OVERVIEW OF TRANSMISSION LINE INTEGRATED WITH LAND CADASTRE IN BRAZIL

Francisco Henrique de Oliveira - chicoliver@yahoo.com.br
Mapping Engineer
Geoprocessing Lab
State University of Santa Catarina - UDESC

Guilherme Clasen Wosny - gcwosny@hotmail.com
Geographer
Federal University of Santa Catarina - UFSC
Civil Engineer program post graduate

Julia Cucco - juliacucco@yahoo.com
Geographer
State University of Santa Catarina - UDESC

TLs BRAZIL
89,000 Km TLs
Long Distances
Rural and Urban Areas
Private and Public Facilities

No Land Records
No Cartography - >1:25,000
Rural Areas- (Lei 10.267)

Since 2005
Parcel identification
Land record
Georreferencing
National database
50cm parcel vertex precision

Urban Areas

Cadastre - No Standardizations
According to facilities needs
Difficult to manage/plan
High costs
Duplicated mapping areas

Expropriation and Compensation Process

- The responsibility of the concessionaire of Electric Energy is to define the boundaries between the parcels;
- It is necessary that the owners of the parcels be present at the time of the survey’s defining the limits;
- Inconsistency between the registered areas (legal) and raised (real);
- Identification of the right proprietor or of the lease holding proprietor.

- Compensatory calculations;
- Appraisal efficient total cost of the project;
- Satisfaction of agreements for use and occupation of the territory between the company and owners;
- Possibility of territorial (re)ordering, following the principles of planning and land management;
- Reducing costs with teams of topography/geodesy, optimization of survey work;
- Efficient asset management by utilities in the electricity sector;
- Compliance with the laws of environmental protection;

Brazil’s Next Step

areas with low utilization
Thank you!