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**REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND  
THE COUNCIL**

**Quality of petrol and diesel fuel used for road transport in the European Union  
Twelfth annual report  
(Reporting year 2013)**

# **REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL**

## **Quality of petrol and diesel fuel used for road transport in the European Union: Twelfth annual report (Reporting year 2013)**

### **1. INTRODUCTION**

This report represents a consolidation of the twelfth year of Member States' submissions under Directive 98/70/EC<sup>1</sup> (the "Directive"), summarising the quality of petrol and diesel used for road transport in the EU for 2013. Specifications for petrol and diesel sold for road transport in the EU are included in the Directive: the first specifications entered into force on 1 January 2000; the second on 1 January 2005 and the third on 1 January 2009 which limited the sulphur content of all automotive road fuels in the EU to 10 ppm. Additional requirements are defined in the European Standard for Fuel Quality Monitoring Systems ("FQMS"), EN 14274:2012, required from 2004.

The Directive also stipulates that Member States are required to report summaries of the quality of fuels sold in their territories. The original reporting format for this was laid out in Commission Decision 2002/159/EC of 18 February 2002<sup>2</sup>. The requirements of the Directive have evolved with the introduction of new fuel specifications and reporting requirements. All Member States receive a reporting template in order to include all pertinent details to enable a European wide analysis and comparison of the results of the fuel quality monitoring undertaken in Member States. The template follows the reporting requirements outlined in Commission Decision 2002/159/EC and is annually reviewed and agreed by the Commission.

In 2013, all Member States have complied with the fuel specifications that require road fuels to contain less than 10 ppm of sulphur. In addition, Member States have begun to report fuels with added ethanol, which is a reporting requirement from 1 January 2011.

All Member States submitted their report in the template provided. Of the 28 annual FQMS reports, 24 were received within the reporting deadline of 30 June, two were received less than one week late and the last two reports were submitted within one month of the original deadline. This proves a continuous improvement in compliance with the deadline compared with recent years.

### **2. FUEL SALES IN EUROPE**

Fuel sales in the EU in 2013 continue to be heavily weighted towards diesel with 243,516 million litres of diesel sold compared to 106,082 million litres of petrol sold.

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<sup>1</sup> O.J. L 350 of 28.12.1998, p. 58

<sup>2</sup> O.J. L 53 of 23.2.2002, p.30

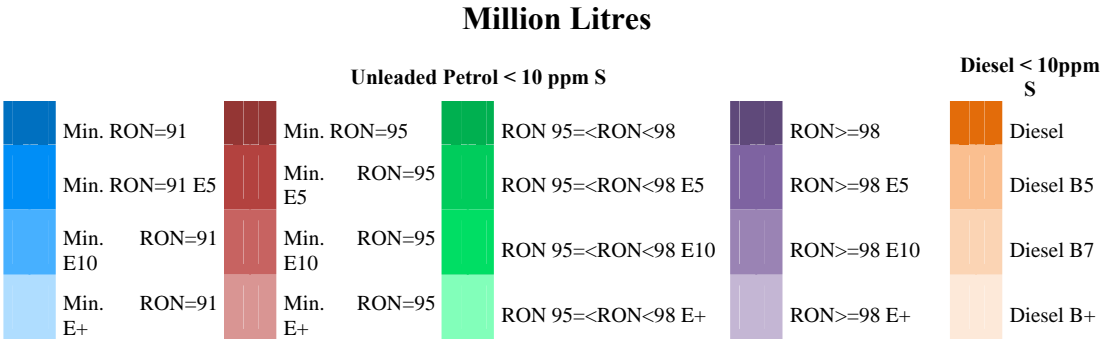
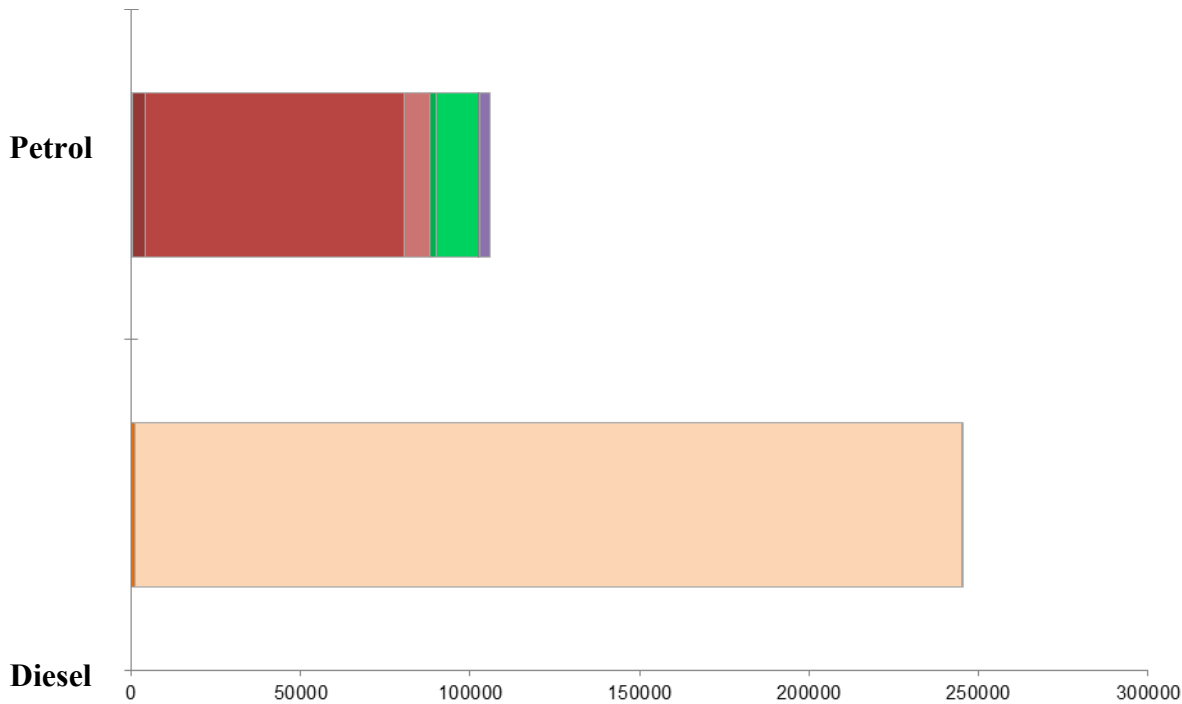
Of the petrol fuel grades, very small amounts of RON 91 were still available on the market with sales of only 369 million litres (0.4%); RON 95 - 98 totalled 14,335 million litres (13.5%); RON 98 totalled 3,396 million litres (3.2%), whilst RON 95 represented the majority of petrol fuel sales with 87,982 million litres (82.9%).

In diesel, the B7 grade represented the majority of sales with 241,946 million litres sold (99%). B+ and zero FAME diesel totalled 1,570 million litres.

Even if diesel is the dominant fuel in Europe there is a continued reduction in consumption with 2013 being the fourth year in a row that saw a fall in sales. For petrol there is also a reduction in consumption in 2013; in fact petrol sales have continued to decline since 2004. In terms of fuel grades, RON 91 has almost disappeared from the European market and currently is only sold in a small amount.

Figure 1 illustrates the volume of petrol and diesel sold in Europe by different fuel type.

**Figure 1: EU fuel sales by fuel type in 2013**



**2.1 Fuel availability 2013**

One of the main facts of 2013 is that RON 91 has almost disappeared from the market, and is only now being sold in four countries. Denmark is the only country where this fuel has any significant presence.

The sale of E10 continues to be limited to only three Member States: France, Finland and Germany.

Table 1 illustrates the quantities and types of fuels sold by Member State.

**Table 1: 2013 EU28 fuel sales by type**

Fuel Type	Petrol Sales (million litres)				Diesel Sales (million litres)	
	min. RON=91	min. RON=95	min. RON=98	RON $\geq$ 98	Total Petrol	Total Diesel
<b>Austria</b>	31	-	2,151	53	<b>2,235</b>	<b>7,667</b>
<b>Belgium</b>	-	1,389	-	278	<b>1,667</b>	<b>8,011</b>
<b>Bulgaria</b>	-	674	-	21	<b>695</b>	<b>2,178</b>
<b>Cyprus</b>	-	-	448	26	<b>474</b>	<b>310</b>
<b>Croatia</b>	-	693	24	25	<b>742</b>	<b>1,682</b>
<b>Czech Republic</b>	10	2,052	-	34	<b>2,096</b>	<b>4,983</b>
<b>Denmark</b>	322	1,503	1	-	<b>1,826</b>	<b>3,032</b>
<b>Estonia</b>	-	-	292	24	<b>316</b>	<b>806</b>
<b>Finland</b>	-	1,187	865	-	<b>2,052</b>	<b>2,878</b>
<b>France</b>	-	9,363	-	-	<b>9,363</b>	<b>40,419</b>
<b>Germany</b>	6	23,498	-	1,440	<b>24,944</b>	<b>41,671</b>
<b>Greece</b>	-	3,491	22	98	<b>3,611</b>	<b>2,639</b>
<b>Hungary</b>	-	1,537	-	48	<b>1,585</b>	<b>3,244</b>
<b>Ireland</b>	-	1,684	-	-	<b>1,684</b>	<b>2,648</b>
<b>Italy</b>	-	9,015	-	-	<b>9,015</b>	<b>26,755</b>
<b>Latvia</b>	-	251	23	-	<b>274</b>	<b>889</b>
<b>Lithuania</b>	-	262	-	8	<b>270</b>	<b>1,288</b>
<b>Luxembourg</b>	-	-	353	76	<b>429</b>	<b>1,964</b>
<b>Malta</b>	-	-	98	-	<b>98</b>	<b>116</b>
<b>Netherlands</b>	-	5,239	-	58	<b>5,297</b>	<b>7,264</b>
<b>Poland</b>	-	4,464	-	428	<b>4,892</b>	<b>13,159</b>
<b>Portugal</b>	-	-	1,360	103	<b>1,463</b>	<b>4,867</b>
<b>Romania</b>	-	-	1,585	91	<b>1,676</b>	<b>4,807</b>
<b>Slovakia</b>	-	691	-	13	<b>704</b>	<b>1,317</b>

<b>Slovenia</b>	-	-	591	32	<b>623</b>	<b>2,213</b>
<b>Spain</b>	-	-	5,872	424	<b>6,296</b>	<b>24,411</b>
<b>Sweden</b>	-	3,619	-	116	<b>3,735</b>	<b>5,394</b>
<b>UK</b>	-	17,370	650	-	<b>18,020</b>	<b>26,904</b>
<b>Total</b>	<b>369</b>	<b>87,982</b>	<b>14,335</b>	<b>3,396</b>	<b>106,082</b>	<b>243,516</b>

On the basis of Table 1 some general points can be noted:

- Diesel dominates the market in all but two of the 28 Member States with petrol fuels representing 57.8% share of Greek fuel sales and 60.5% of Cypriot fuel sales.
- Belgium, on the other hand, has the heaviest dependence on diesel fuel with an 82.8% diesel share of the market. Above 80% of diesel share can also be found in Lithuania (82.7 %), Luxembourg (82.1%) and France (81.2 %).
- The greatest volume of fuel sales in 2013 took place in Germany, with 19.1% total EU fuel sales; the petrol:diesel sales ratio was 37.4%:62.6%. The next biggest market was France with a 14.3% share of EU petrol and diesel fuel sales; its petrol diesel sales ratio was 18.8%:81.2%. UK fuel sales totalled 12.9% of all fuel sales in the EU with a ratio of 40.1%:59.9% for petrol:diesel.
- In most countries the tax rate for diesel is lower than for petrol (sometimes significantly), this coupled with the higher efficiency of diesel vehicles (vs. petrol equivalents) and improvements to diesel cars has been a key driver in the shift to increasing diesel use in the EU.
- RON 95 is by far the most popular type of petrol fuel in most Member States, followed by 95<RON<98.

### **3. FUEL QUALITY MONITORING 2013**

#### **3.1 Description of systems used by different Member States**

A number of different approaches have been used to implement the FQMS across the EU. Although consistency between Member States has improved slightly year on year, approaches range from those based on European Standard EN 14274<sup>3</sup>, with sampling at a range of fuel retail stations, through to national systems.

Alternative monitoring systems are permitted by the Directive, provided such systems ensure the results are of an equivalent confidence to EN 14274, although the criteria for assessing this are not specified. It is therefore not clear whether the existing systems not based on EN 14274 meet this criterion.

<sup>3</sup> EN 14274:2003 - Automotive fuels - Assessment of petrol and diesel quality - Fuel Quality Monitoring System (FQMS).

In 2013, the majority of Member States have provided additional information about their selection of a monitoring system (if using a statistical model from EN 14274) or have provided information about the selection of a national monitoring system.

Of the 28 Member States FQMS used in 2013:

- Five have opted to use EN 14274 statistical model A (Austria, Finland, Greece, Italy and Spain)
- Five have used EN 14274 statistical model B (France, Germany, Poland, Bulgaria and Romania)
- Ten have opted for EN 14274 statistical model C (Ireland, Portugal, Cyprus, Croatia Czech Republic, Estonia, Hungary, Lithuania, Slovakia and Slovenia) and;
- The remaining eight have used a national monitoring system

### **3.2 Sampling and reporting**

One of the key points in the assessment of fuel quality is the how fuels are sampled. This sampling must be done in accordance with requirements laid down in EN 14274.

This standard indicates the number and location of samples to be taken and reported in Member States' fuel quality reports. The standard also specifies the minimum number of samples per fuel grade in each of the winter and summer periods. Table 2 provides a breakdown of individual Member States' sampling and reporting in 2013. The total minimum samples required is calculated where the Member State has used a statistical model as outlined in EN 14274 such that the minimum sample requirement is known for each model (A, B and C).

Table 2 also provides a breakdown of the total sample numbers taken and the sampling carried out at service stations. All Member States provided this breakdown in 2013. As EN 14274 specifies that the minimum sampling requirement should be taken from fuel dispensing sites – which are defined as a “*site, retail or commercial where fuel is dispensed into road vehicles for propulsion*” any sampling taken at distribution terminals or refineries should be taken in addition to those from service stations in order to meet minimum sampling requirements.

### **3.3 Commission EU Pilot**

As noted above Article 8(2) of the Directive requires Member States to establish a FQMS in accordance with the requirements of the relevant European standard and if, an alternative fuel quality monitoring system (a national system) is used, it should ensures results of equivalent confidence.

As noted in the annual report for 2012 it would appear that some Member States were not in full compliance with these requirements. The main issues of divergence regarded the number of samples, location of the sampling and the measurement of all necessary parameters to ensure appropriated fuel quality. The continuing divergence of some of these issues can still be seen in this report as indicated in tables 2 and 3.

Following the adoption of the annual report for 2012 EU Pilots were launched during 2014 in respect of 20 Member States. Replies have been received from all these countries which have undertaken to improve their reporting systems for the future. However, as these actions post-date the 2013 report, it cannot show the improvements agreed with these Member States. The Commission expects to see a major improvement in reporting as regards 2014.



**Table 2: Summary of Member State sampling and reporting in relation to the requirements of Directive 98/70/EC and of European Standard EN 14274**

MS	FQMS Model (1)	Size (2)	Separate S&W? (3)	Samples per grade per period (4)	Total samples required (5)		Samples Taken (6)		Samples Taken at Service Stations (7)	
					Pet	Dsl	Pet	Dsl	Pet	Dsl
Austria	A	S	✓	50	104	100	106	100	106	100
Belgium	N	S	✓	(50)	(200)	(100)	2013	6387	2013	6387
Bulgaria	B	S	✓	100	206	200	475	491	460	476
Croatia	C	S	✓	50	108	100	105	168	91	152
Cyprus	C	S	✓	50	106	100	268	153	268	153
Czech Republic	C	S	✓	50	103	106	907	1237	926	1237
Denmark	N	S	✓	(50)	(201)	(100)	43	21	43	21
Estonia	C	S	✓	50	108	100	350	210	350	210
Finland	A	S	✓	50	200	100	223	115	223	115
France	B	L	✓	200	800	400	487	420	487	420
Germany	B	L	✓	200	825	400	741	399	741	399
Greece	A	S	✓	50	103	100	116	100	116	100
Hungary	C	S	✓	50	104	100	120	120	120	120
Ireland	C	S	✓	50	100	100	199	199	199	199
Italy	A	L	✓	100	200	200	200	200	200	200
Latvia	N	S	✓	(50)	(110)	(150)	91	153	45	47
Lithuania	C	S	✓	50	104	100	106	100	104	100
Luxembourg	N	S	✓	(50)	(200)	(100)	66	86	58	86
Malta	N	S	✓	(50)	100	100	44	43	34	32
Netherlands	N	S	✓	(50)	(102)	(100)	100	100	100	100
Poland	B	S	✓	100	220	200	539	406	539	406
Portugal	C	S	✓	50	108	100	143	112	23	12
Romania	B	S	✓	100	212	200	92	72	92	72
Slovakia	C	S	✓	50	102	100	151	122	110	122
Slovenia	C	S	✓	50	106	100	146	165	146	117
Spain	A	L	✓	100	214	200	400	200	126	99
Sweden	N	S	✓	(50)	(104)	(100)	602	776	0	0
UK	N	L	x	(100)	(208)	(200)	1262	2109	473	280

#	Column	Explanatory notes
(1)	FQMS Model	N = National Fuel Quality Monitoring System (FQMS) A = EN 14274 Statistical Model A B = EN 14274 Statistical Model B C = EN 14274 Statistical Model C
(2)	Size – Country size	S = Small (total automotive road fuel sales < 15 million tonnes pa) L = Large (total automotive road fuel sales > 15 million tonnes pa)
(3)	Separate S & W?	✓ Separate summer & winter reporting × indicates full year sample results reporting only.

(4)	Samples per grade per period	EN 14274: There are reduced sampling requirements for grades comprising of less than 10% total sale. For Member States using a national FQMS, estimated equivalent minimum samples (based on fuel sales) are shown in brackets ().
(5)	Total samples required	Calculation of the EN 14274 minimum sample total required according to FQM model and country size. The minimum sample requirement is to be taken from the 'point of use' at fuel dispensing sites. For Member States using a national FQMS, estimated equivalent minimum samples (based on fuel sales) are shown in brackets ().
(6)	Samples Taken	The total number of samples taken per fuel type at all locations (service stations, terminals and refineries).
(7)	Samples taken at Service Stations	The total number of samples taken at service stations; fuel dispensing sites (public and commercial). This is reported separately in the standard reporting template; where samples taken at service stations do not match overall samples taken, this is due to differences in the original report submission (in particular France and the Czech Republic, where samples taken at service stations is greater than samples taken).
	Pet.	Petrol
	Dsl	Diesel

**Table 3: Summary of parameters not reported by Member States for each fuel grade**

This table shows the parameters that were not correctly assessed during 2013 by Member States. Some of the situations referred to in this table were already covered in the EU Pilots and measures to fix these issues have been promised by the relevant Member States.

Member States	Petrol and diesel grades marketed in each Member State in 2013				
<b>Austria</b>	Unleaded petrol RON=91 E5	Unleaded petrol 95=<RON<98 E5	Unleaded petrol RON>= 98 E5	Diesel B7	
	All reported	All reported	All reported	All reported	
<b>Belgium</b>	Unleaded petrol RON=95 E5	Unleaded petrol RON>=98 E5			Diesel B7
	All reported	All reported			All reported
<b>Bulgaria</b>	Unleaded petrol RON=95 E5	Unleaded petrol RON>=98 E5			Diesel B7
	Motor Octane Number	Motor Octane Number			All reported
<b>Croatia</b>	Unleaded petrol RON=95 ppm S)	min. (<10 (<10 ppm S)	Unleaded petrol 95=<RON<98 (<10 ppm S)	Unleaded petrol RON>=98 (<10 ppm S)	Diesel B7
	All parameters reported aggregated (no split by fuel grade)				All reported
<b>Cyprus</b>	Unleaded petrol RON=95	Unleaded petrol RON 98			Diesel B7
	Manganese Iso-butyl alcohol	Manganese Iso-butyl alcohol			All reported
<b>Czech Republic</b>	Unleaded petrol RON=91 E5	Unleaded petrol RON=95 E5	Unleaded petrol RON>=98 E5	Diesel B7	Diesel B+

Member States	Petrol and diesel grades marketed in each Member State in 2013				
	All reported	All reported	All reported	All reported	Only few parameters tested according to FAME content (see country report for details)
<b>Denmark</b>	<b>Unleaded petrol RON=91 E5</b>	<b>Unleaded petrol RON=95 E5</b>	<b>Unleaded petrol 95=&lt; RON&lt;98</b>	<b>Diesel B7</b>	
	All reported	All reported (albeit for some parameter <4 samples were tested)	All reported	All reported	
<b>Estonia</b>	<b>Unleaded petrol 95=&lt;RON&lt;98 E5</b>	<b>Unleaded petrol RON &gt;= 98 E5</b>		<b>Diesel</b>	
	All reported	All reported		All reported	
<b>Finland</b>	<b>Unleaded petrol RON=95 E10</b>	<b>Unleaded petrol RON&gt;=98 E5</b>		<b>Diesel B7</b>	
	All reported	All reported		All reported	
<b>France</b>	<b>Unleaded petrol RON=95 E5</b>	<b>Unleaded petrol RON=95 E10</b>		<b>Diesel B7</b>	
	All reported	All reported		All reported	
<b>Germany</b>	<b>Unleaded petrol RON 91 E5</b>	<b>Unleaded petrol RON 95 E5/E10</b>	<b>Unleaded petrol RON 98 E5</b>	<b>Diesel B7</b>	
	Olefins, oxygen content, methanol, iso-propyl alcohol, tert-butyl alcohol, iso-butyl alcohol, ethers with =>5 carbon atoms/molecule, other oxygenates, lead content	All reported	All reported	All reported	
<b>Greece</b>	<b>Unleaded petrol RON=95</b>	<b>Unleaded petrol 95=&lt; RON&lt;98</b>	<b>Unleaded petrol RON &gt;= 98</b>	<b>Diesel B7</b>	
	Motor Octane Number Manganese	Motor Octane Number Manganese	Motor Octane Number Manganese	All reported	
<b>Hungary</b>	<b>Unleaded petrol RON=95</b>	<b>Unleaded petrol RON&gt;=98</b>		<b>Diesel B7</b>	
	All reported	All reported		All reported	
<b>Ireland</b>	<b>Unleaded petrol RON=95</b>			<b>Diesel</b>	
	Manganese			All reported	
<b>Italy</b>	<b>Unleaded petrol RON=95</b>			<b>Diesel B7</b>	
	All reported			All reported	
<b>Latvia</b>	<b>Unleaded petrol RON=95 E5</b>	<b>Unleaded petrol 95=&lt;RON&lt;98</b>		<b>Diesel</b>	<b>Diesel B7</b>

Member States					Petrol and diesel grades marketed in each Member State in 2013				
	All reported		All reported		All reported		All reported		All reported
<b>Lithuania</b>	<b>Unleaded petrol RON=95</b>		<b>Unleaded petrol RON&gt;=98</b>		<b>Diesel</b>				
	All reported		All reported		All reported				
<b>Luxembourg</b>	<b>Unleaded petrol RON=95 E5</b>		<b>Unleaded petrol RON&gt;=98 E5</b>		<b>Diesel B7</b>				
	All reported		Manganese		All reported				
<b>Malta</b>	<b>Unleaded petrol RON 95-98</b>				<b>Diesel</b>				
	All reported				All reported				
<b>Netherlands</b>	<b>Unleaded petrol RON 95</b>				<b>Diesel</b>				
	Research Octane Number		Motor Octane number		All reported				
	Methanol		Iso-propyl alcohol						
	Tert-butyl alcohol		Iso-butyl alcohol						
	other oxygenates		Lead Content						
	Manganese								
<b>Poland</b>	<b>Unleaded petrol RON 95</b>		<b>Unleaded petrol RON 98</b>		<b>Diesel</b>				
	Manganese		Manganese		All reported				
<b>Portugal</b>	<b>Unleaded petrol RON 95-98</b>		<b>Unleaded petrol RON 98</b>		<b>Diesel B7</b>				
	Manganese		Manganese		All reported				
<b>Romania</b>	<b>Unleaded petrol RON 95-98 E5</b>		<b>Unleaded petrol RON 98 E5</b>		<b>Diesel B7</b>				
	Manganese		Manganese		All reported				
<b>Slovakia</b>	<b>Unleaded petrol RON 95 E5</b>		<b>Unleaded petrol RON 98 E5</b>		<b>Diesel B7</b>				
	All reported		All reported		All reported				
<b>Slovenia</b>	<b>Unleaded petrol RON 95-98 E5</b>		<b>Unleaded petrol RON 98 E5</b>		<b>Diesel B7</b>				
	Manganese		Manganese		All reported				
<b>Spain</b>	<b>Unleaded petrol RON 95-98 E5</b>		<b>Unleaded petrol RON 98 E5</b>		<b>Diesel B7</b>				
	All reported		All reported		All reported				
<b>Sweden</b>	<b>Unleaded petrol RON 95 E5</b>		<b>Unleaded petrol RON 95-98 E5</b>		<b>Diesel B7</b>				

Member States	Petrol and diesel grades marketed in each Member State in 2013		
	Methanol, Ethanol, Iso-propyl alcohol, Tert-butyl alcohol, Iso-butyl alcohol, Other oxygenates	Methanol, Ethanol, Iso-propyl alcohol, Tert-butyl alcohol, Iso-butyl alcohol, Other oxygenates	FAME content
<b>UK</b>	<b>Unleaded petrol RON 95 E5</b>	<b>Unleaded petrol RON 95-98 E5</b>	<b>Diesel B7</b>
	All reported	All reported	All reported

#### 4. COMPLIANCE WITH THE DIRECTIVE'S LIMIT VALUES

##### 4.1 Petrol reporting

In 2013, all Member States provided minimum information about petrol sample compliance. In order to determine compliance it is necessary to know which test method has been used to test for some parameters (because reproducibility and tolerance levels differ according to test method). Provision has been made for Member States to give this information within the reporting template – although this is not a mandatory part of the reporting it is vital to determine compliance levels. Furthermore, Member States were requested to report the number of samples that exceeded the 95% tolerance limits; the Netherlands and Sweden have not provided this figure.

The parameters found to be out of specification most frequently within the EU in 2013 were:

- Summer Vapour Pressure was exceeded 124 times in 2013 (3.12% of cases). However, many exceedances are the result of transitional periods; when suppliers swap the summer specification fuel for winter specification fuels and vice versa.
- RON and MON samples out of specification totalled respectively 39 and 29 times, equivalent to 0.52% and 0.34% respectively.

## 4.2 Diesel reporting

In 2013, some Member States did not provide full details of samples found to be out of compliance with tolerance limits.

Of the 6 parameters required to be tested for diesel in 2013, parameters found to be out of specification were:

- The sulphur content maximum of 10ppm was exceeded by a total of 94 samples (0.65% of total). However the average sulphur content for all Member States remains below the mandatory limit of 10ppm.
- In total, 44 samples (0.33%) reported FAME content above the 7% limit (excluding B+ diesel).
- Distillation and density exceedances were reported respectively 16 and 5 times, equivalent to 0.12% and 0.03%.

## 4.3 Summary

In general, of the 10,095 samples tested for petrol in 2013, 248 were found to be out of specification with tolerance limits for one or more parameter, which represents a non-compliance rate of 2.5%.

Of the 14,764 samples tested for the six mandatory parameters for diesel in 2013, 161 were found to be non-compliant with the specified limits, representing 1.1% of all samples reported.

The proportion of samples found to be out of specification relies on the number of samples taken, which should be dependent (within each Member State) on the fuel sales volume, and supply sources. However, with Member States using national systems that may not demonstrate equivalence with statistical models A, B or C and using statistical models that may not be the most suitable, it is necessary to also consider non-compliances within the EU weighted by sales volume and by sample numbers.

A rate of non-compliances weighted according to sales volume and sample numbers shows downward trends for diesel, following a peak registered in 2011, while petrol non-compliances have fluctuated more. In 2013, sales-weighted petrol non-compliances amounted to 1.8% (an improvement compared to 2012); diesel sales-weighted non-compliances were 0.9%, (an improvement compared to 2012).

Table 4 summarises the compliance of Member States with the Directive for 2013 reporting in terms of the results of the analysis of samples against Tolerance Limits and the reporting format and content. Amendments to the Directive included the insertion of a paragraph stating *“Member States shall determine the penalties applicable to breaches of the national provisions adopted pursuant to this Directive. The penalties determined must be effective, proportionate and dissuasive.”*

Some Member States have provided an explanation of the remedial action and penalties imposed by national authorities where samples are found to be out of specification.

**Table 4: summary of Member State compliance for 2013 reporting**

MS	Non-compliance with limit values number of non-compliant samples (NC)				Incomplete reporting parameters not measured (NM)	
	(a)		(b)		Petrol (out of 19)	Diesel (out of 6)
	Petrol NC	Total	Petrol NC	Total		
AT	3	106	2	100	0	0
BE	53	2013	92	6387	0	0
BG	24	475	16	491	1	0
HR	5	105	0	168	0	0
CY	16	268	1	153	2	0
CZ	28	907	13	1237	0	0
DK	4	43	3	21	0	0
EE	5	350	1	210	0	0
FI	5	223	0	115	0	0
FR	7	487	5	420	0	0
DE	6	741	1	399	0	0
EL	1	116	4	100	2	0
HU	1	120	0	120	0	0
IE	18	199	3	199	1	0
IT	4	200	0	200	0	0
LV	0	91	0	153	0	0
LT	0	106	0	100	0	0
LU	3	66	0	86	0	0
MT	7	44	0	43	0	0
NL	>1	100	>1	100	9	0
PL	16	539	16	406	1	0
PT	1	143	0	112	1	0
RO	3	92	0	72	1	0
SK	9	151	2	122	0	0
SI	0	146	0	165	1	0
ES	0	400	0	200	0	0
SE	0	602	0	776	6	1
UK	28	1262	1	2109	0	0

#	Column	Explanatory notes
(a)	Non-compliance with limit	It is not possible to confirm whether limit values have been

values (95% confidence limits)	<p>respected in all samples, where reporting data is incomplete. Where it has not been possible to establish from submissions the number of samples exceeding the limit value a '&gt;' symbol indicates that the number of samples exceeding limits is a minimum and might be greater.</p> <p>The table covers samples exceeding limit values stipulated in Directive 98/70/EC. In cases samples where however found to be exceeding national limit values.</p>
(b) Incomplete reporting	<p>Some parameters may be sampled in smaller quantities, however all parameters should be sampled to accurately assess fuel quality. Member States should make it clear when sample results have been obtained and provide sample results.</p> <p>The table only covers fuels with &gt;10% market share.</p>

Table 4 shows the current situation indicating that there is no problem with overall fuel quality in the EU. The Commission however considers that this situation can be enhanced and will insist that Member States continue to improve their fuel quality in the future.

## 5. CONCLUSIONS

The monitoring of fuel quality in 2013 shows that the specifications for petrol and diesel laid down in Directive 98/70/EC are in general met with very few deviations from the relevant provisions being identified.

Even if there is an improvement in the way Member States meet their reporting and monitoring obligations and enhance their fuel quality monitoring systems, they are still not, in some cases, attaining the expected level sampling.

The Commission launched and closed 20 EU Pilots during 2014, the main issues addressed were sampling procedures, the number of samples, the confidence level of national systems and incorrect parameters being measured. The Commission was satisfied with the replies it received from the Member States. However as this exercise was conducted during 2014 the report from 2013 does not reflect the agreed improvement. The Commission expects to see the full result of these improvements in the 2014 report.

As cases of non-compliance are relatively rare and Member States generally take action to remove non-compliant fuel from sale, the Commission is not aware of any negative repercussions on vehicle emissions or engine functioning due to these exceedances.

The Commission urges Member States to continue to take action to ensure full compliance with the requirements of the Fuel Quality Directive.