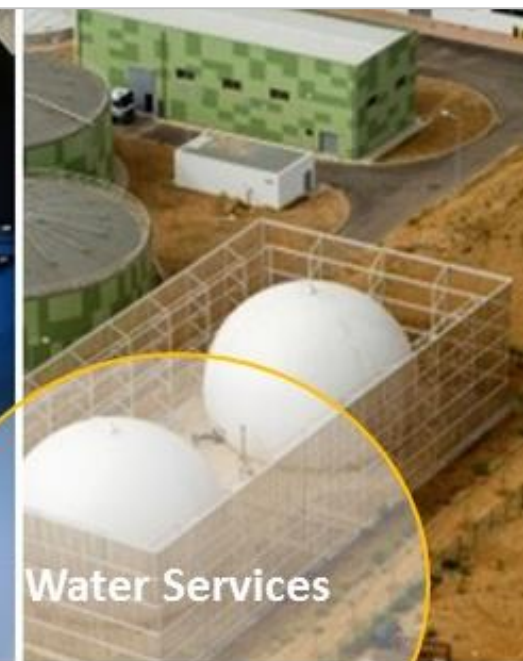


WATER SOLUTIONS
MADE IN PORTUGAL
INNOVATIVE WATER PARTNERSHIPS

Alexandra Serra | **President**



Portuguese Water
Partnership





PWP

A gateway to

PORTUGUESE

WATER Solutions, Expertise & Partnerships

**WATER
RESOURCES**

WATER SERVICES

**HYDRAULIC
SCHEMES**

**COASTAL
MANAGEMENT**

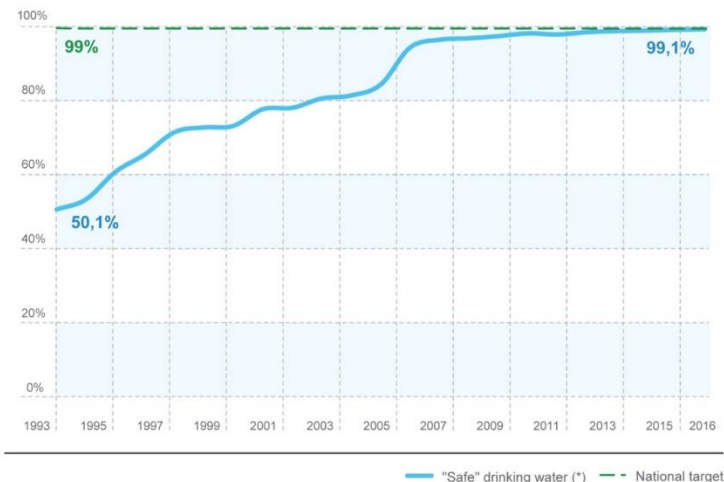
**GOVERNANCE &
INSTITUTIONS**

In the last 20 years, **Portuguese Water Sector** has acquired and developed significant expertise in multiple segments of the **Industry Value Chain**



DRINKING WATER QUALITY

Source: ERSAR | RASARP ("AA04 Retail" indicator)

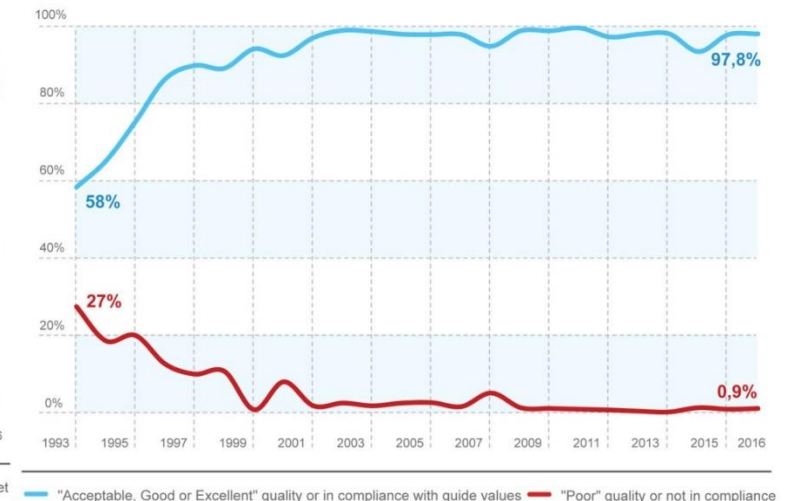


WASTEWATER TREATMENT

Source: ERSAR | RASARP ("AR01 Retail" indicator)



COASTAL BATHING WATER QUALITY



dedicated to water



Several of those institutions and companies
have business or developed

close links abroad

Associated in a

**Portuguese Water
Partnership**

synergies can be
developed and the

potential maximized



WATER SOLUTIONS MADE IN PORTUGAL

Water services
benchmarking in your pocket

Smart water for
wise cities

2

3

4

Portuguese WATER
present in the H2020

Governance in
the Urban
Water Cycle:
the Portuguese
model

1

5

International
Water Centres
born in
Portugal.



1

Governance in the Urban Water Cycle

The Beginning

Portugal Adhesion to EEC / EU (1986)

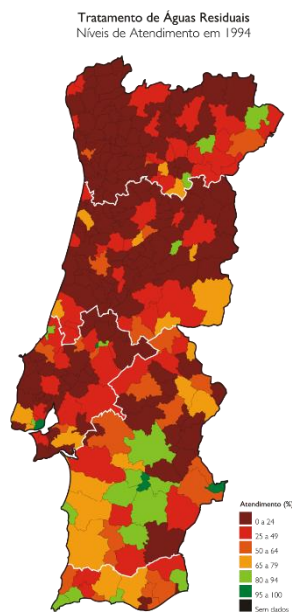
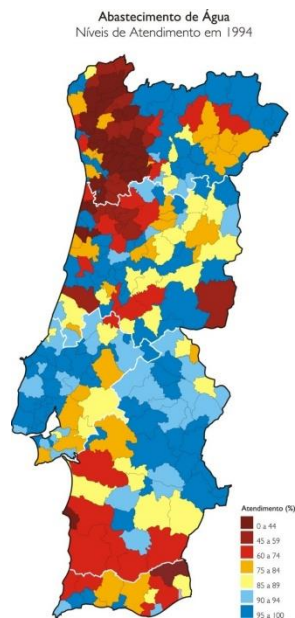
With the entry of Portugal into the EEC (1986), Portugal accessed to Community funding, under the structural policies, for building public infrastructure (*particularly the ERDF - Regional Development Fund*).

The Environment sector, from the first time became one of the main recipients of these funds.

However, until 1992 the EU funding to the water and wastewater sector were dispersed by the various municipalities, reducing their effectiveness.

1

Missing



Governance in the Urban Water Cycle

25 years ago...

Investment | Heavy investment was required and marginal costs were increasing

Efficiency | To many small non corporate operators; solutions that did not stimulate efficiency; Absence of market mechanisms

Sustainability | Only a small part of the costs were being recovered

Transparency | No information to consumers and stakeholders

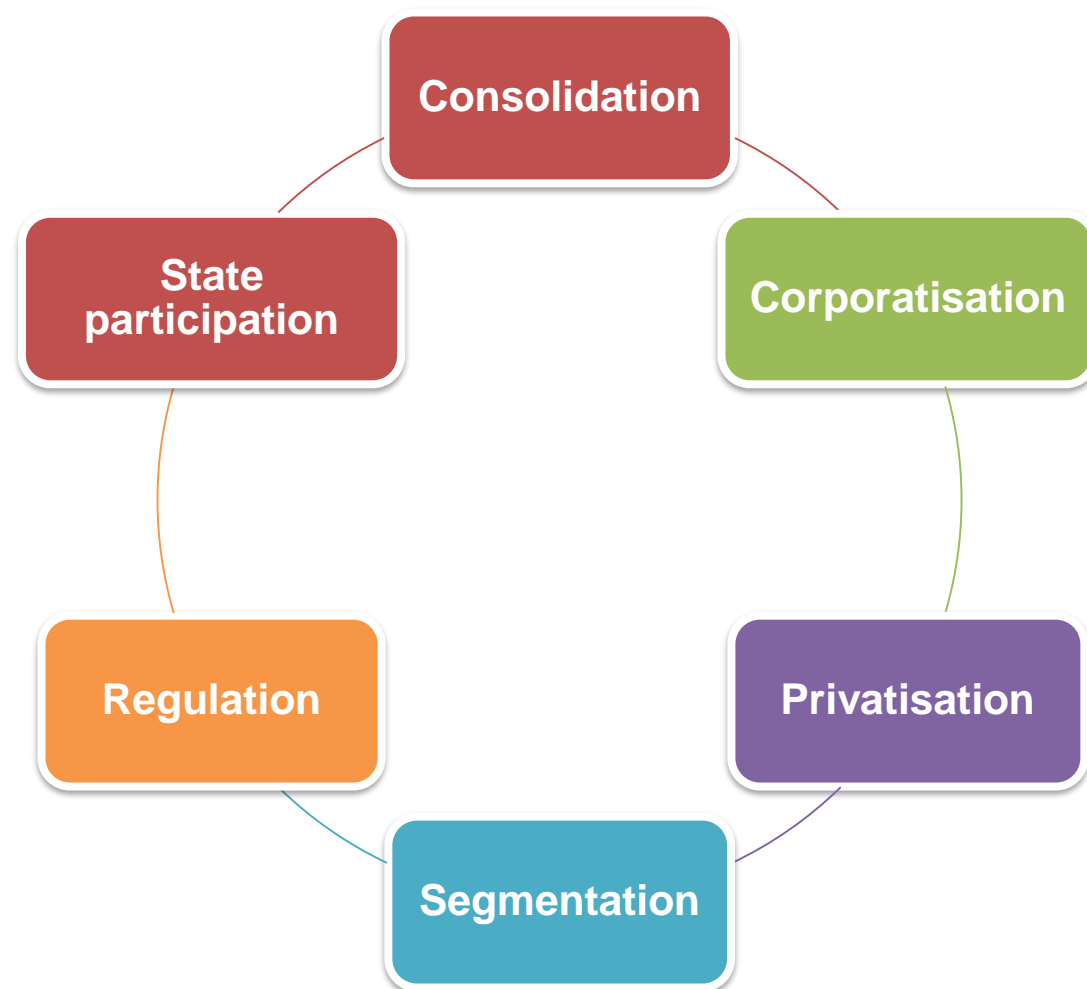
One exception: EPAL, public utility under commercial law, water provider for Lisbon Metropolitan Area

1

**It was decided
to built upon
the experience
of EPAL**

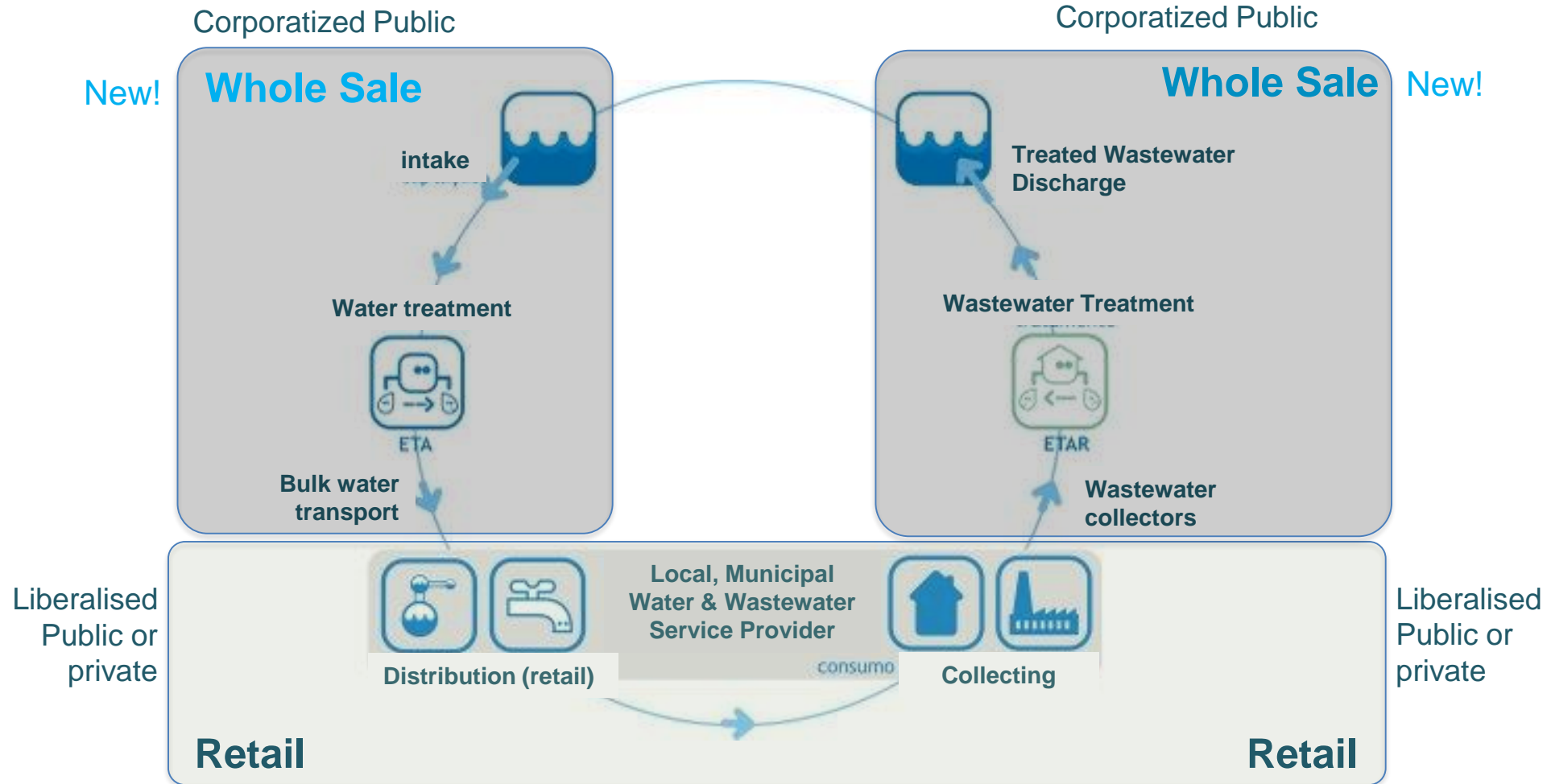
Governance in the Urban Water Cycle

1993: the way forward



1

Governance in the Urban Water Cycle 1993: the way forward



1

Governance in the Urban Water Cycle

A new management model





Governance in the Urban Water Cycle

A new management model

Decree-Law nr. 379/1993

**Opening-up of the sector to
private companies and
creation of the conditions
required for the development
of multimunicipal systems**

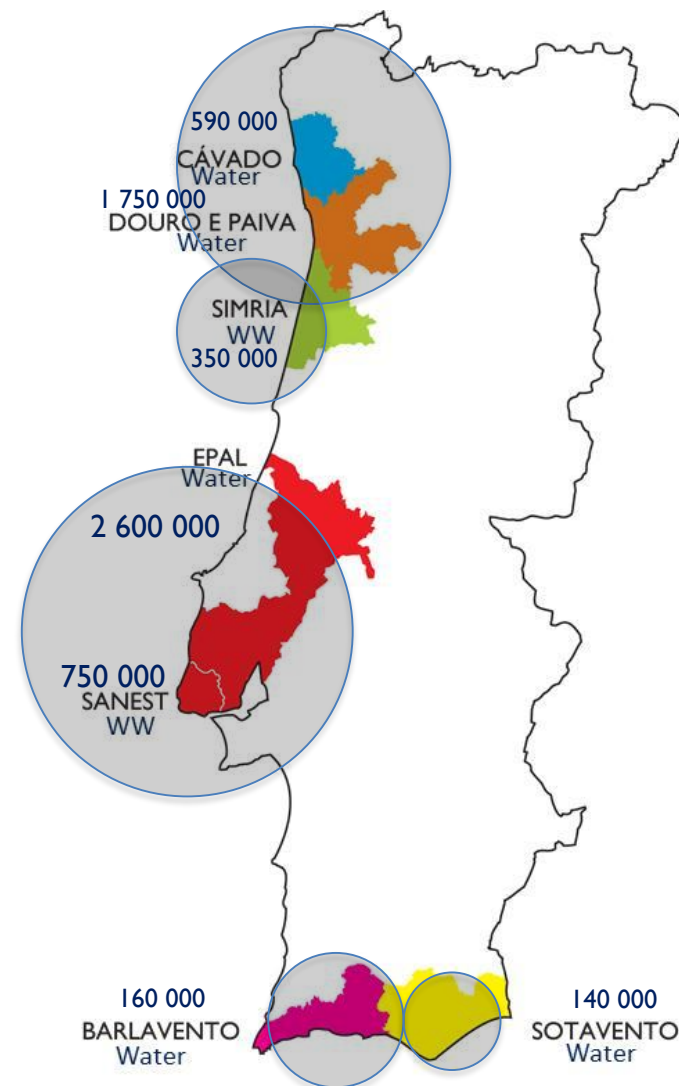
- **Municipal Systems:** The design, construction and management of the systems are entrusted to municipalities; private entities may be called to participate, under concession contract.
- **Multimunicipal systems:** The design, construction and management of the systems are entrusted to the State or via concession to a public entity of a corporate nature under private law, where the State holds 51% or more of the share capital, whereas the remaining share capital is held by the municipalities.

1

Governance in the Urban Water Cycle

Multimunicipal systems

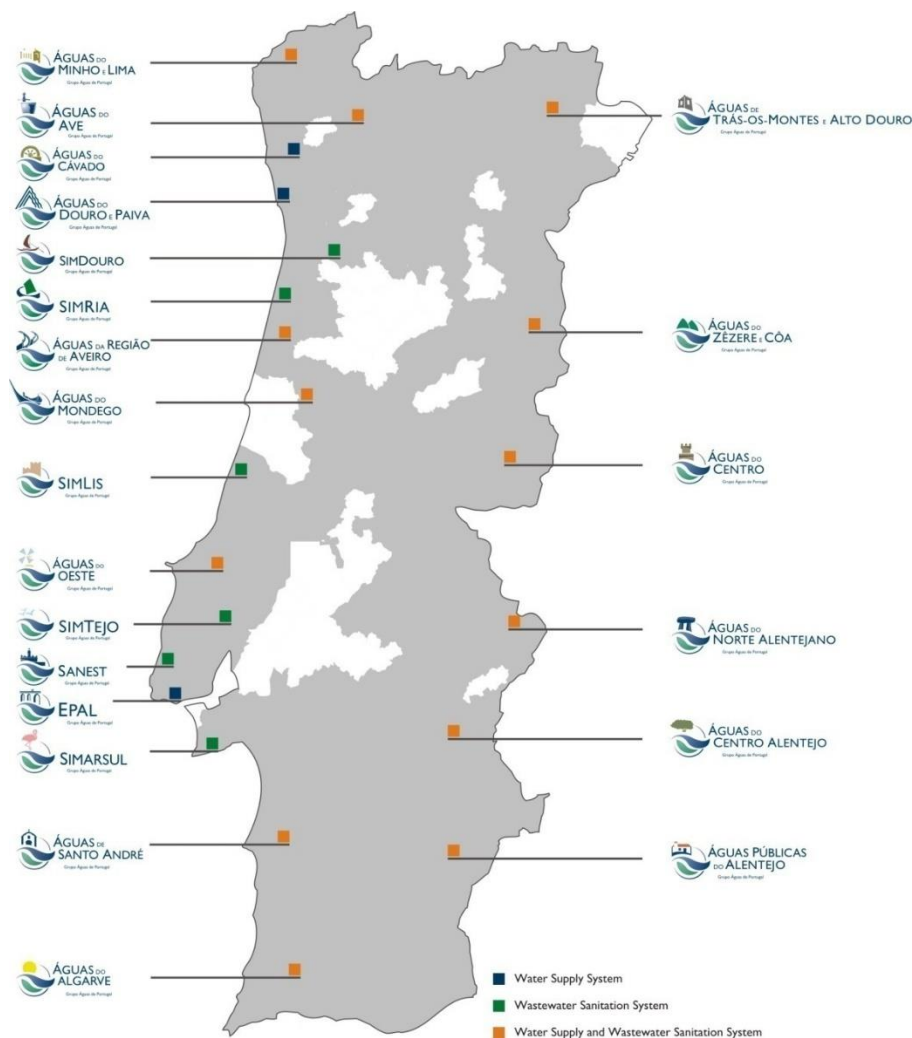
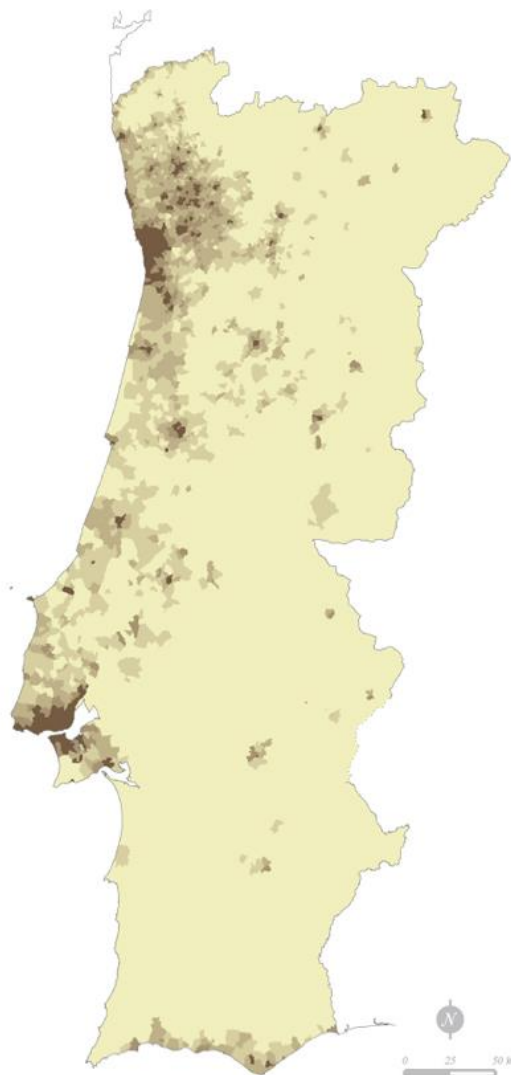
- **Public regional water utilities provide wholesale water services** to the municipalities.
- **Contract includes a capital investment plan** for the duration of the contract and a framework for services provision.
- **Full cost recovery tariffs are set annually** by the Minister of Environment on the basis of a budget presented by the company to ERSAR.
- **Cost-of-service model** with a **fixed return on capital** (Euribor+3%).
- **Benchmarking by ERSAR** by annually monitoring a set of financial and quality-of-service indicators; no service performance rewards or penalties.



1

Governance in the Urban Water Cycle

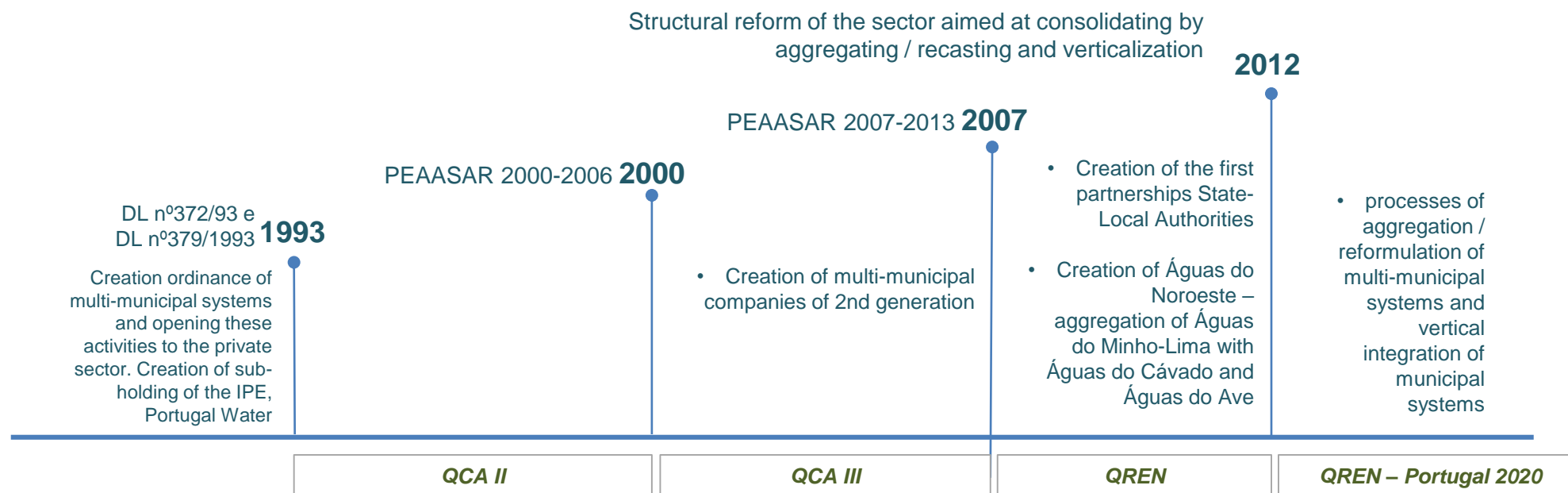
Multimunicipal systems 2012



1

Governance in the Urban Water Cycle From 1993 to 2012

National Strategic Planning is essential



1

Governance in the Urban Water Cycle

Lessons learned

- **Corporatization** is very important for sustainable water services;
- Separating wholesale from retail services **must engage all stakeholders in agreed objectives**;
- **Sustainable cost recovery** is a must;
- **Water and wastewater** services should preferably be delivered by the **same entity**, in order to have sustainable solutions for wastewater management;
- Water services must be provided by **regional, not local entities**;
- **Benchmarking** is very important for the transparency of the whole system.

2

Smart water for wise cities

PARADIGM SHIFT: FROM WWTP TO RESOURCES FACTORIES



Annual
Treated
Water:
19 M m³

Energy

integrid

Bio.product

URBIS



2

Smart water for wise cities

STRATEGIC LISBON WATER REUSE PLAN

Nature-based

LISBON GREEN CORRIDOR



Digital-based



A product that allows domestic and commercial customers to know day-by-day consumption and to be notified by email or SMS if there are any losses.



- Check the billed water consumption
- Discover the average daily consumption per person
- Meter Reading
- Receive consumption alerts.



- Annual assessment of water services performance.
- An impressive source of information available and easily accessible to stakeholders and consumers.

3

BENCHMARKING
in your pocket



Recognized by OECD as a case of innovation success in water service regulation.



4

Portuguese WATER in H2020 WORKING TODAY FOR OUR WATER FUTURE



BINGO
a better future under
CLIMATE CHANGE

Coordination by



LABORATÓRIO NACIONAL
DE ENGENHARIA CIVIL

- **Climate predictions & projections:** Downscaled at appropriate scale
- **Impacts in the water cycle:** full water cycle for near future
- **Adaptation strategies:** Co-production of tools and methodologies, and dissemination



5

International Water Centres born in Portugal



LISBON INTERNATIONAL CENTRE FOR WATER

Think tank and strategic advice | Support to the policy makers

Education, training & capacity building | Support to the utilities & regulators

Business, support, incubation & acceleration of start-ups | Support to the industry

Social engagement | Support to the society in large



LABORATÓRIO NACIONAL
DE ENGENHARIA CIVIL



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 763562

WISE PPP

International Centre of Excellence for PPP on Water and Sanitation

Proposing international standards, best practices and recommendations for **policy makers to use PPP** to achieve the SDGs.

Collecting and disseminating information on **successes and failures from the past and current PPP** experiences around the world.

Developing a **network of specialists** and supporting countries interested in the **PPP Programme**.

Hosting project team meetings.

An independent affiliated of the **United Nations** Economic Commission for Europe (UNECE).



SMEs with Solid Expertise

Top Research Centers

Modern institutions

Open to international partnerships

The Portuguese Water Cluster has
excellent conditions for innovative
win-win partnerships





European Climate Change Adaptation conference

28–31 May 2019

CCB, Lisbon

www.ECCA2019.eu

Call for Abstracts & Sessions
31 October 2018



Whatever we possess becomes of double value when we have the opportunity of sharing it with others !

JEAN-NICOLAS BOUILLY (1763-1842)

THANK YOU
FOR YOUR
ATTENTION

Portuguese Water Partnership

www.ppa.pt