

# **Security of drinking water supply - Guidelines for risk and crisis management - Part 1: Crisis management**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15975-1:2011 sisaldab Euroopa standardi EN 15975-1:2011 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.03.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 16.03.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 15975-1:2011 consists of the English text of the European standard EN 15975-1:2011.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.03.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 16.03.2011.

The standard is available from Estonian standardisation organisation.

ICS 13.060.20

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English Version

Security of drinking water supply - Guidelines for risk and crisis  
management - Part 1: Crisis management

Sécurité de l'alimentation en eau potable - Lignes  
directrices pour la gestion de risque et de crise - Partie 1:  
Gestion de crise

Sicherheit der Trinkwasserversorgung - Leitlinien für das  
Risiko- und Krisenmanagement - Teil 1:  
Krisenmanagement

This European Standard was approved by CEN on 12 February 2011.

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## Foreword

This document (EN 15975-1:2011) has been prepared by Technical Committee CEN/TC 164 "Water supply", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by September 2011.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

The second part of the guidelines for risk and crisis management will describe risk management procedures to ensure a stable and secure drinking water supply.

The elaboration of this European Standard has been financially supported by the EC and the CIPS Program (Grant Agreement JLS/2008/CIPS/AG/CEN-002).

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## Introduction

This guideline has been developed by Working Group 15 "Security of drinking water" of CEN/TC 164 "Water supply". This guideline describes the fundamentals of crisis management, including relevant recommendations for drinking water suppliers, and offers examples drawn from disaster and crisis management organisations within the relevant contributing national authorities.

Drinking water suppliers should have at their disposal appropriate equipment, sufficiently qualified personnel and reliable quality assurance measures. They should be organised in such a way as to ensure their services are provided in a safe, reliable, environmentally friendly and economical manner under normal supply conditions. The existence of an effective and efficient risk management system will support any organisation's crisis management process. Guidelines on risk management regarding the security of drinking water supply exist in a separate document (prEN 15975-2) in development.

Extremely rarely however, certain situations occur that drinking water suppliers may not be able to control without significant third-party assistance and the involvement of the relevant authorities. These situations are difficult to forecast and, therefore, impossible to make detailed provisions for. They are characterised by an absence of, or the presence of ambiguous, information and high risk with severe potential consequences. The situation's degree of complexity due to the involvement and interaction of different players and its high degree of intrinsic dynamics make it difficult to control. Key personnel involved may suffer from a high degree of pressure regarding decision-making, time and justification requirements while having at their disposal only a limited number of resources. Internal and external communications may work unsatisfactorily or not at all.

Decisions need to take appropriate account of the specific circumstances of the crisis and the key objectives for restoration of normal water supply services. These guidelines have been developed by CEN to support that aim.

The objectives of these guidelines are to enable the drinking water supplier to take action in the event of a crisis in order to ensure the continued supply of water to the greatest possible extent and to restore normal operating conditions as quickly as possible. The management tools required to achieve these objectives are explained in this standard. Basic steps of the workflow described in this standard (see Figure 3) may also be used during normal operations that have the potential to become a crisis.

Across Europe there are many different ways to organise drinking water supply. The responsibility for crisis management may differ depending on legislation and organisational structures. In this document the term "drinking water supplier" is used to reflect all the different organisational structures. Member States may choose to specify these structures in more detail. National legislation may impose definitions that differ from the ones defined in this standard. In this case the necessary adaptations should be made in the application of this standard.

## 1 Scope

This European Standard describes good practice principles of drinking water supply management in the event of a crisis, including preparatory and follow-up measures.

## 2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 2.1 crisis

event or situation with the potential to seriously affect a drinking water supplier that may require other organisational structures and possibly more than the usual means of operation to respond to an emergency

### 2.2 crisis management

special kind of organisational capability designed to guide a drinking water supplier through a crisis, outside the organisation of normal operations

NOTE Such capability also includes the organisation of preparatory and follow-up structural and process activities.

### 2.3 disaster

situation where widespread human, material, economic or environmental losses have occurred that exceeded the ability of the affected organisation, community or society to cope using its own resources

### 2.4 emergency

sudden, urgent, usually unexpected incident or circumstance that is highly likely to or will cause grave damage to persons or assets or considerably impair the supply of drinking water and that requires immediate action frequently involving the relevant authorities (e.g. police, public health officials, and local authorities)

### 2.5 incident

deviation from normal operating conditions

NOTE An incident is characterised by its cause, the extent and the consequences of the deviation.

### 2.6 hazard

potential source of biological, chemical, physical or radiological impairment of the water supply system

NOTE Each organisation should determine the maximum credible hazard (the 'Design Basis Hazard') that the organisation plans to have a capability to respond to. By definition the organisation is therefore tolerant that its crisis management response to events or circumstances exceeding the Design Basis Hazard may be inadequate.

### 2.7 normal operation

general term describing all water supply-related operating conditions and processes including failures that can be controlled by the normal means of operation and/or organisation structures selected by the water supplier

### 2.8 risk (of hazard)

combination of the likelihood of a hazardous event and the impact of that event on the integrity of the drinking water supply system and on related stakeholders