

### Modelling Governmental Information in Greece and Eastern Europe

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SEMIC.EU Workshop – February 2, 2009, Brussels

#### The idea

- Develop a federated system for storing country-wide definitions of service metadata, execution process and exchanged data schemas for public sector organisations, under the Greek NIF (eGIF)
- Support descriptions for all key elements in an eGovernment landscape (organisations, services, documents, web services, metadata)
- Provide for automated data input by organisations and means of electronic collaboration and reaching consensus upon the new process and data.
- Extend the functionality of the registry, with BPMN process models and XML schema descriptions for each service/document, providing also means for Service Transformation (process / data / technical architecture redesign).
- Provide tools for service redesign, service simulation and cost/benefit calculation based on different scenaria.

#### The Greek eGIF



- 500 pages with standards (L-O-S-T levels)
- 10,000 pages supporting documentation
- n 1 web site for the public
- 1 interoperability infrastructure (registry), for administrations
- Training Material (9 modules 3 levels 160 hrs)
- Certification Material (for administrations, industries, practitioners)

The Greek eGIF is since 1/2009 a National Law in Greece, based on which all Public IT systems & services must abide to its provisions

# The Contents of an extended Interoperability Registry

Definition & Exchange Automated Data Exchange Service Execution Interface Web Interface - Web Services - Web Services -Registry Management and Provision Infrastructure (DBMS, BPMN-UML Authorware, XML Authorware, Middleware) Common Codelists Common Data Structures Core Registry Elements International Standardization Services Definitions Basic Data Types (Numbers, (Countries, Currencies, Strings, Records, etc) Languages, etc) **Documents Definitions** National Standardization Core Components Systems Definitions (Public Entities Tree, Public (Administration, Citizen, Servants Roles, Types of Enterprise, Address, etc) Service Execution Rules Services, etc) Horizontal XML Document Legal Structures Sector Standardization Definitions (Digital Forms) (Finance, Justice, Health, Education, Defense) Sectoral XML Document Definitions (Digital Forms)

# On-line Metadata for Organisations, Services, Documents, Fields

#### ervice Edit INVOLVED PUBLIC BODIES DOCUMENTS **ADDRESSEES** INFORMATION SYSTEMS WEB-SERVICES **GENERAL INFO** Family Status Certificate Issuing Title: Identifier: 0002 Is a Generic Service: Yes ONo n/a Based on Generic Service: Is Final Service: OYes No Category: .Family Certificate Issuing Type: Providing Public Body: .Municipality **Business Event:** n/a Life Event: n/a FEK t. B 896/16.07.2002 Authorising Statute: MANUAL SERVICE PROVISION INFO Demand On Presence In Submission: Yes ONo Demand On Presence In Receivement: Yes O No Identity Card OR Passport Manual Authentication Type:

TEFFILMING OFFICE EMPARATOR THE P			
Website:	http://www.kep.gov.gr		
Provision Method:	Browser		
Current Electronic Provision Level:	Level 3: Two-way interaction		
Target Electronic Provision Level:	n/a 🔻		
Multilingual Content:	⊙ Yes	ONo	
Offline Provision Potentiality:	OYes	⊙ No	
XML File Dispatch Potentiality:	OYes	⊙ No	
Progress Monitoring Support:	○ Yes	⊙ No	
Electronic Authentication Type:	Username / Password		
DIGITAL AUTHENTICATION FRAMEWORK INFO			
Data Type:	n/a ·		
Trust Level:	n/a 💌		
Authentication Level:	n/a 💌		
Authentication Mechanism:	n/a		
Registration Level:	n/a	8	
SERVICE SIGNIFICANCE INFO			
Frequency (Transactions number / Year):			
International Policy:	⊙ Yes	○ No	
SERVICE REGISTRATION INFO			
Information Source:	http://www.kep.gov.gr/kepportal/Cit izenGuide/CitizenGuideC1/CitizenGui deC2/CitizenGuideC3? PARAM1=1890&lng=EL		
Date of last Update:	14/9/2007		
Sata Complateness States	Final	7	

#### Population of the Greek Registry

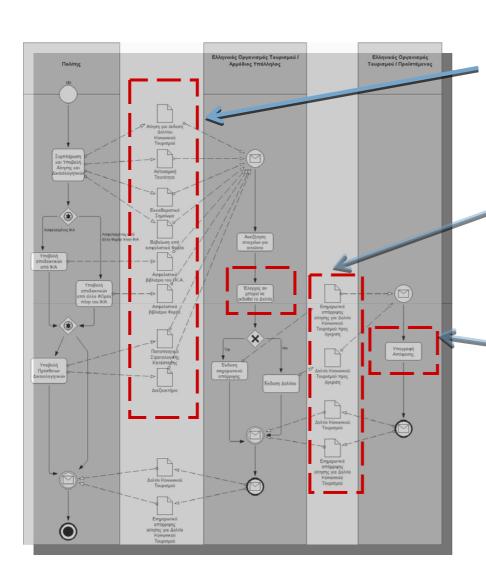
Entity	Population
Public Administration Organisations	1,797
Governmental Services Definitions	1,890
IT Systems Definitions	900
Service Execution & Orchestration Models – BPMN	614
Web Services Definitions – WSDL +	35
Government Category List - RDF	200
Life Events / Business Episodes	35 / 25
Other Taxonomies (Legal, Security, Quality, Channels, etc)	200
Documents Definitions	1,106
Document Field Definitions / Unique	10,000 / 1,434
Standard Codelists (ISO, UN, EC, CEN, GR)	16
Standard Document Schemas – XSD	404
Reusable Business Information Entities – CCTS	154
Core Components – CCTS	36

Best Paper Award

for the most Compelling,
Critical Research Reflection 2008 - 2009

International Conference on
Electronic Government (DEXA, IFIP),
Torino, September 2008

#### **Governmental Service / Data Patterns**

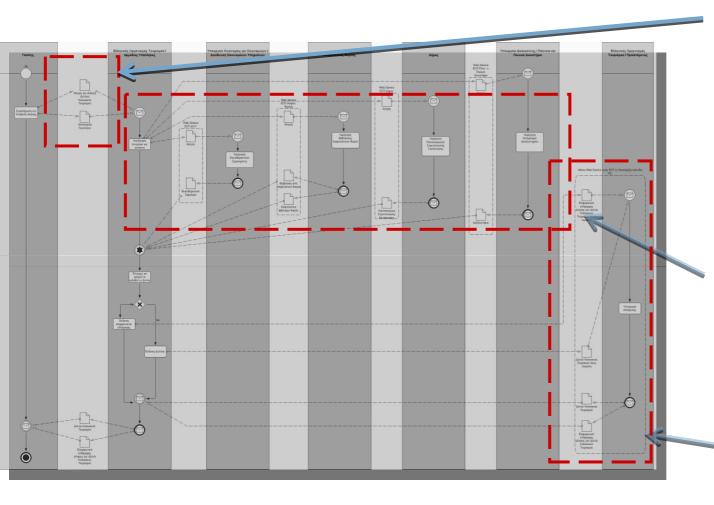


Forms, Certificates, Permits, submitted by the Citizen

Public Administration organisations collaborate manually

Some steps may be repeated by another PA entity

#### **Service / Data Redesign**



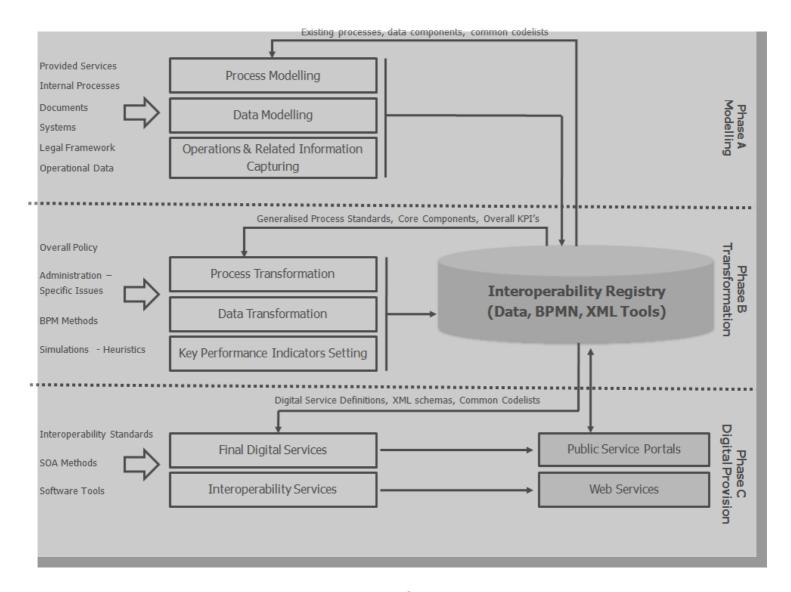
Citizen only provides

ID and application

Web service / XML / CCTS collaboration between PA entities

Service component can be a pattern for other similar services

## The Interoperability Registry in Service / Data Transformation

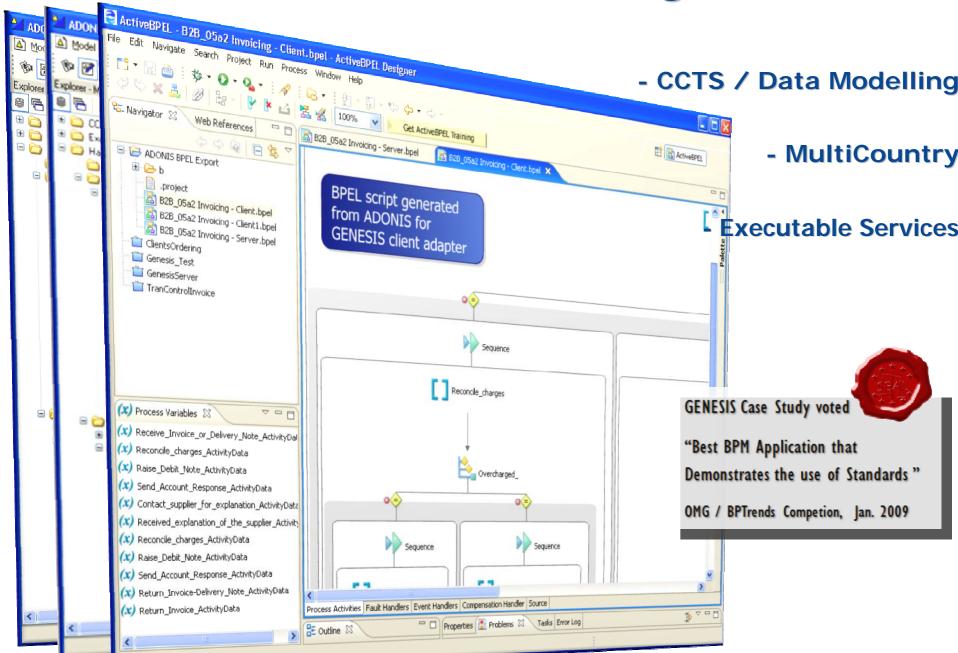


Best eGovernment Paper Nominee, 42<sup>nd</sup> HICSS Conference, Hawaii, 1/2009

# GENESIS B2B / B2G Data Modelling in SE Europe



### **GENES** S Unified Modelling Method



#### **Conclusions and Next Steps**

- The extension of the registry from textual info to process models and XML schemas now provides a much more complete infrastructure for governmental organisations.
- Binding registry with the Central Governmental Portal for citizens and businesses (Hermes) is on for 2009, in Greece.
- Training is important for PA officials (currently more than 100 users from 25 key organisations)
- n More emphasis on:
  - Government Schema Generator (GSG): CCs, BIEs and XSDs design and management
  - UDDI Interface: Import and export data through Web Services
  - Infrsastructures for Management of eGIF Standards and Specifications / Rules and Assessment of public sites and administrations
  - Advanced eParticipation functionalities for committees / approvals
  - Simulations for processes, services, policy: what-if scenaria and impact analysis on administrative cost, service time, service quality

#### **Application Opportunities**

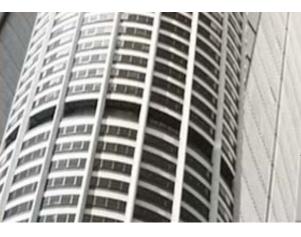
- Urgent need for simplification and reduction of administrative burdens by the "Services Directive" (Directive 2006/123/EC), and the EC Policy on Administrative Burden Reduction
- i2010 calls for the provision of "one stop" services and the deployment of pan-European eGovernment Services (PEGS), requiring cross-country collaboration, will soon be a need
- Interoperability Infrastructures for coordinated management of processes / data / web services will be a need in most cross-country lighthouse projects (STORK, PEPPOL, SPOCS)
- The registry is also under initialisation in other EU Member States, now joining the NIF experience.
- Cooperation with SEMIC for sharing semantic artifacts, components, service definitions, tools.



#### **Next Opportunities to work together**

- "Worldwide Advances in eGovernment Interoperability Minitrack", American Conference on Information Systems (AMCIS), 3-9 August, 2009, San Francisco, US (deadline for submissions end of February 2009)
- «Interoperability in Digital Public Services and Administration: Bridging E-Government and E-Business», Charalabidis Y. (ed), a book from IGI Global, US. (deadline for submissions 30 April 2009)

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