



CERC



KICK-OFF MEETING

May 10-11, 2010



THALES

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich



Introduction

- 1. Project overview**
- 2. Main outputs of day 1 discussion**
 1. Interaction with GMES Core Services and other European initiatives
 2. Actions list related to working sessions : users, data, portal
- 3. Agenda of the Kick-Off Meeting**



NOVELTIS Representatives

Project Coordination

Project Team



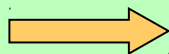
Pascal PRUNET

Dorothee COPPENS, Andrzej KLONIECKI, Cedric BACOUR

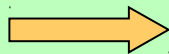
Project Assistant

Administrative

Coordination



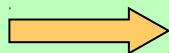
Catherine TINE



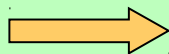
Richard BRU (NOVELTIS CEO)

Financial Controller

Quality Controller



Caroline GUIOT



Frédérique PONCHAUT

...do not hesitate to ask any of us for any point ...



Project context and goal

→ *FP7 cooperation work program*

→ *THEME SPACE: FP7-SPACE-2009-1, Monitoring of climate change issues*

→ *3 years collaborative project with 14 partners*

*To provide **Calibrated 30 year-long re-analysis of space and time variations of carbon fluxes and pools over Europe and the Globe**, consistent with all available in situ and satellite data.*

*To set up the **integrated system** able to properly combine all available information to **update and improve** this reanalysis, and to provide **forecasting and impact studies capabilities**.*



Project positioning

NEED

*information on CO₂ fluxes and variabilities at regional scale is fundamental for the validation of Earth system and climate models: **the CO₂ cycle parameterisation is one of the major source of uncertainties for modelling future climate***

REQUIREMENTS

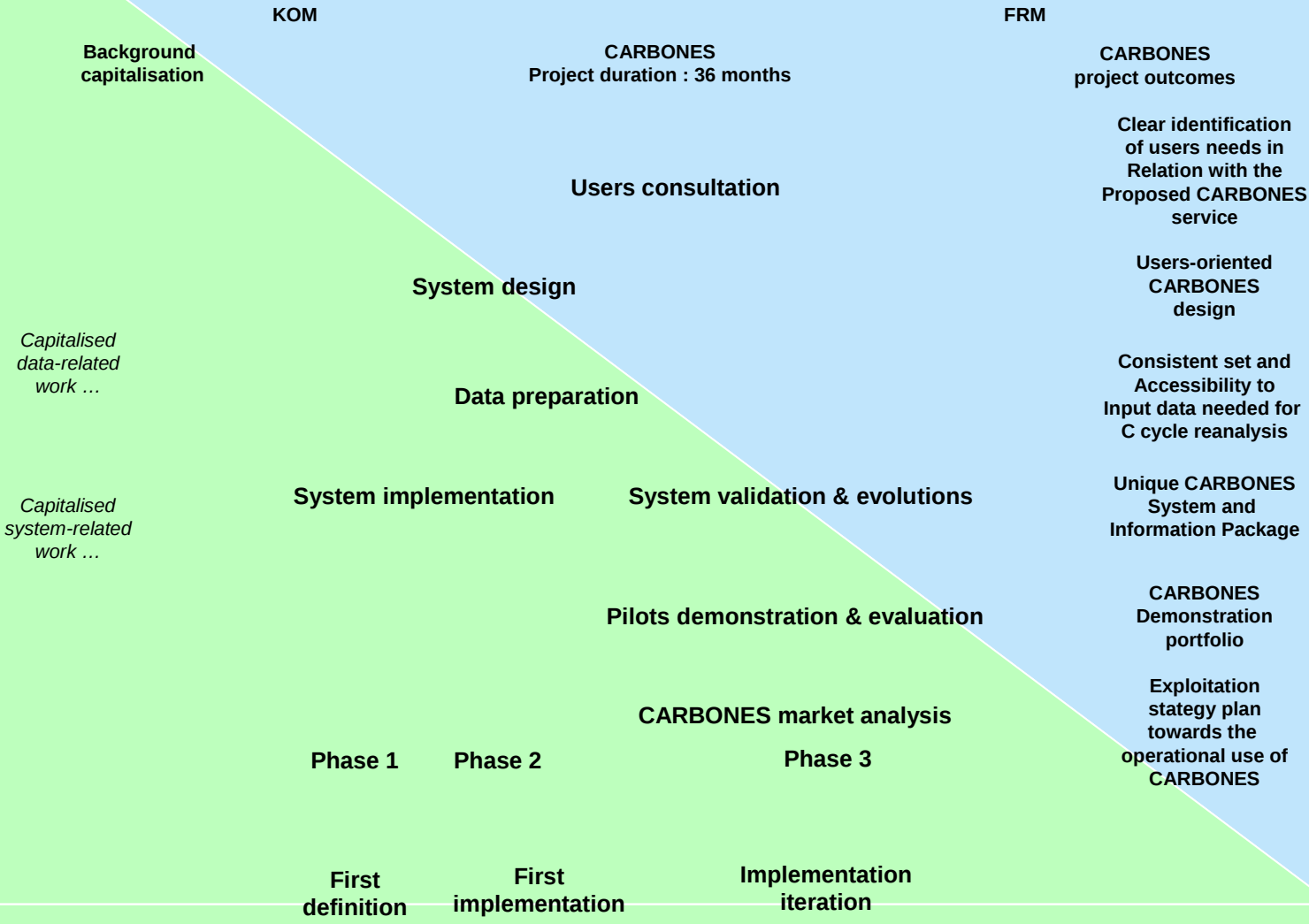
*The **quantification of the current state of the carbon cycle depends on knowledge of the recent history of the carbon cycle**, i.e. a reanalysis (the current behaviour of the system depends on pools of carbon). **Such an analysis of the carbon-climate is not offered in any existing or proposed service.***

APPROACH

*Through a global information system for the quantification and understanding of the distribution of CO₂ fluxes, carbon pools and underlying processes, **CARBONES** will deliver the first ever consistent, **high space and time resolution information of the history of the carbon Cycle**, with associated **uncertainties** and attribution to **controlling processes.***

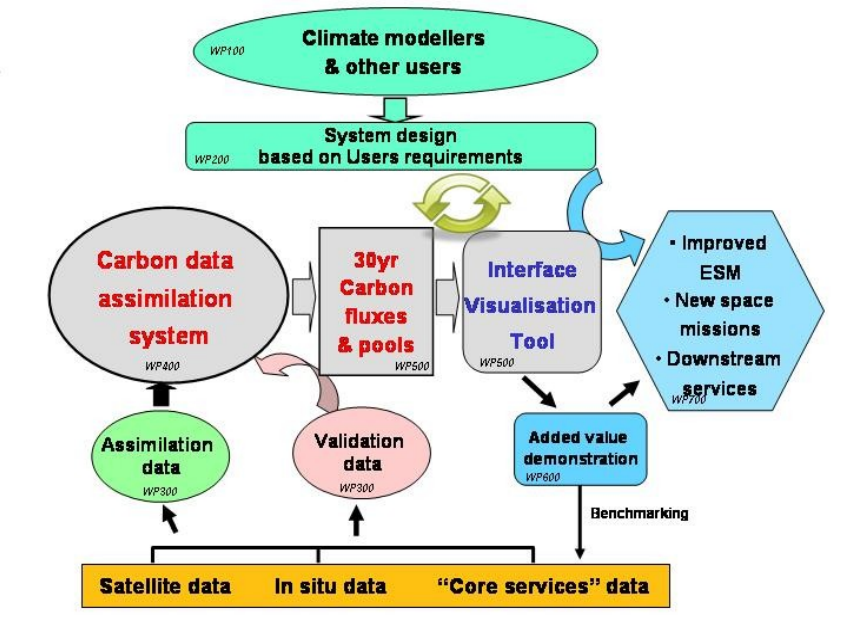


Project Objectives





Operational Objectives



- ✓ *Analysing users needs*
- ✓ *Interfacing with and integrating available various type of data*
- ✓ *Implementing state-of-the-art processed-based models and assimilation methods*
- ✓ *Generate a 30-year re-analysis of carbon fluxes and pools maps regularly updated*
- ✓ *Developing an interface visualisation/mapping interface*
- ✓ *Evaluating and demonstrating the interest of CARBONES information system*
- ✓ *Specifying future satellite missions*
- ✓ *Analysing future applications and downstream potentialities*



CARBONES Challenges (1)

3 majors questions : science, observation, services

1. To improve scientific understanding and quantification of Carbon fluxes and pools at global and regional scales, as input for Climate studies and IPCC assessments
2. To better understand the needs of observations of the Carbon Cycle (in situ, emission databases, satellite systems), in order to better integrate and specify existing and future measurement infrastructures and space missions
3. To develop and support applications and services favorizing the reduction of anthropogenic emissions and the mitigation of human activities impacts on climate change



CARBONES challenges (2)

CARBONES Challenges :

- Properly carry out project objectives and the related 3 questions (science, observation, services) during and after the project, by :
- Ensuring the success of CARBONES project with efficiency and cooperation (Organisation, animation and control of the project)
- Respecting during and after the project the interests of the partners (scientific, industrial, SMEs) investing in CARBONES
- Proposing and ensuring the balance between EC GMES and commercial interests
- Building the autonomy of CARBONES beyond the UE support



CARBONES Consortium

*Project Manager
System processing*

- *Noveltis*



*Scientific advisor
System development*

- *Laboratoire des Sciences du Climat et de l'Environnement*
+ *Three external scientific advisors*



Requirements analysis

- *Met Office Hadley Centre*



*Data providers,
System validation*

- *Max Planck Institute for biogeochemistry*
- *Federal Institute of Technology of Zurich*
- *Alterra-DLO*
- *Universtaet Stuttgart*
- *Peking university*
- *Aberdeen university*
- *European forest Institute*



*User interface tool
development*

- *Cambridge Environmental Research Consultants*



System development

- *CLIMMOD*



Market analysis

- *Atomic Energy Authority Technology*



*future missions specification
System design*

- *Thales Aliena Space*



Agenda – Official Kick-Off

MORNING – Room Sirius

9 :00 - 9:15	Presentation of the Project Introduction by Coordinator – official KO	NOVELTIS
9:15 – 9:45	Quick roundtable: each partner and its role in the project	Each Partner
9:45 – 10:15	Presentation of objectives and expected results of the project	LSCE
10:15 - 10:30	Coffee break	
10:30 – 10:50	Presentation of main activities (WP, study logic) and implementation schedule	NOVELTIS
10:50 – 12:30	Project structure: WP + milestones, deliverables	WP leaders

12:30 – 14:00 LUNCH

AFTERNOON - Room Sirius

14:00 – 14:20	Management: Internal structures (CUAG, Advisory Group), Decision-making system	NOVELTIS
14:20 – 14:40	European Community presentation	REA
14:40 - 15:10	Reporting and commitments towards EC + Presentation of Consortium agreement + Distribution of management kit to each partner	NOVELTIS
15:10 – 16:00	Questions / Further discussion (e.g. future Space Calls) + organisation of next meetings (when and where)	All