ABENGOA

Public-Private Partnerships in the Water & Sanitation Sector.
Best Practices & Lessons Learnt

Canal de Navarra Case Study

October 2014
Introduction
Project and irrigation geographies

Concession area
Aoiz
Ablitas
1 Introduction
2 Players data & organization
3 Economic structure
4 Project evolution
5 Conclusions
Players data & organization
Four developing levels

Itoiz Dam

Canal de Navarra (Canasa)

Irrigation Area Infrastructure

Plot Irrigation System
Public Assets

- **Itoiz dam**
  - Concrete gravity dam
  - 418 Hm³ volume capacity
  - 1,100 ha surface
  - 525 m length topping
  - 122 m high

- **Canal de Navarra**
  - 198 km (98km built)
  - 45 m³/s capacity
1st Phase of the Irrigation Area from Canal de Navarra PPP

- **Technical characteristics**
  - 15 sectors – 22,445 ha to develop
  - 28 councils with a total of 50,000 hab.
  - 6,000 growers
  - 758 km pipeline
  - 980 km rural paths
  - 345 km drainage network
  - 3,625 delivery points (3” and 4”)
  - 8 pumping stations

- **Concession characteristics**
  - 30 years
  - Design + Financing + Construction + O&M
  - Initial investment 185 M EUR (2007-2011)
  - Transferred risk: water demand & availability
  - Financial economic rebalancing
  - Quality of the service included in tariff (TC)
1 Introduction

2 Players data & organization

3 Economic structure

4 Project evolution

5 Conclusions
The PPP contract includes an unique income (RuT), divided in three components:

- **Quality & Inf. Management fee (CCGI)**
- **Water demand fee (CD)**
- **O & M fee (CE)**

Retribution to Concessionary from the Government of Navarre

Retribution to Concessionary from the 15 Irrigation Communities

Tariff sub-components:
- **Water demand Fee (53%)**
- **O&M Fee (4%)**
- **Quality & Infrastructure management Fee (43%)**

**Total income**

RuT $\rightarrow$ 100%

**Risk transferred due to deductions**

Risk of water availability

$[CE + CCGI + CD] - Deductions (Till 100% CCGI + CE)$
The total planned investment is of approx. 1,409 MM EUR

**Itoiz Dam**
- National Government (Spain): 210 MM €
- Local Government (Navarra): 86 MM €

**Canal de Navarra**
- Total investment planned: 751 MM €
- Investment completed: 450 MM €

**Irrigation Area**
- Total investment planned: 362 MM €
- Investment completed: 135 MM € (PPP 1st Phase Irrigation area)
- Equipment in the plots: 190 MM € (76 MM € 1st Phase Irrigation area)
Mean Irrigation cost for owners approx.. 251.17 € / ha

Itoiz Dam regulation 35 €/ha.

Canal de Navarra (Canasa) 89 €/ha.

Irrigation Area: 127 €/ha

- Water demand fee (*): 0.02 €/m$^3$ ( ~$5,293 m^3$/ha = 105 €/ha)
- O&M fee 22.17 €/ha.

Total mean cost /ha: 251.17 €/ha

(*) Different from Conssecionaire fee
Project area evolution (ha)
1. Introduction
2. Players data & organization
3. Economic structure
4. Project evolution
5. Conclusions
Keys for a successful PPP: irrigation area of Canal de Navarra

- Previous work of the Public Administration
- Implication & coordination of users
- Appealing for the private sector
- Balance in risk assumptions

PPP Added value

- Great investment in short time
- No public debt compromise
- Private ↔ Public knowledge transfer
- High quality of the irrigation services
- 30 years guarantee for the infrastructures O&M
Learned lessons

- About the project structure
  - Developing strategic projects – Detail viability study
  - Strong legal framework – Create it if necessary
  - Public Administration guaranteeing solvency – Rating
  - Multilateral Financial institutions participation – Cost optimization

- Objective
  - Raise the key actor interest: private co, financial institutions,…

- Maximizing
  - Public Administration budget / debt
  - Guarantee to avoid the Government’s debt
  - Guarantees for open tendering and private financing
¡Thanks!

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