SLOVENSKI STANDARD
SIST EN 15975-1:2011

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Varnost preskrbe s pitno vodo - Smernice za tveganje in krizno vodenje - 1. del: Krizno vodenje

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

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

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

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13.200	Preprečevanje nesreč in katastrof	Accident and disaster control

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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

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

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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of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by September 2011.

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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 chose 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

2.9
residual risk
tolerated risk with current control measures

3 Fundamentals of crisis management

3.1 Establishing the context

3.1.1 Legal basis in the event of crises

In the event of a crisis, a fundamental aim in the operation of water supply systems should be to remain compliant with the national regulations that apply in normal circumstances.

In the presence of a public health hazard, the responsible national health authorities are entitled to conduct investigations on the basis of national regulations to avert the danger. If rapid and/or coordinated action is required, the relevant authorities may have power to intervene in order to avert danger or to improve the effectiveness of response.

Beyond that, special regulations stipulating additional requirements and empowering the state to intervene may apply in the event of disaster or war.

Some Member States governments can have defined levels of threat that can influence the response of the drinking water supplier.

3.1.2 Cooperation between water utilities and the relevant authorities in the event of a crisis

The interaction between a drinking water supplier and the relevant authorities should be guided by the regulations applying to normal operating conditions until the relevant authorities declare a crisis/disaster. This applies even if the drinking water supplier has already itself declared a state of crisis and alerted its crisis management team.

As soon as the competent authority establishes a state of crisis/disaster, the drinking water supplier and the authority in question should get organised jointly in accordance with the pertinent statutes and/or regulations.

Like all other crisis management measures, the above-mentioned activities should be prepared well in advance of a crisis. This ensures that in the event of a crisis all concerned already know each other and are mutually informed about each other's structures and processes as well as about the means and channels of communication. A request for cooperation may be initiated either by the authorities or by the drinking water supplier.

The early integration of crisis management team members/technical consultants from drinking water suppliers into the relevant authorities' crisis management system is intended to

— exchange necessary information at an early point in time,

— provide the authorities with expert knowledge, and

— enable the drinking water supplier to influence decisions and measures to avoid or mitigate risks in acute situations.

At a national level, this guideline might be combined with information about the drinking water supplier or the national crisis management arrangements.

The drinking water supplier should create the prerequisites for the integration of drinking water supplier employees as crisis management team members/technical consultants from drinking water suppliers into the crisis management team of the relevant authorities and, consequently, their involvement in the crisis management processes of the competent authorities as shown in Figure 1. This integration can be implemented either by telephone or by dispatching liaison officers. If the drinking water supplier dispatches a suitable employee to the administrative committee, exchange of information with this employee should be ensured.

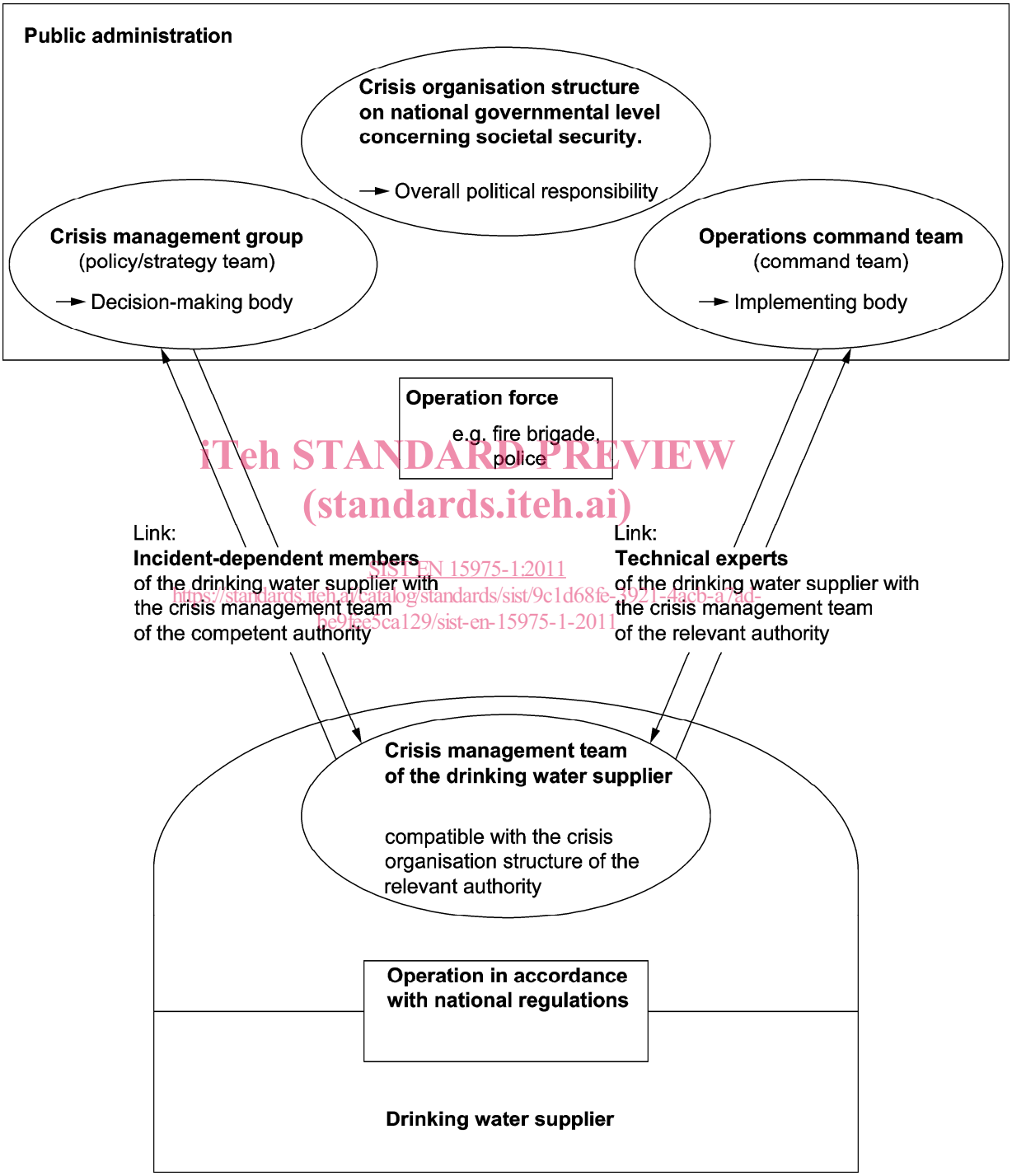


Figure 1 — Example of a cooperation structure of the crisis organizations of a drinking water supplier and the competent authorities

3.1.3 Regulatory, contractual, and environmental aspects

The drinking water supplier should know and respect all relevant national regulations concerning crisis/disaster situations.

The drinking water supplier should determine if there is a need to make provision for additional dependable contractual support. If applicable, a crisis management system may be organised jointly with third-party suppliers; multi-segment organisations may also outsource it to a suitable organisation unit, always unambiguously assigning all responsibilities.

The drinking water supplier should always respect the local environmental situation.

3.1.4 Consideration of size and structure of a drinking water supplier

The general conditions prevailing at a drinking water supplier (e.g. company size, potential freedom of action regarding logistics in the event of a crisis) should be considered when designing the organisation and employee structures as well as the infrastructure for a crisis management capability.

It is recommended that for very small local suppliers it should be ensured that they can rely on the support of other competent official organisational units in the event of a crisis.

3.1.5 Link to risk assessment

Public health, technical and commercial risks exist at all water utilities and should be suitably managed. Risk management is used for systematically dealing with the risks. A standardised method for risk management enables managers to look at the whole range of risks at water utilities (e.g. caused by natural hazards, technical failure, or malicious threats) on a comparable basis with each other. With a risk-based and process-oriented approach the management risks at the drinking water supplier can be systematically determined, evaluated and controlled.

However, a residual level of risk will usually remain (unless the hazard is terminated). This is because it may be impractical to treat, terminate or transfer all risks. In addition, those measures upon which reliance is placed to control hazards may fail. For these reasons a crisis management system is needed. Crisis management is a management system with a special structure and process organisation especially designed for the exceptional circumstances of crisis. Examples of this kind of special capability are evident in the general structure of military staffs, and are also found in the police, fire brigade and other emergency protection authorities, security and relief organisations.

3.2 Definition of objectives

The primary goal of drinking water suppliers should be to handle a crisis situation potentially affecting drinking water supply in an organised way focussing on the ongoing provision of drinking water in accordance with established statutes and/or regulations.

Therefore drinking water suppliers should

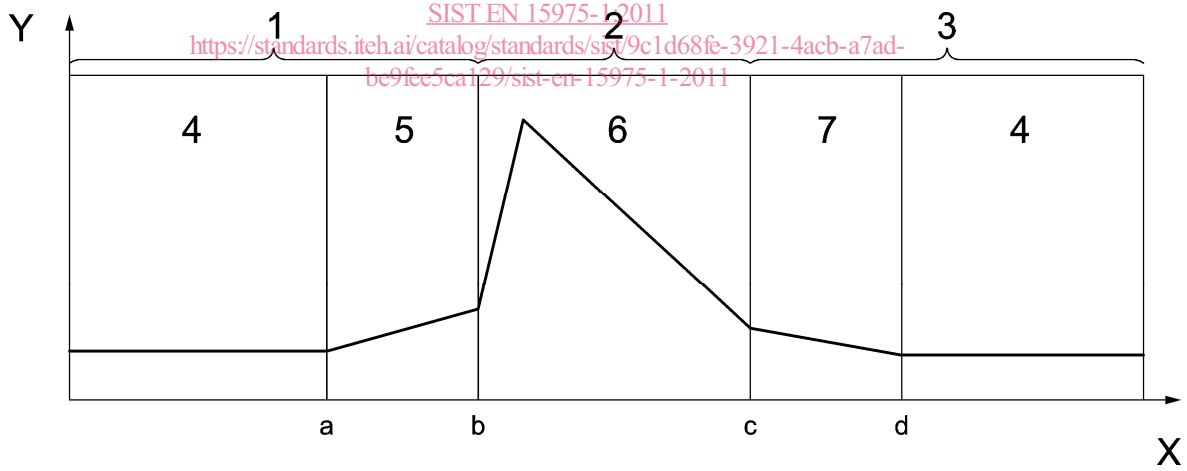
— define their objectives based on the relevant national laws, regulations and permits, and

— develop an individual crisis management plan by appropriate interpretation of these guidelines.

3.3 Phases and elements of crisis management

Crisis management is a process that can be subdivided into the following phases and elements (see also Figure 2):

— Preparatory crisis management:	- normal operations: including, among other things, structural preparation and training
	- Phase I: transition from incident management to crisis management and preparation for crisis operations (preparation of operations)
— Operative crisis management:	- Phase II: marked by declaring a state of crisis and convening the crisis management team; comprises intensely pursued crisis control activities. This phase terminates when the end of a crisis is declared and the crisis management team stands down
— Follow-up crisis management:	- Phase III: a progressive resumption of normal operations takes place (this may include a continuation of the incident below the trigger level for a crisis)
	- Normal operations: includes, among other things, a de-briefing of and follow-up on what has been learned, preparation for future crises, additional training etc.



Key

X	time
Y	activity
1	preparatory crises management
2	operative crises management
3	follow-up crises management
4	normal operations
5	phase I
6	phase II
7	phase III
a	ascertaining the failure
b	declaring a state of crisis
c	declaring the end of a crisis
d	changeover to routine operations

Figure 2 — Management activities over the course of a crisis