Vee kvaliteet
Proovivõtt
Osa 6: Proovide võtmise juhend jõgedest ja vooluveekogudest

Water quality
Sampling
Part 6: Guidance on sampling of rivers and streams

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-ISO 5667-6:2010 “Vee kvaliteet. Proovivõtmine. Osa 6: Proovide võtmise juhend jõgedest ja vooluveekogudest” sisaldab rahvusvahelise standardi ISO 5667-6:2005 “Water quality. Sampling. Part 6: Guidance on sampling of rivers and streams” identset ingliskeelset teksti.	This Estonian Standard EVS-ISO 5667-6:2010 consists of the identical English text of the International Standard ISO 5667-6:2005 “Water quality. Sampling. Part 6: Guidance on sampling of rivers and streams”.
Standard EVS-ISO 5667-6:2010 on kinnitatud Eesti Standardikeskuse 02.08.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teataja 2010. aasta septembrikuu numbris.	This standard is ratified with the order of Estonian Centre for Standardisation dated 02.08.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from Estonian Centre for Standardisation.

Käsitlusala

Käesolev ISO 5667 osa määratleb põhimõtted, mis rakenduvad jõgede ja vooluveekogude proovivõtukavade väljatöötamisele, proovikogumistehnikale ja proovide käsitlemisele vee füüsikaliseks ja keemiliseks hindamiseks.

See ei ole rakendatav proovide võtmiseks suudmealal või rannikuvetes ning on piiratud rakendatavusega mikrobioloogiliseks proovivõtuks.

MÄRKUS Mikrobioloogilised proovivõtumeetodid on esitatud standardis ISO 19458.

Käesolev ISO 5667 osa ei ole rakendatav setete, hõljuvainete või elustiku uurimiseks.

Kui looduslikud või tehislikud tammid põhjustavad mitmeid päevi või rohkem vee kinnihoidmist või säilitamist, võib olla parem proovivõtu eesmärgil käsitleda jõe või vooluveekogu paisutatud osa seisva veekoguna. Sellistel juhtudel annab juhiseid proovivõtuks ISO 5667-4.

HOIATUS — Käesoleva ISO 5667 osa tähelepanu keskmes on veeproovide võtmine ja nende terviklikkus. Selliste proovide võtmine võib olla ohtlik ning seepärast juhitakse tähelepanu seadusandlike nõuete olemasolule mõnedes riikides töötajate ohutuse tagamiseks.

ICS 13.060.10 Loodusliku vee kvaliteet, **13.060.45** Vee uurimise üldküsimused

Contents

Page

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 5667-6 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 6, *Sampling (general methods)*.

This second edition cancels and replaces the first edition (ISO 5667-6:1990), which has been technically revised.

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

— *Part 1: Guidance on the design of sampling programmes* [1)]

— *Part 2: Guidance on sampling techniques* [1)]

— *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 and water used for food and beverage processing*

— *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*

1) ISO 5667-1 and ISO 5667-2 are currently undergoing joint revision, which will be published as ISO 5667-1.

— *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*

Introduction

An understanding of the purpose of sampling is an essential prerequisite to identifying the principles to be applied to a particular sampling problem. Examples of the purposes of sampling programmes commonly devised for rivers and streams are as follows:

a) to determine the suitability of the water quality of a river or stream within a river basin for a particular use, such as:

   1) a source of drinking water,

   2) for agricultural use (e.g. all types of irrigation, live-stock watering),

   3) for the maintenance and/or development of fisheries,

   4) for amenity use (e.g. aquatic sports and swimming);

b) to assess the impact of human activities on the quality of water, such as:

   1) to study the effects of waste discharge or accidental spillages on a receiving water,

   2) to assess the impact of land use on river or stream quality,

   3) to assess the effect of the accumulation and release of substances including contaminants from bottom deposits on aquatic biota within the water mass, or on bottom deposits,

   4) to study the effects of abstraction, river regulation and river-to-river water transfers on the chemical quality of rivers and their aquatic biota,

   5) to study the effects of river engineering works on water quality (e.g. addition/removal of weirs, changes to channel/bed structure).

Water quality — Sampling —

Part 6:
Guidance on sampling of rivers and streams

1 Scope

This part of ISO 5667 sets out the principles to be applied to the design of sampling programmes, sampling techniques and the handling of water samples from rivers and streams for physical and chemical assessment.

It is not applicable to the sampling of estuarine or coastal waters and has limited applicability to microbiological sampling.

NOTE Procedures for microbiological sampling are given in ISO 19458.

This part of ISO 5667 is not applicable to the examination of sediment, suspended solids or biota.

In cases where naturally occurring or artificially constructed dams result in the retention or storage of water for several days or more, it might be better to consider the stretch of the river or stream as a standing water body for sampling purposes. ISO 5667-4 provides guidance for sampling in these circumstances.

WARNING — The focus of this part of ISO 5667 is the collection and integrity of water samples. The collection of these samples can be hazardous and attention is therefore drawn to the existence in some countries of legislative requirements for the safety of personnel.

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 5667-18:2001, *Water quality — Sampling — Part 18: Guidance on sampling of groundwater at contaminated sites*

ISO 6107-2:1997, *Water quality — Vocabulary — Part 2*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5667-18 and ISO 6107-2 and the following apply.

3.1
automatic sampling
process whereby samples are taken either discretely or continuously, independently of human intervention, and according to a predetermined programme

[ISO 6107-2:1997]