

# **ORganisation of European GNSS Industry**

**Council Transport Working Group  
14 February 2001**

**The ORganization of European GNSS INdustry of equipment and services:**

- **information exchange**
- **cross-fertilisation of expertise, fostering synergies**
- **point of contact/industry voice for the European Institutions**
- **publicity and lobbying**
- **fostering co-operation with non-European industries creating opportunities in overseas and global market**

- **75 members including international industry organisations and national groups (more than 100 industrialists represented)**
- **Industries from 14 countries**
- **From SMEs to biggest groups**
- **Service providers, equipment manufacturers, chip producers, software developers, integrators, telecom and car manufacturers...**

# MEMBERS



- ACSA (FRANCE)
- ADTRANZ (GERMANY)
- ADVANCED AVIATION TECHNOLOGY Ltd. (UNITED KINGDOM)
- ADVETO AB (SWEDEN)
- AERODATA F. (GERMANY)
- AGROCOM (GERMANY)
- AIRSYS ATM (UNITED KINGDOM)
- AIRSYS ATM (GERMANY)
- ALCATEL/SEL (GERMANY)
- ALENIA (ITALY)
- BCI (FRANCE)
- BMW-AG (GERMANY)
- CAA (GERMANY)
- COM DEV Europe Ltd. (UNITED KINGDOM)
- CS Communication & Systèmes (FRANCE)
- DAIMLER CRYSLER GROUP (GERMANY)
- DSNP (FRANCE)
- DIGINEXT (FRANCE)
- EDISOFT (PORTUGAL)
- EGERY (FRANCE)
- ELNA (GERMANY)
- ERICSSON TELECOMUNICAZIONI (ITALY)
- ERTICO (INTERNATIONAL)
- EURO -TELEMATIK (GERMANY)
- EUTELSAT (INTERNATIONAL)
- FIAT (ITALY)
- GSS (UNITED KINGDOM)
- HELLENIC AEROSPACE INDUSTRY (GREECE)
- IMEC (BELGIUM)
- INDRA ESPACIO (SPAIN)
- INTECS SISTEMI (ITALY)
- LEICA (SWITZERLAND)
- LOGICA (UNITED KINGDOM)
- MAN TECHNOLOGIE (GERMANY)
- MANNESMANN VDO (GERMANY)
- MARCOSOFT (ITALY)
- MLR (FRANCE)
- MORS (FRANCE)
- NAVIONICS (ITALY)
- NEXT S.p.A. (ITALY)
- NOKIA (FINLAND)
- OmniSTAR BV (THE NETHERLANDS)
- ORMSTON (UNITED KINGDOM)
- RACAL AVIONICS (UNITED KINGDOM)
- RACAL RESEARCH Ltd. (UNITED KINGDOM)
- RACAL TRACKS (UNITED KINGDOM)
- RAYTHEON (UNITED KINGDOM)
- ROBERT BOSCH GmbH (GERMANY)
- SAGEM (FRANCE)
- SAIT RADIOHOLLAND (BELGIUM)
- SATCON (GERMANY)
- SATPLAN (FRANCE)
- SEATEX (NORWAY)
- SEMA GROUP (SPAIN)
- SENA GPS (SPAIN)
- SENER (SPAIN)
- SEPTENTRIO (BELGIUM)
- SEXTANT (FRANCE)
- SKEYE (GERMANY)
- TCHIP SEMICONDUCTOR (SWITZERLAND)
- TECHNIUM (FRANCE)
- TELE ATLAS (BELGIUM)
- TELEMATICA (GERMANY)
- TELECONSULT (AUSTRIA)
- TELESPAZIO (ITALY)
- TELIT (ITALY)
- TEMEX TELECOM (FRANCE)
- TERRAFIX (UNITED KINGDOM)
- THOMSON-CSF COMSYS (FRANCE)
- THOMSON-CSF AIRSYS (FRANCE)
- THOMSON-CSF DETEXIS (FRANCE)
- VAN HOPPLYNUS INSTRUMENTS (BELGIUM)

## EUROPEAN GNSS INDUSTRIAL ORGANIZATIONS

- AUSTRIAN INDUSTRY (ASA)
- SCANDINAVIAN INDUSTRY (SGIC)
- SPANISH INDUSTRY (Galileo Sistemas y Servicios)

- To support the development of GALILEO users segment equipment and services,
- To provide public authorities with technical and marketing expertise and support in analysing the impact of GALILEO architecture on user equipment and services,
- To support the necessary efforts on standardisation and certification for the development of user segment equipment and services,
- To foster the identification of business opportunities and define the necessary actions to ensure their success,
- To foster partnership between industrialists and in particular between large corporations and SMEs,
- To rapidly and efficiently circulate relevant information,
- To promote EUROPEAN industry, technology, products and services,
- To encourage participation of universities and research centres in R&D activities related to GALILEO developments.

- **Investment in Galileo has already started:**
  - participation in 50% funded projects
  - OREGIN Management and meeting organisation
- **Investment for R&D and for the development of Value Added Services and equipment is likely to happen, depending on the general company rules**

- **Investment in Galileo infrastructure could be conceived**
  - **for some of OREGIN members**  
**(it is not likely that OREGIN could have a unique voice on that issue, which is beyond its objectives)**
  - **if risks can be measured with a good level of confidence, and after a positive business case can be established**
  - **if it will provide these industrialists with an advantage (possibility to participate to the programme management, to influence the system/services design, to expect benefits...), it should not become a barrier that non European industrialists don't have**

**OREGIN is composed of companies:**

- **which were involved in the Galileo definition phase,**

**and thus, might be able to assess if investment in Galileo can match with their Business goals.**

**Some of them already identified an interest to correspond directly with the European Institutions.**

- **which did not take part in the definition phase,**

**for which information available is far to be sufficient to take any decision now**

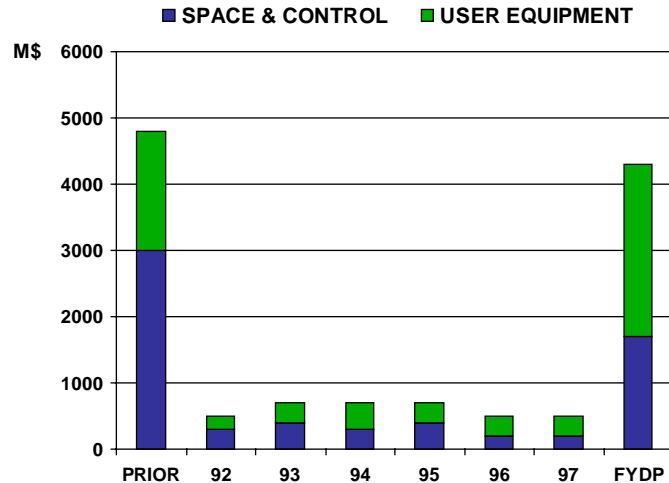
**(reports have not been disseminated, and available reports do not give enough information on the assumptions behind the figures)**



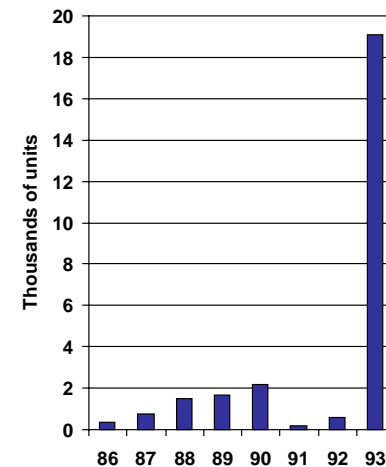
# HISTORICAL PARADOX



**DoD plans in 92**



**Actual procurement in 93**



## GPS Programme:

**Half of the US DoD Budget was dedicated to the User Segment Industry**

## Galileo:

**The User Segment Industry is kindly asked to contribute to the Budget**



**Public funding should not forget the sectors which have the potential to generate the most significant revenues**

# GALILEO BENEFITS TO PRODUCERS



	2001-2005 Annual averages	2006-2007	2010	2015	2020
Space Sector firms and the Galileo Operator	190	930	190	190	190
Producers of integrated products and services			20	45	80
<b>TOTAL Benefits to suppliers</b>	<b>190</b>	<b>930</b>	<b>210</b>	<b>235</b>	<b>270</b>

**Economic value-added benefits accrued to producers in Europe (million Euros pa)**

*source European Commission*

**➡ Benefits to the products and services industry do not seem so important**

## European Industry competitiveness and access to market

US and Japanese equipment and services Industries are far ahead, they were supported in particular by important Public funding and captive markets.

If nothing is done, Galileo will provide them first with an additional market and a new opportunity to consolidate their lead.

## Services and system definition

Service Definition is not enough clear at that stage

(e.g. will EGNOS provide a free service with good accuracy and integrity levels? will Safety of Life services be encrypted? so that the CAS 1 market can be assessed with a good level of confidence).

A clear position of Industry could only be done when a unique detailed definition of the system (incl. signals and services) would be available.

## PPP Issues

PPP must not slow down the European industry, it shall support it.

There is currently a lack of confidence in the viability of the revenue streams and even no policy on how the revenues will be shared.

What regulations can be expected to support the development of Galileo market (Electronic Tolling? Speed Control? Emergency calls? Transport Safety regulations? Car Black Boxes? Management of Dangerous Goods...)

## Programme Management

Programme Management is still unclear for the following phases for which private investment is expected (definition and assignment of responsibilities, financial planning and control, including handling of cost overruns, Liability planning, key decision points and associated pass/fail criteria...)

## Chicken & Egg

There is still no insurance (political decision) that the system will be fully deployed!

- **This workshop will provide an opportunity for the application industry to support the Galileo decision making process**
- **OREGIN industrialists will provide the European Commission, the European Space Agency and the national institutions with their views and arguments on the crucial issues:**
  - **Private financing for Galileo**
  - **Programme management**
  - **Service Definition**
- **This workshop will also aim at supporting the development of Galileo pilot projects**

# CONCLUSION

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**Thank you for your invitation to participate in the Debate.**

**This presentation is only a preliminary response, due to the short notice. Detailed answers can be sent in the coming days if needed.**

**The Launch of the Galileo Programme is crucial for the Application Industry and OREGIN is strongly willing to support the European (incl. National) Institutions in order to achieve a positive decision as soon as possible.**

**The OREGIN meeting planned on 27 February aimed at confirming this pro-active willingness and at finding through interactive discussions with the European Institutions, the solutions which could foster the decision making process.**

# CONCLUSION (2)

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**PPP is fully conceivable for Galileo, but its success depends on many factors (such as the definition of services, identification of revenue streams and confidence in a business case, involvement of industry in the management)**

**PPP Scenarios must be elaborated with the Industry to confirm their viability (must be agreeable to the investors).**

**Today, it is too early to have a clear view for most of the user segment industrialists, but their involvement may grow along with the certainties.**

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