Public Private Partnership for Galileo

Presented by John Gallimore
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Why Galileo?

- **Positioning and timing information is an essential part of everyday life**
  - Location Based Services (billing, information)
  - Emergency E112 services
  - Global clock / time synchronisation
  - Fleet management

- **Single satellite system limits market development**
  - Need for TWO systems
    - **Technical:**
      - Accuracy* (95% availability) 25m ➔ 4m
      - Availability* (4m accuracy) 10% ➔ 96%
      - * 95% probability
    - **Contractual:**
      - Contracts & Liability No ➔ Yes (for Galileo)
    - **Redundancy:**
      - For safety critical applications No ➔ Yes

- **Complementary system to GPS essential**
  - Avoiding economical and political dependence on GPS

*Only Europe is capable of delivering a second system*
Why PPP?

- **Procurement of Services - not Infrastructure**
  - “European Commission procurement of services for the benefit of the society and economy it serves” - (Neil Kinnock speech 1995)

- **Payment over whole life**
  - Provides Incentives for the service provider to deliver quality services throughout lifetime of the programme

- **Appropriate allocation of risks**
  - Allocating risks to those best equipped to manage them

- **Commercial revenue streams**
  - Reduced public sector costs

**Over 50 PPP contracts per annum in UK demonstrate 17% improvement on value for money**
Why European Nations like PPP for Galileo?

- **Market oriented Galileo System & Services**
  - incentives are provided for the private sector to establish and grow market-oriented commercial operations over time

- **Good Value for Money (effective cost control)**
  - projects are delivered at better quality, on time and to cost
  - appropriate risk allocation and management

- **Cap and optimise public investment**
  - private finance is introduced into the investment phase of the programme
  - commercial operations establish long-term revenues, thereby reducing the long-term burden on the public payments

**Is a PPP for Galileo Appropriate?**
Is a PPP appropriate for Galileo?

- What does everyone want?
  - Public Sector
    - European Independence
    - Social and Macro-economic benefits
      - Large number of users (people)
      - Application growth, hardware manufacture
      - Limit to public costs
  - Private Sector
    - PROFIT
      - Large number of users (people)
      - Application growth, hardware manufacture
      - Profit Opportunities

*Is a PPP for Galileo Appropriate? - YES*
A Service Oriented Market

- Insurance
- Banks
- Fleets
- Energy
- Air traffic control
- Science
- etc...

Optional Service Level Agreement

Content

Telcos (Bundled services)

Service Providers (Added Value)

Institutions: (enhance competitiveness)

Users

Nav UMTS
Nav ...
Time
Info
....
...

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Galileo’s Emerging Market
Global Intelligent Mobile Infrastructure

Position & Timing

- GPS
- Improved Redundancy
- Performance
- GALILEO

Mobile Communications

- GSM & UMTS
- et al.

Emergency 112
Financial Transactions
Info services / Advertising
In-Car Assistance..

Adding 4 Dimensions to Mobile Communications
A joint venture between Alcatel Space, Alenia Spazio, Astrium GmbH and Astrium Ltd

Value Chain

Public Sector

Service Payments

Galileo PPP Company

Customers

Service Charge

Public Sector

Royalty per chip

System Supply

Service Charge

Galileo Industries

Chip Price

Products

Product Price

Service Operators

Chips

Galileo Industries

A joint venture between Alcatel Space, Alenia Spazio, Astrium GmbH and Astrium Ltd

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The PPP Concept

- More aggressive development and deployment strategy
  - Commercial start-up from phase 1 deployment (at least ten satellites)
  - Early awareness of Galileo and exploitation of benefits
  - Assess the compatibility between the business of EGNOS and that of Galileo

- Chip suppliers
  - Stimulate development of products by funding Galileo+GPS chips
  - Must ensure negligible delta cost to add Galileo functionality

- Service operators
  - Promote Galileo to service suppliers et al.
  - Negotiate and sign Service Level Agreements (SLAs)

- Secure PPP equity and loans based on revenue streams
  - Small license fee (royalty) per mass market chip
  - Service charges through SLAs with service operators (aviation, rail, phone, ...)
  - Government funding for public service benefits
PPP Commitments from Public Side

- Launch and commit full programme in December 2000
  - commercial start-up 2005
- Create a single Public Customer for the system development, validation and deployment
  - ensure competitiveness of the system
  - establish clear contractual framework
- Public sector support for PPP development
- Public service payments during operations
  - for public good and governmental services
PPP Commitments from Industry

- Continued investment in PPP development
  - Start-up of Galileo PPP Company
    - Build up of specialised PPP team
    - partnering the public entity
    - focusing European know-how
    - merging external expertise
    - Investment in PPP development

We will deliver the PPP solution
Establishing a PPP - Organisational Structure

1. GALILEO TRUST / AGENCY (EC / ESA)
2. GALILEO Holding Company
3. Public Funding
4. Concession Agreement
5. Equity Funding
6. Debt Funding
7. Funding Support
8. E.I.B.
9. COMMERCIAL BANKS
10. “GALILEO BONDS”

- Government/International Relations
- Subsidiaries
- INDUSTRY / SERVICES EQUITY
- NON-CONTRACTOR EQUITY (e.g. public offering)
- INDUSTRY / SERVICES EQUITY
- SUBCONTRACTORS
- PRIME CONTRACTOR
- INFRASTRUCTURE PROCUREMENT
- MAINTENANCE / REPLENISHMENT CONTRACTS
- SYSTEM NETWORK CONTROL
- SUBCONTRACTOR
- COMMERCIAL OPERATIONS
- SERVICE PROVIDERS / USERS / SHADOW FEE
Proposed Funding/Revenue Structure

PPP Promoters
Private Finance (Equities)
Vendor Financing

GVC Promoter Operator

Concession Agreement
Public Finance (Equities & operational)

Service Provider Fees

Equity Investment ?

Subscription Fees

Key / Strategic Users

Users

Service Providers

Galileo Agency
Galileo PPP Company Midterm Objectives

- Strong Public/Private co-operation
- Define the overall funding needs and respective sharing
- Secure the feasibility of a PPP solution
  - framework, regulations, local components ...
  - risks for the parties
  - clarify government funding for public service benefits
- Establish a world-wide vision on markets, players, public and private contributors,...
- Establish rules for revenues returns to each of the contributors
- Finalise and secure the frequency filing (the basic asset of Galileo)
Closing Remarks

- A PPP for Galileo is generally recognised as one of the most complex PPP schemes yet
- Even so, the benefits make it worth while
  - 17% of €3.2bn = €500M (of tax dollars!)
- Achieving the public sector requirements will also deliver returns for the private sector
- Time is of the essence
- Appropriate management structures required quickly
- PPP is all about getting the right balance between investment, risk and return
- A major activity is now to analyse and allocate risks
Closing Remarks

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