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From vision to action



Implementation of the Water Quality Legal Framework in Portugal

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Short summary

The implementation in Portugal of the drinking water quality legal framework 20 years ago could only guarantee 50% of safe water, which meant that the other 50% were not controlled or were not complying with the national standards. After a decade, the levels of safe water increased to 84%.

However Portugal was very far from the 99% of safe water internationally considered as the level of excellent drinking water quality. Pursuing this goal, a new regulatory model for drinking water quality was established taking into account the European Drinking Water Directive 98/83/CE and, 10 years after its implementation, the safe water is now on 98%. Meanwhile, new tools, like water safety plans approach, are being implemented to reach the 99%. It is important to highlight that one of the decisions that made a difference in this evolution was the creation of an independent regulatory framework for the water sector (ERSAR).

Issues addressed:

WASH (inequalities, schools, health centres, refugee camps, women and girls)

Drinking-water quality at the consumer's tap:

In the beginning of the 90's in the 20th century, Portugal had a tap water with 50% of safety with great disparities between the big cities and the smaller ones, between urban and rural areas, between coastal and inland areas.

Before the transposition of the European Drinking Water Directive 98/83/EC, the drinking water regulations were a part of a law that included all the urban cycle of water (water sources, drinking water and wastewater) as well as the other different water uses (drinking water, bathing waters and water for agriculture and fish production). This legal framework allowed us to improve from 50 to 84% of safe water, which is a major improvement but not enough.

In what concerns to drinking water, this legal framework spread the competences in several public entities, especially of the Environment and Health Ministries. That situation created some difficulties in the independent surveillance, because it was difficult to achieve a good level of coordination.

Something has to be done to improve the safety of the drinking-water and at the same time to reduce the existent inequalities.

Water quality (pollution, dumping of toxic materials, wastewater management, recycling, reuse, restore ecosystems and aquifers)

Pesticides control in tap water: In the last ten years the pesticides controlled in the tap water are a result of an integrated risk analysis to look for the substances that can be present in the water accordingly to the agricultural practices. Before this strategy, the water suppliers were searching for the same pesticides from north to south of Portugal not taking into account all the variables that affect the presence of pesticides (p.e., agricultural practices, time of the year, type of water source,...)

Risks (mortality, economic losses caused by natural and human-induced disasters)

Health risks related to the consumption of the tap water: Accordingly to Portuguese law every drinking water supplier has 24 hours to communicate any non-compliance using the ERSAR Portal tool, making possible the immediate evaluation by ERSAR and health authorities.

Besides the non-compliance, the drinking water supplier also has to register the causes, the remedial actions and the results of verification analyses to evaluate the efficacy of remedial actions.

With this strategy, it is possible in a very short time to efficiently correct the non-compliances and therefore improve the drinking water quality.

Tools for implementation

Governance: Institutions / legal framework: When transposing the European directive 98/83/EC to the Portuguese law (Decreto-Lei n.º 306/2007, of August 27th), one of the first changes was to focus the coordination and surveillance of this new regulation in one entity - The Water and Waste Services Regulation Authority (ERSAR). So the need of making a new law with the obligation of transposing the European Drinking Water Directive gave the chance to modify the Portuguese drinking water regulatory model trying to obtain a good level of efficacy and efficiency in regulation compliance.

When transposing this European directive to the Portuguese law, one of the first changes was to focus the coordination and surveillance of this new regulation in one entity - The Water and Waste Services Regulation Authority (ERSAR).

It was also decided that were the drinking water suppliers responsible to make the official drinking water quality control, besides the usual operational monitoring. ERSAR, as the drinking water national authority, had to create and implement the mechanisms and tools to make sure everyone was complying with the new regulations. This was done enforcing all the drinking water suppliers to

prepare a Drinking Water Quality Control Plan (DWQCP) that must be approved by ERSAR to assure that all the legal requirements are fulfilled on an annual basis.

Another important aspect that was changed in comparison with the previous legislation was making ERSAR responsible of the legal requirements compliance inspection. With this competence it will be possible to create a team of inspectors to verify in loco if everyone was implementing the DWQCP approved by ERSAR.

The reliability of the drinking water quality control data was also a subject to take in consideration and the strategy followed was to give ERSAR the competence of controlling the laboratories technical ability to analyse drinking water.

Considering that ERSAR is related to environment, it was also necessary to clarify the role of the health authorities. In this way, this new legislation stated that the health authorities should make the sanitary surveillance as a complement of the drinking water operators operational monitoring and official quality control. The health authorities are also in charge of making the risk analysis of the non-compliances, which means to define if there are any risks for the protection of the human health and what are the procedures to minimize or eliminate these risks.

Who is involved?: To increase the quality level of the tap water in Portugal and to reduce the disparities between large and small cities, urban and rural areas, coastal and inland areas. As a consequence of this, to increase the human health protection and making tap water, not only safe, but also healthy.

What were the objectives of the intervention?:

- Great number of water utilities (around 400) with very different levels of development and resources (human, technical and financial).
- Great diversity in water utilities size from 52 to about 500 000 inhabitants supplied.
- With the incoming of a new stakeholder (ERSAR as the regulator), it was a major challenge to gain the trust and confidence of all the other stakeholders.
- Achieving a good level of coordination between all the stakeholders.

Implementation challenges?:

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Main task/activities undertaken / Tools used:

- Regulatory model with three pillars: structural regulation (helping pro-actively to set the rules for the water sector), behaviour regulation (checking and benchmarking the water utilities) and auxiliary regulatory activities (capacity building with workshops, seminars, technical guidance).
- Stakeholder engagement (p.e. with their inclusion in working groups for subjects of their own interest).
- Development of a web based system (Portal ERSAR) to communicate with the water suppliers.

- Create a team of specialized people with different professional backgrounds (laboratories, water treatment and drinking water companies) to develop and implement the new drinking water quality regulatory cycle

Main outcomes / impacts (what has changed?):

- The drinking water quality improved.
- Strong cooperation between the different stakeholders.
- Working procedures between regulator and the stakeholders has a very high level of coordination.
- Everyone knows what it is their role in the drinking water regulatory model.

Lessons Learned

Triggers:

- New European legislation
- National strategic plans for the water sector (PEAASAR I, PEAASAR II e PENSAAR)

Drivers:

- Political will for independent regulation
- International networking

Barriers: The disparities between the water suppliers in size, number, knowledge and amount of resources (human, technical and financial).

What has worked well?: The stakeholder engagement; the awareness of the independent regulation importance and benefits.

What can be improved?: There are still some aspects to improve, namely in the internal procedures of the water utilities (operational monitoring), the legal framework needs an upgrade to include the risk assessment/risk management approach and as a result of this more technical information for the implementation is needed.

The way forward: The future is in short term the water safety planning approach and the implementation of a national approval scheme for products in contact with drinking water. In the long term we have to learn how to deal with the emerging substances (water safety planning approach) and with the resilience of the water systems. We must also have to guarantee the human rights to safe water and sanitation when we build a regulatory model.

Links:

www.ersar.pt