

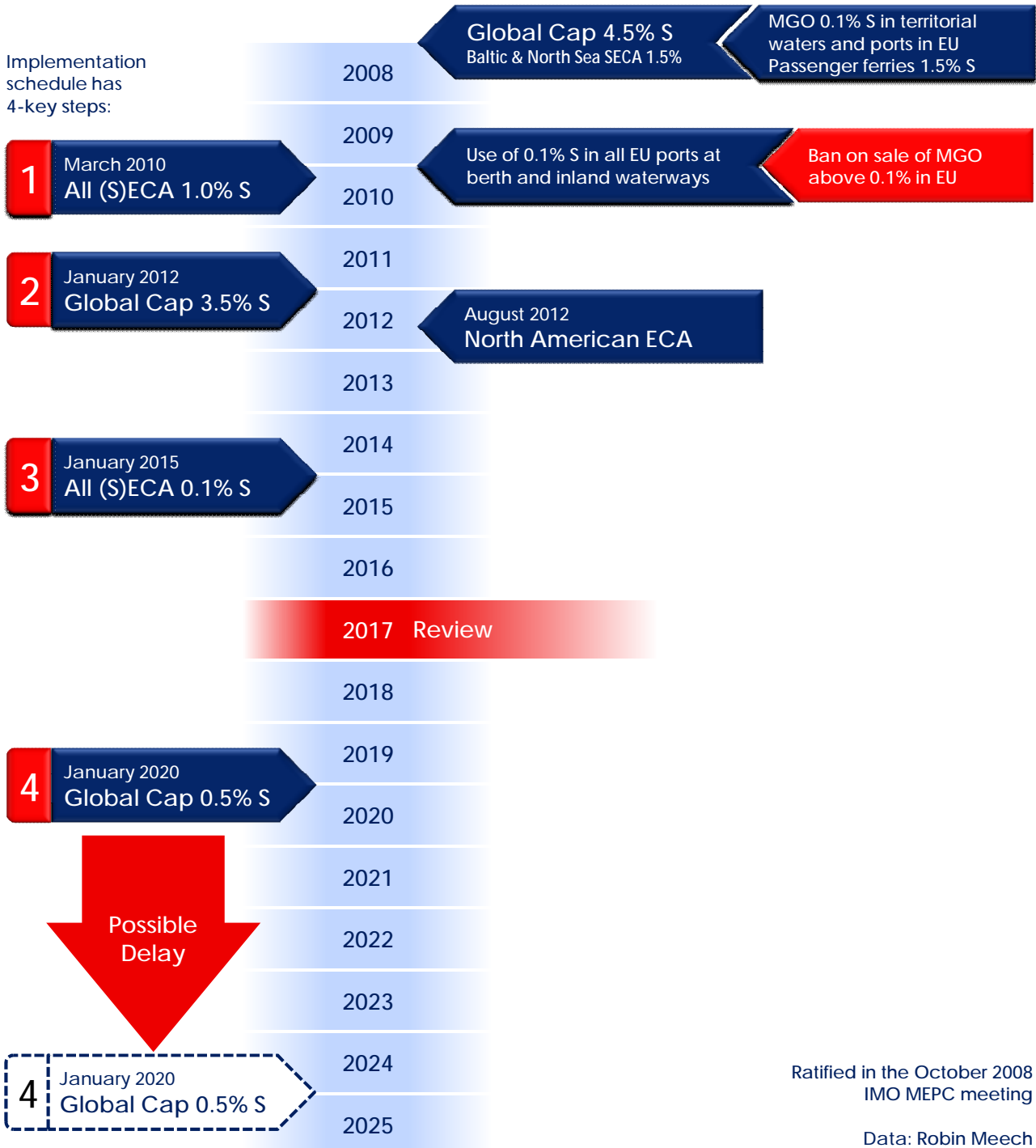
Characteristic	Limit	Residual										Distillate		
		RMA	RMB	RMD	RME	RMG				RMK			DMA	DMB
		10	30	80	180	180	380	500	700	380	500	700		
Kinematic viscosity, mm ² /sb	min.												2,0	
- at 40 °C	max.												6,0	11,0
- at 50 °C	max.	10,0	30,0	80,0	180,0	380,0	500,0	700,0	380,0	500,0	700,0			
Density at 15°C, kg/m ³	max.	920,0	960,0	975,0	991,0				1010,0			890,0	900,0	
CCAI	max.	850	860		870									
Cetane index	min.												40	35
Sulphur, % (m/m)	max.	Statutory requirements											1,50	2,00
Flash point, °C	min.	60											60	
Hydrogen sulfide, mg/kg	max.	2,0											2,0	
Acid number, mg KOH/g	max.	2,5											0,5	
Total sediment aged, % (m/m)	max.	0,10												
Total sediment hot filtration, % (m/m)	max.												-	0,10
Oxidation stability, g/m ³	max.												25	
Carbon residue, % (m/m)	max.	2,5	10	14	15	18				20			-	0,30
- 10% volume distillation	max.												0,30	-
Pour point (upper), °C													-	-
- winter quality	max.	0						30				-6	0	
- summer quality	max.	6						30				0	6	
Water, % (V/V)	max.	0,3					0,5				-	0,3		
Ash, % (m/m)	max.	0,04	0,07		0,10				0,15			0,01		
Vanadium, mg/kg	max.	50	150		350				450					
Sodium, mg/kg	max.	50	100	-	50	100								
Aluminium plus silicon, mg/kg	max.	25	40	-	50	60								
Lubricity, corrected wsd 1,4 @ 60°C	max.												520	
Used lubricating oil (ULO), mg/kg		Fuel shall be free of ULO. Fuel is considered to contain ULO when either:												
- Calcium and Zinc	-	Calcium > 30 and Zinc > 15; OR												
- Calcium and Phosphorus	-	Calcium > 30 and Phosphorus > 15												

ISO 8217:2010 Category ISO F

5.0 General Requirements

- 5.1 The fuel shall conform to the characteristics and limits given in Table 1 or Table 2, as appropriate, when tested in accordance with the methods specified.
- 5.2 The fuel shall be a homogeneous blend of hydrocarbons derived from petroleum refining. This shall not preclude the incorporation of additives intended to improve some aspects of the fuel's characteristics and performance. The fuel shall be free from inorganic acids and used lubricating oils.
- 5.3 Fuels shall be free from any material that renders the fuel unacceptable for use in marine applications.
- 5.4 The fuel shall be free from bio-derived materials other than 'de minimis' levels of FAME (FAME shall be in accordance with the requirements of EN 14214 or ASTM D6751). In the context of this International Standard, "de minimis" means an amount that does not render the fuel unacceptable for use in marine applications. The blending of FAME shall not be allowed.
- 5.5 The fuel shall not contain any additive at the concentration used in the fuel, or any added substance or chemical waste that -
 - a) jeopardizes the safety of the ship or adversely affects the performance of the machinery; or
 - b) is harmful to personnel; or
 - c) contributes overall to additional air pollution.

Sulphur ("S") Content Timeline



Ratified in the October 2008
IMO MEPC meeting

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