FTA PPP Workshop:

Preparing an RFP

Lessons Learned from European PPP Rail Projects

Atlanta
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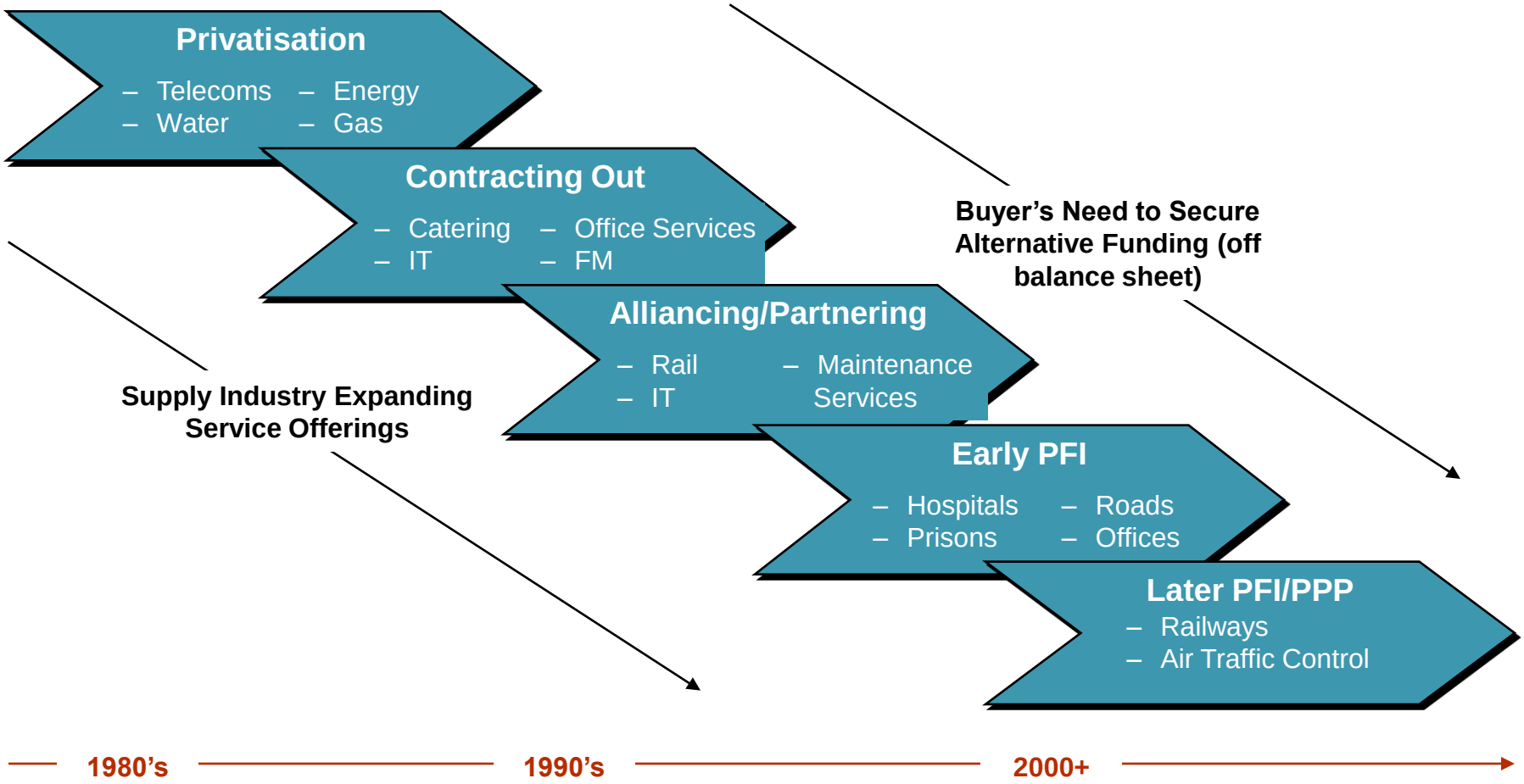
Over the past 25 years, Europe has transformed the way major infrastructure investment is financed and delivered



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Many European Governments believe PPP can provide better value for money when procuring modern, high quality services from the private sector

- The PPP initiative (previously known as PFI) was adopted in vigor in the late 1980's to provide the capital requirements for the public sector

- Key sectors supported by the PPP initiative include:
  - Health (hospital facilities management)
  - Education (school facilities, libraries, IT services)
  - Law Enforcement (prison facilities, IT services)
  - Government Services (local government facilities, IT services)
  - Defense (facilities, infrastructure projects)
  - Transport
    - Air Traffic Control (infrastructure projects, operating services)
    - Rail (train operations, infrastructure delivery & management)
    - Roads (infrastructure projects, operating services)

- A 15 - 25% efficiency savings has been realized by many of initiatives … but not all

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In the rail industry, PPP initiatives have used different contracting structures reflecting the risks and rewards of the project and the ultimate transportation service

- Light rail PPP initiatives have involved new-build Design, Build, Finance, Operate and Maintain (DBFOM) or Build, Operate, Transfer (BOT) schemes:
  - Full project cost/program risk transferred to the private sector
  - Full revenue risk transferred to the private sector
  - Public Sector has defined the project specification, minimum service requirements and in some cases, the fares levels
- Metro PPP initiatives, specifically the London Underground PPP, have segregated infrastructure provision from train operation:
  - Trains & stations operated by the public sector (revenue, service definition and operating cost risk)
  - Private sector upgrades & maintains the infrastructure, based on a very detailed performance specification
- Heavy Rail PPP initiatives have also segregated infrastructure provision from train operation:
  - Private sector operates the trains (revenue and operating cost risk)
  - Public Sector or private sector manages the infrastructure (maintenance & upgrade project risk)
  - Government defines the minimum service requirements and revenue guidelines

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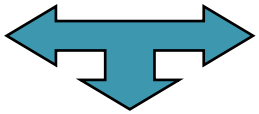
In Light Rail, Metro and Inter-City/High Speed Rail, the successful delivery of major infrastructure projects has relied on balancing three basic elements … scope, risk & acceptance

Major Projects Delivery



Ensuring a Clear Scope of Supply and Services

- Robust definition of scope in terms of outputs, interfaces and processes
- Condition of existing infrastructure and operational interfaces captured
- Integrity of scope across operational and technical boundaries and constraints
- End-users and operators involved at earliest stage and committed to to outputs and processes

Optimising Apportionment of Project Risks

- Define investment based on system levels needs, considering the whole life of both the system and the asset
- Assess risks in terms of delivery time frame, scope of supply and external constraints
- Balance risk transfer based on the ability to manage the risk and the ability to manage the consequences

Linking Acceptance Process to Project Goals

- Acceptance process must be embedded within contract philosophy and award process
- Acceptance criteria and milestones reflect the output requirements of the railway system
- Acceptance of operational system may be incentivised in performance or cash terms

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Example PPP – Dutch High Speed Line: The infrastructure aspects of HSL Project were procured as a design, build, finance & maintain contract (called the Infraprovider) …

- 30 year concession, including a 5 year construction period and a 25 year maintenance period
- Scope of supply includes:
  - Track, power & electrical/mechanical systems
  - Signalling & communications
- Scope of services include:
  - Design & development
  - Construction, test, integration & commissioning, safety & approvals
  - Mainenance and renewals
- Interfaces are management by Government
  - Physical & Functional: civils, existing railway infrastructure, stations, control centre
  - Operational: central control, timetabling, safety & approvals
  - Commercial: civil contracts, TOC contract, RIB, etc.
- Payment is based on the performance of the system during revenue operation
  - Payment commences upon completion of the construction period
  - Performance regime, based on system availability and reliability, is the basis of the payment stream

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Dutch and European procurement rules were applied to the Infraprovider procurement process

- Dutch UAR specified the structure and criteria for the procurement
- Significant consultation with the Private Sector was performed before the pre-qualification process
  - consultation paper
  - information exchange (web site, status brochures)
- Pre-qualification was completed in the Spring of 1999
- Post pre-qualification, a consultation phase was used to further discuss the technical, programme, commercial and financial aspects of the contract
- Bid Book was issued in the Winter of 1999
- Bids submitted in 2000 - 2001
  - Shortlisting process … Best & final offers … Subsequent negotiations
- Financial Close in October 2001 … Infraspeed
- System Operation … 2008

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The HSL Infraprovider's scope of work was performance based, reflected in three primary documents: Scope/Deliverables, Interface Specifications and Performance Regime

- Scope & Deliverables and Functional Requirements Specification defines the overall system performance and functional requirements:
  - Operating speed, capacity, throughput
  - Functional requirements
  - Processes & services to be provided
  - Applicable standards
- Interface Specifications define the boundary conditions for the Infraprovider's scope:
  - Physical interfaces
  - Programme interfaces
  - Operational interfaces and assumptions
- Performance regime defines the mechanism in which payment is made:
  - Performance measure (Availability & Asset Condition)
  - Testing/measurement method
  - Assumptions

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Lessons Learned - Clear Scope Definition: The HSL Project procurement structure placed significant interface and integration risk on the Government

- Management of interfaces between the many contracts has proven incredibly challenging for the Dutch Government, requiring very active project management and hands-on technical management:
  - Different contract structures and varying incentive mechanisms make project prioritisation & coordination extremely difficult
  - Primary focus has been the delivery of the civil contracts, given the programme priorities
  - Interface management has been extremely challenging, requiring intense commercial and technical negotiations
- Planning and managing the integration between civils, systems and operations required strong project management and technical integration skills
  - Site transition between civils and systems must be coordinated in terms of programme, access, site management, tools/equipment, acceptance, approvals etc.
  - 'Making the system work' is a significant challenge for the Infraprovider, but with many 'get out clauses' resulting from Government's interface and integration responsibility

If we were to do it all again, knowing what we know now …

- Civils/Systems Split …
  - Contractually, we believe this to be the right decision
  - Better definition of interfaces required prior to contract signature
  - Better alignment of the contract incentives, acceptance & approvals
- Government's Role as Interface Manager & Integrator …
  - Better insight into technical designs and solutions is essential
  - More interaction with contractors is required to 'facilitate' integration

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Lessons Learned - Risk Apportionment: Significant risk was transferred to the private sector through the Infraprovider contract, but there were a significant number of 'risk qualifications'

- The business case approach, which defined scope and apportioned risk, was essential for the development of a service-based contract:
  - Clear understanding within Government of 'what was being procured' and how the Infraprovider contract was to interact with the other contracts associated with the HSL Project
  - Financial, legal and commercial teams understood the risks of the project, which supported the development of T&C which were consistent with the service provision
  - The objective was to ensure a clear, concise and simple risk transfer structure, but it got very complex very quickly
  - Private sector's added value and risk appetite was not always what it seemed
- Project/risk cost identification and assessment (e.g. public sector comparator) was developed independent of the project … which led to a mis-match in risk value perception
  - Independence is necessary when developing a cost comparator
  - Risk assessment/valuation must be completed by those with intimate knowledge of the contract structure and insight into private sector views

If we were to do it all again, knowing what we know now …

- Performance/ Output Based Contract …
  - Yes … but be more realistic in relation to private sector efficiencies/ capabilities
  - Ensure the private sector clearly understands the risk transfer strategy
- Performance based payment mechanism …
  - The regime became too complex
  - Simple and easy to understand

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Lesson Learned - Linking Acceptance to Project Goals: Mismatch in the contract incentive mechanisms has led to very perverse attitudes and actions from the various contracting entities

- Incentives and acceptance criteria must relate to the overall project goals, in terms of programme and output:
  - There is a mismatch between the acceptance/incentives of the civil contractors and those of the Infraprovider and TOC
  - This has required significant commercial and technical negotiations
  - Be aware that perverse attitudes will exist within a consortium, creating more complexity in relation to facilitating the acceptance process
- Ensure that the acceptance process is clearly understood and documented in the contract
  - Definition of the acceptance process prior to contract close was not prioritized
  - But it is essential to clearly define the process and criteria prior to contract signature to 'protect' the delivery of project goals
  - Be realistic in terms of the 'depth' of private sector's technical solution, as this often limits the ability to define the acceptance process and acceptance criteria

If we were to do it all again, knowing what we know now …

- Different contract types for related contracts …
  - Minimise if possible … but the driving force behind the selection of a contracting type/ structure may be other external factors
- Nail down acceptance criteria prior to contract signature …
  - Clearly define acceptance processes
  - Confirm the acceptance criteria

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A successful RFP and PPP procurement/delivery must balance scope, risk & acceptance and ensure clear communication of the risks throughout the tendering process

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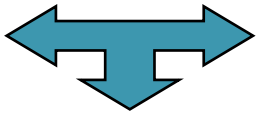

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