



PUBLIC ENVIRONMENTAL AUDITING: CHALLENGES AND OPPORTUNITIES FOR EXTERNAL MONITORING BODIES

Auditing the Urban Water Cycle in the Madrid Community

"Courtesy translation provided by the organisation"



KEY POINTS OF THIS PRESENTATION

- The choice of theme.
- Framework, scope, overall objective.
- Operational aims.
- Subjective elements.
- Dynamic of the auditing.
- Conclusions and recommendations: case studies
- Looking ahead to the future.



The choice of theme

- The social, economic and environmental importance of water resources to sustainable development.
- The longstanding concern, associated with physical and demographic characteristics, over water resources in the Comunidad de Madrid.
- The considerable volume of resources used by plans, programmes and projects associated with water resources.
- The debate on the new approaches for supplying, producing and financing public assets and services and compliance with the Water Framework Directive of 2000.
- The need for a young audit body, such as the Audit Commission of the Comunidad de Madrid, to undertake audits that exceed its mandate.



Framework, scope, overall objective and dynamic of the auditing

- **What are we talking about?**
Flows and processes that water follows from nature and back again.
- **Underlying framework?**
Complex rule system and institutional network associated with an asset regarded as an essential service that involves the EU and central, autonomous community and local authorities.
- **What is the scope?**
Complete cycle versus urban water cycle.
- **What is the overall objective?**
To analyse the current situation and outlook vis-à-vis compliance with the EU Water Framework Directive.



Operational aims

- Current situation and recommendations on:
 - Guaranteeing availability of resource
 - Management models for supplying, producing and financing the service
 - Environmental quality and quality of the service
 - Public participation
 - Economic and financial aspects, paying special attention to cost recovery.



Subjective elements

| <u>PHASES OF THE WATER CYCLE IN THE COMUNIDAD DE MADRID:</u> | | RESPONSIBILITY | MANAGEMENT BODY |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------|
| Supply | Adduction <ul style="list-style-type: none"> •Treatment •Storing •Collection | Autonomous community | Canal Isabel II (96%) Aguas del Sorbe Federation (3.2%) Others (0.8%) |
| | Distribution <ul style="list-style-type: none"> •Elevation •Distribution | Municipalities | Canal Isabel II (96%) UTE de Alcalá de Henares Others. Federations in 18 Municipalities |
| Sanitation | Drainage system <ul style="list-style-type: none"> •Collection and evacuation of waste and rain water | Municipalities | Canal Isabel II. Agreements Federations |
| | Treatment <ul style="list-style-type: none"> •Return to rivers or networks •Re-use | Autonomous community | Canal de Isabel II Madrid City Council |



Dynamic of the auditing

- Some differences in focus in comparison with audits carried out on the basis of the traditional mandates of external audit bodies.
- *Preparation*: Previous experience, specific training for human resources and meetings with agents involved.
- *Implementation*: Volume of information. Delays.
- *Presentation of the report*:
 - Introduction, including details of the body on whose initiative it was carried out; the subjective and objective elements included; objectives and scope; its limitations as well as the treatment given any declarations.
 - An overview of the general context surrounding management of the urban water cycle in the Comunidad de Madrid, with a description of the geographical and socio-economic characteristics of Madrid, the agents involved in the water sphere and the phases of the urban water cycle.
 - The report then gives over a chapter to each of the operational aims detailed above, focussing on three different aspects:
 - Current state
 - Conclusions
 - Recommendations



Aim: Guaranteeing availability of resource

- **Considerations**

Projections show that levels are insufficient to guarantee future supply.

- **Recommendations**

- Supply

- Discover formulae that establish a commitment from institutions given the development time that major infrastructure such as dams require
- Policies to renew networks and to separate them must be speeded up.

- Demand

- Need for greater depth in population and development studies
- Progress on programmes related to saving water, technical efficiency of equipment and consumer devices, as well as the consumption of extremely high-quality water for certain uses.

- Improvements

- Clearly define the Canal's area of action in the event of new missions
- Agree terms and definitions that will enable greater rigour and transparency on data, given the current differences between the various organisations
- Install metering systems for all end consumers.



Aim : The management model

- **Considerations**

- Water is a public asset and hence surrounded by a special legal system
- The provision of the service related to water is regarded as essential
- The service can be managed
 - Individually: Direct, Indirect or Mixed
 - Jointly : Agreement, Tender and Federation
- Traditionally, priority has been given to direct or joint formulae in the provision of the service in the Comunidad de Madrid
- Trends: increase in the activity of the Canal Isabel II and indirect management formulae.

- **Recommendations**

- Need to analyse the financial impact of the service provision models on city councils and citizens alike. Specific case of Alcalá de Henares
- Reconsideration of the legal purpose and status of the Canal de Isabel II in the light of its fields of activity
- Specific audit of the Canal de Isabel II.



Aim: Environmental impact

- **Considerations**

The Framework Directive establishes targets for 2015 for:

- Surface water: good chemical and ecological status
- Groundwater : good chemical and quantitative status.

- **Recommendations**

- Surface water:
 - Focus on the recovery of stream plant life
 - Improve purification treatment for return to canal
- Groundwater:
 - Avoid excessive and uncontrollable extraction
 - Make progress as regards the replenishment of aquifer.
- Industrial activities:
 - Incentives for more environmentally-friendly industrial processes
- All agents:
 - Change individual and collective behaviour through campaigns to promote considerate and responsible consumption



Public participation

- **Considerations**

- Governance and new culture of water: transparency, participation and control
- Environment Directive: supply of information, consultation and active involvement
- Institutional and public participation: different users, different interest groups and different authorities involved.

- **Recommendations**

- Improve citizen involvement by ensuring access to information and giving greater priority to citizen participation exercises on plans and programmes in addition to the awareness-raising and education programmes currently in place.



Internalising costs

- Considerations
 - Principle of cost recovery in water-related services, including environmental costs and costs relating to resources, in other words, opportunity costs
 - Tariff policy is crucial to achieving targets.
- Recommendations:
 - Need to make progress by conducting a specific audit of the Grupo del Canal de Isabel II that will increase our understanding of the processes and costs associated with them.
 - Improve the internal cost control system.
 - Adequate accounting of costs that will make it possible to determine for certain the cost of the services.
 - Outline the concepts associated with environmental costs.
 - Differentiate costs.
 - Reflect subsidies received in such a way that their impact on the consumer is transparent.
 - Tariffs:
 - Improve information to users through a single bill, as an element that contributes to saving.
 - Analyse and/or increase escalating tariffs.



Looking ahead to the future

- Need to improve co-ordination given the existence of various monitoring bodies on issues such as the environment
- Supplement standardised procedures for this kind of audit that makes it easier to arrive at uniform comparisons between institutions and countries
- Make headway on the recommendations by seeking increased efficiency in information, particularly as regards result evaluation. To achieve this, improvements need to be made in information analysis techniques
- Strive for increased efficiency in resources by using multidisciplinary teams
- Monitor progress on recommendations made.