



**FACH**



EUROPEAN  
COMMISSION

Community research

**ECTP GENERAL ASSEMBLY**

**Warsaw, 4th October 2011**



## **Parallel session Cultural Heritage**

**Michel Chapuis – European Commission**

**Isabel Rodriguez-Maribona - TECNALIA**

## **CULTURAL HERITAGE PARALLEL SESSION**

- 1. Cultural Heritage priorities: Isabel Rz-Maribona (Tecnalia)**
- 2. Main relevant FP7 projects:**
  - CLIMATEFORCULTURE: Marjana Sijanec (ZRMK)**
  - 3ENCULT: Daniel Martín (CARTIF)**
  - EFFACEUR: Javier García Jaca (Tecnalia)**
  - TEACH: Adriana Bernardi (ISAC-CNR)**
- 3. Cultural heritage research in FP7: Michel Chapuis (EC)**
- 4. Discussion**

**TEACH: Small Medium Size Collaborative project (2007)**

**CLIMATE FOR CULTURE: Large Collaborative Project (2008)**

**3ENCULT: Large Collaborative project (2010)**

**EFFACEUR: SME's project (2010)**

**CHIC: Coordination and Support Action (2008)**

## **FACH CULTURAL HERITAGE RESEARCH PRIORITIES**

- **FACH – ECTP recent activities**
- **Implementation of FACH priorities in FP7**
- **Overview of FP7 Cultural Heritage projects.**

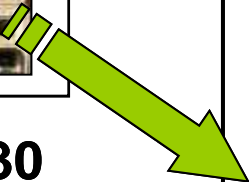
# FACH-ECTP RECENT ACTIVITIES

## FACH RECENT ACTIVITIES

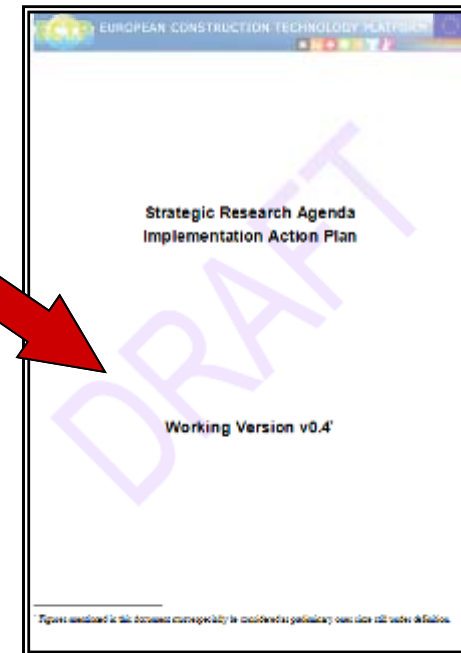
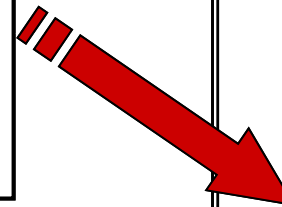
- **ECTP DOCUMENTS**
  - Update SRA document
  - Update IAP-SRA document
- **INVOLVEMENT OF SMEs**
  - SME's involvement in FP7 projects
  - CHRESP (2008) & AR&PA INNOVATION (2010 & 2012)
- **COORDINATION WITH OTHER INITIATIVES**
  - ECTP
  - E2B
  - REFINE
  - JPI Cultural Heritage
- **DISSEMINATION**
  - Dissemination of FACH in Conferences & Fairs
  - Participation in ECTP Conference



**VISION 2010/20/30**



**STRATEGIC  
RESEARCH  
AGENDA (SRA)**



**IMPLEMENTATION  
ACTION PLAN (IAP)**

## **REGULARLY UPDATED FACH – SRA & SRA-IAP**

**April 2011**

- New topics within FACH priorities: Materials and Energy efficiency at district level
- Update members, projects, etc.
- Update roadmap and budget

## **SME'S INVOLVEMENT IN FP7 CALLS**

- ENV.2008.3.2.2.1: Framework conditions to enhance most promising prototypes. **A relevant participation of SMEs is requested.**
- EeB.ENV.2010.3.2.4-1: Compatible solutions for improving the energy efficiency of historic buildings in urban areas. **EU contribution going to SME(s) is 35% or more**
- ENV-NMP.2011.3.2.1-1: Development of advanced compatible materials and techniques for cultural heritage assets. **SME targeted Collaborative Projects - EU contribution going to SME(s) is 35% or more**
- ENV.2012.6.2-6: Technologies and tools for underwater and coastal archaeological sites. **SME target Collaborative project**
- EeB.ENV.2012.6.6-2: Energy efficiency at district level. **EU contribution going to SMEs is 30% or more**



## SME'S INVOLVEMENT

### FACH Involvement in SME's events: Fairs

- **Ferrara Salone di Restauro Fair, 2009:** Specific FACH-ECTP session
- **CHRESP 2008:** Exhibition areas – Most promising FP5 & FP6 prototypes
- **AR&PA INNOVATION 2010:** Restoration fair – specific area devoted to RTD
- **AR&PA 2012:** Main driver for AR&PA 2012 - Innovation



## COORDINATION WITH OTHER INITIATIVES

- PPP – E2B: Energy efficiency in historic buildings and districts



- REFINE: Archaeology, old infrastructures



- NET-HERITAGE & JPI Cultural Heritage: Common topics





## Working Group 1 - Setting the scene

Looking at what information we have and what we know to decide the research agenda. Taking into account existing programmes, projects and national initiatives. There will also be a need to evaluate the impact of our research in the coming years.

## Working Group 2 - Working at building level, new and existing

The greatest challenge is the large European existing building stock. This includes the integration of renewables in both existing and new buildings and the need for cost effective solutions.

## Working Group 3 - Work at district level

In order to make significant savings, the district scale needs to be considered. This involves research on synergies and specific technologies and work with public organisations dealing with cities.

## Working Group 4 - Construction processes

Changing industry processes is also important. How do we change from business as usual to construction of energy efficient buildings?

## Working Group 5 - Successful implementation

Implement the 'catalyst' that will make things work. The National working group.

### 2.4 A living cultural heritage for an attractive Europe

Developing new materials, with a high degree of energy efficiency, improving our knowledge of cultural heritage typologies, monitoring tools, mathematical modelling ...are all topics integrated in E2B EI. Hence convergence is fairly strong.

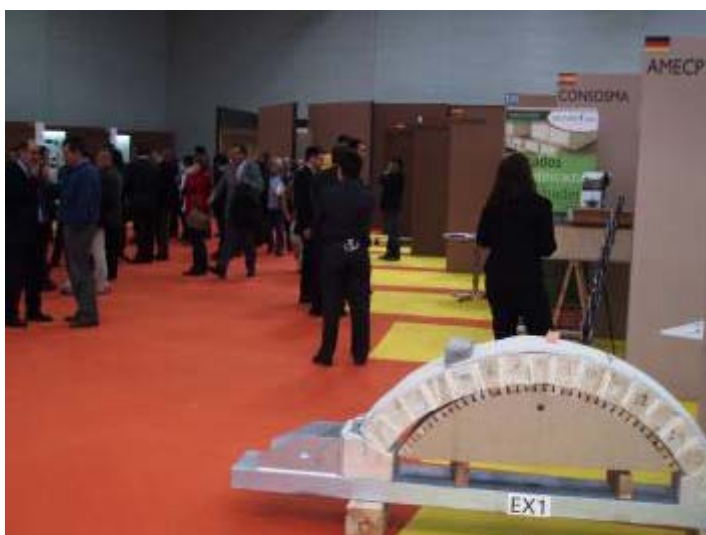
### 2.5 Improve Safety and Security

Concerned with natural and man-made hazards, safety and security of infrastructures this chapter has little common points with E2B EI.

In E2B EI, sustainability will essentially be seen under the angle of the reduction of energy consumption, with low carbon technologies and of the economy in the use of natural resources. Cultural heritage will benefit from some aspects of research on materials and systems.

## DISSEMINATION

- ECTP General assemblies
- Restoration fairs
- Other events (Net-Heritage, congresses, etc.)



# IMPLEMENTATION OF FACH PRIORITIES IN FP7

- Priority 1:** Building assessment, diagnosis and monitoring
- Priority 2:** Assessment of material decay and development of Cultural Heritage compatible materials
- Priority 3:** Low-intrusive retrofit and conservation techniques
- Priority 4:** Integration in urban and natural environment
- Priority 5:** Long term and effective management processes to mitigate the environmental risks
- Priority 6:** New tools for European citizens interaction
- Priority 7:** Knowledge and technology transfer to construction sector and demonstration of the best-practice cases
- Priority 8:** On-site application of knowledge gained from FP7 and other research projects in selected typical CH sites across the EU

Priority	Related ENV call
<b>1. Building assessment, diagnosis and monitoring</b>	<ul style="list-style-type: none"> <li>• <b>ENV.2007.3.2.1.1:</b> Damage assessment, diagnosis &amp; monitoring for the preventive conservation &amp; maintenance of the cultural heritage</li> <li>• <b>ENV.2008.3.2.1.2:</b> EU cultural heritage identity card</li> </ul>
<b>2. Assessment of material decay. Compatible materials</b>	<ul style="list-style-type: none"> <li>• <b>ENV-NMP.2011.3.2.1-1:</b> Development of advanced compatible materials and techniques and their application for the protection , conservation and restoration of cultural heritage assets</li> </ul>
<b>3. Low-intrusive retrofit and conservation techniques</b>	<ul style="list-style-type: none"> <li>• <b>ENV.2009.3.2.1.1:</b> Technologies for protecting cultural heritage assets from risks and damages resulting from extreme events, especially in the case of earthquakes</li> <li>• <b>ENV.2009.3.2.1.2:</b> Technologies for protecting cultural heritage assets from risks and damages resulting from extreme events, especially in the case of fires and storms</li> </ul>
<b>4. Integration in urban and natural environment</b>	<ul style="list-style-type: none"> <li>• <b>EeB.ENV.2010.3.2.4-1:</b> Compatible solutions for improving the energy efficiency of historic buildings in urban areas</li> <li>• <b>EeB.ENV.2012.6.6-2:</b> Concepts and solutions for improving energy efficiency of historic buildings, in particular at urban district scale</li> </ul>

Priority	Related ENV call
<p><b>5. Long term and effective management processes to mitigate the environmental risks</b></p>	<ul style="list-style-type: none"> <li>• <b>ENV.2007.3.2.1.1:</b> Damage assessment, diagnosis &amp; monitoring for the preventive conservation &amp; maintenance of the cultural heritage</li> <li>• <b>ENV.2008.3.2.1.1:</b> Methodologies, technologies, models and tools for damage assessment, monitoring and adaptation to climate change impacts</li> <li>• <b>ENV.2009.3.2.1.1:</b> Technologies for protecting cultural heritage assets from risks and damages resulting from extreme events, especially in the case of earthquakes</li> <li>• <b>ENV.2009.3.2.1.2:</b> Technologies for protecting cultural heritage assets from risks and damages resulting from extreme events, especially in the case of fires and storms</li> </ul>
<p><b>6. New tools for European citizens interaction</b></p>	
<p><b>7. Knowledge and technology transfer</b></p>	<ul style="list-style-type: none"> <li>• <b>ENV.2007.3.2.2.2:</b> Consolidation &amp; dissemination of results</li> </ul>
<p><b>8. On-site application of knowledge gained from FPs</b></p>	<ul style="list-style-type: none"> <li>• <b>ENV.2008.3.2.2.1:</b> Framework conditions to enhance most promising prototypes</li> </ul>



# **OVERVIEW OF FP7 CULTURAL HERITAGE PROJECTS**

YEAR	CALL	FUNDED PROJECTS
2007	Damage assessment, diagnosis & monitoring for the preventive conservation & maintenance of the cultural heritage	TEACH - SMOOTH POPART
	Technologies, knowledge transfer and optimisation of results in cultural heritage	NET HERITAGE
	Consolidation & dissemination of results	CHRESP
2008	Methodologies, technologies, models and tools for damage assessment, monitoring and adaptation to climate change impacts	CLIMATE FOR CULTURE
	EU cultural heritage identity card	EU CHIC – WRECKPROTECT
	Framework conditions to enhance most promising prototypes	MUSECORR - ROCARE
2009	Technologies for protecting cultural heritage assets from risks and damages resulting from extreme events, especially in the case of earthquakes	NIKER PERPETUATE
	Technologies for protecting cultural heritage assets from risks and damages resulting from extreme events, especially in the case of fires and storms	FIRESENSE

YEAR	CALL	FUNDED PROJECTS
2010	Compatible solutions for improving the energy efficiency of historic buildings in urban areas	3ENCULT
	Non-destructive diagnosis technologies for the safe conservation of movable assets diagnosis technologies	MEMORY – SYDDARTA
2011	Development of advanced compatible materials and techniques and their application for the protection , conservation and restoration of cultural heritage assets	IMAT – PANNA - NANOMATCH
	Coordination Action in support of implementation by participation States of a Joint Programming Initiative	JHEP



**THANK YOU  
VERY MUCH  
... and enjoy  
the session**