

Towards an Ontology for Knowledge Organisation in E-Gov

Fernando Galindo

Data Protection and Electronic Signature Group

LEFIS

Universidad de Zaragoza

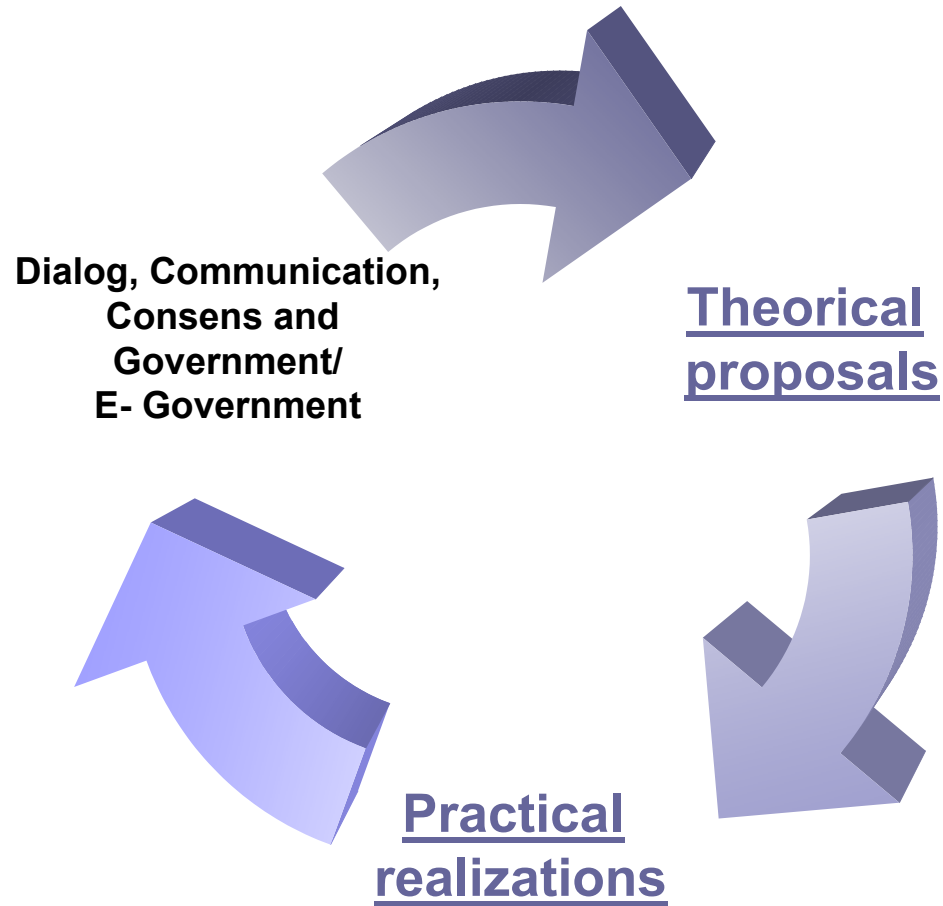
APTICE

Workshop on
e-Government Ontologies
Sirolo, 7th October 2005

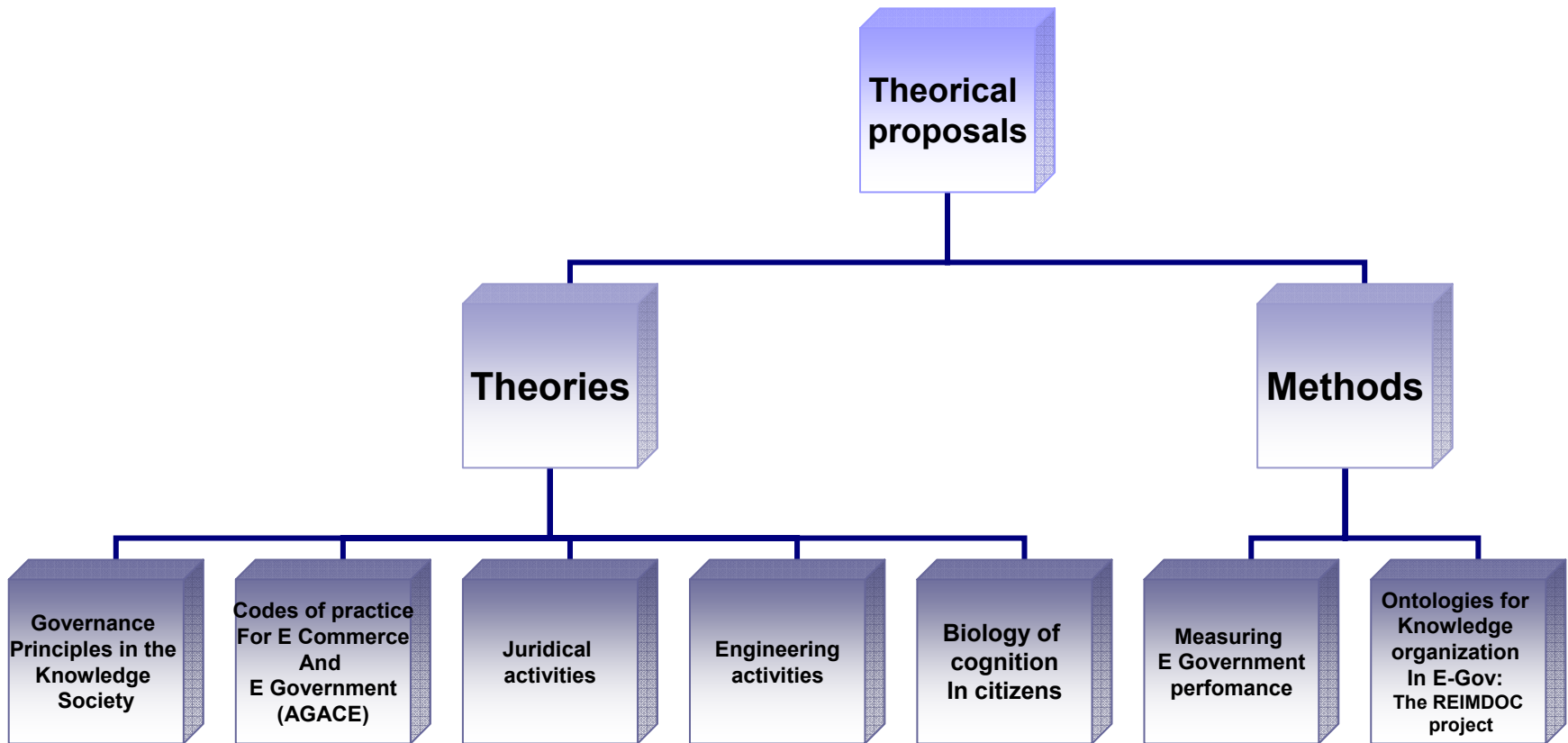
Index

- Research context: the plan
- The basis for an Ontology for E-Gov
- An example: the REIMDOC project
- Conclusions

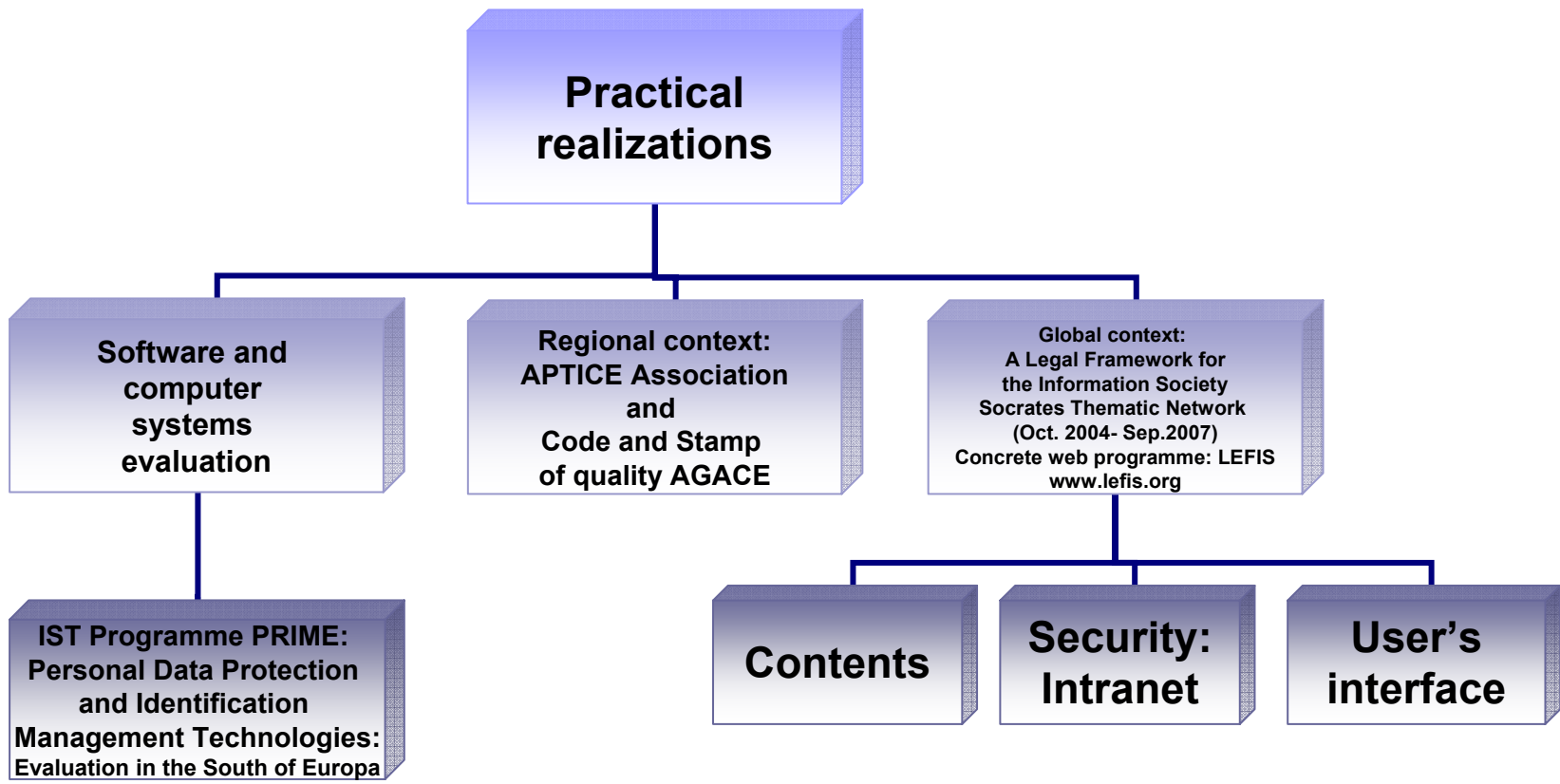
Research context: the plan



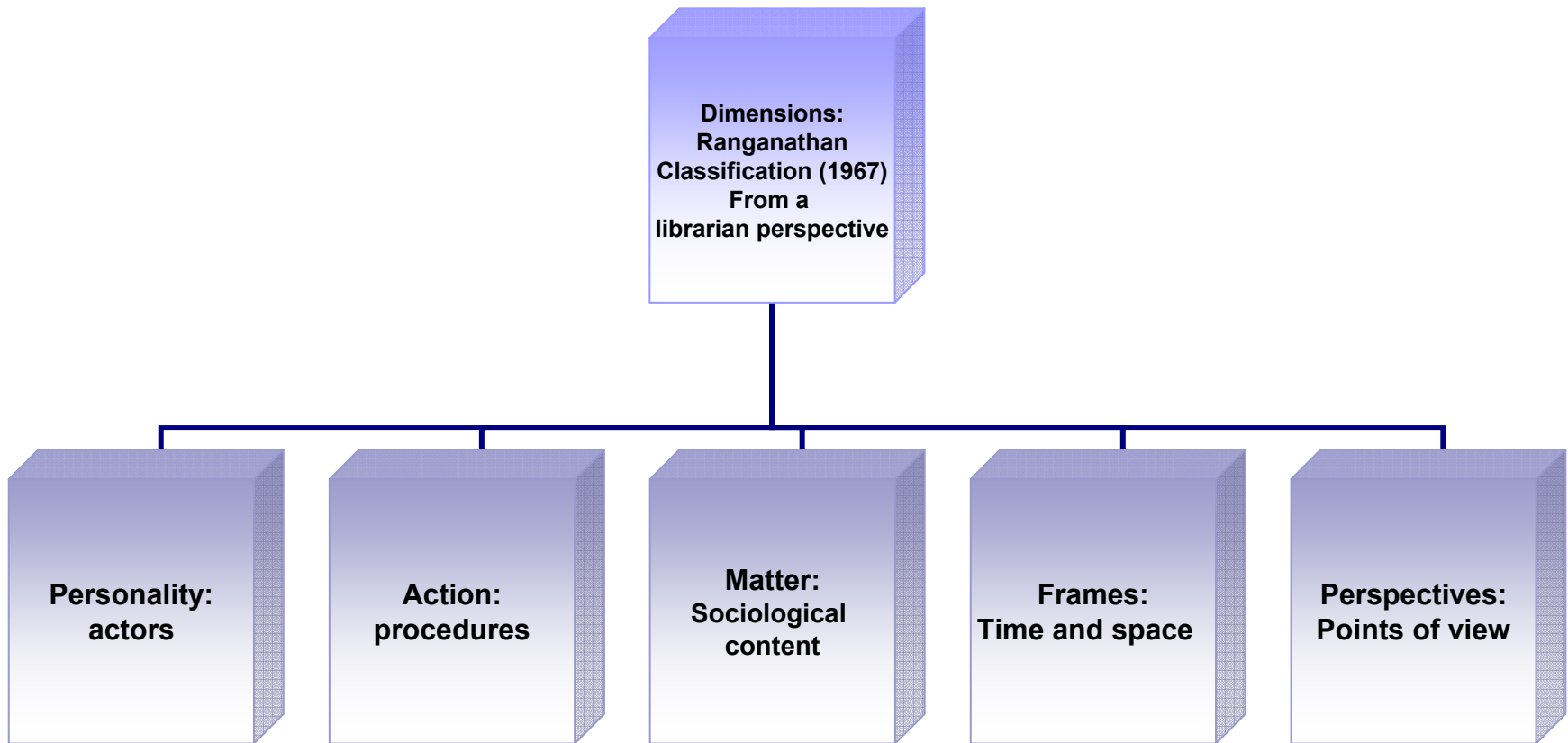
Research context: the plan



Research context: the plan



The basis for an Ontology for E-Gov



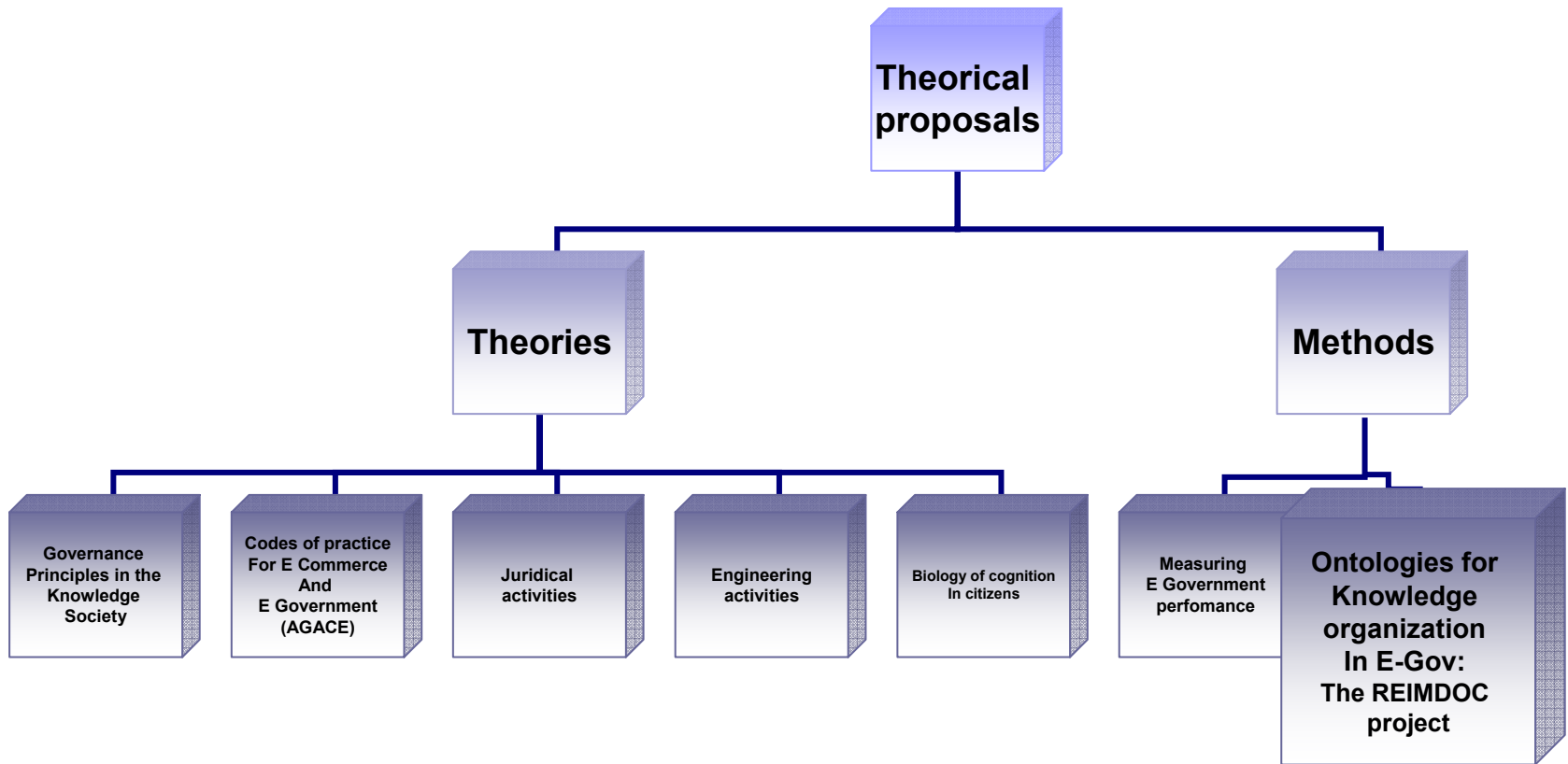
An example: the REIMDOC project

- Object of the project
- The example: Knowledge Organisation for the Government
- Ontologies
- Software programme

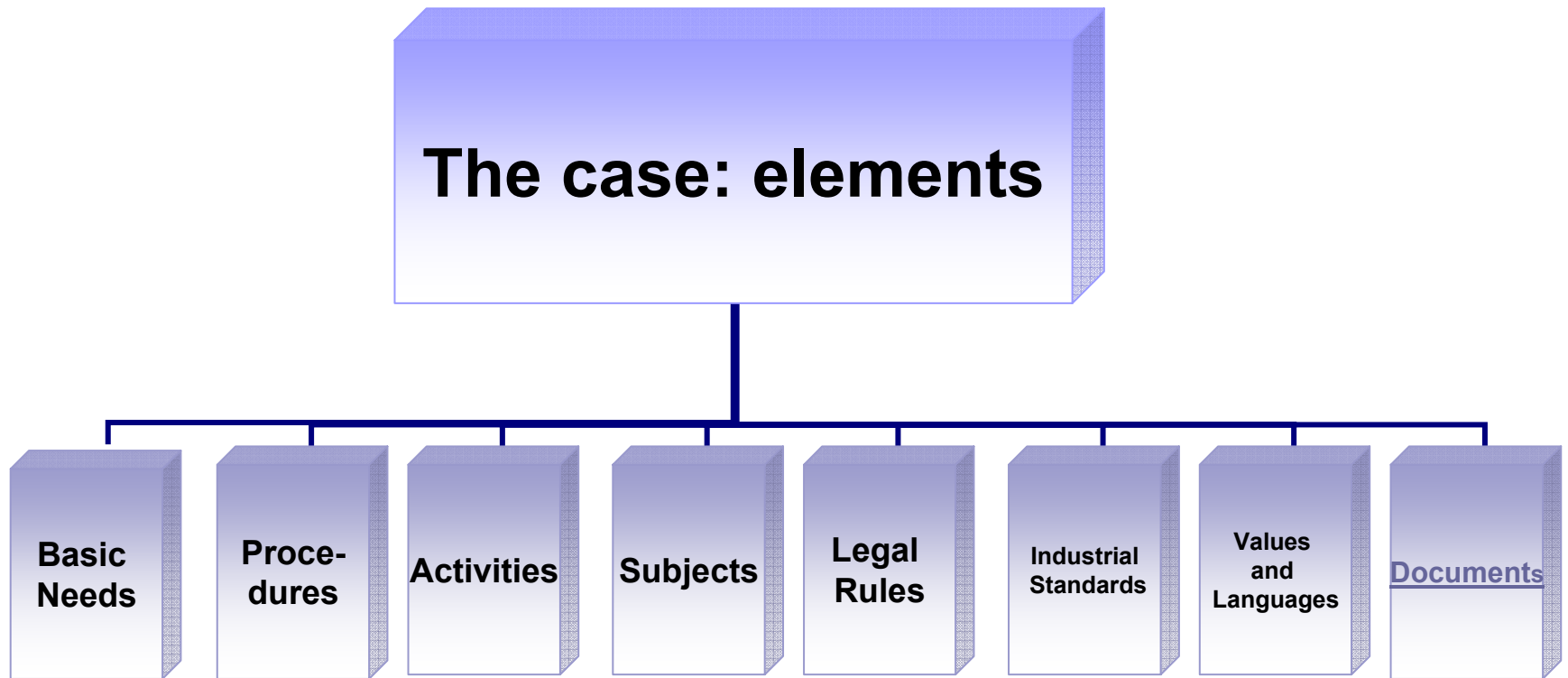
Object of REIMDOC

- Documentation retrieval in administrative procedures related with contracts on Real Estate
- Development of a methodology for E-Gov
- Construction of a computer programme: application
- Participants.- Atos Origin, Jurisweb, Polytechnic University of Madrid (Ontologies group), University of Zaragoza (Data protection and electronic signature group)

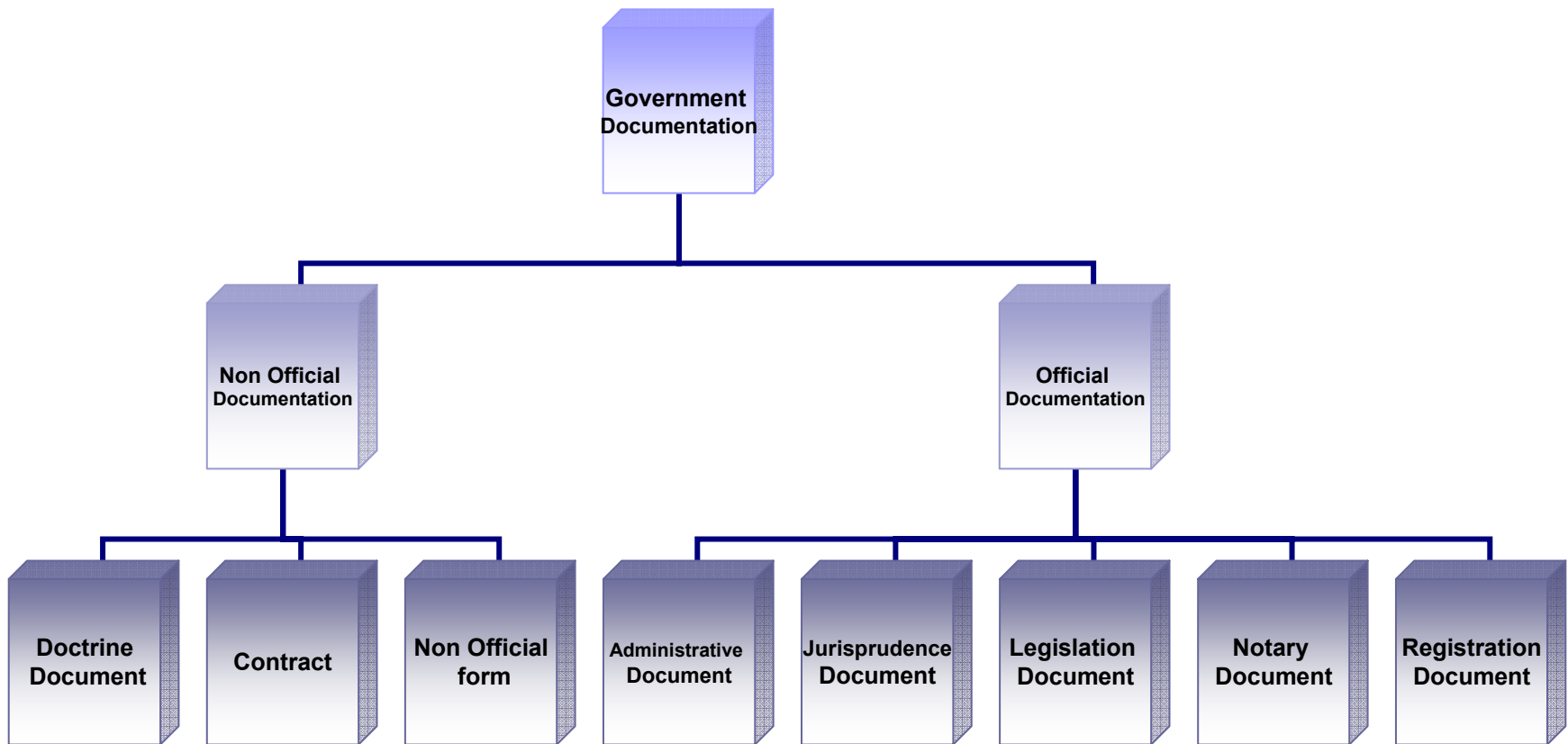
Research context: the plan



The example: Knowledge Organization for e Government (juridical point of view)

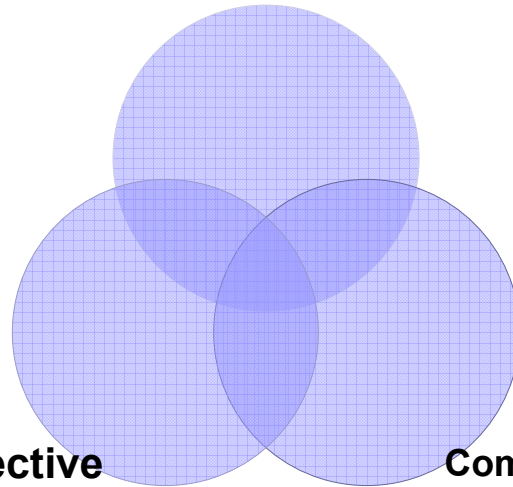


The example: Knowledge Organization for e Government (Documents)



Ontologies: perspectives

Librarian perspective



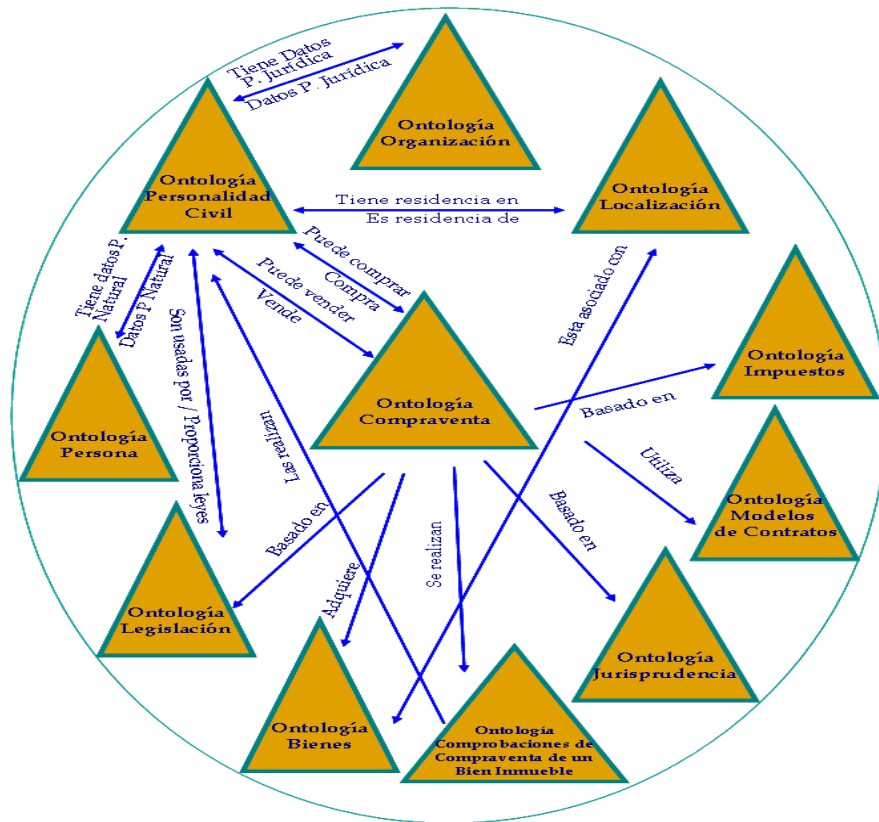
Juridical perspective

Computer perspective

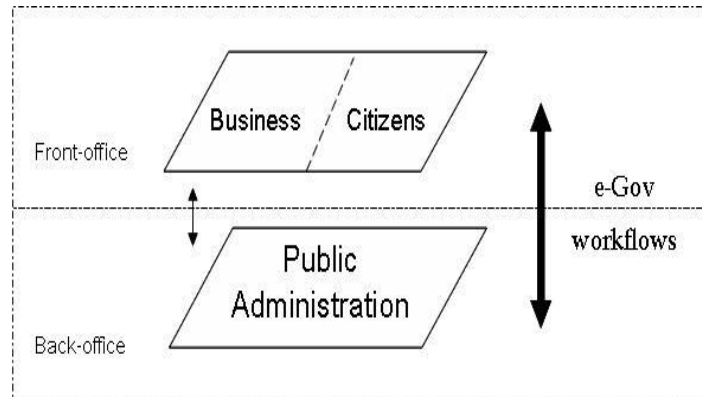
Ontologies in REIMDOC

- Person
- Location
- Organization
- Trading
- Models of Contracts
- Taxes
- Judicial Sentences
- Legislation
- Belongings
- Civil Personality
- Proving of Trading of Estate
- Government Roles

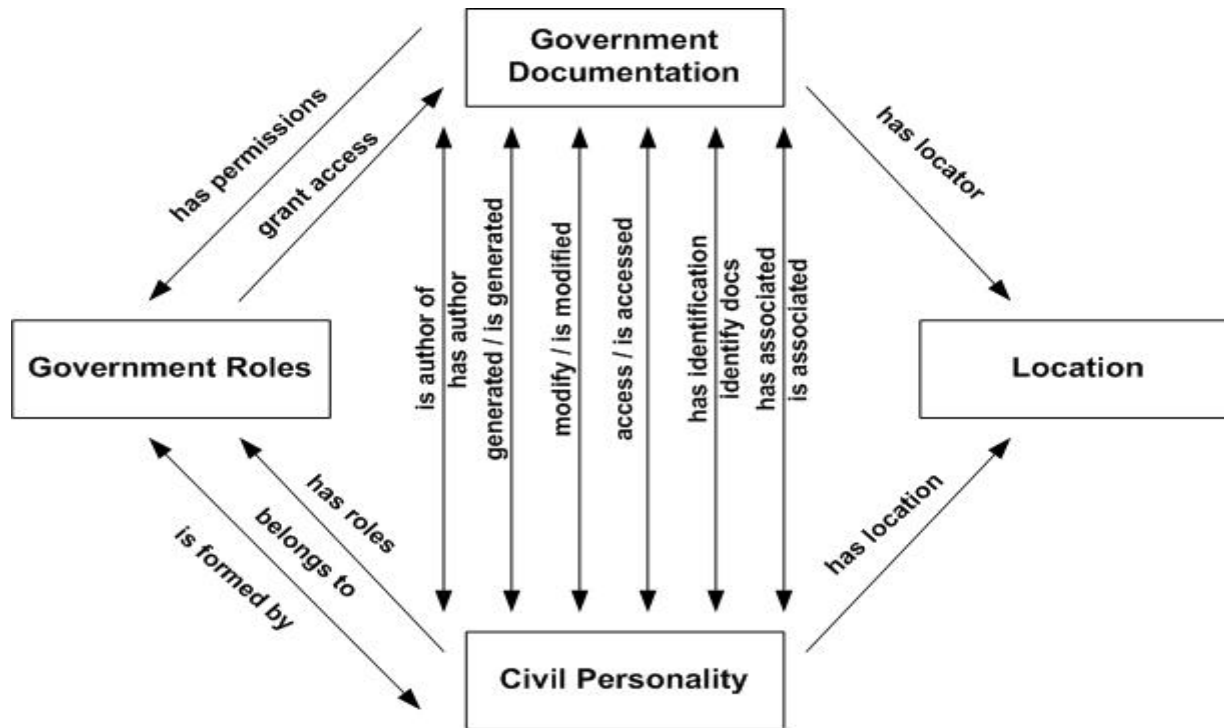
Interrelations of the REIMDOC Ontologies



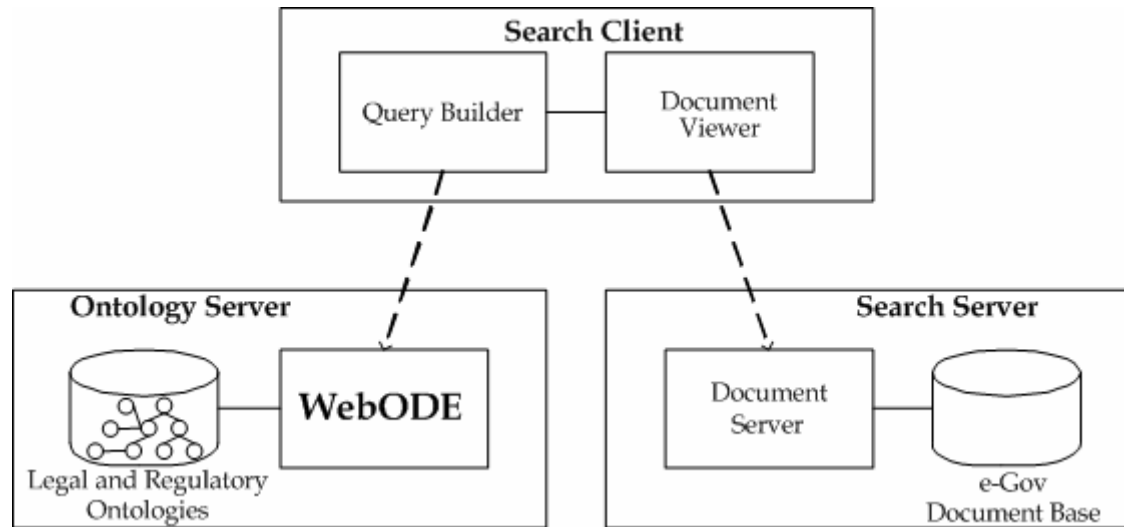
The computer programme (I): e– Government reference model of activities



The computer programme (II): Ad-hoc relationships of the Documentation Ontologies

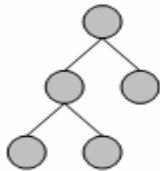


The computer programme (III): e –Government Information Retrieval System Architecture

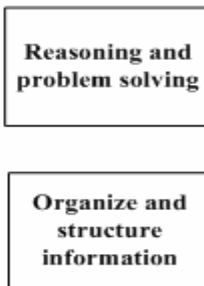


The computer programme (IV): Reasoning process of Documentation Ontologies

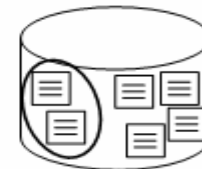
**Documentation
Regulatory Ontology**



Ontology Roles



**e-Gov Document
Base**



The computer programme (and V): e –Government Information Retrieval User Interface

The screenshot displays the Reimdoc web application interface. On the left side, there is a navigation menu under the heading "Government_Documentation". The menu is expanded to show "Non-Official_Documentation" (with sub-items: Contract, Doctrine_Document, Non-Official_Form) and "Official_Documentation" (with sub-items: Administrative_Document, Jurisprudence_Document, Legislation_Document, Notary_Document, Registration_Document). Below the menu, there is a search input field containing the word "contract", and buttons for "Add", "Remove", and "Remove All". Underneath, there are radio buttons for "All the concepts" and "Some concept" (which is selected), and a "Submit query" button.

The main content area, titled "Reimdoc", shows a document preview. The document title is "CONTRATO DE ARRAS O SEÑAL". The text of the document is as follows:

En (*ciudad*), a (*día*) de (*mes*) de (*año*).

REUNIDOS

De una Parte,

Don/ Doña (*nombre*), mayor de edad, (*estado civil*), (*profesión*), vecino/ a de (*ciudad*), con domicilio (*calle/ avenida/ plaza*), número (*número*) y con Documento Nacional de Identidad (*número*), en adelante, "el Vendedor".

o

(*nombre de la entidad/ sociedad/ persona jurídica*), entidad de nacionalidad (*española*) con domicilio social en (*ciudad*), (*calle/ avenida/ plaza*), número (*número*) y provista de Código de Identificación Fiscal (*C.I.F.*). Constituida mediante escritura pública autorizada por el Notario de (*ciudad*) Don (*nombre del Notario*) el (*día*) de (*mes*) de (*año*), bajo el número (*número*) de su protocolo, e inscrita el (*día*) de (*mes*) de (*año*) en el Registro Mercantil de

Conclusions

- Initial experience from top-down and bottom-up approaches
- New examples of ontologies related with REIMDOC are in development: LEFIS and another projects related with the citizens as users
- The implementation of ontologies in web navigation and browsers for different users: a next step