



# SIGIT system for Guatemala and Honduras

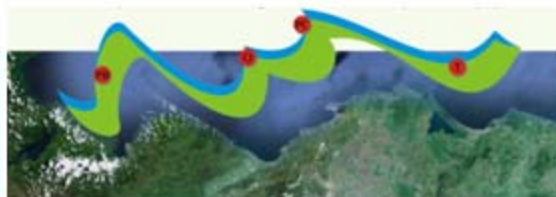
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LADM 2013

Kuala Lumpur, Malaysia, September 25th 2013



# Project Integral Land Management

- Financed by EuropeAid
- Budget EURO 3,700,000
- Municipality of Puerto Cortes, Municipality of Omoa, Municipality of Tela, Municipality of Puerto Barrios





# Proyecto Gestión Integral de Tierras



*Puerto Barrios*



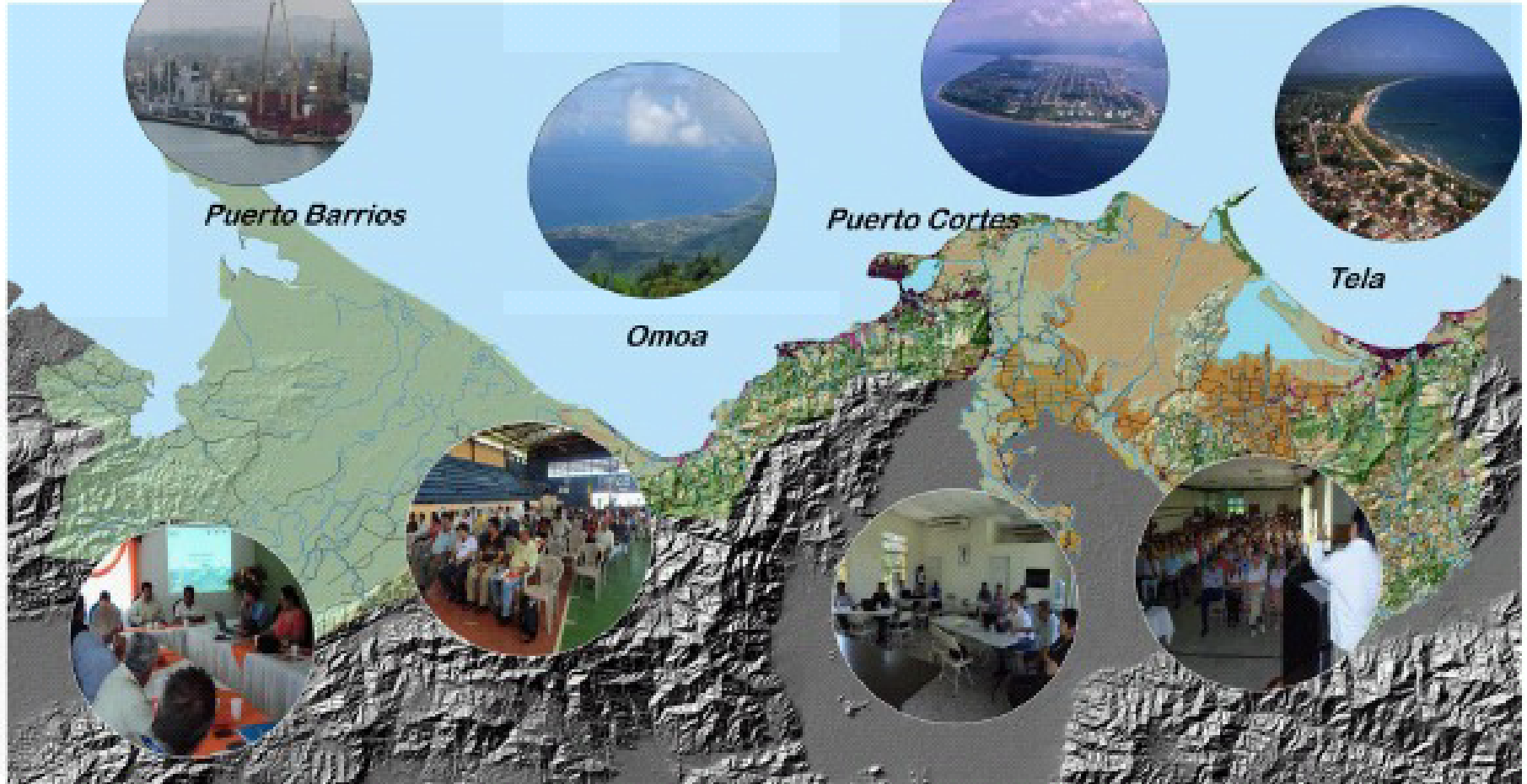
*Omoa*



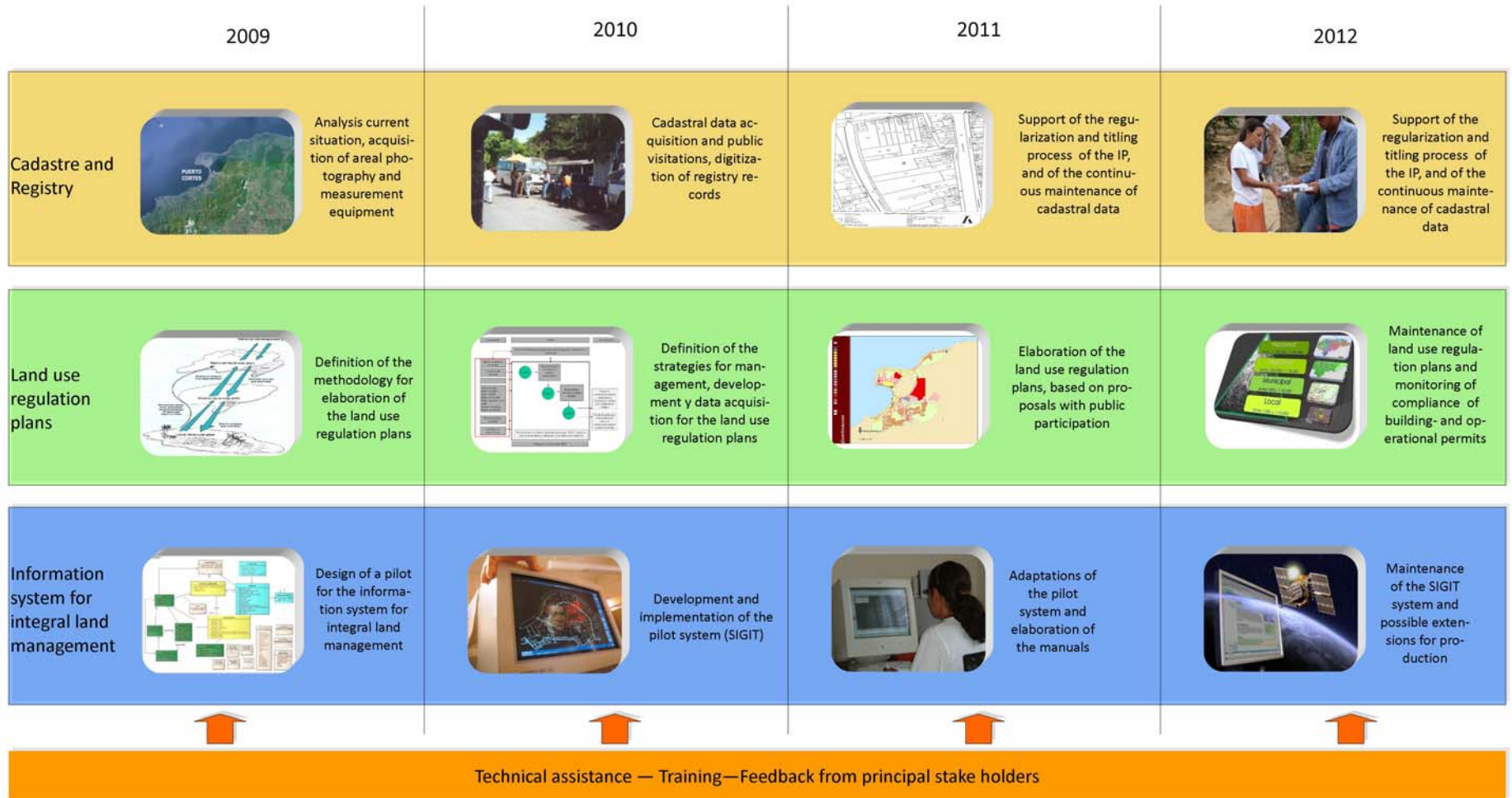
*Puerto Cortés*



*Tela*



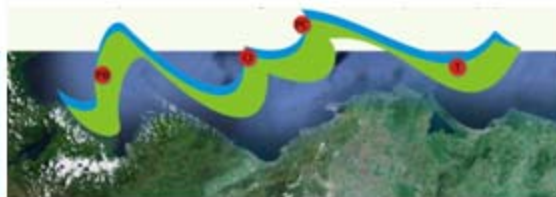
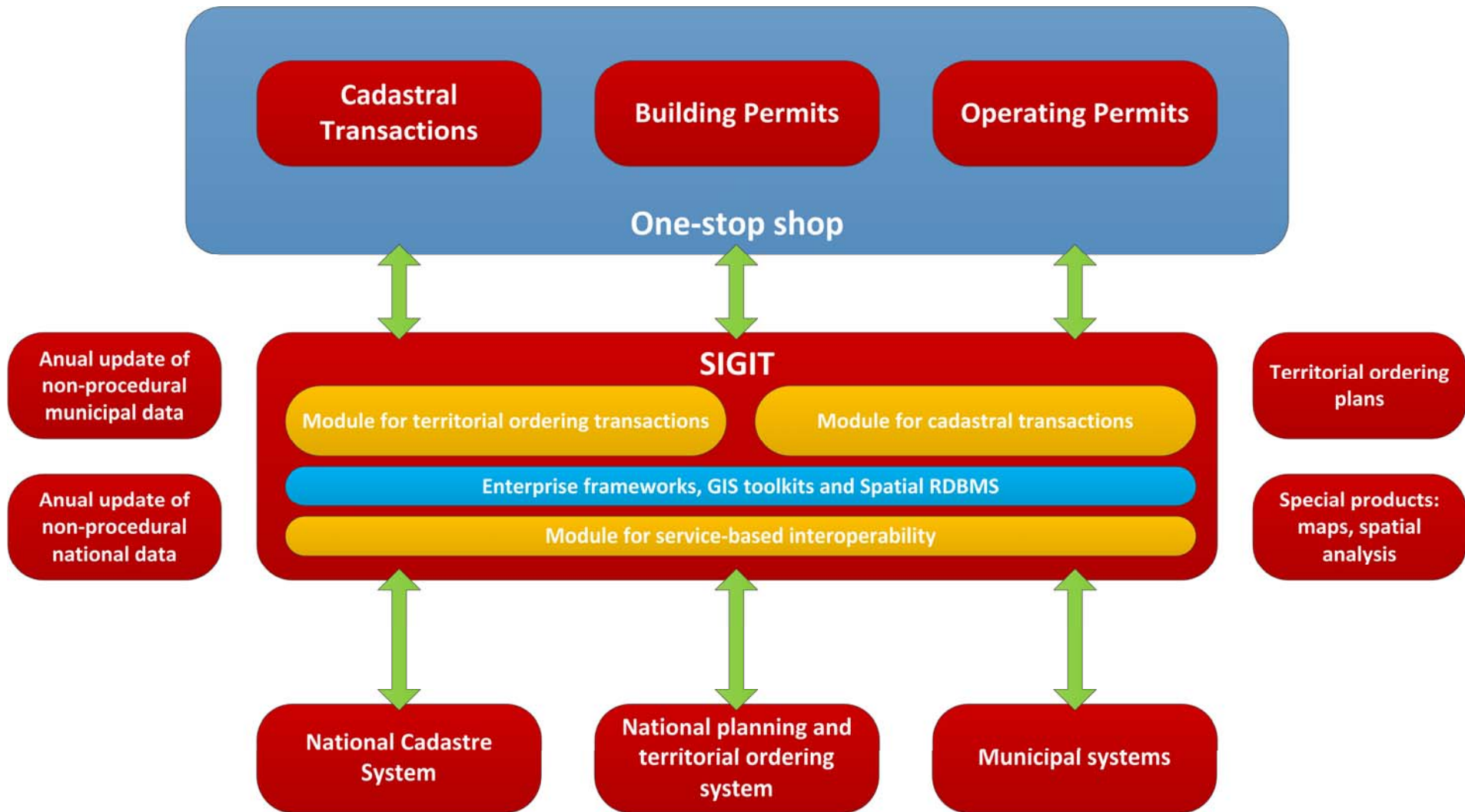
## Activities and principal product of the project



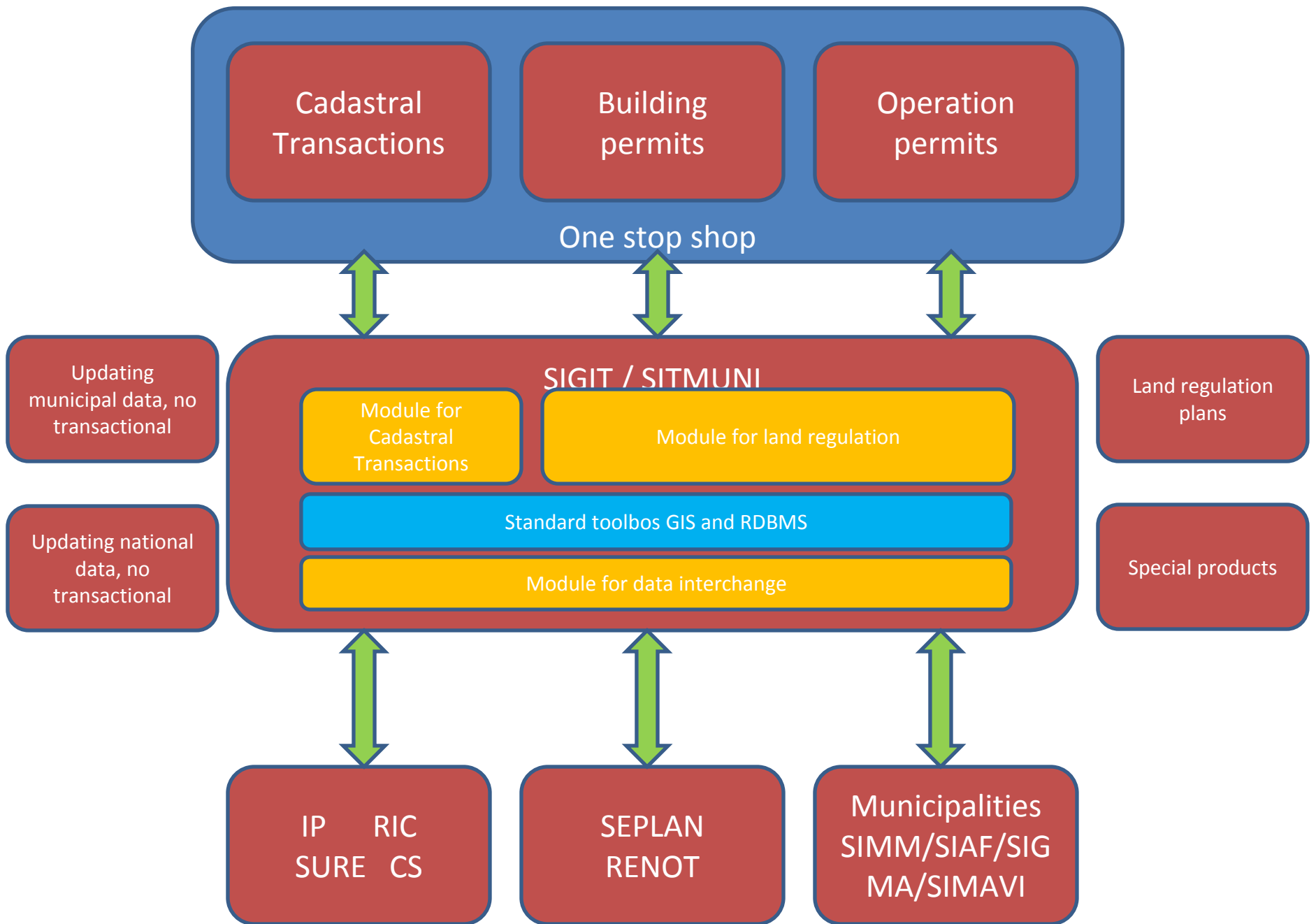
# Objectives SIGIT

- Cadastral maintenance at local level with updating mechanism to national level
- Maintenance of land regulation plans at local level with updating mechanism to national level
- Management of building permits and operation permits
- Provide general land administration platform

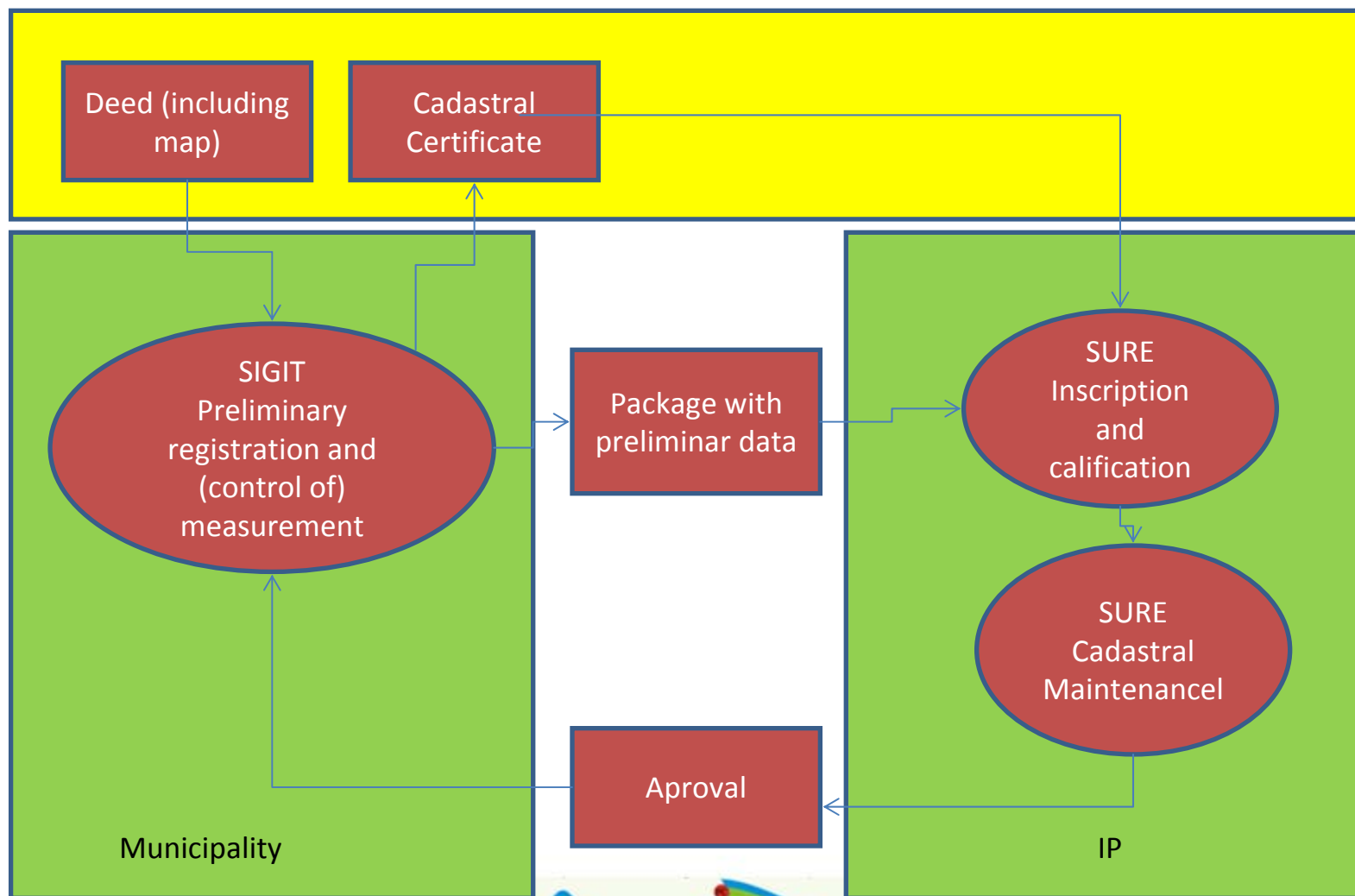








# Agreement IP procedure





# Characteristics SIGIT

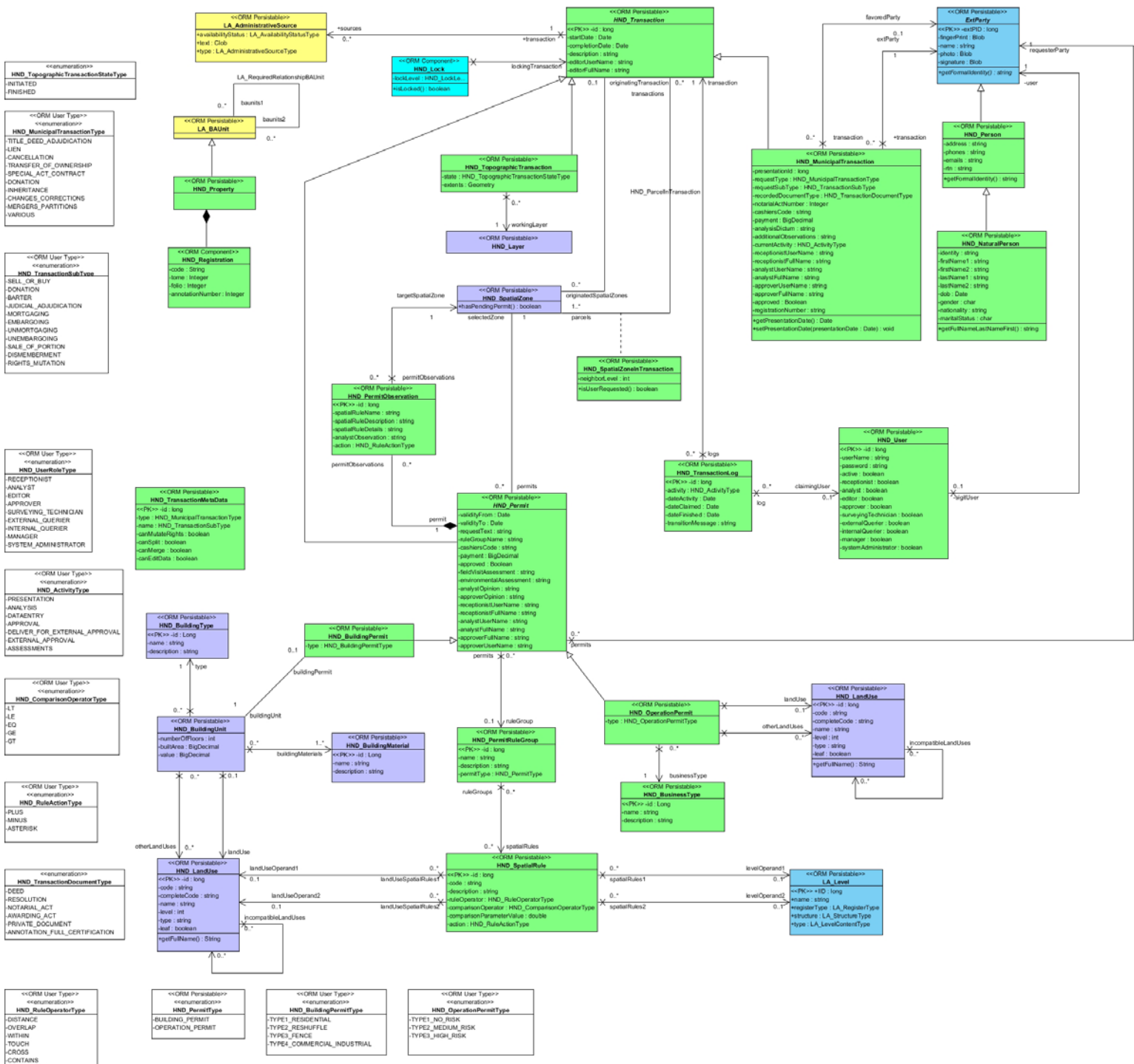
- Transactional system
- Database with history of both administrative and geometric data
- Use of Land Administration Domain Model
- Integration of land rights, land use and land planning data
- Based on open source software
- Based on mixed local / central implementation



# SIGIT implementation

- Implementation Proof of Concept in April 2011
- Necessary cooperation of IP/PATH to adapt actual SURE system to receive transaction data
- All 2011 will be adaption period for fine tuning of system
- Replication in other municipalities via AMHON / IP / Kadaster projects





**Enumeration: HND\_TopographicTransactionStateType**  
INITIATED  
FINISHED

**ORM User Type: HND\_MunicipalTransactionType**  
TITLE\_DEED\_ADJUDICATION  
LIEN  
CANCELLATION  
TRANSFER\_OF\_OWNERSHIP  
SPECIAL\_ACT\_CONTRACT  
DONATION  
INHERITANCE  
CHANGES\_CORRECTIONS  
MERGERS\_PARTITIONS  
VARIOUS

**ORM User Type: HND\_TransactionSubType**  
SELL\_OR\_BUY  
DONATION  
BARTER  
JUDICIAL\_ADJUDICATION  
MORTGAGING  
EMBARGOING  
LUNEMORTGAGING  
LUNEMBARGOING  
SALE\_OF\_PORTION  
DISMEMBERMENT  
RIGHTS\_MUTATION

**ORM User Type: HND\_UserRoleType**  
RECEPTIONIST  
ANALYST  
EDITOR  
APPROVER  
SURVEYING\_TECHNICIAN  
EXTERNAL\_QUERIER  
INTERNAL\_QUERIER  
MANAGER  
SYSTEM\_ADMINISTRATOR

**ORM User Type: HND\_ActivityType**  
PRESENTATION  
ANALYSIS  
DATENTRY  
APPROVAL  
DELIVER\_FOR\_EXTERNAL\_APPROVAL  
EXTERNAL\_APPROVAL  
ASSESSMENTS

**ORM User Type: HND\_ComparisonOperatorType**  
LT  
LE  
EQ  
GE  
GT

**ORM User Type: HND\_RuleActionType**  
PLUS  
MINUS  
ASTERISK

**Enumeration: HND\_TransactionDocumentType**  
DEED  
RESOLUTION  
NOTARIAL\_ACT  
AWARDING\_ACT  
PRIVATE\_DOCUMENT  
ANNOTATION\_FULL\_CERTIFICATION

**ORM User Type: HND\_RuleOperatorType**  
DISTANCE  
OVERLAP  
WITHIN  
TOUCH  
CROSS  
CONTAINS

**ORM Persistence: HND\_TransactionMetaData**  
PK: id: long  
Type: HND\_MunicipalTransactionType  
Name: HND\_TransactionSubType  
CanMultiRights: boolean  
CanSell: boolean  
CanMerge: boolean  
CanEditData: boolean

**ORM Persistence: HND\_BuildingType**  
PK: id: long  
Name: string  
Description: string

**ORM Persistence: HND\_BuildingUnit**  
PK: id: long  
NumberOfFloors: int  
SurfaceArea: BigDecimal  
Volume: BigDecimal

**ORM Persistence: HND\_BuildingMaterial**  
PK: id: long  
Name: string  
Description: string

**ORM Persistence: HND\_PermitsRuleGroup**  
PK: id: long  
Name: string  
Description: string  
PermitType: HND\_PermitsRuleGroup

**ORM Persistence: HND\_SpatialRule**  
PK: id: long  
Code: string  
Description: string  
UseOperator: HND\_RuleOperatorType  
ComparisonOperator: HND\_ComparisonOperatorType  
ComparisonParameterValue: double  
Action: HND\_RuleActionType

**ORM Persistence: HND\_BuildingType**  
PK: id: long  
Name: string  
Description: string

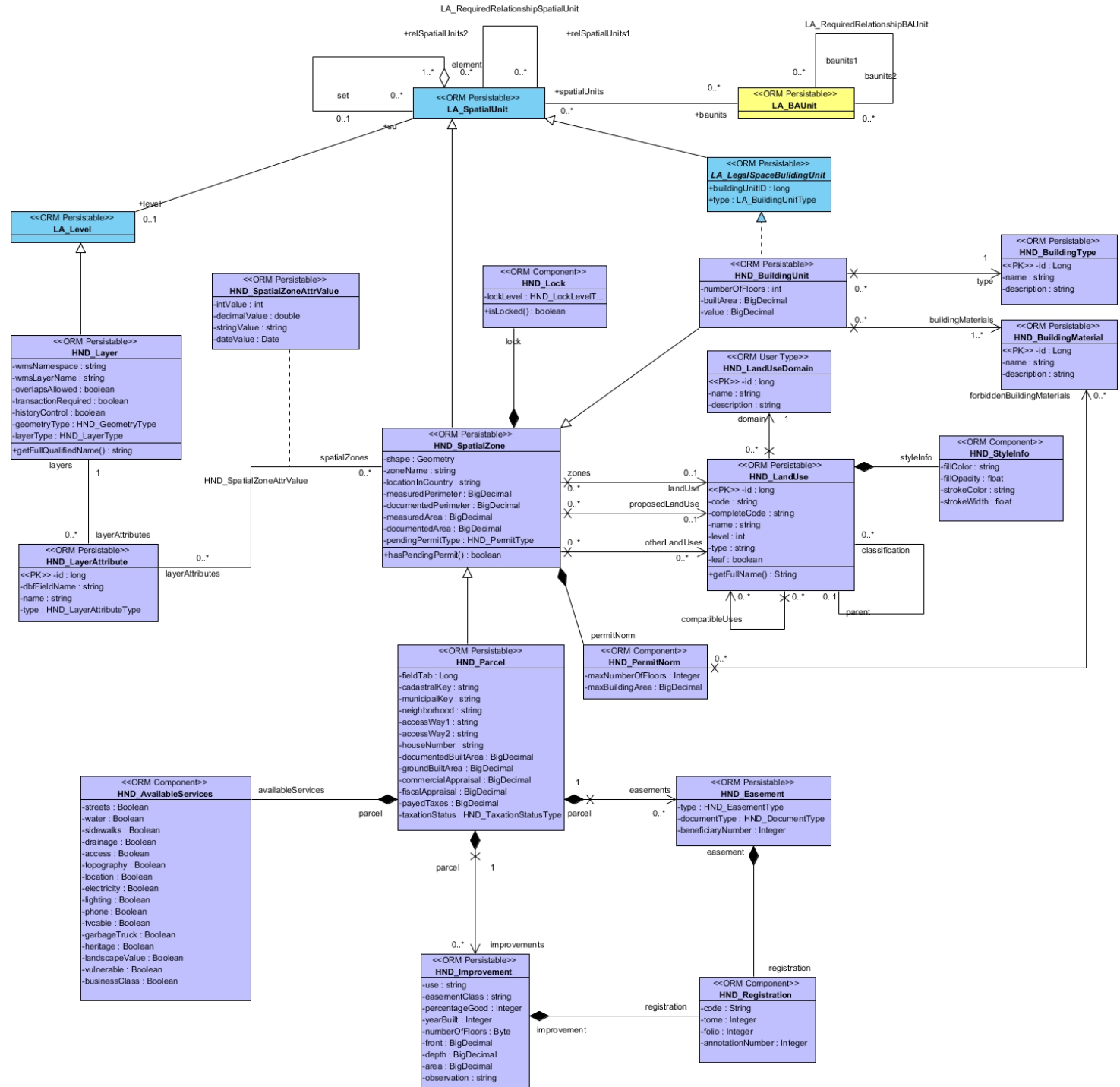
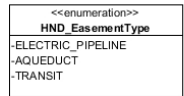
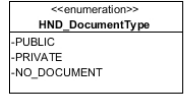
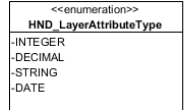
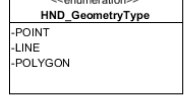
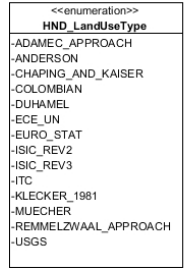
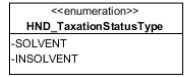
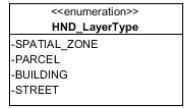
**ORM Persistence: HND\_OperationPermit**  
PK: id: long  
Code: string  
ComplexCode: string  
Name: string  
Level: int  
Type: string  
IsSelf: boolean  
HgtFullNames: String

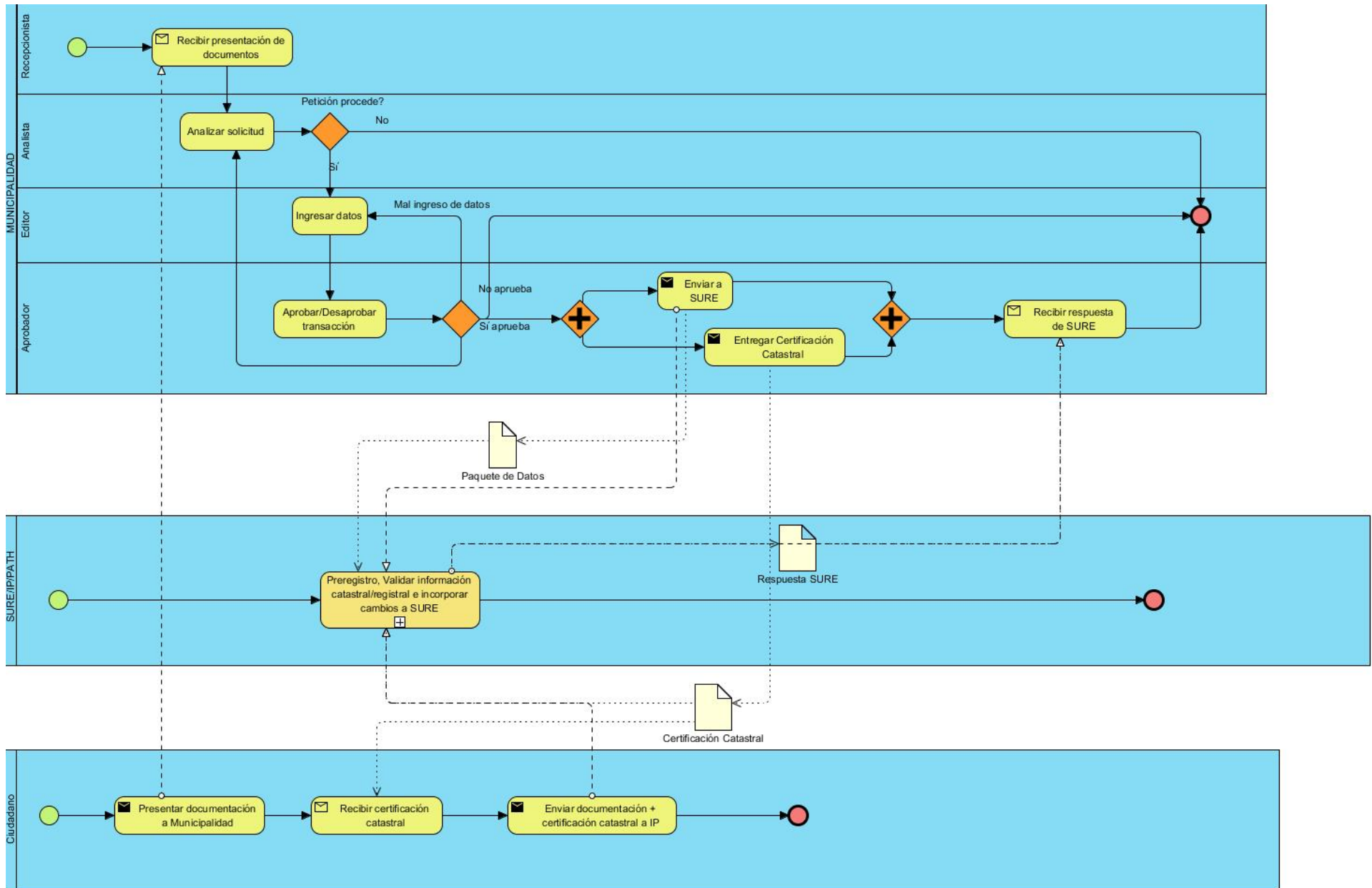
**ORM Persistence: LA\_Level**  
PK: id: long  
Name: string  
RegisterType: LA\_RegisterType  
Structure: LA\_StructureType  
Type: LA\_LevelContentType

**ORM Persistence: HND\_PermitsType**  
PK: id: long  
PK: id: long  
PK: id: long  
PK: id: long  
PK: id: long

**ORM User Type: HND\_BuildingPermitType**  
TYPE1\_RESIDENTIAL  
TYPE2\_RESURFICLE  
TYPE3\_FENCE  
TYPE4\_COMMERCIAL\_INDUSTRIAL

**ORM User Type: HND\_RuleOperatorType**  
TYPE1\_NO\_RISK  
TYPE2\_MEDIUM\_RISK  
TYPE3\_HIGH\_RISK







SIGIT

Aceptar

Seguir más tarde

Regresar a Analista

Visualizar datos de la solicitud

Documentación adjunta

[Inicio](#)  
[Visualizador](#)  
[Acerca de...](#)

INGRESO DE DATOS

Consultas

[Parcelas](#)  
[Transac](#)  
[Permiso](#)  
[Permiso](#)

Flujo de

[Visualiz](#)  
[Docume](#)

Predic

Parcelas  
catastra

Parcela  
50002 /

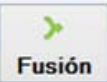
Haga cli

[50002 /](#)  
- [Selecc](#)

[50001 /](#)  
- [Selecc](#)

Parcelas

[619 / \(s\)](#)  
[620 / \(s\)](#)  
[601 / \(s\)](#)



División de zona espacial/parcela

Zona seleccionada 50002 / (sin clave catastral)

Lista de puntos

Rumbo y distancia a cada punto iniciando en punto de referencia conocido

Par de puntos de referencia conocidos con rumbo y distancia



Ingrese las coordenadas

[Seleccionar](#)

NORTE

ESTE

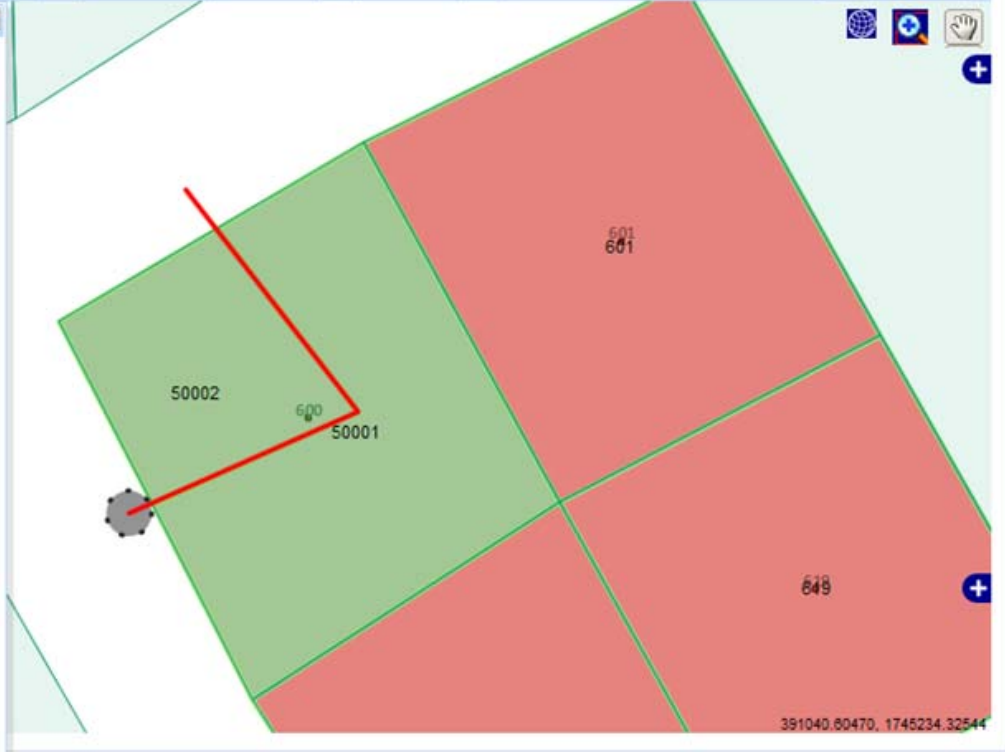
1745227.7336435 N 391030.35078985 E

1745217.7359 N 391038.1308 E

1745213.1584482 N 391027.78731329 E

Input fields for coordinates with 'N' and 'E' labels

Aplicar cambios



Aceptar

Seguir más tarde

Regresar a Analista

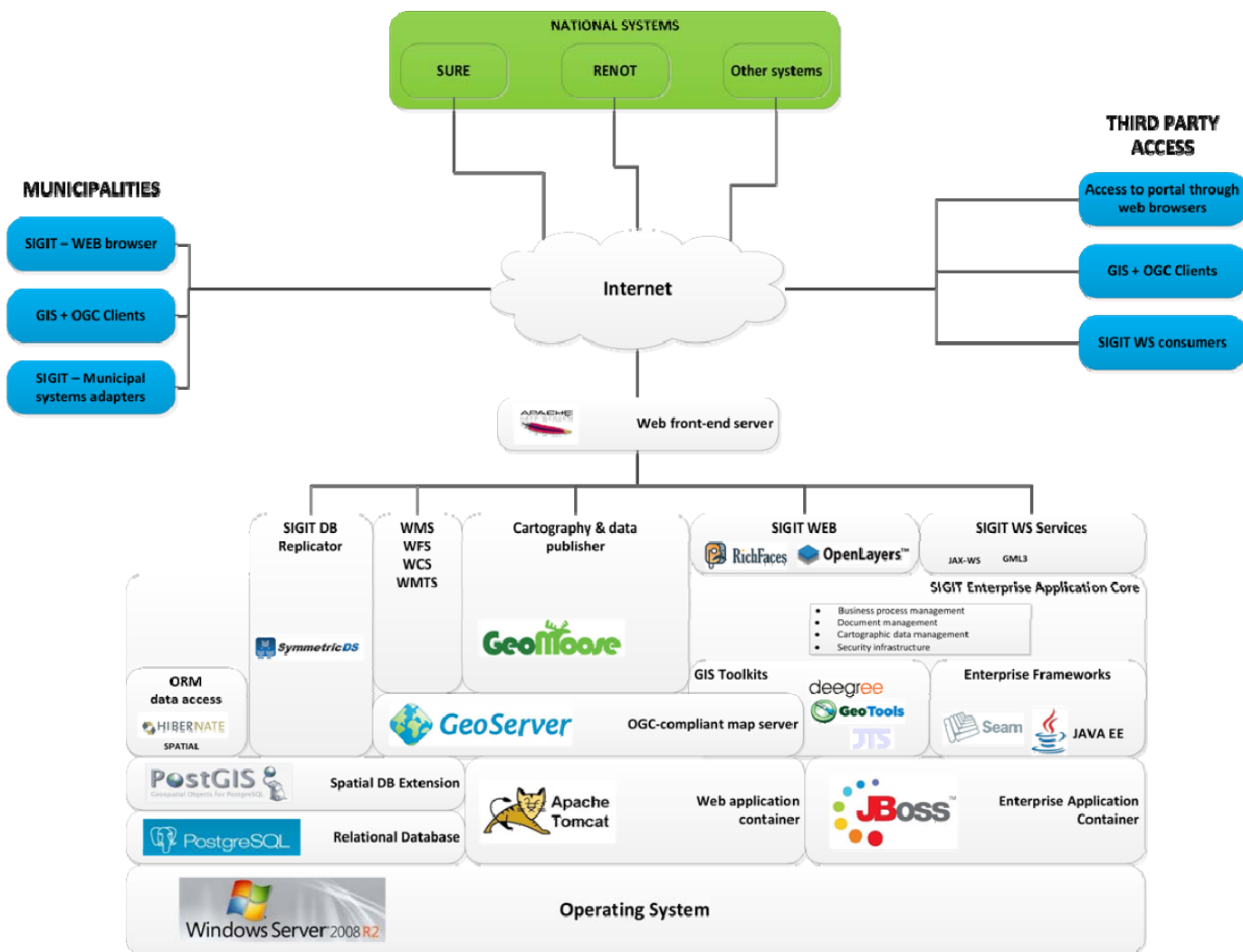
Visualizar datos de la solicitud

Documentación adjunta

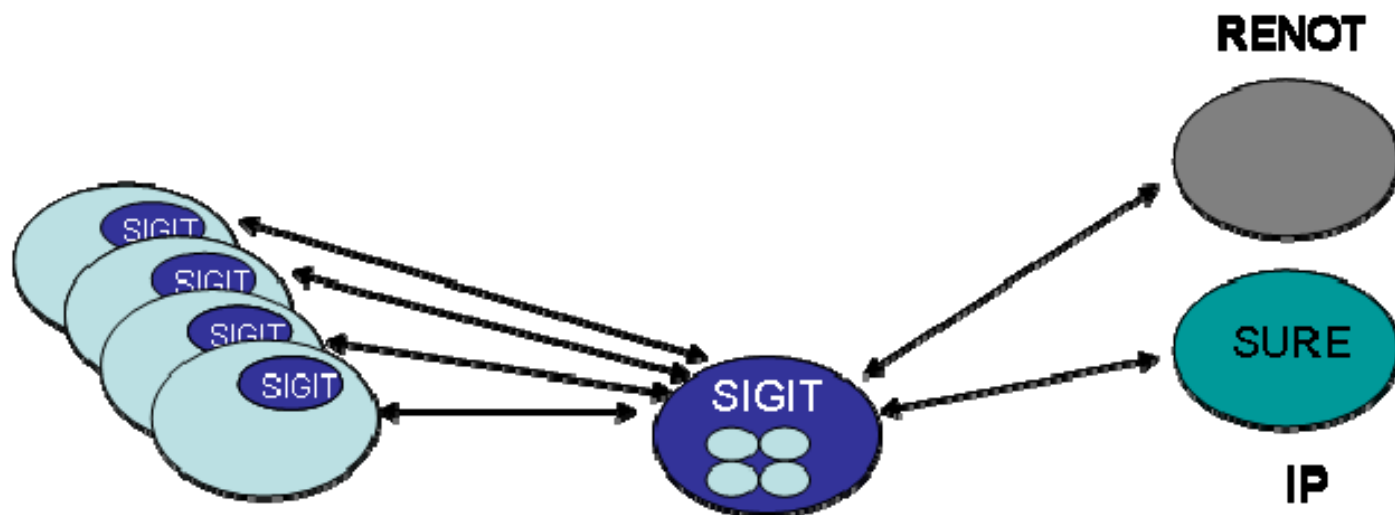




# Tecnical infrastructure



# Implementation model



**Municipality:**  
 Core functions  
 Black Box  
 minimum maintenance

**Central:**  
 All functions incl publishing  
 Backup/recovery  
 Continuity  
 Synchronization

**Service Provider:**  
 - Municipality  
 - Foundation



# Thank You!

