

# Safe water

## Drinking and wastewater committee rides new wave



Photo: P. Granier/ISO

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The late 1990s saw the creation of ISO technical committee ISO/TC 224, *Service activities relating to drinking water supply systems and wastewater systems*. Originally established to address drinking water and wastewater services, the scope has now expanded to address other pressing water management issues.

### Managing utilities

Since its creation, the goal of ISO/TC 224 was to provide guidelines for the management and assessment of service activities carried out by water and wastewater utilities and not to develop elaborate technical standards or to facilitate certification.

The result of its work are three core ISO standards published in 2007, providing tangible guidelines for all relevant authorities, governing bodies, operators and other stakeholders. Developed by experts from more than 24 countries, with many years of combined experience in water supply and wastewater management, the standards address:

- Assessment and improvement of service to users (ISO 24510)
- Wastewater services (ISO 24511)
- Drinking water services (ISO 24512).

The three standards in the series were conceived with a broad global application in mind. Their guidelines are, therefore, relevant to industrial, developing and emerging economies. They are applicable to countries with abundant water resources as well as those with scarce supplies. The framework of these guidelines allows for the selection of appropriate measures for any situation, explicitly including the plan – do – check – act cycle.

### Unlike other infrastructure

ISO 24510, ISO 24511 and ISO 24512 state explicitly that the standards should not be used for certification. Why? Management for drinking water and wastewater infrastructure must be undertaken according to very unique criteria, differing fundamentally from those for other kinds of infrastructure because:

- Drinking water is a basic and non-substitutable commodity necessary for life
- Safe drinking water is crucial for human health
- Safe handling, transport, treatment and disposal or recycling of wastewater is fundamentally important for public health
- As a public asset, water must be managed sustainably to meet quality requirements
- Water supply and wastewater systems are generally underground and not readily available for inspection as are other kinds of infrastructure



Pipeline renovation using close-fit technology.  
Photo: Roland Rohrhofer

- Most of this infrastructure has an operating life of 10 to 30 years, and may remain in use for up to a century.

The certification of management activities for these utilities is therefore not a solution for the governing bodies and operators who must find appropriate answers for their specific systems. Certification similar to ISO 9001 or ISO 14001 can only verify that a utility has taken management issues into consideration, but can never confirm that the utility has a functioning asset or actual management capability.



Pipeline renovation using curing-in-place technology. Photo: Roland Rohrhofer.

## New ventures

In 2006, ISO/TC 224 recognized that there was a need to deal with both asset management and crisis management. Incidents such as natural disasters, accidents or intentional disruptions affecting water and wastewater systems can result in serious health threats and have enormous economic implications.

It is therefore necessary to effectively address safety and security issues arising from both technological and non-technological causes. Following intensive discussions, the work of ISO/TC 224 was extended beyond service activities to also address security matters.

The future ISO standards on asset management and crisis management, which are now being developed by the committee, will be in many ways similar to ISO 24510, ISO 24511 and ISO 24512. The standards will provide guidelines

on appropriate solutions, and on how such management structures could be developed, and will not be applicable to certification. ■

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