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**Water quality — Sampling —**

Part 1:

**Guidance on the design of sampling  
programmes and sampling techniques**

*Qualité de l'eau — Échantillonnage —*

*Partie 1: Lignes directrices pour la conception des programmes et des  
techniques d'échantillonnage*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 5667-1 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 6, *Sampling (general methods)*, and by Technical Committee CEN/TC 230, *Water analysis*, in collaboration.

Within ISO, this second edition cancels and replaces the first edition of ISO 5667-1:1980, ISO 5667-1:1980/Cor.1:1996 and the second edition of ISO 5667-2:1991, which have been technically revised. Within CEN, this document supersedes EN 25667-1:1993 and EN 25667-2:1993.

ISO 5667 consists of the following parts, under the general title *Water quality — Sampling*:

- *Part 1: Guidance on the design of sampling programmes and sampling techniques*
- *Part 3: Guidance on the preservation and handling of water samples*
- *Part 4: Guidance on sampling from lakes, natural and man-made*
- *Part 5: Guidance on sampling of drinking water from treatment works and piped distribution systems*
- *Part 6: Guidance on sampling of rivers and streams*
- *Part 7: Guidance on sampling of water and steam in boiler plants*
- *Part 8: Guidance on the sampling of wet deposition*
- *Part 9: Guidance on sampling from marine waters*
- *Part 10: Guidance on sampling of waste waters*
- *Part 11: Guidance on sampling of groundwaters*
- *Part 12: Guidance on sampling of bottom sediments*
- *Part 13: Guidance on sampling of sludges from sewage and water treatment works*
- *Part 14: Guidance on quality assurance of environmental water sampling and handling*
- *Part 15: Guidance on preservation and handling of sludge and sediment samples*

- *Part 16: Guidance on biotesting of samples*
- *Part 17: Guidance on sampling of suspended sediments*
- *Part 18: Guidance on sampling of groundwater at contaminated sites*
- *Part 19: Guidance on sampling of marine sediments*
- *Part 20: Guidance on the use of sampling data for decision making — Compliance with thresholds and classification systems*

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# Water quality — Sampling —

## Part 1:

## Guidance on the design of sampling programmes and sampling techniques

### 1 Scope

This part of ISO 5667 sets out the general principles for, and provides guidance on, the design of sampling programmes and sampling techniques for all aspects of sampling of water (including waste waters, sludges, effluents and bottom deposits).

It does not include detailed instructions for specific sampling situations, which are covered in the various other parts of ISO 5667. Also, it does not include microbiological sampling, which is covered in ISO 19458 <sup>[23]</sup>.

### 2 Normative references

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

ISO 6107-1, *Water quality — Vocabulary — Part 1*

ISO 6107-2, *Water quality — Vocabulary — Part 2*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6107-1, ISO 6107-2 and the following apply.

#### 3.1

##### **periodic sampling**

process of taking samples at fixed intervals which can be time-, volume- or flow-dependent

#### 3.2

##### **area profile sampling**

process of taking samples at chosen locations in a specific area while keeping other parameters (e.g. time, depth) as constant as possible

#### 3.3

##### **depth profile sampling**

process of taking samples at chosen depths at a specific location while keeping other parameters (e.g. time, flow) as constant as possible