# LTWG Standards Table of Contents - Navigation view Standards

This document is a supplement of the BMM and will be subject to meet the following criteria

- I. Purpose: This document is used as a supplement to the Blockchain Maturity Model (BMM) and is used to assess solutions, using blockchain technology to maintain the register of real property record, process transfer of ownership, update record of ownership and notify to all parties concerned.
- II. Real Property Defined: Real property is a parcel of land and everything that is permanently attached to the land. The owner of real property has all of the rights of ownership, including the right to possess, sell, lease, and enjoy the land.

#### A. Access to government systems

- 1. Tools necessary to verify data of Buyer and Seller
  - a) CAMA software (GIS maps)
  - b) Ability to access primary conveyance records through the local and state government data base. (Including all records evidenced by title and jurisdiction requirements and access)
  - c) Access to immediate, real time transaction information when any change of ownership takes place. This can include a court ordered transfer, purchase or sale, gifted or next of kin, or anything that would result in the change of ownership.
  - d) Ability to mirror a secondary source of ownership, as good as available for the property of question, if the primary conveyance records are not available or existent. (Dependent upon evidence needed to satisfy this requirement).

# B. Identification/Ownership verification of the property description

1. Geographic and physical attributes (coordinates, landmarks, etc.) of the property. Legal Description if applicable and incorporate GIS data (Software suggestion is CAMA software, used by Assessors, Appraisers and Modelers)

# C. Land Valuation

- 1. System should be equipped to determine market based land valuation based on comparable in the identified property market, staying within a certain perimeter. Must have capability to identify minimum transaction value. This feature will enable:
  - a) Collection of accurate duties and taxes

b) Market value payment by Government upon compulsory land acquisition or private equity, individual or institutional buyers.

# **D.** Transfer Event

1. System should be capable to record and apply law on different type of transfer/lease event e.g. sale, gift, inheritance, court orders, government acquisition.

# E. Transfer Process

 International standard transfer process with multiple checks and validation by the department concerned officer. Multiple checks must be applied including but not limited to physical presence of seller/legal attorney, bio-metric of the seller, photo of seller by system, ownership proof and details of unit sold e.g. type, size, measurement of boundaries, location, details of owner on the boundaries, clear pictures of the location and location validation by concerned officer.

# F. Real Estate Asset Type

- 1. System should have capability to identify and record different type of real estate asset as well as zoning, including but not limited to
  - a) House
  - b) Villa
  - c) Flat
  - d) Commercial Property (Industrial, GSA, Retail, Multi-Family, Land all types developed or undeveloped, Office Buildings, Hotels and Hospitality, Special purpose (churches or educational buildings or recreational facilities and Mixed Use)

# G. Title & Occupancy Information (Seller/Buyer or Current Owner)

- 1. Capable of recording the details of the chain of ownership, instrument used to show ownership (Whether General Warranty Deed or a Special Warranty Deed was used)
- 2. Capable of recording type of ownership
  - a) Life estate
  - b) Leasehold agreement
  - c) Cooperative Ownership
  - d) Condominium Ownership
  - e) Joint Tenancy
  - f) Tenancy In Common

- g) Trust Ownership
- h) Community property
- i) Easements
- j) Oil/Mineral Rights

#### H. Due Diligence Documents

- 1. All existing paper record must be maintained in the form of high resolution images to ensure readability and clarity, for accurate store in appropriate digital system within the blockchain.
  - a) Tax certificate
  - b) Deed
  - c) Encumbrances
  - d) Platt Maps
  - e) Contingencies
  - f) All Inspection Documentation, including but not limited to objections, resolutions, extension on dates and deadlines, receipts
  - g) Any and all public notice documentation
  - h) Any settlement, disputed or contested claims documentation
  - i) Documentation of any certificates, related to the property such HOAs, development plans, platt maps, permits, easements or encroachment documentation
  - j) High Resolution Mapping and zoning information or change of zoning, use permits, special use permits etc.
  - k) County and state measurements in Square Feet, acres if applicable or Meters, depending on location.
  - l) Surveys, ILCs
  - m) Property description and breakdown of internal layout (Bedrooms bathrooms, etc), external layout (Sheds, barns etc.)
  - n) Any bill of sale tied to the sale of the personal property of a sale.

#### I. Inheritance Law

- 1. System must have a provision to incorporate the inheritance law of the country and any other applicable valid law of the land, the system should have further capacity to accommodate special court orders on account of inheritance transfer.
- 2. Court Order
  - a) System must have provision to record the orders issued by the court of law about the real estate asset e.g. stay order, transfer order, ban on transfer, acquisition order etc. etc.

### J. Legacy system

1. System must be able to inherit all features and functions of legacy system and new system should not limit or eliminate the feature and productivity provided by the existing system, but instead improve it's capabilities.

### K. Speed of Title Record System

1. System must be capable to process X% (e.g. 10-20% of total record) of transaction in the real time and simultaneously. A careful scientific consideration to be carried out to identify the system needs for the hardware, software, infrastructure and human resources. An underutilized system is as harmful as an underperforming system.

### L. Paper Record

1. In additional to digital record, system must capable to provide printed record of title with system generated endorsed stamp or special mark.

# M. GIS Data/Record of Surveys Updates

1. Land survey on regular interval (e.g. 6-12 month) to be carried out to re-define and update the record. Real estate record is very dynamic and keeps constant update as certain events (e.g. abrupt weather, infrastructure works, inheritance, new housing societies, mergence/depletion of Islands etc. etc.) effects type, size and/or nature of real estate asset.

#### N. Government Orders

1. Eminent Domain or government sell/buy restrictions or change of laws, due to economic, social or environmental factors.

#### **O.** Financial Exchanges

 System should have the ability to record the history and all details of monetary exchange for property, such as loan, debt, cash transfer, institution used to facilitate transaction including but not limited to exchange QI fees (Qualified Intermediary), closing fees, DST QI fees, settlement statements from lenders or Title and Bill of Sale tied to transactions. In some cases, the documentation of the sources of wealth, ensuring this standard counters the use or housing of illegal and unreported money in all real estate sectors.

# P. Environment Information

- 1. System should have the capability to categorize areas, parallel to county records and insurance premiums, regarding areas known for being high risk, due to reoccurring threat of extreme weather conditions or Seismic Zone Classification.
- 2. Any and all documentation pertinent to environmental inspections including but not limited to mold, Phase I or Phase II, IAQ (Indoor Air Quality), lead paint, radon, Septic, water, wetland, Stormwater assessment etc.