Base Load Power Hub (BLPH)

FF and Safety Equipment Specifications

Document Number: 123A90-DDL-SAF-SP-30032

Document Class: 2

01	01/07/2024	Approved for Construction (AFC)	HAR	C. Caracciolo	D. Lo Sterzo
00	02/05/2024	Issue for Review (IFR)	HAR	C. Caracciolo	D. Lo Sterzo
Rev.	Date	Description	Prepared	Reviewed	Approved

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

Revision / Change Log

Rev.	Description
00	Issue for Review (IFR)
01	Approved for Construction (AFC)

HOLDS LIST

No.	Description
1	
2	
3	
4	

Table of contents

1 INTRODUCTION 6
1.1 PROJECT OVERVIEW 6
1.1.1 Project Location 6
1.1.2 Project Concept 7
2 DOCUMENT SCOPE 9
2.1 REFERENCES 9
2.2 Codes and Standards 9
2.3 DEFINITIONS AND ABBREVIATIONS 11
3 GENERAL 12
3.1 Environmental Conditions 12
3.2 VENDOR RESPONSABILITIES 12
3.3 Equipment Safety 12
3.4 Electrical and Instrumentation General Requirements 13
3.5 Painting and COATING 13
3.6 Thermal Insulation 13
3.7 Weight Information 13
3.8 Review of Documents 14
4 TECHNICAL REQUIREMENT fOR fire fighting 15
4.1 Fire Extinguisher 15
4.1.1 Dry Powder Portable Extinguisher 15
4.1.2 CO2 Portable Extinguisher 15
5 TECHNICAL REQUIREMENT FOR SAFETY EQUIPMENT 16
5.1 Life raft 16
5.1.1 General Requirements 16
5.1.2 Unit Description 16
5.1.3 Inflation system 16
5.1.4 Container 17
5.1.5 Equipment required 17

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

5.1.6 Design requirements of launching appliance 17
5.2 Life Jacket and Immersion Suit 18
5.2.1 General requirements 18
5.2.2 Unit description 18
5.3 Life Buoy 18
5.3.1 General Requirement 18
5.3.2 Unit description 19
5.4 Safety cabinet 19
5.5 Escape MASK 19
5.6 First Aid Kit 19
5.7 RESUSCITATION unit 20
5.8 EVACUATION Stretcher 20
5.9 Electrical Safety Kit 20
6 Deviations and Exclusions 22

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

List of Figures

Figure 1 HOLLANDSE KUST NOORD WIND PARK Location Map 6
Figure 2 - Wind Park Details 7
Figure 3 – BLPH Concept 8

List of tables

Table 1 - Reference Documents 9
Table 2 - Definitions and Abbreviations 11

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

1 INTRODUCTION

1.1 PROJECT OVERVIEW

Crosswind, a Shell and Eneco joint venture, was awarded the tender to develop the offshore Hollandse Kust Noord (HKN) wind farm, located 18.5km off the coast of Netherlands near the town of Egmond aan Zee. The consortium plans to have HKN operational in 2023 with an installed capacity of 759MW generating at least 3.3TWh per year. This is sufficient renewable power to supply more than 1 million Dutch households with green electricity.

Offshore wind farms produce intermittent electricity and balancing these dips and peaks and integrating this electricity into the national energy system requires new technologies. For this reason, the offshore wind farm will include several new technologies that could be implemented at full-scale in the future. The new technologies being explored include a floating solar park, a short-duration battery storage as well as long-term storage via green hydrogen produced by water electrolysis and subsequently consumed in a fuel cell. The combination of these individual measures, herein referred to as the Base Load Power Hub (BLPH) will ensure a continuous power supply regardless of the wind situation.

1.1.1 Project Location

The Hollandse Kust Noord (HKN) wind farm is located 18.5km off the coast of the Netherlands near the town of Egmond aan Zee.

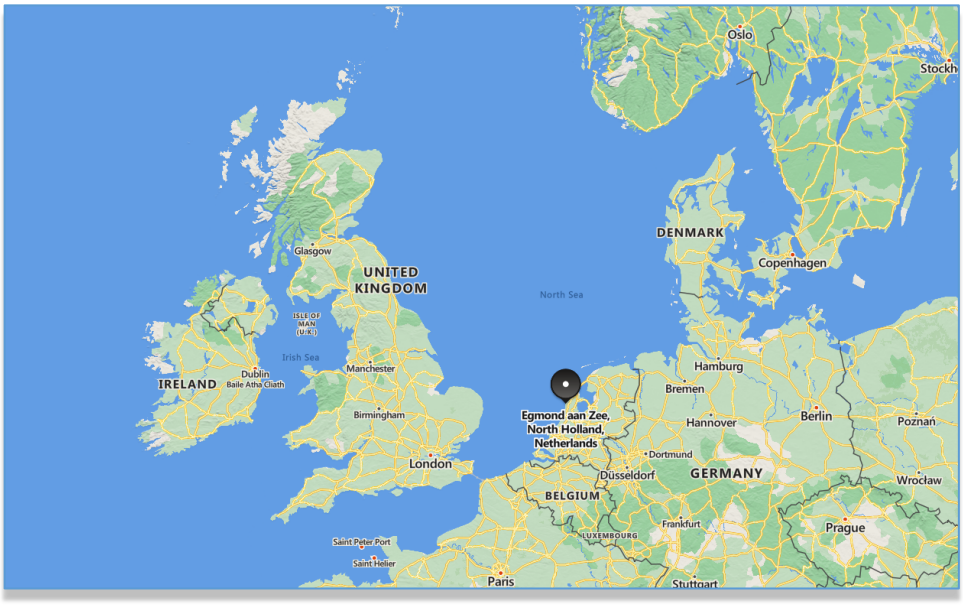


Figure 1 HOLLANDSE KUST NOORD WIND PARK Location Map

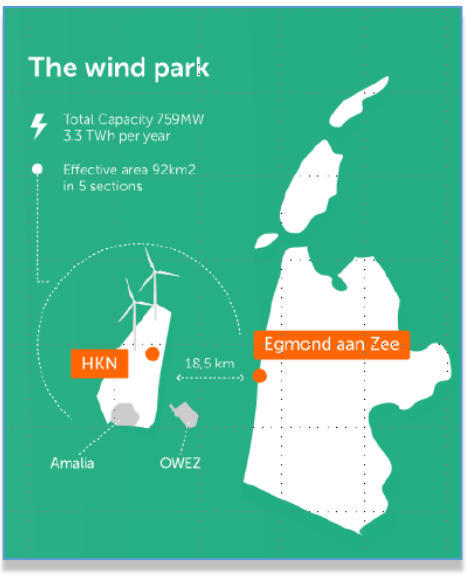


Figure 2 - Wind Park Details

The wind farm will consist of No. 69 x 11.5MW wind turbine generators each to be installed on a dedicated monopile structure. A 70th monopile located on coordinates E 590719.1, N 5841602.3 is reserved for installing the platform accommodating the BLPH. The monopile structure was designed and installed by Van Oord Offshore Wind (VooW) and therefore not part of the BLPH scope.

1.1.2 Project Concept

All components included in the BLPH will be integrated onshore on a topsides and installed in an offshore location within the boundaries of the HKN wind farm. At its simplest, the BLPH will store energy during periods of high electricity generation from renewable sources (a wind turbine generator and the floating solar PV farm) and release it during periods of low generation. In practice. It is expected that the energy stored will supplement generation from renewable sources to ensure that at least 1.0MW of power is exported to the electrical grid regardless of wind/solar availability.

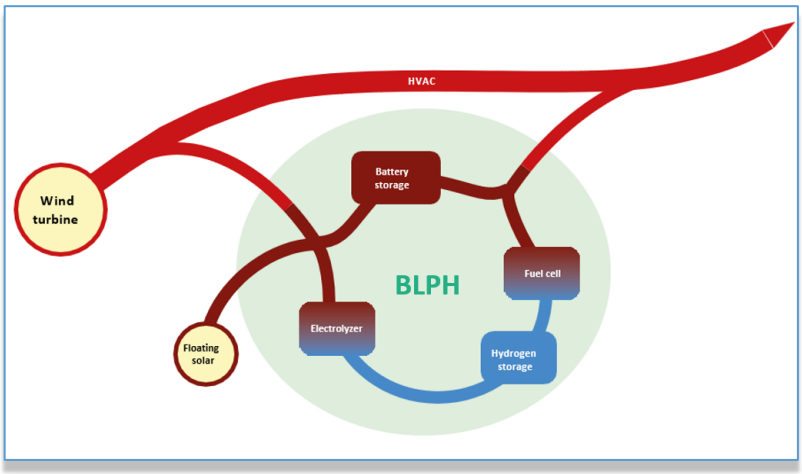


Figure 3 – BLPH Concept

Electricity in the BLPH will be stored in the form of electrons in a battery energy storage system (BESS) as well as converted into green hydrogen via water electrolysis. When the power output from the connecting wind turbine drops to below 1 MWe, the BLPH will return its stored energy to supplement the remaining power output. This will be by discharging the BESS, while stored hydrogen will be converted back into electricity using a fuel cell to extend the discharge duration.

The purpose of the BLPH s to function as a testbed for the integration of energy storage technologies with renewable generation. It is expected that equipment installed on the BLPH will operate as Normally Unmanned Installation for at least two (2) years with no or minimal maintenance and it will have its own independent control room with the ability to communicate with Crosswind's control room.

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

2 DOCUMENT SCOPE

The purpose of this Specification, together with the referenced documents, is to define the minimum requirements for the design, manufacture, inspection, certification and preparation for shipment of Firefighting and life-saving equipment to be installed on BLPH Platform.

Compliance with this Specification does not relieve the Vendor from meeting the requirements of the Company or the Contractor when specified in the Purchase Order (PO).

Any deviation from the design standards and requirements laid out in this Specification shall be considered but shall not be acceptable unless agreed to in writing by the Contractor. These deviations shall be listed at the time of tendering in order to define the Vendor's proposal completely.

It is mandatory upon the Vendor to comply with all applicable legislation of the Netherlands regulatory requirements; all safety equipment shall be certified in accordance with related norms.

2.1 REFERENCES

Doc. No.	Description
[1] K559-2254-PM-PLN-003	COMPANY, "Basis for Design Base Load Power Hub (BLPH)", Rev. 01.
[2] 123A90-DDL-SAF-RE-30046	Design HSE Philosophy, rev 03
[3] 123A90-DDL-SAF-RE-30001	Fire Protection Philosophy, rev 02
[4] K559-2254-SE-LST-002	Hazardous Area Classification Schedule rev 03
[5] 123A90-DDL-SAF-DL-30025	Escape Routes, Fire Fighting, Life Saving Equipment and Safety Equipment Layouts Drawings - lower deck rev00
[5] 123A90-DDL-SAF-DL-30026	Escape Routes, Fire Fighting, Life Saving Equipment and Safety Equipment Layouts Drawings - upper deck rev00
[6]123A90-DDL-SAF-RE-3002	Evacuation, Escape and Rescue Assessment (EERA) Report rev 00
[7]123A90-DDL-SAF-MR-30031	MR - FF and Safety Equipment MR rev00
[8]123A90-DDL-SAF-DS-30033	TDS - FF and Safety Equipment rev00
[9]123A90-DDL-SAF-TBE-30034	TBE - FF and Safety Equipment rev00

Table 1 - Reference Documents

2.2 CODES AND STANDARDS

All the following codes shall be used in the last available revision at the date of May 2023.

[1] IMO / SOLAS	International Convention for the Safety of Life at Sea (consolidated Edition 2009, with the latest amendments)
[2] IMO Life-Saving Appliance (LSA)	IMO New Regulations for Life Saving Appliances 2022
[3] IMO FSS Code	International Code for Fire Safety System
[4] NOGEPA standards	Industry standards and guidelines, Element NL
[5] IP 15	Area Classification Code for Installations Handling Flammable Fluids: Part 15 of the IP Model Code of Safe Practice in the Petroleum Industry
[6] API RP 14G	Recommended Practice for Fire Prevention and Control on Fixed Open-type Offshore Production Platforms
[7] ISO 13702	Petroleum and Natural Gas Industries - Control and Mitigation of Fires and Explosion on Offshore Production Installations – Requirements and Guidelines
[8] API RP 2001	Fire Protection in Refineries
[9] ASME Vessel Code	Boiler and Pressure Vessel Code
[10]EU Directive 2014/68/EU	Pressure Equipment Directive
[11]EU Directive 2014/34/EU	Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres
[12]ISO 9000-9004	Quality Management Systems Requirement
[13]ISO 15544:2000	Petroleum and natural gas industries – Offshore production installations – Requirements and guidelines for emergency response
[14] EN 10204	Metallic Products - Types of Inspection Documents
[15] IEC 60079	Explosive atmospheres (series)
[16] IEC 60529	Degrees of Protection provided by Enclosures (IP Code)
[17] IECEx	IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEx System)
[18] NFPA 10	Standard for Portable Fire Extinguishers
[19] EN 443	Helmets for fire fighting in buildings and other structures

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

[20] EN ISO 20345	Personal protective equipment - Safety footwear
[21]DEP 80.47.10.12-Gen	Fire And Explosion Control, Protection Systems And Emergency Response For Offshore
[22]DEP 37.17.10.11-Gen	Design of Offshore Temporary Refuges

2.3 DEFINITIONS AND ABBREVIATIONS

COMPANY or Client (CPY):	Crosswind
CONTRACTOR (CTR):	ROSETTI MARINO S.p.A.
PROJECT:	HOLLANDSE KUST NOORD WIND PARK Project
MANUFACTURER	the party that manufactures the pump and performs the
SUB-SUPPLIER	The party that manufactures or supplies equipment and
SHALL	indicates a requirement.
SHOULD	indicates a recommendation
ATEX	ATmosphères EXplosibles
CA	Certifying Authority
IEC	International Electrotechnical Commission
IECEx	International Electrotechnical Commision Explosive
IP	Ingress Protection
ITP	Inspection and Testing Plan
SOLAS	Safety of Life at Sea

Table 2 - Definitions and Abbreviations

3 GENERAL

3.1 ENVIRONMENTAL CONDITIONS

Site data, utilities and environmental data are defined in the project reference document "COMPANY, "Basis for Design Base Load Power Hub (BLPH)", Revision 01. Ref. [1].

All equipment is required to be stored in an outdoor environment shall be suitable for corrosive and salt laden environment. It shall be designed to withstand temperatures from -10°C to 30°C.

3.2 VENDOR RESPONSABILITIES

This Specification is primarily intended to define the minimum requirements and does not relieve the vendor of its responsibility for the design, performance and safe operation of the whole unit.

The Vendor shall be responsible for the design, performance, guarantees, co-ordination, manufacture, inspection, testing, preservation and packaging of the entire unit, in accordance with the requirements of this General Specification and Project Specifications and Data Sheets. This shall include as a minimum:

- provision of documentation.
- control and co-ordination of Manufacturer and Sub-suppliers;
- compliance with Statutory Requirements, Codes and Standards;

identification of all technical exceptions and deviations from this General Specification, Project Specifications and all referenced Industry Codes and Standards;

- consideration of equipment design and shipping arrangements for ease of delivery to the site;
- provision of all necessary design certification.

The equipment including auxiliaries, shall be designed and constructed for a minimum service life of 2 years and 2 years of uninterrupted operation without maintenance.

3.3 EQUIPMENT SAFETY

All equipment shall be certified for use in hazardous areas. Design shall comply with IEC 60079 and be ATEX rated for IIC or rated for IIB + H2. All equipment specified for use in a hazardous area shall be suitable for hydrogen production and storage. Items located in the hazardous area (hydrogen environment) shall be explosion-proof Ex-d certified. Ex-I technique shall be avoided. Junction boxes in the hazardous area shall be Ex-e certified. ATEX marking shall be on all ATEX certified equipment.

All instruments and outside equipment shall be suited for a harsh offshore marine environment. If necessary, items shall be installed with a weather-cap or housing. This counts also for junction boxes, cabling, ducts, and glands.

3.4 ELECTRICAL AND INSTRUMENTATION GENERAL REQUIREMENTS

All instruments provided shall be calibrated, and calibration certificates to be provided prior to delivery.

The Equipment (as applicable only in classified area) shall be suitable for Zone 2, ATEX certified Ex II 2 G Gas Group IIC or IIB+H_2, Temperature Class T1, to a minimum level of enclosure protection shall be IP 66 as a minimum.

All field instruments and instrument equipment (i.e. junction boxes, outdoor control panels/cabinets; etc.) shall be certified for Zone 2 certified for Gas Group IIC Temperature Class T1 as per IEC 60079.

Hazardous certificates shall be supplied for all equipment where applicable.

3.5 PAINTING AND COATING

Painting and coating of equipment shall comply with the Technical Specification cited in the Material requisition. Manufacturer's standard painting system may be proposed as an alternative but shall be subject to Contractor review and approval.

3.6 THERMAL INSULATION

Non-asbestos, chemically inert, thermal insulation shall be applied to all normally accessible exposed surfaces of equipment which may exceed a temperature of 65°C, when the ambient temperature is 50^0C .

The insulation shall be encased by metal cladding or other approved means. Where the cladding is readily accessible to personnel during set operation its surface temperature shall not exceed 650C. If this is not practical, additional guarding or warning notices shall be provided. This prescription is applicable also to the portions of ducts inside the enclosures.

Any type of insulation proposed by the Supplier shall be well referenced and be a standard design type for the Supplier.

Any insulation or shielding on hot parts shall be easily removable.

All connections to electrical transmitters shall protrude through the insulation. Cables shall be installed outside the insulation. The hot insulation, if applicable, shall be based Technical Specification indicated in the Material requisition.

3.7 WEIGHT INFORMATION

VENDOR shall provide estimated weight of the equipment during the bid stage. This weight shall include all auxiliaries, regardless of whether they are being supplied separately or installed with the equipment.

The VENDOR may be required to guarantee its weight estimates prior to order date.

The VENDOR shall supply the weight and location of the centre of gravity of the equipment (where applicable) in the following situations:

- As shipped including packing, shipping constraints, lifting equipment etc.
- As installed including all auxiliary components as well as fluids

When all weights have been verified, the VENDOR shall review its initial weight estimation and confirm or modify the data by re-issuing the information as required. This shall not be done later than one month prior to the agreed shipping date of the equipment.

3.8 REVIEW OF DOCUMENTS

Review / approval of VENDOR documents by the Contractor or an inspector shall not relieve VENDOR of his guarantees regarding performance of the units or the responsibility to ensure the equipment is safe for operation and fit for purpose.

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

4 TECHNICAL REQUIREMENT FOR FIRE FIGHTING

4.1 FIRE EXTINGUISHER

Portable fire extinguishers shall meet the general requirements of NFPA 10, Ref. [18] and of IMO FSS Code (Chapter 4), Ref [3].

The following types of portable fire extinguishers are foreseen in the facilities:

- Dry powder 9kg portable extinguishers,
- CO2 5kg portable extinguishers,

The standardised colour of each type of fire extinguishers shall be red (RAL 3000). All portable fire extinguishers located in open area shall be placed in a dedicated waterproof cabinet.

VENDOR shall furnish a complete description of protection coating system for each type of fire extinguisher.

4.1.1 Dry Powder Portable Extinguisher

Extinguishers capacity shall be 9kg of ABC type dry powder. Each extinguisher shall incorporate the following:

- Pressurisation by CO2 or N2 cartridge,
- Large diameter filler cap for easy field re-filling,
- "High Flow" Hand Applicator Hose complete with nozzle,
- Facility for a controlled discharge of its contents,
- Charged with a Potassium Bicarbonate based powder,
- Mounting brackets with marine corrosion resistant coating,
- Each extinguisher shall have a minimum discharge time of 15 seconds with an effective range of 6m.

4.1.2 CO2 Portable Extinguisher

CO2 extinguishers shall be provided with a capacity of 5kg on the platform from which 2 shall be provided in ITER, HV& LV and UPS room.

Each extinguisher shall incorporate the following:

- A flexible high-pressure hose with a non-conducting discharge nozzle,
- Facility for controlled discharge of contents,
- A pressure indication device which shall incorporate a small indicator that shall break away when the extinguisher is used,
- Mounting brackets with marine environment coating,
- Each extinguisher shall have a minimum discharge time of 10 seconds, with an effective range of 2m.

5 TECHNICAL REQUIREMENT FOR SAFETY EQUIPMENT

5.1 LIFE RAFT

5.1.1 General Requirements

The life rafts design and construction shall be in accordance with the SOLAS, Ref. [1], relevant requirements of Chapter 4.1 and 4.2 of the IMO Life-Saving Appliance (LSA) Code Ref. [2].

Life rafts shall be certified according to relevant requirements of Chapter 4.1 and 4.2 of the IMO Life-Saving Appliance (LSA) Code, by an independent, internationally recognised Certifying Authority.

VENDOR shall furnish to CONTRACTOR all documents necessary to certification for CA project acceptance.

5.1.2 Unit Description

Life rafts shall be located at the lower deck. Life rafts shall be of the encapsulated, self-inflating, 10-person capacity, jettison type. Embarkation into the rafts shall be by scramble nets.

The life rafts shall be of sufficiently robust construction to remain afloat when fully laden, under all sea conditions. The design and construction shall ensure stability in a seaway.

The construction shall include twice the number of buoyant tubes, each capable of supporting the full complement for which the life raft is approved.

The life rafts canopy shall be "International Orange" in colour and shall be automatically erected upon inflation, giving immediate protection from exposure. The canopy shall have two separate entrances.

The life rafts shall be marked with the name of the installation, so that easy identification from air is possible.

The life raft shall be permanently clearly marked “LIFE RAFT”, in both English and Dutch, in easily readable capital letters.

The floor of the life rafts shall be double skinned, and when manually inflated shall afford insulation. Water pockets attached to the underside of the raft together with the sea anchor shall provide stability and limit drift.

Webbing ladders or boarding ramps and grablines shall be provided to enable personnel to enter the raft.

An external locating light, an internal light and a sleeve to locate the radio aerial shall be incorporated into the canopy.

The life rafts shall be provided with means to enable it to be readily righted by one man in the event of capsize.

5.1.3 Inflation system

The life rafts shall be equipped with an automatic inflation system capable of one-man operation. Gas shall be supplied to two separate buoyancy chambers. Non-return valves shall be provided at point of entry to the buoyancy chambers.

Provision shall be made for topping-up the chambers with a hand inflator.

5.1.4 Container

Each life raft and accessories shall be supplied packed in a container designed and constructed to:

- Protect the contents from the environment,
- Transport, prior to launching,
- Achieve the desired mode of operation during launching.

The container shall be made in glass fibre.

Each container shall be supplied complete with fire retardant deck storage cradles with an external coating coloured "International Orange", lashing straps, and senhouse slip.

The painter / operating line shall be securely fastened to the installation and shall be of sufficient length to reach sea level at LAT (i.e. 27.7 m long).

Length of the painter shall be equal to the height of the launch point above LAT plus 12 m (i.e. 39.7 m at minimum) and clearly marked on the container.

5.1.5 Equipment required

Equipment to be supplied with the life rafts shall be made as per requirements of Chapter 4.1.5 and 4.2.9 of the IMO Life-Saving Appliance (LSA) Code Ref. [2]. Additionally, the life rafts are each to be equipped with an approved radio distress beacon (EPIRB) or a search and rescue transponder beacon (SART).

Requirements regarding EPIRB beacon and SART to be provided with life rafts.

Prior the life raft acceptance, the following shall be available:

- Type performance data showing compliance with SOLAS requirements with the latest amendments,
- Quality Control Inspection Procedures,
- Approval Certification by a recognised authority, still valid at the start-up period.

5.1.6 Design requirements of launching appliance

The cradle supporting each life raft shall allow the launching of the container and its life raft by only one person.

Special care must be taken to avoid damage to the life raft during falling; the cradle shall be cantilevered regarding the edge of the platform. Jib Crane for the rescue of each liferaft to quoted as option.

5.2 LIFE JACKET AND IMMERSION SUIT

5.2.1 General requirements

The life jackets, suitable immersion suits, cabinets design and construction shall be in accordance with the SOLAS Ref. [1] and the relevant requirements of Chapter 2.2 and 2.3 of the IMO Life-Saving Appliance (LSA) Code Ref. [1] .
Lifejackets and suitable immersion suits to be certified according to relevant requirements of Chapter 2.2 and 2.3 of the IMO Life-Saving Appliance (LSA) Code Ref. [2], by an independent, internationally recognised Certifying Authority (CA).
VENDOR shall furnish to CONTRACTOR all documents necessary to certification for CA project acceptance.

5.2.2 Unit description

The life jackets shall be fitted with:

- Whistle lanyard,
- Reflective strips,
- Automatically actuated light,
- Lifting brackets,
- Water actuation battery.

Except the life jackets positioned in the lifeboat, all the life jackets/Immersion suits shall be stored inside cabinets.

Life jacket/Immersion suit (max POB for evacuation) shall be provided at the external of primary muster area and at the external of secondary muster area.

Life jackets shall be "self-buoyant" type to avoid maintenance of CO_2 system and buoyancy level 275 to be provided.

Clear marking "LIFE JACKETS/IMMERSION SUIT", in both English and Dutch, shall be fixed on each container (50 mm high letters).

5.3 LIFE BUOY

5.3.1 General Requirement

The life buoys design and construction shall be in accordance with the SOLAS, relevant requirements of Chapter 2.1 of the IMO Life-Saving Appliance (LSA) Code, Ref. [1]

Life Buoys are to be certified according to the relevant requirements of Chapter 2.1 of the IMO Life-Saving Appliance (LSA) Code Ref. [2], by an independent, internationally recognised Certifying Authority (CA).

VENDOR shall furnish to CONTRACTOR all documents necessary to certification for CA project acceptance.

5.3.2 Unit description

Life buoys shall be provided to the platform. These Life buoys shall be coloured "International Orange" and suitably marked with the name of the installation Life buoys shall have an outer diameter of not more than 800 mm and an inner diameter of not less than 400mm..

At least one life buoy on two opposite sides of the platform shall be fitted with a buoyant lifeline. An end of this buoyant lifeline shall be attached to the life buoy and the other end shall be securely fastened to the platform. The line shall be three times longer than the height above sea level (at LAT level) at which the life buoy is posted.

All life buoys shall be equipped with both water activated light and smoke marker, for Lifebuoys located on Hazardous area classification.

Galvanised life buoys bracket suitable for hanging on handrail shall be provided.

5.4 SAFETY CABINET

Safety cabinets shall be provided to store safety and firefighting equipment. The cabinets shall be made of UV resistant GRP or epoxy coated steel, red coloured.

5.5 ESCAPE MASK

Personal shall be provided with escape mask to enhance survival / rescue in smoke-laden atmospheres. The smoke hood shall provide breathing protection against smoke and carbon monoxide for a minimum period of 10 minutes.

The mask shall be capable of fast donning, have a long life (in storage) filter, be light in weight, and easy to store.

5.6 FIRST AID KIT

Container of the first aid kit shall be in plastic suitable for wall mounting and semi portable type (non-locking container with a handle to facilitate easy transportation by one person). The design of the container shall have no sharp corners, edges or protuberances which could cause personnel injury. The container should be clearly identified as first-aid container (e.g. marked with a white cross on a green background).

The first aid kit shall contain, as a minimum, the following items:

- A pair of heavy-duty scissors (for cutting clothes and dressings),
- Non-sterile examination gloves (several sizes),
- An emergency trauma pressure dressing,

- A cloth tourniquet,
- A bottle of iodine-based disinfectant (BETADINE type),
- A bottle of non-iodine disinfectant (HIBIDINE type),
- Several packs of sterile compresses (of 5 or 10),
- A pack of non-sterile compresses (of 50 or 100),
- A roll of adhesive plaster,
- A roll of adhesive elastic bandage (cotton – width 5, 10 and 20cm),
- Ready-to-use dressings of various sizes,
- Two triangular cloth slings,
- A detailed instructions booklet describing rescue and first aid actions,
- An eyewash kit,
- List of contents.

The first aid kit shall be in compliance with Directive and Regulaton BHV and Inland Shipping.

5.7 RESUSCITATION UNIT

Resuscitation unit shall be provided with in cabinet and shall be installed in the shelter.

5.8 EVACUATION STRETCHER

One evacuation stretcher of an approved type shall be provided for general personnel rescue and evacuation.

Features:

- Collapsible to minimum space,
- Of minimum weight (approx. 5.5 kg),
- Including neoprene-coated nylon bottom.

Stretcher shall be easily washable and carry padded head rest and securing straps.

5.9 ELECTRICAL SAFETY KIT

Electrical Safety Kit, primarily for the purposes of protecting personnel from live electrical sources during periods of emergency response and rescue, shall be provided within the Technical Room.

Electrical safety kits shall shall include as a minimum:

- 1 pair of rubber gloves for 0,6/1kV
- 1 safety anti-flash glasses
- 1 rubber mat 0,6/1kV

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

- "First aid" safety instructions and first aid posters.

The electrical safety kit shall be supplied complete with a full set of signs/ instructions to personnel to provide to guidance on electrical safety procedures. Such instructions shall be from a source of internationally recognised codes and standards.

The cabinet of the electrical safety kit shall be stored wall mounted and designed to have no sharp corners, edges or protuberances which could cause personnel injury.

The cabinet shall be coloured green and shall be permanently clearly marked "ELECTRICAL SAFETY KIT" in white bold letters, in both English and Dutch.

6 DEVIATIONS AND EXCLUSIONS

The VENDOR shall identify and list all deviations and exclusions to the listed documents of Chapter 2 and associated requirements, using the form in Material Requisition – FF and Safety Equipment Ref. [7].

Unless deviations or exclusions are specifically identified by the VENDOR in the bid proposal and approved by the Contractor, the VENDOR shall be deemed to have confirmed full compliance with all listed documents.

In the event of a technical deviation, the VENDOR shall submit to the Contractor a formal written quotation, as detailed in the commercial terms and conditions. This shall be approved before the agreed technical changes are implemented. Where such changes affect the agreed price or delivery schedule a revised price schedule and/or manufacturing program shall accompany the quotation supplement. In the absence of a quotation supplement and/or revised schedule it shall be assumed that the proposal changes have no effect on the delivery schedule and/or price.

This document undergoes an issuance cycle within EDMS Fusionlive". Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy