GDRI INTI

INTI Conference Huelva 2013

21st-22nd November

Social Innovation and new ways of governance for the socio-ecological transition

The "WebGIS" as a Tool for Territorial Diagnostic and Dialogue Among Territorial Actors: What is the Optimal Format within a Socio-Ecological Transition Context?

Mathieu Jaspard (Université de Liège)
Blanca Miedes Ugarte (Universidad de Huelva)
Celia Sánchez López (Universidad de Huelva)
Antonio Moreno Moreno (Universidad de Huelva)
Guénaël Devillet (Université de Liège)

Universidad de Huelva

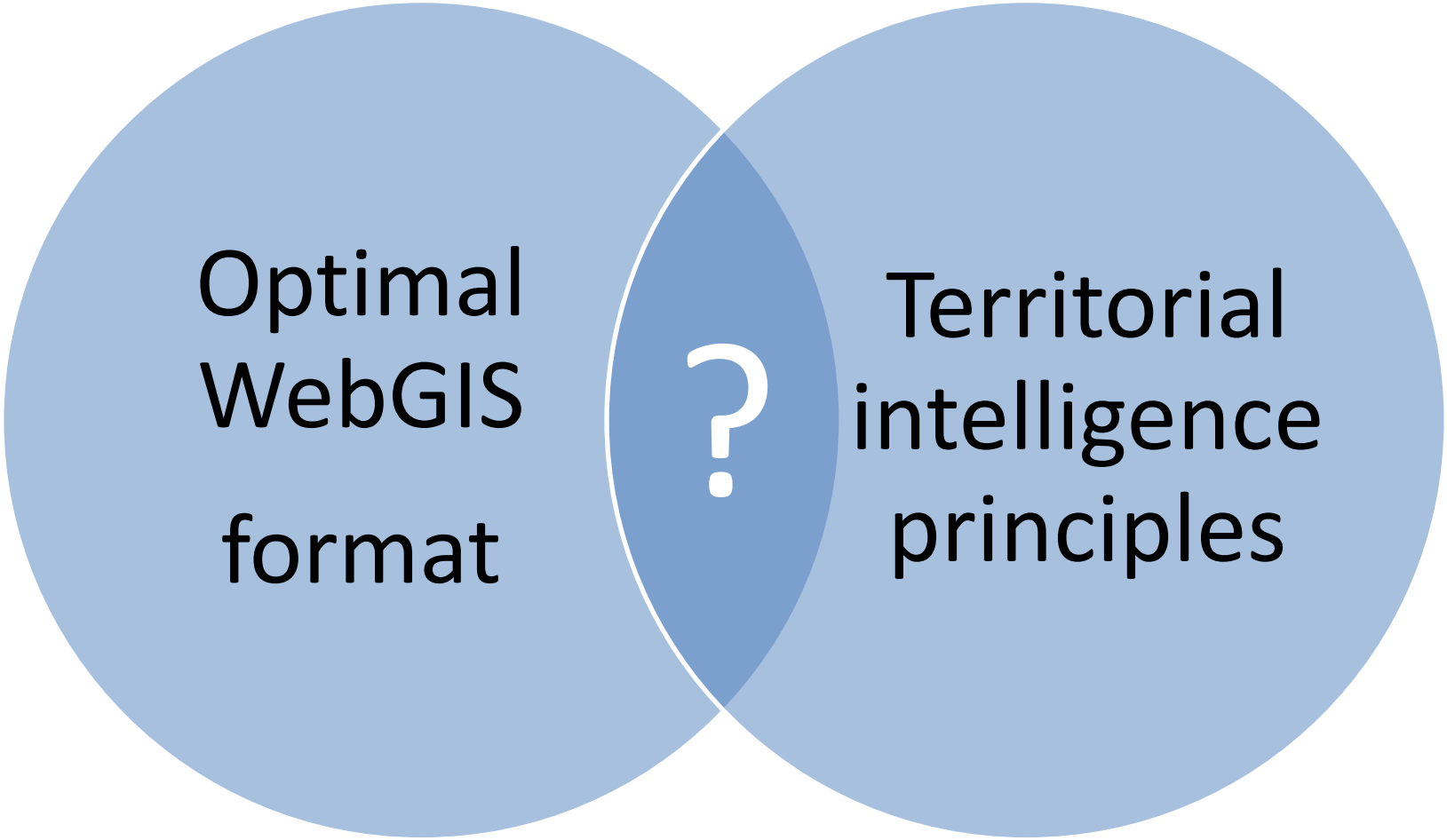
c3it
Centro de Investigación Internacional en Inteligencia Territorial

Agenda

1. Context and Objectives
2. Framework Description: WebGIS-IT Concepts
   - WebGIS : Notions and Definitions
   - IT : Context of Territorial Actions
3. Observations and Analyses Based on WebGIS-IT Examples
4. Conclusions and Future Perspectives

GDRI INTI
Universidad de Huelva
c3it Centro de Investigación Internacional en Inteligencia Territorial

1. Context and Objectives

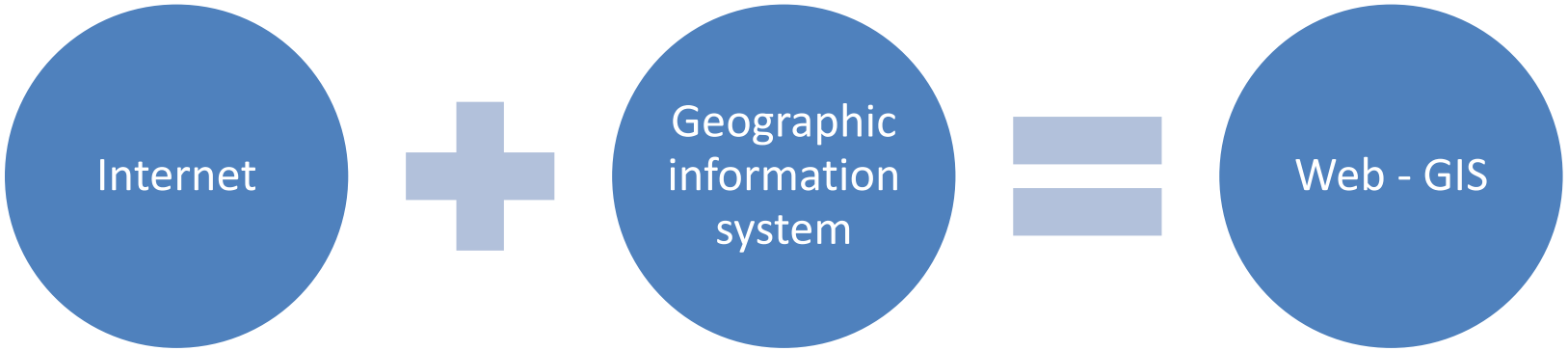


GDRI INTI
Universidad de Huelva
c3it
Centro de Investigación Internacional en Inteligencia Territorial

2. Framework Definition

- What is a WebGIS ?

“ Online geographic information diffusion”



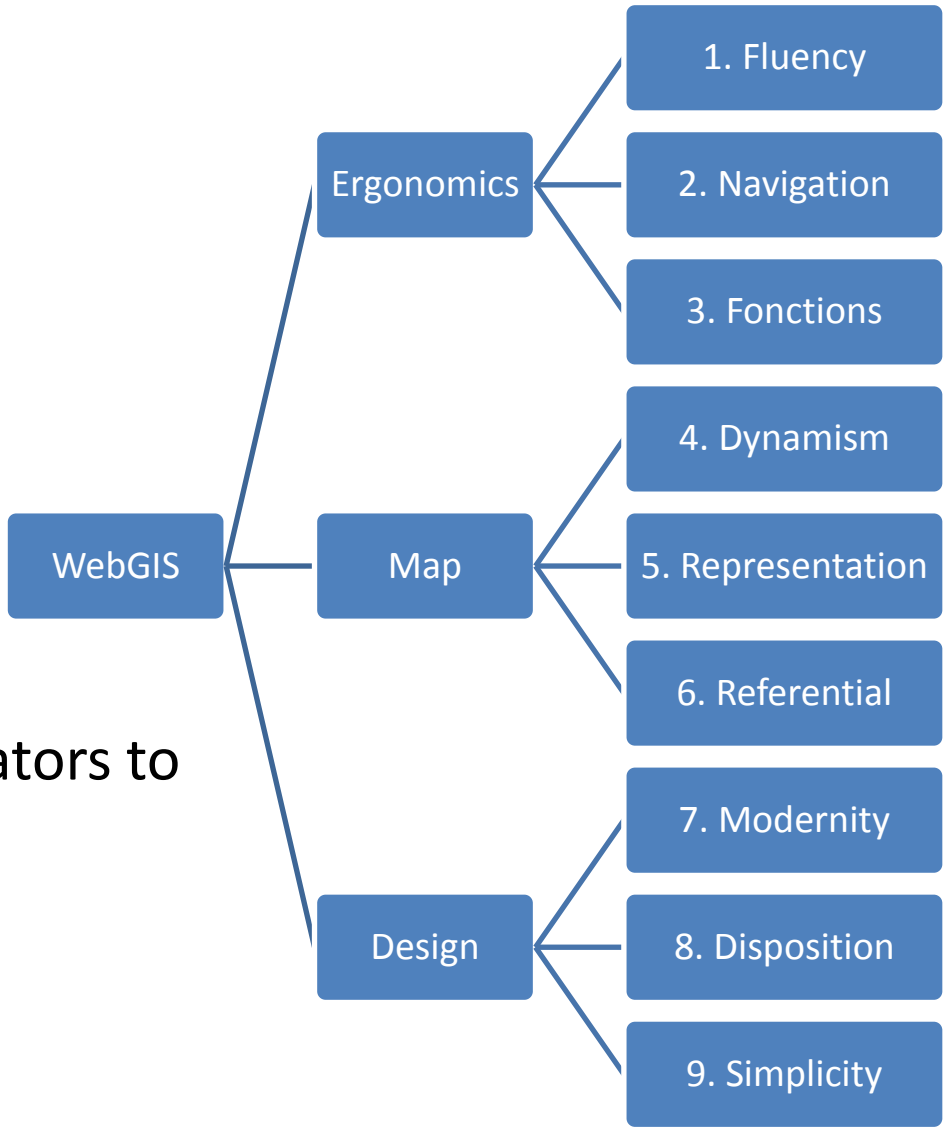
GDRI INTI
Universidad de Huelva
c3it
Centro de Investigación Internacional en Inteligencia Territorial

2. Framework Definition

- Spatial data server: notion of centralisation and distribution of geographic information
- Advanced open source software solutions (for example, the solution: PostGIS - GeoServer - OpenLayers)
- International standards and organisations (OGC and OSGEO)
- Many advantages (data updates, dynamic mapping; indicators combination; representation customisation; collaboration among actors…)

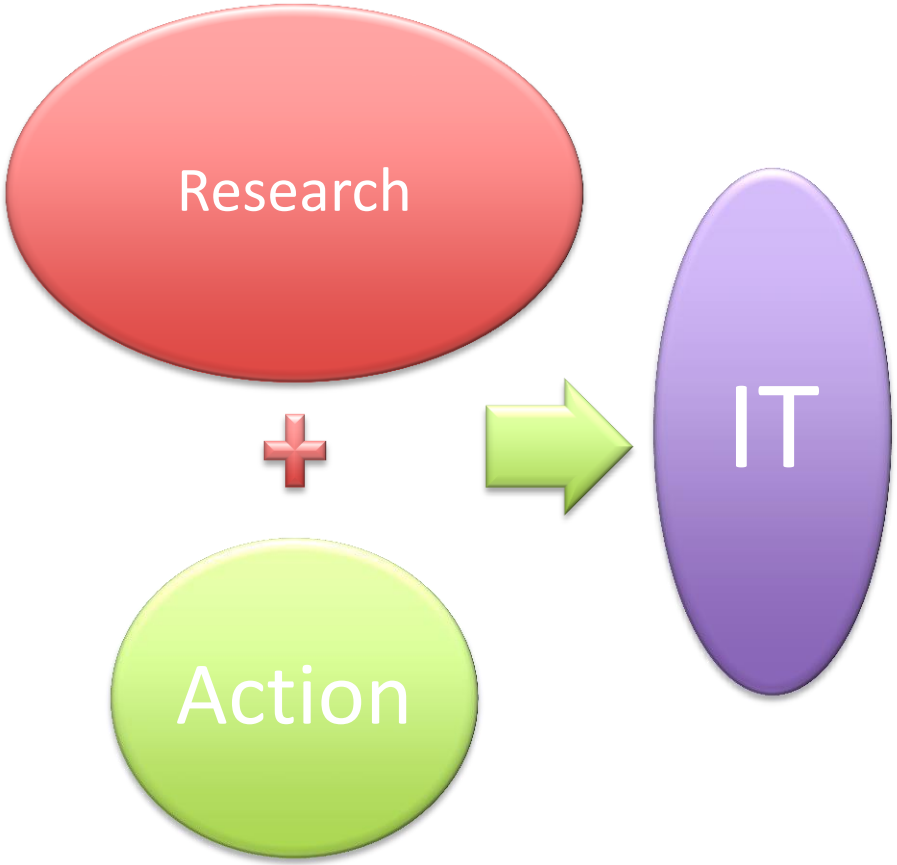
2. Framework Definition

- Technical elements :
  - A few key rules
    - Don’t feel confused.
    - Three clicks rules;
    - A function = A need ;
    - …
  - Interface development
    - Identification of 9 indicators to describe a WebGIS-IT



GDRI INTI
Universidad de Huelva
c3it Centro de Investigación Internacional en Inteligencia Territorial

2. Framework Definition



GDRI INTI
Universidad de Huelva
c3it Centro de Investigación Internacional en Inteligencia Territorial

http://www.territorial-intelligence.eu/

2. Framework Definition

- "Territorial intelligence is a process where information technologies are organised to produce":
  - Knowledge related to the understanding of territorial structures and dynamics,
  - Tools to be used by territorial actors to create, use and share knowledge for sustainable territorial development.

2. Framework Definition

GDRI INTI
Universidad de Huelva
c3it
Centro de Investigación Internacional en Inteligencia Territorial

2. Framework Definition

Territorial resources organisation	• Seek resources of the targeted territory • Partnership organisations
Knowledge and competency pooling	• Multi-dimensional project • Co-learning
Participants accountability	• Organise collaborative project management • Participant's deontology and autonomy
Commun results control	• Valuation of territorial impact • Sustainability of actions

GDRI INTI

Universidad de Huelva

c3it Centro de Investigación Internacional en Inteligencia Territorial

3. Observations and Analyses

- What is the optional format of a WebGIS-IT?
- An application must fulfill its objectives;
- A “User friendly” application ;
  - Satisfaction level ;
  - Usage level (Gap between the expected and actual use);
- An application integrates IT principles.

3. Observations and Analyses

Google Maps

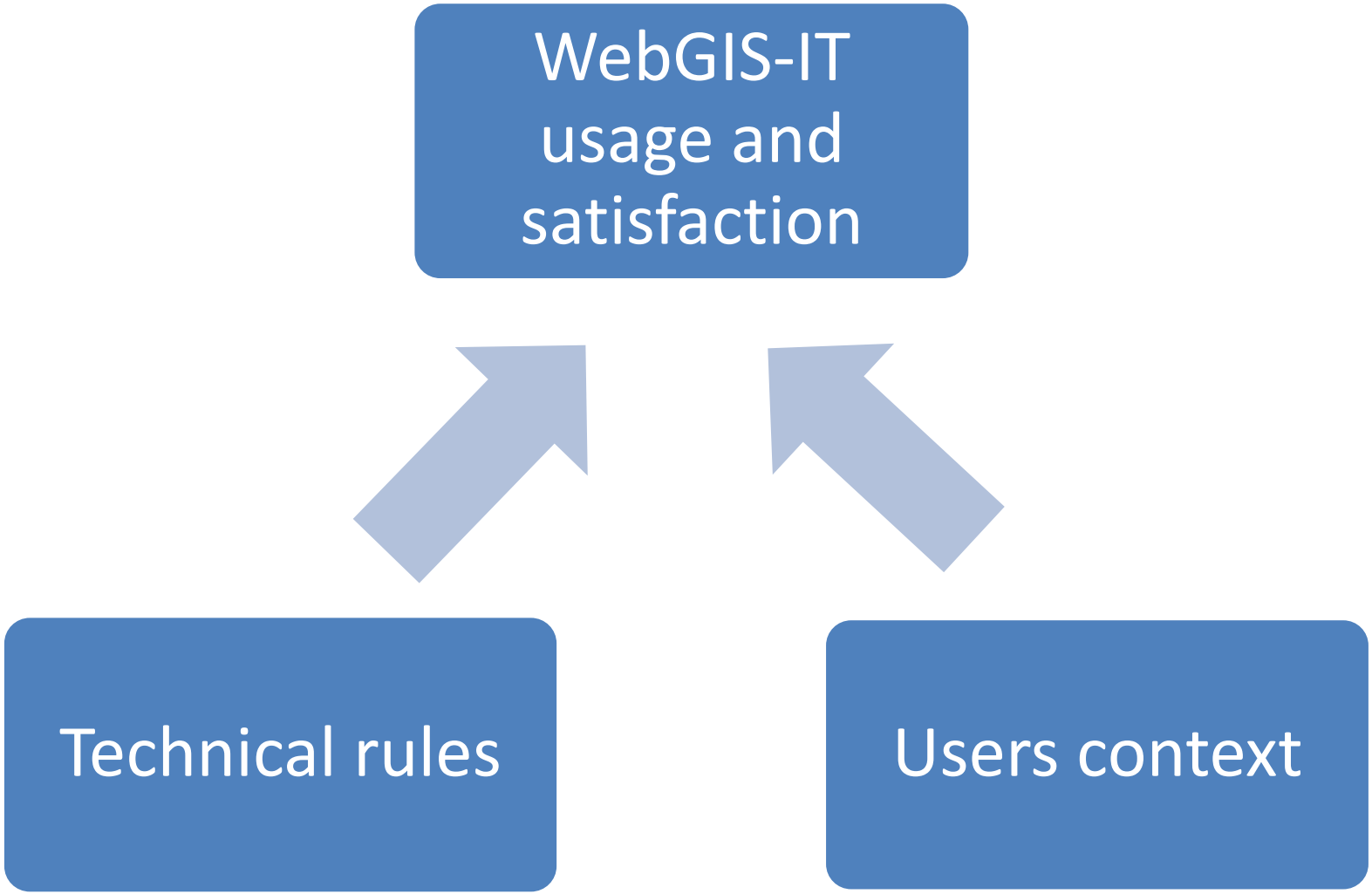
Géoportail

GDRI INTI

Universidad de Huelva

c3it
Centro de Investigación Internacional en Inteligencia Territorial

3. Observations and Analyses



GDRI INTI
Universidad de Huelva
c3it Centro de Investigación Internacional en Inteligencia Territorial

3. Observations and Analyses

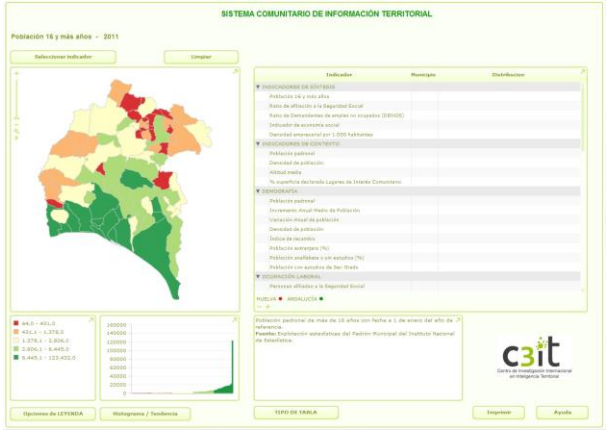
- Users context :
  - Their needs: **WebGIS-IT = a tool**

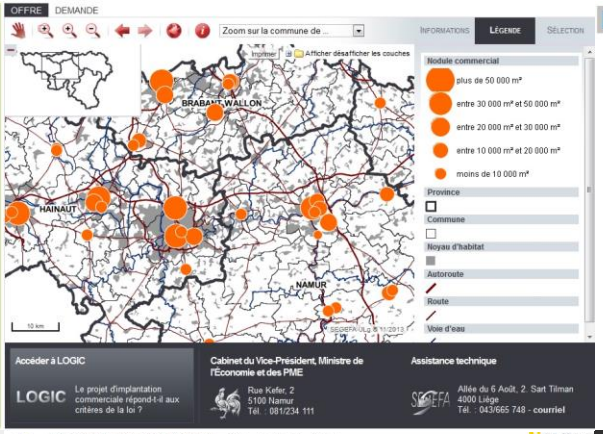
    The application must be developed according to the users needs (investigation among them).
  - Their efficiency : **WebGIS-IT = an opportunity**

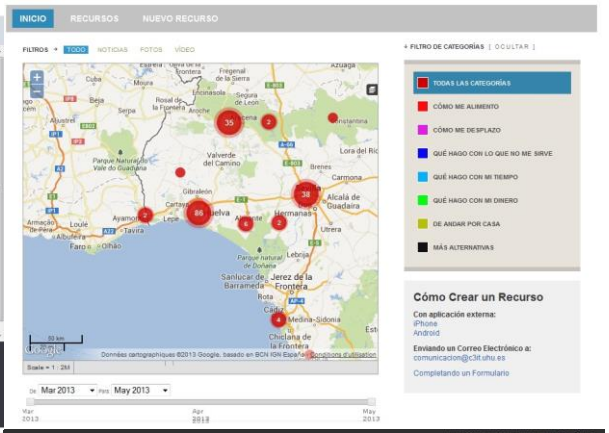
    The application must reinforce users efficiency within their field of practice

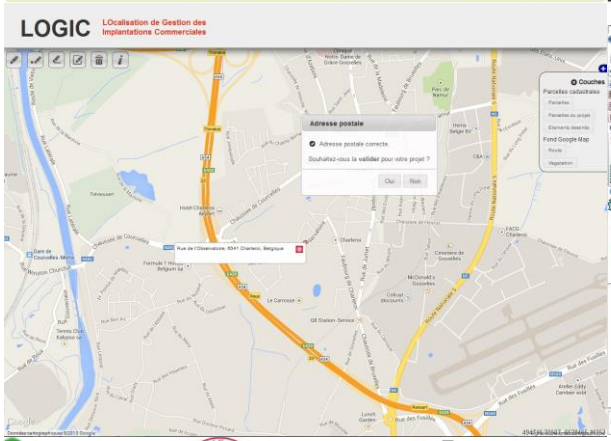
3. Observations and Analyses

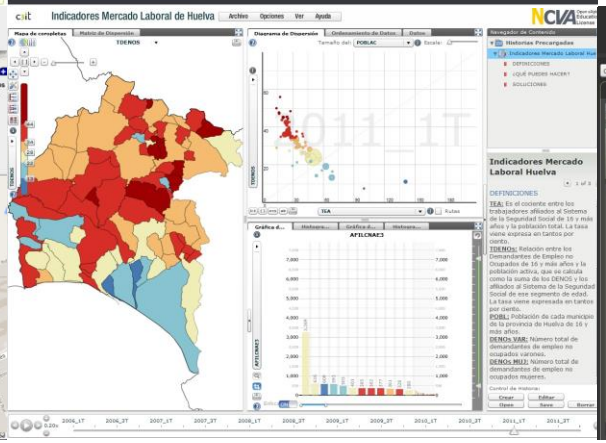
- 6 WebGIS-IT examples (C3IT and SEGEFA projects)

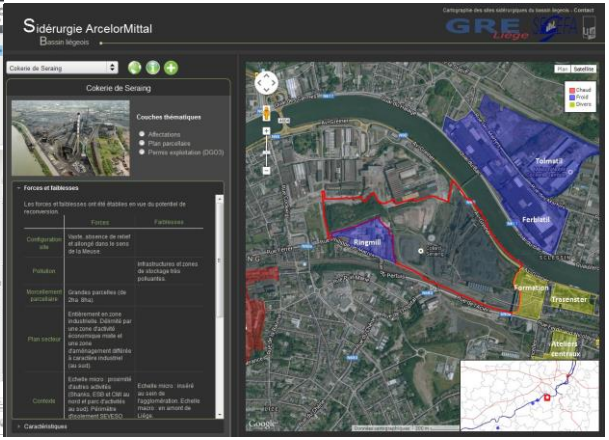










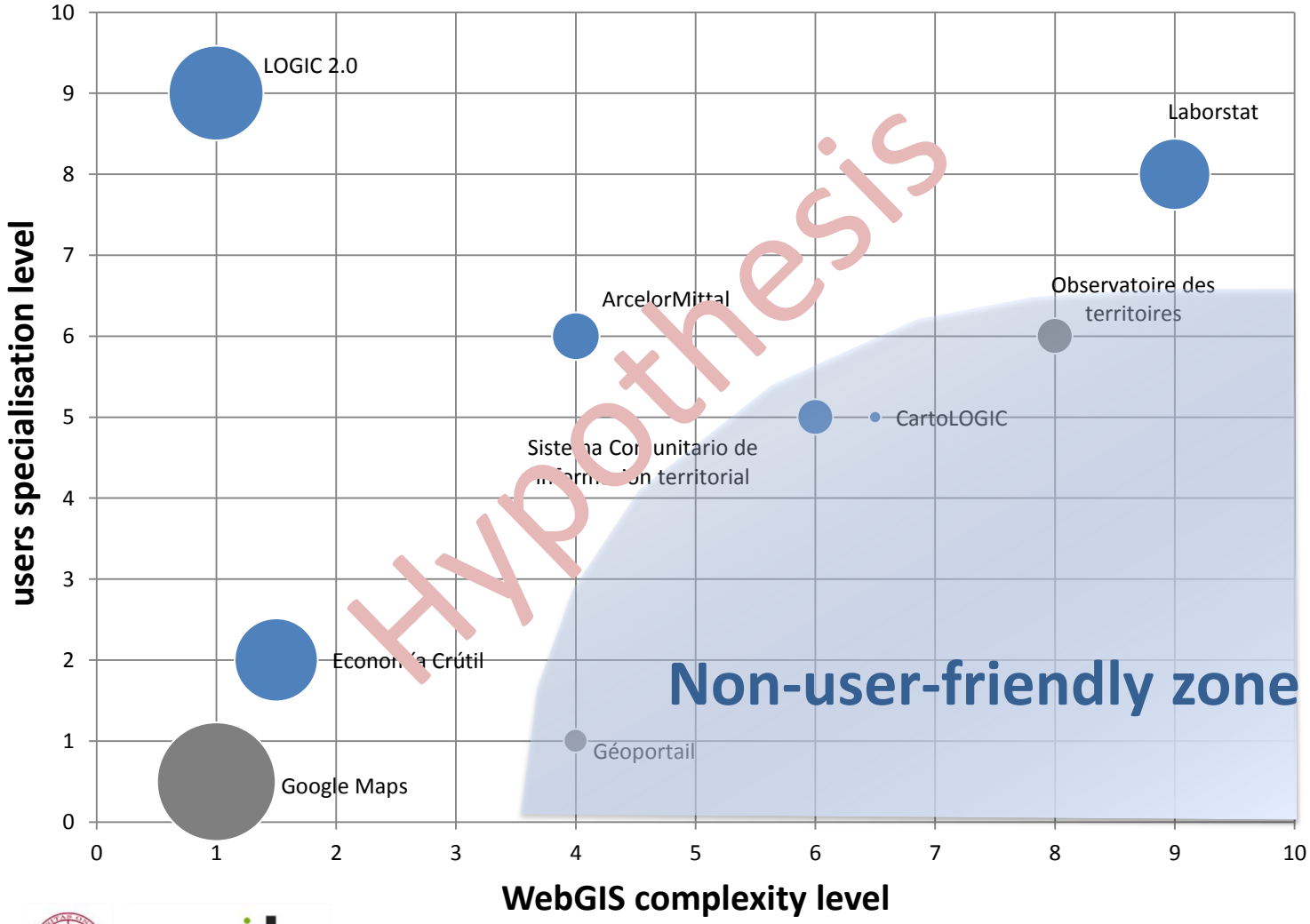


GDRI INTI

Universidad de Huelva

c3it Centro de Investigación Internacional en Inteligencia Territorial

3. Observations and Analyses



3. Observations and Analyses

- Analysis and evaluation of 6 examples taking into account their finalities

Application	Laborstat	Sistema Comunitario info territorial	Economía Crútil	CartoLOGIC	LOGIC 2.0	ArcelorMittal Lieja
Level of use (%)	**60**	**30**	**70**	**10**	**80**	**20**
Ergonomics	**5**	**6**	**8**	**4**	**8**	**6**
Fluency	*8*	*8*	*9*	*2*	*8*	*7*
Navigation	*3*	*3*	*6*	*6*	*9*	*7*
Fonctions	*5*	*7*	*8*	*4*	*8*	*4*
Map	**4**	**3**	**8**	**5**	**8**	**6**
Dynamics	*1*	*1*	*8*	*7*	*7*	*5*
Representation	*8*	*6*	*7*	*4*	*8*	*5*
Referential	*3*	*1*	*8*	*3*	*8*	*7*
Design	**7**	**6**	**8**	**4**	**8**	**5**
Modernity	*7*	*3*	*7*	*1*	*8*	*5*
Disposition	*8*	*8*	*8*	*6*	*8*	*4*
Simplicity	*5*	*7*	*9*	*4*	*9*	*7*

3. Observations and Analyses

- Analysis and evaluation of 6 examples taking into account their finalities

Application	Laborstat	Sistema Comunitario de información territorial	Economía Crútil	CartoLOGIC	LOGIC 2.0	ArcelorMittal Lieja
Territorial resources organisation						
Resources		X	X	X	X	
Parterships	X		X	X	X	X
Knowledge and competency pooling						
Multi dimensions	X	X	X	X	X	X
Co-learning	X		X			X
Participants accountability						
Collaborative management	X		X			
Participants autonomy	X	X	X	X	X	X
Commun results control						
Impacts evaluation	X		X		X	X
Sustainability	X		X		X	X

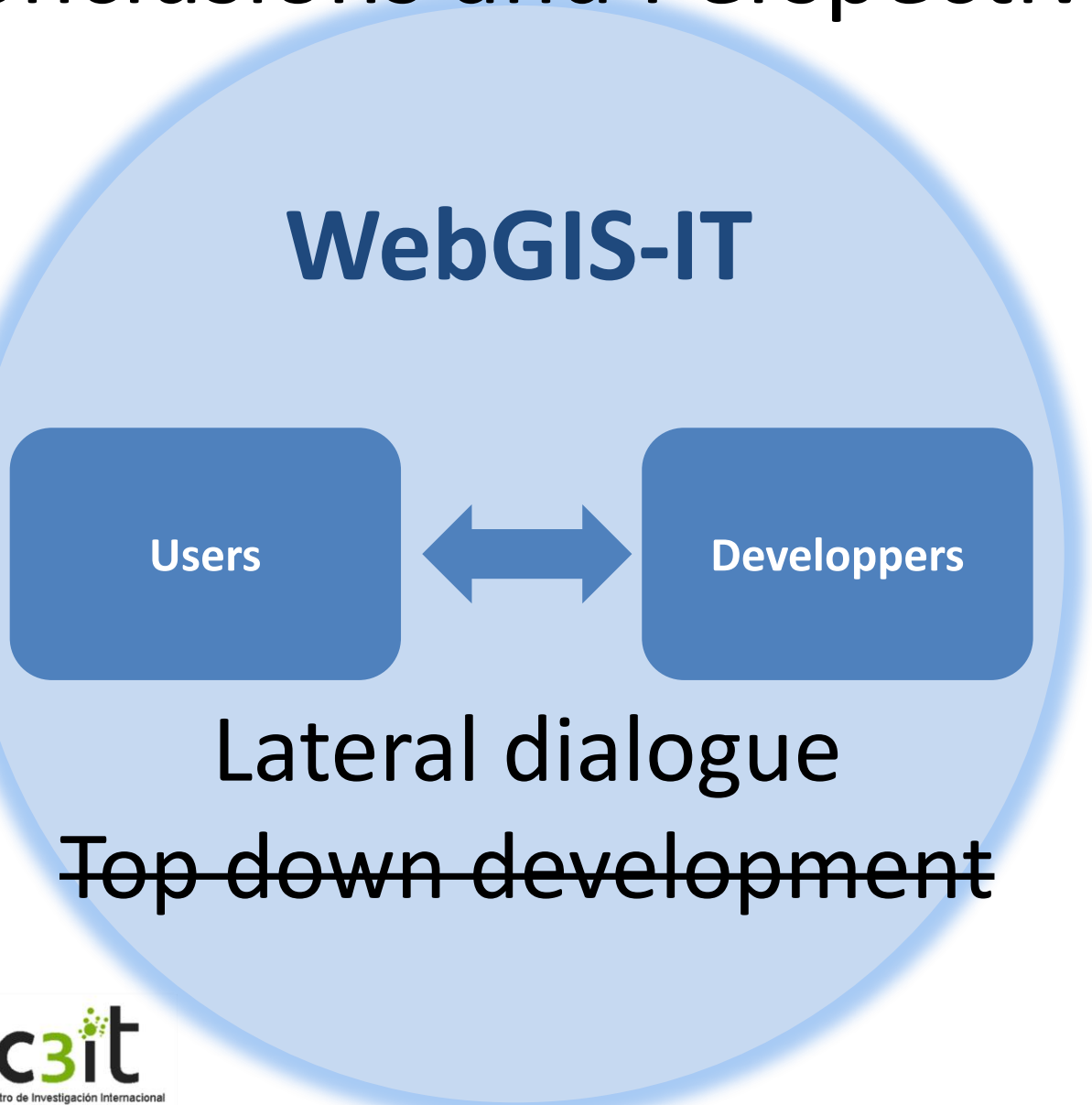
GDRI INTI · Universidad de Huelva · c3it Centro de Investigación Internacional en Inteligencia Territorial

4. Conclusions and Perspectives

- Towards a quality agreement including rules for WebGIS-IT settings
- Examples of rules:
  - WebGIS-IT= geographic data sharing space. This requires both spatial data bases and OGC standards (WMS, WFS …).
  - WebGIS-IT = known and recognised. Orientation must be ensure through reference maps and information search tools.
  - …

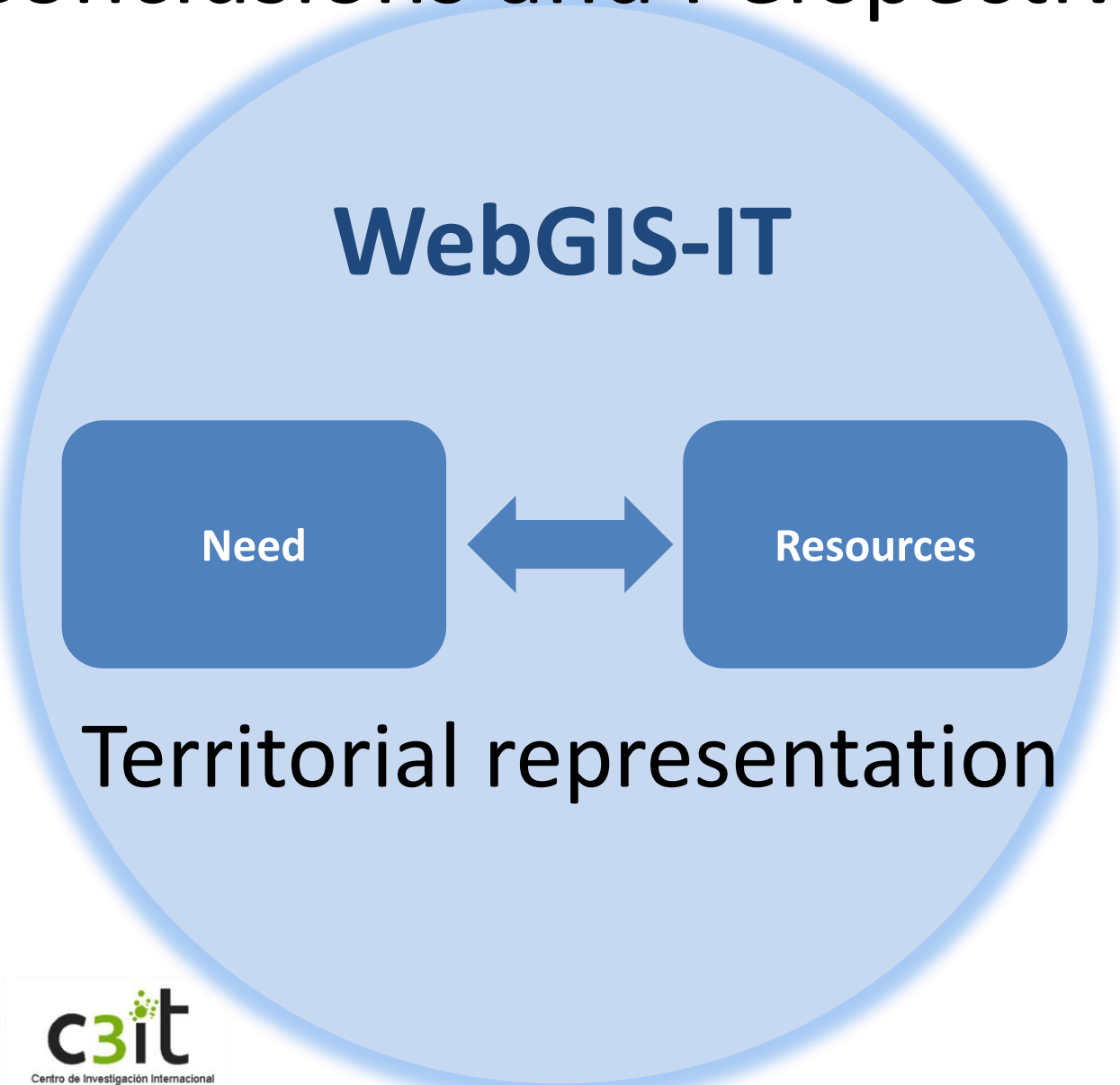
GDRI INTI Universidad de Huelva c3it Centro de Investigación Internacional en Inteligencia Territorial

4. Conclusions and Perspectives



GDRI INTI
Universidad de Huelva
c3it
Centro de Investigación Internacional en Inteligencia Territorial

4. Conclusions and Perspectives



GDRI INTI
Universidad de Huelva
c3it
Centro de Investigación Internacional en Inteligencia Territorial