Briefing note

Update on the 3Ts

Summary

~ In 2011, a manual and a short guide to the 3Ts was published. This briefing Note updates the existing paper on the 3Ts.

~ This update provides a snapshot of the way the 3Ts were implemented among EurEau members in 2017.

~ A survey among EurEau-members has been conducted. This shows a huge variety in the way the water sector is organised and financed in Europe.

~ EurEau proposes a number of recommendations with respect to the application of the 3Ts.

Recommendations

In order to deliver water services in a sustainable way, all costs must be recovered through tariffs, taxes and/or transfers (3Ts) This “Full Cost Recovery” model is in accordance with the Water Framework Directive and the OECD Model.

The right balance between tariffs, taxes and/or transfers shall collectively make up the basis for sustainable cost recovery, which must reflect the cost structure of the service.

In setting the balance, one must have regard to issues such as the increasing costs of providing the service and reducing per capita demands from customers.

National governments should decide the extent to which they wish to subsidise, through taxation, individual service users in relation to the tariffs. However, any such decisions should not impact on the income due to the utility.

1. Introduction

Drinking water and waste water service providers in Europe have a common goal: to provide safe, reliable and sustainable water supplies and waste water services. Delivering this vision in the future will require operators to meet new challenges, including scarcity, affordability and environmental challenges such as climate change. These factors, among others, will require water professionals to make ever better use of limited financial resources in order to ensure that the necessary funding and investment is secured for a sustainable water supply for present and future generations.

The 3Ts framework developed by the OECD represents a powerful tool in unlocking our
understanding of the sources of the funds that underpin this sustainable future.

The 3Ts acknowledges that Tariff, Taxes and Transfers (e.g. users, taxpayers, foreign aid...) are the ultimate sources of funding for water services. The current mix between those terms, and its future evolution, should result from an explicit choice. A choice made at local level from the responsible authorities depending on the socio-economic and historical conditions.

In 2011, EurEau produced a manual and a short guide how to apply the 3T’s in 5 short steps including 9 case studies. This update seeks to explore how the 3T’s are implemented and applied in a variety of national and institutional contexts among EurEau members in 2016.

We hope that this update will act as a significant spur to a broader understanding and adoption of the 3Ts approach to provide a useful tool for stakeholder consultations and strategic financial planning in this most vital infrastructure sector – the water sector. We encourage all stakeholders to contribute to the application of this toolkit.

2. How to apply the 3Ts

The practical manual from 2011 recommends ways to aggregate the information to develop the 3Ts from the utility level to the municipal, regional, or national level. It is intended to be a policy tool, to be applied for water utilities as a whole (operators and entities who own the assets). The following sequential steps are recommended, representing a tiered approach to harmonise the method used for comparisons of the 3Ts at different levels within a country as well as between different countries.

STEP 1: Institutional mapping

STEP 2: Charting financial flows

STEP 3: Categorise financial flows according to the 3Ts approach

STEP 4: Quantifying of financial flows

STEP 5: Aggregating data
3. Implementation of the 3Ts

In order to deliver water services in a sustainable way, all costs must be recovered through tariffs, taxes and/or transfers (3Ts). Indeed the right balance between these types of funding can collectively make up the basis for sustainable cost recovery, which must reflect the costs structure of the service. The 3Ts framework was developed by the OECD and its application in practice was analysed by EurEau in a report in 2011 (see earlier references)

This update on the 3Ts can be summarized in the following way:

3.1. Institutional mapping

The water services and waste water services are either operated by a state owned public utility, by water boards, by the municipalities, municipal or inter-municipal companies, by public-private companies, by private companies via concession or by cooperatives.

Shown in the table below are some examples of the operation of the services in different member states:

<table>
<thead>
<tr>
<th>Operation</th>
<th>State owned public utility</th>
<th>Water boards</th>
<th>Municipalities</th>
<th>Municipal or inter-municipal companies</th>
<th>Public-private companies</th>
<th>Private companies via concession</th>
<th>Cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Services</td>
<td>Belgium, Ireland, Serbia</td>
<td>Austria</td>
<td>Austria, Czech Republic, France, Norway, Spain</td>
<td>Austria, Denmark, France, Netherlands, Norway, Poland, Serbia, Spain</td>
<td>France, Spain, Czech Republic,</td>
<td>Czech Republic, France, Spain</td>
<td>Denmark</td>
</tr>
<tr>
<td>Waste Water services</td>
<td>Belgium, Ireland, Serbia</td>
<td>Austria, Netherlands (WWTP)</td>
<td>Austria, Czech Republic, France, Netherlands (sewage system), Norway, Spain</td>
<td>Austria, Czech Republic, Denmark, France, Norway, Poland, Serbia, Spain</td>
<td>Czech Republic, France, Spain</td>
<td>Czech Republic, France, Spain</td>
<td></td>
</tr>
</tbody>
</table>

The charges for water are collected from water users by the utility, by the municipalities/water authorities or by a public company. Shown in the table below are some examples of the operation of the services in different member states:

<table>
<thead>
<tr>
<th>Collection of charges</th>
<th>Utilities</th>
<th>Municipalities/Water Authorities</th>
<th>Public Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water and Waste Water services</td>
<td>Ireland, Spain, Poland, Serbia, Austria, Denmark, Netherlands (drinking water), Czech Republic</td>
<td>Netherlands, Norway</td>
<td>Serbia</td>
</tr>
</tbody>
</table>
The water and wastewater infrastructure is owned either by the utilities or by the municipalities/water boards.

<table>
<thead>
<tr>
<th>Ownership infrastructure</th>
<th>Utilities</th>
<th>Municipalities/Water boards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water services</td>
<td>Ireland, Denmark, Netherlands, Belgium, Czech Republic</td>
<td>Norway, Spain, Serbia, Poland, Czech Republic</td>
</tr>
<tr>
<td>Waste Water services</td>
<td>Ireland, Denmark, Belgium, Czech Republic</td>
<td>Norway, Spain, Serbia, Austria, Netherlands, Poland, Czech Republic</td>
</tr>
</tbody>
</table>

3.2. Financial flows

In most countries - like Ireland*, Denmark, Spain, Serbia and Austria - the utilities are responsible for collecting all charges. The company collecting the bill is eventually responsible for transferring capital to other entities involved in the operation of the water service.

In some countries - like Norway – the municipality charges and collects the water and wastewater fees. There are very little cash flow between different organizations.

Some countries – like Norway and Denmark – operates the water services as full cost recovery services meaning that all costs are covered by the tariffs solely.

In some countries – like Spain - long-term contracts, in which the private operator collects the tariff, are arranged via concession.

In cases - Norway, Spain, Austria, Denmark - where the operator is a public company or a public-private company (where the municipality is stakeholder); the municipality gives an authorization to the company to operate the service.

In countries where it’s the municipality who directly operates the service, there is no need to have a contractual arrangement.

In the Netherlands the services of drinking water, sewage and waste water treatment are separately operated and financed by the responsible organisations: The drinking water companies, the municipalities and the water boards. These operations have their own separate financial flows on a full cost recovery basis.

*Ireland has decided in 2017 to remove domestic water charges except for exceptionally heavy use.*
### 3.3. Categorisation of the financial flows according to the 3Ts approach

<table>
<thead>
<tr>
<th>Country</th>
<th>Tariffs</th>
<th>Taxes</th>
<th>Transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>87% of the financing comes from tariffs</td>
<td>13% from subsidies from the state and the federal state</td>
<td>EU Interreg programme</td>
</tr>
<tr>
<td>Belgium</td>
<td>Principle of &quot;full cost recovery&quot; from consumers is applied.</td>
<td>In Flanders there is still a net subsidy of the regional authority of approximately 50 to 75% for the waste water collection and 40% for the waste water treatment.</td>
<td>No transfers</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Full cost recovery by water tariffs by most large utilities. Obligatory benchmarking shows that small municipalities and in particular in the self-operation model do not fully apply the cost recovery principle and do not create sufficient funds for infrastructure renewal.</td>
<td>Direct and indirect taxation in the tariffs (including 15% VAT) represents nearly 50% of the total cost structure.</td>
<td>EU Cohesion Fund investment subsidies (due to be replaced by loans after 2020). National level investment subsidies (WWTPs, WTPs, cross regional systems).</td>
</tr>
<tr>
<td>Denmark</td>
<td>Full cost recovery meaning all expenses covered by tariffs</td>
<td>No subsidies</td>
<td>No transfers</td>
</tr>
<tr>
<td>France</td>
<td>94% cost-recovery through the bill</td>
<td>4% of services costs are covered by local subsidies</td>
<td>EU programmes cover 1,6%</td>
</tr>
<tr>
<td>Ireland</td>
<td>(non-domestic supplies and new connection charges) Set by the Commission for the Regulation of Utilities (CRU)</td>
<td>Domestic Water Charges replaced by taxation.</td>
<td>Non applicable</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Drinking water is billed through a tariff per volumetric consumption and a fixed part</td>
<td>Sewage is billed by a local tax at the municipalities Treatment of waste water is billed by a regional tax by the water boards</td>
<td>No transfers</td>
</tr>
<tr>
<td>Norway</td>
<td>Full cost recovery meaning all expenses covered by tariffs</td>
<td>As good as no subsidies. Exemption might be municipalities with good economy, who choose to subsidise the services over the general budget.</td>
<td>No transfers</td>
</tr>
</tbody>
</table>
### Poland

According to “polluter pays” and „user pays“ principles, all operational costs as well as depreciation of investments and environmental costs have to be covered by tariffs.

Environmental taxes included in tariffs are redistributed by the regional and national funds by giving soft loans, and subsidies to the investments, or support to the individuals.

EU grants, especially from Cohesion Fund for modernization and extension of the existing water/waste water infrastructure.

Grants from Norway and Switzerland, and special loans from World Bank, EBRD.

### Serbia

Tariffs are defined as revenues collected through the water companies, or other public companies in charge of utility bills collection.

Taxes include subventions from the local self-government and donations from the Republic budget.

Donation from EU and member states (for instance Germany).

### Spain

Service providers can levy such fees for delivering the service (it usually consists of a fixed part and a variable one, depending on the volume consumed). Additional fees can be derived from meter rentals, access to the service (connection charges), penalties, etc.

Tariffs include:

- Revenues to cover costs of water and wastewater services.
- Revenues to cover infrastructure maintenance (relevant only if reinvested in the water and sanitation sector). This revenues are not common in all water supply and sanitation services, thus, the asset renovation management is not being correctly developed in some areas.

While subsidies or grants are the most visible form of tax funds directed to the water supply and sanitation sector, “hidden” forms of subsidies may include tax rebates, soft loans, transfers from local government housing taxes, donations, subsidized inputs (e.g., electricity services) or “dormant” equity investments. Subsidies from the national tax base include:

- Subsidies to local or national water operators.
- Subsidies to infrastructure owners.

Transfers include any contributions from foreign donors. They include:

- EU subsidies.
- Official development assistance (ODA).
- Philanthropic donations.

### Sweden

Full cost recovery meaning that all expenses are covered by tariffs.

Nearly no subsidies at all. Exemptions, a few smaller municipalities, which choose to subsidise the water services over the municipal budget.

No transfers.
4. Quantification of financial flows and aggregation of data

Norway and Serbia have delivered information from the utility level from the City of Oslo and Naissus Nis, respectively.

In the City of Oslo, all income originated from the tariffs in the years 2009-2014.

Graph 1: City of Oslo, Agency for Water and Wastewater Services, total tariffs year 2009 – 2014.

In Naissus Nis the main part of the income (80-90 %) comes from the tariffs in the years 2010-2014. The remaining part of the income comes from subventions from local government.

Graph 2: 3T presentation – Case study PUC "Naissus" Niš

Denmark and the Netherlands has presented income on national level. In Denmark all income in the years 2009-2014 comes from tariffs. In the Netherlands all income in the years 2011-2015 comes from tariffs and taxes.

In Denmark, 30 % of the water tariff and 10 % of the wastewater tariff is fixed. As to the Netherlands, 45 % of the drinking water tariff is fixed. For wastewater, the tax is completely variable.
**Graph 3: Development of revenues from tariffs in Denmark**

**Graph 4: Development of revenues and revenue structure in the Netherlands**
5. Concluding remarks

The information gathered showed a wide variety in the way the water and the wastewater sector are organized and financed in Europe.

It is also clear from the data received that full cost recovery is not in use in some countries and this increases the risk of underfunding of the industry and an ongoing lack of investment in asset maintenance and renewal. The result of such underinvestment will, inevitably, impact on the level of service and the long term viability of the service.

The cost recovery model also needs to have regard to the higher cost per capita of providing water services to dispersed rural populations, compared to urban centres.

About EurEau

EurEau is the voice of Europe’s water sector. We represent drinking water and waste water operators from 29 countries in Europe, from both the private and the public sectors.

Our members are 32 national associations of water services. At EurEau, we bring national water professionals together to agree European water sector positions regarding the management of water quality, resource efficiency and access to water for Europe’s citizens and businesses. The EurEau secretariat is based in Brussels.

With a direct employment of around 476,000 people, the European water sector makes a significant contribution to the European economy.