

SEMIDE

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Système Euro-
Méditerranéen

d'information sur les
savoir-faire dans le
domaine de l'Eau

النظام المعلوماتي الأورو متوسطي
للمعرفة في مجال المياه

EMWIS

www.emwis.net

Euro-Mediterranean
Information System
on know how in the
water sector

**Mediterranean Water Knowledge Platform: first lessons on
water information systems,**

Eric MINO
e.mino@semide.org



Urgent need for comparable data & indicators

Ministerial Declaration on Water, Union for the Mediterranean
Dead Sea, Decembre 2008



- Regional activities opened to all Med countries
- Application of principles from SEIS, INSPIRE, WISE 2, Water Accounting (UN-DS)



Objectives of the platform

- **Improving Integrated Water Resources Management planning and fostering its implementation:**
 - A common approach for developing National Water Information Systems
 - An assessment of water resources and use

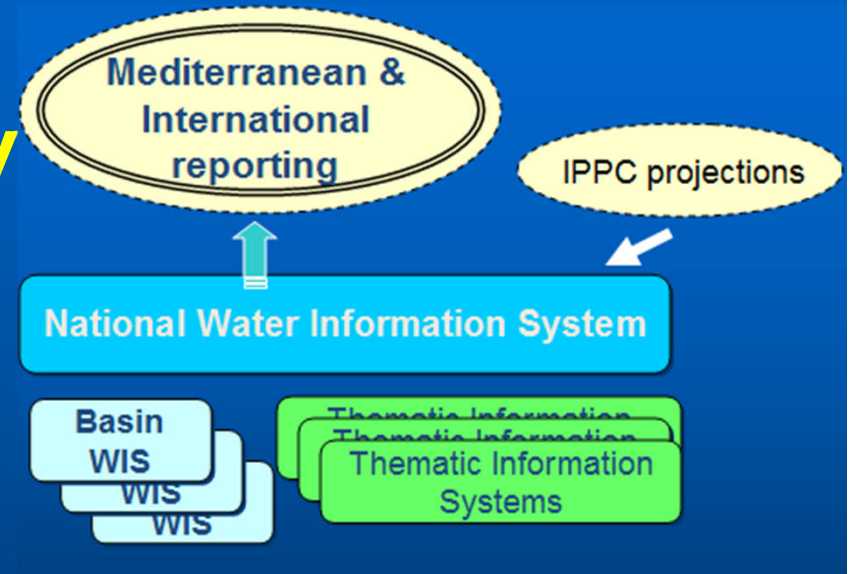
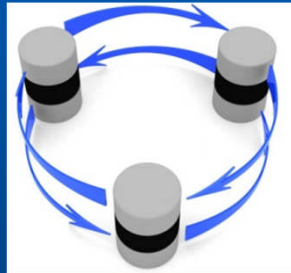
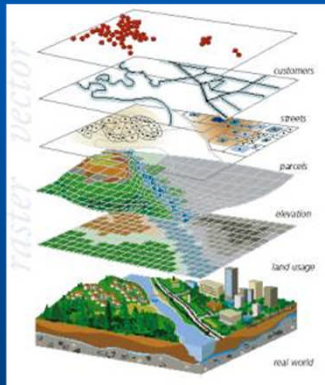
→ We can only manage what we know



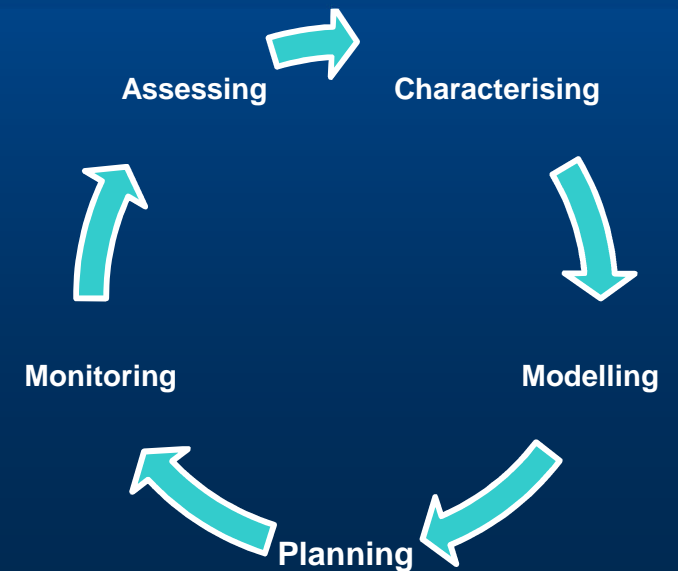


Better knowledge for Climate adaptation and mitigation

- **Organising data sharing and management in each country**



- **Building capacities for monitoring, evaluation, planning**



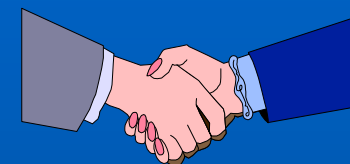
- **Exchange of experiences**



1. Shared (institutional cooperation)

- Political commitment (law / MoU)
- Partnership (win-win)
- Networking

Policy Framework Agreement



2. Environmental Information (content)

- Horizontal integration (themes)
- Vertical integration (local to global)
- Onlie access (near real time)
- Different target users (data collected once)

Common language

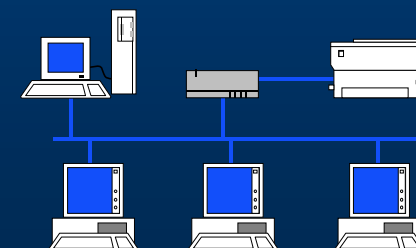


Agreements on procedures



3. System (infrastructure)

- Existing ICT infrastructures
- INSPIRE, Earth Observation, Internet of things, ...
- New e-Services (e-Government)



System development

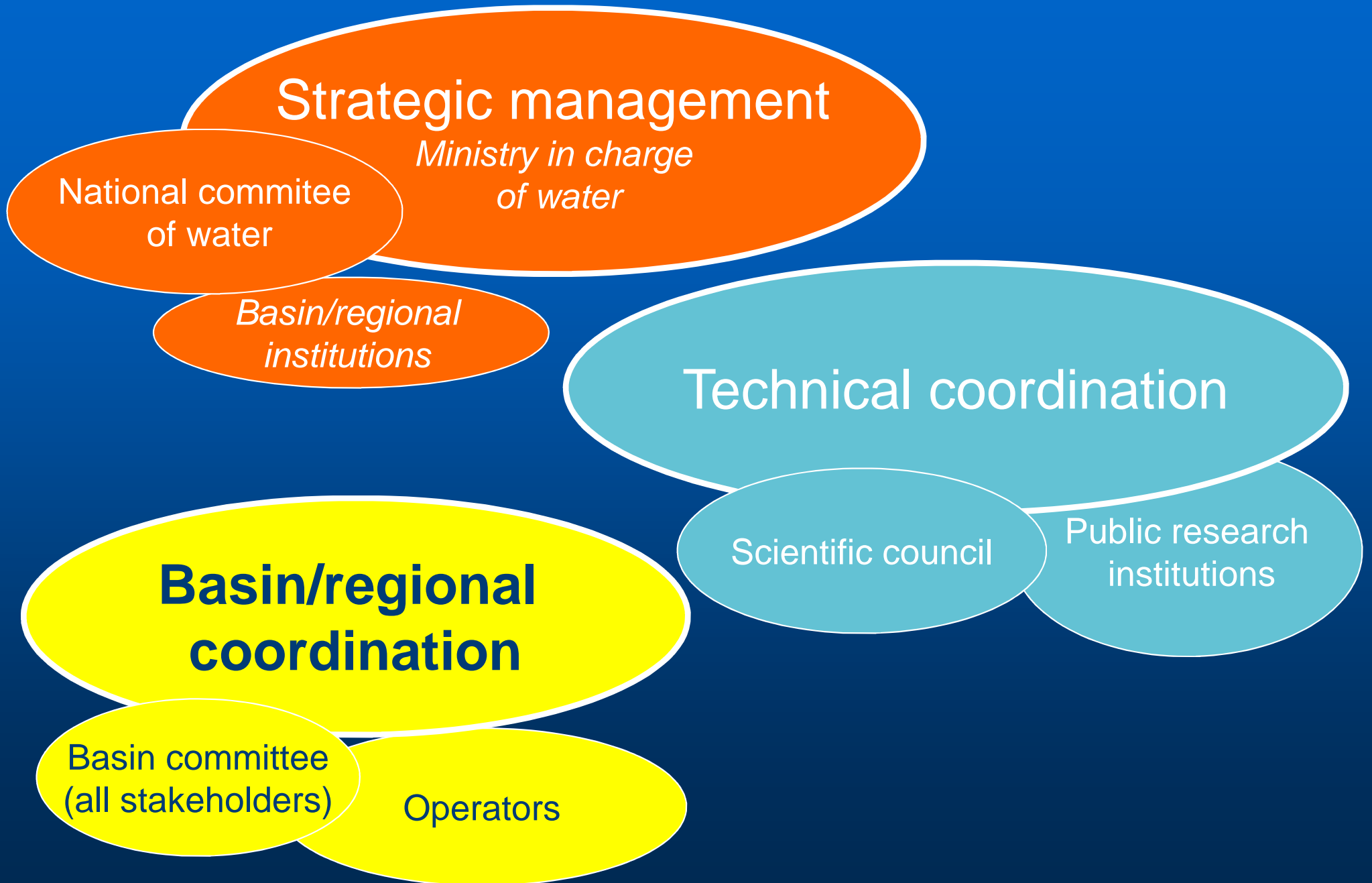


Legal framework: a must

	Algeria	Lebanon	Jordan	Morocco	Tunisia	France
Water law	2005	2000	1988-2002	2016	1975 rev. 2001 Water code under preparation	2006
WIS	5 articles	No	No	2 art.	(6 art.)	1 art.
Coordination	Ministry Thematic approach			ABH + Ministry	Ministry	ONEMA
Decrees	2008			To be defined	-	2009 (SNDE) + bylaw 2010 (roles)
Public access to data	To be defined			To be defined	To be defined	Part of the water law

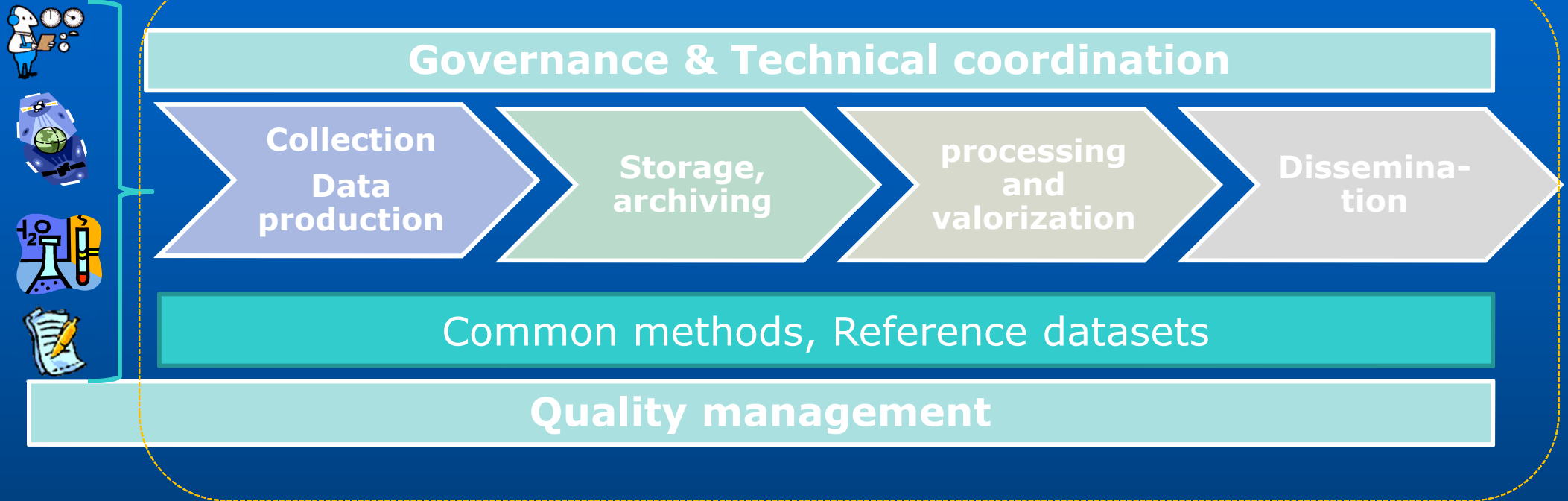
- **But not sufficient:**
 - An organisational framework
 - Human and financial resources

A three pillar governance





Typical data work flow for a Water Information System



International
Country

Region

Local level



- **Vertical integration**
 - ❑ **Data management at local level**
 - ❑ **Responding to upper level needs/reporting**

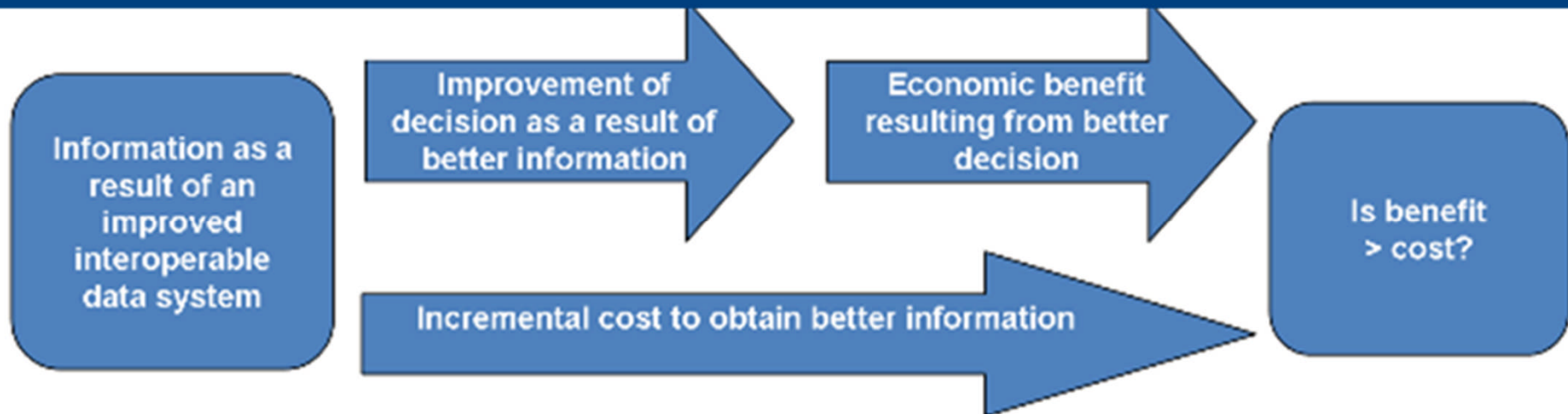


- Characterization and monitoring
 - ❑ **Status of water resources** (aquifers, rivers, reservoirs and non conventional) in terms of **quality and quantity**
 - ❑ **Pressures** from Agriculture, Industries, Urban areas (e.g. water abstractions, pollution generated by the activity)
 - ❑ **Impacts** (socio-economic and environmental)
 - ❑ **Water infrastructures**, including in project (WWTP, dams, transfers, desalination plants, etc.)
 - ❑ **Soft measures**: tariffs, permits
- Actors
- Reference datasets
 - ❑ Hydrological network, land use/cover,
 - ❑ Management units



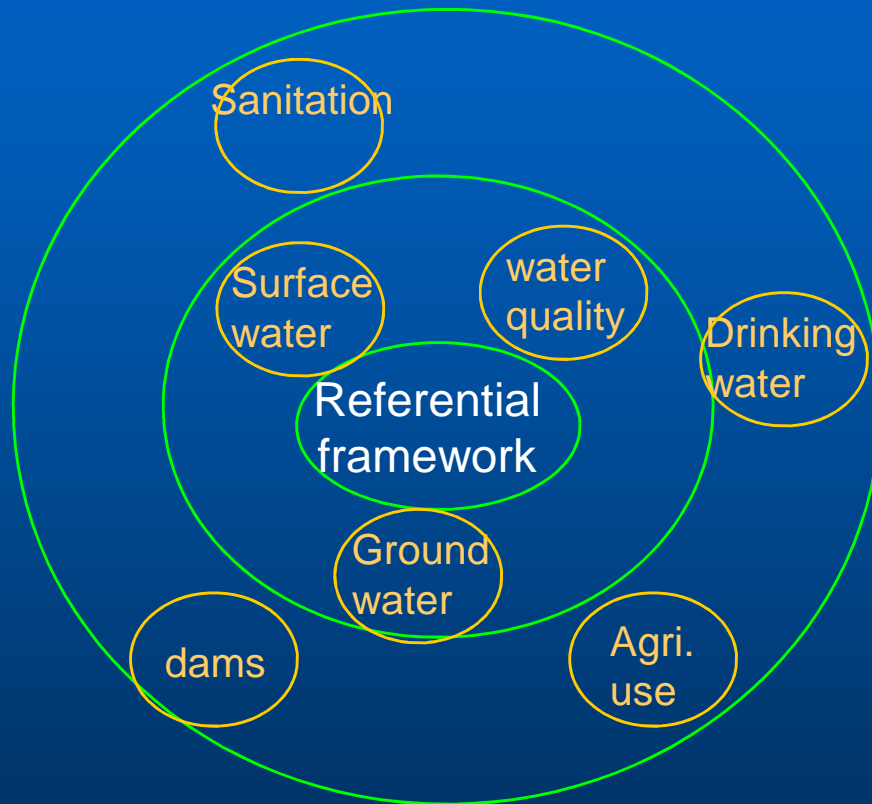
Cost-benefits analysis

- **Necessary to ensure sustainability**
- **All cost should be included:**
 - ❑ Investments (hardware, software, specific development, data)
 - ❑ Transfer/ownership (training)
 - ❑ Operational (data, telecom, maintenance, staff, coordination)
 - ❑ Evolution, adding new thematic components
- **Benefits difficult to quantify in money terms (e.g. new services)**
- **Comparing with monitoring & infrastructure costs**





A step wise integration process



- **Referential framework**
 - ❑ Set by and for the stakeholders
 - ❑ Quality Assurance
- **Sub-systems**
 - ❑ One domain = one leader
- **National system**
 - ❑ Sub-systems integration
 - ❑ Needs going beyond single sub-systems



Thank You for your attention

www.semide.org/initiatives/MWKP



Wetlands Observation

Med Water Knowledge
Platform



Water Infrastructure
Smart management

Water efficiency for
touristic sector



Climate Services
Water & energy
efficiency in irrigation



Solid waste
management



Water & Food
Innovation Med agenda