



**EUROPEAN
CONSTRUCTION
TECHNOLOGY
PLATFORM**

FACH

**FOCUS AREA
CULTURAL HERITAGE**



ARE THE IDEAS OF FACH STILL INTERESTING?

Roko Žarnić

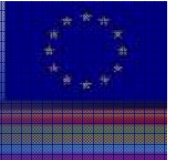
ECTP FACH Co-coordinator

University of Ljubljana, Ljubljana, Slovenia and

Ministry of Environment and Spatial Planning of R Slovenia



European Construction Technology Platform



SIXTH FRAMEWORK
PROGRAMME

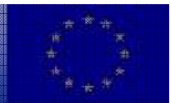


SEVENTH FRAMEWORK
PROGRAMME

Established in 2004 bringing together stakeholders, under industrial leadership, to define and implement a Strategic Research Agenda in construction sector, where Europe's competitiveness, economic growth and welfare depends on important research and technological progress in the medium to long term.



Public access to ECTP



ECTP: European Construction Technology Platform - Mozilla Firefox

http://www.ectp.org/

Google ectp

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- Networks
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- Private Area
- Previous version of the CWS
- Access to Euro-RTD Construction Portal
- Access to RTD Portal

A new approach for the construction sector

The European Construction Technology Platform (ECTP) will raise the sector to a higher worldbeating level of performance and competitiveness. This will be achieved by analysing the major challenges that the sector faces in terms of society, sustainability and technological development. Research and innovation strategies will be developed to meet these challenges engaging with and mobilising the wide range of leading skills, expertise and talent available to us within our industry over the coming decades, in order to meet the needs of the Society.

ECTP: FA Cultural Heritage - Mozilla Firefox

http://www.ectp.org/fa_cultural_heritage.asp

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FA Cultural Heritage

Since October 2006 and till March 2008, the **CHRAF** Project is supporting the activities related to the Focus Area of Cultural Heritage, its dissemination, coordination and integration into the ECTP and FP7. More information...

Safeguarding our cultural heritage for future generations

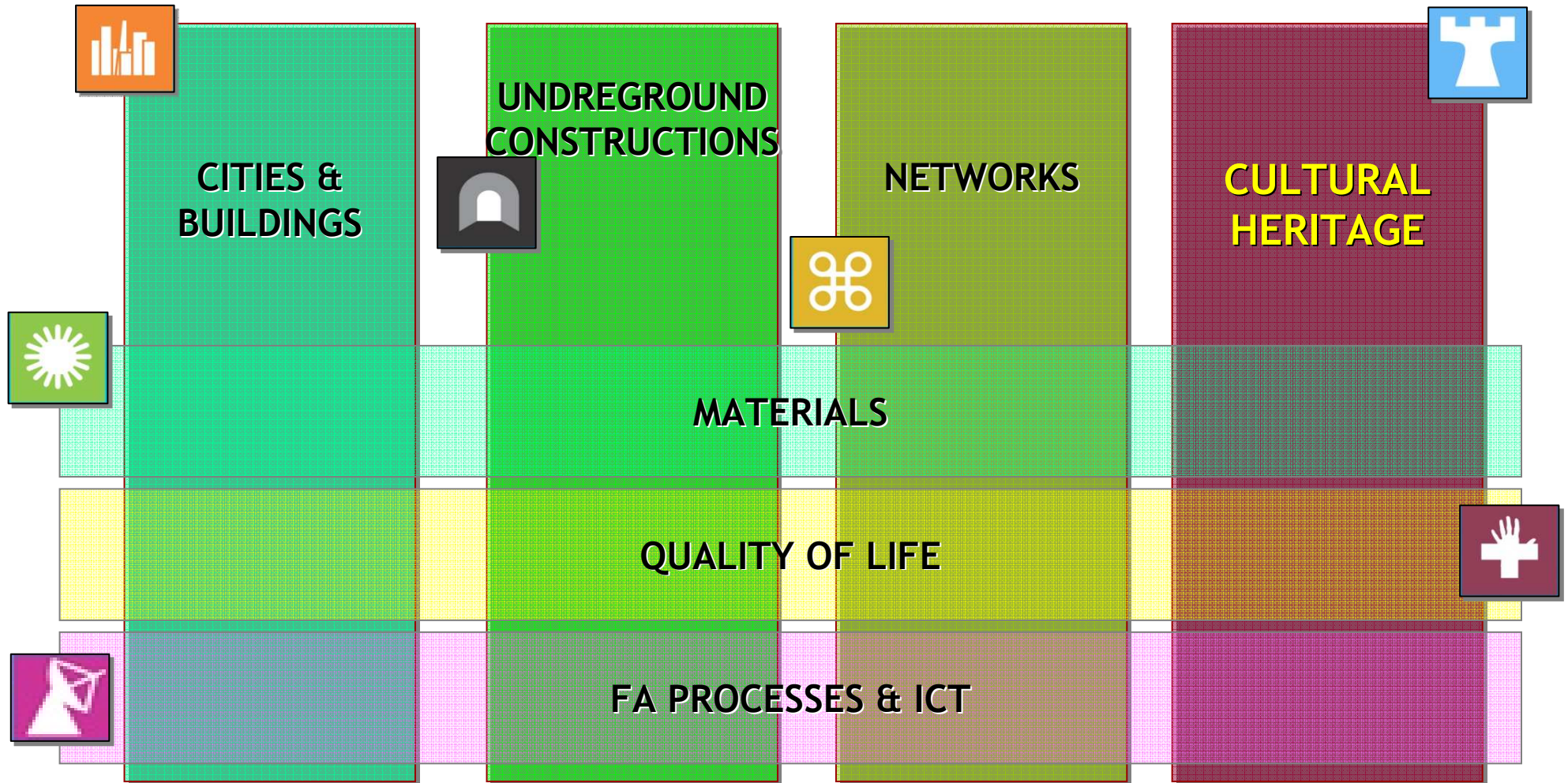
Cultural heritage enriches the collective memory; this makes the future of Europe human and friendly to its population. It is also the basic asset on which tourism is built. Construction activities and heritage preservation needs will however be in conflict if they are not considered together at the initial planning stage of any development.

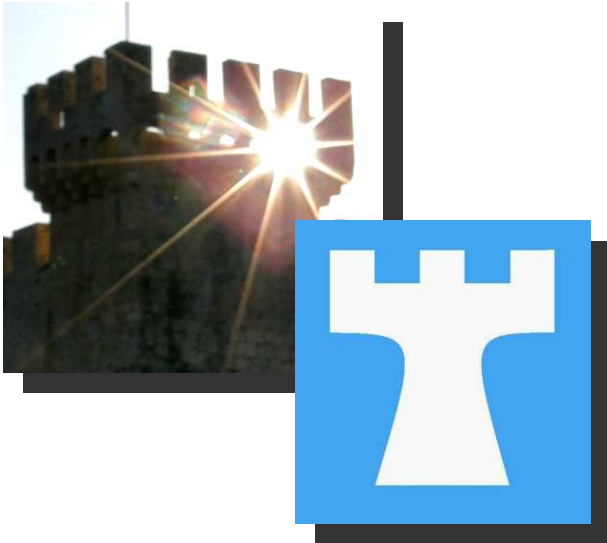
The main challenge involves the application of special techniques, materials and processes in order to maintain the rich cultural heritage of the European Union. This is of crucial importance for all stakeholders oriented towards the maintenance and preservation of European cultural identity in the face of ever increasing globalisation. A robust research partnership between the construction industry, institutes and universities is important for heritage protection and its integration into the contemporary life of cities. The need to keep all stakeholders (e.g. authorities, construction professionals, academics, urban planners, sociologists, economists, environmental professionals, tourism operators, marketing professionals, researchers and training specialists etc.) in touch with heritage developments will be maintained within the European Construction Technology Platform.

The research challenges related to the involvement of the construction industry in the preservation of cultural heritage are focussed at the intersection of technology and environment. Socio-economic impacts need to be assessed in order to reach the goals of a consequence based approach to heritage protection.

The number of challenges - preservation, rehabilitation, integration in urban and natural, environment, increase of life quality, economic promotion, multicultural tolerance, spreading of awareness, knowledge transfer, and impact assessment - will be responded to by the activities of different working groups.

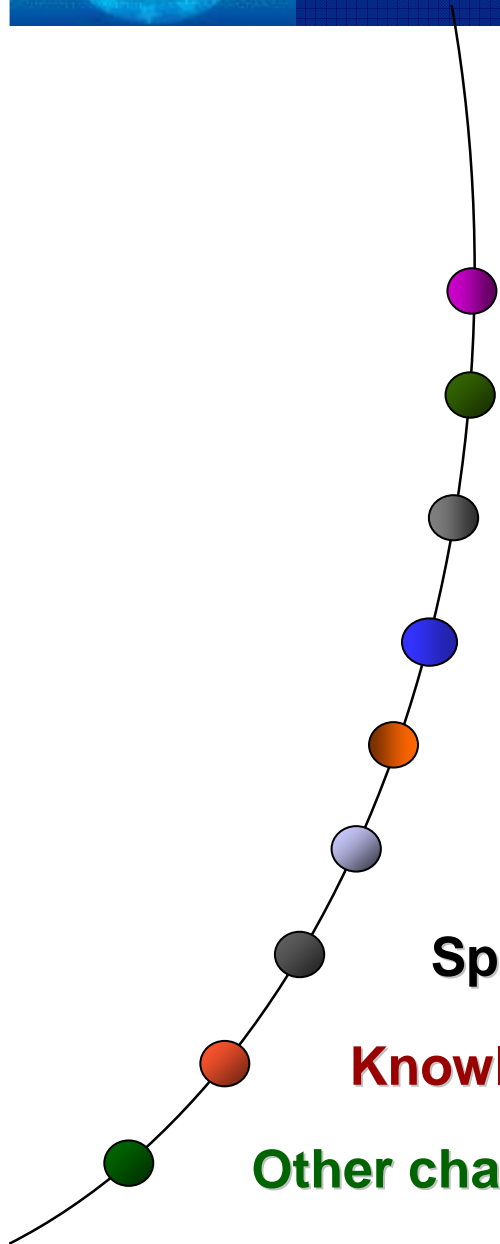
www.ectp.org





A Living Cultural Heritage for an Attractive Europe

New strategies, concepts, methodologies and techniques for preventive conservation and sustainable intervention in the cultural heritage for increasing the attractiveness of the European territories, cities and buildings



Preservation

Rehabilitation

Integration in urban and natural environment

Increase of life quality

Economic promotion

Multicultural tolerance

Spreading of awareness

Knowledge transfer

Other challenges....

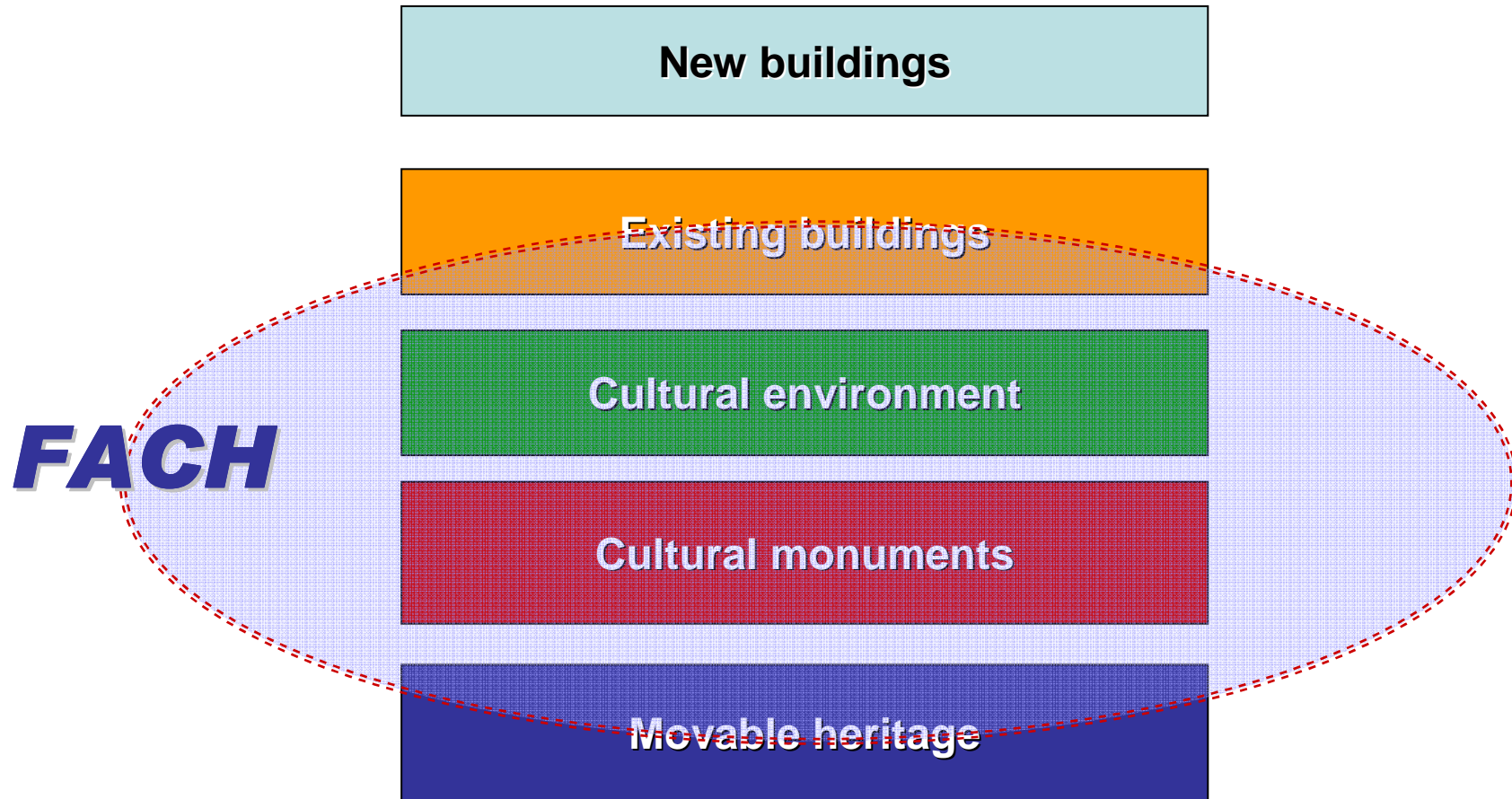


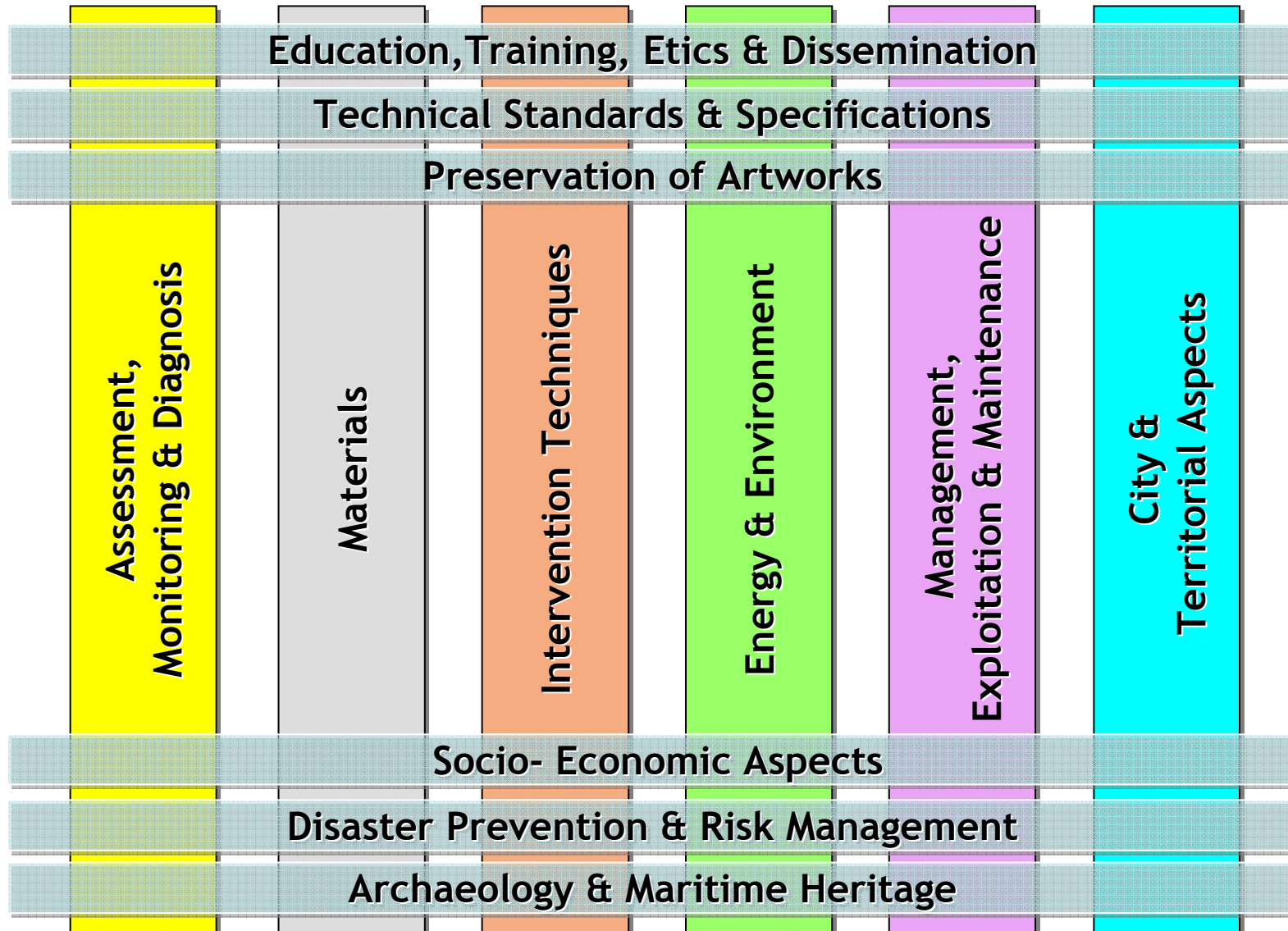
Construction **activities** and heritage preservation **needs** may lead to conflict situations if their necessary harmonisation is not respected from the very beginning of interventions.



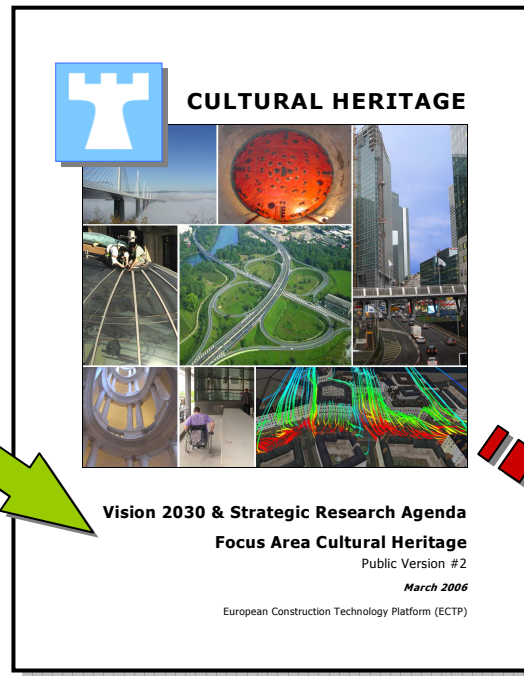
- All steps of intervention in cultural heritage should be guided by permanent observation of consequences caused by intervention
- The concept of **consequence based approach to heritage safeguarding** may be developed





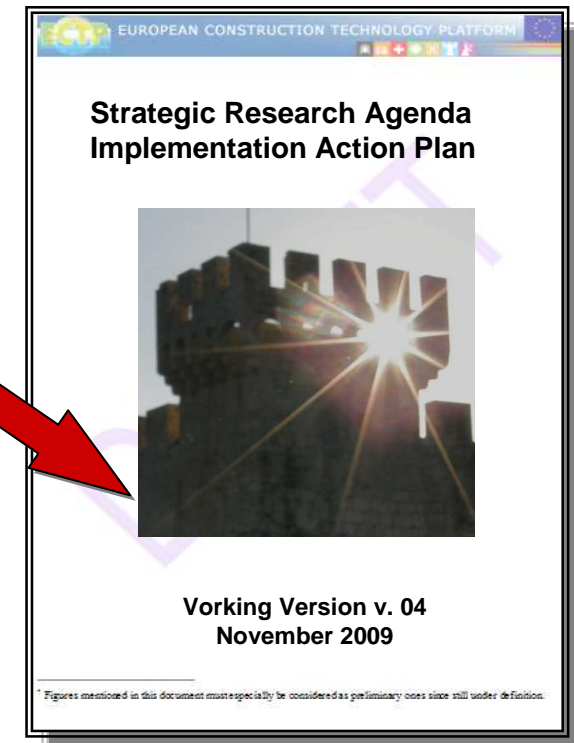


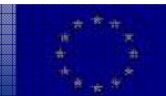
VISION 2010/20/30



STRATEGIC RESEARCH AGENDA

REGULARLY UPDATED FACH SRA IMPLEMENTATION PLAN





Research Themes	FP7							Other Programmes	Σ
	2007	2008	2009	2010	2011	2012	2013		
Building assessment, diagnosis and monitoring	5			15				40	60
Assessment of material decay and development of Cultural Heritage compatible materials		10	10					40	60
Low intrusive retrofit and conservation techniques		8	12		15			50	85
Integration in urban and natural environment		5		5				20	30
Rational and long term management processes		5	5	5	10			40	65
New tools for European citizens interaction				10	5			30	45
Knowledge transfer and demonstration of the best-practice cases		2	3	2	3			20	30
Demonstration of knowledge gained from FP7 and other research projects in selected typical CH sites across the EU						45	45	60	150
TOTAL	5	30	30	35	35	45	45	300	525

All figures are in M€ and correspond to total costs of projects. Internal industrial private projects are not included.

- 2007: Building assessment, diagnosis and monitoring
- 2008: Impact of climatic changes
Cultural heritage identity card
- 2009: Earthquake impact mitigation – Low – intrusive retrofit and conservation techniques
- 2010: Rational use of energy in heritage buildings
- 2011: Development of advanced compatible materials for cultural heritage assets
Support of implementation of JPI on "Cultural Heritage and Global Change"
- 2012 – 2013: How many of FACH ideas will be reflected in calls?

- Approach proposed by FACH
 - Introduction of Advisory Groups and End -users Groups
 - Clustering of compatible projects
 - Transfer of knowledge gained from the research to SMEs in order to stimulate buissness opportunities
 - Formal education role in knowledge transfer



Sinergy of research efforts and results



CHRESP Demonstration Area

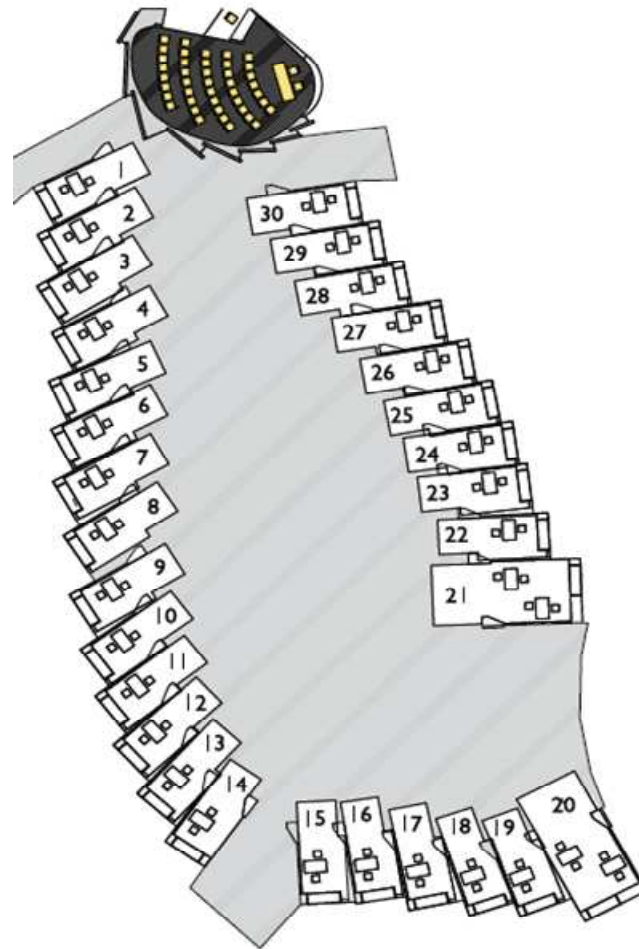
The 8th European Conference on Research for Protection, Conservation and Enhancement of Cultural Heritage, Ljubljana, Slovenia, November 2008

25 Cultural Heritage projects presented



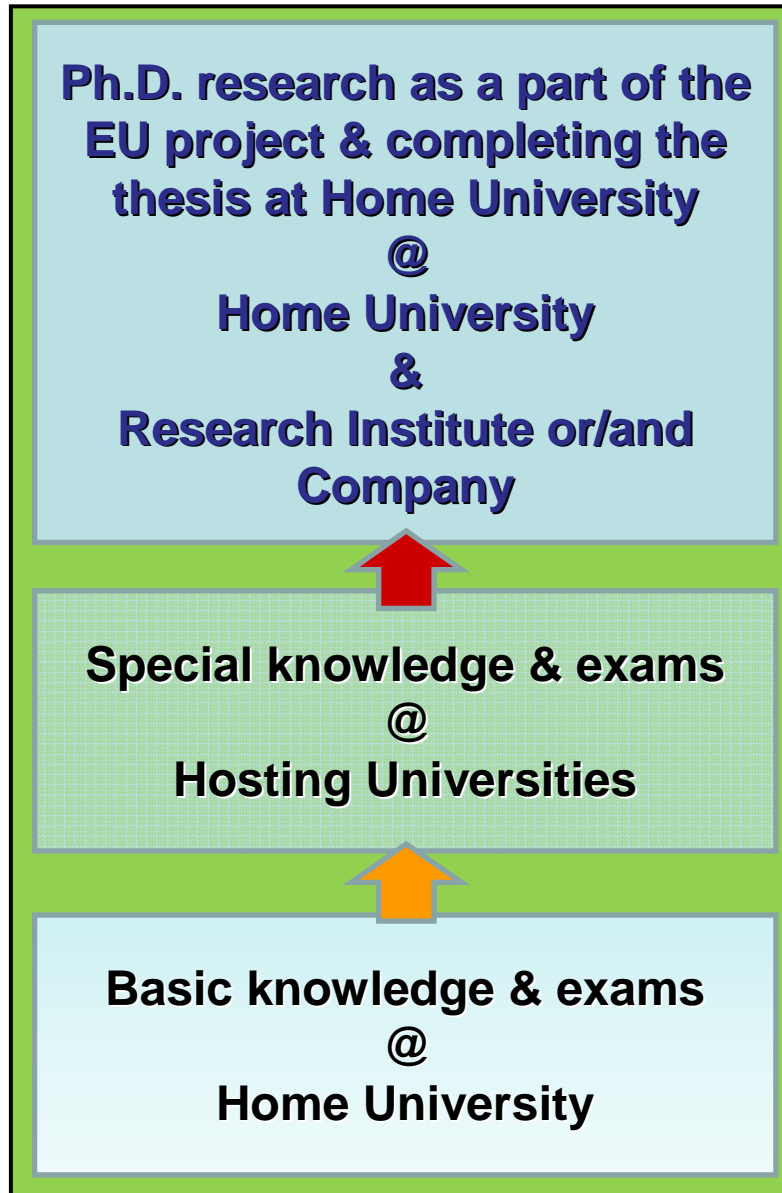
ARPA Demonstration Area - the exhibition of prototypes and technologies developed as part of European Commission research projects, The 7th Bienal of Heritage Restoration and Management, Valladolid, Spain, November 2010

29 Cultural Heritage projects presented



Pabellón 4 AR&PA INNOVACIÓN / INNOVATION

- 02 SENSORGAN, SUECIA
- 03 LIVACAD, ESPAÑA
- 04 MUSCORR, FRANCIA
- 05 CONSOLIDER, ESPAÑA
- 06 GEOMATERIALES, ESPAÑA
- 07 IMAGINARTE, ESPAÑA
- 08 TEACH-VIDRIO, ITALIA
- 09 SAVARES, ESPAÑA
- 10 STONECORE, ALBANIA
- 11 MESIS, ESPAÑA
- 12 SMOOHS, ALBANIA
- 13 INNODEVICES, ESPAÑA
- 14 VIRTUALWARE, ESPAÑA
- 15 PROPAINTE, NORUEGA
- 16 ROCARE, AUSTRIA
- 17 NIKER, ITALIA
- 18 PTEC, Plataforma Tecnológica Española de la Construcción, ESPAÑA
- 19 ECTP, European Construction Technology Platform, EUROPA
- 20 COMISIÓN EUROPEA
- 21 TECNALIA, ESPAÑA
- 22 GRAFFITAGE, INGLATERRA
- 23 OPHERA, ESPAÑA
- 24 AMECP, ALEMANIA
- 25 CONSOSMA, ESPAÑA
- 26 FIRESENSE, GRECIA
- 27 H-KNOW, ESPAÑA
- 28 PERPETUATE, ITALIA
- 29 PATRAC, ESPAÑA



Goal:

- To stimulate the project result transfer by involving young researchers
- To increase the research potential of project partners by involvement of Ph.D. students
- To stimulate transfer of knowledge to end users through the Ph.D. student after achieving his Ph.D. degree

Prerequisites:

- The flexibility of Ph.D. programme at targeted Universities

What to do?

- Include a special funding scheme in FP project system (additional funds for subsidizing of Ph.D. student)
- To stimulate Universities for opening for the proposed scheme

- Joint Programming Initiative (JPI) on cultural heritage – engagement of national and EU funds
- Public Private Partnership – engagement of industrial and EU funds (alike E2B – Energy Efficient Buildings)
- Open EU calls – the “clasic” calls for proposals (alike FP7 Cooperation calls)

- “Soft borders”
- Closely related ecosystems
- Closely related cultural heritage
- Similar economical problems
- Need for integration of environmental policies in all other policies





Thank you for attention!

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