

GRAIL

GNSS Introduction in the RAIL sector
Galileo 6th Framework Program



The GRAIL Project



Galileo Services Meeting

Madrid, 7 September 2005

Project Objectives



- **To achieve a common specification (agreed by users and industry) for the GNSS subsystem for the**
 - Enhanced Odometry application
 - Enhanced ETCS applications (Absolute positioning and Train awakening)
- **To develop and test a prototype of the GNSS subsystem for the Enhanced odometry and the Enhanced ETCS applications**
 - Test in a real ERTMS/ETCS line
 - Test in a lab environment
- **To study the complementary aspects**
 - Economic studies
 - Legal issues
 - Development of GNSS local elements specific for railways consistent with the objectives 1 and 2

The Consortium



GRAIL Consortium

RAIL SIGNALLING

The RAIL SIGNALLING category includes four logos: ANSALDO SIGNAL CSEE Transport, ALSTOM, SIEMENS, and invensys DIMETRONIC signals.

GNSS / IT

The GNSS / IT category includes four logos: ALCATEL ALENIA SPACE (An Alcatel/Finmeccanica company), Indra, EUSP, and deimos SPACE.

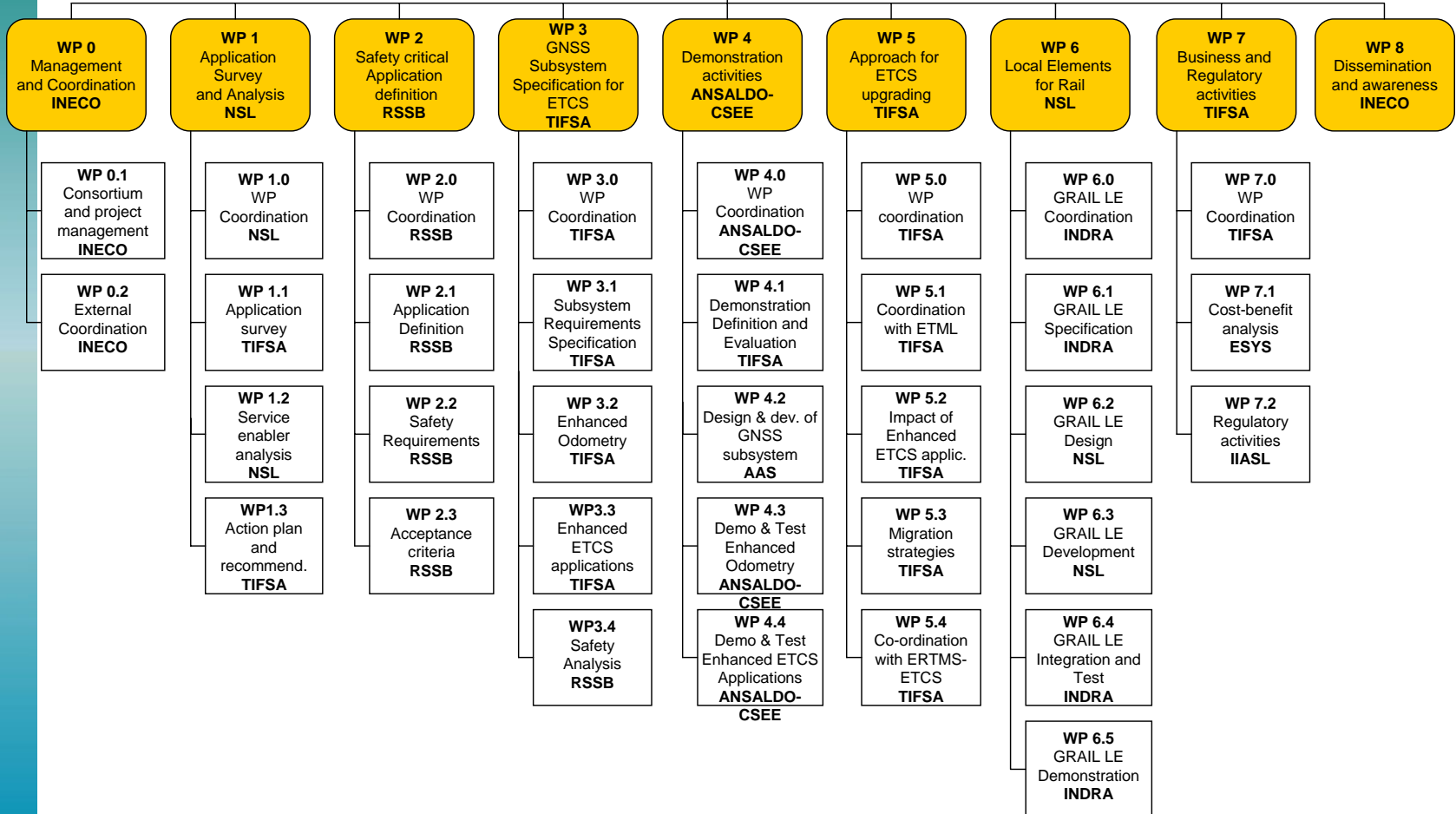
CONSULTANTS

The CONSULTANTS category includes five logos: INECO, TIFSA, NSL, ESYS CONSULTING, and IIASL.

RAILWAY ORGANISATIONS

The RAILWAY ORGANISATIONS category includes three logos: Rail Safety & Standards Board, CEDEX, and adif.

GRAIL PROJECT



Contract status and POCs



- **Contract signed on 22 August 2005**
- **KOM held on 1 September 2005**

- Galileo Joint Undertaking

Vincent Gabaglio

Tel: +32 (0) 2 507 80 42

vincent.gabaglio@galileoju.com



- INECO (Project coordinator)

Alvaro Urech

Tel: +34 91 452 12 99

alvaro.urech@ineco.es

