
European Research in E-commerce and Brokerage

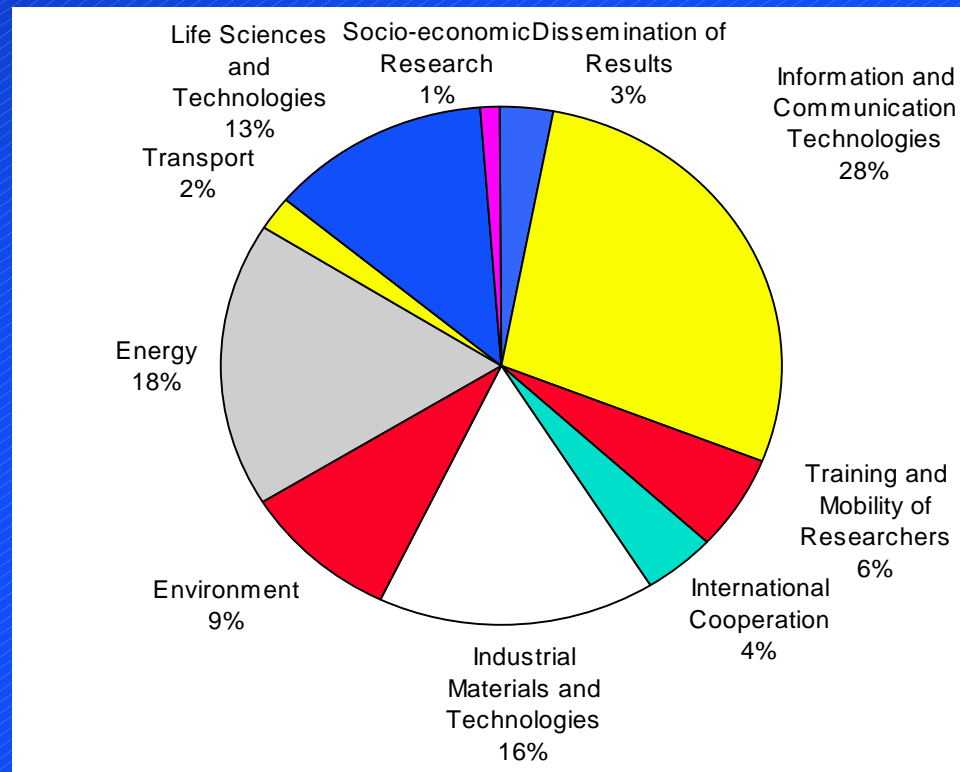
Jens E. Kristensen

European Commission - ACTS programme



The Fourth Framework Programme

13.3 Billion ECU



Key Principles for EU RTD Programmes

- **Scope outlined in a Call for Proposals**
- **Proposals submitted by Consortium**
Must involve at least two independent organisations in two different countries
- **Proposals are evaluated by a team of Independent Experts**
- **Selected Projects of “shared-cost” Type**
(up to 50% of the costs are contributed by the EC)



European Framework in Telecommunications

Main driving forces

- Deregulation of market, competition
- New market place/opportunities

Key Requirements

- Shorter times in the development of new Services
- Lower costs
- Interoperability, integration, flexibility for telecommunication interfaces
- Higher bandwidth



Advanced Communication Technologies and Services

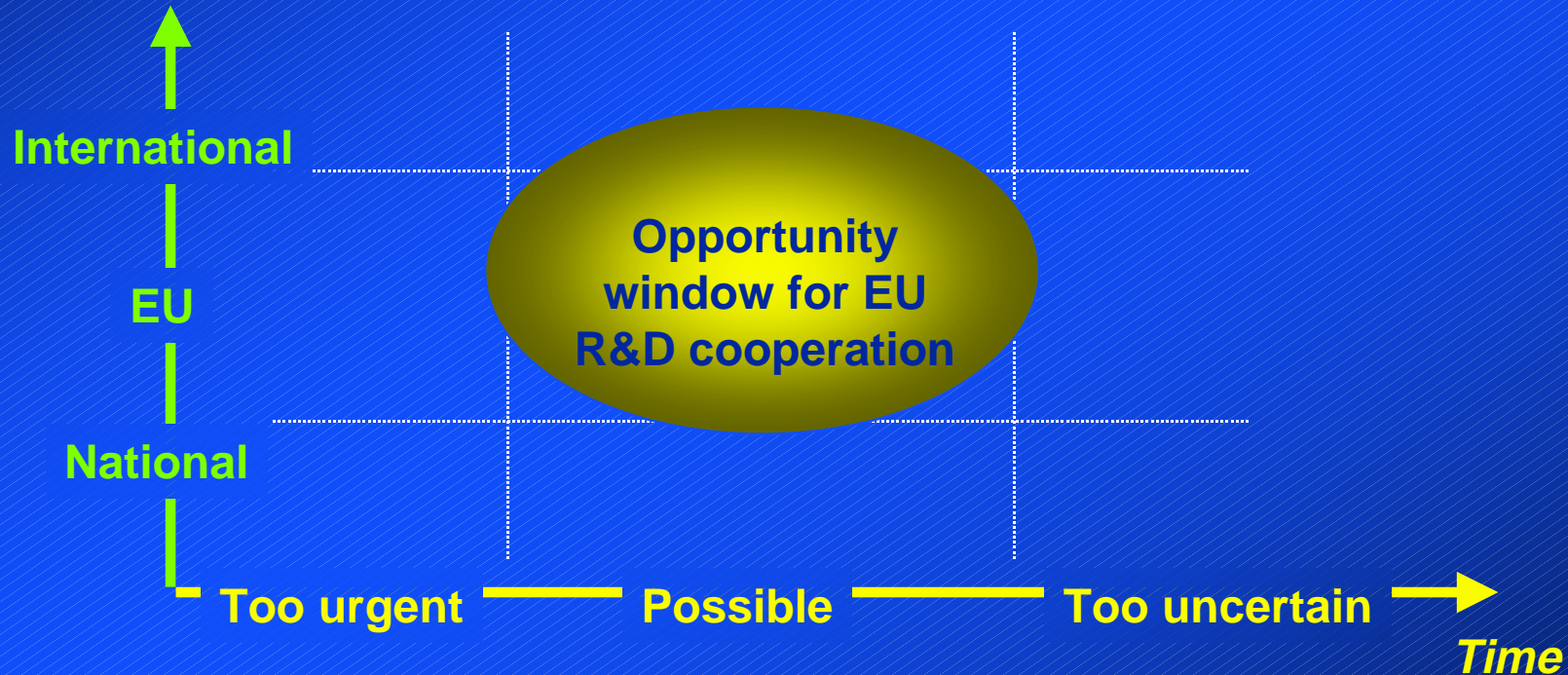
Builds on

- **RACE I** - developed the “concepts” of Integrated Broadband Communications
 - blue-print for the next generation of systems and technologies
 - consolidated technology base
 - promoted European collaboration amongst technologists and sector actors
- **RACE II** - developed the “capabilities”
 - explored new services and generic applications
 - emphasised improvement in cost / performance
 - validated specifications



ACTS Opportunity Window

Scale of cooperation



Orientation of ACTS

User Trials

Horizontal actions



Digital Image



Photonics



High Speed Networks



Mobiles



Integrated Service Engineering



Quality, Security & Safety

Enabling Technologies

Exploit new technological opportunities



Community Funding for ACTS

Interactive Digital Multimedia Services	175 MECU
Photonic Technologies	112 MECU
High-Speed Networking	81 MECU
Mobility and Personal Communication Networks	124 MECU
Intelligence in Networks and Services	108 MECU
Quality, Security and Safety of Communication Systems and Services	47 MECU
Horizontal Actions	<u>34 MECU</u>
	681 MECU



Electronic Commerce

Generic architecture for secure commerce

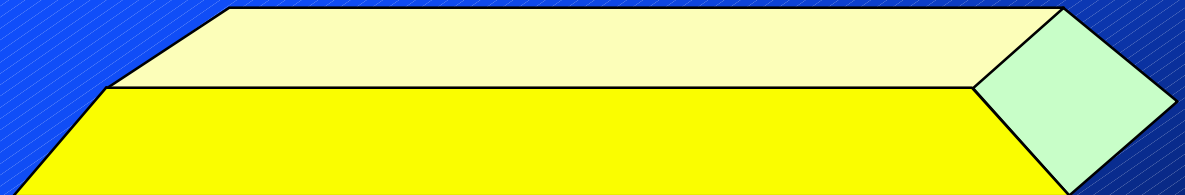
electronic



Open brokerage architecture



Electronic Commerce enabling technologies



Security

- **SCAN**
 - Encryption over ATM
- **SCARAB**
 - Agent technology and smart cards for secure access
- **USECA**
 - Secure UMTS architecture

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Electronic Brokerage (I)

- **ABS:**
 - *Design/Spec based on ODP/TINA concepts*
 - *Prototypes using CORBA and JAVA*
- **COBRA:**
 - *Enterprise and transaction model*
 - *Catalogue/ www-db integration/ agents*
 - *Demos in four distinct business cases*
- **OSM:**
 - *Definition of a service brokerage engine*
 - *Contract/commercial serv management.*
 - *Cataloguing, brokering and agencies*
 - *Visible presence of SMEs*

<http://www.infowin.org/>



Electronic Brokerage (II)

- **MULTIMEDIATOR**

- multimedia publishing brokerage service
- trials across different networks (ATM/ISDN/Internet)
- visible involvement of SMEs
- Deliver a European-wide distributed printing network (integrating ISDN, satellite, ATM)

- **GAIA**

- generic model applicable to distributed information supply chains and networks
- demonstrate applicability to music, publishing and technical data



Enabling technologies

The results of a number of other projects have a direct impact on electronic commerce:

- IPR/Copyright
- Multimedia delivery chain integration
- Communications accounting
- Access to broadband comm. infrastructure
- Terminals
- Keeping in touch with SMEs and teleworkers



Cluster on security and electronic commerce

- Electronic commerce: security services, brokerage architecture, brokerage applications, IPR protection and management, etc.
- Trusted Third Parties (TTPs): Use, legal implications, regulatory and licensing aspects, interoperability problems, etc.
- Use of open interfaces (APIs).
- Requirements on standardisation.
- Applications: publishing, co-operative working and teleworking, brokerage services, usability, dependability, etc.



ACTS Guidelines

- **SIA (Service Architecture)**
 - Enterprise Models of Electronic Brokerage
- **SII (Interactive Multimedia Services)**
 - Electronic Commerce
- **GAS (Small Business Networking and Commercial Transactions)**
 - Describing SMEs
 - Access to Electronic Commerce for SME's
 - Implementation of Electronic Commerce for SME's

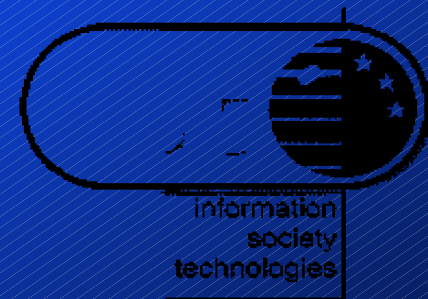
<http://www.infowin.org/ACTS/ANALYSYS/CONCERTATION/glindex.htm>



4. THE FUTURE - 5th Framework R&D Programme

- 1998 - 2002
- Total Budget ~ 15 Bi Ecu (?)
- Grouping “Information and Communications Technologies”

“IST” (Information Society Technologies) Programme



4. THE FUTURE - IST Contents

KA I: Systems and services for Citizen

KA II: New Methods of Work and Electronic Commerce

KA III: Multimedia Content and Tools

KA IV: Essential Technologies and Infrastructures

- **Future and Emerging technologies**
- **Research Networking**

Budget ~ 3.750 BiEcu (?)

