TECHNICAL REPORT

CEN/TR 15738

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

September 2008

ICS 97.100.40; 75.160.20

English Version

Petroleum products - Heating fuels - Need, feasibility and required deliverables for a common European specification

Produits pétroliers - Fioul domestique - Besoin, faisabilité et livrables pour des spécifications européennes communes

Erdölprodukte - Heizöle - Notwendigkeit, Möglichkeit und erforderliche Deliverables für eine allgemeine europäische Spezifikation

This Technical Report was approved by CEN on 23 March 2008. It has been drawn up by the Technical Committee CEN/TC 19.

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



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Cont		Page
Forewa	ord	
	iction	
11111 OGU 4	Summary	
1	Scope	
2		
3 3.1	Market information Definitions	
3.1 3.2	Volumes	
3.3	Market of burner and boiler equipment	
4	Fuel specifications including alternative components	11
4.1	Europe	
4.2 4.3	Alternative components Heating oils	
-	Legislation	
5 5.1	IntroductionIntroduction	
5.2	European Directives	
5.3	National Legislation	
5.4	Tax regulations	
6	Distribution systems	
6.1 6.2	GeneralUK, Ireland, Netherlands and France	
6.2 6.3	Spain	
6.4	Norway	15
6.5	Germany, Austria, Italy and Greece	
6.6 6.7	Finland Belgium	
6.8	Portugal	17
6.9	Denmark	
6.10 6.11	Sweden Poland	
7	Statement of European Heating Industries	
<i>1</i>	Discussions and conclusion	
8 8.1	Discussions and conclusion	
8.2	LHO volume	
8.3	Market	
8.4 8.5	LHO specifications	
o.5 8.6	LHO distribution systems	
8.7	National Regulations and taxes / duties	20
8.8	European LHO standard or reference fuel	
	A (informative) WG 25 "Specification of heating fuel" membership	
	B (informative) LHO Standards overview	
Annex	C (informative) Regulations regarding markers and dyes	26
Annex	D (informative) LHO sulfur content	27
A	E (informativa) Evalua duty tables of see all	20

Annex F (informative) Excise duty in relation to sulfur content	0
Annex G (informative) Excise duty tables of kerosene	1
Annex H (informative) Excise duty for LHO	
Annex I (informative) Gas oil quality specification	
Bibliography3	5
Bibliography	5

Foreword

s and relat. This document (CEN/TR 15738:2008) has been prepared by Technical Committee CEN/TC 19 "Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin", the secretariat of which is held by NEN.

Introduction

In Europe the subject of a common standard for heating fuels is not new. This topic often arises in times of change related to heating fuel qualities or stronger market competition.

In discussions in the early 2000s on new low-sulfur light heating oil (LHO) qualities the question of a common European standard for LHO was raised again in the mineral oil industry. In 2001, GEME, Non-Road Fuels Task Force of CONCAWE (The Petroleum Companies Organization for Conservation of Clean Air and Water in Europe), released a report on fuel specifications [1]. This report contains an overview on market volumes, specifications and distribution systems for middle distillates including LHO at that time. The resulting conclusions showed significant differences in the markets and that the most cost effective solution in 2001 was to adopt the situation as it was, i.e. different approaches in different Member States.

In joint meetings of the common Technical Board (TB) of the Association of European Heating Industries (EHI) and Eurofuel (The European Heating Oil Association) the question of a common European LHO standard was again discussed. The reason for pursuing the discussion about standardization work on LHO was argued by EHI in the context of harmonization within the European markets. Therefore the need for a common European standard analogous to EN 590 [2] for automotive diesel fuel was envisaged.

Furthermore, the finalization of standardization work for FAME in 2003 as a blending component for heating fuels, and as a heating fuel itself, supported the question "Why doesn't European standard exist for LHO?" This question was pushed by some market participants mainly by members of Eurofuel but also by some members of the mineral oil industry. Based on this the subject of a common European standard for heating fuels was discussed at the CEN/TC 19 plenary meeting in Oslo, 1-3 June 2005. The result of the discussion is reported in CEN/TC 19 document N 1254 as resolution 51: "CEN/TC 19 requests the WG 25 convenor to report back on requirements, feasibility and needed deliverables concerning a European Standard on liquid (heating) fuel before July 2006".

Receiving that request, CEN/TC 19/WG 25 started, after reconvening the group in April 2006 (see Annex A), to collect information and data. The conclusions of the report were presented at the CEN/TC 19 plenary meeting in May 2007 and thereafter being balloted for Technical Committee Approval. The text being accepted, some of the informative data on taxes were updated to the most recently available information.

Within this report the ideas of the European mineral oil industry and those from EHI have been considered.

1 Summary

Although the EUROSTAT definition of "medium distillates" includes residual fuel oil, the technical experts in CEN/TC 19/WG 25 (see Annex A) decided that this was outside of the scope of the study and that it was not necessary to develop a CEN standard for residual fuel oils.

Technically it would be ambitious, although not impossible, to establish a common European LHO standard. However, other considerations must be taken into account when deciding on a common LHO standard.

The majority of the WG 25 members see no real benefit or necessity for standardising LHO on a European level. Multiple uses of LHO qualities in some countries is well serviced by the existing supply chain, while for other countries it would require separate processing or additional infrastructure installation. The impact on refinery process technology as well as on refinery economics has to be evaluated on a European level (crude selection, investments in plant technology, separated storage facilities). A cost benefit analysis would be needed to justify such a large investment.

A common European LHO standard could affect national legislation/regulation in many Member States. Therefore a political decision applying an EC Mandate may be required giving a clear indication that the necessary changes in national legislation/regulation will be applied by each member state. This question is far beyond WG 25 working content limits. The scope of WG 25 is limited to deal with standardisation of heating fuels and related technical questions.

There is a belief that harmonisation of LHO standards could reduce production costs for oil heating equipments. It could ease export of oil heating equipment within Europe and open up new markets to manufacturers. However, the vast majority of experts of WG 25, based on the information made available by EHI, do not accept these as enough justification to establish a European LHO standard as it will not fully address the concerns expressed.

It is the WG 25 opinion that improving the reference fuel specification described in EN 267 [3] for this application would assist in type approval for the equipment manufacturers. Thus, it would address the concern of the heating equipment industry.

2 Scope

This report gives background information about LHO market volumes, fuel specifications, regulations, taxes, duties, logistics and distribution systems for LHO in different European countries.

It assesses the necessity, and whether it is appropriate, to recommend the development of a CEN standard for liquid heating fuels.

3 Market information

NOTE All market statistical data submitted in this report are based on publications of the International Energy Agency (IEA) and Eurostat. Data reported for Switzerland were submitted by the Swiss Federal Statistical Office. All data had been summarized by the Austrian Energy Agency (AEA) in a special report [4].

3.1 Definitions

According to the European Energy Balances¹, the group "medium distillates" covers three main product groups:

6

Definitions taken from "The Eurostat Concepts and Definitions Database".