Oil Companies International Marine Forum

MTIS Programme

Terminal TPQ

Terminal TPQ: PETRONOR MARINE TERMINAL

ReportName 4a6894ea-0874-4bb4-94e4-f35777d86a74

Terminal Name: PETRONOR MARINE TERMINAL

Terminal Port: BILBAO PORT

Terminal Port Authority: AUTORIDAD PORTUARIA DE BILBAO

Country: Spain

06 November 2015

1 General

1.1	Date this TPQ document was completed/updated	16 November 2012
1.2	Specify units used	Metres and Metric Tonnes

2 Port Details

2.1	Port Name	BILBAO PORT
2.2	UN LOCODE	ESBIO
2.3	Country	Spain
2.4	Latitude and Longitude of Port	
1	Latitude	432150 North
2	Longitude	0030616 West
2.5	Is this location affected by ice?	No
2.6	Name of port authority	AUTORIDAD PORTUARIA DE BILBAO
2.7	Port authority contact name and title	MARIO HERNAEZ URIARTE - DIRECTOR
2.8	Port authority full style contact address	
1	Address Line 1	CAMPO VOLANTIN, 37
2	Address Line 2	N/A
3	Address Line 3	N/A
4	City	BILBAO
5	County/State	BIZKAIA
6	Postcode/Zipcode	48007
7	Phone	944871200
8	Fax	944871208
9	Email	n/a
10	Website	www.bilbaoport.es

3 Terminal Details

3.1	Terminal name	PETRONOR MARINE TERMINAL
3.2	Terminal owner	PETROLEOS DEL NORTE S.A.
3.2	Number of berths included in this TPQ	6
3.3	Name of first point of contact for terminal owner	JOSU JON IMAZ SAN MIGUEL
3.4	Terminal owner full style contact address	
1	Address Line 1	SAN MARTIN, 5
2	Address Line 2	N/A
3	Address Line 3	N7A
4	City	MUSKIZ
5	County/State	BIZKAIA
6	Postcode/Zipcode	48550

7	Phone	946357000
8	Fax	946365332
9	Email	PETRONOR_PORT@repsol.com
10	Website	http://www.repsol.com/es_en/productos-servicios/servicios-marinos/terminales-marinas/petronor/about-us/welcome/default.aspx
3.5	Terminal operator, if different from owner	N/A
3.6	Name of first point of contact for terminal operator	N/A
3.7	Terminal operator full style contact address	
1	Address Line 1	N/A
2	Address Line 2	N/A
3	Address Line 3	N/A
4	City	N/A
5	County/State	N/A
6	Postcode/Zipcode	N/A
7	Phone	N/A
8	Fax	N/A
9	Email	N/A
10	Website	N/A

4 TPQ Accountability

4.1	Name and title of person completing this TPQ	IMANOL OLABARRIA INTXAUSTI - JEFE A. TERMINAL MARITIMA
4.2	Full style contact details of person completing this TPQ	
1	Address Line 1	SAN MARTIN, 5
2	Address Line 2	N/A
3	Address Line 3	N7A
4	City	MUSKIZ
5	County/State	BIZKAIA
6	Postcode/Zipcode	48550
7	Phone	946357000
8	Fax	946365332
9	Email	PETRONOR_PORT@repsol.com

5 Port Facility Security Officer Details

5.1	Does the port facility comply with the ISPS code?	
1		Yes
2	Port Facillity Security Officer contact name	IMANOL OLABARRIA INTXAUSTI
5.2	Port Facility Security Officer full style contact details	
1	Address Line 1	SAN MARTIN, 5
2	Address Line 2	n/a

3	Address Line 3	n/a
4	City	MUSKIZ
5	County/State	BIZKAIA
6	Postcode/Zipcode	48550
7	Phone	946357000
8	Fax	946365332
9	Email	molabarriai@repsol.com

6 Operational Integrity Details

6.1	State details of any pre-arrival/operational clearance formalities for vessels	See Petronor Terminal Questionnaire
6.2	Has the terminal completed an assessment using the standard industry process?	
1		Yes
2	If 'Yes', state date completed	11 November 2012
6.3	Additional comments or information	None

Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: JETTY - 6

ReportName d966225a-2a3c-4d6e-bb03-4f91f9ea9ded

Terminal Name: PETRONOR MARINE TERMINAL

Terminal Port: BILBAO PORT

Terminal Port Authority: AUTORIDAD PORTUARIA DE BILBAO

Country: Spain

Berth Name: JETTY - 6

06 November 2015

1 Berth General

1.1		Berth name or number	JETTY - 6
1.2		Berth type	
	1		Wharf or Quay
	2	If 'Other' please specify	
1.3		Terrestrial co-ordinates of manifold centreline	
	1	Latitude	432151 North
	2	Longitude	0030551 West
1.4		Berth users for liquid and gas cargoes	JETTY OUT OF SERVICE
1.5		Has a structural survey of the berth been undertaken, including its underwater structure?	
	1		Yes
	2	If 'Yes', state date of last survey	17 May 2005
1.6		Has an engineering (mooring and fendering) analysis of berth been undertaken?	
	1		Yes
	2	If 'Yes', state date of last analysis	17 May 2005
1.7		Additional comments or information	out of order

2 Berth Approaches

2.1		Is pilotage compulsory?	
	1		Yes
	2	If 'Yes', state if any vessels are exempted	SPANISH LAW THE PILOTAGE IS COMPULSORY FOR ALL DANGEROUS GOODS
2.2		State distance from pilot station(s) to berth	JETTY OUT OF SERVICE
2.3		Is a waiting anchorage available?	
	1		Yes
	3	If 'Yes', state distance from waiting anchorage to berth	TWO (2) MILES
2.4		Controlling depth of water for transit to and from berth	
	1	Water depth	7.00 Metres
	2	State datum used	
	3	If 'Other' please specify datum	
2.5		Date of latest survey from which transit depth has been determined	08 November 2008
2.6		Date next survey is due	08 November 2018
2.7		State Maximum Tidal Range in berth approaches	4.50
2.8		Is laden transit to and/or from the berth conducted using the tide?	
	1		No
	2	If 'Yes', state optimum transit window (i.e. at High Water, HW +/- 1 hr)	

2.9	State details of any specific berthing and/or unberthing restrictions	SEE PETRONOR MARINE TERMINAL INFORMATION AND PORT REGULATION
2.10	Minimum under keel clearance (UKC) in berth approaches	
1	Value	1.00 Meters
2	Percentage	6.00 Depth of water
3	Specify other UKC criterion where applicable	ROM 3.1-99 NORMATIVE
2.11	Absolute maximum draught in berth approaches, if applicable	7.00
2.12	State minimum vertical clearance of any bridges/power cables/vertical obstructions	
1	Vertical clearance	999.00 Metres
2	State datum used	
3	If 'Other' specify other datum used	
4	Further details	N/A
2.13	Does the port require tankers and gas carriers to be escorted by tugs?	
1		Yes
2	If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	SEE PORT CAPTAIN PROCEDURES
2.14	Additional comments or information	JETTY OUT OF ORDER

3 Water Depth Alongside

3.1	Minimum controlled water depth alongside berth at chart datum	
1	Water depth	7.00 Metres
2	State datum used	
3	If 'Other' specify datum	
3.2	Date of latest survey from which alongside depth has been determined	08 November 2008
3.3	Date next survey is due	08 November 2018
3.4	Minimum static under keel clearance (UKC) alongside berth	
1	Value	1.00 Meters
2	Percentage	7.00 Depth of water
3	Specify other UKC criterion where applicable	
3.5	State range of water densities at berth	
1	From	1015.00
2	To	1025.00
3	Further details	
3.6	Type of bottom alongside berth	
1		Mud
2	If 'Other' please specify	
3.7	Absolute maximum draft alongside, if applicable	6.00
3.8	State maximum tidal range at berth, if applicable	4.50
3.9	Are 'over-the-tide' cargo handling operations permitted at the berth?	Yes

3.10	Does the berth location experience water-level anomalies?	
1		No
2	Provide details	
3.11	Additional comments or information	JETTY OUT OF ORDER

4 Limiting Vessel Dimensions

4.1	Summer deadweight	
1	TPQ NA Selector	Not applicable
2	Minimum	
3	Maximum	
4.2	Berthing displacement	
1	TPQ NA Selector	Not applicable
2	Minimum	
3	Maximum	
4.3	Alongside displacement	
1	TPQ NA Selector	Not applicable
2	Minimum	
3	Maximum	
4.4	State any deadweight/displacement exceptions	
1	TPQ NA Selector	Not applicable
2		
4.5	Cubic capacity (gas carriers)	
1	TPQ NA Selector	Not applicable
2	Minimum	
3	Maximum	
4.6	Length over all (LOA)	
1	TPQ NA Selector	Not applicable
2	Minimum	
3	Maximum	
4.7	Beam	
1	TPQ NA Selector	Not applicable
2	Minimum	
3	Maximum	
4.8	Minimum parallel body length (PBL)	
1	TPQ NA Selector	Not applicable
2		
4.9	Minimum PBL forward of manifold	
1	TPQ NA Selector	Not applicable
2		

4.10	Minimum PBL aft of manifold	
1	TPQ NA Selector	Not applicable
2		
4.11	Bow to centre of manifold (BCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	
3	Maximum	
4.12	Stern to centre of manifold (SCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	
3	Maximum	
4.13	Freeboard	
1	TPQ NA Selector	Not applicable
2	Minimum	
3	Maximum	
4.14	Manifold height above water	
1	TPQ NA Selector	Not applicable
2	Minimum	
3	Maximum	
4.15	Manifold to shipside rail distance	
1	TPQ NA Selector	Not applicable
2	Minimum	
3	Maximum	
4.16	Height of manifold above deck or drip tray	
1	TPQ NA Selector	Not applicable
2	Minimum	
3	Maximum	
4	Specify whether height is from the deck or the drip tray	
4.17	Manifold spacing	
1	TPQ NA Selector	Not applicable
2	Minimum	
3	Maximum	
4.18	Maximum air draft alongside	
1	TPQ NA Selector	Not applicable
2		
4.19	Vessel's minimum derrick/crane Safe Working Load (SWL)	
1	TPQ NA Selector	Not applicable
2		
4.20	Additional comments or information	JETTY OUT OF ORDER

5 Mooring and Berthing Information

5.1	State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	JETTY OUT OF SERVICE
5.2	Are ship's or tug's lines used?	
1	Ship/Tug	Not required
2	Comments	JETTY OUT OF SERVICE
5.3	Type of fenders installed at berth	
1		
2	If 'Other' please specify	
5.4	State orientation of vessel alongside berth	
5.5	At buoy moorings, state which side hose is normally connected	
1		
2	If 'Other' please specify	
5.6	Minimum mooring arrangement	JETTY OUT OF SERVICE
5.7	Describe any additional mooring requirements	JETTY OUT OF SERVICE
5.8	Are there any restrictions using wire mooring ropes?	
1		No
2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	
5.9	Are there any restrictions using synthetic mooring ropes?	
1		No
2	If ‘yes’; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	
5.10	Are there any restrictions on using high modulus synthetic mooring ropes?	
1		No
2	If 'yes' provide details	
5.11	Details of any specific mooring equipment required for any vessel utilising the berth	JETTY OUT OF SERVICE
5.12	Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?	
1		No
2	If 'Yes', provide details of particular requirements regarding ETOPs.	
5.13	Details of any shore-provided mooring equipment	JETTY OUT OF SERVICE
5.14	Are berthing aids provided?	
1		No
2	If 'Yes', state type of aids	
5.15	State allowable speed of approach if applicable	
1		JETTY OUT OF SERVICE
1		

5.16	Is a mooring tension monitor fitted?	No
5.17	Are mooring hook quick release arrangements provided?	No
5.18	Chain stopper requirements	
1	Applicable	No
2		
5.19	Largest ship handled at berth to date	JETTY OUT OF SERVICE
5.20	Additional comments or information	JETTY OUT OF ORDER

6 Berth Equipment and Facilities

6.1	Number, type and size of cargo transfer connections	JETTY OUT OF SERVICE
6.2	List grades handled at berth	
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	JETTY OUT OF SERVICE
6.3	State transfer rate restrictions and back pressure for each cargo grade	JETTY OUT OF SERVICE
6.4	Are transfer connections fitted with insulation flanges?	
1		No
2	Provide details	
6.5	State storage type for LPG	
6.6	Describe any terminal-specific requirements for vessel manifolds	JETTY OUT OF SERVICE
6.7	Is berth fitted with a vapour manifold connection?	
1		No
2	If 'Yes' state type and size of vapour connection	
3	State cargo types for which it is required to use vapour connection (if applicable)	
6.8	State throughput rate(s) of vapour recovery system	JETTY OUT OF SERVICE
6.9	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms?	
1		No
2	Supply details	
6.10	Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship?	
1		No
2	If 'yes' provide details	
6.11	Describe access arrangements between ship and shore.	JETTY OUT OF SERVICE
6.12	Does the berth have pollution response equipment?	
1		Yes
2	If 'yes' provide details	Containment boom(s) • Skimming equipment • Absorbent materials • Dispersant stocks

6.13	Additional comments or information	JETTY OUT OF ORDER

7 Berth Operations

7.1	What is the primary and backup communication system between ship and terminal during cargo operations?	JETTY OUT OF SERVICE
7.2	Is it required that terminal or shore representatives stay on board during operations?	
1		No
2	If 'Yes', state requirements including number of persons and their roles	
7.3	Specify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?	JETTY OUT OF SERVICE
7.4	Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	
1		No
2	If 'Yes' provide full details of these restrictions	
7.5	Are there any berth specific requirements regarding tanker inerting procedures?	
1		No
2	If 'Yes', state requirements	
7.6	Is there a temperature limit for cargo handled?	
1		No
2	If 'Yes', state temperature limits	
7.7	Is it permitted for vessels to undertake double-banked operations alongside the berth?	
1		No
2	If 'Yes', state limiting criteria	
7.8	Is vessel required to pump water ashore or receive water on board for line clearance purposes?	
1		No
2	If 'Yes', provide operational details	
7.9	Can the berth be used for Ship-to-Ship transfers using terminal facilities?	
1		No
2	Provide details	
7.10	State details regarding any environmental restrictions applicable at the berth	JETTY OUT OF SERVICE
7.11	Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	
1		No
2	If 'Yes', state restriction	
7.12	Are there any restrictions regarding Mercaptan content in Cargo Tanks?	
1		No
2	If 'Yes', state restriction	
7.13	Are there any restrictions on handling stores when a ship is moored alongside berth?	

1		No
2	If 'Yes', state restriction	
7.14	Additional comments or information	JETTY OUT OF ORDER

8 Available Services

8.1	Are Fuel Oil bunkers available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.2	Are Diesel Oil bunkers available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.3	Are Intermediate Oil bunkers available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.4	Is fresh water available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.5	Are slop reception facilities available?	
1		No
2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck)	
3	State capacity of slop reception facilities (if applicable)	
4	State any specific exclusions for slop receipts (e.g. chemicals, detergents, cleaning agents)	
8.6	Are dirty ballast reception facilities available?	
1		No
2	If 'Yes', state how received	
3	State capacity of dirty ballast receiption facilities	
8.7	Are engine room sludge and bilge reception facilities available?	
1		No
2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	
8.8	Are garbage reception facilities available at the berth.	
1		No
2	If 'Yes', provide details	
8.9	Additional comments or information	JETTY OUT OF ORDER

9 Berth Low Temperature Impact

9.1	What is the typical range of temperatures the terminal operates in during a winter season?	
9.2	Which months of the year can ice be expected?	

9.3	Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities	
9.4	State any limitations for cargo operations in sub-zero temperatures	
9.5	State the minimum allowable ambient temperature for safe cargo operations	
9.6	State the minimum temperature of cargoes handled	
9.7	State the minimum temperature for the emergency shut-down system to operate safely	
9.8	Does the terminal have its own resources for conducting icebreaker escort	
1		
2	If 'Yes' provide details and specify how they can be requested	
9.9	Are there icebreakers available to operate in the terminal area	
1		
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.10	Does the terminal have ice-capable tugs and support craft	
1		
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.11	Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice?	
1		
2	If 'Yes', provide details	
9.12	Does the terminal provide its own ice navigator/advisor?	
1		
2	If 'Yes', provide details of how the service may be requested	
9.13	Additional comments or information	

10 Supplementary Information

10.1	Berth transparency	JETTY OUT OF SERVICE
10.2	Specify datum used for height and depth measurements in this section	
1		
2	If 'Other' please specify other	
10.3	Berth height above datum	7.10
10.4	Berth heading	
10.5	Width of the channel adjacent to the berth	
10.6	Position of mooring bollards and hooks	
10.7	Position of mooring buoys	
10.8	Fender Location	
10.9	Fender Reaction Data	
10.10	Fender friction coefficient (μ)	

10.11	State identity and horizontal position of loading arms	
10.12	State loading arm operating limits	
10.13	Additional comments or information	JETTY OUT OF ORDER

Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: JETTY - 2

ReportName cc7c3099-befc-4665-852f-5ff9b9ea8123

Terminal Name: PETRONOR MARINE TERMINAL

Terminal Port: BILBAO PORT

Terminal Port Authority: AUTORIDAD PORTUARIA DE BILBAO

Country: Spain

Berth Name: JETTY - 2

06 November 2015

1 Berth General

1.1		Berth name or number	JETTY - 2
1.2		Berth type	
	1		Wharf or Quay
	2	If 'Other' please specify	as above
1.3		Terrestrial co-ordinates of manifold centreline	
	1	Latitude	432204 North
	2	Longitude	0030557 West
1.4		Berth users for liquid and gas cargoes	PETRONOR
1.5		Has a structural survey of the berth been undertaken, including its underwater structure?	
	1		Yes
	2	If 'Yes', state date of last survey	17 May 2005
1.6		Has an engineering (mooring and fendering) analysis of berth been undertaken?	
	1		Yes
	2	If 'Yes', state date of last analysis	06 December 2008
1.7		Additional comments or information	No comments

2 Berth Approaches

2.1		Is pilotage compulsory?	
	1		Yes
	2	If 'Yes', state if any vessels are exempted	SPANISH LAW THE PILOTAGE IS COMPULSORY FOR ALL DANGEROUS GOODS
2.2		State distance from pilot station(s) to berth	TWO (2) MILES
2.3		Is a waiting anchorage available?	
	1		Yes
	3	If 'Yes', state distance from waiting anchorage to berth	TWO (2) MILES
2.4		Controlling depth of water for transit to and from berth	
	1	Water depth	31.00 Metres
	2	State datum used	Chart Datum (CD)
	3	If 'Other' please specify datum	As above
2.5		Date of latest survey from which transit depth has been determined	08 November 2008
2.6		Date next survey is due	08 November 2018
2.7		State Maximum Tidal Range in berth approaches	4.50
2.8		Is laden transit to and/or from the berth conducted using the tide?	
	1		No
	2	If 'Yes', state optimum transit window (i.e. at High Water, HW +/- 1 hr)	As above.

2.9	State details of any specific berthing and/or unberthing restrictions	SEE PETRONOR MARINE TERMINAL INFORMATION AND PORT REGULATION
2.10	Minimum under keel clearance (UKC) in berth approaches	
1	Value	1.50 Meters
2	Percentage	5.00 Depth of water
3	Specify other UKC criterion where applicable	ROM 3.1-99 NORMATIVE
2.11	Absolute maximum draught in berth approaches, if applicable	19.00
2.12	State minimum vertical clearance of any bridges/power cables/vertical obstructions	
1	Vertical clearance	999.00
2	State datum used	Chart Datum (CD)
3	If 'Other' specify other datum used	as above
4	Further details	No vertical obstructions
2.13	Does the port require tankers and gas carriers to be escorted by tugs?	
1		Yes
2	If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	SEE PORT CAPTAIN PROCEDURES
2.14	Additional comments or information	No comments

3 Water Depth Alongside

3.1	Minimum controlled water depth alongside berth at chart datum	
1	Water depth	19.00 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify datum	
3.2	Date of latest survey from which alongside depth has been determined	08 November 2008
3.3	Date next survey is due	08 November 2018
3.4	Minimum static under keel clearance (UKC) alongside berth	
1	Value	0.30 Centimeters
2	Percentage	1.50 Vessel static draft
3	Specify other UKC criterion where applicable	ROM 3.1-99 NORMATIVE
3.5	State range of water densities at berth	
1	From	1017.00
2	To	1025.00
3	Further details	
3.6	Type of bottom alongside berth	
1		Sand
2	If 'Other' please specify	
3.7	Absolute maximum draft alongside, if applicable	17.00
3.8	State maximum tidal range at berth, if applicable	4.50
3.9	Are 'over-the-tide' cargo handling operations permitted at the berth?	Yes

3.10	Does the berth location experience water-level anomalies?	
1		No
2	Provide details	
3.11	Additional comments or information	No comments

4 Limiting Vessel Dimensions

4.1	Summer deadweight	
1	TPQ NA Selector	No restrictions
2	Minimum	0.00
3	Maximum	0.00
4.2	Berthing displacement	
1	TPQ NA Selector	Applicable
2	Minimum	10000.00 Metric Tonnes
3	Maximum	200000.00 Metric Tonnes
4.3	Alongside displacement	
1	TPQ NA Selector	Applicable
2	Minimum	10000.00 Metric Tonnes
3	Maximum	200000.00 Metric Tonnes
4.4	State any deadweight/displacement exceptions	
1	TPQ NA Selector	Not applicable
2		No exceptions
4.5	Cubic capacity (gas carriers)	
1	TPQ NA Selector	No restrictions
2	Minimum	0.00
3	Maximum	0.00
4.6	Length over all (LOA)	
1	TPQ NA Selector	Applicable
2	Minimum	100.00 Metres
3	Maximum	325.00 Metres
4.7	Beam	
1	TPQ NA Selector	No restrictions
2	Minimum	0.00
3	Maximum	0.00
4.8	Minimum parallel body length (PBL)	
1	TPQ NA Selector	No restrictions
2		0.00
4.9	Minimum PBL forward of manifold	
1	TPQ NA Selector	No restrictions
2		0.00

4.10	Minimum PBL aft of manifold	
1	TPQ NA Selector	No restrictions
2		0.00
4.11	Bow to centre of manifold (BCM)	
1	TPQ NA Selector	No restrictions
2	Minimum	0.00
3	Maximum	0.00
4.12	Stern to centre of manifold (SCM)	
1	TPQ NA Selector	No restrictions
2	Minimum	0.00
3	Maximum	0.00
4.13	Freeboard	
1	TPQ NA Selector	No restrictions
2	Minimum	0.00
3	Maximum	0.00
4.14	Manifold height above water	
1	TPQ NA Selector	Applicable
2	Minimum	7.00 Metres
3	Maximum	15.50 Metres
4.15	Manifold to shipside rail distance	
1	TPQ NA Selector	No restrictions
2	Minimum	0.00
3	Maximum	0.00
4.16	Height of manifold above deck or drip tray	
1	TPQ NA Selector	Applicable
2	Minimum	1.00
3	Maximum	2.00
4	Specify whether height is from the deck or the drip tray	As per OCIMF recommendations for all tanker manifolds and associated equipment
4.17	Manifold spacing	
1	TPQ NA Selector	No restrictions
2	Minimum	0.00
3	Maximum	0.00
4.18	Maximum air draft alongside	
1	TPQ NA Selector	Not applicable
2		17.50 Metres
4.19	Vessel's minimum derrick/crane Safe Working Load (SWL)	
1	TPQ NA Selector	Not applicable
2		15.00 Metric Tonnes
4.20	Additional comments or information	No comments

5 Mooring and Berthing Information

5.1	State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	SEE BILBAO TUGS FLEET
5.2	Are ship's or tug's lines used?	
1	Ship/Tug	Tug's Lines
2	Comments	As per pilot instructions
5.3	Type of fenders installed at berth	
1		Cell Type
2	If 'Other' please specify	As above
5.4	State orientation of vessel alongside berth	Either Port & Starboard Side To
5.5	At buoy moorings, state which side hose is normally connected	
1		Not applicable
2	If 'Other' please specify	No buoy moorings
5.6	Minimum mooring arrangement	Vessels > DWT 50.000 Ton, a minimum of eight (8) mooring lines must be use at each end of the vessel.
5.7	Describe any additional mooring requirements	No additional mooring requirements
5.8	Are there any restrictions using wire mooring ropes?	
1		No
2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	They should be in good condition
5.9	Are there any restrictions using synthetic mooring ropes?	
1		No
2	If ‘yes’; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	They should be in good condition
5.10	Are there any restrictions on using high modulus synthetic mooring ropes?	
1		No
2	If 'yes' provide details	They should be in good condition
5.11	Details of any specific mooring equipment required for any vessel utilising the berth	No specific mooring requirements
5.12	Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?	
1		No
2	If 'Yes', provide details of particular requirements regarding ETOPs.	As per OCIMF
5.13	Details of any shore-provided mooring equipment	N/A
5.14	Are berthing aids provided?	
1		Yes
2	If 'Yes', state type of aids	AUTOMATIC VESSEL APPROACH SYSTEM
5.15	State allowable speed of approach if applicable	
1		RECOMMENDED MAXIMUM VELOCITY IN CMS / SEC = 10

1		0.36
5.16	Is a mooring tension monitor fitted?	Yes
5.17	Are mooring hook quick release arrangements provided?	Yes
5.18	Chain stopper requirements	
1	Applicable	No
2		Not an SBM
5.19	Largest ship handled at berth to date	NO RECORDS
5.20	Additional comments or information	No comments

6 Berth Equipment and Facilities

6.1	Number, type and size of cargo transfer connections	MARINE LOADING ARM (MLA): 2 X 16" ANSI 150 2 X 10" ANSI 150
6.2	List grades handled at berth	Crude Oils/Condensates, Bitumen (including cut-backs), Black Petroleum Products, Heavy Distillates, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha, Biodiesel/Biosiesel Blends, Ethanol/Ethanol Gasoline Blends, Vegetable Oils
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	Crude, Fuel Gasoil, Kerosene, gasoline, naphta
6.3	State transfer rate restrictions and back pressure for each cargo grade	CRUDE OIL 7.500 m3/hr BP= 10 bars FUEL OIL 3.000 m3/hr BP= 15 bars GAS OIL 1.500 m3/hr BP= 15 bars KEROSENE 1.400 m3/hr BP= 15 bars GASOLINE 1.400 m3/hr BP= 15 bars NAPHTHA 1.400 m3/hr BP= 15 bars
6.4	Are transfer connections fitted with insulation flanges?	
1		Yes
2	Provide details	Refer. 8.3.9 OCIMF "design and construction specification for marine loading arms.
6.5	State storage type for LPG	Not applicable
6.6	Describe any terminal-specific requirements for vessel manifolds	No specific requirements for vessel manifolds
6.7	Is berth fitted with a vapour manifold connection?	
1		No
2	If 'Yes' state type and size of vapour connection	
3	State cargo types for which it is required to use vapour connection (if applicable)	
6.8	State throughput rate(s) of vapour recovery system	N/A
6.9	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms?	
1		Yes
2	Supply details	Manufacture by Woodfield

6.10	Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship?	
1		No
2	If 'yes' provide details	
6.11	Describe access arrangements between ship and shore.	SHORE GANGWAY AND PLATFORMS
6.12	Does the berth have pollution response equipment?	
1		Yes
2	If 'yes' provide details	SEE PETRONOR POLLUTION PREVENTION PLAN
6.13	Additional comments or information	No comments

7 Berth Operations

7.1	What is the primary and backup communication system between ship and terminal during cargo operations?	PRIMARY: MARINE VHF CHANNEL - 17 BACK UP: PORTABLE RADIO - CH:11
7.2	Is it required that terminal or shore representatives stay on board during operations?	
1		No
2	If 'Yes', state requirements including number of persons and their roles	
7.3	Specify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?	• Maximum wind velocity in operation: 22, 2 m/s.
7.4	Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	
1		Yes
2	If 'Yes' provide full details of these restrictions	Washing cargo tanks or gas freeing is NOT permitted while the vessel is alongside, unless approval has been given by the Terminal Representative. Venting, purging of hydrocarbon vapours to the atmosphere is PROHIBITED
7.5	Are there any berth specific requirements regarding tanker inerting procedures?	
1		Yes
2	If 'Yes', state requirements	All cargo tanks should be pressurized with good quality of Inert gas .Oxygen below 8 % in cargo tanks and 5% in line.
7.6	Is there a temperature limit for cargo handled?	
1		Yes
2	If 'Yes', state temperature limits	Maximum: 85 º C
7.7	Is it permitted for vessels to undertake double-banked operations alongside the berth?	
1		No
2	If 'Yes', state limiting criteria	
7.8	Is vessel required to pump water ashore or receive water on board for line clearance purposes?	
1		Yes

2	If 'Yes', provide operational details	Only for maintenance and inspection purpose
7.9	Can the berth be used for Ship-to-Ship transfers using terminal facilities?	
1		Yes
2	Provide details	Using both vessel different piers, and all operations coordinate by Terminal Control Room.
7.10	State details regarding any environmental restrictions applicable at the berth	Reference ISGOTT
7.11	Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.12	Are there any restrictions regarding Mercaptan content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.13	Are there any restrictions on handling stores when a ship is moored alongside berth?	
1		Yes
2	If 'Yes', state restriction	ONLY BY BARGE
7.14	Additional comments or information	No comments

8 Available Services

8.1	Are Fuel Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX PIPE
8.2	Are Diesel Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX PIPE
8.3	Are Intermediate Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX PIPE
8.4	Is fresh water available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.5	Are slop reception facilities available?	
1		Yes
2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck)	EX PIPE
3	State capacity of slop reception facilities (if applicable)	20000.00 Cubic metres
4	State any specific exclusions for slop receipts (e.g. chemicals, detergents, cleaning agents)	Terminal is unable to accept tank washings or slops which has been heated or containing chemicals additives or lube-oils
8.6	Are dirty ballast reception facilities available?	
1		Yes

2	If 'Yes', state how received	EX PIPE
3	State capacity of dirty ballast receiption facilities	20000
8.7	Are engine room sludge and bilge reception facilities available?	
1		No
2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	
8.8	Are garbage reception facilities available at the berth.	
1		Yes
2	If 'Yes', provide details	Refer: BILBAO PORT FACILITIES
8.9	Additional comments or information	No comments

9 Berth Low Temperature Impact

9.1	What is the typical range of temperatures the terminal operates in during a winter season?	
9.2	Which months of the year can ice be expected?	
9.3	Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities	
9.4	State any limitations for cargo operations in sub-zero temperatures	
9.5	State the minimum allowable ambient temperature for safe cargo operations	
9.6	State the minimum temperature of cargoes handled	
9.7	State the minimum temperature for the emergency shut-down system to operate safely	
9.8	Does the terminal have its own resources for conducting icebreaker escort	
1		
2	If 'Yes' provide details and specify how they can be requested	
9.9	Are there icebreakers available to operate in the terminal area	
1		
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.10	Does the terminal have ice-capable tugs and support craft	
1		
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.11	Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice?	
1		
2	If 'Yes', provide details	
9.12	Does the terminal provide its own ice navigator/advisor?	
1		
2	If 'Yes', provide details of how the service may be requested	
9.13	Additional comments or information	

10 Supplementary Information

10.1	Berth transparency	SOLID WHARF
10.2	Specify datum used for height and depth measurements in this section	
1		Chart Datum (CD)
2	If 'Other' please specify other	
10.3	Berth height above datum	7.00
10.4	Berth heading	042
10.5	Width of the channel adjacent to the berth	500.00

10.6 Position of mooring bollards and hooks

Hook/Bollard ID Number and Type	'x' dist to Fender Face (m)	'y' dist to Target Line (m)	Height (m)	SWL (tonnes)
SD-EW-4 (2)	-244.00	76.30	7.00	60.00
SD-EW-5 (2)	-172.00	76.30	7.00	60.00
SD-EW-6 (2)	-127.00	76.30	7.00	60.00
SD-EW-7 (3)	-102.00	76.30	7.00	100.00
SD-EW-8 (2)	-45.00	5.30	7.00	60.00
SD-EW-8A (2)	-32.00	5.30	7.00	60.00
SD-EW-9A(2)	32.00	5.30	7.00	60.00
SD-EW-9 (2)	45.00	5.30	7.00	60.00
SD-EW-10 (2)	89.00	76.30	7.00	60.00
SD-EW-11 (3)	109.00	76.30	7.00	100.00
SD-EW-12 (4)	158.00	76.30	7.00	150.00

10.7 Position of mooring buoys

10.8 Fender Location

Fender ID Number	'x' Dist to Target Line (m)	Elevation of Fenders (m)	Fender Width (m)	Fender Height (m)	Fender Contact Area (m2)
SD1-ESC-21	2.00	6.10	3.30	6.85	22.61
SD1-ESC-22	2.00	6.10	3.30	6.85	22.61
SD1-ESC-23	2.00	6.10	3.30	6.85	22.61
SD1-ESC-24	2.00	6.10	3.30	6.85	22.61
SD1-ESC-25	2.00	6.10	3.30	6.85	22.61

10.9 Fender Reaction Data

Fender Id Number	Point No.	Compression (metres)	Load (tonnes)
SD1-ESC-0021	44	1.20	494.60
SD1-ESC-0022	22	1.20	494.60
SD1-ESC-0023	1	1.20	494.60
SD1-ESC-0024	-22	1.20	494.60
SD1-ESC-0025	-44	1.20	494.60

10.10	Fender friction coefficient (μ)	0.22
10.11	State identity and horizontal position of loading arms	

	Loading Arm/Shore Connection ID Number	Horizontal co-ordinate X	Horizontal co-ordinate Y	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
	SD1-MLA-008	6.40	-4.50			
	SD1-MLA-009	6.40	-1.50			
	SD1-MLA-010	6.40	1.50			
	SD1-MLA-011	6.40	4.50			

10.12 State loading arm operating limits

Loading Arm ID Number	Max Op Height	Min Op Height	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
MLA-008	17.50	7.00	5.50	3.00	19.50
MLA-009	17.50	7.00	5.50	3.00	19.50
MLA-010	17.50	7.00	5.50	3.00	19.50
MLA-011	17.50	7.00	5.50	3.00	19.50

10.13	Additional comments or information	Item 16.10: fender friction coefficient is 22 Mpa Product: POLYTEC-500 REG

Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: JETTY - 1

ReportName 7f69eba4-b7be-49cb-ab97-8d7bb3fea48e

Terminal Name: PETRONOR MARINE TERMINAL

Terminal Port: BILBAO PORT

Terminal Port Authority: AUTORIDAD PORTUARIA DE BILBAO

Country: Spain

Berth Name: JETTY - 1

06 November 2015

1 Berth General

1.1		Berth name or number	JETTY - 1
1.2		Berth type	
	1		Wharf or Quay
	2	If 'Other' please specify	as above
1.3		Terrestrial co-ordinates of manifold centreline	
	1	Latitude	432212 North
	2	Longitude	0030540 West
1.4		Berth users for liquid and gas cargoes	PETRONOR
1.5		Has a structural survey of the berth been undertaken, including its underwater structure?	
	1		Yes
	2	If 'Yes', state date of last survey	17 May 2005
1.6		Has an engineering (mooring and fendering) analysis of berth been undertaken?	
	1		Yes
	2	If 'Yes', state date of last analysis	06 December 2008
1.7		Additional comments or information	No comments

2 Berth Approaches

2.1		Is pilotage compulsory?	
	1		Yes
	2	If 'Yes', state if any vessels are exempted	SPANISH LAW THE PILOTAGE IS COMPULSORY FOR ALL DANGEROUS GOODS
2.2		State distance from pilot station(s) to berth	TWO (2) MILES
2.3		Is a waiting anchorage available?	
	1		Yes
	3	If 'Yes', state distance from waiting anchorage to berth	TWO (2) MILES
2.4		Controlling depth of water for transit to and from berth	
	1	Water depth	31.00 Metres
	2	State datum used	Chart Datum (CD)
	3	If 'Other' please specify datum	As above
2.5		Date of latest survey from which transit depth has been determined	08 November 2008
2.6		Date next survey is due	08 November 2018
2.7		State Maximum Tidal Range in berth approaches	4.50
2.8		Is laden transit to and/or from the berth conducted using the tide?	
	1		No
	2	If 'Yes', state optimum transit window (i.e. at High Water, HW +/- 1 hr)	as above

2.9	State details of any specific berthing and/or unberthing restrictions	SEE PETRONOR MARINE TERMINAL INFORMATION AND PORT REGULATION
2.10	Minimum under keel clearance (UKC) in berth approaches	
1	Value	1.50 Meters
2	Percentage	5.00 Depth of water
3	Specify other UKC criterion where applicable	ROM 3.1-99 NORMATIVE
2.11	Absolute maximum draught in berth approaches, if applicable	29.00
2.12	State minimum vertical clearance of any bridges/power cables/vertical obstructions	
1	Vertical clearance	999.00
2	State datum used	Chart Datum (CD)
3	If 'Other' specify other datum used	as above
4	Further details	No biridges or vertical obstructions.
2.13	Does the port require tankers and gas carriers to be escorted by tugs?	
1		Yes
2	If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	SEE PORT CAPTAIN PROCEDURES
2.14	Additional comments or information	No comments

3 Water Depth Alongside

3.1	Minimum controlled water depth alongside berth at chart datum	
1	Water depth	31.00 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify datum	
3.2	Date of latest survey from which alongside depth has been determined	08 November 2008
3.3	Date next survey is due	08 November 2018
3.4	Minimum static under keel clearance (UKC) alongside berth	
1	Value	0.30 Centimeters
2	Percentage	1.00 Vessel static draft
3	Specify other UKC criterion where applicable	ROM 3.1-99 NORMATIVE
3.5	State range of water densities at berth	
1	From	1017.00
2	To	1025.00
3	Further details	
3.6	Type of bottom alongside berth	
1		Sand
2	If 'Other' please specify	
3.7	Absolute maximum draft alongside, if applicable	29.00
3.8	State maximum tidal range at berth, if applicable	4.50
3.9	Are 'over-the-tide' cargo handling operations permitted at the berth?	Yes

3.10	Does the berth location experience water-level anomalies?	
1		No
2	Provide details	
3.11	Additional comments or information	No comments

4 Limiting Vessel Dimensions

4.1	Summer deadweight	
1	TPQ NA Selector	No restrictions
2	Minimum	0.00
3	Maximum	0.00
4.2	Berthing displacement	
1	TPQ NA Selector	Applicable
2	Minimum	25000.00 Metric Tonnes
3	Maximum	500000.00 Metric Tonnes
4.3	Alongside displacement	
1	TPQ NA Selector	Applicable
2	Minimum	25000.00 Metric Tonnes
3	Maximum	500000.00 Metric Tonnes
4.4	State any deadweight/displacement exceptions	
1	TPQ NA Selector	Not applicable
2		No exceptions
4.5	Cubic capacity (gas carriers)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.6	Length over all (LOA)	
1	TPQ NA Selector	Applicable
2	Minimum	150.00 Metres
3	Maximum	400.00 Metres
4.7	Beam	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.8	Minimum parallel body length (PBL)	
1	TPQ NA Selector	No restrictions
2		0.00
4.9	Minimum PBL forward of manifold	
1	TPQ NA Selector	No restrictions
2		0.00

4.10	Minimum PBL aft of manifold		
	1	TPQ NA Selector	No restrictions
	2		0.00
4.11	Bow to centre of manifold (BCM)		
	1	TPQ NA Selector	No restrictions
	2	Minimum	0.00
	3	Maximum	0.00
4.12	Stern to centre of manifold (SCM)		
	1	TPQ NA Selector	No restrictions
	2	Minimum	0.00
	3	Maximum	0.00
4.13	Freeboard		
	1	TPQ NA Selector	No restrictions
	2	Minimum	0.00
	3	Maximum	0.00
4.14	Manifold height above water		
	1	TPQ NA Selector	Applicable
	2	Minimum	7.00 Metres
	3	Maximum	23.50 Metres
4.15	Manifold to shipside rail distance		
	1	TPQ NA Selector	No restrictions
	2	Minimum	0.00
	3	Maximum	0.00
4.16	Height of manifold above deck or drip tray		
	1	TPQ NA Selector	
	2	Minimum	
	3	Maximum	
	4	Specify whether height is from the deck or the drip tray	As per OCIMF recommendations for all tanker manifolds and associated equipment
4.17	Manifold spacing		
	1	TPQ NA Selector	No restrictions
	2	Minimum	0.00
	3	Maximum	0.00
4.18	Maximum air draft alongside		
	1	TPQ NA Selector	Not applicable
	2		0.00
4.19	Vessel's minimum derrick/crane Safe Working Load (SWL)		
	1	TPQ NA Selector	Not applicable
	2		15.00 Metric Tonnes
4.20	Additional comments or information		No comments

5 Mooring and Berthing Information

5.1	State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	Bilbao Port Tugs Fleet TUGS POWER BOLLARD PULL PROPULSION FIRE-FIGHTING GATIKA 4.500 H.P. 46 Ton Voith W Tractor Fi-Fi 1 - 2.400 m3 GALDAMES 4.500 H.P. 46 Ton Voith W Tractor Fi-Fi 1 - 2.400 m3 IBAIZABAL SEIS 5.300 H.P. 56 Ton Voith W Tractor Fi-Fi 1 - 2.400 m3 IBAIZABAL SIETE 9.000 H.P. 105 Ton Stern Drive Fi-Fi 1 - 2.400 m3 IBAIZABAL NUEVE 5.300 H.P. 76 Ton Stern Drive Fi-Fi 1 - 2.400 m3 GOGOR 2.030 H.P. 30 Ton Conventional Fi-Fi 1 ALAI 1.420 H.P. 20 Ton Conventional N/A AITOR UNO 1.420 H.P. 20 Ton Conventional N/A SERTOSA 30 4.000 H.P. 51 Ton Stern Drive Fi-Fi 1 - 2.400 m3 URGOZO 335 H.P. N/A Conventional
5.2	Are ship's or tug's lines used?	
1	Ship/Tug	Tug's Lines
2	Comments	Tug requirements
5.3	Type of fenders installed at berth	
1		Cell Type
2	If 'Other' please specify	as above
5.4	State orientation of vessel alongside berth	Either Port & Starboard Side To
5.5	At buoy moorings, state which side hose is normally connected	
1		Not applicable
2	If 'Other' please specify	No buoy moorings.
5.6	Minimum mooring arrangement	• Vessels > DWT 50.000 Ton, a minimum of eight (8) mooring lines must be use at each end of the vessel.
5.7	Describe any additional mooring requirements	NO ADDITIONAL MOORING REQUIREMENTS
5.8	Are there any restrictions using wire mooring ropes?	
1		No
2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	They should be in good condition.
5.9	Are there any restrictions using synthetic mooring ropes?	
1		No

2	If ‘yes’; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	They should be in good condition.
5.10	Are there any restrictions on using high modulus synthetic mooring ropes?	
1		No
2	If 'yes' provide details	They should be in good condition
5.11	Details of any specific mooring equipment required for any vessel utilising the berth	No specific mooring requirements
5.12	Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?	
1		No
2	If 'Yes', provide details of particular requirements regarding ETOPs.	As per OCIMF
5.13	Details of any shore-provided mooring equipment	N/A
5.14	Are berthing aids provided?	
1		Yes
2	If 'Yes', state type of aids	AUTOMATIC VESSEL APPROACH SYSTEM
5.15	State allowable speed of approach if applicable	
1		RECOMMENDED MAXIMUM VELOCITY IN CMS / SEC = 8
1		0.29
5.16	Is a mooring tension monitor fitted?	Yes
5.17	Are mooring hook quick release arrangements provided?	Yes
5.18	Chain stopper requirements	
1	Applicable	No
2		Not an SBM
5.19	Largest ship handled at berth to date	HILDA KNUDSEN Dated: May 25th, 1978 SHIP DIMENSIONS: LBP: 378 mtrs BEAM: 69 mtrs DWT: 423,621 tONS

5.20	Additional comments or information	SAFE MOORING AND WORKING GUIDE (OCIMF) Masters of the Vessels are responsible for the following mooring practices: * Any known defect in the Vessel's mooring system or limitation of mooring winch brakes should be reported to the Pilot and to the Terminal before arrival in order that, if necessary, additional precautions may be agreed. * Ensure that their Vessels are properly secured alongside with adequate ropes or wires, and that all mooring equipment is in good condition. * Ensure that a strict watch is kept on their Vessel mooring system, and that they are tendered as required to prevent slack or over tight lines and undue movement of the Vessel. * Where wires are used they should be of a similar breaking load to that of the ropes. * It is recommended that wires should be used for all mooring lines. * It is not recommended that synthetic ropes and wires be used leading in the same direction, to the same fast release hook or bit. * Ensure that the Vessel mooring ropes are fastened only to the proper fixtures provided for this purpose. * Springs should be as long as possible, and it is recommended that wires are used and secured to the mooring points of the jetty. In case of using bitts for fastening the wires ashore (instead of fast release hooks), it is recommended to use wires fitted with synthetic fibre rope tails of at least 25% greater breaking load than the wire. * Provide full power or steam on deck to all mooring winches throughout the period vessels are alongside the jetty. * As soon as Vessel is positioned, positively secure the manual brakes on all mooring winches. Winches must not be left on automatic tension mode. * Masters should ensure that mooring lines are in good condition. Winch brakes or securing devices should be in efficient operating order and should have a holding power of at least 60% of the breaking load of the Vessel's mooring lines. * Mooring lines must be adjusted under the supervision of a responsible officer. * An efficient watch must be maintained on deck throughout the Vessel's stay alongside.

		* The Terminal will require cargo operations to be ceased and/or tugs summoned, if the Vessel's movement will endanger the loading arms, or in absence of an alert and efficient deck watch ALL DELAYS/CHARGES caused by the ship's failure to observe the above precautions will be for the ship's account.

6 Berth Equipment and Facilities

6.1	Number, type and size of cargo transfer connections	MARINE LOADING ARM (MLA) 5 X 16" ANSI 150 2 X 12" ANSI 150
6.2	List grades handled at berth	Crude Oils/Condensates, Bitumen (including cut-backs), Black Petroleum Products, Heavy Distillates, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha, Biodiesel/Biosiesel Blends, Ethanol/Ethanol Gasoline Blends, Vegetable Oils
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	Crude, Fuel, gasoil, kerosene, Gasoline, Naphta
6.3	State transfer rate restrictions and back pressure for each cargo grade	CRUDE OIL 15.000 BP= 10 bars FUEL OIL 3.000 BP= 15 bars GAS OIL 1.500 BP= 15 bars KEROSENE 1.400 BP= 15 bars GASOLINE 1.400 BP= 15 bars NAPHTHA 1.400 BP= 15 bars
6.4	Are transfer connections fitted with insulation flanges?	
1		Yes
2	Provide details	Refer. 8.3.9 OCIMF "design and construction specification for marine loading arms.
6.5	State storage type for LPG	Not applicable
6.6	Describe any terminal-specific requirements for vessel manifolds	No specific requirements for vessel manifolds
6.7	Is berth fitted with a vapour manifold connection?	
1		No
2	If 'Yes' state type and size of vapour connection	
3	State cargo types for which it is required to use vapour connection (if applicable)	
6.8	State throughput rate(s) of vapour recovery system	N/A
6.9	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms?	
1		Yes
2	Supply details	Manufacture by SVT
6.10	Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship?	
1		No
2	If 'yes' provide details	
6.11	Describe access arrangements between ship and shore.	SHORE GANGWAY AND PLATFORMS

6.12	Does the berth have pollution response equipment?	
1		Yes
2	If 'yes' provide details	SEE PETRONOR POLLUTION PREVENTION PLAN
6.13	Additional comments or information	No comments

7 Berth Operations

7.1	What is the primary and backup communication system between ship and terminal during cargo operations?	PRIMARY: MARINE VHF CHANNEL - 17 BACK UP: PORTABLE RADIO - CH:11
7.2	Is it required that terminal or shore representatives stay on board during operations?	
1		No
2	If 'Yes', state requirements including number of persons and their roles	
7.3	Specify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?	• Maximum wind velocity in operation: 22, 2 m/s.
7.4	Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	
1		Yes
2	If 'Yes' provide full details of these restrictions	Washing cargo tanks or gas freeing is NOT permitted while the vessel is alongside, unless approval has been given by the Terminal Representative. Venting, purging of hydrocarbon vapours to the atmosphere is PROHIBITED
7.5	Are there any berth specific requirements regarding tanker inerting procedures?	
1		Yes
2	If 'Yes', state requirements	All cargo tanks should be pressurized with good quality of Inert gas .Oxygen below 8 % in cargo tanks and 5% in line.
7.6	Is there a temperature limit for cargo handled?	
1		Yes
2	If 'Yes', state temperature limits	Maximum: 85 º C
7.7	Is it permitted for vessels to undertake double-banked operations alongside the berth?	
1		No
2	If 'Yes', state limiting criteria	
7.8	Is vessel required to pump water ashore or receive water on board for line clearance purposes?	
1		Yes
2	If 'Yes', provide operational details	Only for maintenance and inspection purpose
7.9	Can the berth be used for Ship-to-Ship transfers using terminal facilities?	
1		Yes

2	Provide details	Using both vessel different piers, and all operations coordinate by Terminal Control Room.
7.10	State details regarding any environmental restrictions applicable at the berth	Reference ISGOTT
7.11	Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.12	Are there any restrictions regarding Mercaptan content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.13	Are there any restrictions on handling stores when a ship is moored alongside berth?	
1		Yes
2	If 'Yes', state restriction	ONLY BY BARGE
7.14	Additional comments or information	No comments

8 Available Services

8.1	Are Fuel Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX-PIPE
8.2	Are Diesel Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX-PIPE
8.3	Are Intermediate Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX-PIPE
8.4	Is fresh water available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.5	Are slop reception facilities available?	
1		Yes
2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck)	EX-PIPE
3	State capacity of slop reception facilities (if applicable)	20000.00 Cubic metres
4	State any specific exclusions for slop receipts (e.g. chemicals, detergents, cleaning agents)	Terminal is unable to accept tank washings or slops which has been heated or containing chemicals additives or lube-oils
8.6	Are dirty ballast reception facilities available?	
1		Yes
2	If 'Yes', state how received	EX-PIPE
3	State capacity of dirty ballast receiption facilities	20,000 c.m.
8.7	Are engine room sludge and bilge reception facilities available?	

1		No
2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	
8.8	Are garbage reception facilities available at the berth.	
1		Yes
2	If 'Yes', provide details	Refer: BILBAO PORT FACILITIES
8.9	Additional comments or information	No comments

9 Berth Low Temperature Impact

9.1	What is the typical range of temperatures the terminal operates in during a winter season?	
9.2	Which months of the year can ice be expected?	
9.3	Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities	
9.4	State any limitations for cargo operations in sub-zero temperatures	
9.5	State the minimum allowable ambient temperature for safe cargo operations	
9.6	State the minimum temperature of cargoes handled	
9.7	State the minimum temperature for the emergency shut-down system to operate safely	
9.8	Does the terminal have its own resources for conducting icebreaker escort	
1		
2	If 'Yes' provide details and specify how they can be requested	
9.9	Are there icebreakers available to operate in the terminal area	
1		
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.10	Does the terminal have ice-capable tugs and support craft	
1		
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.11	Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice?	
1		
2	If 'Yes', provide details	
9.12	Does the terminal provide its own ice navigator/advisor?	
1		
2	If 'Yes', provide details of how the service may be requested	
9.13	Additional comments or information	

10 Supplementary Information

10.1	Berth transparency	SOLID WHARF
10.2	Specify datum used for height and depth measurements in this section	
1		Chart Datum (CD)

2	If 'Other' please specify other	As above
10.3	Berth height above datum	7.00
10.4	Berth heading	042º/T
10.5	Width of the channel adjacent to the berth	500.00

10.6 Position of mooring bollards and hooks

Hook/Bollard ID Number and Type	'x' dist to Fender Face (m)	'y' dist to Target Line (m)	Height (m)	SWL (tonnes)
SD-EW-12 (4)	-299.00	76.30	7.00	150.00
SD-EW-13 (3)	-235.00	76.30	7.00	150.00
SD-EW-14 (4)	-179.00	76.30	7.00	100.00
SD-EW-15 (3)	-112.00	76.30	7.00	150.00
SD-EW-16 (29	-66.00	5.30	7.00	100.00
SD-EW-16A (2)	-29.00	5.30	7.00	100.00
SD-EW-17A (2)	29.00	5.30	7.00	100.00
SD-EW-17 (2)	66.00	5.30	7.00	100.00
SD-EW-18 (3)	139.00	76.30	7.00	150.00
SD-EW-19 (3)	247.00	76.30	7.00	150.00
SD-EW-20 (4)	327.00	76.30	7.00	150.00

10.7 Position of mooring buoys

10.8 Fender Location

Fender ID Number	'x' Dist to Target Line (m)	Elevation of Fenders (m)	Fender Width (m)	Fender Height (m)	Fender Contact Area (m2)
SD1-ESC-11	4.56	6.63	4.85	7.15	34.68
SD1-ESC-12	3.14	6.63	4.85	7.15	34.68
SD1-ESC-13	3.66	6.63	4.85	7.15	34.68
SD1-ESC-14	3.66	6.63	4.85	7.15	34.68
SD1-ESC-15	2.60	6.63	4.85	7.15	34.68
SD1-ESC-16	3.66	6.63	4.85	7.15	34.68

10.9 Fender Reaction Data

Fender Id Number	Point No.	Compression (metres)	Load (tonnes)
SD1-ESC-11	64	1.24	791.00
SD1-ESC-12	34.75	1.24	791.00
SD1-ESC-13	8.5	1.24	791.00
SD1-ESC-14	-11.5	1.24	791.00
SD1-ESC-15	-38.25	1.24	791.00
SD1-ESC-16	-67.4	1.24	791.00

10.10	Fender friction coefficient (μ)	0.22
10.11	State identity and horizontal position of loading arms	

Loading Arm/Shore Connection ID Number	Horizontal co-ordinate X	Horizontal co-ordinate Y	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
SD1-MLA-001	6.80	12.25			
SD1-MLA-002	6.80	-12.25			
SD1-MLA-003	6.80	5.25			
SD1-MLA-004	6.80	1.75			
SD1-MLA-005	6.80	-5.25			
SD1-MLA-006	6.80	-8.75			
SD1-MLA-007	6.80	8.75			

10.12 State loading arm operating limits

Loading Arm ID Number	Max Op Height	Min Op Height	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
MLA-001	23.50	7.00	5.50	3.50	26.00
MLA-002	23.50	7.00	5.50	3.50	26.00
MLA-003	23.50	7.00	5.50	3.50	26.00
MLA-004	23.50	7.00	5.50	3.50	26.00
MLA-005	23.50	7.00	5.50	3.50	26.00
MLA-006	23.50	7.00	5.50	3.50	26.00
MLA-007	23.50	7.00	5.50	3.50	26.00

10.13 Additional comments or information

Item 16.10: fender friction coefficient is 22 Mpa
Product: POLYTEC-500 REG

Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: JETTY - 4

ReportName 853a49e8-87d2-4b9f-8269-bc12660c8dbe

Terminal Name: PETRONOR MARINE TERMINAL

Terminal Port: BILBAO PORT

Terminal Port Authority: AUTORIDAD PORTUARIA DE BILBAO

Country: Spain

Berth Name: JETTY - 4

06 November 2015

1 Berth General

1.1		Berth name or number	JETTY - 4
1.2		Berth type	
	1		Wharf or Quay
	2	If 'Other' please specify	
1.3		Terrestrial co-ordinates of manifold centreline	
	1	Latitude	432154 North
	2	Longitude	0030605 West
1.4		Berth users for liquid and gas cargoes	PETRONOR
1.5		Has a structural survey of the berth been undertaken, including its underwater structure?	
	1		Yes
	2	If 'Yes', state date of last survey	17 May 2005
1.6		Has an engineering (mooring and fendering) analysis of berth been undertaken?	
	1		Yes
	2	If 'Yes', state date of last analysis	06 December 2008
1.7		Additional comments or information	No comments

2 Berth Approaches

2.1		Is pilotage compulsory?	
	1		Yes
	2	If 'Yes', state if any vessels are exempted	SPANISH LAW THE PILOTAGE IS COMPULSORY FOR ALL DANGEROUS GOODS
2.2		State distance from pilot station(s) to berth	TWO (2) MILES
2.3		Is a waiting anchorage available?	
	1		Yes
	3	If 'Yes', state distance from waiting anchorage to berth	TWO (2) MILES
2.4		Controlling depth of water for transit to and from berth	
	1	Water depth	31.00 Metres
	2	State datum used	Chart Datum (CD)
	3	If 'Other' please specify datum	
2.5		Date of latest survey from which transit depth has been determined	08 November 2008
2.6		Date next survey is due	08 November 2018
2.7		State Maximum Tidal Range in berth approaches	4.50
2.8		Is laden transit to and/or from the berth conducted using the tide?	
	1		No
	2	If 'Yes', state optimum transit window (i.e. at High Water, HW +/- 1 hr)	

2.9	State details of any specific berthing and/or unberthing restrictions	SEE PETRONOR MARINE TERMINAL INFORMATION AND PORT REGULATION
2.10	Minimum under keel clearance (UKC) in berth approaches	
1	Value	1.00 Meters
2	Percentage	9.00 Vessel static draft
3	Specify other UKC criterion where applicable	ROM 3.1-99 NORMATIVE
2.11	Absolute maximum draught in berth approaches, if applicable	11.00
2.12	State minimum vertical clearance of any bridges/power cables/vertical obstructions	
1	Vertical clearance	999.00
2	State datum used	Chart Datum (CD)
3	If 'Other' specify other datum used	
4	Further details	No vertical obstructions
2.13	Does the port require tankers and gas carriers to be escorted by tugs?	
1		Yes
2	If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	SEE PORT CAPTAIN PROCEDURES
2.14	Additional comments or information	No comments

3 Water Depth Alongside

3.1	Minimum controlled water depth alongside berth at chart datum	
1	Water depth	9.80 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify datum	
3.2	Date of latest survey from which alongside depth has been determined	08 November 2008
3.3	Date next survey is due	08 November 2018
3.4	Minimum static under keel clearance (UKC) alongside berth	
1	Value	0.15 Meters
2	Percentage	1.60 Vessel static draft
3	Specify other UKC criterion where applicable	ROM 3.1-99 NORMATIVE
3.5	State range of water densities at berth	
1	From	1017.00
2	To	1025.00
3	Further details	
3.6	Type of bottom alongside berth	
1		Sand
2	If 'Other' please specify	
3.7	Absolute maximum draft alongside, if applicable	9.50
3.8	State maximum tidal range at berth, if applicable	4.50
3.9	Are 'over-the-tide' cargo handling operations permitted at the berth?	Yes

3.10	Does the berth location experience water-level anomalies?	
1		No
2	Provide details	
3.11	Additional comments or information	No comments

4 Limiting Vessel Dimensions

4.1	Summer deadweight	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.2	Berthing displacement	
1	TPQ NA Selector	Applicable
2	Minimum	3000.00 Metric Tonnes
3	Maximum	18000.00 Metric Tonnes
4.3	Alongside displacement	
1	TPQ NA Selector	Applicable
2	Minimum	3000.00 Metric Tonnes
3	Maximum	18000.00 Metric Tonnes
4.4	State any deadweight/displacement exceptions	
1	TPQ NA Selector	Not applicable
2		No exceptions
4.5	Cubic capacity (gas carriers)	
1	TPQ NA Selector	Applicable
2	Minimum	3200.00 Cubic metres
3	Maximum	16000.00 Cubic metres
4.6	Length over all (LOA)	
1	TPQ NA Selector	Applicable
2	Minimum	70.00 Metres
3	Maximum	170.00 Metres
4.7	Beam	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.8	Minimum parallel body length (PBL)	
1	TPQ NA Selector	Not applicable
2		0.00
4.9	Minimum PBL forward of manifold	
1	TPQ NA Selector	Not applicable
2		0.00

4.10	Minimum PBL aft of manifold	
1	TPQ NA Selector	Not applicable
2		0.00
4.11	Bow to centre of manifold (BCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.12	Stern to centre of manifold (SCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.13	Freeboard	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.14	Manifold height above water	
1	TPQ NA Selector	Applicable
2	Minimum	6.00 Metres
3	Maximum	12.00 Metres
4.15	Manifold to shipside rail distance	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.16	Height of manifold above deck or drip tray	
1	TPQ NA Selector	Applicable
2	Minimum	1.00
3	Maximum	2.00
4	Specify whether height is from the deck or the drip tray	As per OCIMF recommendations for all tanker manifolds and associated equipment
4.17	Manifold spacing	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.18	Maximum air draft alongside	
1	TPQ NA Selector	Applicable
2		12.00 Metres
4.19	Vessel's minimum derrick/crane Safe Working Load (SWL)	
1	TPQ NA Selector	Applicable
2		5.00 Metric Tonnes
4.20	Additional comments or information	None.

5 Mooring and Berthing Information

5.1	State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	SEE BILBAO TUGS FLEET
5.2	Are ship's or tug's lines used?	
1	Ship/Tug	Tug's Lines
2	Comments	As per pilot instructions
5.3	Type of fenders installed at berth	
1		Cell Type
2	If 'Other' please specify	
5.4	State orientation of vessel alongside berth	Either Port & Starboard Side To
5.5	At buoy moorings, state which side hose is normally connected	
1		Not applicable
2	If 'Other' please specify	No buoy moorings
5.6	Minimum mooring arrangement	FWD MOORING: 6 AFT MOORING: 6
5.7	Describe any additional mooring requirements	No additional mooring requirements
5.8	Are there any restrictions using wire mooring ropes?	
1		No
2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	
5.9	Are there any restrictions using synthetic mooring ropes?	
1		No
2	If ‘yes’; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	
5.10	Are there any restrictions on using high modulus synthetic mooring ropes?	
1		No
2	If 'yes' provide details	
5.11	Details of any specific mooring equipment required for any vessel utilising the berth	None
5.12	Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?	
1		No
2	If 'Yes', provide details of particular requirements regarding ETOPs.	
5.13	Details of any shore-provided mooring equipment	N/A
5.14	Are berthing aids provided?	
1		Yes
2	If 'Yes', state type of aids	ONLY BERTHING MODE
5.15	State allowable speed of approach if applicable	
1		RECOMMENDED MAXIMUM VELOCITY IN CMS / SEC = 10

1		0.36
5.16	Is a mooring tension monitor fitted?	No
5.17	Are mooring hook quick release arrangements provided?	Yes
5.18	Chain stopper requirements	
1	Applicable	No
2		Not an SBM
5.19	Largest ship handled at berth to date	NO RECORDS
5.20	Additional comments or information	No comments

6 Berth Equipment and Facilities

6.1	Number, type and size of cargo transfer connections	MARINE LOADING ARM (MLA): 2 X 12" ANSI 150 2 X 8" ANSI 150 1 X 6" ANSI 300
6.2	List grades handled at berth	Bitumen (including cut-backs), Black Petroleum Products, Heavy Distillates, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha, Commercial LPG, Biodiesel/Biosiesel Blends, Ethanol/Ethanol Gasoline Blends, Vegetable Oils
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	Fuel, gasoil, gasoline, Naphta, LPG, Propylene
6.3	State transfer rate restrictions and back pressure for each cargo grade	FUEL OIL 3.000 GAS OIL 1.500 KEROSENE 1.400 GASOLINE 1.400 NAPHTHA 1.400 LPG 190 PROPYLENE 90
6.4	Are transfer connections fitted with insulation flanges?	
1		Yes
2	Provide details	Refer. 8.3.9 OCIMF "design and construction specification for marine loading arms.
6.5	State storage type for LPG	Semi-Pressurised
6.6	Describe any terminal-specific requirements for vessel manifolds	No specific requirements for vessel manifolds
6.7	Is berth fitted with a vapour manifold connection?	
1		No
2	If 'Yes' state type and size of vapour connection	
3	State cargo types for which it is required to use vapour connection (if applicable)	
6.8	State throughput rate(s) of vapour recovery system	N/A
6.9	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms?	
1		Yes

2	Supply details	ONLY FOR LPG LOADING ARM
6.10	Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship?	
1		Yes
2	If 'yes' provide details	ONLY FOR LPG VESSELS
6.11	Describe access arrangements between ship and shore.	SHORE PLATFORM
6.12	Does the berth have pollution response equipment?	
1		Yes
2	If 'yes' provide details	SEE PETRONOR POLLUTION PREVENTION PLAN
6.13	Additional comments or information	No comments

7 Berth Operations

7.1	What is the primary and backup communication system between ship and terminal during cargo operations?	PRIMARY: MARINE VHF CHANNEL - 17 BACK UP: PORTABLE RADIO - CH:11
7.2	Is it required that terminal or shore representatives stay on board during operations?	
1		No
2	If 'Yes', state requirements including number of persons and their roles	
7.3	Specify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?	• Maximum wind velocity in operation: 22, 2 m/s.
7.4	Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	
1		Yes
2	If 'Yes' provide full details of these restrictions	NO COW OPERATIONS IN THIS BERTH Washing cargo tanks or gas freeing is NOT permitted while the vessel is alongside, unless approval has been given by the Terminal Representative. Venting, purging of hydrocarbon vapours to the atmosphere is PROHIBITED
7.5	Are there any berth specific requirements regarding tanker inerting procedures?	
1		Yes
2	If 'Yes', state requirements	All cargo tanks should be pressurized with good quality of Inert gas .Oxygen below 8 % in cargo tanks and 5% in line.
7.6	Is there a temperature limit for cargo handled?	
1		Yes
2	If 'Yes', state temperature limits	BLACK PRODUCTS: 85 º C LPG minimum - 10 º C
7.7	Is it permitted for vessels to undertake double-banked operations alongside the berth?	
1		No
2	If 'Yes', state limiting criteria	

7.8	Is vessel required to pump water ashore or receive water on board for line clearance purposes?	
1		Yes
2	If 'Yes', provide operational details	Only for maintenance and inspection purpose
7.9	Can the berth be used for Ship-to-Ship transfers using terminal facilities?	
1		Yes
2	Provide details	Using both vessel different piers, and all operations coordinate by Terminal Control Room.
7.10	State details regarding any environmental restrictions applicable at the berth	Reference ISGOTT
7.11	Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.12	Are there any restrictions regarding Mercaptan content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.13	Are there any restrictions on handling stores when a ship is moored alongside berth?	
1		Yes
2	If 'Yes', state restriction	ONLY BY BARGE
7.14	Additional comments or information	No comments

8 Available Services

8.1	Are Fuel Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX-PIPE
8.2	Are Diesel Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX-PIPE
8.3	Are Intermediate Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX-PIPE
8.4	Is fresh water available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.5	Are slop reception facilities available?	
1		Yes
2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck)	EX-PIPE
3	State capacity of slop reception facilities (if applicable)	20000.00 Cubic metres
4	State any specific exclusions for slop receipts (e.g. chemicals, detergents, cleaning agents)	Terminal is unable to accept tank washings or slops which has been heated or containing chemicals additives or lube-oils

8.6	Are dirty ballast reception facilities available?	
1		Yes
2	If 'Yes', state how received	EX-PIPE
3	State capacity of dirty ballast receiption facilities	20000 c.m.
8.7	Are engine room sludge and bilge reception facilities available?	
1		No
2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	
8.8	Are garbage reception facilities available at the berth.	
1		Yes
2	If 'Yes', provide details	Refer: BILBAO PORT FACILITIES
8.9	Additional comments or information	No comments

9 Berth Low Temperature Impact

9.1	What is the typical range of temperatures the terminal operates in during a winter season?	
9.2	Which months of the year can ice be expected?	
9.3	Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities	
9.4	State any limitations for cargo operations in sub-zero temperatures	
9.5	State the minimum allowable ambient temperature for safe cargo operations	
9.6	State the minimum temperature of cargoes handled	
9.7	State the minimum temperature for the emergency shut-down system to operate safely	
9.8	Does the terminal have its own resources for conducting icebreaker escort	
1		
2	If 'Yes' provide details and specify how they can be requested	
9.9	Are there icebreakers available to operate in the terminal area	
1		
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.10	Does the terminal have ice-capable tugs and support craft	
1		
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.11	Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice?	
1		
2	If 'Yes', provide details	
9.12	Does the terminal provide its own ice navigator/advisor?	
1		
2	If 'Yes', provide details of how the service may be requested	
9.13	Additional comments or information	

10 Supplementary Information

10.1	Berth transparency	PILED JETTY
10.2	Specify datum used for height and depth measurements in this section	
1		Chart Datum (CD)
2	If 'Other' please specify other	
10.3	Berth height above datum	6.50
10.4	Berth heading	045º / T
10.5	Width of the channel adjacent to the berth	

10.6 Position of mooring bollards and hooks

Hook/Bollard ID Number and Type	'x' dist to Fender Face (m)	'y' dist to Target Line (m)	Height (m)	SWL (tonnes)
SD1-W-4 (2)	-90.00	10.00	6.50	60.00
SD1-W-6 (2)	-46.00	10.00	6.50	60.00
SD1-W-8 (1)	-24.00	3.50	6.50	60.00
SD1-W-10 (1)	34.00	3.50	6.50	60.00
SD1-W-12 (2)	62.00	9.00	6.50	60.00
SD1-W-14 (1)	83.00	13.00	6.50	60.00
SD1-W-15 (2)	108.00	13.00	6.50	60.00

10.7 Position of mooring buoys

10.8 Fender Location

Fender ID Number	'x' Dist to Target Line (m)	Elevation of Fenders (m)	Fender Width (m)	Fender Height (m)	Fender Contact Area (m2)
SD1-ESC-41	1.89	6.35	2.60	6.85	13.33
SD1-ESC-42	1.89	6.35	2.60	6.85	13.33
SD1-ESC-43	1.89	6.35	2.60	6.85	13.33
SD1-ESC-44	1.89	6.35	2.60	6.85	13.33

10.9 Fender Reaction Data

Fender Id Number	Point No.	Compression (metres)	Load (tonnes)
SD1-ESC-41	-25	1.02	366.00
SD1-ESC-42	-5	1.02	366.00
SD1-ESC-43	15	1.02	366.00
SD1-ESC-44	35	1.02	366.00

10.10	Fender friction coefficient (μ)	0.22

10.11 State identity and horizontal position of loading arms

Loading Arm/Shore Connection ID Number	Horizontal co-ordinate X	Horizontal co-ordinate Y	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave

SD1-MLA-012	3.00	3.93
SD1-MLA-013	3.00	1.30
SD1-MLA-014	3.00	-1.30
SD1-MLA-015	3.00	-3.93
SD3-MLA-002	3.00	-6.56

10.12 State loading arm operating limits

Loading Arm ID Number	Max Op Height	Min Op Height	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
MLA-12	12.00	7.00	5.00	3.00	13.00
MLA-13	12.00	7.00	5.00	3.00	13.00
MLA-14	12.00	7.00	5.00	3.00	13.00
MLA-15	12.00	7.00	5.00	3.00	13.00
MLA-002	12.00	7.00	5.00	3.00	13.00

10.13 Additional comments or information

Item 16.10: fender friction coefficient is 22 Mpa
Product: POLYTEC-500 REG

Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: JETTY - 5

ReportName b5595101-8c60-429b-9f48-dc175115c7d7

Terminal Name: PETRONOR MARINE TERMINAL

Terminal Port: BILBAO PORT

Terminal Port Authority: AUTORIDAD PORTUARIA DE BILBAO

Country: Spain

Berth Name: JETTY - 5

06 November 2015

1 Berth General

1.1		Berth name or number	JETTY - 5
1.2		Berth type	
	1		Wharf or Quay
	2	If 'Other' please specify	
1.3		Terrestrial co-ordinates of manifold centreline	
	1	Latitude	432153 North
	2	Longitude	0030603 West
1.4		Berth users for liquid and gas cargoes	PETRONOR
1.5		Has a structural survey of the berth been undertaken, including its underwater structure?	
	1		Yes
	2	If 'Yes', state date of last survey	17 May 2005
1.6		Has an engineering (mooring and fendering) analysis of berth been undertaken?	
	1		Yes
	2	If 'Yes', state date of last analysis	06 December 2008
1.7		Additional comments or information	None

2 Berth Approaches

2.1		Is pilotage compulsory?	
	1		Yes
	2	If 'Yes', state if any vessels are exempted	SPANISH LAW THE PILOTAGE IS COMPULSORY FOR ALL DANGEROUS GOODS
2.2		State distance from pilot station(s) to berth	TWO (2) MILES
2.3		Is a waiting anchorage available?	
	1		Yes
	3	If 'Yes', state distance from waiting anchorage to berth	TWO (2) MILES
2.4		Controlling depth of water for transit to and from berth	
	1	Water depth	31.00 Metres
	2	State datum used	Chart Datum (CD)
	3	If 'Other' please specify datum	
2.5		Date of latest survey from which transit depth has been determined	08 November 2008
2.6		Date next survey is due	08 November 2018
2.7		State Maximum Tidal Range in berth approaches	4.50
2.8		Is laden transit to and/or from the berth conducted using the tide?	
	1		No
	2	If 'Yes', state optimum transit window (i.e. at High Water, HW +/- 1 hr)	

2.9	State details of any specific berthing and/or unberthing restrictions	SEE PETRONOR MARINE TERMINAL INFORMATION AND PORT REGULATION
2.10	Minimum under keel clearance (UKC) in berth approaches	
1	Value	1.00 Meters
2	Percentage	9.00 Depth of water
3	Specify other UKC criterion where applicable	ROM 3.1-99 NORMATIVE
2.11	Absolute maximum draught in berth approaches, if applicable	11.00
2.12	State minimum vertical clearance of any bridges/power cables/vertical obstructions	
1	Vertical clearance	999.00 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify other datum used	
4	Further details	N/A
2.13	Does the port require tankers and gas carriers to be escorted by tugs?	
1		Yes
2	If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	SEE PORT CAPTAIN PROCEDURES
2.14	Additional comments or information	No comments

3 Water Depth Alongside

3.1	Minimum controlled water depth alongside berth at chart datum	
1	Water depth	9.80 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify datum	
3.2	Date of latest survey from which alongside depth has been determined	08 November 2008
3.3	Date next survey is due	08 November 2018
3.4	Minimum static under keel clearance (UKC) alongside berth	
1	Value	0.15 Centimeters
2	Percentage	1.60 Vessel static draft
3	Specify other UKC criterion where applicable	ROM 3.1-99 NORMATIVE
3.5	State range of water densities at berth	
1	From	1017.00
2	To	1025.00
3	Further details	
3.6	Type of bottom alongside berth	
1		Sand
2	If 'Other' please specify	
3.7	Absolute maximum draft alongside, if applicable	9.50
3.8	State maximum tidal range at berth, if applicable	4.50
3.9	Are 'over-the-tide' cargo handling operations permitted at the berth?	Yes

3.10	Does the berth location experience water-level anomalies?	
1		No
2	Provide details	
3.11	Additional comments or information	No comments

4 Limiting Vessel Dimensions

4.1	Summer deadweight	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.2	Berthing displacement	
1	TPQ NA Selector	Applicable
2	Minimum	3000.00 Metric Tonnes
3	Maximum	18000.00 Metric Tonnes
4.3	Alongside displacement	
1	TPQ NA Selector	Applicable
2	Minimum	3000.00 Metric Tonnes
3	Maximum	18000.00 Metric Tonnes
4.4	State any deadweight/displacement exceptions	
1	TPQ NA Selector	Not applicable
2		No exceptions
4.5	Cubic capacity (gas carriers)	
1	TPQ NA Selector	Applicable
2	Minimum	3200.00 Cubic metres
3	Maximum	16000.00 Cubic metres
4.6	Length over all (LOA)	
1	TPQ NA Selector	Applicable
2	Minimum	45.00 Metres
3	Maximum	115.00 Metres
4.7	Beam	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.8	Minimum parallel body length (PBL)	
1	TPQ NA Selector	Not applicable
2		0.00
4.9	Minimum PBL forward of manifold	
1	TPQ NA Selector	Not applicable
2		0.00

4.10	Minimum PBL aft of manifold	
1	TPQ NA Selector	Not applicable
2		0.00
4.11	Bow to centre of manifold (BCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.12	Stern to centre of manifold (SCM)	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.13	Freeboard	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.14	Manifold height above water	
1	TPQ NA Selector	Applicable
2	Minimum	6.00 Metres
3	Maximum	10.00 Metres
4.15	Manifold to shipside rail distance	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.16	Height of manifold above deck or drip tray	
1	TPQ NA Selector	Applicable
2	Minimum	1.00
3	Maximum	2.00
4	Specify whether height is from the deck or the drip tray	As per OCIMF recommendations for all tanker manifolds and associated equipment
4.17	Manifold spacing	
1	TPQ NA Selector	Not applicable
2	Minimum	0.00
3	Maximum	0.00
4.18	Maximum air draft alongside	
1	TPQ NA Selector	Not applicable
2		0.00 Metres
4.19	Vessel's minimum derrick/crane Safe Working Load (SWL)	
1	TPQ NA Selector	Applicable
2		5.00 Metric Tonnes
4.20	Additional comments or information	No comments

5 Mooring and Berthing Information

5.1	State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	SEE BILBAO TUGS FLEET
5.2	Are ship's or tug's lines used?	
1	Ship/Tug	Tug's Lines
2	Comments	As per pilot instructions
5.3	Type of fenders installed at berth	
1		Pneumatic Floating Fenders
2	If 'Other' please specify	
5.4	State orientation of vessel alongside berth	Either Port & Starboard Side To
5.5	At buoy moorings, state which side hose is normally connected	
1		Not applicable
2	If 'Other' please specify	
5.6	Minimum mooring arrangement	FWD MOORING: 6 AFT MOORING: 6
5.7	Describe any additional mooring requirements	No additional mooring requirements
5.8	Are there any restrictions using wire mooring ropes?	
1		No
2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	
5.9	Are there any restrictions using synthetic mooring ropes?	
1		No
2	If ‘yes’; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	
5.10	Are there any restrictions on using high modulus synthetic mooring ropes?	
1		No
2	If 'yes' provide details	
5.11	Details of any specific mooring equipment required for any vessel utilising the berth	None
5.12	Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?	
1		No
2	If 'Yes', provide details of particular requirements regarding ETOPs.	
5.13	Details of any shore-provided mooring equipment	N/A
5.14	Are berthing aids provided?	
1		Yes
2	If 'Yes', state type of aids	ONLY BERTHING MODE
5.15	State allowable speed of approach if applicable	
1		RECOMMENDED MAXIMUM VELOCITY IN CMS / SEC = 10

1		0.36
5.16	Is a mooring tension monitor fitted?	No
5.17	Are mooring hook quick release arrangements provided?	Yes
5.18	Chain stopper requirements	
1	Applicable	No
2		Not an SBM
5.19	Largest ship handled at berth to date	NO RECORDS
5.20	Additional comments or information	No comments

6 Berth Equipment and Facilities

6.1	Number, type and size of cargo transfer connections	1 x 6" ANSI 300
6.2	List grades handled at berth	Bitumen (including cut-backs), Black Petroleum Products, Heavy Distillates, Commercial LPG
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	Fuel, Gasoil, gasoline, Naphta,LPG, propylene
6.3	State transfer rate restrictions and back pressure for each cargo grade	LPG 190 PROPYLENE 90
6.4	Are transfer connections fitted with insulation flanges?	
1		Yes
2	Provide details	Refer. 8.3.9 OCIMF "design and construction specification for marine loading arms.
6.5	State storage type for LPG	Semi-Pressurised
6.6	Describe any terminal-specific requirements for vessel manifolds	No specific requirements for vessel manifolds
6.7	Is berth fitted with a vapour manifold connection?	
1		No
2	If 'Yes' state type and size of vapour connection	
3	State cargo types for which it is required to use vapour connection (if applicable)	
6.8	State throughput rate(s) of vapour recovery system	N/A
6.9	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms?	
1		Yes
2	Supply details	Method of initiation : Valve closing interval: Surge protection measure Yes/No? Which measure?
6.10	Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship?	
1		Yes
2	If 'yes' provide details	
6.11	Describe access arrangements between ship and shore.	SHORE PLATFORM

6.12	Does the berth have pollution response equipment?	
1		Yes
2	If 'yes' provide details	
6.13	Additional comments or information	No comments

7 Berth Operations

7.1	What is the primary and backup communication system between ship and terminal during cargo operations?	PRIMARY: MARINE VHF CHANNEL - 17 BACK UP: PORTABLE RADIO - CH:11
7.2	Is it required that terminal or shore representatives stay on board during operations?	
1		No
2	If 'Yes', state requirements including number of persons and their roles	
7.3	Specify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?	• Maximum wind velocity in operation: 22, 2 m/s.
7.4	Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	
1		Yes
2	If 'Yes' provide full details of these restrictions	NO COW OPERATIONS IN THIS BERTH Washing cargo tanks or gas freeing is NOT permitted while the vessel is alongside, unless approval has been given by the Terminal Representative. Venting, purging of hydrocarbon vapours to the atmosphere is PROHIBITED
7.5	Are there any berth specific requirements regarding tanker inerting procedures?	
1		Yes
2	If 'Yes', state requirements	All cargo tanks should be pressurized with good quality of Inert gas .Oxygen below 8 % in cargo tanks and 5% in line.
7.6	Is there a temperature limit for cargo handled?	
1		Yes
2	If 'Yes', state temperature limits	LPG maximum - 10 º C
7.7	Is it permitted for vessels to undertake double-banked operations alongside the berth?	
1		No
2	If 'Yes', state limiting criteria	
7.8	Is vessel required to pump water ashore or receive water on board for line clearance purposes?	
1		Yes
2	If 'Yes', provide operational details	Only for maintenance and inspection purpose
7.9	Can the berth be used for Ship-to-Ship transfers using terminal facilities?	
1		Yes

2	Provide details	Using both vessel different piers, and all operations coordinate by Terminal Control Room.
7.10	State details regarding any environmental restrictions applicable at the berth	Reference ISGOTT
7.11	Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.12	Are there any restrictions regarding Mercaptan content in Cargo Tanks?	
1		Yes
2	If 'Yes', state restriction	Reference ISGOTT
7.13	Are there any restrictions on handling stores when a ship is moored alongside berth?	
1		Yes
2	If 'Yes', state restriction	ONLY BY BARGE
7.14	Additional comments or information	No comments

8 Available Services

8.1	Are Fuel Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX-PIPE
8.2	Are Diesel Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX-PIPE
8.3	Are Intermediate Oil bunkers available?	
1		Yes
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX-PIPE
8.4	Is fresh water available?	
1		No
2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.5	Are slop reception facilities available?	
1		Yes
2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck)	EX-PIPE
3	State capacity of slop reception facilities (if applicable)	20000.00 Cubic metres
4	State any specific exclusions for slop receipts (e.g. chemicals, detergents, cleaning agents)	Terminal is unable to accept tank washings or slops which has been heated or containing chemicals additives or lube-oils
8.6	Are dirty ballast reception facilities available?	
1		Yes
2	If 'Yes', state how received	EX-PIPE
3	State capacity of dirty ballast receiption facilities	20.000 c.m.
8.7	Are engine room sludge and bilge reception facilities available?	

1		No
2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	
8.8	Are garbage reception facilities available at the berth.	
1		Yes
2	If 'Yes', provide details	Refer: BILBAO PORT FACILITIES
8.9	Additional comments or information	No comments

9 Berth Low Temperature Impact

9.1	What is the typical range of temperatures the terminal operates in during a winter season?	
9.2	Which months of the year can ice be expected?	
9.3	Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities	
9.4	State any limitations for cargo operations in sub-zero temperatures	
9.5	State the minimum allowable ambient temperature for safe cargo operations	
9.6	State the minimum temperature of cargoes handled	
9.7	State the minimum temperature for the emergency shut-down system to operate safely	
9.8	Does the terminal have its own resources for conducting icebreaker escort	
1		
2	If 'Yes' provide details and specify how they can be requested	
9.9	Are there icebreakers available to operate in the terminal area	
1		
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.10	Does the terminal have ice-capable tugs and support craft	
1		
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.11	Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice?	
1		
2	If 'Yes', provide details	
9.12	Does the terminal provide its own ice navigator/advisor?	
1		
2	If 'Yes', provide details of how the service may be requested	
9.13	Additional comments or information	

10 Supplementary Information

10.1	Berth transparency	PILED JETTY
10.2	Specify datum used for height and depth measurements in this section	
1		Chart Datum (CD)

2 If 'Other' please specify other

10.3	Berth height above datum	6.50
10.4	Berth heading	045º / T
10.5	Width of the channel adjacent to the berth	500.00

10.6 Position of mooring bollards and hooks

Hook/Bollard ID Number and Type	'x' dist to Fender Face (m)	'y' dist to Target Line (m)	Height (m)	SWL (tonnes)
SD1-W-5 (2)	-90.00	10.00	6.50	60.00
SD1-W-7 (2)	-46.00	10.00	6.50	60.00
SD1-W-9 (1)	-24.00	4.00	6.50	60.00
SD1-W-11 (1)	34.00	4.00	6.50	60.00
SD1-W-13 (2)	62.00	9.00	6.50	60.00
SD1-W-15 (2)	108.00	13.00	6.50	60.00

10.7	Position of mooring buoys
10.8	Fender Location
10.9	Fender Reaction Data
10.10	Fender friction coefficient (μ)

10.11 State identity and horizontal position of loading arms

Loading Arm/Shore Connection ID Number	Horizontal co-ordinate X	Horizontal co-ordinate Y	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
SD3-MLA-001	3.00	-6.53			

10.12 State loading arm operating limits

Loading Arm ID Number	Max Op Height	Min Op Height	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
MLA-001	12.00	7.00	5.00	3.00	13.00

10.13 Additional comments or information

Item 16.8 Pneumatic Fenders Yokohama:
SD1-DEF-51= 2.0 mtrs diam x 2,0 mtrs Long
Pressure : 0.5kg/cm2
SD1-DEF-52= 3.3 mtrs diam x 6,5 mtrs Long
Pressure : 0.5 kg/cm2
SD1-DEF-53= 3.3 mtrs diam x 6,5 mtrs Long
Pressure : 0.5 kg/cm2
SD1-DEF-54= 2.0 mtrs diam x 2,0 mtrs Long
Pressure : 0.5 kg/cm2

Oil Companies International Marine Forum

MTIS Programme

Berth TPQ

Berth TPQ: JETTY - 3

ReportName f9f72b1e-9098-4482-816a-e6c28fadcfb1

Terminal Name: PETRONOR MARINE TERMINAL

Terminal Port: BILBAO PORT

Terminal Port Authority: AUTORIDAD PORTUARIA DE BILBAO

Country: Spain

Berth Name: JETTY - 3

06 November 2015

1 Berth General

1.1		Berth name or number	JETTY - 3
1.2		Berth type	
	1		Jetty - 'T' finger
	2	If 'Other' please specify	
1.3		Terrestrial co-ordinates of manifold centreline	
	1	Latitude	432157 North
	2	Longitude	0030608 West
1.4		Berth users for liquid and gas cargoes	PETRONOR
1.5		Has a structural survey of the berth been undertaken, including its underwater structure?	
	1		Yes
	2	If 'Yes', state date of last survey	01 July 2004
1.6		Has an engineering (mooring and fendering) analysis of berth been undertaken?	
	1		Yes
	2	If 'Yes', state date of last analysis	06 December 2008
1.7		Additional comments or information	Repairs carried out, December 2006: Reparación de la plataforma central mediante un tablestacado perimetral y sujeto a una estructura metálica auxiliar anclado con tirantes transversales y un hormigonado entre las tablestecas y el muelle actual Reposición de las pasarelas y reparación de la superficie del SP-3 Los frontales de los “duques de Alba” hormigonado mediante encofrados metálicos con una avance de unos 600 mm.

2 Berth Approaches

2.1		Is pilotage compulsory?	
	1		Yes
	2	If 'Yes', state if any vessels are exempted	SPANISH LAW THE PILOTAGE IS COMPULSORY FOR ALL DANGEROUS GOODS
2.2		State distance from pilot station(s) to berth	TWO (2) MILES
2.3		Is a waiting anchorage available?	
	1		Yes
	3	If 'Yes', state distance from waiting anchorage to berth	TWO (2) MILES
2.4		Controlling depth of water for transit to and from berth	
	1	Water depth	31.00 Metres
	2	State datum used	Chart Datum (CD)
	3	If 'Other' please specify datum	As above

2.5	Date of latest survey from which transit depth has been determined	08 November 2008
2.6	Date next survey is due	08 November 2018
2.7	State Maximum Tidal Range in berth approaches	4.50
2.8	Is laden transit to and/or from the berth conducted using the tide?	
1		No
2	If 'Yes', state optimum transit window (i.e. at High Water, HW +/- 1 hr)	
2.9	State details of any specific berthing and/or unberthing restrictions	SEE PETRONOR MARINE TERMINAL INFORMATION AND PORT REGULATION
2.10	Minimum under keel clearance (UKC) in berth approaches	
1	Value	1.50 Meters
2	Percentage	5.00 Depth of water
3	Specify other UKC criterion where applicable	ROM 3.1-99 NORMATIVE
2.11	Absolute maximum draught in berth approaches, if applicable	14.00
2.12	State minimum vertical clearance of any bridges/power cables/vertical obstructions	
1	Vertical clearance	999.00
2	State datum used	Chart Datum (CD)
3	If 'Other' specify other datum used	As above
4	Further details	No vertical obstructions
2.13	Does the port require tankers and gas carriers to be escorted by tugs?	
1		Yes
2	If 'Yes', state whether Active or Passive escort is employed and the maximum towline force that the tug is able to generate	SEE PORT CAPTAIN PROCEDURES
2.14	Additional comments or information	No comments

3 Water Depth Alongside

3.1	Minimum controlled water depth alongside berth at chart datum	
1	Water depth	12.00 Metres
2	State datum used	Chart Datum (CD)
3	If 'Other' specify datum	
3.2	Date of latest survey from which alongside depth has been determined	08 November 2008
3.3	Date next survey is due	08 November 2018
3.4	Minimum static under keel clearance (UKC) alongside berth	
1	Value	0.20 Meters
2	Percentage	1.30 Vessel static draft
3	Specify other UKC criterion where applicable	ROM 3.1-99 NORMATIVE
3.5	State range of water densities at berth	
1	From	1017.00
2	To	1025.00
3	Further details	No details

3.6	Type of bottom alongside berth		
	1		Mud
	2	If 'Other' please specify	
3.7	Absolute maximum draft alongside, if applicable		11.70
3.8	State maximum tidal range at berth, if applicable		4.50
3.9	Are 'over-the-tide' cargo handling operations permitted at the berth?		Yes
3.10	Does the berth location experience water-level anomalies?		
	1		No
	2	Provide details	
3.11	Additional comments or information		No comments

4 Limiting Vessel Dimensions

4.1	Summer deadweight		
	1	TPQ NA Selector	Not applicable
	2	Minimum	0.00
	3	Maximum	0.00
4.2	Berthing displacement		
	1	TPQ NA Selector	Applicable
	2	Minimum	3000.00 Metric Tonnes
	3	Maximum	50000.00 Metric Tonnes
4.3	Alongside displacement		
	1	TPQ NA Selector	Applicable
	2	Minimum	3000.00 Metric Tonnes
	3	Maximum	50000.00 Metric Tonnes
4.4	State any deadweight/displacement exceptions		
	1	TPQ NA Selector	Not applicable
	2		Not exceptions
4.5	Cubic capacity (gas carriers)		
	1	TPQ NA Selector	Not applicable
	2	Minimum	0.00
	3	Maximum	0.00
4.6	Length over all (LOA)		
	1	TPQ NA Selector	Applicable
	2	Minimum	70.00 Metres
	3	Maximum	230.00 Metres
4.7	Beam		
	1	TPQ NA Selector	Not applicable
	2	Minimum	0.00
	3	Maximum	0.00

4.8	Minimum parallel body length (PBL)		
	1	TPQ NA Selector	Not applicable
	2		0.00
4.9	Minimum PBL forward of manifold		
	1	TPQ NA Selector	Not applicable
	2		0.00
4.10	Minimum PBL aft of manifold		
	1	TPQ NA Selector	Not applicable
	2		0.00
4.11	Bow to centre of manifold (BCM)		
	1	TPQ NA Selector	Not applicable
	2	Minimum	0.00
	3	Maximum	0.00
4.12	Stern to centre of manifold (SCM)		
	1	TPQ NA Selector	Not applicable
	2	Minimum	0.00
	3	Maximum	0.00
4.13	Freeboard		
	1	TPQ NA Selector	Not applicable
	2	Minimum	0.00
	3	Maximum	0.00
4.14	Manifold height above water		
	1	TPQ NA Selector	Applicable
	2	Minimum	7.00 Metres
	3	Maximum	12.00 Metres
4.15	Manifold to shipside rail distance		
	1	TPQ NA Selector	Not applicable
	2	Minimum	0.00
	3	Maximum	0.00
4.16	Height of manifold above deck or drip tray		
	1	TPQ NA Selector	Applicable
	2	Minimum	1.00
	3	Maximum	2.00
	4	Specify whether height is from the deck or the drip tray	As per OCIMF recommendations for all tanker manifolds and associated equipment
4.17	Manifold spacing		
	1	TPQ NA Selector	Not applicable
	2	Minimum	0.00
	3	Maximum	0.00
4.18	Maximum air draft alongside		

1	TPQ NA Selector	Not applicable
2		0.00 Metres
4.19	Vessel's minimum derrick/crane Safe Working Load (SWL)	
1	TPQ NA Selector	Not applicable
2		15.00 Metric Tonnes
4.20	Additional comments or information	No comments

5 Mooring and Berthing Information

5.1	State availability and specifications of tugs and mooring craft required for berthing and/or unberthing.	SEE BILBAO TUGS FLEET
5.2	Are ship's or tug's lines used?	
1	Ship/Tug	Tug's Lines
2	Comments	As per pilot instructions
5.3	Type of fenders installed at berth	
1		Pneumatic Floating Fenders
2	If 'Other' please specify	
5.4	State orientation of vessel alongside berth	Either Port & Starboard Side To
5.5	At buoy moorings, state which side hose is normally connected	
1		Not applicable
2	If 'Other' please specify	No mooring buoys
5.6	Minimum mooring arrangement	FWD MOORING: 7 AFT MOORING: 7
5.7	Describe any additional mooring requirements	No additional mooring requirements
5.8	Are there any restrictions using wire mooring ropes?	
1		No
2	If 'yes', provide details of restrictions in wire moorings as part of the mooring pattern	
5.9	Are there any restrictions using synthetic mooring ropes?	
1		No
2	If ‘yes’; provide details of restrictions in synthetic mooring ropes as part of the mooring pattern	
5.10	Are there any restrictions on using high modulus synthetic mooring ropes?	
1		No
2	If 'yes' provide details	
5.11	Details of any specific mooring equipment required for any vessel utilising the berth	N/A
5.12	Does the terminal require the vessel to rig Emergency Towing Off Pennants (ETOPs) while at the berth?	
1		No
2	If 'Yes', provide details of particular requirements regarding ETOPs.	
5.13	Details of any shore-provided mooring equipment	N/A

5.14	Are berthing aids provided?	
1		Yes
2	If 'Yes', state type of aids	ONLY BERTHING MODE
5.15	State allowable speed of approach if applicable	
1		RECOMMENDED MAXIMUM VELOCITY IN CMS / SEC = 10
1		0.36
5.16	Is a mooring tension monitor fitted?	Yes
5.17	Are mooring hook quick release arrangements provided?	Yes
5.18	Chain stopper requirements	
1	Applicable	No
2		Not an SBM
5.19	Largest ship handled at berth to date	NO RECORDS
5.20	Additional comments or information	No comments

6 Berth Equipment and Facilities

6.1	Number, type and size of cargo transfer connections	MARINE LOADING ARM (MLA): 2 X 12" ANSI 150 2 X 8" ANSI 150
6.2	List grades handled at berth	Bitumen (including cut-backs), Black Petroleum Products, Heavy Distillates, Gasoils, Diesels and Kerosenes, Gasolines and Gasoline Blendstocks, Naphtha, Biodiesel/Biosiesel Blends, Ethanol/Ethanol Gasoline Blends, Vegetable Oils
2	State specific grades handled at berth (e.g. Ekofisk crude oil, Unleaded Gasoline, Jet A1).	Fuel, gasoil, Kerosene, Gasoline, Naphta, Fame, VGO. LCO
6.3	State transfer rate restrictions and back pressure for each cargo grade	FUEL OIL 3.000 m3/hr BP= 15 bars GAS OIL 1.500 m3/hr BP= 15 bars KEROSENE 1.400 m3/hr BP= 15 bars GASOLINE 1.400 m3/hr BP= 15 bars NAPHTHA 1.400 m3/hr BP= 15 bars
6.4	Are transfer connections fitted with insulation flanges?	
1		Yes
2	Provide details	Refer. 8.3.9 OCIMF "design and construction specification for marine loading arms.
6.5	State storage type for LPG	Not applicable
6.6	Describe any terminal-specific requirements for vessel manifolds	No specific requirements for vessel manifolds
6.7	Is berth fitted with a vapour manifold connection?	
1		No
2	If 'Yes' state type and size of vapour connection	N/A
3	State cargo types for which it is required to use vapour connection (if applicable)	N/A

6.8	State throughput rate(s) of vapour recovery system	N/A
6.9	Are Powered Emergency Release Couplings (PERCS) installed to the cargo transfer arms?	
1		No
2	Supply details	Not installed.
6.10	Does the berth have an emergency shutdown (ESD) capability that can be activated by the ship?	
1		No
2	If 'yes' provide details	
6.11	Describe access arrangements between ship and shore.	ONLY PLATFORMS
6.12	Does the berth have pollution response equipment?	
1		Yes
2	If 'yes' provide details	SEE PETRONOR POLLUTION PREVENTION PLAN
6.13	Additional comments or information	No comments

7 Berth Operations

7.1	What is the primary and backup communication system between ship and terminal during cargo operations?	PRIMARY: MARINE VHF CHANNEL - 17 BACK UP: PORTABLE RADIO - CH:11
7.2	Is it required that terminal or shore representatives stay on board during operations?	
1		No
2	If 'Yes', state requirements including number of persons and their roles	
7.3	Specify weather/environmental restrictions for stopping cargo operations, disconnecting hoses or arms and vacating the berth?	• Maximum wind velocity in operation: 22, 2 m/s.
7.4	Are there any restrictions regarding tank cleaning/Crude Oil Washing (COW) operations at the berth?	
1		Yes
2	If 'Yes' provide full details of these restrictions	NO COW OPERATIONS IN THIS BERTH Washing cargo tanks or gas freeing is NOT permitted while the vessel is alongside, unless approval has been given by the Terminal Representative. Venting, purging of hydrocarbon vapours to the atmosphere is PROHIBITED
7.5	Are there any berth specific requirements regarding tanker inerting procedures?	
1		Yes
2	If 'Yes', state requirements	All cargo tanks should be pressurized with good quality of Inert gas .Oxygen below 8 % in cargo tanks and 5% in line.
7.6	Is there a temperature limit for cargo handled?	
1		Yes
2	If 'Yes', state temperature limits	Maximum: 85 º C

7.7		Is it permitted for vessels to undertake double-banked operations alongside the berth?	
	1		No
	2	If 'Yes', state limiting criteria	
7.8		Is vessel required to pump water ashore or receive water on board for line clearance purposes?	
	1		Yes
	2	If 'Yes', provide operational details	Only for maintenance and inspection purpose
7.9		Can the berth be used for Ship-to-Ship transfers using terminal facilities?	
	1		Yes
	2	Provide details	Using both vessel different piers, and all operations coordinate by Terminal Control Room.
7.10		State details regarding any environmental restrictions applicable at the berth	Reference ISGOTT
7.11		Are there any restrictions regarding Hydrogen Sulphide content in Cargo Tanks?	
	1		Yes
	2	If 'Yes', state restriction	Reference ISGOTT
7.12		Are there any restrictions regarding Mercaptan content in Cargo Tanks?	
	1		Yes
	2	If 'Yes', state restriction	Reference ISGOTT
7.13		Are there any restrictions on handling stores when a ship is moored alongside berth?	
	1		Yes
	2	If 'Yes', state restriction	ONLY BY BARGE
7.14		Additional comments or information	No comments

8 Available Services

8.1		Are Fuel Oil bunkers available?	
	1		Yes
	2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX-PIPE
8.2		Are Diesel Oil bunkers available?	
	1		Yes
	2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX-PIPE
8.3		Are Intermediate Oil bunkers available?	
	1		Yes
	2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	EX-PIPE
8.4		Is fresh water available?	
	1		No
	2	If 'Yes', state how delivered (e.g. Ex-Pipe, barge, truck)	
8.5		Are slop reception facilities available?	
	1		Yes

2	If 'Yes', state how received (e.g. Ex-Pipe, barge, truck)	EX-PIPE
3	State capacity of slop reception facilities (if applicable)	20000.00 Cubic metres
4	State any specific exclusions for slop receipts (e.g. chemicals, detergents, cleaning agents)	Terminal is unable to accept tank washings or slops which has been heated or containing chemicals additives or lube-oils
8.6	Are dirty ballast reception facilities available?	
1		Yes
2	If 'Yes', state how received	EX-PIPE
3	State capacity of dirty ballast receiption facilities	20000
8.7	Are engine room sludge and bilge reception facilities available?	
1		No
2	If 'Yes', state how received (e.g. Ex-pipe, barge, truck)	
8.8	Are garbage reception facilities available at the berth.	
1		Yes
2	If 'Yes', provide details	Refer: BILBAO PORT FACILITIES
8.9	Additional comments or information	No comments

9 Berth Low Temperature Impact

9.1	What is the typical range of temperatures the terminal operates in during a winter season?	
9.2	Which months of the year can ice be expected?	
9.3	Specify any terminal requirements for vessel Ice Class notation and winterisation capabilities	
9.4	State any limitations for cargo operations in sub-zero temperatures	
9.5	State the minimum allowable ambient temperature for safe cargo operations	
9.6	State the minimum temperature of cargoes handled	
9.7	State the minimum temperature for the emergency shut-down system to operate safely	
9.8	Does the terminal have its own resources for conducting icebreaker escort	
1		
2	If 'Yes' provide details and specify how they can be requested	
9.9	Are there icebreakers available to operate in the terminal area	
1		
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.10	Does the terminal have ice-capable tugs and support craft	
1		
2	Specify details (e.g. Name/IMO Nr/GRT/Power/Ice Class)	
9.11	Does the terminal have specific requirements for the vessel speed and manoeuvrability characteristics in ice?	
1		
2	If 'Yes', provide details	

9.12	Does the terminal provide its own ice navigator/advisor?	
1		
2	If 'Yes', provide details of how the service may be requested	
9.13	Additional comments or information	

10 Supplementary Information

10.1	Berth transparency	"T" JETTY
10.2	Specify datum used for height and depth measurements in this section	
1		Chart Datum (CD)
2	If 'Other' please specify other	
10.3	Berth height above datum	7.00
10.4	Berth heading	042º/T
10.5	Width of the channel adjacent to the berth	500.00

10.6 Position of mooring bollards and hooks

Hook/Bollard ID Number and Type	'x' dist to Fender Face (m)	'y' dist to Target Line (m)	Height (m)	SWL (tonnes)
SD-EW-1 (2)	-164.00	76.30	7.00	60.00
SD-EW-2C (2)	-144.00	76.30	7.00	60.00
SD-EW-2A (2)	-34.00	5.30	7.00	60.00
SD-EW-2B (2)	34.00	5.30	7.00	60.00
SD-EW-3 (2)	57.00	76.30	7.00	60.00
SD-EW-4 (4)	81.00	76.30	7.00	100.00
SD-EW-5 (2)	153.00	76.30	7.00	60.00

10.7	Position of mooring buoys
10.8	Fender Location
10.9	Fender Reaction Data
10.10	Fender friction coefficient (μ)

10.11 State identity and horizontal position of loading arms

Loading Arm/Shore Connection ID Number	Horizontal co-ordinate X	Horizontal co-ordinate Y	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
SD1-MLA-020	8.00	-3.90			
SD1-MLA-021	8.00	-1.30			
SD1-MLA-022	8.00	1.30			
SD1-MLA-023	8.00	3.90			

10.12 State loading arm operating limits

Loading Arm ID Number	Max Op Height	Min Op Height	Max Excursion Surge	Max Excursion Sway	Max Excursion Heave
MLA-020	12.00	7.00	5.00	3.00	13.00
MLA-021	12.00	7.00	5.00	3.00	13.00
MLA-022	12.00	7.00	5.00	3.00	13.00
MLA-023	12.00	7.00	5.00	3.00	13.00

10.13	Additional comments or information	Item 16.8 Pneumatic Fenders Yokohama: SD1-DEF-31= 3.3 mtrs diam x 6.5 mtrs Long Pressure : 0.8 kg/cm2 SD1-DEF-32= 333 mtrs diam x 10.5 mtrs Long Pressure : 0.2 kg/cm2 Ballasted with fresh water 14,250. SD1-DEF-33= 3.3 mtrs diam x 6.5 mtrs Long Pressure : 0.8 kg/cm2