Social Tenure Domain Model – Online

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**Introduction**

Most people-to-land-relationships worldwide are not recognized nor identified. Existing land administration systems are incomplete and do not perform.

**Historical Background**

Cadastre and land registries were built with pen and paper long before the digital revolution. Mapping the land took decades and involved systematic surveys with expensive equipment and highly trained staff.

When the digital revolution set in, these paper maps, and cadastral books were simply transferred into database systems. The data acquisition process did not really have to change. As a result most IT-systems for land information, cadastre and land registry are based on old analog processes which were digitized after the fact.

**Digital Revolution**

The Digital Revolution has opened up a whole new approach to data acquisition and management. Today’s digital systems have the potential to go way beyond what legacy survey and cadastral software offers. The model is an ISO Land Administration Data Model (LADM) concept bridging the gap between customary and informal tenure with a standard for representing ‘people – land’ relationships independent of the level of formality, legality and technical accuracy.

**Materials and Methods**

The Global Land Tool Network (GLTN) is an alliance contributing to poverty alleviation. It developed the LADM concept bridging the gap between customary and informal tenure with a standard for representing ‘people – land’ relationships independent of the level of formality, legality and technical accuracy.

**STDM Online**

The STDM Desktop tool has proven that the gap between customary and informal tenure can be bridged with modern technology.

**STDM Online is a logical next step and opens the concept and model to a broader community of users who have little background in IT or cannot afford or maintain their own installation.**

STDM Online implements the same core technology as STDM with Postgres and PostGIS databases plus Sahana Eden as Web front end.

**Results**

The software platform STDM Online is a suite of tools addressing both the needs of ad-hoc projects on tenure and long term operation and maintenance of cadastral and registry information.

The SaaS (Software as a Service) platform is offered as a secure solution to get started working with a distributed team within 24 hours at lowest possible operational costs.

All components are Open Source and can be installed and operated on own premises without any licensing costs. The architecture is secure and scalable.

All data can be extracted from the system at any point in time through a standard SQL interface. This makes users and organizations independent of the platform operator.

**Conclusions**

Pro-poor land tools can be feature rich, reliable, scalable but at the same time affordable if the are licensed as Open Source software. Open Source is the way to go. The tools are mature, reliable and in operation around the world. It has been recognized internationally that legacy software and processes to create and maintain cadastre and land registries are out of date. New concepts have emerged that make better use of the new technology resulting in flexible and scalable fit-for-purpose solutions.

The STDM software has been released under an Open Source license and leverages tested and proven Open Source technology. These include the database Postgresql with PostGIS, the desktop software QGIS, the web-map client OpenLayers and the Humanitarian Relief Platform Sahana Eden and many more which are maintained by The Open Source Geospatial Foundation in the OSGeo Live distribution available at http://live.osgeo.org.

Contact the author Arnulf Christl (Metaspatial, Germany) for more information on how to get access to the first operational STDM Online platforms.

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**Literature**


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