VEE KVALITEET. PROOVIVÕTT. OSA 6: JUHISED JÕGEDEST JA MUUDEST VOOLUVEEKOGUDEST PROOVIDE VÕTMISEKS

Water quality - Sampling - Part 6: Guidance on sampling of rivers and streams (ISO 5667-6:2014)



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 5667-6:2016 sisaldab Euroopa standardi EN ISO 5667-6:2016 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 5667-6:2016 consists of the English text of the European standard EN ISO 5667-6:2016.		
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.		
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 21.09.2016.	Date of Availability of the European standard is 21.09.2016.		
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.		

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 13.060.10, 13.060.45

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2016

EN ISO 5667-6

ICS 13.060.10; 13.060.45

English Version

Water quality - Sampling - Part 6: Guidance on sampling of rivers and streams (ISO 5667-6:2014)

Qualité de l'eau - Échantillonnage - Partie 6: Lignes directrices pour l'échantillonnage des rivières et des cours d'eau (ISO 5667-6:2014) Wasserbeschaffenheit - Probenahme - Teil 6: Anleitung zur Probenahme aus Fließgewässern (ISO 5667-6:2014)

This European Standard was approved by CEN on 30 April 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of ISO 5667-6:2014 has been prepared by Technical Committee ISO/TC 147 "Water quality" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 5667-6:2016 by Technical Committee CEN/TC 230 "Water analysis" the secretariat of which is held by DIN.

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 March 2017, and conflicting national standards shall be withdrawn at the latest by March 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

Please see informative Annex ZA (A-deviation), which is an integral part of this document.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 5667-6:2014 has been approved by CEN as EN ISO 5667-6:2016 without any modification.

Annex ZA (informative)

A-deviation

A-deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN-CENELEC national member.

This European Standard does not fall under any Directive of the EU.

In the relevant CEN-CENELEC countries (Estonia), these A-deviations are valid instead of the provisions of the European Standard until they have been removed.

<u>Clause</u>	<u>Deviation</u>
1	According to the regulation of Estonian Minister of the Environment no 30, 06.05.2002 "Sampling procedure", paragraph 15, only three methods described in the standard, are permitted to use for sampling from surface water in Estonia – discrete sampling, composite sampling or continuous sampling.
6	According to the regulation of Estonian Minister of the Environment no 30, 06.05.2002 "Sampling procedure", paragraph 9, clause 4, temperature for storage and transportation of sample must be between 2 °C-5 °C.
7	According to the regulation of Estonian Minister of the Environment no 30, $06.05.2002$ "Sampling procedure", paragraph 16, clause 3^1 , a sample must be collected from the depth of surface water of 25 cm. If the depth of water in the stream is less than 50 cm, the sample must be collected at a depth of $1/3$.
7.2	According to the regulation of Estonian Minister of the Environment no 30, 06.05.2002 "Sampling procedure", paragraph 14, clause 3, sampling from near the bridges is not recommended. If it is necessary, a sample must be collected from the upstream side of the bridge.

Coı	ntents	Page
Fore	eword	v
Intr	oduction	vii
1	Scope	1
2	Normative references	
3	Terms and definitions	
	Design of sampling programme	
4		
5	Sampling location 5.1 Sampling point selection	
	5.2 Frequency and time of sampling	
6	Preparation for sampling	8
7	Sampling at specific locations	
,	7.1 General	
	7.2 Sampling from bridges	
	7.3 In-stream sampling	
	7.4 Sampling from the bank side	
	7.5 Sampling from craft	
8	Sampling methods	
	8.1 Single, discrete samples	12
	8.2 Sampling from specific depths	
9	Sampling equipment	
,	9.1 Single, discrete samples	13
	9.2 Sampling of surface layers for LNAPL (e.g. oils) or surface films	
	9.3 Devices for sampling from specific depths	14
	9.4 Automatic sampling devices	
	9.5 Other sampling equipment	
10	Taking the sample	15
	10.1 Risk factors 10.2 Arrival on site	
	10.2 Arrival off site 10.3 Rinsing the equipment	
	10.4 Direct sampling	16
	10.5 Indirect sampling using a sampling vessel	16
	10.6 Sampling through ice	17
	10.7 Sampling of surface layers or films	17
	10.8 Sampling by increments	17
	10.10 Labelling	17
11	Stabilization, transport, and storage of samples	
11	11.1 Stabilization	17
	11.2 Transportation	18
	11.3 Security and traceability of samples during storage and delivery	18
12	Quality assurance	18
	12.1 Avoidance of contamination	18
	12.2 Sample identification and records	
	12.3 Assurance and quality control	
13	Reports	
	13.1 Analytical reports	
	10.4 Janiping protocols	∠∪

EVS-EN ISO 5667-6:2016

LVO	214 100 0007 0.2010	
14	Certification, registration, or accreditation	20
15	Safety precautions	
Anno	ex A (informative) Calculation of complete mixing distance	22
Anno	ex B (informative) Example of a report - Sampling from rivers and stre	eams23
Bibli	ography	26
iv	o document is a preview genete.	
iv		© ISO 2014 – All rights reserved

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 or development of fisheries,
 - 4) for amenity use (e.g. aquatic sports and swimming), and
 - 5) for conservation and protection of aquatic life;
- b) to assess the impact of human activities on the quality of water, such as
 - 1) study of the effects of waste discharge or accidental spillages on a receiving water,
 - 2) assessment of the impact of land use on river or stream quality,
 - 3) assessment of the effect of the accumulation and release of substances including contaminants from bottom deposits on aquatic blota within the water mass, or on bottom deposits,
 - 4) study of the effects of abstraction, river regulation, and river-to-river water transfers on the chemical quality of rivers and their aquatic biota, and
 - 5) study of the effects of river engineering works on the water quality (e.g. addition or removal of weirs, changes to channel or bed structure).