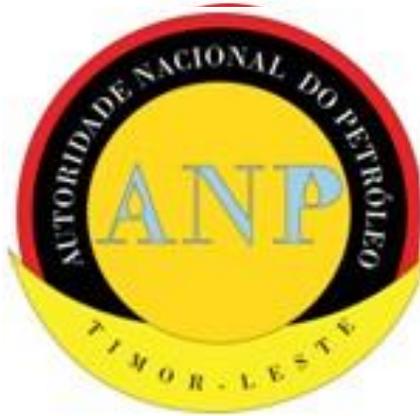


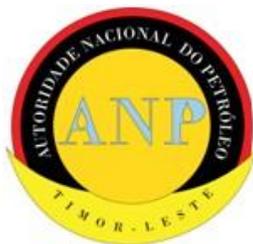
DEMOCRATIC REPUBLIC OF TIMOR-LESTE



REGULATIONS NO. 1/2014, of 15 January 2014
ON
FUEL, BIOFUEL, AND LUBRICANT QUALITY STANDARDS AND SPECIFICATIONS

TABLE OF CONTENTS

Chapter I – General Provisions	1
Chapter II – Fuel, Biofuel and Lubricant Specifications	4
Chapter III – Special Provisions	7
Chapter IV – Quality control system regarding the specifications set forth in Annexes III and V.....	8
Chapter V – Offence Provisions	9
Chapter VI – Fuel, Biofuel and Lubricant Standards Consultative Panel	10
Annex I – Liquefied Petroleum Gas Specifications.....	14
Annex II – GPL Auto Specifications	14
Annex III – Petrol / Gasoline Specifications	14
Annex IV – Kerosene Specifications.....	15
Annex V –Diesel Specifications	15
Annex VI – Fuel Oil Specifications.....	16
Annex VII – Heating Oil Specifications	17
Annex VIII – Avgas 100LL Specifications	17
Annex IX – Jet-A1 Specifications	17
Annex X – Maritime Bunker Fuel Specifications	17
Annex XI – Turbo Generator Specifications.....	18
Annex XII – Biofuel Specifications.....	18



FUEL, BIOFUEL, AND LUBRICANT QUALITY STANDARDS AND SPECIFICATIONS

Whereas, it is necessary to adopt measures aimed at minimizing the negative environmental impact arising from the use of Fuel, Biofuel and Lubricant and protect the interest of consumers.

Whereas, under Decree-Law 20/2008, of 19 June 2008 the Autoridade Nacional do Petróleo (ANP) is responsible for ensuring minimum quality standards for Fuel, Biofuel, Lubricants and similar products available in the domestic market and minimum standards of consumer protection.

Considering the importance of regulating the specifications of the above-mentioned products, so as to provide minimum standards for performance, safety and environmental protection and protect the interests of consumers.

Now therefore, under the terms of Article 7.2 (d) of Decree-Law No. 1/2012, of 1 February 2012 and of Articles 1.2, 3.4, 4.2 and 8 (c) of Decree-Law No. 20/2008, of 19 June 2008, the Board Directors of the ANP approves the following Regulations:

CHAPTER I General

Provisions

Article 1

Object and Scope

1. This Regulation sets forth the specifications for Fuel, Biofuel and Lubricants to be used in Timor-Leste and the rules applicable to their determination and amendment.
2. In order to achieve the purposes stated in Article 1.1, this Regulation is aimed at achieving the following goals:
 - (a) to regulate the quality of the Fuel, Biofuel and Lubricants distributed in the domestic market in order to reduce pollutant emissions arising from their use;
 - (b) to encourage the adoption of environmentally friendly engine technologies capable of ensuring minimum carbon emissions and the implementation of emission control technologies;
 - (c) to ensure that all the relevant and appropriate information about Fuel, Biofuel and Lubricants is provided to retailers and consumers when the products are provided, marketed and used.

Article 2
Definitions

1. The expressions, terms and concepts defined in Article 2 of Decree-Law no. 1/2012, of 1 February 2012, shall have herein the same meaning as conferred upon them in the above-mentioned Decree-law.
2. In addition to the definitions mentioned in Article 2.1 above, for the purposes of this Regulation:
 - (a) *Fuel Additive*: means a chemical substance incorporated in a Fuel so as to improve its properties or amend some of its characteristics;
 - (b) *Asphalt*: means a thermoplastic residue, obtained from crude oil through a distillation process by vacuum, which is semi-solid at air temperature and used primarily for road construction;
 - (c) *Cutback Asphalt*: means a mixture of Asphalt and Naphtha, Kerosene or gasoil which is used for road construction and civil construction works;
 - (d) *Avgas 100LL*: means the petroleum product with high-octane levels and low lead content, which specifications are provided in DERD 2485 (code NATO F-18) and ASTM Specifications D910, as amended from time to time and which is used in aircrafts powered by internal combustion engines (piston or Wankel);
 - (e) *Turbo Generator Fuel*: means a mixture of Kerosene with light and heavy Gasoline or Naphta, which is used for operating turbo generators for the generation of electric power;
 - (f) *Bio – ETBE (ethyl-tert-butyl-ether)*: means the ETBE produced on the bases of Bioethanol, which percentage by volume of bio-ETBE that is calculated as Biofuel is 47%;
 - (g) *Biofuel*: means the liquid or gaseous Fuel, produced from Biomass;
 - (h) *Biodiesel*: means a methyl-ester produced from vegetable or animal oil, of diesel quality, to be used as Biofuel;
 - (i) *Bioethanol*: means the ethanol produced from Biomass, to be used as Biofuel;
 - (j) *Biomass*: means the biodegradable fraction of products, waste and residues from agriculture (including vegetal and animal substances), forestry and related industries, as well as the biodegradable fraction of industrial and domestic waste;
 - (k) *Asphalt Emulsions*: means a mixture of Asphalt, water and an emulsifier, which is used for road construction and repair and also civil construction works;
 - (l) *Fuel Oil*: means a heavy petroleum distillate obtained from petroleum refining operations, either as a residue or as a mixture of a residue and a distillate, having a flash point above 60° C, which is used in combustion for heat or power generation;
 - (m) *Liquefied Petroleum Gas or LPG*: means a group of hydrocarbons processed and derived from Crude Oil refining or Natural Gas fractionation, composed mainly of a mixture of propane and butane, and which is used as combusting Fuel;

- (n) *Diesel Fuel*: means the medium petroleum distillate obtained from petroleum refining operation, which has distillation temperatures at 95% of diesel not to be above 360 °C and is used in diesel engines;
 - (o) *Heating Oil*: means a petroleum distillate middle range (similar to Diesel Fuel) obtained from petroleum refining, which is used as Fuel for burners or boilers for domestic heating or for moderate capacity commercial/industrial burner units;
 - (p) *Maritime Diesel Oil*: means a low viscosity distillate Fuel oil used in furnaces and large capacity, slow and medium speed diesel engines especially in marine service.
 - (q) *Gasoline* or *Petrol*: means a mixture of relatively volatile hydrocarbons obtained by the fractional distillation of refined petroleum products, normally boiling within the limits of 30° C to 205° C, blended to form a Fuel intended for use in spark-ignition internal combustion engines;
 - (r) *Jet-A1*: means the medium petroleum distillate obtained from petroleum refining operation, which is used in aircraft powered by gas-turbine engines and which specifications are provided in the standards and specifications contained in AFQRJOS (Aviation Fuel Quality Requirements For Jointly Operated Systems), as amended from time to time;
 - (s) *Licensee*: means a legal person to which a License is granted under Part III of Decree-Law No. 1/2012, of 1 February 2012 on the Downstream Sector;
 - (t) *Lubricant*: means products, most of them petroleum derivatives, used in mechanical machines to reduce the drag of the moving parts;
 - (u) *Naphtha*: means low boiling point distillate (same as Gasoline) with no further refining process, which can be used as feedstock in the refining process for Gasoline or used as is in some Fuel blends;
 - (v) *Kerosene*: means the medium petroleum distillate obtained from petroleum refining operation, which has a final boiling of 300°C and is used as combusting Fuel.
3. The definitions established in Article 2.2 are in furtherance of the definitions contained in Decree-Law No.1/2012, 1 February 2012 on the Downstream Sector and, in case of conflict between definitions set forth in the said Decree-Law and those set forth herein, the definitions of Decree-Law No. 1/2012, 1 February 2012 shall prevail.

Article 3

Fuel, Biofuel and Lubricant Requirements

Only Fuel, Biofuel and Lubricants that conform to the specifications set forth in this Regulation may be imported into, produced, provided, marketed and used in Timor-Leste.

CHAPTER II
Fuel, Biofuel and Lubricant Specifications

Article 4

Propane, butane and LPG specifications

1. The propane and butane, as Liquefied Petroleum Gases or LPG, to be used in the domestic market must conform to the specifications set out in Annex I to this Regulation, which is deemed a part hereof.
2. The Liquefied Petroleum Gas to be used as motor Fuel (Autogas) in the domestic market must conform to the specifications set out in Annex II to this Regulation, which is deemed a part hereof.

Article 5

Gasoline specifications

1. The Gasoline to be used in the domestic market must conform to the specifications set out in Annex III to this Regulation, which is deemed a part hereof.
2. The sale and use of leaded Gasoline is strictly prohibited in all the territory of Timor-Leste.

Article 6

Kerosene specifications

The Kerosene to be used in the domestic market must conform to the specifications set out in Annex IV to this Regulation, which is deemed a part hereof.

Article 7

Diesel Fuel specifications

The Diesel Fuel to be used in the domestic market, including agricultural and maritime diesel, as well as diesel for power generation, must conform to the specifications set out in Annex V to this Regulation, which is deemed a part hereof.

Article 8

Fuel Oil specifications

The Fuel Oil types to be used in the domestic market must conform to the specifications set out in Annex VI to this Regulation, which is deemed a part hereof.

Article 9

Heating Oil specifications

1. The Heating Oil to be used in the domestic market shall conform to the specifications to be approved by the ANP to this effect, which shall be set out in Annex VII to this Regulation, which is deemed a part hereof.
2. Heating Oil may only be used as a Fuel for industrial, commercial or domestic heating. Its use as Fuel for motor engines is not permitted.

Article 10

Avgas 100LL specifications

The Avgas 100LL to be used in the domestic market shall conform to the specifications to be approved by the ANP to this effect, after consultation with the national aviation authorities, and which are described in Annex VIII to this Regulation, which is deemed a part hereof.

Article 11

Jet-A1 specifications

The Jet-A1 to be used in the domestic market must conform to the specifications of the last edition of «AFQRJOS» as described in Annex IX to this Regulation, which is deemed a part hereof.

Article 12

Maritime Bunker Fuel specifications

The Maritime Bunker Fuels to be used in the domestic market must conform to the specifications to be approved by the ANP to this effect, which shall be set out in Annex X to this Regulation, which is deemed a part hereof.

Article 13

Turbo Generator Fuel specifications

The Turbo Generator Fuel to be used in the domestic market must conform to the specifications to be approved by the ANP to this effect, which shall be set out in Annex XI to this Regulation, which is deemed a part hereof.

Article 14

Biofuel specifications

1. The Biofuel (Bioethanol and Biodiesel) to be used for blending with Gasoline and Diesel Fuel in the domestic market must conform to the specifications to be approved by the ANP to this effect, which shall be set out in Annex XII to this Regulation, which is deemed a part hereof.

2. Once they are approved, the specifications for testing of Biofuel quality shall also be contained in Annex XII to this Regulation.

Article 15

Specification for blending of Biofuel with Gasoline and Diesel Fuel

1. The specification for the blending of Biofuel with Gasoline and Diesel Fuel used for the propulsion of vehicles, used in the domestic market, with a percentage by volume of Biofuel greater than 5%, are set forth in Annexes III and V, except for the values established as maximum contents of such Biofuel.
2. The blending of Biofuel is limited up to a maximum threshold of 20% by volume.
3. For the blending referred to in article 15.1 it is mandatory that the respective fuelling equipment displays an inscription regarding the contents of Bioethanol or Biodiesel, as determined in regulations to be approved by the ANP to this effect.
4. The supplier of the Fuel referred in article 15.1 is responsible for ensuring that:
 - (a) The product is made and kept under conditions and for a period that guarantee a physical and chemical stability and an acceptable water level;
 - (b) The materials and the operating, storage and dispensing equipment are compatible with the respective Biofuel for which they are used.
5. The consumer is responsible for ensuring that its vehicle and the referred Fuel are compatible. To this effect the consumer shall obtain the necessary information from the manufacturer or its representative, who must provide it in one of the official languages of Timor-Leste.

Article 16

Cutback Asphalt and Asphalt Emulsions specifications

The Cutback Asphalt and Asphalt Emulsions to be used in the domestic market shall conform to internationally acceptable specifications to be approved by the ANP on a case-by-case basis upon proposal of the importer thereof, after consultation with the government bodies responsible for supervising the construction and the public works sectors.

Article 17

Asphalt specifications

The Asphalt to be used in the domestic market shall conform to internationally acceptable specifications to be approved by the ANP on a case-by-case basis upon proposal of the importer thereof, after consultation with the government bodies responsible for supervising the construction and the public works sectors.

Article 18

Lubricant specifications

The Lubricants to be used in the domestic market shall conform to internationally acceptable specifications to be approved by the ANP on a case-by-case basis upon proposal of the importer thereof.

Article 19

Amendments to Fuel, Biofuel and Lubricant specifications

1. From time to time, the ANP shall, at its sole discretion and based on social, economic, energetic and environmental criteria, amend the Fuel, Biofuel and Lubricants specifications set out in the Annexes to this Regulation, which are deemed a part hereof.
2. The amendment of the Annexes to this Regulation to include specifications for products already mentioned herein shall not require the amendment of its respective article.

CHAPTER III

Special Provisions

Article 20

Supply Crisis Situations

1. Subject to the provisions of Article 20.2, in the event of supply crisis situations resulting from an extraordinary event which provokes a sudden change in the market that hinders the supply of crude oil or Fuel, Biofuel and/or Lubricants, the specifications set forth in this Regulation shall not apply, provided that the following circumstances occur:
 - (a) The sudden change in the market is such that it severely hinders compliance with the relevant specifications by the refineries;
 - (b) The interested parties provide proof to the member of the Government responsible for the petroleum sector that it is not possible to comply with the relevant specifications.
2. In a supply crisis situation, the members of the Government responsible for petroleum matters and the environment may set forth, by means of a joint decree, valid for up to 6 months, Gasoline and Diesel Fuel specifications less stringent than those established in this Regulation.
3. Less stringent product specifications may also be determined, by means of a Government Decree valid for up to 6 months, in cases of duly grounded public interest.

Article 21

Fuel Additives

1. The use of Fuel Additives shall be allowed under the terms set forth in this Article.
2. The ANP may approve the supply of Fuel at the pump with incorporated Fuel Additives on a case-by-case basis. The approval request shall include:
 - (a) A description of the Fuel Additives' main active elements;
 - (b) Information on the percentage by volume that the Fuel Additive incorporated in the Fuel represents;
 - (c) Description of the blending process;
 - (d) The purpose justifying the use of the Fuel Additive;
 - (e) Any other details or information requested by the ANP.
3. The ANP shall supervise compliance with the rules contained in this Article 21 and in the approval granted hereunder for the use of Fuel Additives in any point of the value chain.

CHAPTER IV

Quality Control System Regarding the Specifications set forth in Annexes III and V

Article 22

Quality Control Systems

1. The quality control system rules of the Fuels defined in articles 2(q) and 2(n) are established in accordance with the ASTM Book of Standards – Section 5 – Petroleum Products, Lubricants and Fossil Fuels (Vols 05.01 -05.06)
2. The analytical control of the Fuels mentioned in article 22.1 above is made pursuant to the methods specified in the ASTM D6227 and ASTM D975. Notwithstanding the foregoing, the ANP may authorise the use of alternative analytical methods that ensure the same quality and precision levels of the methods being replaced.
3. The ANP is responsible for ensuring the implementation and execution of the Fuel quality control system established in article 22.2 above.

Article 23

Inspection and Control

1. The ANP is responsible for controlling the implementation of and compliance with this Regulation at all phases of the marketing value chain, including, amongst others, for:
 - (a) Gathering and processing the information on control of the implementation of the specifications provided for in Chapter II and the Annexes to this Regulation;

- (b) Submitting to the member of the Government responsible for the petroleum sector all information obtained from the inspections performed during each year, by the end of the first quarter of the subsequent year.
- 2. The Marketing value chain referred in article 23.1 shall include, amongst others, supply, storage, transportation, distribution, point of sales and consumption of Fuel.
- 3. The Licensees that introduce in the market or sell Gasoline or Diesel Fuels must advise the ANP, during the first quarter of each year, of the programs and control methods used to comply with the relevant specifications.
- 4. Importers of Fuel, Biofuel or Lubricants shall request the ANP's approval for the importation of the products prior to their entry into the territory of Timor-Leste. For this purpose, the importer shall present to the ANP all documents and any other evidence from the supplier or from the producer of the product attesting the respective specifications of origin.
- 5. The legal persons that operate facilities subject to quality control pursuant to this Regulation are obliged to allow the access of duly certified ANP inspectors to their facilities, to provide such inspectors the necessary assistance and allow them to gather representative samples of the Fuels.
- 6. The provision contained in article 23.5 above shall also apply to the agents of entities that have been hired by the ANP to proceed with the gathering of the samples mentioned in the referred article and any other inspection activities.

CHAPTER V

Offence provisions

Article 24

Offences

- 1. Under article 57.1 of Decree-Law 1/2012, of 1 February 2012, the following are deemed light Offences subject to a penalty ranging from USD 250 to USD 15,000, in case of physical persons, and USD 1,250 to USD 75,000, in case of legal persons:
 - (a) The breach of the provision of article 9.2;
 - (b) The lack of the mandatory inscription provided for in article 15.3;
 - (c) The delay or refusal in providing the information requested under article 23.3;
 - (d) The breach of the obligation referred in article 23.4.
- 2. Under article 57.2 of Decree-Law 1/2012, of 1 February 2012 the following are deemed a serious Offence punishable with a penalty from USD 750 to USD 50,000, in case of physical persons, and from USD 15,000 to USD 300,000 in case of legal persons:
 - (a) Variation of the Fuel, Lubricant or Biofuel Quality Standards, outside the situations foreseen in article 20;

- (b) Breach of the rules for supply or use of Fuel Additives provided in this Regulation;
 - (c) Breach of the obligations set forth in articles 23.5 and 23.6;
 - (d) The non-use or incorrect use of a dye when required by international rules and standards or by the specifications listed in the Annexes to this Regulation, or the use of a dye in breach of the respective specifications.
3. Under article 57.3 of Decree-Law 1/2012, of 1 February 2012 the following are deemed very serious offenses subject to a penalty ranging from USD 1,500 to USD 150,000, in case of physical persons, and USD 75,000 to USD 1,000,000, in case of legal persons:
- (a) The introduction into consumption or the marketing of Fuel, Biofuel or Lubricants that do not conform with the specifications set forth in Chapter II and the Annexes to this Regulation;
 - (b) The use of dyed Fuel for purposes other than those for which they are intended.
4. Attempt and negligence are punishable.

Article 25

Supervision and Application of Penalties

1. As determined in articles 7.1 (d) and 7.2 (d) of Decree-Law no. 1/2012, of 1 February 2012 the ANP is responsible for supervising compliance with this Regulation, without prejudice of the powers of other public entities.
2. The sanctioning proceedings shall be conducted by the ANP under Decree-Law 1/2012, of 1 February 2012 which shall also be responsible for imposing administrative sanctions and additional sanctions.
3. The product resulting from the application of administrative sanctions shall be allocated as determined in article 21.3 of Decree-Law no. 1/2012, of 1 February 2012.

CHAPTER VI

Fuel, Biofuel and Lubricant Standards Advisory Panel

Article 26

Fuel, Biofuel and Lubricant Standards Advisory Panel

1. The ANP may establish a Fuel, Biofuel and Lubricant Standards Advisory Panel to assist it in establishing and reviewing the standards contained in this Regulation.
2. Until the Fuel, Biofuel and Lubricant Standards Advisory Panel is established, the ANP may use external expert consultants for the purposes of this Chapter VI.

Article 27
Consultation

1. The Fuel, Biofuel and Lubricant Standards Advisory Panel is an informal group of stakeholders, comprising the members listed in Article 28 below, which must be consulted by the ANP in respect of the following matters.
 - (a) before establishing or changing Fuel, Biofuel and Lubricant quality standards;
 - (b) before taking any measures under Article 20;
 - (c) on any other policy or technical matters respecting to Fuel, Biofuel and Lubricant quality standards.
2. The Panel's opinion shall be merely indicative and is not binding on the ANP.
3. The ANP's consultation of the stakeholder representatives that comprise the Panel may be done, at its own discretion, individually in writing, or through group meetings.
4. In the case of individual consultation in writing, the ANP shall, on a case-by-case basis, establish an adequate deadline for the members of the Panel to provide their comments. The absence of comment by one or more members within the deadline established by the ANP shall be deemed as a declaration by the same member(s) that they do not oppose to the issue under discussion or have nothing further to add to the discussion.
5. All comments and contributions by members of the Panel and all decisions made by the ANP on matters subject to the Panel's opinion shall be published on the ANP website.

Article 28
Composition of Panel

The Panel shall consist of members of the following stakeholders appointed by the member of the Government responsible for the petroleum sector, and must include, at least:

- (a) 1 representative of the member of the Government responsible for the petroleum sector;
- (b) 1 representative appointed by the member of the Government responsible for the environment;
- (c) 1 representative representing car manufacturers and /or importers;
- (d) 1 person representing Fuel, Biofuel and/or Lubricant producers and/or importers;
- (e) 1 person representing a non-government body with an interest in the protection of the environment;
- (f) 1 person representing the interests of consumers, when a consumer representation body or entity is created in Timor-Leste.

Article 29
Expert advisers

Upon receiving the Fuel, Biofuel and Lubricant Standards Advisory Panel's opinion, and should it deem necessary, the ANP may appoint one or more qualified persons to provide expert advice.

Article 30
Approval of new and amendment of existing Specifications

1. When new types of Fuel, Biofuel and Lubricants already listed in Chapter II become available on the Timor-Leste market, when specifications are approved for products that are already available but have not yet been regulated in these Regulations, or when the existing specifications are amended, the ANP shall approve the respective Annexes which shall be inserted in this Regulation without the need of otherwise amending the provisions hereof.
2. The approval of new specifications, or the amendment of existing specifications, under Article 30.1 above, shall be preceded by consultation as provided in Chapter VI hereof, and followed by the republication of this Regulation in the Jornal da República, with the new Annexes.
3. The entry into force of new or amended specifications shall be subject to a transitional period under the terms set forth in Article 33.

Article 31
Use of Dyes

The ANP may elect to use dyes to distinguish between types of Fuel, Biofuel and Lubricants, in accordance with applicable international rules and standards or, when the same rules and standards do not exist, as defined by the ANP in the relevant product specifications listed in the Annexes to this Regulation.

Article 32
Repeal

All prior statutes or regulations contradicting the provisions of this Regulation are hereby repealed.

Article 33
Transitional Period

4. The quality standards and specifications set forth in this Regulation shall apply to all contracts entered into for the importation of Fuel, Biofuel and Lubricants into Timor-Leste, and all Fuel, Biofuel and Lubricants produced or blended in the country as of the effective date hereof.
5. At the latest, within one year of the effective date hereof, all existing importers shall ensure that their contracts for the acquisition and/or importation of Fuel, Biofuel and

Lubricants comply with the quality standards and specifications provided for in this Regulation.

6. For the purposes of Article 33.2 above, upon expiration of their current term, existing contracts may not be renewed unless they incorporate the quality standards and specifications set forth herein, and any such renewal shall be deemed a new contract for the purposes, namely but not limited to, of Article 33.1 and 24 above.

Article 34

Effective Date

This Regulation is effective on the day following the date of its publication in the *Jornal da República*.

Approved by the ANP Board of Directors, on 17 December 2013

Members:

- 1) Gualdino do Carmo da Silva – Chair
- 2) Jorge Martins, Non – Executive
- 3) Mateus da Costa - Executive Board Member
- 4) Nelson de Jesus - Executive Board Member

ANNEX I

Liquefied Petroleum Gas specifications

Parameter	Units	Limits		Date of Effect	Test methods
		Min.	Max.		

ANNEX II

Autogas specifications

Parameter	Units	Limits		Date of Effect	Test methods
		Min.	Max.		
Pending approval					

ANNEX III Petrol/Gasoline specifications

Parameter	Units	Limits		Grade	Date of Effect	Test Method
		Min	Max			
Sulphur	mg/kg		150	All grades	2013	ASTM D5453
			50	All grades	2020	
Research Octane Number (RON)		88.0		ULP	2013	ASTM D2699
		91.0		PULP	2017	
Motor Octane Number (MON)		78.0		ULP	2013	ASTM D2700
		85.0		PULP	2013	
Distillation, Final Boiling Point	°C		210	All grades	2013	ASTM D86
Olefins	% v/v		18.0	All grades	2013	ASTM D1319
Aromatics	% v/v		42.0	All grades	2013	ASTM D1319
Benzene	% v/v		3.0	All grades	2013	ASTM D5580
			1.0	All grades	2013	ASTM D5580
Lead	mg/L		5.0	All grades	2013	ASTM D3237
Oxygen	% m/m	2.7		All grades (no ethanol)	2013	ASTM D4815

Non Official Translation
Regulation No.1/2014

	% m/m	3.5		All grades (with ethanol)	2013	
Ethanol	% v/v		10.0	All grades	2013	ASTM D4815
Oxygenates Except Ethanol, Each	% v/v		1.0	All grades	2013	ASTM D4815
Phosphorus	mg/L		1.3	All grades	2013	ASTM D3231
Copper Corrosion (3 hrs at 50°C)	rating		Class 1	All grades	2013	ASTM D130
Existent Gum (washed)	mg/100mL		5	All grades	2013	ASTM D381
Induction Period	minutes	360		All grades	2013	ASTM D525
Reid Vapour Pressure	kPa	45	65	All grades	2013	ASTM D323
Flexible Volatility Index	index		100	All grades	2013	ASTM D86 & ASTM D323

ANNEX IV

Kerosene specifications

Parameter	Units	Limits		Date of Effect	Test Method
		Min	Max		
Pending approval					

ANNEX V

Automotive Diesel

Parameter	Units	Limits		Date of Effect	Test Method
		Min	Max		
Sulphur Content	mg/kg		500	2013	ASTM D5453
	mg/kg		50	2025	
	mg/kg				
Cetane Index		45		2013	ASTM D4737
Density at 15 °C	kg/m ³	820	850	2013	ASTM D4052 ASTM D1298
Distillation T95	°C		360	2013	ASTM D86
Polyaromatic Hydrocarbons (PAHs)	% m/m		11.0	2013	IP391
Ash Content	% m/m		0.01	2013	ASTM D482
Viscosity	mm ² /s	2.00	4.50	2013	ASTM D445

Non Official Translation
Regulation No.1/2014

Carbon Residue (10% distillation residue)	% m/m		0.20	2013	ASTM D4530
Water Content	mg/kg		200	2013	ASTM D6304
Total Contamination	mg/kg		24	2013	EN 12662
Conductivity at Ambient Temperature (all diesel held by a terminal or refinery for sale or distribution)	pS/m	50		2013	ASTM D2624
Oxidation Stability	mg/L		25	2013	ASTM D2274
Colour	Rating		2	2013	ASTM D1500
Copper Strip Corrosion (3 hours at 50 °C)	Rating		Class 1	2013	ASTM D130
Flash Point	°C	61.5		2013	ASTM D93
Filter Blocking Tendency	Rating		2.0	2013	IP 387
Fatty Acid Methyl Ester (FAME) Content	% v/v		5.0	2013	EN 14078
Lubricity	Mm		0.460	2013	IP 450

Maritime Diesel Oil

Parameter	Units	Limits		Date of Effect	Test methods
		Min.	Max.		
Pending approval					

ANNEX VI

Fuel Oil specifications

Parameter	Units	Limits		Date of Effect	Test methods
		Min.	Max.		
Pending approval					

ANNEX VII

Heating Oil specifications

Parameter	Units	Limits		Date of Effect	Test methods
		Min.	Max.		
Pending approval					

ANNEX VIII

Avgas 100LL specifications

Avgas specifications shall conform to the most up-to-date issue of the following specifications:

- - ASTM D910 in the US
- - DEFENCE STANDARD 91/90 in the rest of the world.

ANNEX IX

Jet-A1 Specifications

The Jet-A1 specifications shall be the most up-to-date specifications of Aviation Fuel Quality Requirements for Jointly Operated Systems (AFQRJOS) for Jet A-1, which embodies the most stringent requirements of the following two specifications:

- (a) British Ministry of Defence Standard DEF STAN 91-91/Issue 7 Amendment 1, 16 December, 2011 for Turbine Fuel, Kerosene Type, Jet A-1, NATO Code F-35, Joint Service Designation: AVTUR.
- (b) ASTM Standard Specification D 1655 for Aviation Turbine Fuels "Jet A-1".

ANNEX X Maritime

Bunker Fuels

Parameter	Units	Limits		Date of Effect	Test methods
		Min.	Max.		
Pending approval					

ANNEX XI

Turbo Generator Fuel specifications

Parameter	Units	Limits		Date of Effect	Test methods
		Min.	Max.		
Pending approval					

ANNEX XII

Biodiesel

Parameter	Units	Limits		Date of Effect	Test methods
		Min.	Max.		

Bioethanol

Parameter	Units	Limits		Date of Effect	Test methods
		Min.	Max.		