

10º Congreso Nacional del Medio Ambiente (Conama 10)
I+D+i en tecnologías ambientales: Qué es y cómo se financia.

GfG²

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Starlab



Martes 23 de noviembre de 2010

GNSS for Global Environmental Earth Observation and GEOSS

Marco Caparrini

Space R&D Area

Starlab[®]

Madrid, 23/11/2010

WORK PROGRAMME 2010

COOPERATION

THEME 6

ENVIRONMENT (INCLUDING CLIMATE CHANGE)

Area 6.4.1.3 Earth Observation activities in emerging areas

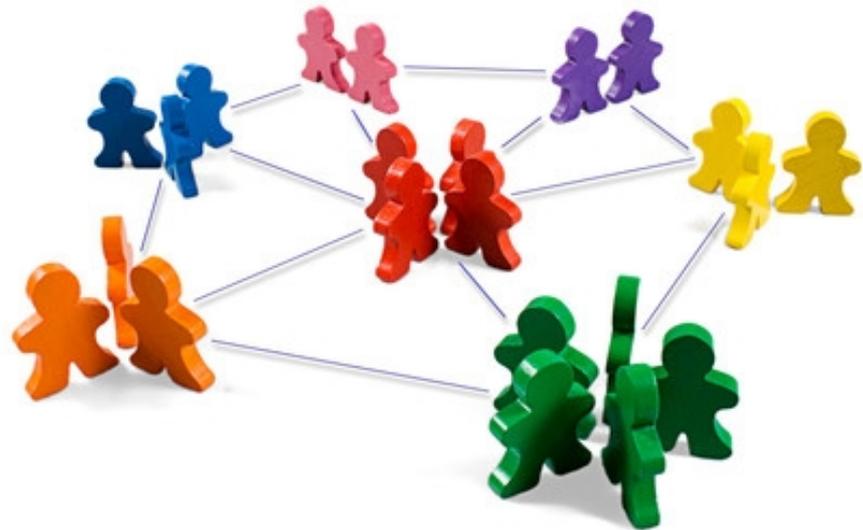
ENV.2010.4.1.3-1 Exploring GNSS (global navigation satellite systems) applications for Global Environmental Earth Observation and GEOSS (Global Earth Observation Systems of Systems)

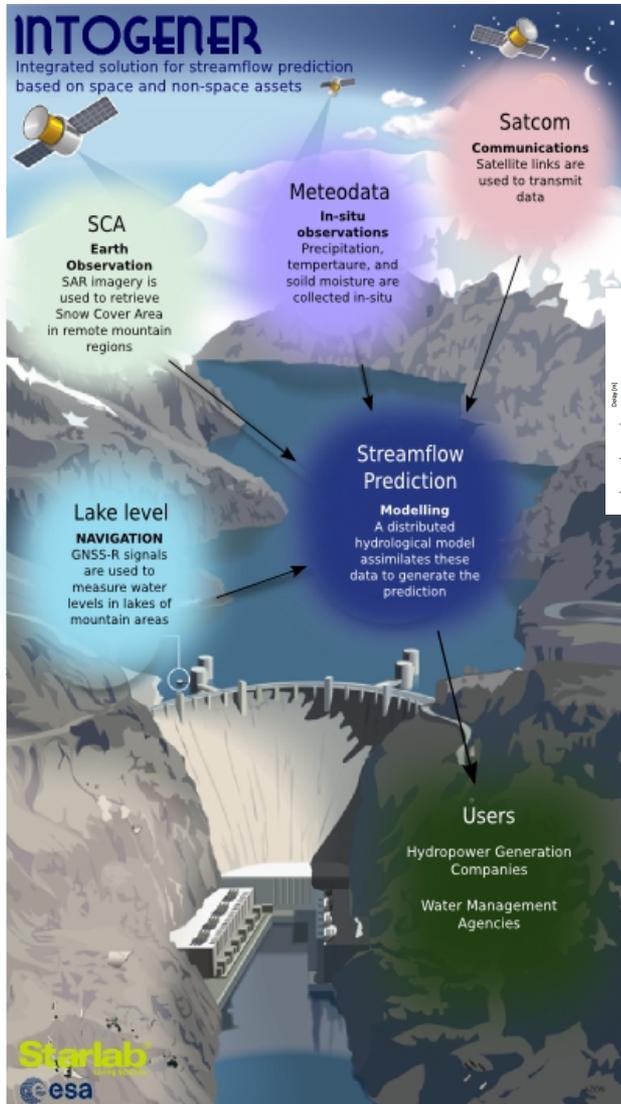


Starlab has interest in Coordination Actions

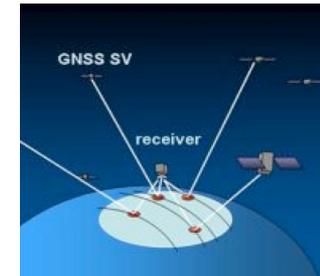
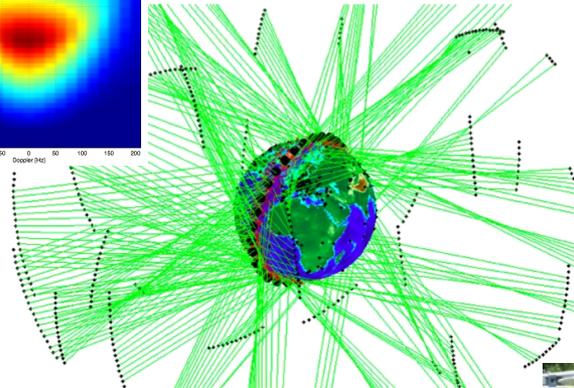
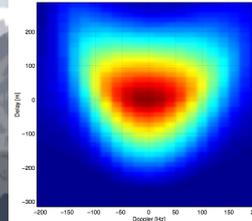
“A Coordination Action aims to promote and support the networking and coordination of research innovation activities”

(<http://cordis.europa.eu>)





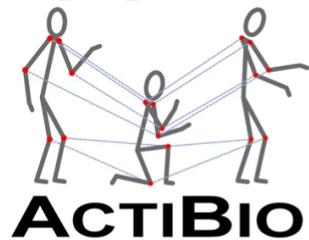
Since it's foundation (and before ...) one of the main R&D Area of Starlab has been the use of navigation signals for Earth Observation purposes.



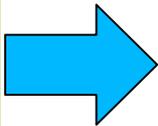
Starlab has already an important net of contacts in the area of interest to allow building a strong consortium.



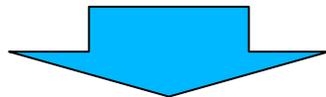
Starlab has past experience in FP projects and also in leading.



Publication of call	<i>30-July-2009</i>
Deadline for submission of proposals	<i>5-January-2010, 17:00 local Brussels time</i>
Evaluation of proposals	
Individual evaluations	<i>February 2010</i>
Consensus meetings	<i>March 2010</i>
Evaluation Summary Reports sent to proposal coordinators ("initial information letter")	<i>April 2010</i>
Invitation letter to successful coordinators to launch grant agreement negotiations with Commission services	<i>May 2010</i>
Letter to unsuccessful applicants	<i>From October 2010</i>
Signature of first grant agreements	<i>From December 2010</i>



All **GEOSS Societal Benefit** areas require access to geo-referenced data. There is a need, therefore, to better assess the value of **GNSS** data and constellations for GEOSS in general and more specifically the value of European systems such as the **EGNOS** constellation which is the **GALILEO** precursor. The activities should explore **other potential applications** derived from those systems in particular in the research sectors relating to GEO Societal Benefit areas in addition to the classical positioning services provided by EGNOS and GALILEO.



GfG²: GNSS for GEE0 and GEOSS

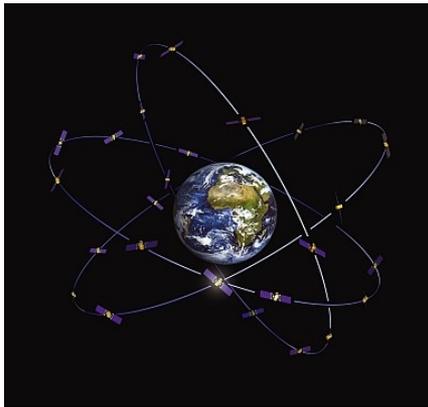
GfG²: GNSS for GEEO and GEOSS

GNSS: Global Navigation Satellite System

GEEO: Global Environmental Earth Observation

GEOSS: Global Earth Observation System of Systems

GNSS: Global Navigation Satellite System



Credits: ESA

GPS
GLONASS
GALILEO
COMPASS

WAAS
EGNOS
SDCM
MSAS

GAGAN
QZSS

Geodesy
Volcanism
Seismology
Attitude determination
Formation flying

Oceanography
Troposphere
Weather forecasting
Ionosphere and Space Weather
Hydrology and Climatology
Cryosphere

GEOSS: Global Earth Observation System of Systems



Credits: GEO

“GEOSS will provide the overall conceptual and organizational framework to build towards integrated global Earth observations to meet user needs.”

Vision for GEOSS

To realize a future wherein decisions and actions for the benefit of humankind are informed by coordinated, comprehensive and sustained Earth observations and information.

Credits: GEO



Disaster

Health

Energy

Climate

Water

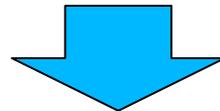
Weather

Ecosystems

Agriculture

Biodiversity

Objective ID	Obj. Description
O1	To consolidate a community of experts to exploit GNSS for GEE0 and GEOSS
O2	To explore novel applications derived from GNSS for GEE0 and GEOSS while enhancing research-industry collaboration to implement these applications
O3	To identify the research challenge and define the strategic research vision, direction, roadmap and policy for GNSS (available or underdevelopment, European and non European) for GEE0 and GEOSS.
O4	To assess the value of a European GNSS independent constellation (EGNOS-GALILEO) in the support to GEE0 and GEOSS.
O5	To promote the public understanding of GNSS research and use within the GEO community, providing support to GEO tasks



Success criteria

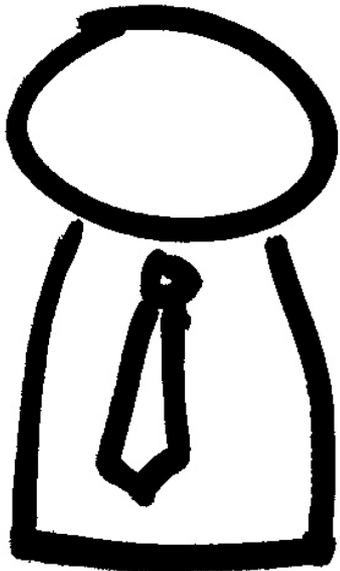
GfG²
Objectives

team



Define AIMS of your
coordination Action

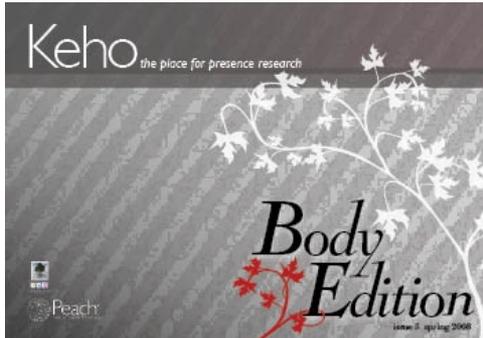
tools



Seven partners compose the Core team of GfG2: a SME, three universities and three research centres; four are GNSS for Global Environmental Earth Observation and GEOSS experts, either in GNSS scientific applications (STARLAB, GFZ & Chalmers University) or in positioning applications (University of Nottingham). Furthermore, two are experts in Earth Observation for GEE0 and GEOSS (University of Leicester & MET.NO), and one is a GEO expert (ALTERRA).

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PRINTED MATERIAL



Piggy Bank



Board of Experts

Manuel Hernandez

Norbert Jakowski

Christopher Buck

Paul Poli

Charles Dixon

Carmen Aguilera

Christensen Jacob

EVENTS

•CA events

- 2 Summer Schools
- 4 Workshops
- Socioeconomic impact event

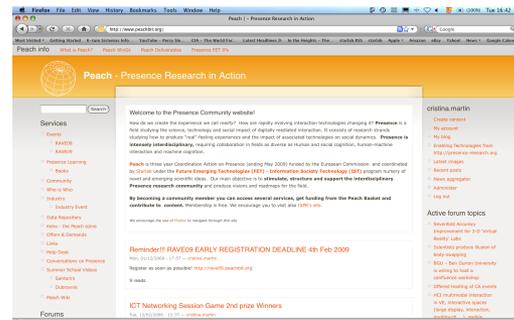
•Community events

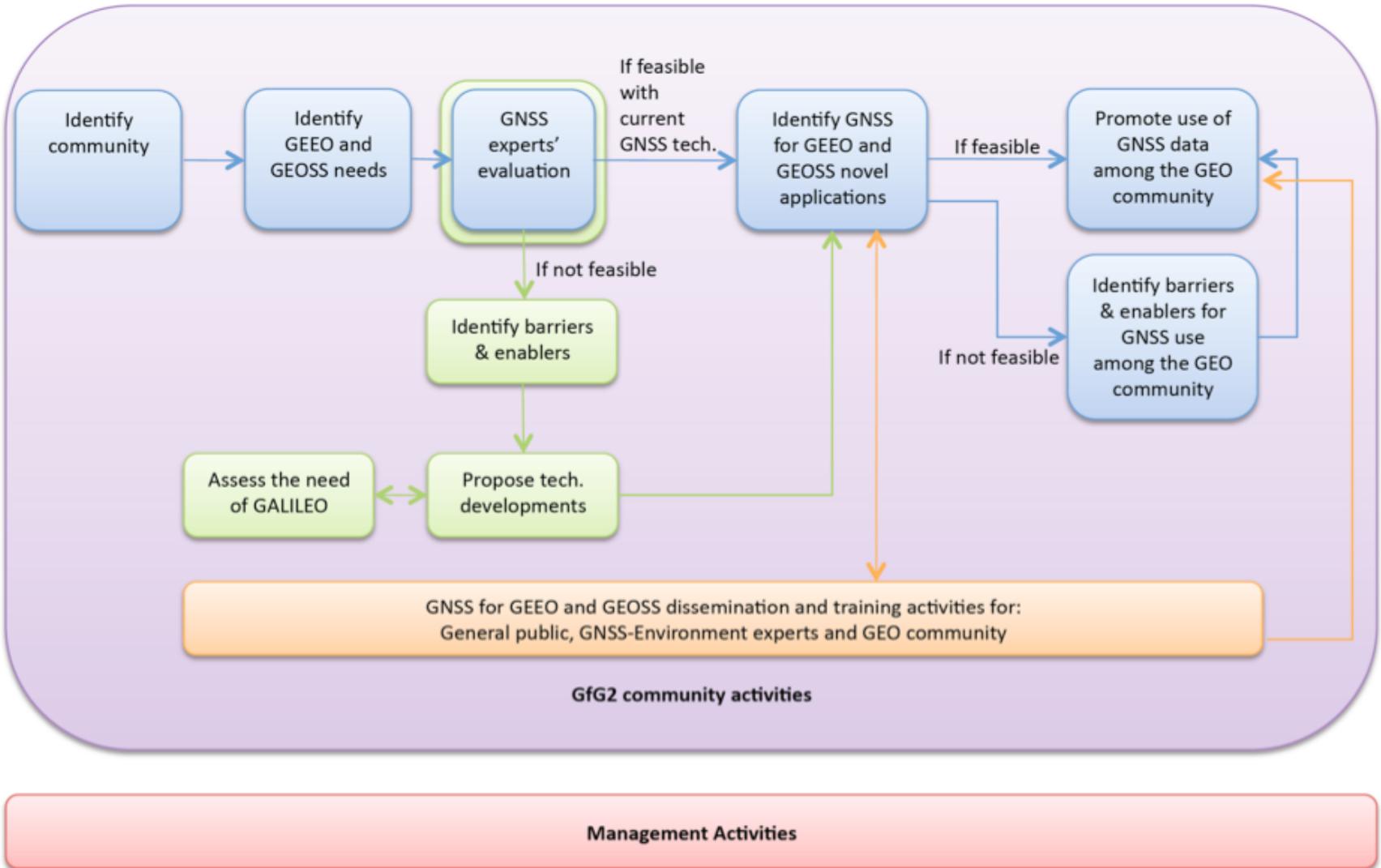
- Scientific conferences
- Working Groups

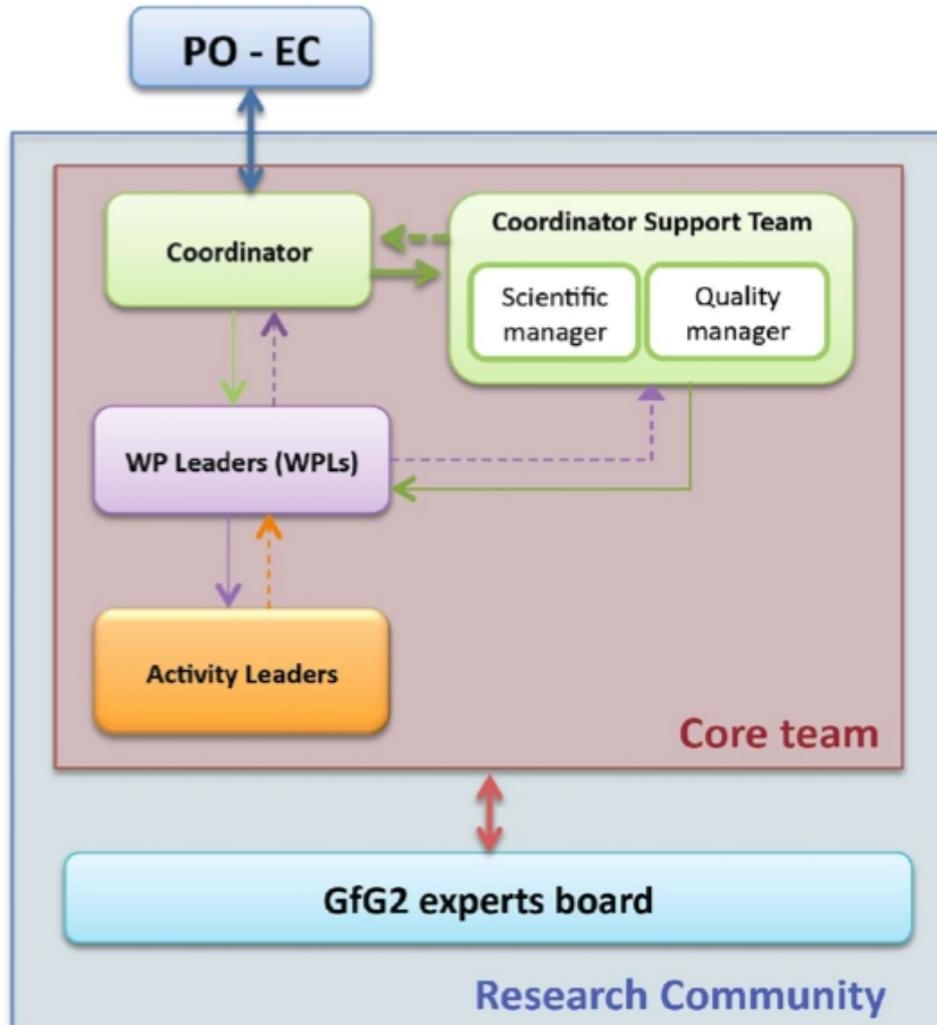
•EU & GEO events

•International conferences

WEB BASED COLLABORATIVE TOOLS







Are you interested?

- Give me your card
- Send me an email (gfg2@starlab.es)

Thank you

Marco Caparrini

Space R&D Area

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