# Business Register Interoperability Throughout Europe: The BRITE Project

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## Motivation: European Union as Dynamic Business Ecosystem

- Potentially conflicting goals:
  - Facilitate free movement of companies and services
  - Prevent financial crime, ensure transparency
- Political goals are given (11th directive)
- Intiatives are started to meet the objectives
  - Legal aspects
  - Organizational aspects
  - Technical support

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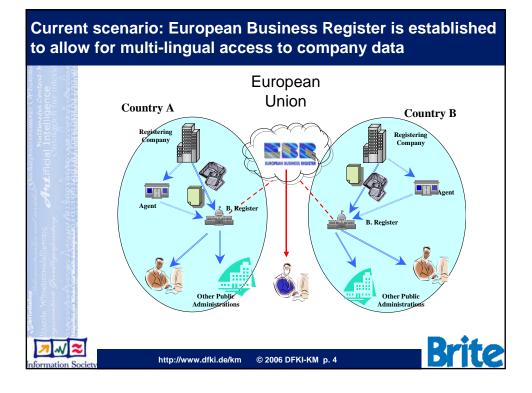


#### The BRITE Domain: Business Registers

- EU: Companies have to register in the country where they are seated
- Company registration information held by Business Registers is available to the public
- Details of Business Registers are subject to national regulations
  - Structure, organizational embedding
  - Territorial competencies (national, local)
  - Record information
  - **–** ...
- But: Adoption of EU regulations is also required

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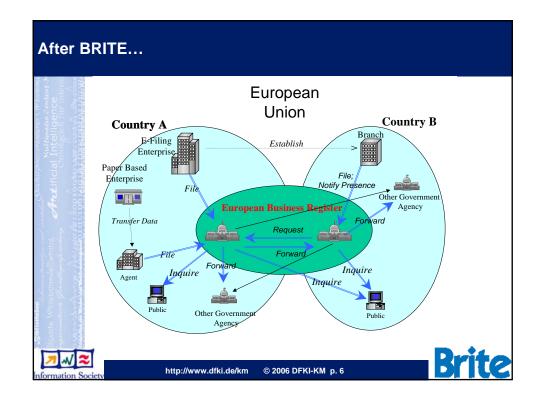
#### **Abstract Description of BRITE Scenario**

- Geographically distributed (within and between countries & EU)
- Multiple stakeholders and actors (potentially increasing number)
- With different knowledge, goals, rights, and obligations
- Processes with knowledge-intensive tasks
- Complex communication, communication structure not known in advance



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#### BRITE's scientific and technical objectives are...

to develop, implement and demonstrate

- an interoperability model,
- an information & communication technology service platform, and
- a management instrument

for Business Registers to interact across the EU.



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#### **BRITE Objectives Relate to Three Levels**

- Data & Information: Enable semantic and technical interoperability;
- Process: Enable organizational and service interoperability;
- **Maintenance:** Enable effective deployment & sustainability.



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#### **Consortium Reflects the Demands of the Project**

- Business Registers (national and EU)
  - Application partners
  - Organizational structures
  - As domain experts
- Technology Providers
  - From document to database technology
- Research Institutions
  - From eGovernment to AI & Knowledge Management



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#### Why is BRITE on an Al Symposium?

Inspired by previous projects on Distributed Enterprise Knowledge Management

- Business Process Orientation
  - Process-oriented information organization
  - Process-driven information support
- Semantic Web Technology
  - Ontology-based Modeling of
    - Information and
    - Processes
  - Rule-based Information Integration



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#### **BRITE Architecture**

- Ontology Tools:
  - creating and maintaining the BRITE ontologies
  - ontology mapping
- Knowledge repository:
  - capabilities for storing, maintaining and inferencing on various forms of data and metadata
- Interoperability Layer:
  - basic technical level for data, process and service integration across national and technological borders
- · High-level Workflow:
  - run-time support for service orchestration
- Dashboard:
  - for high-level monitoring of patterns of service and platform usage



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## The Metadata Repository is Central to BRITE's Semantic Approach

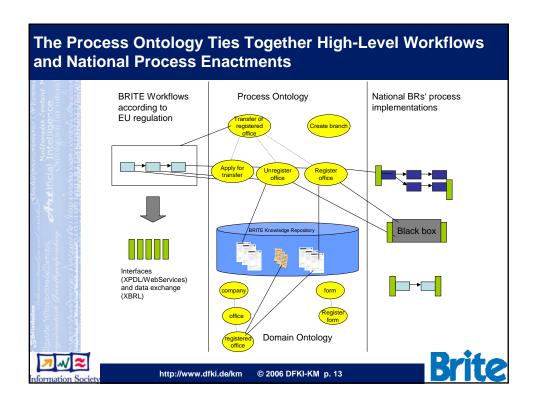
- Domain ontology
  - the 'World' of a business registrar
  - relationships between the objects that exist in this world
  - 'Implementation' of the elements / objects pertaining to the EU directives
- Process ontology
  - the business processes involved
  - relationships to supporting documents etc.
- Monitoring ontology

- Usage patterns



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#### Some (expected) Key Challenges

- Ontology Lifecycle Management
  - Technical
  - Social
- Different "levels of readiness" of various BRs (e.g., in terms of IT penetration, legacy systems, ...)

and ...

### **Many of Your**

experiences/do's/do not's/...

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