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**Activities relating to drinking water  
and wastewater services — Crisis  
management of water utilities**

*Activités relatives aux services de l'eau potable et de  
l'assainissement — Gestion de crise des services publics de l'eau*





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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 224, *Service activities relating to drinking water supply systems and wastewater systems — Quality criteria of the service and performance indicators*.

## Introduction

Water is the source of life, without which humans, as well as other species, cannot survive. In many countries, there is a lack of knowledge regarding the crisis management of drinking water and wastewater services.

Impairment of the drinking water service would change the quality of life of the affected population in the immediate period while in the medium-term period it could affect their ability to survive; therefore, the continuous and orderly supply of drinking water is of paramount importance for the population. On the other hand, the collection and safe disposal of sanitary wastewater and drainage storm-water is also important if epidemics and general poisoning by contamination as well as urban inundation are to be prevented and in order to protect the environment.

This guideline describes the fundamentals of a crisis management system, including relevant recommendations for water utilities.

This guideline deals with situations where the normal supply of potable water or collection and treatment of wastewater are interrupted because of a crisis situation. It enumerates steps that should be taken in preparing the organization for a crisis situation (pre-crisis phase). It then provides general International Standards as to how a crisis should be dealt with (the crisis phase). Guidelines on re-establishing services (post-crisis phase) and on drawing conclusions and revising procedures for future events follow.

This guideline follows the Plan-Do-Check-Act (PDCA) approach to crisis management. This is a continuous process of ascertaining whether any organization has at its disposal the means for responding successfully to any crisis.

The approach of an organization when preparing for any crisis should encompass all pertinent aspects of water supply and the collection and treatment of wastewater. The organization needs to cooperate with all relevant authorities concerned with the crisis. Efficient crisis management should ensure that the actions taken before, during, and after the crisis should consider the natural environment as well as the impact on the health and wellbeing of the population. Effective communications with the public are necessary to mitigate or prevent panic and to establish trust in the organization by disclosing important information appropriately in the area affected by a crisis or in neighbouring areas.

This International Standard is complemented with an International Standard named "*Activities relating to drinking water and wastewater services — Crisis management of water utilities — Good practice for technical aspects*" to be published.

The objective of this International Standard is not to lay down systems or specifications supporting direct certification of conformity, but to provide International Standards for crisis management in water utilities. The use of this International Standard is voluntary in accordance with rules.

# Activities relating to drinking water and wastewater services — Crisis management of water utilities

## 1 Scope

This International Standard provides general guidance to water utilities to develop and implement a crisis management system.

This International Standard may be applicable to all sizes of public or private water utilities that want to prepare, respond, and recover from a crisis.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 24510, *Activities relating to drinking water and wastewater services — Guidelines for the assessment and for the improvement of the service to users*

ISO 24511, *Activities relating to drinking water and wastewater services — Guidelines for the management of wastewater utilities and for the assessment of wastewater services*

ISO 24512, *Activities relating to drinking water and wastewater services — Guidelines for the management of drinking water utilities and for the assessment of drinking water services*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 24510, ISO 24511, ISO 24512 and the following apply.

NOTE Where there are conflicting terms and definitions, the terms and definitions given in this International Standard should be used.

### 3.1 Terms relating to “plan”

#### 3.1.1

##### **organization**

person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its *objectives* (3.1.6)

Note 1 to entry: The concept of organization includes, but is not limited to sole-trader, company, corporation, firm, enterprise, authority, partnership, charity or institution, or part or combination thereof, whether incorporated or not, public or private.

Note 2 to entry: For the purposes of this International Standard the organization will usually be a water utility.

#### 3.1.2

##### **interested party**

stakeholder

person or *organization* (3.1.1) that can affect, be affected by, or perceive themselves to be affected by a decision or activity