

Deutscher Verein des Gas- und Wasserfaches e.V.



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Technical Rule – Standard **DVGW W 1003 (A)** June 2022

Resilience and Security of Drinking Water Supply

Resilienz und Versorgungssicherheit in der öffentlichen Wasserversorgung

WATER

The DVGW is the technical and scientific association of gas and water engineers and comprises approximately 14,000 members. For 160 years, the DVGW has been setting the technical standards for the safe, secure and reliable supply of gas and water, actively initiating the exchange of ideas and information in the gas and water sectors and encouraging and promoting on-going progress in the sectors through practical guidance.

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Foreword

This Standard has been prepared by a joint project group of the DVGW Steering Committee on "Water management/water quality" and "Water supply systems". It serves as a guide to describing, analysing, and assessing the resilience and security of supply in a water supply area.

The public supply of water is a key service of general interest that has to be provided by municipal utilities and forms part of the critical infrastructure. The main objective of water utilities is to secure the reliable, secure supply of wholesome, hygienically safe drinking water in sufficient quantities and at adequate pressure to the general public and other consumers. This requirement necessitates securing, on a permanent basis, the necessary resources, the quality of the drinking water, the proper functioning of the technical facilities and the qualification of all personnel involved in the supply of water.

The Drinking Water Ordinance sets out as a minimum requirement, that drinking water supply systems shall be designed, built, and operated having regard to the generally recognised codes of practice. In this context, the DVGW Technical Rules define the guiding principles designed to ensure the reliable, secure, and hygienically safe supply of water to the general public. The achievement of the supply targets must be reliably guaranteed in terms of quantity, pressure, and quality, even under exceptional circumstances like, for instance, a key plant component failure. Assessments shall be based on a risk analysis in accordance with DIN EN 15975-2 in combination with DVGW W 1001 (M).

The publication of this Standard marks the first time that the DVGW has defined an integral technical rule that applies to the security of water supply, with a focus on normal operating conditions. The following general principle shall nevertheless be generally observed, especially in respect of security of supply: Whatever does not work in normal operation, will also not work during a crisis event.