



## Executive summary

### Introduction

Monitoring and control technologies are indispensable for the production of safe drinking water. They allow for the surveillance of source water and treatment processes, which are permanently controlled, so a high quality of finished water can be safeguarded. Data produced by analytical techniques (evaluated in "Monitoring and control of drinking water quality", Techneau deliverable 3.1.3) need to be handled and analyzed by software packages. This deliverable gives a short overview of available data handling software and evaluation of software packages that have been developed by Techneau partners.

### Importance

The major objective of WA 3 is to provide a set of analytical techniques and methods to ensure the provision of safe high quality drinking water that has the trust of the consumers. In WP 3.1 existing monitoring technologies are evaluated according to their suitability for application in controlling water quality in the whole drinking water production process. Evaluation criteria include criteria like ease-of-use, robustness, maintenance, and costs.

### Approach

Basic principles in evaluation of complex data are discussed. Commercially available general statistical software packages are described, but not discussed in detail. A more extensive evaluation of software packages optimized for dealing with analytical results, and with data from online sensors in particular, was performed. The packages are described and evaluated against the criteria robustness, ease of use, interoperability and costs.

### Result

Many different approaches are available, especially for statistical data evaluation. Most statistical software packages are very powerful, but only suited for use by highly skilled personnel. More user friendly software tools are offered by instrument manufacturers, such as the Techneau partners involved in this project. These tools are often focussed on the instruments provided by the manufacturer, but they also offer interfaces to databases or text files. Thus they can be used for data analysis, detection of changes in water quality, classification of water types etc. In addition, these systems can operate with external data, and are generally provided with a graphical user interface which makes them suited for use by waterworks personnel.

### More information

**Techneau Report:** Concepts for Data Evaluation (Deliverable 3.1.4).

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