each

european agency for cultural heritage

The realisation of a flexible management and information system capable of connecting, at European level, the needs of customers, particularly with regard to Public Administrations, to the enterprises operating in the sector, specially small and medium sized companies, with aim of answering quickly and efficiently all technical, scientific and operative needs and queries in this field.
Various sectors of Cultural Heritage will be taken into consideration including diagnostics, restoration and multimedia application and other fields where a high level of inter-disciplinary knowledge and ability is necessary.
To better manage this system it will be necessary to create both an Extranet and a complete database listing all researchers and enterprises operating in this field.

NATION/CONTRIBUTION %
Italy 55 - Austria 13 - Sweden 13 - Greece 6 - Spain 13

COST 3 Mecu

DURATION 30 Months

PARTICIPANTS
Italy: Consorzio Comunica - Società per l'Imprenditorialità Giovanile SpA–Selfin SpA - Bitmap Snc
Austria: Schloss Schönbrunn Kultur und Betriebsges M.B.H.
Spain: Agencia National de Evaluacion y Prospectiva (ANEP) - Foro de Empresas de la Restauracion del Patrimonio Historico Artistico (FERPHA)
Greece: General Secretariat of Research and Technology International Cooperation Directorate
Sweden: Göteborgs Universitet Institutionen för Kulturvad

EUREKA
euro care
UMBRELLA PROJECT 140

bronzart

selection of modern artistic bronze alloys evaluation of the effectiveness of protective materials through advanced technologies

The intention of the project is the selection of advanced bronze alloys and relevant protectives in order to assure the best conditions for the conservation of BRONZe and ART objects
With this aim, modern analytical techniques such as Thin Layer Activation (TLA) and Electrochemical Noise (ECN) will be used alongside more traditional methods, making possible the definition of the composition of more durable alloys, and thus the definition of "friendlier" environments for ancient bronze, and the improvement of the upkeep of outdoor objects.
The information obtained will also allow:

a) the production of advanced portable multitasking apparatus to be used "in situ" measurements.
b) the application of differentiated protective techniques which take into account the real corrosion and condition of degradation which can differ from area to area.

NATION/CONTRIBUTION %
Italy 55 – Spain 25 - Sweden 20

COST 5,4 Meuro

DURATION 36 Months

PARTICIPANTS:
Italy: Fonderia Artistica Venturi Arte - Centro Sviluppi Materiali - CNR Istituto di Chimica Nucleare - Università di Ferrara
Spain: Fundacion Labéin
Sweden: Institutet for Metallforskning – Saven AB

EUREKA
euro care
UMBRELLA PROJECT 140

sigma

optical fibre sensors for pollutants within museum and art galleries

Recent studies have shown how a museums microclimate is characterised by a higher concentration of pollutants than is found outside the building, as the closed environment causes the pollutants to accumulate. Those pollutants associated with particular microclimate conditions can cause very visible damage.
The objective of this project is the creation of techniques for the analysis of damage caused to works of art by pollutants such as nitrogen oxides (NOx), sulfur dioxide (SO_2) and ozone (O_3), through direct spectroscopy or optical transducers in the visible and near infrared bands, and by using optical sensors connected to an optical fibre network.
This would make possible the creation of a general control system capable of evaluating, through continuous monitoring of the museum environment, the effects of visitors and other sources of pollution, and thus purification and air-changing systems for the elimination of these harmful compounds.

NATION/CONTRIBUTION %
Italy 47 - United Kingdom 34 - Belgium 19

COST 1.03 Mecu

DURATION 36 Months

PARTICIPANTS
Italy: Prodotec
United Kingdom: Opto Sci - University of Strathclyde
Belgium: Identity e.e.i.g.

EUREKA
euro care
UMBRELLA PROJECT 140

oldmovies

creation of film restoration technologies

The aim of this project is to create new digital technologies for the conservation and restoration of films (OLD MOVIES), to fix a standard quality level in order to define industry trade cost, to optimise film restoration procedures on a common basis, and to create an industrial film restoration system.
For this last it is necessary to integrate the technical and scientific skills of different branches in order to define standardised procedures. To achieve this result philological and historic-archival aspects, chemical-phisico analysis, digital restoration technologies, scanning and printing technologies and film conservation methods to establish an integrated operative basis for film restoration will be taken into account.
This procedure will make an important contribution to the restoration of many films of historical value.

NATION/CONTRIBUTION %
Italy 60 - Sweden 20 - United Kingdom 20

COST 4.2 Mecu

DURATION 36 Months

PARTICIPANTS
Italy: CAM - Centro Multimediale di Terni - Cinecittà
Sweden: Rotebro Filmservice
United Kingdom: Soho Images

EUREKA
euro
care
UMBRELLA PROJECT 140

moist

control and monitoring of moisture presence in buildings

One of the primary causes of building decay is moisture (MOISTure).
The aim of this project is to solve this problem, especially in relation to ancient buildings, or buildings of historical interest.
In many cases an accurate diagnosis carried out by an expert on the basis of his experience, without officially recognised standard guidelines, may only increase the damage.
This project aims to create portable instrument to monitor and identify humidity, providing a system able to guide the operator during the diagnosis and the intervention approach.
The instrument is based on a microprocessor system connected to various sensors depending on the measurements to be taken. All data will be stored in order to be automatically processed and compared with other results so as to increase knowledge in the open system.

NATION/CONTRIBUTION %
Italy 50 - Spain 25 - Germany 25

COST 1,4 Mecu

DURATION 30 Months

PARTICIPANTS
Italy: Coop Acep
Spain: Codiv S.L.
Germany: Cavastop 300

EUREKA
euro care
UMBRELLA PROJECT 140

jewelcraft

preservation of jewellery manufacturing techniques

Today the know-how and experience of craftsmen is slowly disappearing on account of modern technologies. The aim of this project is to preserve the traditional and classical aspects of the crafts related to jewellery (JEWELs CRAFT) manufacture.
The attention paid to the various aspects, whether technological, traditional, or educational has highlighted specific concerns about gold and silversmithing. Traditional manufacturing competencies, still in usel today should be defined, identified, classified and documented in order to preserve and restore ancient and modern jewelcraft heritage.

NATION/CONTRIBUTION %
Italy 55 - Austria 9 - Poland 9 - Sweden 9 - France 9 - United Kingdom 9

COST 4 Mecu

DURATION 30 Months

PARTICIPANTS

Italy:	Federorafi - Federargentieri
Austria:	Schloss Schönbrunn Kultur und Betriebsges M.B.H.
Poland:	Institute of Non Ferrous Metals, Institut Metali Niezelznych
Sweden:	Multichannel Instruments AB
France:	CETEHOR
United Kingdom:	The Goldsmith's Company

EUREKA
euro care
UMBRELLA PROJECT 140

surface monitor

Development of a portable X-Ray spectrometer for diffration and fluorescence analyses.

An innovative, portable and rapid x-ray spectrometer for diffration and fluorescence analyses. It will be tested and optimized via in -situ and laboratory analyses of different ancient artefacts**.**

NATION/CONTRIBUTION %
Italy 60 - France 40

COST 3,6 Meuro

DURATION 36 Months

PARTICIPANTS
Italy: Assing SpA - CNR Istituto di Chimica dei Materiali - Istituto Centrale per il Restauro
France: Eurisys Measures - Centre de recherche et de Restauration des Musées de France,

EUREKA
euro care
UMBRELLA PROJECT 140

mouse

mobile NMR for the diagnosis of superficial porosity and water infiltration in buildings

The main aim is to create a mobile tomograph (MObile Universal Surface Explorer) able to characterise superficial macro defects and the porosity of materials.
This instrument after adeguate laboratory testing will be able to assess superficial decay, and also the superficial properties of different materials in different situations and permit more in-depth study of the process of environmental exchange.
This method could be crucial in the study of decay processes especially in fresco surfaces and could also permit, together with the diagnostic phase, the inspection and validation of superficial treatments.

NATION/CONTRIBUTION %
Italy 55 - Germany 30 – The Netherlands 15

COST 4,5 Meuro

DURATION 36 Months

PARTICIPANTS

Italy:	Bruker Italiana S.r.l. - Università La Sapienza, Roma - CNR, Istituto di Chimica Nucleare
Germany:	Lehrstuhl fuer Makromolekulare Chemie Sammelbau Chemie - Bruker Analytik GMBH
Netherlands:	Eindhoven University of Technology

eurojubilees

individuation and reinterpretation of themes of the event with new multimedial systems

The Teche and Thematic/Educational Services of RAI Direction aims to promote a project of coproduction with the public television channels of Italy, France, Spain, and Poland.
Due to its particular structure and characteristics, this great event because of the political, historical and sociological context in which it takes place, in a decisive moment for the construction of the European Union.
The Jubilee represents an occasion for the joining of the cultures and traditions of these countries.
The project will develop in the following way: each television board, must present its own proposal on how to treat the event, freely choosing presenters and places representative of it's specific culture and geography, with the aim of creating a great fresco of the European way of life in the centuries during which the Jubilee took place, using highly sophisticated multimedial technologies to look at the most important events of European history through the history of the Jubilee.

NATION/CONTRIBUTION %
Italy - France - Spain - Poland

COST 5 Mecu

DURATION 36 Months

PARTICIPANTS
Italy:
France:
Spain:
Poland:
P.S. National public T.V. are discussing their partecipation

EUREKA
euro care
UMBRELLA PROJECT 140