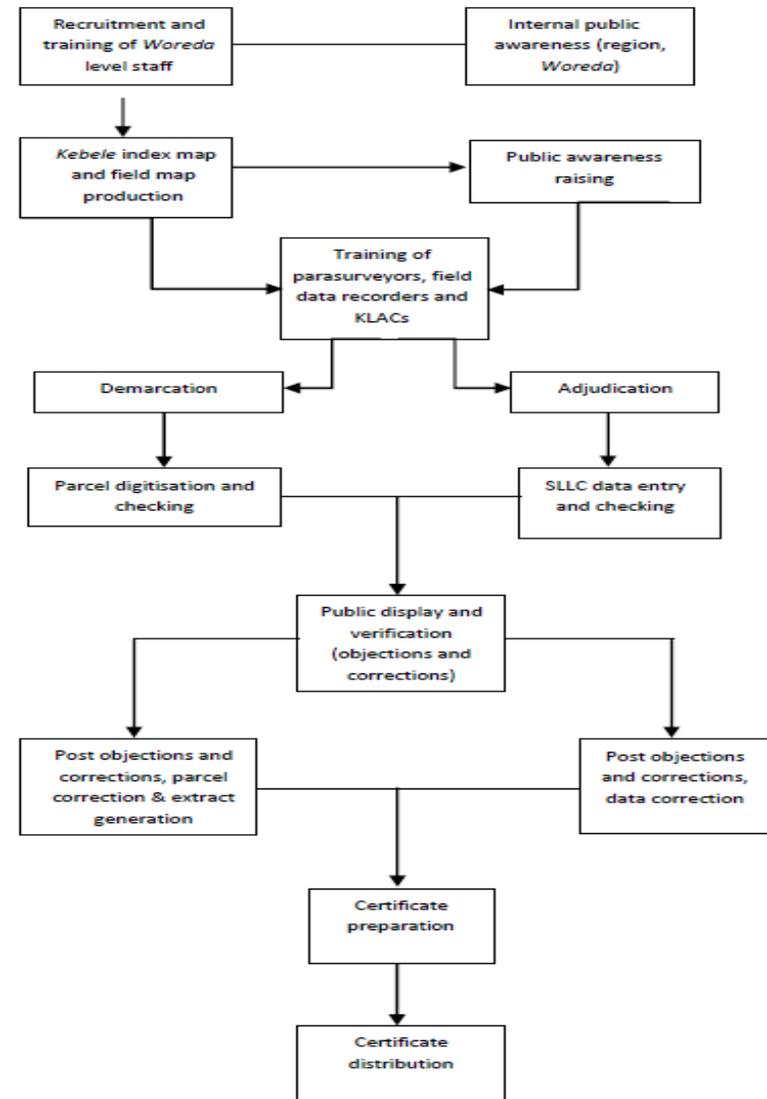
Mass Registration Approach Applied

Field materials included plots of orthophotos (produced from satellite / aerial photography)



Ethiopian Land Certification

Mass Registration Workflow implemented by LIFT Program, which certified 16 million parcels in 6 years

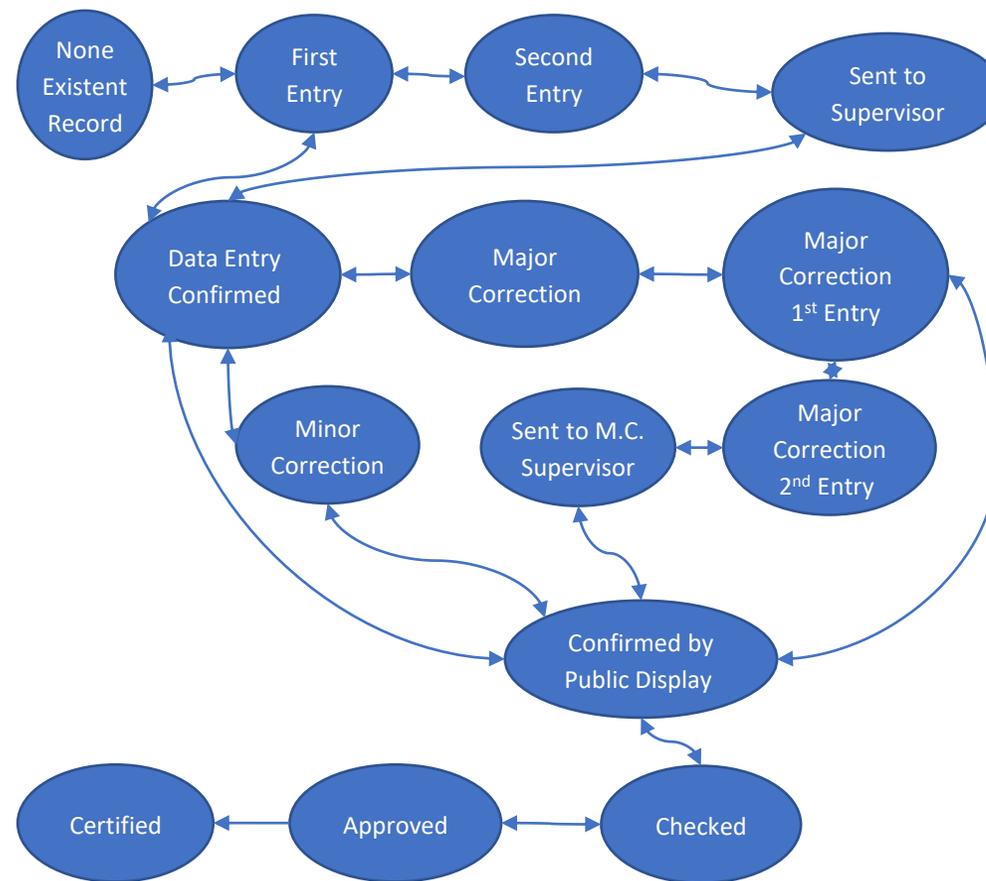




Ethiopian Land Certification

Mass registration software / application is a module of the National Rural Land Administration Information System – NRLAIS

Diagram showing stages of data registration





Ethiopian Land Administration

National Rural Land Administration Information System - NRLAIS

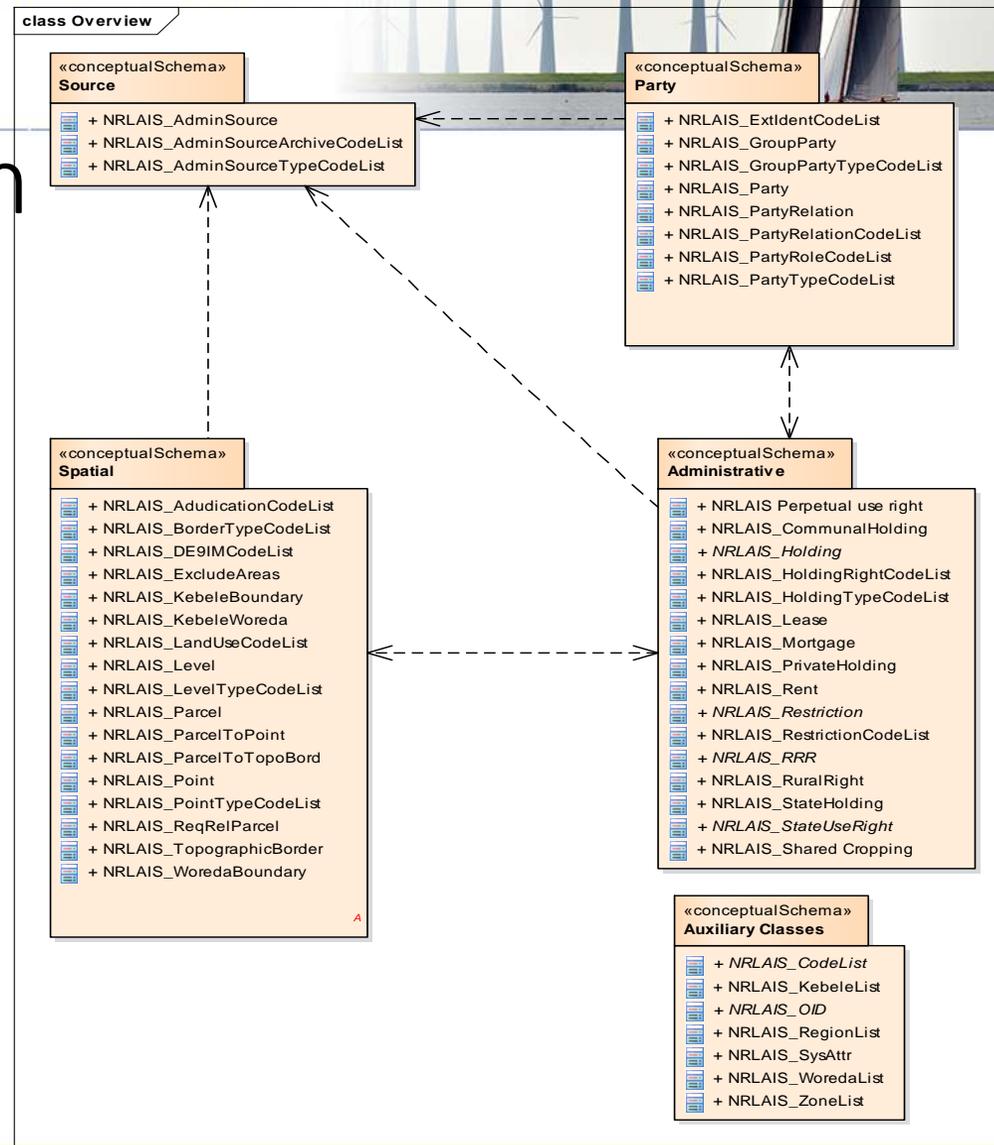
- Developed by Hansa Luftbild AG between 2015 and 2017 under fit-for-purpose approach and based on open source software and ISO 19512 Land Administration Domain Model – LADM
- NRLAIS currently is under maintenance and support contract by Hansa Luftbild
- Local IT company is integrated in the maintenance process so that this company can take over maintenance after Hansa Luftbild's contract expires

Ethiopian Land Administration

NRLAIS Conceptual Data Model based on LADM

Data model based on ISO 19512 LADM and structured as four main packages plus one support package.

- Party
- Administration
- Source
- Spatial
- Auxiliary classes





Ethiopian Land Administration

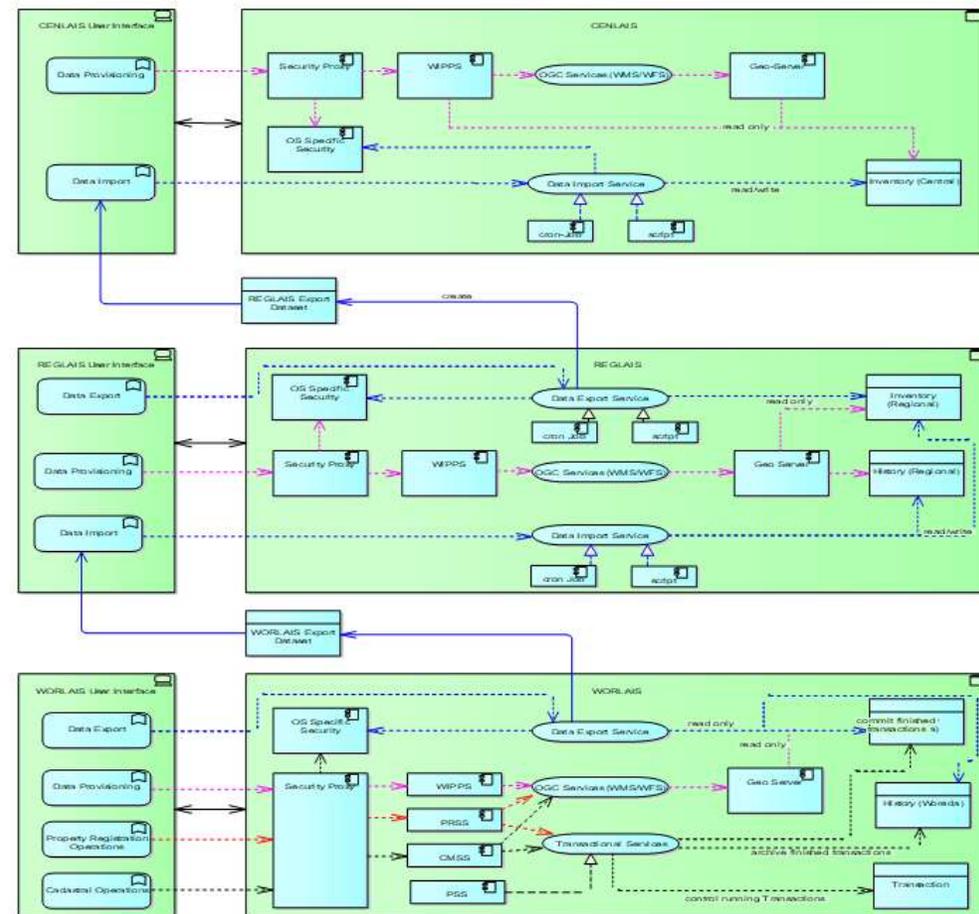
■ CENLAIS

NRLAIS System Overview

- CENLAIS: Federal government platform
- REGLAIS: regional government platform
- WORLAIS: local government platform which administers all land parcels within the jurisdiction of the concerned county

■ REGLAIS

■ WORLAIS





Ethiopian Land Administration

New Application ▾

🔔 2

🗺 Thematic Map ▾

👤 WELCOME: Officer ▾

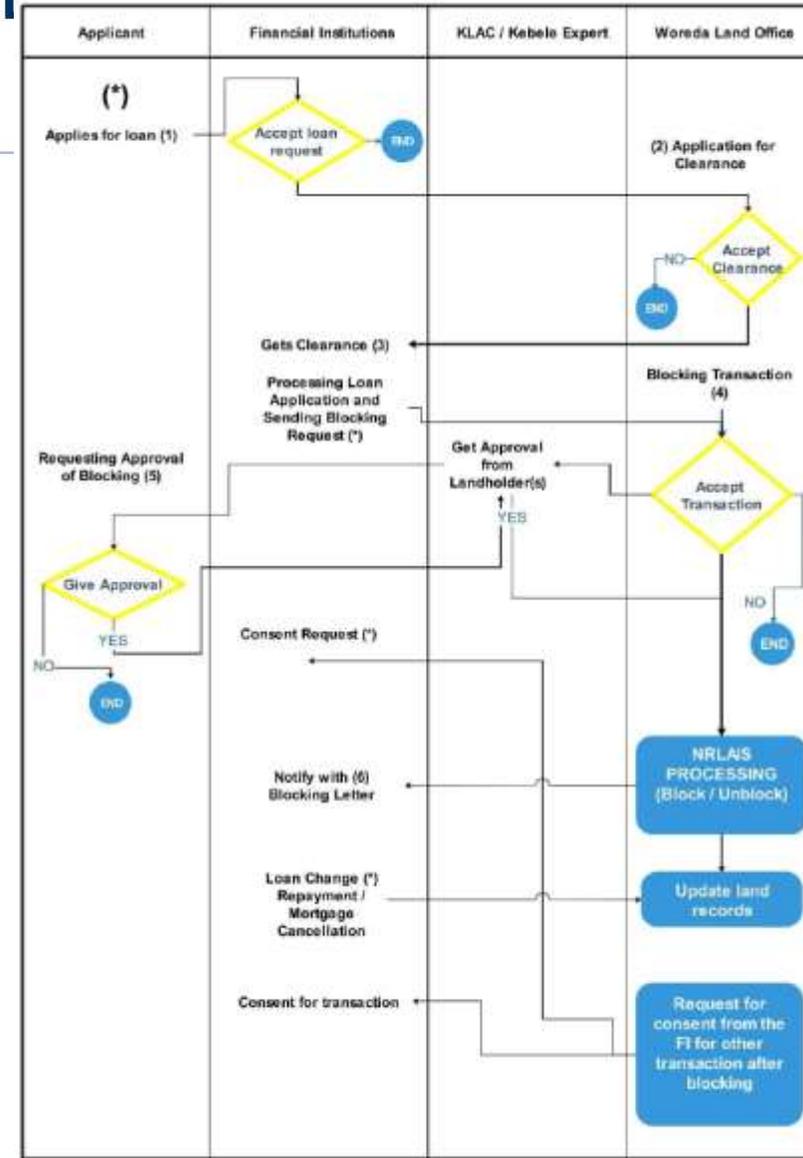
NRLAIS implemented transactions

Initially 21 transactions implemented now includes mortgage transactions (5 transactions) allowing landholders to obtain loans through financial institutions offering their landholdings as collateral

01 Boundary Correction	02 Divorce	03 Ex-Officio	04 Exchange	05 Expropriation	06 Inheritance with Will
07 Inheritance without Will	08 Consolidation / Merge	9 Split Parcel	10 Reallocation	11 Rent/Lease	12 Replacement of Certificate
13 Other Restrictive	14 Servitude / Easement	15 Simple Correction	16 Special Case	17 Inheritance with Will	18 Inheritance without Will
19 Expropriation (Manual)	20 Clearance	21 Register Mortgage	22 Modify Mortgage	23 Cancel Mortgage	24 Record Repayment
25 Gift	26 Marriage				

Ethiopian Land Administration

Loan application procedure in relation to NRLAIS mortgage transactions





In summary FFP-LA has been successful in Ethiopia



Thank you for your attention



Questions

- Does land legislation need to be adapted to allow FFP-LA?
- Does the land legislation in your country allow the FFP-LA approach?
- Do you have experience with FFP-LA?
- Do you have experience with open source software, such as QGIS, PostgreSQL, etc.?
- Any aspects of FFP-LA you need to discuss?