



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)
- Global clock / time synchronisation
- Emergency E112 services
- Fleet management

- **Single satellite system limits market development**

- **Need for TWO systems**

		GPS only		Galileo + GPS
- 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



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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



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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?



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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

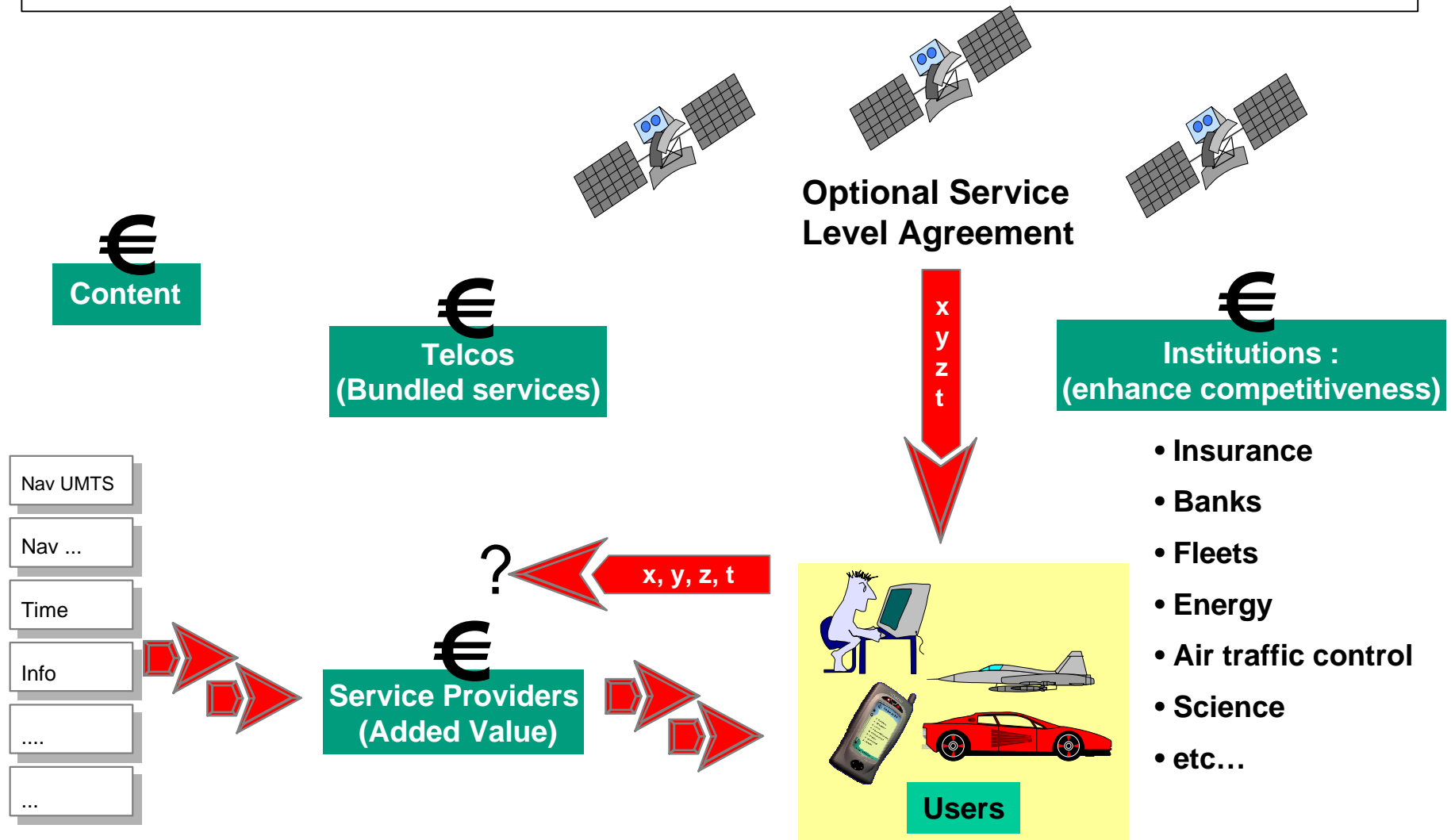
Is a PPP for Galileo Appropriate? - YES



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A Service Oriented Market

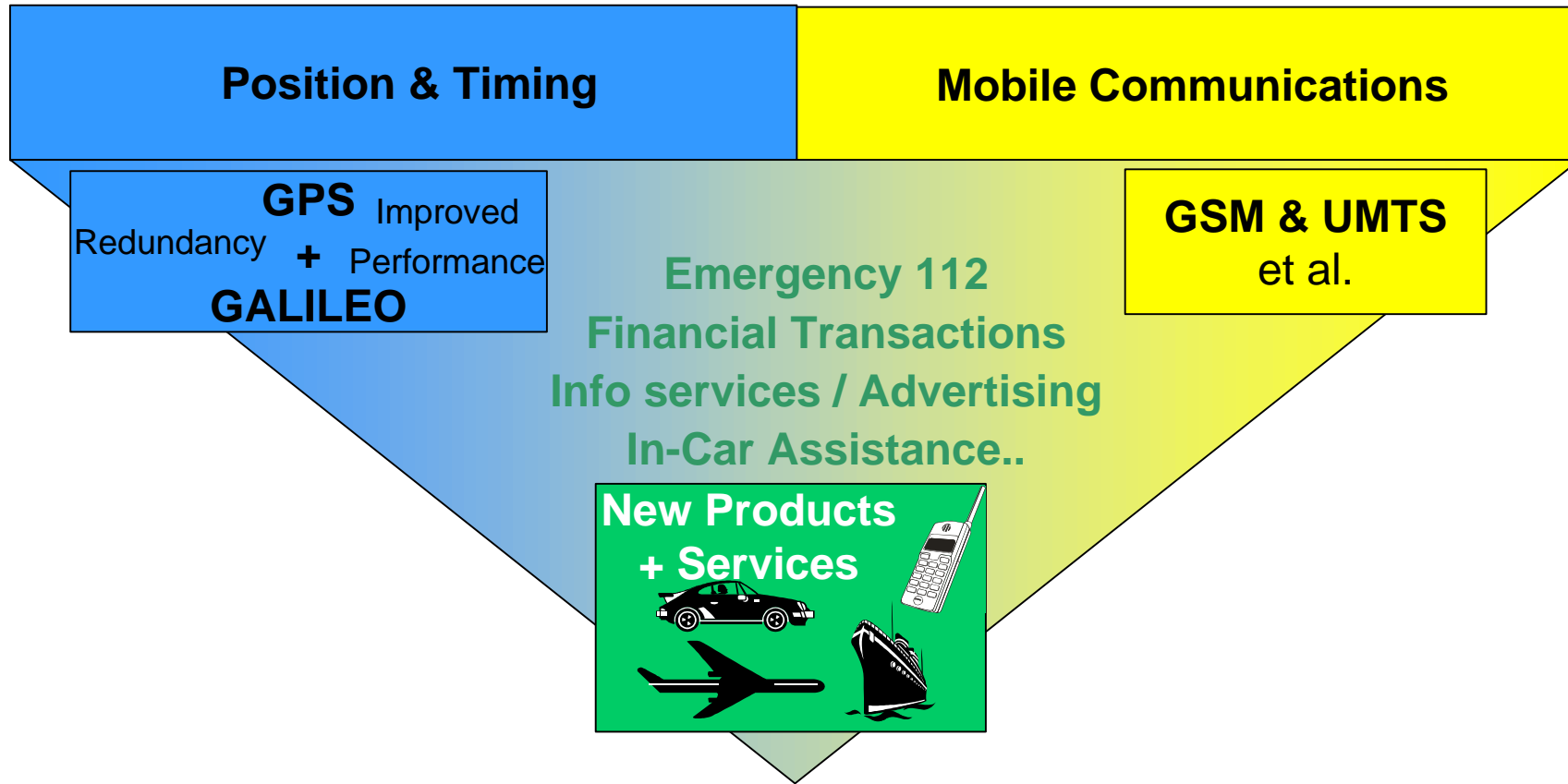


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Galileo's Emerging Market

Global Intelligent Mobile Infrastructure



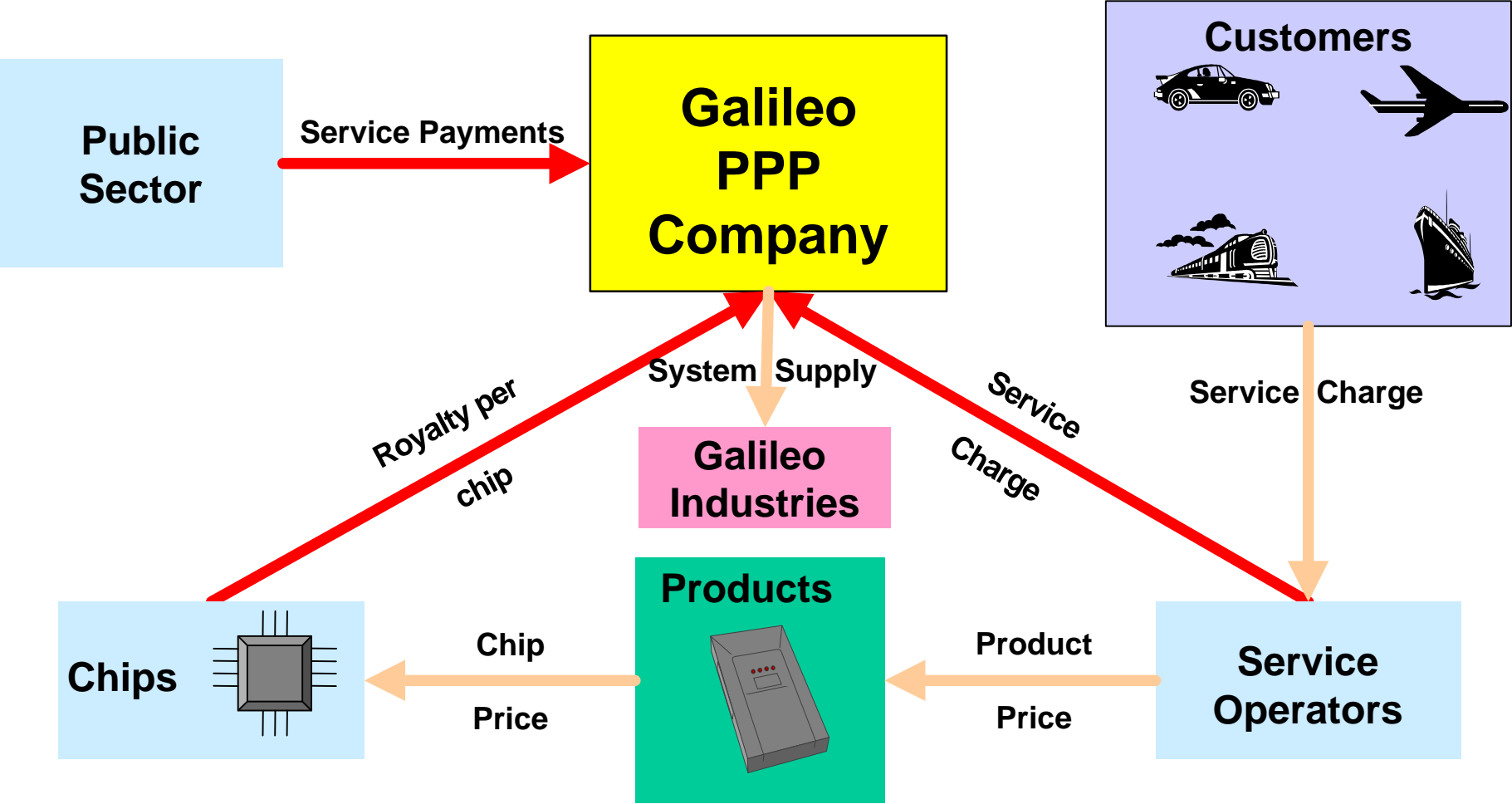
Adding 4 Dimensions to Mobile Communications



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Value Chain



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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



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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



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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

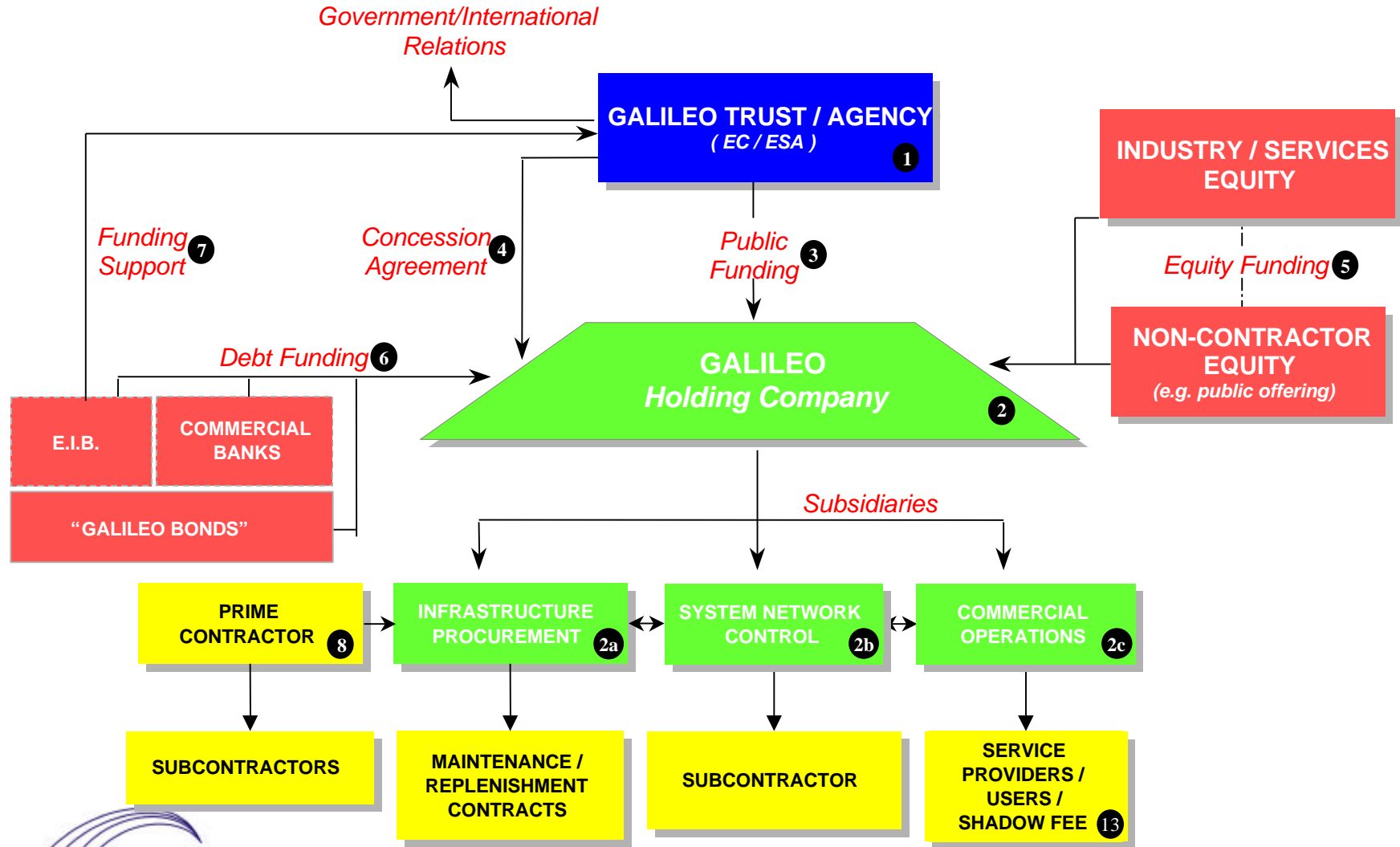
We will deliver the PPP solution



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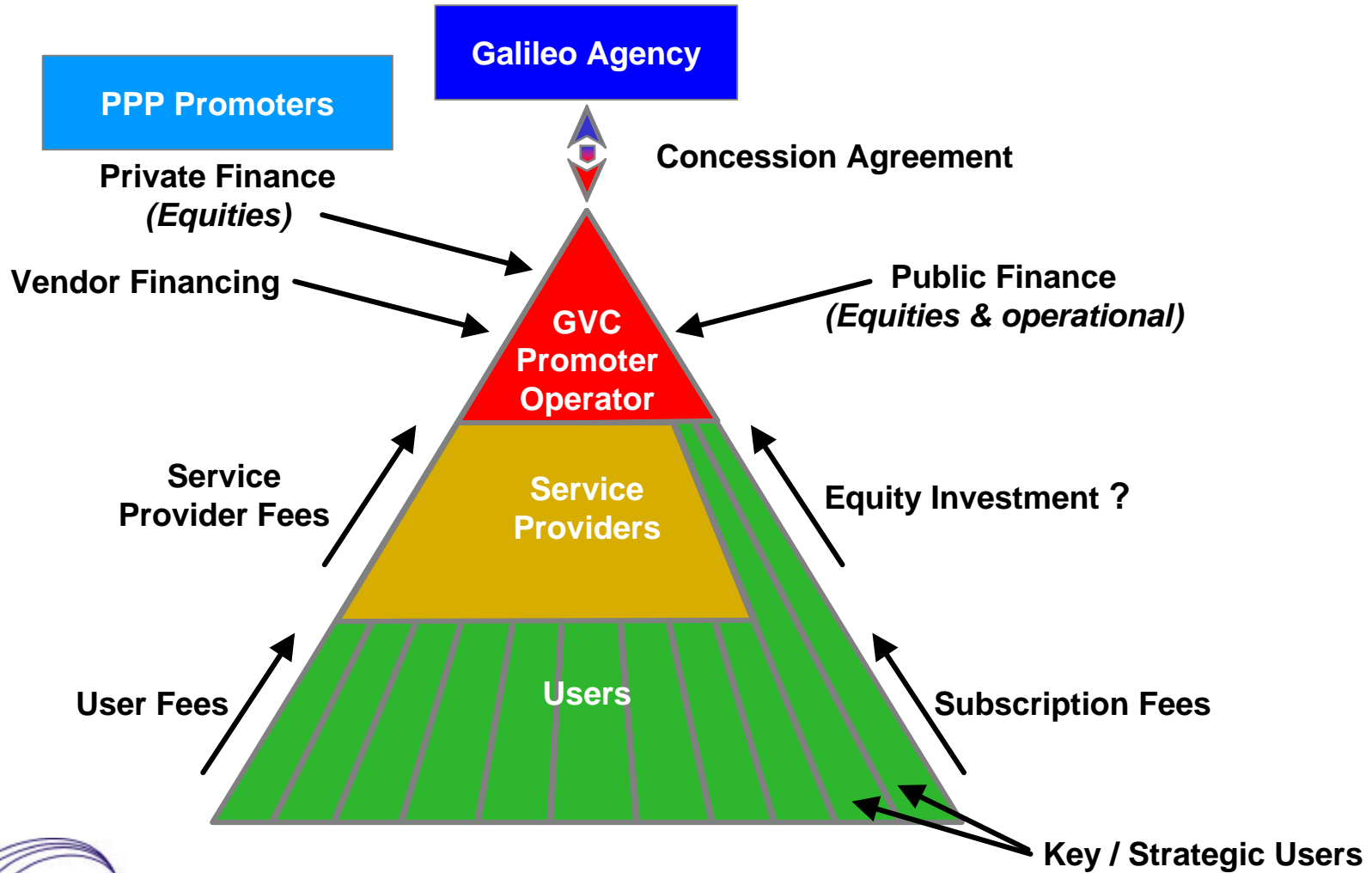
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Establishing a PPP - Organisational Structure



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Proposed Funding/Revenue Structure



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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)**



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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



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Closing Remarks

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