# TECHNICAL SPECIFICATION SPÉCIFICATION TECHNIQUE TECHNISCHE SPEZIFIKATION

# **CEN/TS 16080**

November 2013

ICS 35.080; 35.240.99

**English Version** 

### Internet Content and communications filtering software and services

Logiciel et services de filtrage de contenus et communications d'internet

Software und Dienste für Filterung von Internetskommunikation und Internestsinhalt

This Technical Specification (CEN/TS) was approved by CEN on 7 January 2013 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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, Slovakia, Spain, Sweden, Świtzerland, Turkey and United Kingdom. TON S



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

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

© 2013 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. CEN/TS 16080:2013: E

# Contents

## Page

Forewo	Foreword4		
1	Scope	6	
2	Normative references	6	
3	Terms, definitions and abbreviations		
3.1	Terms and definitions		
3.2	Abbreviations	10	
4	Web filter requirements		
4.1	General		
4.2	Requirements		
4.2.1	Level of protection	10	
4.2.2	Configuration		
4.2.3	Request of revision to categorization		
4.2.4	Installation and initial setup		
4.2.5	Monitoring and logging		
4.2.6	Security	12	
4.2.7	Administration	13	
4.2.8	Web filter update		
4.2.9	Web filter upgrade		
4.2.10	License expiration and renewal	14	
4.2.11	Uninstall/removal	14	
4.2.12	Usability	14	
4.2.13	Support		
4.2.14			
4.2.15	User documentation		
4.3	Recommended Functionalities	16	
Annex	A (normative) Potentially harmful URL categories	18	
A.1	General	18	
A.2	Sexually explicit material (pornography)	18	
A.3	Nudity and erotic material		
A.4	Violence and weapons		
A.5	Self harm		
A.6	Racism, discrimination and hate material		
A.7	Drug taking or the promotion of drug use		
A.8	Promotion of criminal activity		
A.9	Gambling		
<b>A</b>	B (normative) Optional URL categories		
B.1	General Social networking services		
B.2			
	C (normative) Web filter testing procedures		
C.1	General		
C.2	Testing platform		
C.3	Reference blocking efficacy URL database and measure		
C.4	Reference overblocking rate URL database and measure		
C.5	Verification procedure		
C.6	Whitelist and blacklist	24	
C.7	Safe search activation		
C.8	Keyword filtering verification	25	

Social networking services filtering verification	
1 General	
2 Administration interaction points	
3 Checklist	
15	
C.	
C.	
0,	
~	
0	
	<b>N</b>
	O'
	- Or
	0,
	-0

### Foreword

This document (CEN/TS 16080:2013) has been prepared by Technical Committee CEN/TC 365 "Internet Filtering", the secretariat of which is held by AENOR.

In view of the increasing use of Internet communication technologies and the impact that these technologies necessarily have on the general public, in January 2004, the European Commission adopted a Communication to combat SPAM which served as a basis for the March 2004 Council Conclusions highlighting the essential role of technical solutions and consumers empowerment.

In addition, the European Parliament and the Council agreed to a multi-annual programme, proposed by the Commission, to promote safer use of the Internet and new online technologies.

The 4-year programme, Safer Internet Plus (2005-2008) aims at combating illegal and harmful content online. The programme has several actions such as awareness campaigns, hot lines, interoperability issues relevant for Internet filtering and benchmarking (SIP-BENCH project).

In view of the increasing awareness and use of filtering software and services, and worried about the lack of objective testing and scarcity of comparatives, ANEC, the association representing consumers in standardization and certification, commissioned a study on "The standards requirements for Internet filtering tools" at the end of 2005. The purpose of this ANEC project was to investigate to what extent unsolicited commercial communications (SPAM) and Internet content filters should be testable and comparable in order to help consumer choice. Performance standards for Internet filtering products and services were identified as helpful in both ensuring product transparency and aiding choice. The protection of consumers (and especially children) was intended to be the main aim of the ANEC work.

CEN BT WG 194 on Internet filtering tools was set up in February 2007, upon request by ANEC, to consult stakeholders on this issue. Participants range from European Commission representatives from DG Information Society and Justice and Home Affairs (JAI) to national standards bodies (BSI, DIN, AFNOR and NEN).

The CEN BT WG 194 met on 14 March 2007; no other meeting was planned.

The Report was finalized after this meeting and endorsed electronically in June 2007. As a way forward, BT/WG 194 proposed the creation of a CEN Task Force (TF) leading to this Technical Specification with the restricted scope of Web filters.

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.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: 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.

T'L

### Introduction

Nearly three quarters of the population of the European Union is now using the Internet. A very large proportion of them use the Internet for the purpose of education, work, communication and commerce. However, even though the Internet is becoming part of everyday life, potentially harmful or illegal material exists on the Internet.

To protect their children and themselves, Internet users are turning towards filtering product and services besides education. However, there is no easy way for Internet users to discover which of these products and services is best suited to their needs or, indeed, whether a filter is effective.

A Technical Specification can help Internet users to make informed choices when selecting filter tools. They shall be able to expect a filter that complies with the standard to perform to a certain level.

The Technical Specification covers issues such as ease of use and installation, as well as filtering performance. This can lead to an increase of confidence of the user in the filter. The users can also be ensured, that they shall be able to install, configure and maintain (update/upgrade) the filter themselves.

#### 1 Scope

The objective of this Technical Specification is to define a set of criteria on how Web filters shall perform and that shall give Internet users more confidence in choosing a suitable product or service in order to help protecting children online.

NOTE A product is a software system that is installed by its administrator or its provider. A service is provided without specific installation by the administrator, but by direct provision of the customer by the provider. An example of a product is a software system installed on a personal computer, and an example of a service is an Internet connection filter provided by an Internet Service Provider and added on the Internet access service.

By using a Web filter that complies with the requirements set out in this Technical Specification, a user can be confident that the product or service:

- a) has been specifically designed to meet the needs of parents and carers (administrators of the filter) to protect children from potentially harmful URLs on the Internet;
- b) has been specifically targeted to minors, and is also suited for individuals looking to protect themselves from potentially harmful URLs on the Internet;
- c) delivers a minimum set of features and efficacy that are sufficient to provide the required level of protection;
- d) comes with clear and comprehensive documentation, installation and implementation instructions and available support;
- e) is reasonably secure, i.e. adopts proven measures to prevent bypassing or removal of the filter itself.

This Technical Specification does not cover the following technologies:

- f) any kind of email filtering, including: antispam filtering, antivirus analysis of emails and attachments, anthiphishing filtering;
- g) other Web filtering for the purpose of enterprise or adult Web usage, including: antivirus analysis of Web content, antiphishing filtering;
- h) the analysis and/or filtering of any other application traffic delivered over HTTP/HTTPS/FTP including for instance: instant messaging, peer to peer file (P2P) sharing, VoIP;
- the analysis and/or filtering of any other application traffic delivered over non HTTP/HTTPS/FTP protocols including for instance: newsgroups, instant messaging, peer to peer file (P2P) sharing, VoIP and social networking applications.

#### 2 Normative references

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

EN ISO/IEC 17025, General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025)