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Public-Private Partnerships in the Water & Sanitation Sector.

Best Practices & Lessons Learnt

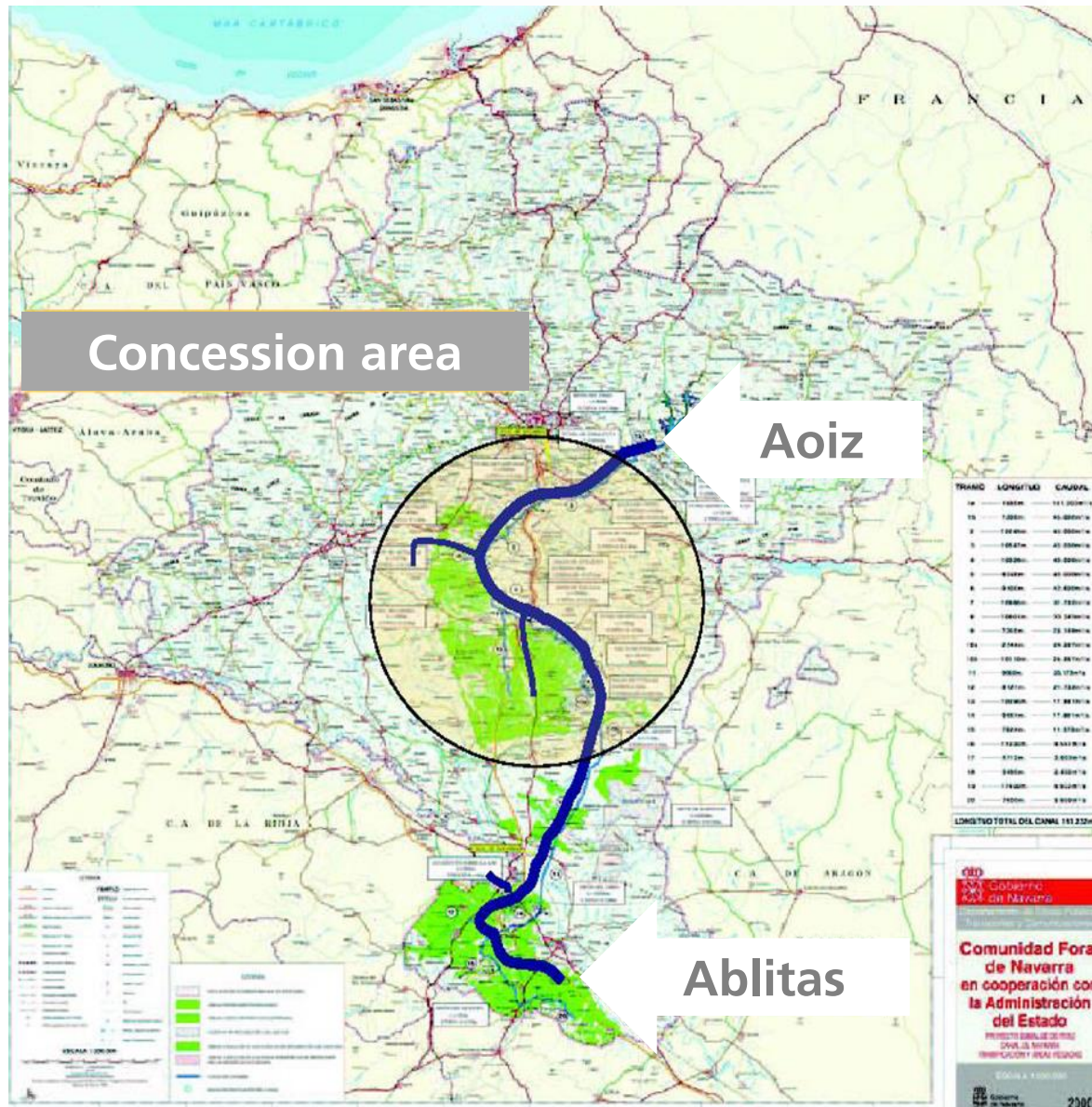
Canal de Navarra Case Study



October 2014

- 1 Introduction
- 2 Players data & organization
- 3 Economic structure
- 4 Project evolution
- 5 Conclusions

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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

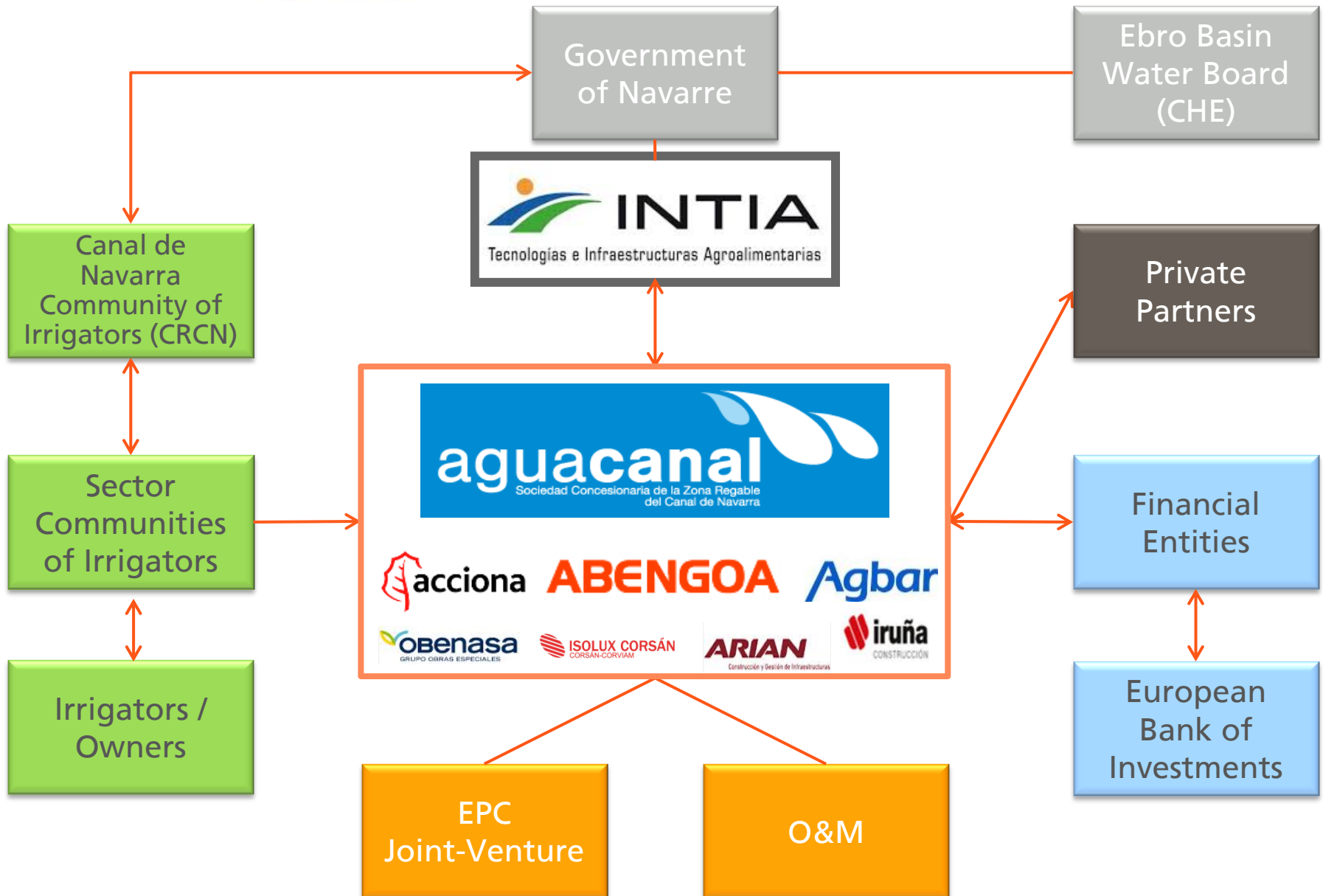
- ✓ 30 years
- ✓ Design + Financing + Construction + O&M
- ✓ Initial investment 185 M EUR (2007-2011)
- ✓ Transferred risk: water demand & availability
- ✓ Financial economic rebalancing
- ✓ Quality of the service included in tariff (TC)



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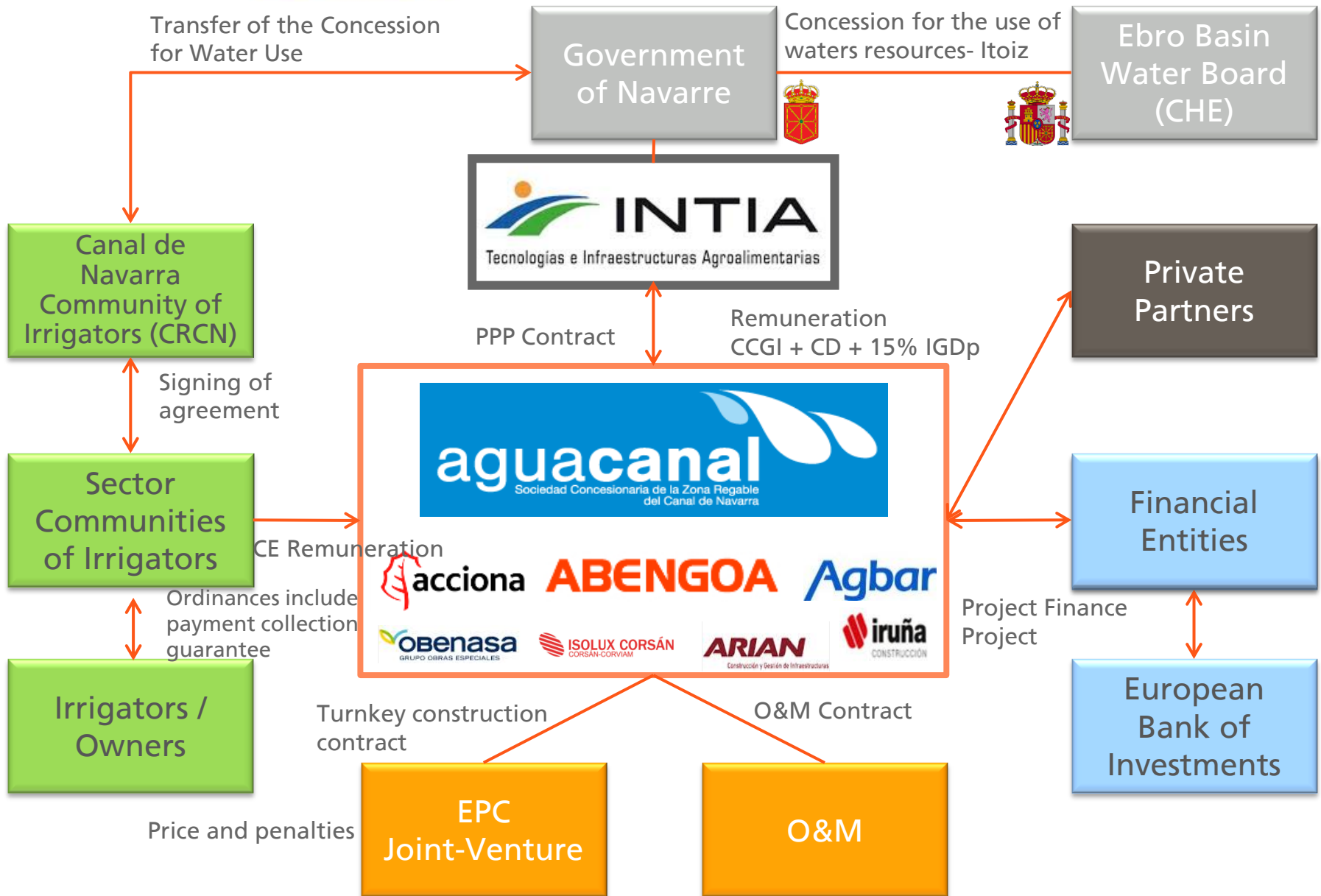
Players data & organization

Structure diagram



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Players data & organization Structure diagram



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



Retribution to Concessionary from the Government of Navarre

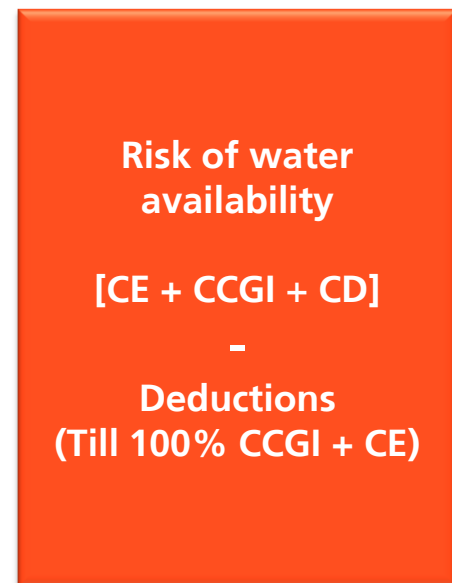
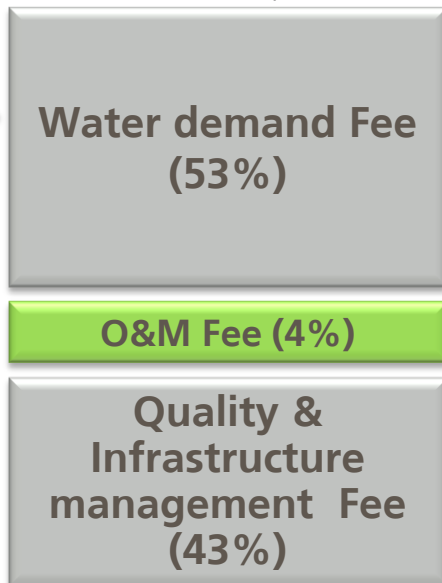


Retribution to Concessionary from the 15 Irrigation Communities

Tariff sub-components

Tariff

Risk transferred due to deductions



0.066 €/m³

22.17 €/ha

299 €/ha

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 €/m³ (~5,293 m³/ha = 105 €/ha)

✓ O&M fee 22.17 €/ha.

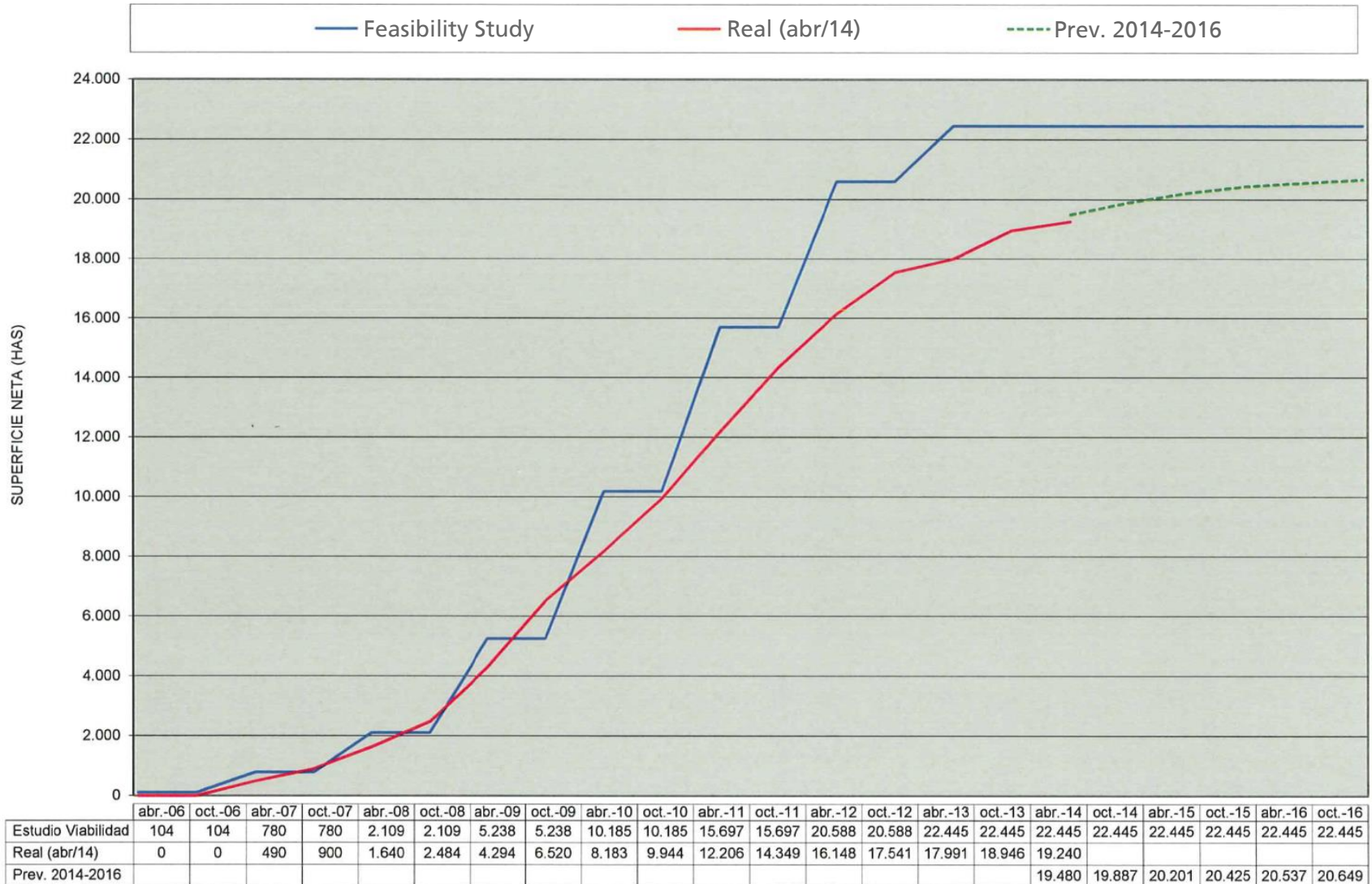


Total mean cost /ha: 251.17 €/ha

(*) Different from Consesconaire fee

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Project area evolution (ha)



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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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Antonio Borrero
Head of Water Proposals

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