SIXTH FRAMEWORK PROGRAMME

PRIORITY IST-2002-2.3.1.12

Technology-enhanced Learning and Access to Cultural Heritage

Contract for:

NETWORK OF EXCELLENCE

Annex 1 - "Description of Work"

Network acronym: **DELOS**

Network full title: DELOS: a Network of Excellence on Digital Libraries

Proposal/Contract no.: **G038-507618**

Related to other Contract no.: IST-1999-12262

Date of preparation of Annex 1: **01 December 2003 (FINAL)**

Operative commencement date of contract: **01 January 2004**

1 Appendix A

1.1 Description of Cluster Coordinators

1.1.1 Digital Library Architecture

COORDINATOR EXCELLENCE FACT SHEET

GENERAL & CONTACT INFORMATION						
Family Name	**Hans-Jörg Schek**		Title	Position	Birth date	Gender
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	WWW	http://www.dbs.ethz.ch/				
Centre/Institute´s Name	**Department of Computer Science, Institute of Information Systems – Databases** Institute for Information Systems				CS-IS-DBS IIS	
Organization Name	**Swiss Federal Institute of Technology (ETH) Zurich** University for Health Informatics and Technology, Tyrol, Austria				ETH UMIT	
Research Profile	Information Engineering, Databases, Transactional Processing, High-Performance Cluster Databases, Multimedia Databases, Information Dynamics and Mobility, Information Engineering in E-Health					
Keywords of intended contributions in DELOS	Hyperdatabase infrastructure for DLs, synthesis of grid computing with information infrastructures, service component architecture, self-configuration, dependability, reliability, infrastructure for ontent-based retrieval of multimedia databases.					
Brief biography	Prof. Dr.- Ing. Hans-Jörg Schek is a professor of Computer Science at the Swiss Federal Institute of Technology (ETH) Zurich since 1988 and, since 2002, he is also a professor at the University for Medical Informatics and Technology Tyrol (UMIT) Innsbruck. He holds a diploma in Mathematics (University of Stuttgart, 1968) and a Ph.D (1972) and habilitation degree (1978) in Engineering from the University of Stuttgart. The milestones of his career are the IBM Scientific Center Heidelberg (1972-1983), C4 Professor at the Technical University of Darmstadt (1983-1988), and research sabbaticals at IBM Almaden Research (1987), at the ICSI Berkeley (1995) and at the Medical Informatics Department of the University of Heidelberg (1995). Dr. Schek is an ACM Fellow since 2000.					
EXCELLENCE CRITERIA: FUNDING SOURCES						
The 5 main research projects in the last 5 years	Name of Project		Project Partner (main contractor first)	Duratio n	Funded by	Amou nt or PM

	Informatik Cluster	Schek, Alonso, Nagel, Stricker	01.2001	ETH	CHF 781'200
	PowerDB: Coordinating a Database Cluster for both OLTP and OLAP.	Schek, J. Gray MSR , D. Lomet MSR	09.2000 - 08.2003	Microsoft Research	CHF 300'000
	Advanced Querying and Coordination of Multimedia Information in ETH World –Prototype Demonstrator.	Schek	04.2000 - 03.2002	ETH WORLD	CHF 304'000
	INVENT: Infrastructure for Virtual Enterprises.	Alonso, Schek, Plattner, Dittrich U Zurich, Tsichritzis U Geneva, Kobel VSM	01.2000 - 12.2001	SNF SPP I&K	CHF 564'230
	MARIFLOW: A Workflow Management System for Maritime Industry.	Alonso, Schek, Beeri U Jerusalem, Dogac U Ankara, 3 Industry Partners	09.1998 - 03.2001	BBW EU	CHF 232'514
	WISE: Workflow based Internet Services.	Schek, Alonso, Plattner, Lienhard IvyTeam, Jenny Online SOLUTIONS	12.1997 - 04.2000	SNF, SPP I&K	CHF 653'393
	HERMES: Foundation of High Performance Multimedia Information Management Systems, EU LTR Project	Schek, Christodoulakis TU Crete, Rabitti IEI-CNR, Neuhold GMD-IPSI, Weikum U Saarbrücken	04.1995 - 03.1998	BBW EU	CHF 631'090

EXCELLENCE CRITERIA: SCIENTIFIC OUTPUT

Peer reviewed journal publications in the last 5 years	>30	Total number of publications in peer-reviewed journals	>150

List the 5 main publications	K. Böhm, M. Mlivoncic, H.-J. Schek, R. Weber: *Fast Evaluation Techniques for Complex Similarity Queries.* In: Proc. of the 27th Int. Conf. on Very Large Databases (VLDB 2001), Roma, Italy, September 2001.
	U. Röhm, K. Böhm, H.-J. Schek: *Cache-Aware Query Routing in a Cluster of Databases.* In: Proc. of the 17th Int. Conf. on Data Engineering (ICDE 2001), Heidelberg, Germany, April 2-6, 2001, pp. 641-650.
	H. Schuldt, G. Alonso, H.-J. Schek: *Concurrency Control and Recovery in Transactional Process Management.* In: Proc. of the 18th ACM Symp. on Principles of Database Systems (PODS'99), Philadelphia, Pennsylvania, May 31-June 2, ACM Press, New York, 1999, pp. 316-326.
	R. Weber, H.-J. Schek, S. Blott: *A Quantitative Analysis and Performance Study for Similarity-Search Methods in High-Dimensional Spaces.* In: Proc. of the 24th Int. Conf. on Very Large Data Bases (VLDB'98), New York, USA, Aug.24-27, 1998, pp. 194-205.
	R. Vingralek, H. Hasse-Ye, Y. Breitbart, H.-J. Schek: *Unifying Concurrency Control And Recovery of Transactions With Semantically Rich Operations.* In: Journal of Theoretical Computer Science 190 (1998), pp. 363-396.
List your 5 main patents	Signature B-Tree
Prizes / distinctions	ACM Fellow 2000 Member VLDB Endowment since 1996 Head of Institute of Information Systems ETHZ (1988-1998) Head of Computer Science Department ETHZ (2001) Vice Rector Research at UMIT Innsbruck since 2002 Conference Organisation: Year Title Role 2002 ECDL Tutorial Co-Chair 2001 WISE PC Co-Chair 2000 ICDE Program Vice-Chair 1999 SCSC Conference Co-Chair 1999 INTEROP Conference Co-Chair 1998 EDBT PC Chair 1997 SSD Steering Committee 1997 LATSIS General Co-Chair 1996 CoopIS Panel Chair 1995 VLDB General Co-Chair
Participation in national or international committees and boards	Member in the PC of the following conferences and workshops Year Conferences /Workshops 2003 VLDB, ECDL 2002 VLDB 2001 SIGMOD, CIKM, TES 2000 PODS , CoopIS, COMAD, IDEAS

	1999 BTW, IDEAS, IWOSS, ECDL, TDD, SSD
	1998 PDCS, ECDL, DL
	1997 CoopIS, ICDT, ECDL, DL
	1996 SIGMOD, PDIS, ICDE, DS-6
	Abbreviations used in the two tables above:
	- BTW: German Conf. on Database Systems for Office, Engineering and Science
	- CIKM: Int. Conf. on Knowledge and Data Engineering.
	- COMAD: Int. Conf. on Management of Data.
	- CoopIS: Int. Conf. on Cooperative Information Systems.
	- DELOS: First DELOS Network of Excellence Workshop „Information Seeking, Searching and Querying in Digital Libraries".
	- DS: IFIP WG 2.6 Working Conference on Data Semantics.
	- ECDL: European Conf. on Research and Advanced Technology for Digital Libraries.
	- EDBT: Int. Conf. on Extending Database Technology.
	- ERCIM: European Research Consortium for Informatics and Mathematics.
	- ICDE: Int. Conf. on Data Engineering.
	- ICDT: Int. Conf. on Database Theory.
	- IDEAS: Int. Database Engineering and Applications Symposium.
	- INTEROP: Int. Conf. on Interoperating Geographic Information Systems.
	- IWOSS: Int. Workshop on Similarity Search.
	- LATSIS: The Latsis Foundation sponsors international symposia
	- PDCS: Int. Conf. on Parallel and Distributed Computing Systems.
	- PDIS: Parallel and Distributed Databases.
	- PODS: Principles of Database Systems.
	- RIDE: Int. Workshop on Research Issues in Data Engineering.
	- .SCSC: Swiss Computer Science Conference.
	- SIGMOD: Int. Conf. on Management of Data.
	- SSD: ymposium on Large Spatial Databases.
	- TES: Workshop on Technologies for E-Services.
	- VLDB: Int. Conf. on Very Large Data Bases.
	- WISE: Int. Conf. on Web Information Systems Engineering.

EXCELLENCE CRITERIA: EDUCATIONAL ACTIVITIES

Nº of Supervised PhD Theses	>30
Related teaching activities	Information Systems, Transaction Management, Higher-Order Object Management – Middleware, Enterprise Resource Management, XML and Databases

EXCELLENCE CRITERIA: INTERNATIONAL COLLABORATIONS

Groups in DELOS	University of Saarbrücken University of Athens Technical University of Crete Technical University of Athens CNR-ISTI FHG-IPSI Darmstadt University of Duisburg University of Amsterdam UKOLN University of Oldenburg
Other groups	Formal Co-operations by contracts: Microsoft Research SF (Gray) Microsoft Research Redmond (Lomet) IBM Dev Böblingen (Leymann) Kent University (Breitbart) INRIA Roquencourt (Abiteboul) Stanford University (Garcia Molina, Widom) ICSI Berkeley

INSTITUTIONAL DESCRIPTION OF ETH
(PARTICIPANT N. 3)

GENERAL & CONTACT INFORMATION				
Centre/Institute´s Name	**INSTITUTE OF INFORMATION SYSTEMS - DATABASES**	PI	**HANS-JÖRG SCHEK**	
Organization Name	**Eidgenössische Technische Hochschule Zürich**	LR	ULRICH W. SUTER	
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		WWW	www.dbs.ethz.ch	
Activity Type	RESEARCH	Legal Status	GOV	
Partner Profile	Scientific Expertise Profile	Technical Expertise Profile		
	Information Engineering, Databases, Transactional Processing, High-Performance Cluster Databases, Multimedia Databases, Information Dynamics and Mobility, Information Engineering in E-Health	OSIRIS prototype, a service architecture that combines grid computing and P2P process management for services. ISIS protoype, a large sale multi-media search system		

Keywords of specific expertise in your domain	Hyperdatabase infrastructure for DLs, synthesis of grid computing with information infrastructures, service component architecture, self-configuration, dependability, reliability, infrastructure for content-based retrieval of multimedia databases.
Brief description	Work at the Database Research Group (DBS) of ETH Zurich is focused on realizing the hyperdatabase infrastructure vision that combines and generalizes database technology with elements from the grid infrastructure and includes peer-to-peer data management. This infrastructure provides well- established database mechanisms at the level of services in a highly distributed, mobile, and autonomous network of information providers and consumers, the "information space" as it occurs in next generation digital libraries. Within this vision, we follow four main research directions: 1) transactional coordination of composite systems, 2) parallelization through the deployment of clusters of databases, 3) information dynamics and mobility, and 4) multimedia information management and efficient search techniques. Apart of theoretical investigations within these directions, the DBS group has a strong tradition in developing prototype systems that demonstrate the usefulness and efficiency of the proposed methods.

FACILITIES TO SHARE	
Relevant Infrastructures/Facilities that can be shared in DELOS	Advanced Lab facilities, including: Database Cluster consisting of up to 128 nodes, Relevant database and middleware software products, Large image database (>350000) for image search/retrieval by content. OSIRIS/ISIS prototype system as hyperdatabase infrastructure (OSIRIS) and for search (ISIS) ETHWorld, ETH's virtual campus

1.1.2 Information Access and Personalization

COORDINATOR EXCELLENCE FACT SHEET

GENERAL & CONTACT INFORMATION						
Family Name	**YANNIS IOANNIDIS**		Title	Position	Birth date	Gender
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Centre/Institute´s Name	**DEPARTMENT OF INFORMATICS AND TELECOMMUNICATIONS**				DIT	
Organization Name	**UNIVERSITY OF ATHENS**				UOA	
Research Profile	Database Systems, Query Processing and Optimisation, Digital Libraries,					

	Personalisation, Distributed Systems, Heterogeneous Systems
Keywords of intended contributions in DELOS	Query processing in distributed, heterogeneous digital libraries, information search in distributed systems, personalized and profile-based information search and presentation, profile construction, peer-to-peer architectures, health information systems.
Brief biography	Yannis Ioannidis is currently a Professor at the Department of Informatics and Telecommunications of the University of Athens. He received his Ph.D. degree in Computer Science from the University of California at Berkeley in 1986. He joined the faculty of the Computer Sciences Department of the University of Wisconsin at Madison in 1986, where he became a Professor before leaving in 1999.
	His research interests include database and information systems, scientific systems, digital libraries and human-computer interaction, topics on which he has published over 50 articles in leading journals and conferences and holds two patents.
	Dr. Ioannidis was the recipient of the Presidential Young Investigator (PYI) award in 1991, awarded by the President of the United States to the top young scientists in each field. He is also the recipient of the "10-Year Best Paper Award" in the 2003 VLDB Conference, given for the most influential paper in the proceedings of the conference 10 years earlier. He spoke on "Next-Generation Experiment Management" as the keynote speaker in the Conference on Statistical and Scientific Databases (July 2000), and on "Databases and the Web" as the keynote speaker in the Worksop on Parallel and Distributed Processing (January 2000) and the Conference on Web Age Information Management (July 2001).
	He has been a principal investigator in approximately twenty research projects funded by various government agencies (USA, Europe, Greece) or private industry. He is the leader of the "Research Forum" Work-Package of the DELOS Network of Excellence in Digital Libraries.
	He is currently an Associate Editor of five journals (Information Systems, VLDB Journal, Journal of Digital Libraries, Journal of Intelligent Information Systems, and the electronic ACM Digital Symposium Collection) and has been a member of the program committees of over forty conferences, three times as (co-)chair (VLDB, SSDBM, and VDB). He has served on the review board for the Lawrence Berkeley Laboratories in Berkeley and on the Science Council of the NASA CESDIS Center for Excellence in Space Data and Information Sciences.

EXCELLENCE CRITERIA: FUNDING SOURCES

The 5 main research projects in the last 5 years	IST, "DELOS", 950000 euros, 2000-2003. (EU)
	Unixfor SA, "Volcano: An ETL Tool System", 70000 euros, 2001. (Hellas)

EXCELLENCE CRITERIA: SCIENTIFIC OUTPUT

Peer reviewed journal publications in the last 5 years	4 (+7 top-rated conferences, usually considered more important)	Total number of publications in peer-reviewed journals	28 (+41)

List the 5 main publications	M. Garofalakis, Y. Ioannidis, B. Ozden, and A. Silberschatz, "Competitive On-line Scheduling of Continuous-Media Streams", *Journal of Computer and System Sciences, 2002.*
	J. Albert, Y. Ioannidis, and R. Ramakrishnan, "Conjunctive Query Equivalence of Keyed Relational Schemas", *Journal of Computer and System Sciences*, Vol. 58, No. 3, June 1999, pp. 512-534.
	C.-Y. Chan and Y. Ioannidis, "Hierarchical Cubes for Range-Sum Queries", *Proc. 25th Int'l VLDB Conference*, Edinburgh, Scotland, September 1999, pp. 675-686.
	Y. Ioannidis and V. Poosala, "Histogram-Based Approximation of Set-Valued Query-Answers", *Proc. 25th Int'l VLDB Conference*, Edinburgh, Scotland, September 1999, pp. 174-185.
	C.-Y. Chan and Y. Ioannidis, "An Efficient Bitmap Encoding Scheme for Selection Queries", *Proc. 1999 Int'l ACM SIGMOD Conference*, Philadelphia, PA, June 1999, pp. 215-226.
List your 5 main patents	"Computer Database Having Tables Identified by Sub-Queries", 1997
Prizes / distinctions	- "10-Year Best Paper Award", VLDB Conference 2003. - "Presidential Young Investigator" Award (PYI), National Science Foundation, 1991. - Five different teaching awards, including the "Chancellor's Distinguished Teaching" Award, University of Wisconsin, Madison, 1996. - Program Committee co-Chair, 28th Int'l Conf. on Very Large Databases (VLDB), Sept 2002 (Information Systems Infrastructure). - Program Committee co-Chair, 4th IFIP TC-2.6 Conference on Visual Database Systems (VDB), May 1998 (with W. Klas). - Program Committee Chair, 9th Int'l Conference on Scientific and Statistical Database Management (SSDBM), August 1997.
Participation in national or international committees and boards	- AE Board member ACM Sigmod DiSC (Digital Symposium Collection), 1998 - present. - AE Board member Very Large Data Bases (VLDB) Journal, 1997 - present. - AE Board member Information Systems Journal, 1993 - present. - AE Board member Int. Journal of Intelligent Information Systems, 1990 - present. - AE Board member IEEE Data Engineering, 1990 - 1993. - Science Council member of the Center for Excellence in Space Data and Information Sciences (CESDIS), Greenbelt, MD, 1998-2000. - Review board for the Computing Science Directorate at Lawrence Berkeley Nat. Lab, 1997, 1999, 2002. - European co-chair of DELOS-NSF Working Group on "Digital Library Information Infrastructure"

EXCELLENCE CRITERIA: EDUCATIONAL ACTIVITIES

Nº of Supervised PhD Theses	7
Related teaching activities	- Five different courses on Database Systems - Univ. of Athens, 1997-present - Course on Human-Computer Interaction - Univ. of Athens, 1997-present - Four different courses on Database Systems - Univ. of Wisconsin-Madison, 1986-1997
EXCELLENCE CRITERIA: INTERNATIONAL COLLABORATIONS	
Groups in DELOS	Technical University of Crete, EL CNR-ISTI, I
Other groups	Univ. of Wisconsin, Madison, US Univ. of Toronto, CAN Univ. of Maryland, College Park, US Lucent Bell Laboratories, US

INSTITUTIONAL DESCRIPTION OF UNIVERSITY OF ATHENS
(PARTICIPANT N. 5)

GENERAL & CONTACT INFORMATION				
Centre/Institute´s Name	**DEPARTMENT OF INFORMATICS AND TELECOMUNICATIONS**	PI	**YANNIS IOANNIDIS**	
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		Fax	+30 210 727 5214	
		E-mail	yannis@di.uoa.gr	GREECE
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Activity Type	RESEARCH	Legal Status	GOV	

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Partner Profile	Scientific Expertise Profile
	Research activities in the Laboratory for Advanced Information Systems include three main areas: query processing and optimisation over heterogeneous information sources, information search over distributed autonomous information providers, and personalized access to information sources.
	Information Search Over Distributed Autonomous Information Providers: A digital library environment often consists of several individual digital library systems that are independent and autonomous, but collaborate with each other to share data and services. Information search and query processing in such an environment is very challenging and raises several problems with respect to algorithms, scale management, speculating on the individual system's behaviour, query optimisation, etc. We investigate all these problems with the goal of developing a comprehensive approach to the overall issue.
	Personalized Access to Information Sources: There are several different forms of personalized access to information, and at the same time, each of them may be applied on different types of stored data. We investigate appropriate user models for representing user preferences over structured and unstructured data in profiles. Furthermore, we develop methods for integrating such information into a user request in order to personalize its overall behaviour and the final results. In each case, we explore user models that take advantage of specific characteristics of data depending on their type.
	Query Processing/Optimisation Over Heterogeneous Information Sources. Traditionally, accessing information in structured, semi-structured, or unstructured form has been done with different technologies, e.g., declarative queries, navigation, and keyword-based information retrieval, respectively. In the future, all these need to be provided seamlessly, in a cohesive way by a digital library system. We compare several aspects of traditional approaches and develop languages, algebras, and processing algorithms that support the necessary semantics across such diverse data sources.
	Technical Expertise Profile
	The Laboratory for Advanced Information Systems has technical expertise in several areas, including complex query optimisation, database approximation and estimation, distributed systems management, software engineering, digital library construction and search, statistical databases.
Keywords of specific expertise in your domain	QUERY PROCESSING – OPTIMIZATION – PERSONALISATION – HETEROGENEOUS INFORMATION SOURCES – DISTRIBUTED AUTONOMOUS INFORMATION PROVIDERS

Brief description	The Department of Informatics and Telecommunications belongs to the School of Sciences of the National and Kapodistrian University of Athens. It was officially founded in 1989; in principle, however, it started functioning in 1986, further to a decision taken by the Senate, as an "Interdisciplinary Study Program in the Computer Sciences and Communications" between the Faculties of Physics and Mathematics. Today the Department has 35 faculty members: 11 Professors, 8 Associate Professors, 14 Assistant Professors and 2 Lecturers.
	In 2000, the Department was renamed from Department of Informatics to Department of Informatics and Telecommunications.
	The Sector of Computer Systems and Applications, which focuses on the Analysis, Synthesis and Applications of Hardware and Software Systems, as well as the management of Databases and Knowledge Bases.
	The Laboratory for Advanced Information Systems focuses on research regarding query processing and optimisation over heterogeneous information sources, information search over distributed autonomous information providers, and personalized access to information sources. Prof. Ioannidis was the leader of the Research Forum work-package of the 5FP DELOS project.
	In the proposed DELOS project, in addition to coordinating the Information Access and Personalization cluster, the University of Athens will participate actively in several integration and research activities within that and other clusters, building on its scientific and technical expertise, i.e., focusing on the topics of query processing in advanced environments, query optimisation, personalisation and profile-based data search, and heterogeneous systems management.
FACILITIES TO SHARE	
Relevant Infrastructures/Facilities that can be shared in DELOS	10 pc's in the Laboratory for Advanced Information Systems

1.1.3 Audio/Visual and Non-traditional Objects

CO-COORDINATOR EXCELLENCE FACT SHEET

GENERAL & CONTACT INFORMATION							
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	WWW	http://www.music.tuc.gr					

Centre/Institute´s Name	**LAB OF DISTRIBUTED INFORMATION SYSTEMS AND APPLICATIONS**	MUSIC	
Organization Name	**TECHNICAL UNIVERSITY OF GREECE**	TUC	
Research Profile	Multimedia information systems, databases and knowledge bases, information retrieval, high performance distributed systems, internet technologies, architectures and web service oriented systems		
Keywords of intended contributions in DELOS	Information management and retrieval, semantic indexing of audio-visual content, domain-specific ontologies, multi-channel delivery mechanisms, information filtering and personalization, metadata frameworks for audio-visual content, user community models.		
Brief biography	Prof. Stavros Christodoulakis is Professor of the Department of Electronic and Computer Engineering of the Technical University of Crete, Greece, and Director of the Laboratory of Distributed Multimedia Information Systems and Applications (TUC/MUSIC).		
	Prof. Christodoulakis has been a member of the Editorial Board of several International Scientific Journals. He has been Program Committee Chairman, Area Program Committee Chairman, European Program Committee Chairman, and Program Committee Member in many of the most important International Conferences in the areas of Databases, Information Retrieval, Multimedia Systems, and Office Information Systems. He has also been reviewer for the top quality Journals in the areas of databases and information systems, reviewer for the NSF of USA, of NSERC of Canada, and of the European Community ESPRIT Projects. He is the author of many scientific articles in journals, conferences and books in the areas of databases, information systems, multimedia systems, document management systems, and system performance. He has also been invited and presented Keynote Speeches and Tutorials in many international conferences.		
	Professor Christodoulakis has been professor in the Department of Computer Science of the Universities of Toronto and Waterloo, Associate Chairman and Chairman of Graduate Studies in the University of Waterloo, Member of the Board Directors of the Institute of Computer Research in the University of Waterloo, as well as the Institute of Speech of Greek Ministry Research and Technology, and the Lambrakis Research Foundation. He was offered the Industrial Research Chair for Multimedia Information Systems supported by the Telecommunication Research Institute (TRIO), the University of Ottawa as well as ten (10) of the largest Canadian Companies in Computers and Telecommunications.		
	Professor Christodoulakis has also been a consultant to several high-tech companies in software and telecommunications in USA, Canada and Europe. He has also been Chairman of the Department of Electronic and Computer Engineering of the Technical University of Crete, Member of the Senate, as well as Director of the Laboratory of Telecommunications and the Laboratory of Software Engineering in the Technical University of Crete. Professor Christodoulakis holds a PhD in Computer Science from the Department of Computer Science of the University of Toronto.		

EXCELLENCE CRITERIA: FUNDING SOURCES	
The 5 main research projects in the last 5 years	EU IST-2000-25131 « UWA », 135600 EUR, 2001-2002 EU IST-1999-20751 « UP-TV », 510000 EUR, 2000-2003 EU ESPRIT « CAMPIELLO », 345000 EUR, 1997-2000 EU INCO-COPERNICUS PL961060 « ARCHIMED », 82000 EUR, 1998-2000 National 99EΔ 56 PENED « HiPerSciMA », 62000 EUR, 2000-2001 EU ACTS-071 « SICMA »,405000 EUR 1995-1998

EXCELLENCE CRITERIA: SCIENTIFIC OUTPUT			
Peer reviewed journal publications in the last 5 years	4	Total number of publications in peer-reviewed journals	31
List the 5 main publications	P. . Triantafillou, S. Christodoulakis and C. Georgiadis: "A Comprehensive Analytical Performance Model for Disk Devices Under Random Workloads"IEEE Transactions on Knowledge and Data Engineering, 2000 P. Triantafillou, S. Christodoulakis and C. Georgiadis: "Optimal Data Placement on Disks: A Comprehensive solution for Different Disk Technologies", IEEE Transactions on Knowledge and Data Engineering, 2000. S. Christodoulakis and F. Zioga: "Data Base Design Principles for Placement of Delay-Sensitive Data on Disks", IEEE Transactions on Knowledge and Data Engineering, 11,3, pp 425-447 May – June 99, special section on Data and Knowledge Management in Multimedia Systems. Tamer Ozsu & Stavros Christodoulakis: "Indroduction to Multimedia Database Management", special issue on VLDB Journal, Decemeber 1998. S. Christodoulakis and P. Triantafillou: "Research and Development Issues for Large-Scale Multimedia Information Systems", Special issue on Multimedia Information Systems, ACM Computing Surveys, pp.75-79, Dec.1995.		
Prizes / distinctions	General Conference Chair, Conference on Extending Data Base Technology EDBT 2004. Associate Program Chair: ACM Multimedia, 2002 European Program Committee Chairman in ICDE 2000, San Diego CA, 28-2-2000 European Program Committee Chairman in ACM Multimedia 93, California General Program Committee Chair, VLDB 1992, Canada VLDB (Very Large Data Bases) European and NorthAmerican Program Committee Chair, ACM First International Conference on Multimedia Information Systems, Singapore 1991 Recognized by NSERC (Natural Science and Engineering Research Council of Canada-the equivalent of NSF of the USA) as "the top		

	Canadian and perhaps world researcher in the field" of real-time distributed multimedia information systems, and he was awarded the NSERC/TRIO Industrial Research Chair in this field (August 1990). The Chair was supported by NSERC, the University of Ottawa, the Telecommunications Research Institute of Ontario (TRIO), and a team of 10 major Canadian companies in the areas of multimedia information systems and telecommunications. Nominated for the position of the Dean in the Department of Information Systems and Education in the University of California Berkeley.
Participation in national or international committees and boards	Board of Directors, Institute of Telecommunications, Technical University of Crete, Greece Board of Directors, Idomeneus Excellence Network(1995,1997). Advisory Board, European Multimedia Forum (1995). National Research Council of Greece (1994) Board of Directors, Lambraki Foundation (1993-1995) Scientific Board, Institute of Language and Speech Processing (1995,1997) Board of Directors, Institute of Computer Research (ICR), Ontario, Canada (1989,1990) Member of the Editorial Boards at various times: ACM Transactions on Information Systems ACM-Verlag Multimedia Systems Information Systems, Pergamon Journal of UCS Distributed and Parallel Databases, Kluwer Publishers

EXCELLENCE CRITERIA: INTERNATIONAL COLLABORATIONS	
Groups in DELOS	National Technical University of Athens University of Athens Universite Paris
Other groups	-Bourgas Free University -Domus Academy -ETH Zurich -Napier University -Fraunhofer Institute -GMD-IPSI -Univerita di Lecce -Politecnico di Milano -T.U Berlin -Technical University of Darmstadt -Technical University of Vienna -University of Antwerp -University la Sapienza -Universita della Svizzera Italiana -University College London -University of Linz -University of Maryland -University of Milano -University of Ottawa -University of Paderborn -University of Budapest

| | -University of Glasgow |
| | -University of Helsinki |

INSTITUTIONAL DESCRIPTION OF TECHNICAL UNIVERSITY OF CRETE
(PARTICIPANT N. 6)

GENERAL & CONTACT INFORMATION				
Centre/Institute´s Name	**LAB OF DISTRIBUTED INFORMATION SYSTEMS AND APPLICATIONS**	PI	**STAVROS CHRISTODOULA KIS**	
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		WWW	www.music.tuc.gr	
Activity Type	RESEARCH	Legal Status	GOV	
Partner Profile	Scientific Expertise Profile	Technical Expertise Profile		
	Video modelling, Content-based retrieval of audio-visual content, semantic content description, domain-specific ontologies, information integration, audio-visual content streaming and scheduling mechanisms, profiling-personalization, filtering models, transaction metamodels, unified transaction modelling language, speech processing models.	Development of Multimedia Information Management and multi-channel delivery Systems. XML– Database middleware. Digital TV systems. Audio-visual metadata management modules and information retrieval mechanisms. Transaction design tool. Content annotation and semantic indexing tools. Application development for java-enabled mobile phones and hand-held devices. Web services development. E-learning platform.		
Keywords of specific expertise in your domain	DATABASES – KNOWLEDGE BASES – INFORMATION RETRIEVAL – WEB SERVICES – GIS – E-LEARNING – HUMAN COMPUTER INTERACTION - MULTIMEDIA INFORMATION SYSTEMS – MULTIMEDIA COMMUNICATION SYSTEMS – DIGITAL TV SYSTEMS			
Brief description	Technical University of Crete is an academic organization that provides high quality education to thousands of students and runs a great number of research activities in many fields. It is a public organization covering advanced technological and engineering areas and is organized in four engineering Departments. The Department of Electronic and Computer Engineering comprises 10 full professors, 13 Associate professors, 4 Associate professors, 4 Assistant professors and several research, technical and administrative staff. The Department carries out research in the fields of computer engineering, system automation and telecommunications. The laboratory of Distributed Information Systems and Applications (TUC/MUSIC) is a center of research, development and education in the			

<table>
<tr><td></td><td>technological fields of Information Systems and their applications. Research fields include web services systems, databases and knowledge bases, information retrieval, digital libraries, multimedia management systems, digital TV systems, geographic information systems, e-Learning, speech processing etc. TUC/MUSIC has participated in over than 40 European and National Projects. The projects include large basic research projects, large projects for the development of innovative software tools and integrated multimedia systems and projects for technology transfer. Current activities include research in audio-visual management systems, digital TV systems, audio-visual metadata management, semantic indexing, personalization and information retrieval, mechanisms for content filtering and summarization, multi-channel delivery systems. The speech processing group of TUC has wide experience in research and application areas in speech processing.</td></tr>
</table>

FACILITIES TO SHARE	
Relevant Infrastructures/Facilities that can be shared in DELOS	Advanced Lab facilities, including: Computer systems (workstations,PCs), projectors, digital cameras, hand-held devices. Distributed Multimedia Information Managements Systems. Database design and development software. Web design and development software. Video capturing, editing, coding solutions. Audio-visual content delivery systems. E-learning platform. Information Management system for metadata of audio-visual content based on TV-anytime and MPEG- standards.

CO-COORDINATOR EXCELLENCE FACT SHEET

GENERAL & CONTACT INFORMATION					
Family Name	**ALBERTO DEL BIMBO**	Title	Position	Birth date	Gender
		Prof.	Full Professor	15/02/52	M
Contact Info	Phone: +39-055-479 6262	Fax: +39-055-479 6363	E-mail	delbimbo@dsi.unifi.it	
	WWW	http://viplab.dsi.unifi.it/			
Centre/Institute´s Name	**DIPARTIMENTO SISTEMI E INFORMATICA** **VISUAL INFOPRMATION SYSTEMS**			DSI VIS	DSI VIS UNIFI
Organization Name	**UNIVERSITA' DEGLI STUDI DI FIRENZE**			UNIFI	
Research Profile	Image Analysis, Image Databases, Hyman Computer Interaction				
Keywords of intended contributions in DELOS	content-based retrieval of image/video, face and gesture recognition, graph matching, image database, image processing environments, image registration, image segmentation and image extraction, machine intelligence, machine vision, motion tracking and analysis, object and scene modelling, object recognition, shape extraction and analysis				

Brief biography	Alberto Del Bimbo is Full Professor of Computer Engineering at the University of Florence, Italy. Since 1998 he is the Director of the Master in Multimedia of the University of Florence. At the present time, he is Deputy Rector of the University of Florence, in charge of Research and Innovation Transfer.
	His scientific interests are Pattern Recognition, Image Databases, Multimedia and Human Computer Interaction. He has delved into object recognition and image sequence analysis, multimedia databases and content-based retrieval. Prof. Del Bimbo is the author of over 170 publications in the most distinguished international journals and conference proceedings. He is the author of the "Visual Information Retrieval" monograph on content-based retrieval from image and video databases edited by Morgan Kaufman.
	He is Member of IEEE (Institute of Electrical and Electronic Engineers) and IAPR (International Association for Pattern Recognition). Prof. Del Bimbo was the President of the IAPR Italian Chapter, from 1996 to 2000 and Member at large of the IEEE Publication Board from 1998 to 2000. He is presently Associate Editor of Pattern Recognition, Journal of Visual Languages and Computing, Multimedia Tools and Applications Journal, Pattern Analysis and Applications, IEEE Transactions on Multimedia, and IEEE Transactions on Pattern Analysis and Machine Intelligence.
	He was the Guest Editor of several special issues on Image databases in highly respected journals. He was the General Chairman of the 9th IAPR International Conference on Image Analysis and Processing, ICIAP '97 - Florence (1997) and the General Chairman of the 6th IEEE International Conference on Multimedia Computing and Systems, ICMCS'99 - Florence (1999).

EXCELLENCE CRITERIA: FUNDING SOURCES

The 5 main research projects in the last 5 years	- EC SOC 972002292 05F05 "VECWIT", 350.000 EUR, 1008-2001 - EC IST 1999 13082 D17 "ASSAVID", 143.445 EUR, 2000-2003 - EC IST 2000 26061 "MIND", 62.820 EUR, 2001-2003 - MIUR PNR2000 "SPADA", 49.586 EUR, 2001-2003 - MIUR FIRB2001, 320.000 EUR, 2002-2004
The 5 main technology transfer projects in the last 5 years	- PROVINCIA FIRENZE, 150.000 EUR- 2002–2004 - BASSILICHI SpA, 30.000 EUR - 2002-2003 - INFOGROUP SpA, 30.000 EUR – 1999-2000 - RAI, 45.000 EUR– 1999-2000 - ELSAG SpA, 20.000 EUR - 1998-1999

EXCELLENCE CRITERIA: SCIENTIFIC OUTPUT

Peer reviewed journal publications in the last 5 years	25	Total number of publications in peer-reviewed journals	54
List the 5 main publications	BERRETTI S., DEL BIMBO A., PALA P., "RETRIEVAL BY SHAPE SIMILARITY WITH PERCEPTUAL DISTANCE AND EFFECTIVE INDEXING", IEEE TRANSACTIONS ON MULTIMEDIA, 2000		
	BERRETTI S., DEL BIMBO A., VICARIO E., "EFFICIENT		

	MATCHING AND INDEXING OF GRAPH MODELS FOR CONTENT BASED RETRIEVAL", IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE, 2001
	ASSFALG J., DEL BIMBO A., VICARIO E., "USING 3D AND ANCILLARY MEDIA TO TRAIN CONSTRUCTION WORKERS", IEEE MULTIMEDIA, 2002
	ASSFALG J., DEL BIMBO A., PALA P., "THREE-DIMENSIONAL INTERFACES FOR QUERYING BY EXAMPLE IN CONTENT-BASED IMAGE RETRIEVAL", IEEE TRANSACTIONS ON VISUALIZATION AND COMPUTER GRAPHICS, 2002
	BERRETTI S., DEL BIMBO A., VICARIO E.,"WEIGHTED WALKTHROUGHS BETWEEN EXTENDED ENTITIES FOR RETRIEVAL BY SPATIAL ARRANGEMENT", IEEE TRANSACTIONS ON MULTIMEDIA, 2002
List your 5 main patents	System for head pointing 2002 PCT
Prizes / distinctions	- University of Florence Deputy Rector for Research and Innovation Transfer, 2001 - International association for Pattern Recognition Fellowship, 2000 - IEEE Computer Society Certificate of Appreciation, 1999 - General chair International Conference on Image Analysis and Processing ICIAP97 Firenze I (1997) - General Chair International Conference on IEEE Multimedia Computing and Systems IEEE ICMCS99 Firenze I (1999) - General Co-Chair of the 1st Workshop on Image and Video Content-based Retrieval, - Milano I (1998) - General Co-Chairman of the 1st Workshop on Artificial Intelligence and Pattern Recognition Techniques for Computer Vision, - IAPRVA98 – Ferrara I (1998) - Program Co-Chairman of the 5th IEEE International Conference on Multimedia Computing and Systems, ICMCS'98 - Austin TX (1998) - Program Co-Chairman of the 3rd International Conference on Visual Information Systems, VISUAL99 – Amsterdam NL (1999). - Track Co-Chair of the International Conference on Pattern Recognition 2004, Cambridge UK (2004)
Relationship with national networks	DELOS network, Costantino Thanos
Participation in national or international committees and boards	- Member at large IEEE Publication Board 1998-2000 - Vice-President International Association for Pattern Recognition Italian Chapter - President International Association for Pattern Recognition Italian Chapter - Associate Editor Board member IEEE Transactions on Multimedia - AE board member IEEE Transactions on Pattern Analysis and machine Intelligence

	- AE Board member Pattern Recognition - AE Board member Multimedia Tools and Applications - AE Board member Journal of Visual languages and Computing - AE Board member Pattern Analysis and Applications - Member of Steering Committee IEEE International Conf. on Multimedia and Expo - Member of the Steering Committee of IEEE International Con. on Multimedia Computing and Systems - Member of the Honorary Committee of IMAGINA - Co-Chair DELOS – NSF Working Group on Digital imagery for Cultural Heritage applications
EXCELLENCE CRITERIA: EDUCATIONAL ACTIVITIES	
Nº of Supervised PhD Theses	16
List of supervised PhD thesis	- Nesi Paolo "Analisi del Moto nella Visione Artificiale: Teoria Unificata, Stima e Architetture Parallele" 1992 - Vicario Enrico "Protocolli di Trasporto per Reti Locali", 1992 - Santini Simone "Reti Neurali per Elaborazione di Immagini", 1992 - Landi Leonardo "Algoritmi non supervisionati per Elaborazione di Immagini", 1995 - Mattolini Riccardo "TILCO, una logica Temporal per la Specifica di Sistemi Tempo Reale", 1995 - Fioravanti Maurizio "A Metric Framework for the Assessment of Object Oriented Systems", 1996 - Bruno Melendez "Completeness and Consistency of External and Internal Specifications of Reactive Systems", 1995 - Pala Pietro "Similarity Search in Image Databases Using Elastic Models" 1996 - Corridoni Jacopo "Ricerca e Annotazione Automatica di Filmati Video", 1996 - Stefano Berretti "Colore e Arrangiamento Spaziale nell'Accesso per Similarità Visuale a Database di Immagini", 1999 - Assfalg Jurgen "Interazione uomo macchina con Ambienti Virtuali", 2000 - Alessandro Valli "Interazione Naturale uomo Macchina", in progress - Marco Bertini "Annotazione Automatica di Video", in progress - Walter Nunziati "Algoritmi di Interpretazione di Contenuto di Sequenze Video", in progress - Federico Pernici "Ricostruzione di oggetti 3D da singola vista", in progress - Giampaolo D'Amico "Web design and Evaluation", in progress
DELOS related teaching activities	- Digital libraries – Master in Multimedia Internet Engineering Univ. of Florence - Web development - Master in Multimedia Content design Univ. of Florence - Principles of Multimedia design - Univ. of Florence
EXCELLENCE CRITERIA: INTERNATIONAL COLLABORATIONS	
Groups in DELOS	University of Surrey, UK

	University of Amsterdam, NL
Other groups	University of California at San Diego, CA University of Michigan at Ann Arbor MI Carnegie Mellon University, IL Boston University, MA Hiroshima University, J Kyoto University, J Niigata University, J Indian Institute of Technology at Bombay, I Indian Institute of Technology at Delhi, I Nanyang University, Singapore University of Lille F IDIAP, Dalle Molle Institute for Perceptual Artificial Intelligence, CH INRIA Roquencourt, F INRIA IRISA, F Aristotle University of Thessaloniki, Gr University of Cambridge UK Universitat Autonoma de Barcelona, S University of Sheffield, UK University of Strathclyde, UK University of Dortmund

INSTITUTIONAL DESCRIPTION OF UNIVERSITY OF FLORENCE
(PARTICIPANT N. 7)

GENERAL & CONTACT INFORMATION				
Centre/Institute´s Name	**DIPARTIMENTO SISTEMI E INFORMATICA - VISUAL INFORMATION SYSTEMS LAB**	PI	**ALBERTO DEL BIMBO**	
Organization Name	**UNIVERSITA' DEGLI STUDI DI FIRENZE**	LR	AUGUSTO MARINELLI	
Full Address	PIAZZA S. MARCO 4 50121 FIRENZE ITALY	Phone	0039-055-4796262	Country
		Fax	0039-055-4796363	
		E-mail	delbimbo@dsi.unifi.it	ITALY
		WWW	viplab.dsi.unifi.it	
Activity Type	RESEARCH	Legal Status	GOV	
Partner Profile	Scientific Expertise Profile	Technical Expertise Profile		

	activity analysis in video, automatic target recognition, clustering, cognitive vision content-based retrieval of image/video, face and gesture recognition, graph matching, image database, shape extraction and analysis, image processing environments, image segmentation and image extraction, machine intelligence, machine vision, object recognition	Development of image processing algorithms, computer vision algorithms, web design, web based applications
Keywords of specific expertise in your domain	COMPUTER VISION – IMAGE ANALYSIS – IMAGE DATABASES – ADVANCED HUMAN COMPUTER INTERACTION	
Brief description	Università degli Studi di Firenze is an academic institution engaged in higher level education and research. It is a public institution providing higher level education to more than 50.000 students in several fields, covering medicine, humanistic, scientific and technological areas. Technological disciplines are the main subject for the School of Engineering. Università degli Studi di Firenze is organized in Departments collecting cohesive scientific areas. Each Department is an autonomous administrative unit. The Dept. of Sistemi e Informatica (www.dsi.unifi.it) comprises 15 full professors, 13 Associate professors, 12 Research Assistants, 3 Technical Staff units, and 5 Administrative Staff units. The Department carries out research in the fields of Information Engineering, Computer Engineering, Automation and Control, Applied Mathematics. Department faculty members support teaching in the core courses for the doctoral degrees in Information Engineering (Ingegneria Informatica) and Computer Science, (Scienze dell'Informazione). The Department also supports three Ph.D. programs (Dottorato di Ricerca) in Information and Telecommunication Engineering (Ingegneria Informatica e delle Telecomunicazioni), Information and Automation Engineering (Ingegneria Informatica e dell'Automazione), System Engineering (Ingegneria dei Sistemi). The main research activities carried out at the Visual Information Systems Laboratory of the Dept. of Sistemi e Informatica are related to Image Technologies and, in particular, Multimedia Information Processing, Annotation of and Retrieval from Image and Video Databases, Data Visualization, Advanced Human-Machine Interaction and Interfaces, and Software Engineering for Multimedia Applications. In these contexts, systems have been designed and developed for: content based retrieval of images and videos, semantic annotation of images and videos, advanced human-machine interfaces based on virtual reality, advanced human-machine interaction based on computer vision, acquisition of realistic 3D models based on computer vision	
FACILITIES TO SHARE		

Relevant Infrastructures/Facilities that can be shared in DELOS	Advanced Lab facilities, including: Computer systems, cameras. Large visualization screens. Software packages for image analysis/computer vision. Proprietary software algorithms for image analysis, computer vision, image database search and retrieval, Web design and development software packages. 3D graphics development software packages. Video editing and compositing packages. Multimedia processing packages. Large test site for advanced machine vision applications for human-computer interaction. Test image databases for image-video search/retrieval by content

1.1.4   User Interfaces and Visualization

COORDINATOR EXCELLENCE FACT SHEET

GENERAL & CONTACT INFORMATION							
Family Name	**TIZIANA CATARCI**			Title	Position	Birth date	Gender
				Prof.	Full Professor	06/11/61	F
Contact Info	Phone	+39-06-4991 8331	Fax	+39-06-4991 8331	E-mail	catarci@dis.uniroma1.it	
	WWW	http://viplab.dsi.unifi.it/					
Centre/Institute´s Name	**DIPARTIMENTO DI INFORMATICA E SISTEMISTICA "A.RUBERTI"**					DIS	
Organization Name	**UNIVERSITA' DEGLI STUDI DI ROMA "LA SAPIENZA" (ROMA1)**					ROMA1	
Research Profile	Visual information access, Information visualization, Human Computer Interaction, Usability, Digital Libraries, Semantic database modeling, Cooperative information systems, Data quality						
Keywords of intended contributions in DELOS	Contest analysis, user requirements, DL visualizations and visual tools, adaptive interfaces, theoretical interaction framework, DL interface design methodology and guidelines						
Brief biography	Tiziana Catarci got her Ph.D. in Computer Engineering in 1992 from the University of Roma "La Sapienza", Italy, where she is now Full Professor of Computer Engineering. Her main research interests are in theoretical and application oriented aspects of visual formalisms for databases, information visualization, database design, cooperative information systems, user interfaces, usability, digital libraries, data quality and Web access. On these topics she has published over 100 papers in leading journals and conferences and 10 books. Her contribution can be regarded as one of the first and most significant examples of deep analysis and formalization of the interaction between the user and the database, which takes in consideration both usability issues and language related aspects. With respect to applications, she has led or participated in various projects						

on visual query systems, usability studies and developed methodologies for database design. Particularly relevant are some European projects, including KIM, VENUS, FADIVA, LAURIN, SEWASIE, aiming at investigating different aspects of interface design and human-computer interaction. Outside of academia, she has been a consultant to large (private and government) organisations.

Dr. Catarci is regularly in the programming committees of the main database and human-computer interaction conferences and is associate editor of IEEE Multimedia, ACM SIGMOD Digital Symposium Collection (DiSC) and World Wide Web Journal. She is the PC Co-chair of the 4th International Conference on Web Information systems (WISE 2003). She has been the organizing chair of the 27th International Conference on Very Large Databases (VLDB2001), has been the program co-chair of the Fifth IFIP Working Conference on Visual Database Systems (VDB5) and has been the program co-chair of the International Workshop on Advanced Visual Interfaces (AVI) in 1996 and is in the AVI steering committee. AVI is bringing together researchers in Human Computer Interaction and Databases since 1992. She has been guest co-editor of two recent special issues of the Journal of Visual Languages and Computing (on "Visual Query Languages") and of ACM SIGMOD Record (on "Information Visualization").

She is member of the Association for Computing Machinery (ACM) and the Institute of Electrical and Electronics Engineers (IEEE).

EXCELLENECE CRITERIA: FUNDING SOURCES

The 5 main research projects in the last 5 years	- MIUR-FIRB, MAIS Project, 1.200.000 EUR, 2002-2005
	- EC IST-2001-34825 "SEWASIE", 130.000 EUR, 2002-2004
	- EC LB-5629/A-LAURIN, 100.000 EUR, 1998-2000
	- MIUR-COFIN, ,DaQuinCIS, 100.000 EUR, 2000-2003
	- CM Sistemi SpA, 100.000 EUR, 2002-2004
	- MIUR, VICE project, 160.000 EUR 2003-2005

EXCELLENECE CRITERIA: SCIENTIFIC OUTPUT

Peer reviewed journal publications in the last 5 years	14	Total number of publications in peer-reviewed journals	39

List the 5 main publications	T. Catarci – What Happened When Database Researchers Met Usability – *Information Systems*, Vol. 25, N. 3, pp. 177-212, 2000.
	D. Calvanese, T.Catarci, G. Santucci - LAURIN: A Distributed Digital Library of Newspaper Clippings - *WWW Journal*, Vol. 4, N.1-2, pp.5-20, 2001.
	S. Fernandes Silva, T.Catarci, U.Schiel - Formalizing Visual Interaction with Historical Databases, *Information Systems*, Vol. 27, N.7, pp. 487-521, 2002.
	T.Catarci, G.Matarazzo, G.Raiss – Driving Usability into the Public Administration: the Italian Experience – *International Journal of Human-Computer Studies*, 57, pp. 121-138, 2002. E.Bertino, T.Catarci, A.K. Elmagarmid, M.S. Hacid – Quality of Service Specification in Video Databases – *IEEE Multimedia*, to appear October 2003.
Prizes / distinctions	IBM Eclipse Innovation Award 2003
	Program Co-Chair Third International Workshop on Advanced Visual Interfaces (AVI'96), Italy (1996).
	Program Co-Chair Fifth International Conference on Visual Database Systems (VDB5), Japan (2000).
	Program Chair International Workshop on Data Quality in Cooperative Information Systems (DQCIS'03), Italy, 2003.
	Program Co-Chair International Conference on Web Information System Engineering (WISE'03), Italy, 2003.
	Organizing Chair 27th International Conference on Very Large Databases (VLDB'01), Italy (2001).
Participation in national or international committees and boards	- Associate Editor Board member IEEE Multimedia - AE Board member ACM SIGMOD Digital Symposium Collection (DiSC) - AE Board member World Wide Web Journal (Kluwer eds.). - Member of IFIP Special Interest Group WG 2.6. (Database). - Member of Steering Committee International Conference on Advanced Visual Interfaces (AVI) - Founder Member Italian Chapter of the ACM Special Interest Group on Computer-Human Interaction - ACM Member - IEEE Member

EXCELLENCE CRITERIA: EDUCATIONAL ACTIVITIES

Nº of Supervised PhD Theses	4
Related teaching activities	Databases, Human-Computer Interaction

EXCELLENCE CRITERIA: INTERNATIONAL COLLABORATIONS

Groups in DELOS	- University of Athens, Greece - Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V., Germany
Other groups	- Brown University, USA - AT&T Research Lab., USA - Lancaster University, UK - GeorgiaTech, USA - INRIA, France - University of Pittsburgh, USA - University of Illinois at Chicago, USA - Universitade Federal de Paraiba, Brasil - Purdue University, USA - Tallaght Institute of Technology, Ireland

INSTITUTIONAL DESCRIPTION OF UNIVERSITY OF ROME 1
(PARTICIPANT N. 14)

GENERAL & CONTACT INFORMATION					
Centre/Institute´s Name	**DIPARTIMENTO DI INFORMATICA E SISTEMISTICA "A.RUBERTI"** VIA EUDOSSIANA 18, 00184 ROMA	PI	**TIZIANA CATARCI**		
Organization Name	**UNIVERSITA' DEGLI STUDI DI ROMA"LA SAPIENZA"**	LR	GIANNI DI PILLO		
Full Address	PIAZZALE ALDO MORO 5 00185 ROMA ITALY	Phone	0039-06-4991 8331	Country	
		Fax	0039-06-4991 8331		
		E-mail	catarci@dis.uniroma1.it	ITALY	
		WWW	www.dis.uniroma1.it		
Activity Type	RESEARCH	Legal Status	GOV		
Partner Profile	Scientific Expertise Profile	Technical Expertise Profile			

	User Interfaces for Information Access, 2D and 3D Information Visualization, Digital Libraries, Adaptive Interfaces, Visual Metaphors, Controlled Studies and Usability Testing, Heterogeneous and Cooperative Database Systems, Database Integration, Data Quality, Web Access, Mobile Information Systems.	Development of user interfaces, information visualization systems, cooperative information systems, web based applications
Keywords of specific expertise in your domain	Information visualization – controlled usability studies – visual metaphors for information access – information modeling	
Brief description	Università degli Studi di Roma "La Sapienza"is a large academic institution engaged in higher level education and research. It is a public institution providing higher level education to more than 150.000 students in several fields, covering medicine, humanistic, scientific and technological areas. Technological disciplines are the main subject for the School of Engineering. Università degli Studi di Roma "La Sapienza" is organized in Departments collecting cohesive scientific areas. Each Department is an autonomous administrative unit. The Dept. of Informatica e Sistemistica "A.Ruberti" (www.dis.uniroma1.it) comprises 24 full professors, 19 Associate professors, 32 Research Assistants, 11 Technical Staff units, and 12 Administrative Staff units. The Department carries out research in the fields of Information Engineering, Computer Engineering, Automation and Control, Bioengineering, Operations Research, Robotics. The Department directly hosts the Ph.D. programs in Computer Engineering and in System Engineering. Moreover, DIS cooperates in the Ph.D. program in Bioengineering, hosted by the University of Bologna, and in the Operations Research Ph.D. program hosted by the Department of Probability and Statistics. The research in Computer Engineering is mainly concentrated on the following areas: Artificial Intelligence, Databases, Visual Formalisms, Design and Analysis of Algorithms, Digital Libraries, Distributed Systems, Co-operative Information Systems, Human-Computer Interaction, Programming Languages, Computer Graphics. The related research activities have been funded by several Italian and international organizations. DIS participants in the DELOS2 project have expertise in different areas, namely user interfaces and human-computer interaction, databases, distributed and co-operative architectures and artificial intelligence. Besides several publications in international journals and conferences, the DIS group has also implemented several prototypes of visual interfaces for database access, such as QBD and QBI, which have been transformed into industrial products by an Italian company. Participants from DIS have been involved in several European projects, including KIM, VENUS, DWQ, FADIVA, LAURIN and COMPULOG, whose results are strictly linked with the starting point of the present Project.	

FACILITIES TO SHARE	
Relevant Infrastructures/Facilities that can be shared DELOS[i]	Advanced Lab facilities, including: Computer systems, Complete Usability Lab, Mobile/wireless systems.

1.1.5 Knowledge Extraction and Semantic Interoperability

COORDINATOR EXCELLENCE FACT SHEET

GENERAL & CONTACT INFORMATION							
Family Name	**ELIZABETH LYON**		Title	Position		Birth date	Gender
			Dr	Director		06/11/57	F
Contact Info	Phone	+44 1225 386580	Fax	+44 1225 386838	E-mail	e.lyon@ukoln.ac.uk	
	WWW	http://www.ukoln.ac.uk					
Centre/Institute´s Name	**UKOLN**						
Organization Name	**UNIVERSITY OF BATH, UK**						
Research Profile	Information Architectures, DL/Grid applications, multimedia digital libraries.						
Keywords of intended contributions in DELOS	Service-oriented information architectures, integration of Grid and digital libraries, cross-sectoral applications, collection level description, information repositories, interaction of e-learning systems.						
Brief biography	Dr Liz Lyon has been the Director of UKOLN since October 2000. UKOLN is an internationally recognised centre of expertise in digital information management located at the University of Bath, UK. It provides policy, research and awareness services to the library, information, education and cultural heritage communities. UKOLN is funded by Resource: The Council for Museums, Archives & Libraries, the Joint Information Systems Committee (JISC) as well as by project funding from the Research Support Libraries Programme, the British Library and the European Community. At UKOLN she is involved with the development and implementation of the common information environment which includes building architectural models for distributed digital libraries. In this context, she is promoting synergies between digital libraries and Grid-enabled research environments, and is developing partnerships with the e-Science / Grid communities. Although Dr Lyon has worked in senior positions in various University libraries in the UK, her background was originally in Biological Sciences and she has a doctorate in cellular biochemistry. She is a member of CILIP, the Chartered Institute of Library & Information Professionals which is the UK's leading professional body for librarians and information managers.						

EXCELLENCE CRITERIA: FUNDING SOURCES		
The 5 main research projects in the last 5 years	Core funding Resource August 2002-2003 444,060 EUR Core funding Resource August 2001-2002 363,639 EUR Core funding Resource August 2000–2001 234,208 EUR Core funding JISC August 2002-2003 444,060 EUR Core funding JISC August 2001-2002 328,030 EUR EC OAF Sep 2001-2003 284,456 EUR EC Renardus January 2000 – 2002 173,563 EUR EC ARCO Jan 2000 - 2002 171,404 EUR EC Cultivate February 2000-2002 124,205 EUR EC CORES April 2002 99,400 EUR	
EXCELLENCE CRITERIA: SCIENTIFIC OUTPUT		
Peer reviewed journal publications in the last 5 years	4	Total number of publications in peer-reviewed journals
		10
List the 5 main publications	Lyon Liz & Miller P. (2001). The people's heritage: democratising our memory institutions. *The New Review of Information Networking*, 7, 185 – 200. Maslin J. & Lyon, E. Project Patron: exploiting a digital library for the performing arts. *IEEE Euromicro 99 Proceedings,* pp35-41. Milan, Italy, September, 8th-10th, 1999 J.Maslin & Lyon Elizabeth (1998) Project Patron – Audio and video on demand at the University of Surrey. *Journal of Academic Librarianship, 24, 464-8*. Maslin, J and Lyon Elizabeth (1998). Project PATRON - audio and video on demand at the University of Surrey. *Information Services & Use*, 18, 45-51.	
Prizes / distinctions	Co-Chair of ECDL 2003 Workshop Committee	
Participation in national or international committees and boards	Liz Lyon is currently a member of the: JISC Committee for the Support of Research Resource Collection Development & Management Group. Board of Directors of SWMLAC Knowledge & Information Advisory Committee of the British Council. Delos Network Advisory Committee	

EXCELLENCE CRITERIA: INTERNATIONAL COLLABORATIONS	
Groups in DELOS	University of Southampton University of Manchester University of Edinburgh ETH Zurich FORTH Crete

INSTITUTIONAL DESCRIPTION OF UNIVERSITY OF BATH
(PARTICIPANT N. 4)

GENERAL & CONTACT INFORMATION				
Centre/Institute´s Name	**UKOLN**	PI	**Dr LIZ LYON**	
Organization Name	**UNIVERSITY OF BATH**	LR	KAREN WILBRAHAM	
Full Address	CLAVERTON DOWN BATH BA2 7AY UK	Phone	0044 1225 386580	Country
		Fax	0044 1225 386838	
		E-mail	e.lyon@ukoln.ac.uk	UK
		WWW	www.ukoln.ac.uk	
Activity Type	HE	Legal Status	GOV	
Partner Profile	Scientific Expertise Profile	Technical Expertise Profile		
	Information architectures, metadata schema, standards, metadata registries, digital preservation, Web archiving, digital library integration with learning management systems, collection level descriptions, open archives, portal development, ontologies & terminologies, user evaluation.	Development of Web-based digital library application software, demonstrators and prototypes.		
Keywords of specific expertise in your domain	INFORMATION ARCHITECTURES, METADATA STANDARDS & SCHEMA, WEB STANDARDS, OPEN ARCHIVES, PORTAL DEVELOPMENT, ONTOLOGIES & TERMINOLOGIES, DIGITAL PRESERVATION			
Brief description	The University of Bath is a leading UK academic institution engaged in higher education and research. It is a public institution providing a range of under- and postgraduate courses to more than 10,000 students in several Faculties including Science, Humanities & Social Sciences, Engineering & Design and a School of Management. The University is structured into 18 Departments arranged in cohesive disciplinary areas. UKOLN is a centre of expertise in digital information management, providing advice and services to the library, information, education and cultural heritage communities. It is a national organisation and serves the whole of the UK working closely with like-minded organisations globally. UKOLN's work includes influencing policy and informing practice,			

	promoting community building and consensus-making, advancing knowledge through research and development, building innovative systems and services based on Web technologies, and acting as an agent for knowledge transfer. UKOLN is a member of the DELOS Network of Excellence on Digital Libraries, and has been active in digital library research, development projects and initiatives throughout Europe and beyond.
	UKOLN comprises 30 staff arranged in 5 teams with a Director and two Assistant Directors and carries out research in the broad area of digital libraries but has particular expertise in the following topics:
	Information architectures. Web standards including Web Services. Integration of digital libraries and learning management systems. Metadata schema, registries and standards. Cross-sectoral descriptions of collections. Open Archive developments. e-Prints, self-archiving and the development of institutional repositories. Digital preservation and Web archiving. Ontologies, terminology and thesaurus applications. Portal development, portlet technology and information channels. Visualisation of multimedia objects. Grid-enabled applications and digital libraries. User evaluation, usability and accessibility.
	UKOLN also has an Events Management service which organizes international conferences and workshops, and publishes e-journals (Ariadne www.ariadne.ac.uk, Cultivate Interactive http://www.cultivate-int.org/).
	UKOLN collaborates with the Department of Computer Science in the areas of Semantic Web, peer-to-peer architectures, agent technology and Grid computing.

FACILITIES TO SHARE

Relevant Infrastructures/Facilities that can be shared in DELOS	Software, toolkits and demonstrator programmes including metadata schemas registry prototype, OpenURL demonstrator, Bath-profile-compliant Z39.50 gateway, Z39.50 directory, metadata tools such as DC-dot, DC-assist, RSS-express, collection description tool, and online training materials such as collection description tutorial.

1.1.6 Preservation

COORDINATOR EXCELLENCE FACT SHEET

GENERAL & CONTACT INFORMATION							
Family Name	**SEAMUS ROSS**		Title	Position	Birth date	Gender	
			Dr	Director	12/11/57	M	
Contact Info	Pho ne	+44−141−330− 3635	Fax	+44−141− 330−2793	E- mail	s.ross@hatii.arts.gla.ac. uk	
	WWW	www.hatii.arts.gla.ac.uk					

Centre/Institute´s Name	**Humanities Advanced Technology and Information Institute**	HATII	
Organization Name	**University of Glasgow**	UG	
Research Profile	Digital Preservation, Digitisation, Digital Repositories, Emulation, Digital Archaeology, Binary Retargetable Code, System Analysis and Design		
Keywords of intended contributions in DELOS	Digital Preservation, Digitisation, Digital Repositories, Emulation, Digital Archaeology, Web Harvesting and Access, Standards		
Brief biography	Seamus Ross, Director of Humanities Computing and Information Management at the University of Glasgow, runs HATII (Humanities Advanced Technology and Information Institute) (http://www.hatii.arts.gla.ac.uk). He is Principal Director of ERPANET (Electronic Resource Preservation and Network) (IST-2001-32706) a European Commission activity to enhance the preservation of cultural heritage and scientific digital objects (http://www.erpanet.org). He leads HATII's contribution to The Digital Culture Forum (DigiCULT Forum, IST-2001-34898), which works to improve the take-up of cutting edge research and technology by the cultural heritage sector (http://www.digicult.info). Previously he was Assistant Secretary for Information Technology at the British Academy, and before that worked for a company specialising in expert systems and software development, as a software engineer and then in management. He acts as ICT advisor to the Heritage Lottery Fund and is a monitor for a number of large ICT-based projects in the UK. He is a member of a number of international organisations including the *DLM-Monitoring Committee of the European Commission*. He was co-Chair of the European Team of InterPARES I (1997-2002) (http://www.interpares.org). In 2001/2 he contributed to the review of Swiss Information Society activities for the Swiss Government and participated in the development during the Swedish, Belgian, and Spanish Presidencies of the European Union of resolutions in the areas of digitisation, digital preservation, and information quality. For example, in 2001 he assisted the European Commission in the development of the Lund Principles on digitisation and associated reports. He completed a review of the Digital Library and Preservation Programme of the National Library of New Zealand which shapes the strategic framework for building a digital library. During 2002 he, co-chaired with Professor Margaret Hedstrom of the University of Michigan the European Union(Delos) and National Science Foundation (NSF) working group on digital archiving and preservation, which is defining the future research agendas that should be funded in this area		
EXCELLENCE CRITERIA: FUNDING SOURCES			

The 5 main research projects in the last 5 years	- DigiCULT Contract N° IST-2001-34898, http://www.digicult.info 205,475 euros, March 2002 – August 2004 - ERPANET: Electronic Resource Preservation and Access Network, European Commission. Lead Partner in a 1.2 million Euro project (900,000 Euros from the European Commission and 300,000 Euros from the Swiss Government). Contract N° IST-2001-32706 http://www.erpanet.org 1.2 Million Euros - November 2001 – November 2004 - Best Practice in Digitisation, NINCH/GETTY - National Initiative for Networking the Cultural Heritage, 2000-01, 80,000 Euros - Investigation of ICT in the Heritage Sector - Heritage Lottery Fund Research Project, 1997-8, 38,000 Euros..		
EXCELLENCE CRITERIA: SCIENTIFIC OUTPUT			
Peer reviewed journal publications in the last 5 years	3	Total number of publications in peer-reviewed journals	6
List the 5 main publications in the last four years.	Ross, S., Donnelly, M. and Doberva, M. 2003. *New Technologies for the Cultural Heritage Sector*, (Salzburg). Ross, S., 2001, *Cyberculture, cultural asset management, and ethnohistory*, in Preserving the Present for the Future: Conference on strategies for the Internet. ISBN: 87-9115-18-3, Copenhagen, June 2001, 11-30. Ross, S., 2000, *Changing Trains at Wigan: Digital Preservation and the Future of Scholarship*, (London), [ISBN: 0 7123 4717 8]. Ross, S. and Gow, A. 1999. *Digital archaeology? Rescuing Neglected or Damaged Data Resources*, (London). [ISBN 1 900508 51 6]. Ross, S., 1999, Strategies for Selecting Resources for Digitization: Source-Orientated, User-Driven, Asset-Aware Model (SOUDAAM), T. Coppock, ed., *Making Information Available in Digital Format: Perspectives from Practitioners*, (Edinburgh: The Stationery Office), 5-27. Ross, S. 1999. Preservation and Networking in Aid of Research, T.Coppock ed., *Information Technology and Scholarship: Applications in the Humanities and Social Sciences,* (Oxford: Oxford University Press), 311-328.		
Funding Evaluation and Project Monitoring Activities	Have served as an evaluator for the European Commission under FP5, The Belgian Office of Science and Technology, the Arts and Humanities Research Board in the UK, the Joint Information Systems Committee of the UK, the Heritage Lottery Fund (HLF) in the UK. For the HLF I have also monitored nearly two dozen projects that have involved significant technological developments (1 million Euros or more).		

Papers Presented & Summer Schools	In the past five years I have delivered over sixty papers all of which have been invited presentations and many of which have been keynote or plenary addresses.
	I have organized or participated in running and teaching on over 15 summer schools in the past five years. Most important among these is the *Glasgow Digitisation Summer School,* Humanities Advanced Technology and Information Institute Summer School in Digitisation, July 1998, July 1999, July 2000, July 2001, July 2002.
Participation in national or international committees and boards	- Director, ERPANET - Co-Chair DELOS – NSF Working Group *Digital Archiving and Preservation* - JISC Images Working Group January 2001 - Chair, DNER Image Cluster Steering Committee, January 2001 - *DLM-Monitoring Committee of the European Commission*, April 1997 - Co-Chair of the European Group of the InterPARES Project, October 2000 – May 2002. - Steering Committee and Technical Panel of the network-based journal *Internet Archaeology*, a consortium of the British Academy, the Council for British Archaeology, and the University of York. (Founder with Dr M. Heyworth of the CBA & Julian Richards of the University of York.) April 1995 - *IHR-INFO* Advisory Board, July 1995 – July 2002 - Content Working Group of the JCEI of the Joint Information Systems Committee, January 1996- December 2001. - *Arts and Humanities Data Service* for the United Kingdom Steering Committee, August 1995 – January 2001. - Digital Archiving Working Group (DAWG), Joint Information Systems Committee (JISC) and National Preservation Office (NPO) Committee overseeing the development of a series of studies on digital archiving issues, January 1997 – July 1999. - Advisory Board of the American Arts and Letters Network, October 1995 – December 1998. - *Scientific Information Committee of the Royal Society* from January 1995 – December 1997.
EXCELLENCE CRITERIA: EDUCATIONAL ACTIVITIES	
Nº of Supervised PhD Theses	3
Related teaching activities	- Multimedia Systems (Computing Science, MScIT Module—Postgraduate Module), (2002, 2003) - Investigating Cyberspace: Cultures and Communities on the Net (Honours Module) (2000, 2001, 2002, 2003) - Heritage and Cultural Computing (Computing Science MScIT Module—Postgraduate Module) (1999, 2000, 2001, 2002) - Introduction to Multimedia Analysis and Presentation (Honours Module) (1997, 1998, 1999, 2000) - Co-Director of the University of Glasgow postgraduate Course in Digital Preservation and Management (MPhil)
External Examining	- Visiting Examiner, MA in Digital Art History, Birkbeck

	College, London October 2001 – September 2003. - External Examiner, Pallas (Humanities Computing) University of Exeter, October 1997 – September 2001 (exceptionally renewed for a fourth year).
EXCELLENCE CRITERIA: INTERNATIONAL COLLABORATIONS	
Delos Activities	Co-Chair of the Delos/NSF Workgroup on Digital Preservation and Archiving (2002-3)

Collaborative Activities	- DigiCULT http://www.digicult.info
	 - ERPANET: Electronic Resource Preservation and Access Network, European Commission. http://www.erpanet.org
	 - Collaboration with among others
	    School of Information and Library Science at the
	    University of North Carolina (Chapel Hill).
	    University of Rice
	    University of Urbino
	    National Library of New Zealand
	    National Archives of Switzerland
	    National Archives of the Netherlands

INSTITUTIONAL DESCRIPTION OF HATII-UNIVERSITY OF GLASGOW
(PARTICIPANT N. 9)

GENERAL & CONTACT INFORMATION				
Centre/Institute´s Name	**Humanities Advanced Technology and Information Institute (HATII)** George Service House 11 University Gardens Glasgow, G12 8QQ	PI	**Dr Seamus Ross**	
Organization Name	**University of Glasgow**	LR	Dr Ian Carter or Stuart McKissock	
Full Address	University Avenue Glasgow G12 8QQ UK	Phone	00441413303635	Country
		Fax	00441413302793	
		E-mail	s.ross@hatii.arts.gla.ac.uk	UK
		WWW	www.hatii.arts.gla.ac.uk	
Activity Type	RESEARCH	Legal Status	GOV	
Partner Profile	Scientific Expertise Profile	Technical Expertise Profile		

	Digital Preservation, digital archaeology, data recovery, emulation, user needs analysis, electronic records management, digitisation, content analysis, document analysis and representation technologies, metadata, evaluation studies.	Development of digital object, emulation, migration and digital repository tools. Software engineering (especially in the areas of databases, digital imaging tools), and system design and integration.
Keywords of specific expertise in your domain	Digital Preservation, digital archaeology, Repositories, digital imaging, electronic records, emulation, binary retargetable code.	
Brief description	The Humanities Advanced Technology and Information Institute (HATII) was formed in 1997 to bring together Glasgow University's expertise in Information Communication and Technology (ICT) in the heritage sector. HATII's research concentrates in the areas of technologies, methods, and theoretical developments that enable (a) access—by combining context and hierarchy with interoperable metadata to improve information management and use, (b) content analysis and appraisal—by exploring the applicability of the records continuum paradigm, of the functional analysis of information systems and re-examining basic assumptions about archival theory and practice in the light of knowledge management, (c) evaluation and impact methodologies—for the use of digital resources in research, and (d) preservation—by developing, and evaluating techniques and technologies and defining strategies that provide curators and content owners with access to best practice guidelines and appropriate technology services

The research and teaching (e.g. course development) staff of nine academic and Senior Research Fellows, drawn from the Archives, Information Systems, and the Library arenas, is supported by four Resource Development Officers and five technicians. HATII's collaborative research activities with universities and institutions in Europe (e.g University of Urbino, and North America (e.g. University of North Carolina (Chapel Hill)), build on Glasgow's commitment to the pedagogical application of technology, the investigation of new access protocols and paradigms, resource enhancement, the impact of the digital order on existing information practice, establishing modalities for evaluation studies (especially in the area of user needs), and the long term preservation of digital materials.

HATII runs a number of projects. (1) HATII is the lead site for ERPANET (Electronic Resource Preservation and Network) (IST-2001-32706) a European Union activity to enhance the preservation of cultural heritage and scientific digital objects. (2) It is a core partner in *The Digital Culture Forum* (DigiCULT Forum, IST-2001-34898), which monitors and assesses technological research and development and defines how they can be effectively deployed in the heritage sector (e.g. museums, libraries and archives). Its first major technology watch report was published in March of 2003. (3) The Effective Records Management (ERM) Project, £230k, with support from the JISC JTAP programme, investigated and piloted records management within the digital order. (4)With funding from the UK's Joint Information Systems Committee (JISC 5/99) HATII is managing the 'Developing the Collection of Historical and Contemporary Census Data and Materials into a Major Learning and Teaching Resource' (CHCC project). (5) It is responsible for the New Opportunities Fund Project that is creating and |

| | evaluating TheGlasgowStory, (6) has a major collaborative research project with the University of North Carolina (Chapel Hill) funded by the Delmas Foundation investigating how researchers use digital information, (7) and was a co-investigator in InterPARES I. |
| | HATII also runs an internationally recognised summer school in digitisation. This is offered twice a year in Glasgow, once in the US (2001 in Houston (Texas) and in 2002 at the University of North Carolina), and in at least one other country (2001 - Crete and Bulgaria) and in 2002 in New Zealand. |

FACILITIES TO SHARE	
Relevant Infrastructures/Facilities that can be shared DELOS	Advanced Computing Laboratory Facilities (45 workstations located in HATII), digital storage facilities, high speed networking services, digitisation equipment, two experimentation servers and associated storage technologies, a variety of 'historic' computers for research purpose, software.

1.1.7 Evaluation

COORDINATOR EXCELLENCE FACT SHEET

GENERAL & CONTACT INFORMATION						
Family Name	**NORBERT FUHR**	Title	Position		Birth date	Gender
		Prof. Dr.	Full Professor		30/06/56	M
Contact Info	Phone	+49-203-379-2524	Fax	+49-203-379-2549	E-mail	fuhr@uni-duisburg.de
	WWW	http://is.informatik.uni-duisburg.de				
Centre/Institute´s Name	**Faculty 5, Institute for Informatics and Interactive Systems**					UNIDU
Organization Name	**Universität Duisburg-Essen**					
Research Profile	Information retrieval, digital libraries					
Keywords of intended contributions in DELOS	Retrieval methods for XML documents, models and methods for multimedia retrieval in networked DLs, strategic support for information access, personalization and collaboration in DL usage, evaluation methodologies, evaluation methods for structured documents					
Brief biography	Norbert Fuhr received a PhD (Dr.) in Computer science from the Technical University of Darmstadt, Germany. From 1991-2001, he was Associate Professor at the Computer Science Department of the University of Dortmund, Germany. Since 2002, he is Full Professor of Computer Science at the University of Duisburg-Essen, Germany.					
	His scientific interests are information retrieval models and methods, especially in the area of digital libraries. For information retrieval of semi-structured data (XML), he is working on query languages and efficient query processing methods. In the area of networked DLs, he has been working on models for resource selection and result fusion, especially for heterogeneous environments with multimedia documents. In the area of user-oriented retrieval methods, he is interested in methods for strategic					

support for information access in combination with adaptive and proactive services, and allowing for personalization and collaboration. For all these retrieval approaches, he is also working on appropriate evaluation methods. He co-leader of the INEX initiative for the evaluation of XML retrieval, and has been working on evaluation methodology as leader of the evaluation WG of the current DELOS NoE.

Prof. Norbert Fuhr is the author of over 130 publications in (mostly international) journals and conference proceedings..

He is Member of ACM and GI (German informatics society). He is the current head of the special interest group on information retrieval (with over 500 members) of the GI, and he also is the treasurer of the special interest group on information retrieval of CEPIS.

He is member of the editorial board of the journal 'Information Retrieval', was program chair of the European IR conference (ECIR) in 2001, and was/is member of the program committees of major international conferences in the areas of information retrieval (SIGIR, CIKM), databases (VLDB, WISE, FQAS) an digital libraries (ECDL, JCDL, ICADL).

EXCELLENCE CRITERIA: FUNDING SOURCES

The 5 main research projects in the last 5 years	- EC IST 2000 26061 "MIND" , 190000 EUR, 2001-2003 - EC IST 2000 "CYCLADES", 220000 EUR, 2001-2003 - German Science Foundation (DFG), "DAFFODIL", 260000 EUR, 2000-2004 - German Science Foundation (DFG), "CLASSIX", 130000 EUR, 2002-2004. - German Ministry of Research and Education (BMBF), "CARMEN", 170000 EUR, 1999-2001.

EXCELLENCE CRITERIA: SCIENTIFIC OUTPUT

Peer reviewed journal publications in the last 5 years	3	Total number of publications in peer-reviewed journals	12
List the 5 main publications	Nottelmann, H.; Fuhr, N. (2003). Evaluting different methods of estimating retrieval quality for resource selection. Accepted for publication in: Proceedings ACM-SIGIR 2003 Fuhr, Norbert; Klas, Claus-Peter; Schaefer, Andre; Mutschke, Peter (2002). Daffodil: An Integrated Desktop for Supporting High-Level Search Activities in Federated Digital Libraries. In: Proceedings ECDL 2002. Fuhr, N.; Großjohann, K. (2001). XIRQL: A Query Language for Information Retrieval in XML Documents. In Proceedings ACM-SIGIR 2001 Fuhr, N. (1999). A Decision-Theoretic Approach to Database Selection in Networked IR. ACM Transactions on Information Systems 17(3) Fuhr, Norbert (2000). Probabilistic Datalog: Implementing Logical Information Retrieval for Advanced Applications. Journal of the American Society for Information Science 51(2)		

Prizes / distinctions	Program Chairman of the European Conference on Information Retrieval (ECIR01) – Darmstadt, Germany, 2001.
Participation in national or international committees and boards	Chairman of the special interest group on Information Retrieval of the German Informatics Society Treasurer of the special interest group on Information Retrieval of the Association of European Informatics Societies (CEPIS)

EXCELLENCE CRITERIA: EDUCATIONAL ACTIVITIES	
Related teaching activities	Information Retrieval – University of Dortmund, University of Duisburg-Essen (Master in computer science) Digital Libraries - University of Dortmund (Master in computer science)

EXCELLENCE CRITERIA: INTERNATIONAL COLLABORATIONS	
Groups in DELOS	University of Florence, I CNR-ISTI, I Queen Mary University of London University of Strathclyde, UK
Other groups	Carnegie Mellon University, USA FORTH, Crete, GR University of Sheffield, UK Dublin City University XEROX Research Center Europe, Grenoble, F

INSTITUTIONAL DESCRIPTION OF UNIVERSITY OF DUISBURG-ESSEN
(PARTICIPANT N. 10)

GENERAL & CONTACT INFORMATION				
Centre/Institute´s Name	**Faculty 5, Institute for Informatics and Interactive Systems**	PI	**Norbert Fuhr**	
Organization Name	**Universität Duisburg-Essen**	LR	Carl-Friedrich Neuhaus	
Full Address	Lotharstraße 65, 4705748 Duisburg, Germany	Phone	+49 203 3792524	Country
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		E-mail	fuhr@uni-duisburg.de	Germany
		WWW	www.uni-duisburg-essen.de	
Activity Type	RESEARCH	Legal Status	GOV	
Partner Profile	Scientific Expertise Profile	Technical Expertise Profile		

	models and methods for digital libraries: query languages and query processing for XML retrieval, resource selection and result fusion for networked DLs, strategic support for information access; evaluation methodology, especially for XML retrieval.	Development of information retrieval systems, user front-ends for federated digital libraries, wrappers and brokers for networked multimedia digital libraries, services for open archives	
Keywords of specific expertise in your domain	Information retrieval models; XML retrieval methods; user support for information access to DLs; evluation methods, especially for XML retrieval		
Brief description	The University of Duisburg-Essen academic institution engaged in higher level education and research. It is a public institution providing higher level education to more than 36.000 students in several fields, covering medicine, humanistic, scientific and technological areas.		
	Within the engineering faculty, there are three institutes focusing on computer science, with 12 professors (8 full, 4 associate), 22 Research Assistants, 3 Technical Staff units, and 5 Administrative Staff units. The Department carries out research in the fields of Information systems, interactive systems, multimedia systems, technical informatics, software technology, computational linguistics, scientific computing and theoretical computer science. Department faculty members support teaching in the core courses for the bachelor and master degrees in i) Applied computer science, ii) Computer engineering and iii) Computer Science and Computation Engineering..		
	The main research activities carried out at the Information systems group are the development of models and methods for information retrieval in DLs, especially for XML retrieval, for multimedia retrieval in networked multimedia DLs and for strategically supporting for information access to DLs in combination with personalization and collaboration. Furthermore, the group is working on the evaluation of specific approaches (e.g. as leader of the INEX initiative) as well as doing research on evaluation methodology.		
FACILITIES TO SHARE			
Relevant Infrastructures/Facilities that can be shared in DELOS	Advanced Lab facilities, including: workstation cluster for processing large databases, wrappers for dozens of publicly accessible DLs , rich set of test databases for DL retrieval,.		

1.1.8   Overall Scientific Coordination and Dissemination

COORDINATOR EXCELLENCE FACT SHEET

GENERAL & CONTACT INFORMATION					
Family Name	**Costantino Thanos**	Title	Position	Birth date	Gender

		Research Director.	Researcher	27-1-39	M
Contact Info	Phone +390503152910	Fax +390503153464	E-mail	Costantino.Thanos@isti.cnr.it	
	WWW	http://www.isti.cnr.it/			
Centre/Institute´s Name	**"Networked Multimedia Information Systems" Lab at the "Istituto di Scienza e Technologie dell'Informazione"**			NMIS-ISTI	
Organization Name	**Italian National Research Council**			CNR	
Research Profile	Digital Libraries, Information Engineering, Databases, Multimedia Databases, Multimedia Information Retrieval.				
Keywords of intended contributions in DELOS	DL Achitectures and Services, Metadata Models and Query Languages, Document Models, Similarity Search, Multimedia Information Access, XML Information Access.				
Brief biography	Dr-Ing Costantino Thanos				

Since 1970 he has worked at CNR-ISTI. He is Research Director and currently head of the "Networked Multimedia.Information Systems" Lab.

His research activities include:

- Coordinator of an Italian nation wide project on Distributed Data Bases: DATANET (1980-1984).
- Coordinator of the ESPRIT/Basic Research Actions Working Group "Multimedia Information Retrieval-MIRO, No.6576", 1992-1994,
- Coordinator of the ESPRIT/Basic Research Actions Project "Formalization and Experimentation on the Retrieval of Multimedia Information-FERMI, No 8134", 1994-1997
- Coordinator of the ESPRIT/Long Term Research Working Group " Supporting Interactive Multimedia On-Line Services-SIMOS, No. 20979", 1996-1999.
- Coordinator of the ESPRIT/Long Term Research Working Group " ERCIM Digital Library-DELOS, No. 21057", 1996-1999.
- Director of the TELEMATICS/IE Project "Personalized Information Gathering System-EUROgatherer. No.IE-8011", 1998-1999
- Director of the "Network of Excellence on Digital Libraries – DELOS", No. IST-1999-12262, 2000-2002 (5th FP Information Society Technologies – Key Action III).

He has also been appointed:

- Associate Editor of the international journal "The Computer Journal" published by the Oxford University Press (1992 - 1995)
- Member of the Editorial Board of the international journal "Computer Standards & Interfaces" published by the North Holland Publishing Company.
- Member of the Editorial Board of the international journal "Digital

	Libraries" published by Springer - Member of the Executive Committee of the "European Research Consortium for Informatics and Mathematics - ERCIM". - He has been Program Committee Chairman/member of numerous international conferences.

EXCELLENCE CRITERIA: FUNDING SOURCES

The 5 main research projects in the last 5 years	- TELEMATICS/IE Project "Personalized Information Gathering System-EUROgatherer". No.IE-8011", 1998-1999 (CNR, Dublin City University-Ireland, University of Dortmund-Germany, Xerox-France, Italia On-line-Italy, Eurospider Information Technology-Switzerland, Xarxa Cinet-Spain) (Coordinator) - 5th FP IST Project "European Chronicles On-Line – ECHO". No 11994, 2000-2002 (CNR, INA-France, Tecmath – Germany, NAA-Nederlands, Univ. Twente, Univ. Mannheim, Carnegie Mellon University - USA, Memoriav – Switzerland, EIT – Switzerland, CNRS – France, Istituto Luce – Italy).(Coordinator) - 5th FP IST Project "An Open Collaborative Virtual Archive Environment – CYCLADES" No. 25456, 2001-2003 (CNR, ERCIM-France, Univ. of Dortmund – Germany, GMD-Germany, FORTH – Greece).(Coordinator) - 5th FP IST "Network of Excellence on Digital Libraries – DELOS", No. IST-1999-12262, 2000-2002 (Director) - 5th FP IST "D-Lib Center" (No.IST-2001-32587)

EXCELLENCE CRITERIA: SCIENTIFIC OUTPUT

List the 5 main publications	- "The Effects of Two-Phase Locking on the Performance of a Distributed Database Management System" Performance Evaluation 8 (1988) - "The Complexity of Operations on a Fragmented Relation" ACM Transactions on database Systems, Vol. 16, No. 1, March 91 - "Conceptual Document modeling and Retrieval" Computer Standards &Interfaces, Vol.11, No. 3, 90/91 - "Conceptual Modeling of Multimedia Documents" Computer IEEE, October 1991 - "An Optimal Predicate Locking Scheduler" Journal of Computer and System Sciences, Vol. 53, No. 3, 1996
Participation in national or international committees and boards	- Chairman of the PC of the International Conference "Very Large Data Bases - VLDB", Florence, 1983, - Conference Chairman of the International Conference " Conference on Advanced Information Systems Engineering-CAiSE", Pisa, 1998. - Conference Chairman of the International Conference "Sixth European Conference on Research and Advanced Technology for digital Libraries - ECDL", Rome, 2002 - Chairman of the PC of the International Conference "First European Conference on Research and Advanced Technology for digital Libraries - ECDL", Pisa, 1997.

	- Chairman of the Organising Committee of the International Conference "Extending Data Base Technology - EDBT", 1990. - Member of the PC of the International Conference "Very Large Data Bases", 1984, 1985, 1986, 1987, 1989, 1990. - Member of the PC of the International Conference "Ninth Annual IEEE International Phoenix Conference on Computers and Communications", Scottsdale-Arizona, 1990. - Member of the PC of the International Conference " Conference on Advanced Information Systems Engineering- CAiSE", 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1999, 2000. - Member of the PC of the International Conference "International Conference on Multimedia Information Systems", Singapore, 1991 - Member of the PC of the International Conference "Visual Database Systems", Budapest,1991. - Member of the PC of the International Conference "Database and Expert Systems Applications-DEXA" 1991, 1992, 1993, 1994.,1995, 1996 - Member of the Advisory Committee of the International Conference on " Multimedia Computer and Communication: Technology, Application and Enterprise", Bombay-India, 1992. - Member of the PC of the International Conference "GIS-From Space to Territory Theories and Methods of Spatio-Temporal Reasoning", Pisa, 1992. - Member of the PC of the 13th International Conference "Entity-Relationship Approach", Manchester, 1994. - Member of the PC of the 13th International Conference "DAGS: Electronic Publishing and the Information Superhighway" , Boston, 1995. - Member of the PC of the International Conference "European Conference on Research and Advanced Technology for digital Libraries", 1998, 1999, 2000, 2001, 2003. - Member of the PC of the International Conference "IEEEE ICMCS99", Florence, 1999. - Member of the PC of the International Conference "International Conference on Data Engineering", San Diego, 2000. - European Liaison for the International Conference " ACM Multimedia 95", San Francisco, 1995.

INSTITUTIONAL DESCRIPTION OF CNR-ISTI
(PARTICIPANT N. 2)

GENERAL & CONTACT INFORMATION				
Institute´s Name	**ISTITUTO DI SCIENZA E TECNOLOGIE DELL'INFORMAZIONE**	PI	**Costantino Thanos**	
Organization Name	**CONSIGLIO NAZIONALE DELLE RICERCHE**	LR	Piero Maestrini	
Full Address	VIA G. MORUZZI 1	Phone	+390503152910	Country
	56124 PISA	Fax	+390503153464	

	ITALY	E-mail	Costantino.Thanos @isti.cnr.it	ITALY
		WWW	www.isti.cnr.it	
Activity Type	RESEARCH	Legal Status	GOV	

Partner Profile	Scientific Expertise Profile	Technical Expertise Profile
	Digital Libraries, Information Engineering, Databases, Multimedia Databases, Multimedia Information Retrieval	SCHOLNET prototype, a service based digital library infrastructure. ECHO prototype, a film Digital Library. CYCLADES prototype, a Digital Library interoperable service environment
Keywords of specific expertise in DL domain	Digital Library Architectures and Services, Metadata Models and Query Languages, Document Models, Similarity Search, Multimedia Information Access, XML Information Access, Machine Learning for Information Retrieval, Logical Models of Information Retrieval, Cross-Language Information Retrieval.	
Brief description	The Institute of Information Science and Technologies (ISTI) is an institute of the Italian National Research Council (CNR). The Institute is located in the CNR Research Area of Pisa. The Institute is committed to producing scientific excellence and to playing an active role in technology transfer. The domain of competence covers Information Science, related technologies and a wide range of applications. The activity of the Institute aims at increasing knowledge, developing and testing new ideas and widening the application areas. ISTI is actively involved in collaborations with the academic world and in cooperative research and development programmes, both national and international The Research and Development activities in the "Networked Multimedia Information Systems" (NMIS) Laboratory aim at developing algorithms, techniques and methods for information modeling, access and handling as well as new architectures and system services supporting large networked multimedia information systems.	
FACILITIES TO SHARE		

| Relevant Infrastructures/Facilities that can be shared in DELOS | - The equipment that the NMIS laboratory can supply in this Network of Excellence include among the others:
- 2 Compaq EVO W4000 running Windows 2000 server edition;
- 1 PC Pentium with analog and digital capture board running Windows 2000 professional edition;
- 1 dual processor PC Pentium running Windows 2000 server edition;
- 2 PC Pentium running Linux;
- 1 SUN Ultra 1 running Solaris;
- 1 SUN Ultra 5 running Solaris;
- 1 SUN Ultra 10 running Solaris;
- 1 SUN Sunblade 100 running Solaris;
- 1 SUN Nextra X1 running Solaris. |