13th Mediterranean Research Meeting Managing Water Resources in the Mediterranean Region

Water governance: a matrix survey on property rights and regulation in 14 Countries



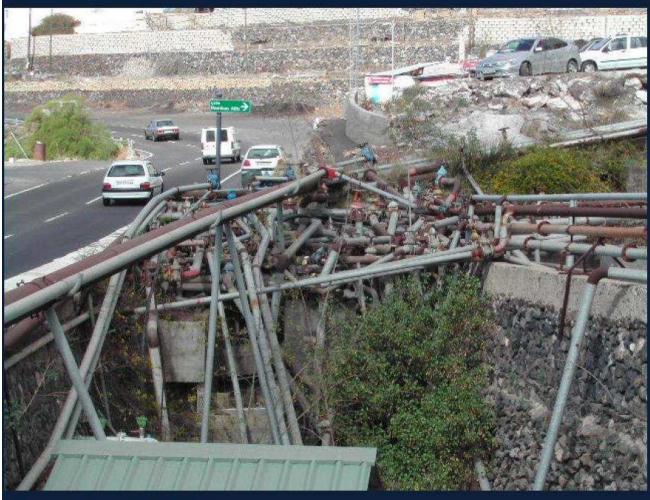
Authors: Franco Becchis, Elisa Vanin







Private water distribution in Tenerife



Hernández, M. 2004



Water policy objectives

WATER AS A HUMAN RIGHT

ENVIRONMENTAL & HEALTH QUALITY

Regulation as a condition for private capital attraction

PRESSURES AND CONFLICTS IN USES

INVESTMENTS & CONSUMER PROTECTION

AFFORDABILITY

from market incumbent's possible abuses

Setting the right questions and aligning incentives

Body responsible for policy design

Legal framework

Relationship operator/policy designer **Compensations for hosting captation plants** Body responsible for water quality

Body responsible for the allocation of different uses

Existence of a regulatory body

Body responsible for the environmental enforcement

Water demand

Structure of revenues

Tariffs structure

Ownership of assets

Water quality

Amount of investments

Body responsible for monitoring/evaluation

Who regulates tariffs

Body responsible for water information

Level of independence of the regulatory body

Who appoints who in the regulatory body

Difficulties to horizontal and vertical co-ordination Representation, participation

Mechanisms for co-ordination

Customer satisfaction

Tools and obstacles for capacity building

Who plans investments

Full cost recovery

Territorial accessibility

Incentives (rules, reward and sanction mechanisms) Relationship private provider/State

Contracting authority

Capital structure of local public companies

Territorial boundaries for operation of local public companies

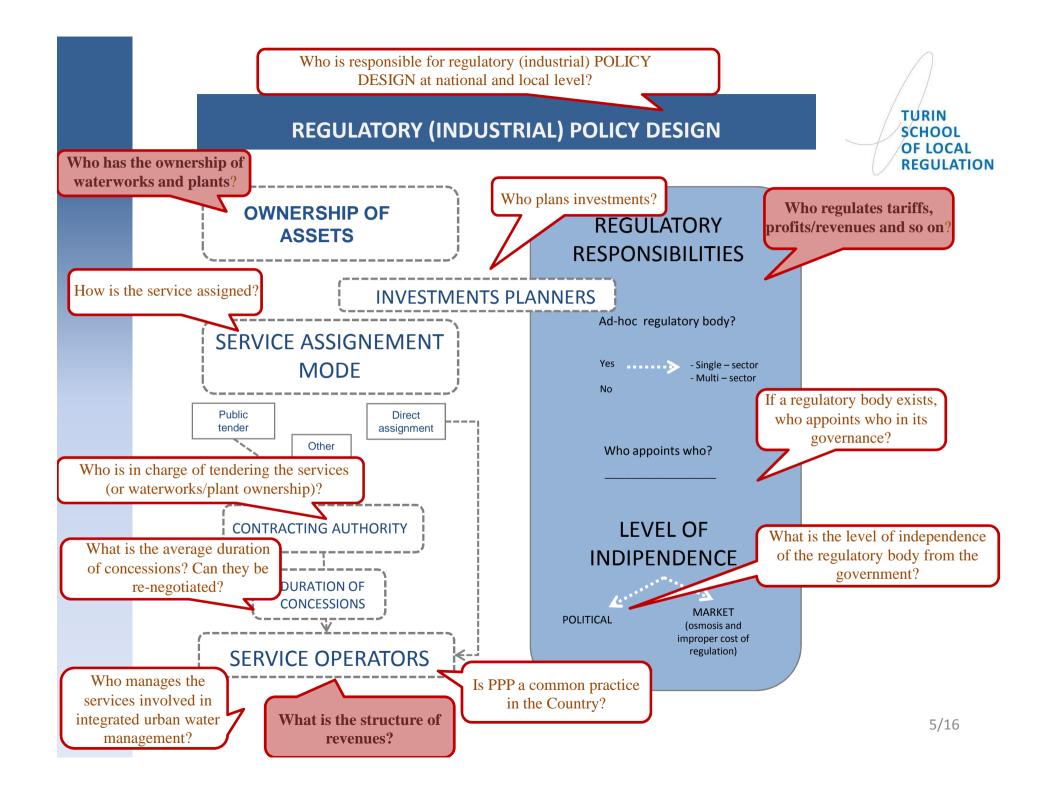
Operators

Service assignment mode

Legal forms of local public companies

Duration of concessions

Public-private partnerships



First results



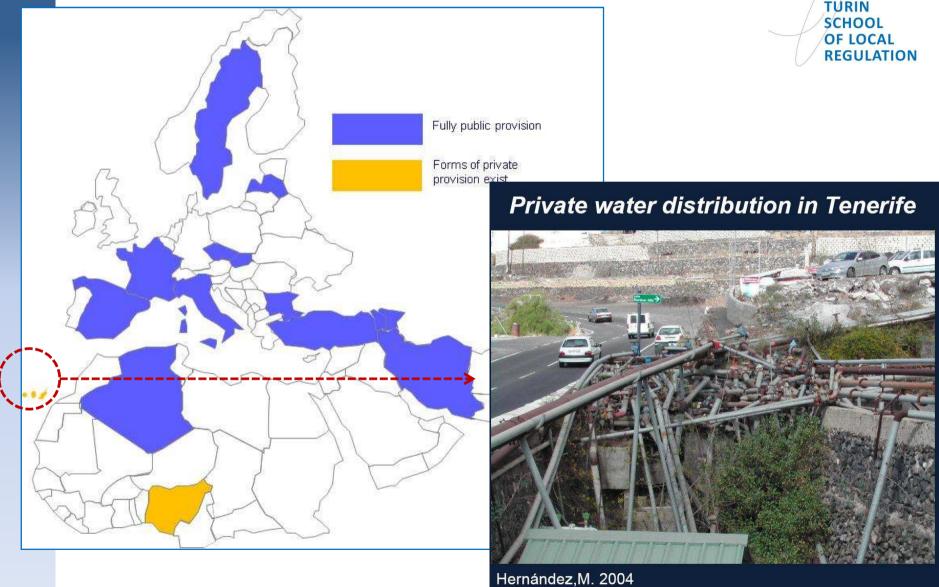
Different Countries, different systems														V. International		
The second secon		Alpeta	America	A Service Special	Majoria	Contil Republic	Plante	len e	Tay .	Latinia	Nigeria	Direction	Dipole	Devotes	Turkey	
Different Countries, different systems In a "model" of regulation does not exist The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single country situation of every single country situation of the peculiar situation of every single situation situat	Class public provides of when review exist or in unless reads provided by private providers (unless)	Pers. Provide providence of unitary unitary mobile	Yes, Politic produce of other mile radio	Yes, Public produce of other union minds.	Yes Public providers of other value while	Yes Politic products of other reason scales	Yes Politic produce of order	Yes, Public provides of union rector reduce	Pies Public produce of urban redor mids	No. Natio pressure of other	Nation provides of what region regions shally educe.	Per, public products of other seller sold.	Yes, public produce of other refer rold.	Yes, public produce of orbits with mid.	Yes, public provides of urban ratios sold.	
Different Countries, different systems In a "model" of regulation does not exist The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single country situation of every single country situation of the peculiar situation of every single situation situat		Northwell tree!	Northead Invol.	Northern Incom	Aindustinat	At authors have	A refer of front	Andreites	Markovi levi le Mare	Northead lead	A Parland Inval	Sandard Inch	Secretary of the Andrew of	A refered treet	Salara Inni	
Different Countries, different systems Country Coun		Managin Rate Resources	Memory of Resident Protection Memory of Tourisms	Calment of Medicines,	State Strongs and Water Regulatory Commission	Bibliopy of Applications (Bibliopy of Physics	Making of Berlings and Auditories Development	Markety of Browning	regulated by a Value of Independent Authority	Making of Resignation	Period Manageration Resources - PRASS	Regulatory Office the National Industries	Name and Address of the Owner o	Control Community Performed bylegislatur	Mining of Parently and Water Administration, General	
Different Countries, different systems The property of the pr	All Marie required to regulatory		and the latest dear	Acres 60			Military of Industry			in aliques of the industrial pulsy design)	Marie Walter Assessment		The Balls		Victoria	
Different Countries, different systems In the contribution of the countries of the countri	(holistic) POLICY DEBICE of referral and local level 3						Lord recognition		MATCH (bank regulatory	Patric Utilities Commission For regulatory profesy designs	Minut less.				Marting Street	
The state of the s									egendes):	Minut Inch. Lord governments (for						
The state of the s	175 for an arrange and de-	to the state and in														
The state of the s	tional communities and manifestibles that from the contribute plant on their territory?	Different Countries different eveters														
The state of the s		o) State	e Note	DITT	erer	IT GC	Dunt	ries.	. C IITT(eren	t SV	sten	15	od poemnents	e Bala II Land arrestants	
The state of the s	A2 Marker the exception of enterceion and				.		01110.	,	, 0	.			- •			
The state of the s	(inter											of television of public				
Address of the control of the contro	A THE REAL PROPERTY AND A PROPERTY AND ADDRESS OF THE PARTY ADDRESS OF THE PARTY AND ADDRESS OF															
Address of the control of the contro	descriptor inte												adjust beautier			
And the state of t		n) Politic bender	a) Politic bandle	e Nationale	a) Politicismin		n) Polisio landar	to Sent and proved	e)Path tente	ij Straitunijoseni	ij Crail angemen	n Nikolanda	ej Politic bender (mility)	ij Nillebede jedyk very		
The state of the s	a Participant	tij Otresi sastgement		ij Dreit ordproset		I) Died entpored			b) Short an algorithm (matrix)			is Chroni analysment (mainly	NA transaction section are probled by public million	be the probably and	ij Dreifundporent	
A Company of the Comp	distribution in the latest section in the la												by the requires	Section 1		
Additional residence of the control				Den State Agency on Proportional	Market public and the Paris	Residente.	Cond subortim	NO.		IGA.	Nate Water Agencies (MAA); and Households	Managed by committees of the c	The same of the bifurbackers found assessments or	WA .	Marketonia.	
And the properties of the prop	All Expellenting who is in other professioning. The continue (or make much applied contenting)	Section of Parameters and to continuous persons (Control	Recovered Management Agency of the Districty of										supremunitied or regional loaders			
And the properties of the prop		PART PRESENT	Nation Probability													
As a "model" of regulation does not exist The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead tailored on the peculiar situation of every single Country The regulatory framework is instead to the regulatory framework is instead to the regulatory situation of every single Country The regulatory framework is instead to the regulatory situation of every single Country The regulatory framework is instead to the regulatory situation of every single Country The regulatory framework is instead to the regulatory situation of every single Country The regulatory framework is instead to the regulatory situation of every single Country The regulatory framework is instead to the regulatory situation of every single Country The regulatory framework is instead to the regulatory situation of every single Country The regulatory framework is instead to the regulatory situation of every single Country The regulatory framework is instead to the regulatory situation of every single Country The regulatory framework is instead to the regulatory situation of every single Country The regulatory framework is instead to the regulatory situation of every single Country The regulatory framework is instead to the regulatory situation of every single Country The regulatory framework is instead to the regulatory situation of every single Country situation is the regulatory situation in the regulatory situation is the regulatory situ			The said statement	Control of selection	Communication (All prints)	Contracts (C) 20 years.	School man 20 years On present the Copyright	Community of the	Communication of the communica	Name and Street	ON.	Secretary May 201	Services 2010 pers	WA.	Contraction long form	
13 files and measured files and	All Marks for energy duration of properties 2 Continue to properties 2			Marie 25 years		And promote of the beautiful density about 16.	Securitation Very Income. Sea very shart period.		Na manifolium mi	many						
13 files and measured files and										•						
13 files and measured files and			Private com		66,000	10111	of Ko		4100	2000	1001	avia	1	y host government		
13 files and measured files and				a		jei (or re		uon (JOES		exis	I	institute primite primes		
All huministed for the property of the propert		of the companies. Notice of the companies maked by the companies of the co		0.				9				02	•			
the regulatory framework is instead tailored on the peculiar situation of every single Country The Production of the peculiar situation of every single Country The Production of the peculiar situation of every single Country The Production of the peculiar situation of every single Country The Production of the peculiar situation of every single Country The Production of the peculiar situation of every single Country The Production of the peculiar situation of every single Country The Production of the peculiar situation of every single Country The Production of the peculiar situation of every single Country The Production of the peculiar situation of every single Country The Production of the peculiar situation of the peculiar situation of every single country The Production of the peculiar situation of the peculiar situation of every single country The Production of the peculiar situation of the peculi	integrated when make management?	make of management) will														
the regulatory framework is instead tailored on the peculiar situation of every single Country The Property of the Country The Pro																
the regulatory framework is instead tailored on the peculiar situation of every single Country The Property of the Country The Pro																
All this regulators less this problem for the peculiar situation of every single All this regulator less this final plant of the peculiar situation of every single All this regulator less this regulator less this final plant of the peculiar situation of every single All this regulator less this regulat	All in Public Private Performing (PPP) a common president in the Country!						C					1 - 11 -				
All this regulators less this problem for the peculiar situation of every single All this regulator less this final plant of the peculiar situation of every single All this regulator less this regulator less this final plant of the peculiar situation of every single All this regulator less this regulat		The Regulatory authority for	De Police	ne re	ലവ വാ	atorv	' trar	new	ork is	s insi	tead	talic	rea	-	Management	
And Mininghine invasionals 2 The first information of the first inform		the regulatory marriewerk to motoda tanorea														
And Mininghine invasionals 2 The first information of the first inform																
And Mininghine invasionals 2 The first information of the first inform	All the regulates be the profesion more and second	on the neculiar situation of every single														
The President of Agents Act of a completely seed, and the first in the		of the peculial situation of every single														
The President of Agents Act of a completely seed, and the first in the					•						_					
The President of Agents Act of a completely seed, and the first in the		The State Officery of States Street, and Design the	The State C Species of th					()	ntru					present.	Manageration, found processing and the Comment	
Activation of the control of the con	A.C. Waspiere Investments?	Select Vide No.	Territoria e				,	Goul	illiy						Constants of the Section Produces (Section).	
Activation of the control of the con																
ACT of the part of the processed of the Continue of the part of th					appears for members of the	Name .	NA.	The taking of Strongs			Personniand Bala governors	President of the Bioseli republi		MAN .	N/A	
AC Office is the first of infragrantment of the suggestion of the	Art Faregulatory budy mining advanty/	and the same of th	menter.	representatives of control managine incides appropriately	requisitory in only					Carried State			magnify medies			
AC Office is the first of infragrantment of the suggestion of the	present)			Springer					Alterdand regional laws							
AC Office is the first of infragrantment of the suggestion of the									Millor							
ACT Mode is the standard or recovery (agreement from the standard or recovery	A.C. What is the local of independence of the		- Aller				Name.		Windless makes	The state of the s		Sales Spin			No.	
ACT Mode is the standard or recovery (agreement from the standard or recovery		(Cotton Maj)	An information annulated	An information on date			o Contoner bills		e) Continuer Min	d Continue 1884	d Continue lide	g Costone life	g Cottom life		g Continue Mile	
Top production _1)	A-12 What is the structure of receiver (e.g.	(Cinter substalles (*)			opes tentrol			r tellar fit made for realer formulas						to the school of the school		
Et for an electrical file fail for partie fails, and an experimental file fail for partie fails, and parties fails, and parties fails for parties fails, and parties	many productionj 7															
Training of	Bil Novice minimalija interes primis prodice and the Bala in a preis 100s.	-	NA.	NA.	MA	Name:	NO.	NO.	NOR.	ex.	No compressions	UN.	NUR.	WA.	NAME OF THE OWNER	
	compressions, _37															

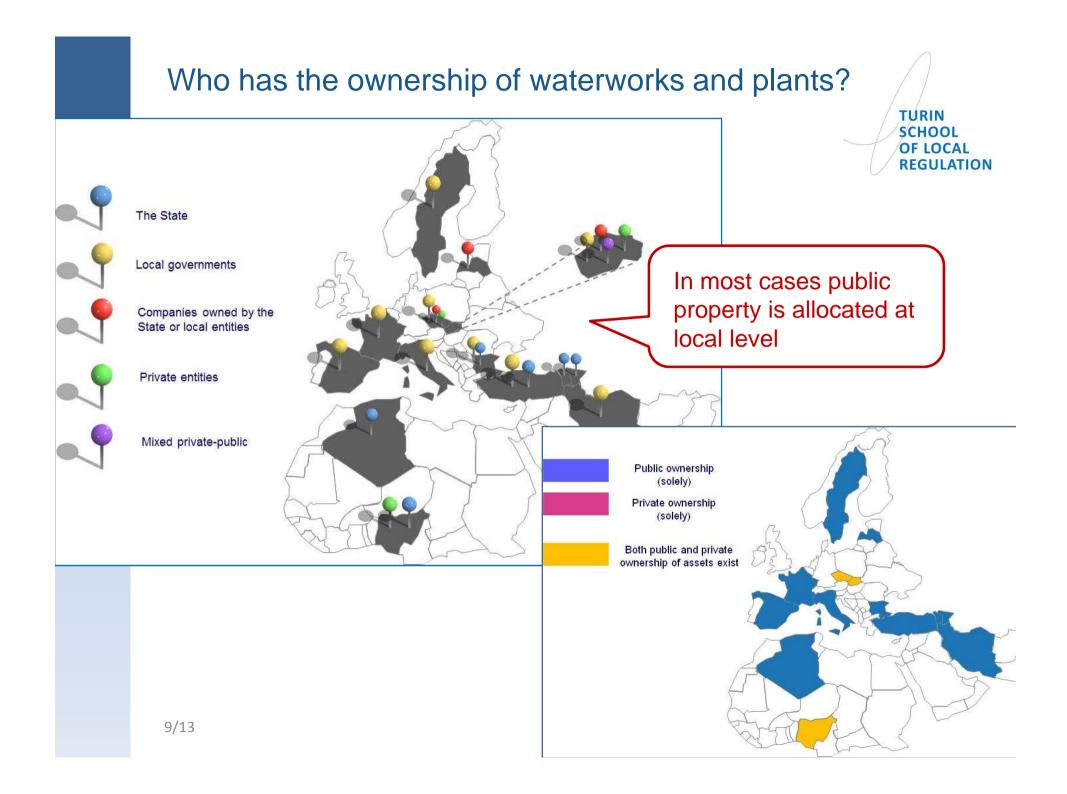
Countries analyzed



Public / private provision

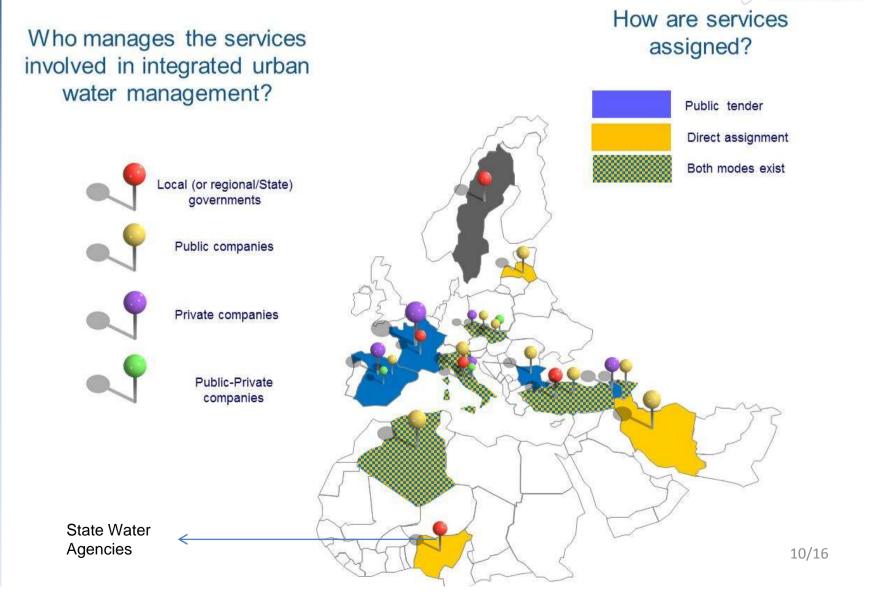






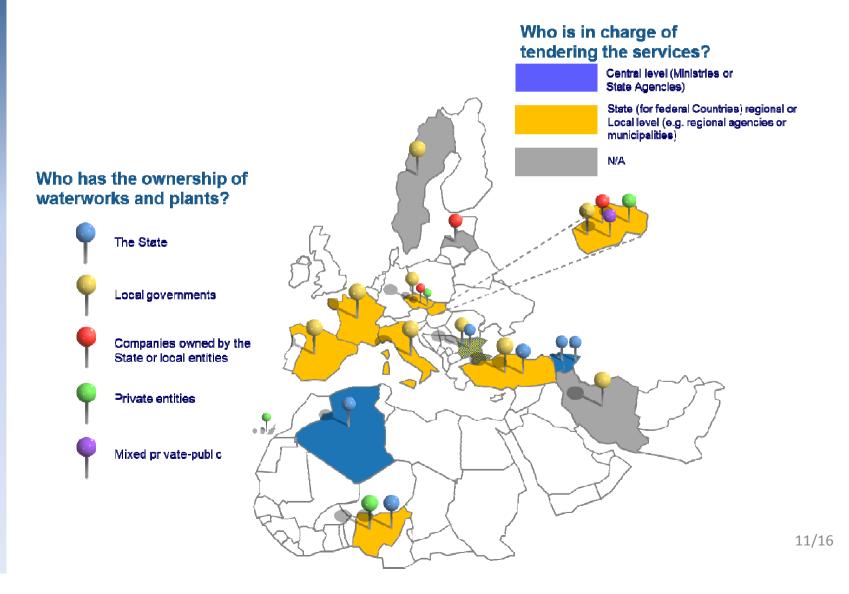
Map overlapping service providers and services assignment modes

TURIN SCHOOL OF LOCAL REGULATION



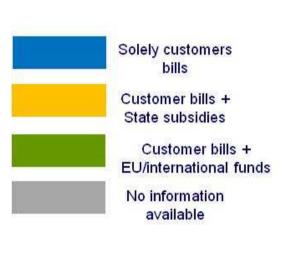
Map overlapping asset ownership and tendering responsibilities

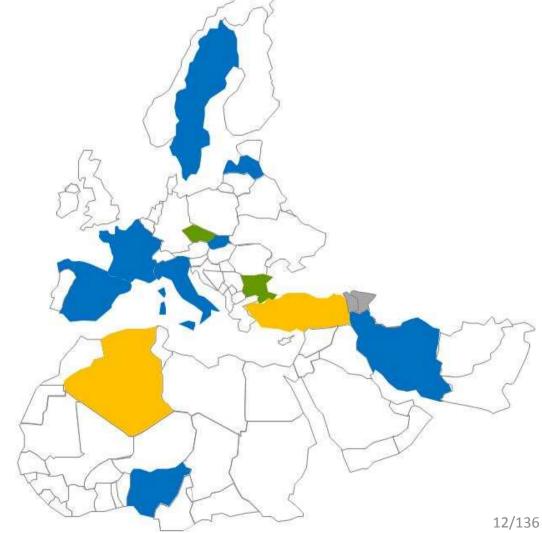


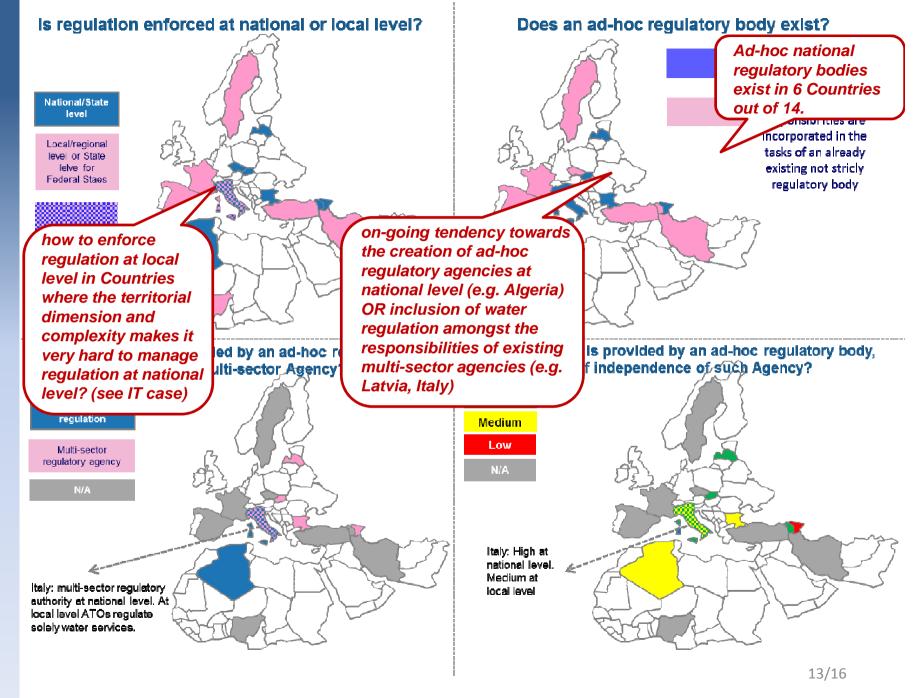


What is the structure of revenues?









Some hints for further investigation



property rights on water as a good

independence of the regulatory bodies (the market) including also a question on

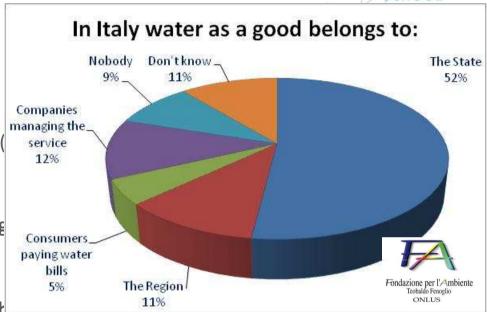
payment of any concession/franchising g providers to use public pipes and plants

collection of some general data to allow the sound of the

keys to interpretation (socio-economic situation, water scarcity and governance forms, historical patterns, law system, colonial background, corruption index). The phenomenon of **arrears** in water service could also be investigated.

> + enlarging the number of Countries

+ comparison with other sectors (see LORENET research)





An open window on local services, infrastructures and welfare policies

Franco Becchis

franco.becchis@fondazioneambiente.org

Elisa Vanin

elisa.vanin@fondazioneambiente.org



Fondazione per l'Ambiente Teobaldo Fenoglio ONLUS

www.fondazioneambiente.org



www.turinschool.eu

With the support of

