

Comparison of Legislation

P. Cimpl

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Legislative Framework of the Czech Republic Compared to Documents of the Serbian Party

Legislation annotation – quality of fuels						
Document type	Number	Name	Number of important articles or sections related to quality issues	What is covered in terms of fuel quality	Documents delivered by Serbian party for review	Major differences
Act	56/2001	on operation of vehicles on roads	§77	Permitted use of approved fuel only		
Act	311/2006	on fuels and filling stations	entire document	Comprehensive approach to fuels		
		on quality of fuels	entire document	Implementation of European legislation	Fuel Quality monitoring system in Serbia (Basic information and principles)	Covers also products that are not monitored in the Czech Republic (diesel for special equipment, fuels for boats, probably heating oils as well. On the contrary, biofuels (B100, B30 E85 and other gas fuels (CNG LPG) are not monitored
					DECREE ON PETROLEUM PRODUCTS AND BIOFUELS QUALITY MONITORING	
					Regulation on technical land other requirements ...	
					THE RULEBOOK ON THE CONTENT AND MANNER OF CONDUCTING THE ANNUAL PROGRAM OF QUALITY MONITORING OF PETROLEUM PRODUCTS AND BIOFUELS FOR 2015	Regional division of territory and assignment of a number of samples to individual regions.
Decree	133/2010	ANNUAL PROGRAM OF QUALITY MONITORING OF PETROLEUM PRODUCTS AND BIOFUELS FOR 2015, Annex 1 to the Rulebook; form 1 to 4				

Legislative Framework of the Czech Republic Compared to Documents of the Serbian Party

Legislation annotation - taxes						
Document type	Number	Name	Number of important articles or sections related to quality issues	What is covered in terms of fuel quality	Documents delivered by Serbian party for review	Major differences
Act	353/2003	On Consumer Taxes	§§ 1, 4, 14, 15, 44 - 59, 63, 134 -136 etc.	Taxes in general, fuels in separated chapter		
Legislation annotation - CTIA						
Act	64/1986	on Czech Trade Inspection Authority	entire document	Valid in general for entire goods CTIA control activity		
Act	22/1997	on Technical Requirements for Products	entire document	Assessment of certification, authorization, accreditation, standardization		
Act	500/2004	On Administrative Procedure	entire document	State administration Correspondence		
Act	634/1992	On Consumer Protection	entire document	Valid in general for entire goods		
Legislation annotation – colouring and marking						
Decree	61/2007	Details of marking and colouring of chosen mineral oils	entire document	Collouring and marking with regard to taxes. In agreement with European legislation – SY124 + SR119	DECREE ON MARKING OF PETROLEUM PRODUCTS	Serbian legislation-marking of all products. It does not define a kind and concentration. It is not linked to EU legislation.
Decree	169/2015	Change of Decree on Colouring	entire document	see above		In the Czech Republic – only fuels with lower tax and in quality comparable to engine fuels, SY 124 + SR 19 (Euromarker) – min. 6mg/l



Legislative Framework of the Czech Republic Compared to Documents of the Serbian Party

Legislation annotation - Climate protection, Environment, Biofuels						
Document type	Number	Name	Number of important articles or sections related to quality issues	What is covered in terms of fuel quality	Documents delivered by Serbian party for review	Major differences
Act	201/2012	on climate protection	Sec. 4. §§ 16 - 21, 25(6)	Biofuels- mandatory quotas		
Government regulation	351/2012	on criterias of biofuels sustainability	entire document	Biofuels – criteria of sustainability		
Decree	415/2012	on permissible pollution level and its detection	§§ 2,3, Supplement 2	e.g. fuel oils with regard to environment		
Decree	312/2012	on assessment of quality requirements for fuels used for inland and seafaring vessels	entire document	Quality of vessel fuels with regard to environment		
Legislation annotation – Chemical substances – Safety and Health protection						
Act	350/2011	on chemical substances and chemical mixtures		General rules for chemical substances, package, labeling, usage, import and export of chemical substances		
Act	258/2000	on public health protection	Sec. 8 §44	It follows Act on chemical substances. safe handling, documentation etc.		



Legislative Framework of the Czech Republic Compared to Documents of the Serbian Party

Energy security						
Document type	Number	Name	Number of important articles or sections related to quality issues	What is covered in terms of fuel quality	Documents delivered by Serbian party for review	Major differences
Act	458/2000	on the conditions of doing business, on the performance of state administration in energy fields, and on amendments to certain laws - Energy Law	fuel and petroleum products quality is not covered in this document	Does not cover fuel quality - Focused on treating electric power, gas, heating industry	ENERGY LAW	Significantly bigger scope. Overlaps other legislative documents of the Czech Republic. See an independent analysis in another chapter.
Act	189/1999	on emergency oil stock, on solution of oil deficiency situations and on amendments to some related acts – Act on Emergency Oil Stock		Only marginally – Focused on holding strategic stock of petroleum products and oil		



Comparison of Legal Regulations

FQMS – Quality Monitoring

Serbian legislation and related documents:

- DECREE ON PETROLEUM PRODUCTS AND BIOFUELS QUALITY MONITORING
- REGULATION ON TECHNICAL AND OTHER REQUIREMENTS FOR LIQUID FUELS OF PETROLEUM ORIGIN
- THE RULEBOOK ON THE CONTENT AND MANNER OF CONDUCTING THE ANNUAL PROGRAM OF QUALITY MONITORING OF PETROLEUM PRODUCTS AND BIOFUELS FOR 2015
- ANNUAL PROGRAM OF QUALITY MONITORING OF PETROLEUM PRODUCTS AND BIOFUELS FOR 2015, Annex 1 to the Rulebook; form 1 to 4

**Czech equivalent – only one document:
Decree No. 133/2010 on Quality of Fuels**



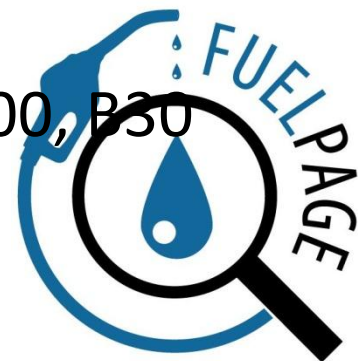
Comparison of Legal Regulations

FQMS – Quality Monitoring

Main differences in legal regulations

Serbian legislation documents

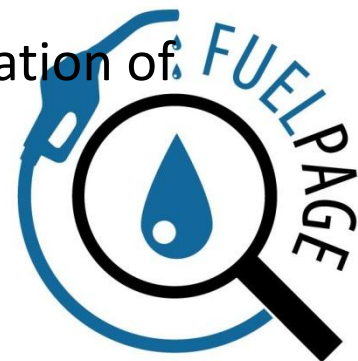
- Covers: also other types fuels than petrol and diesel for vehicles (aircraft fuels, heating fuels, fuels for special machines and boats)
- Regional distribution of number of samples taken
- The provided number of samples OK
- Absence of gas fuels (LPG, CNG) and biofuels B100, B30



Comparison of Legal Regulations

Czech Republic – Decree No. 133/2010 on Quality of Fuels includes in a single document

- Number of samples
- Monitored quality indicators
- Standards of inspection methodologies
- Monitoring rules
- Link to CTIA
- Combination of duties:
 - Monitoring of quality indicators in relation to conservation of environment and protection of consumers



Assessment of Analysis Results

- When assessing the results of analyses according to EN 228 and 590, measurement uncertainty must be included according to EN ISO 4259, which cannot be ensured by the laboratory according to EN ISO 17025, but only by the inspection body according to EN ISO 17020.
- When interpreting the results, the laboratory may only compare against the standard, without including measurement uncertainty. IO must be type A , independent third party.
- There is stated the method of presenting results in the form of tables, for the purposes of statistics it is necessary to consider the obligation of sellers to provide information on the sold amount of the individual types of fuels.






Comparison of Legal Regulations

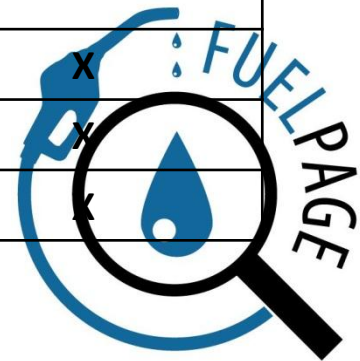
Scope of analyses:

- Only minor differences
- Comparison of control systems – see separate part of presentation






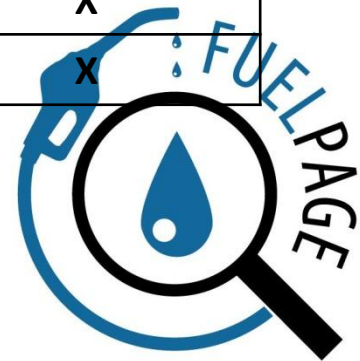
Unleaded petrol EN 228 [1]

Fuel quality parameter	 FQMS	 FQMS	 FQMS
Appearance			
Research octane number	X	X	X
Motor octane number	X	X	X
Density			X
Vapor pressure	X (summer)	X	X
Distillation - E70			
Distillation - E100	X	X	X
Distillation - E150	X	X	X
Distillation - distillation end			X
Distillation - residue			
Vapor lock index			
Lead content	X	X	X
Sulfur content	X	X	X
Manganese content	X	X	X






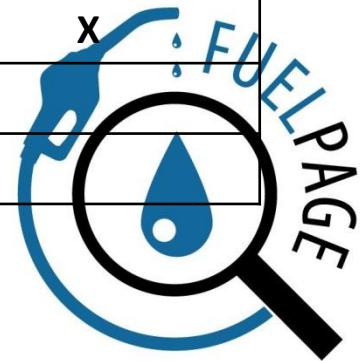
Unleaded petrol EN 228 [2]

Fuel quality parameter	 FQMS	 FQMS	 FQMS
Oxidation stability			X
Olefines content	X	X	X
Aromatic content	X	X	X
Benzene content	X	X	X
Oxygen content	X	X	X
Oxygenates - methanol	X	X	X
Oxygenates - ethanol	X	X	X
Oxygenates - iso-propylalcohol	X	X	X
Oxygenates - iso-butylalcohol	X	X	X
Oxygenates - terc-butylalcohol	X	X	X
Oxygenates - ethers (C5 or > C5)	X	X	X
Oxygenates - others	X	X	X






Diesel EN 590 (moderate climate) [1]

Fuel quality parameter	 FQMS	 FQMS	 FQMS
Cetane number	X	X	X
Cetane index			X
Density	X	X	X
Distillation - R250			X
Distillation - R350			X
Distillation - T95	X	X	X
Polycyclic aromatic hydrocarbons	X	X	X
Sulfur content	X	X	X
Manganese content	X	!!!	X
FAME content	X	X	X
Flash point	!!!	!!!	X
Carbon residue			
Ash content			



Diesel EN 590 (moderate climate) [2]

Fuel quality parameter	 FQMS	 FQMS	 FQMS
Water content			X
Total contaminants			
Copper strip corrosion			
Oxidation stability (sediments)			X
Oxidation stability (Rancimat test)			
Lubricity			
Cold filter plugging point (CFPP)	!!!	!!!	X

Other fuels tested within the framework of FQMS

Serbian FQMS	Czech FQMS
GAS OIL 0.1	LPG
GAS OIL EXTRA LIGHT EVRO EL	CNG
(LPG?)	Biodiesel (B100)
	High FAME diesel (B30)
	ethanol fuel (E85)



Comparison of Legal Regulations

Note regarding engine diesel:

The pressure on compliance with the burning point of this type of diesel fuel is important due to compliance with the type of combustible. Several accidents – fires have appeared recently which originated from contamination of diesel fuel with petrol in vehicles with filter for solid particles. The accidents happened during the cleaning of the filter, when fuel was injected.

Assessments of results:

- must be performed with the inclusion of measurement uncertainty as provided in EN ISO 4259 (should be the responsibility of the inspecting body – EN ISO 17020)



Comparison of Legal Regulations

Colouring and marking

Serbian legislation and related documents:

DECREE ON MARKING OF PETROLEUM PRODUCTS

Czech equivalent:

- Act No. 353/2003 on Consumer Taxes as amended
- Decree No. 61/2007 defining the details of marking and colouring certain mineral oils
- Decree No. 169/2015, amending 61/2007



Comparison of Legal Regulations

Legal regulation of colouring and marking

Main difference

- Serbian legislation – marking of all products, it does not define the composition or concentration of the marking substance, not how it is identified. It is not linked to EU legislation.
- In the Czech Republic – only fuels with lower tax and in quality comparable to engine fuels, SY 124 + SR 19(EUROMARKER) - min. 6mg/l



Comparison of Legal Regulations

Energy safety

Serbian legislation and related documents :

ENERGY LAW

Covers:

- Energetics in general, including crude oil and oil products
- Trade, transport, emergency stock, quality, obligations, sanctions

Very wide scope – Czech Republic deals with it in several separate legal documents



Comparison of Legal Regulations

Czech legislation

- **Act No. 189/1999 Coll.** on emergency oil stock, on solution of oil deficiency situations and on amendments of some related acts (**Act on Emergency Oil Stock**)
- **Covers:**
 - Strategic stock of crude oil and crude oil products
 - Creation, storage, oil deficiency, use, control
- **Act No. 458/2000 Coll.** on the conditions for making business the performance of state administration in energy fields, and on amendments to certain laws (**Energetic Safety**)
- **Covers:**
 - electric power, gas, heating industry
 - business, transfer, licences,.....

But it also overlaps other legislative documents – therefore it has not been clearly defined in the Czech Republic.



Comparison of Legal Regulations

Major difference

The big scope of ENERGY LAW results in a situation when the law is very extensive, however the individual areas cannot be dealt with in more detail



Comparison of Legal Regulations

Annotation of ENERGY LAW in relation to fuels and oil products

The issues of crude oil products and fuels are covered namely in the following sections:

IX Crude oil and its derivatives

- Transport, quality, introducing to the market, protection, etc.

X Stock of energy generating products

- Entities performing their activities related to production of oil derivatives and trading crude oil, oil derivatives, biofuels and pressurised natural gas – obligatory stock for 15 days (year average equivalent)
- **Major difference – in the Czech Republic the stock is for 90 days – crude oil and oil products – owned by the government (related to import of beetroot in the previous year.**



Comparison of Legal Regulations

Another condition for emergency stock resulting from Energy Law

Major differences in legislative requirements

Serbia

- Operating stock of oil derivatives can be formed and maintained in the form of crude oil and oil products provided that at least one third of the mandatory reserves is kept in the form of finished products.

The Czech Republic

- **The stock may involve also so-called Other products: petrol, diesel fuel, gases etc.**
- **The stock is for at least 30 days of average domestic consumption.**



Comparison of Legal Regulations

XVI Temporary and final provisions

- Section 424 – founding a public company Transnafta – owner of the network and product channels.

In the Czech Republic – two companies:

- **MERO – transport of crude oil**
 - MERO ČR, a. s. (international oil pipelines) the owner and the operator of the Družba gas pipeline and crude oil pipeline IKL
- **ČEPRO, a.s. – transport of products, including storage**



Standardization

Products				Specification standards			Related regulations applied in the Czech Republic	
Group according to Serbian regulations	Product according to Serbian regulations	Czech equivalent	Czech product not defined in Serbian legislation	Czech specification or specification applied in the Czech Republic	European or another normative equivalent	Legal document	Subject to control in the Czech Republic under regulations relevant to monitoring	
Unleaded motor gasolines	EURO PREMIUM BMB 95	Super 95 (or Natural 95)		ČSN EN 228	EN 228	Ministry of Industry and Trade Decree No133/2010	yes	
	EURO BMB 98	98 Super Plus						
	EURO BMB 100	98 Super Plus (under the legislation not defined separately in the Czech Republic)						
Aviation Gasolines	AG AB 80/87	not defined (Grade 90)			ASTM D 910		no	
	AG AB 100/130	not defined (Grade 100)						
	AG AB 100 LL	not defined (Grade 100 LL)						
Jet FUELS	GM-1	not defined			JIG AFQRJOS; Def Stan 91-91; ASTM D 1655		no	
	JET-A1	JET A-1						

Continuation of Standardization

Continuation							
Products				Specification standards		Related regulations applied in the Czech Republic	
Group in the compliance with Serbian regulations	Product in the compliance with Serbian regulations	Czech equivalent	Czech product - not defined in the Serbian legislative environment	Czech specification or specification applied in the Czech Republic	European or another normative equivalent	Legal document	Is a subject to inspection in the CR in terms of regulations related to monitoring
Gas oils	EURO DIESEL	Diesel fuel		ČSN EN 590	EN 590	Decree MPO 133/2010	Yes
	GAS oil 0,1	Not defined		Does not exist	Does not exist		
	GAS o Oil EURO EL	Extra light heating fuel. Not defined on the national level.		Only corporate specifications.	DIN 51603-1; ÖNORM C 1109		No
Fuel Oils	FUEL Oil Medium EURO S	It is not clear if it concerns heating materials or fuels for boats.		If it concerns heating materials then	If it concerns fuels for boats then	Act No. 311/2006; Decree No. 61/2007; 415/2012; 312/2012 - depending on whether it concerns heating oils or fuels for boats.	No
	FUEL Oil Medium S						
	FUEL Oil LOW Sulphur fuel - special NSG-S						
The text mentions the standard for LPG sampling which is not presented anywhere. For LPG sampling at filling stations, it is possible to use EN ISO 4257 as a framework, but for the particular procedure, it is necessary to include details concerning sampling at filling stations. If LPG sampling is carried out, it is necessary to include the number of samples and quality indicators according to EN 589 (e.g. motor octane number calculation; the content of sulphur, dienes; the evaporation residue).			LPG	ČSN EN 589	EN 589		
			CNG	ČSN 65 6517			
			FAME	ČSN EN 14 214	EN 14 214		
			Mixed fuel B30	ČSN 65 6508/ Bill ČSN EN 16709	Bill EN 16709		
			Ethanol E85	ČSN P CEN/TS 15293	P CEN/TS 15293		