



Trans Adriatic
Pipeline

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Management CCP

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TAP ITALY ESMS OFFSHORE ECOLOGICAL MANAGEMENT CCP



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1 Abbreviations and definitions

The following table provides definitions of acronyms and a glossary of terms used in this document.

Table 1-1 Abbreviations and definitions

ALARP	As Low As Reasonably Practicable
Battery Limit Point Italy	The location of the first dry weld of the pipeline in Italy (i.e. the dry weld closest to the sea)
BCD	Backhoe crane dredge
CCP	Contractor Control Plan
Coastal areas	Areas located between the Battery Limit Point Italy and Mean High Water Springs (MHWS)
COMPANY	TAP AG
Compensation areas	Areas of land that require development by the Project in order to compensate for the loss of biodiversity caused by Project activities
CONTRACTOR	Construction contractors for Italy
Cultural heritage impact	A change to cultural heritage (in this context “cultural heritage” refers to any tangible (e.g. objects, artefacts, structures, spaces) or intangible element which is of value or importance to people’s culture, history and/or identity) which has occurred as a result of Project activities. Impacts may be considered to be positive or negative
EBRD	European Bank for Reconstruction and Development
EEZ	Exclusive Economic Zone (offshore area extending a maximum of 200 nautical miles beyond territorial waters)
EHS	Environment, Health and Safety
EN	Endangered (Red Data Book definition)
Environmental impact	A change to the environment (in this context the “environment” refers to any aspect of the natural or semi-natural physical environment (air, water, soil etc.)) which has occurred as a result of Project activities. Impacts may be considered to be positive or negative

ESIA	Environmental and Social Impact Assessment
ESIP	Environmental and Social Implementation Plan
ESMS	Environmental and Social Management System
EU	European Union
FOC	Fibre Optic Cable
GMO	Genetically Modified Organism
IFC	International Finance Corporation
IPIECA	Global oil and gas industry association for environmental and social issues
ISPRA	Istituto Superiore per la Protezione e la Ricerca Ambientale - Institute for Environmental Protection and Research
KP	Kilometre Points relating to the pipeline route as per the base case described in the ESIA Italy. It is possible that the KP locations will change because of a re-routing
Land take	land take refers to the additional acquisition of physical space for Project use, and may be applicable to onshore or offshore (including coastal and marine) areas
LC	Least Concern (Red Data Book definition)
Marine areas	Areas located between Mean High Water Springs (MHWS) and the Italy-Albania median line
MARPOL	International Convention for the Prevention of Pollution from Ships
MBES	Multi-beam echo sounder
Median Line	An agreed marine territorial boundary separating the Exclusive Economic Zone(s) (EEZ(s)) of 2 or more countries
MHWS	Mean High Water Springs The mean average of the highest levels that spring tides reach over two successive high waters during those periods of 24 hours when the range of the tide is at its greatest, taken over a period of time (typically 19 years). MHWS is considered the point on this project that delineates between Marine and Coastal areas, which are both considered in the offshore CCPs
Microtunnel	A 3m diameter tunnel extending across the Italian landfall (approximately 1,485 m in length). The microtunnel allows the installation of the pipeline in the landfall area without the need to excavate a trench

Ministry of Environment	Italian Ministry for the Environment, Land and Sea
MLWS	Mean Low Water Springs The mean average of the lowest levels that spring tides reach over two successive low waters during those periods of 24 hours when the range of the tide is at its greatest, taken over a period of time (typically 19 years)
MMO	Marine Mammal Observer
Nearshore	For the purposes of these CCPs, the nearshore marine area in the vicinity of the pipeline landfall is defined as the area seaward from Mean Low Water Springs (MLWS) to approximately 10 m water depth
NT	Near Threatened (Red Data Book definition)
Offshore areas	Areas located between the Battery Limit Point Italy and the Italy-Albania median line. Inclusive of both coastal and marine areas
Pelagic organism	An organism that is occurring or living in the open sea (as opposed to coastal or inland waters)
Pipeline	Proposed pipeline scheme (TAP) including related facilities such as access roads, etc
Project	Proposed pipeline scheme that will bring natural gas from the Caspian region to western and South-Eastern Europe (TAP)
Puglia ARPA	Agenzia Regionale per la Protezione dell'Ambiente - Regional Environmental Protection Agency
ROV	Remotely operated vehicle
SCI	Site of Community Importance
Socio-economic impact	A change to the existing socio-economic environment (in this context the "socio-economic environment" refers to the combination of any existing social and economic factors) which has occurred as a result of Project activities. Social factors may include aspects such as demographics, health and wellbeing etc. and may refer to individuals, groups or wider communities of people. Economic factors may include aspects such as employment, finances, livelihoods etc. An impact may be considered to be positive or negative
SPA	Special Protected Area

SSS	Side scan sonar
TAP	Trans Adriatic Pipeline
TAP AG	Trans Adriatic Pipeline joint venture company
TMP	Traffic Management Plan

1.1 Defining “offshore”, “coastal” and “marine” areas

This Contractor Control Plan (CCP) applies to all offshore areas that might be affected by the Project in Italy. “Offshore” areas include both “coastal” and “marine” areas, which are defined as follows:

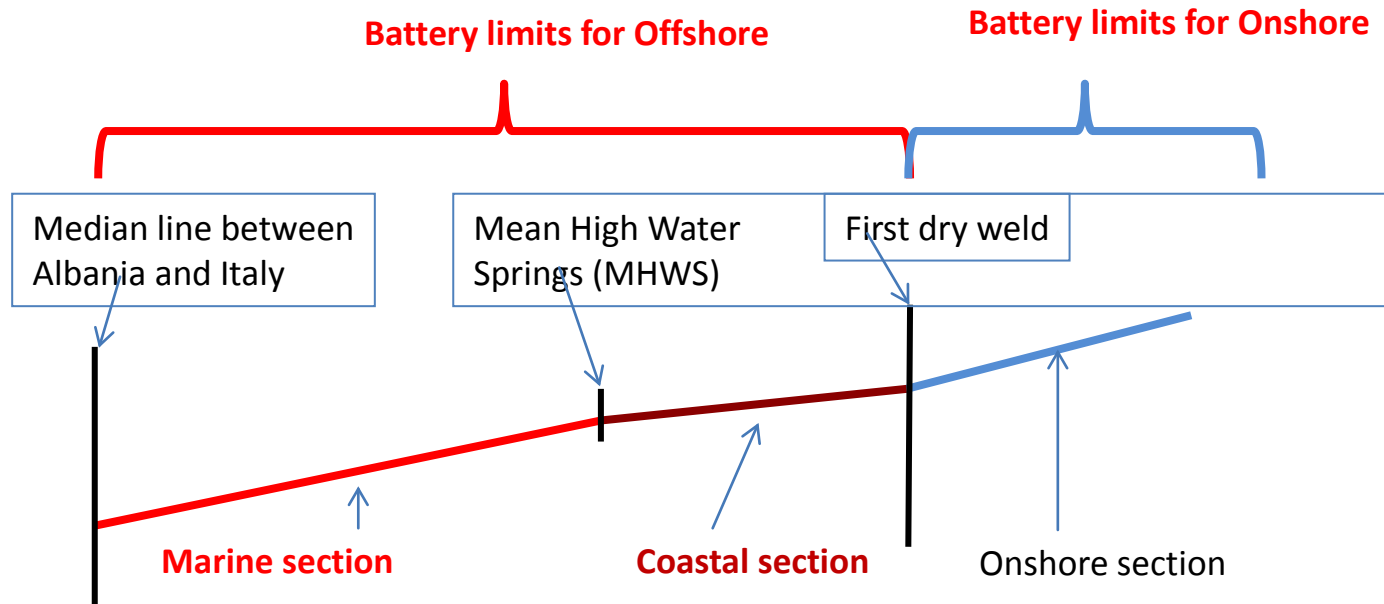
“Coastal” areas are defined as all areas located between the Battery Limit Point Italy (i.e. the location of the first dry weld) and the Mean High Water Springs (MHWS)¹. For further information on the Battery Limit Point location see the TAP Battery Limits Onshore – Offshore Sections (CPL00-ENT-100-F-DFO-0002).

“Marine” areas are defined as all areas located between MHWS and the Italy-Albania median line.

“Offshore” areas include both the marine and coastal areas, and therefore include all areas located between the Battery Limit Point Italy and the Italy-Albania median line.

¹ In the case of the Italian landfall, pipeline construction using a microtunnel complicates the issue. Work sites within marine and coastal areas are further clarified in Section 2.2.

Figure 1 Marine, coastal and onshore limits



2 Introduction

This CCP identifies the commitments made in relation to offshore ecological management during the construction and commissioning phase of the Project and describes the COMPANY's requirements of CONTRACTOR in terms of meeting these commitments. Where a specific commitment from the Italy Commitments Register is described in this CCP, it is followed by its reference number as stated on the Project Commitment Register Italy (e.g. IT0012). Additional requirements have been included within this CCP where they are deemed to be internationally accepted or best practice. These additional requirements are not followed by a reference number.

As part of its planning and readiness for construction, CONTRACTOR is required to prepare its own Environmental and Social Implementation Plans (ESIPs) setting out how it intends to meet and comply with specific Project commitments set out in each CCP developed by the COMPANY. This CCP shall act as a reference from which CONTRACTOR develop an Offshore Ecological Management ESIP.

Deviations that involve measures different from those contained in this CCP will only be permitted upon approval of the COMPANY.

The Contractor's ESMS Framework Document (CAL00-RSK-601-Y-TTM-0001) provides an explanation of the linkage between CCPs and ESIPs.

2.1 Objectives

This CCP has been prepared to define the mitigation measures necessary to ensure effective offshore ecological management (i.e. that impacts to species and habitats are as low as reasonably practicable (ALARP²)) during the construction phase of the offshore section of the Project in Italy. The objectives of the CCP are to ensure that any work undertaken complies with the commitments made in the ESIA Italy and international best practice.

2.2 Scope

This CCP defines COMPANY requirements (i.e. the commitments and best practice) in offshore ecological management that CONTRACTOR shall implement during construction, including hydrotesting and commissioning.

The scope of this CCP includes:

- footprint management
- restrictions on timing of works
- protected areas
- construction management
- management of marine flora and fauna
- watercourse crossings
- invasive species.

² For a risk (or impact) to be ALARP it must be possible to demonstrate that the cost involved in reducing the risk/impact further would be grossly disproportionate to the benefit gained. The ALARP principle arises from the fact that infinite time, effort and money could be spent on the attempt of reducing a risk/impact to zero. It should not be understood as simply a quantitative measure of benefit against detriment. It is more a best common practice of judgement of the balance of risk and societal benefit.

Management of potential ecological impacts associated with the supply chain and resource use (e.g. the use of living resources such as timber) is described in the Offshore Resource Management CCP (IAL00-RSK-601-Y-TTM-0014).

Reinstatement requirements related to this plan are detailed in the Offshore Erosion Control and Reinstatement CCP (IAL00-RSK-601-Y-TTM-0016).

Monitoring and inspection requirements related to this plan are detailed in the Offshore Compliance Monitoring CCP (IAL00-RSK-601-Y-TTM-0023).

This CCP applies to the offshore area that might be affected by the Project in Italy, including both coastal and marine areas. For a further definition as to what is defined as an “offshore”, “marine” or “coastal” area and their respective limits, see Section 1.1.

The marine areas within the scope include but are not limited to the following:

- the microtunnel
- the marine pipeline route/trench and immediately surrounding area
- the fibre optic cable (FOC) route/trench and immediately surrounding area
- Italian territorial waters and Exclusive Economic Zone (EEZ) (in terms of the potential extent of any marine impacts as a result of Project offshore construction activities).

The coastal areas within the scope include but are not limited to the following:

- the temporary worksite for the construction of the microtunnel
- the working strip for approx. 110m of terrestrial pipeline from the Battery Limit Point Italy to the start of the microtunnel
- any roads (including access roads, dirt tracks and public roads), aggregate extraction sites, spoil disposal sites, batch plants, temporary material and waste storage areas, pipe yards, maintenance areas located within the coastal zone.

CONTRACTOR should note that where marine-related activities occur in coastal areas (e.g. pipe storage yards for offshore pipe sections and vehicular transport of supplies/personnel), the requirements specified in the coastal impact avoidance and mitigation section of this CCP will apply. Should any offshore-related activities occur in the onshore area (including onshore roads); the requirements specified in the Onshore Ecological Management CCP (IAL00-RSK-601-Y-

TTM-0004) will apply. It is CONTRACTOR's responsibility to request the onshore CCPs from the COMPANY should they be required.

2.3 Responsibilities

The COMPANY's role is that of compliance assurance, as described in the Compliance Assurance Plan . The COMPANY is also responsible for ensuring that there is adequate marine ecology baseline data (see Section 3.2.1) and for undertaking a range of coastal ecological surveys (see Section 4.2.1) before construction begins.

CONTRACTOR shall be responsible for ensuring that the Project (including all site operations, equipment and machinery) will comply with the defined Project Standards which encompass the requirements of Italian legislation, EU Directives, EBRD Environmental and Social Policy, IFC Performance Standards and IFC EHS Guidelines (IT0036). CONTRACTOR will also comply with the requirements of the COMPANY ESMS (IT0516) (including this CCP) and the ESIA Italy.

CONTRACTOR will be responsible for any adverse environmental, socio-economic and cultural heritage impacts arising from its activities and operations and for putting in place any necessary measures to avoid or, if not possible, mitigate them. CONTRACTOR will also be responsible for promptly reacting to accidental events and mitigating any resulting adverse environmental, socio-economic and cultural heritage impacts for which CONTRACTOR is responsible as much as possible. Should any such accidental events occur, CONTRACTOR will immediately inform the COMPANY. Should these accidental events be the responsibility of CONTRACTOR (i.e. events resulting from CONTRACTOR's activities, events in areas which CONTRACTOR is responsible for) CONTRACTOR shall consult the COMPANY on the best way to handle and/or mitigate immediate risks to Project stakeholders.

CONTRACTOR shall put these responsibilities into effect by:

- writing an Offshore Ecological Management ESIP (to cover the marine environment as well as coastal areas) that describes how it will implement the requirements described in Sections 3 and 4 of this CCP and other legal requirements
- implementing the Offshore Ecological Management ESIP by:

- communicating the contents of the ESIP to its workers and subcontractors and training them to ensure that they understand their responsibilities with respect to offshore ecological control and management, and incident reporting and response
- ensuring that adequate resources are mobilised for offshore ecological management, including input from any specialist resources necessary to ensure effective planning and implementation of measures. CONTRACTOR will employ trained personnel and all work will be supervised by on-site environmental coordinator(s) with relevant experience (see the Contractor's ESMS Framework Document (CAL00-RSK-601-Y-TTM-0001))
- ensuring compliance by its workers and subcontractors with the procedures established in the ESIP
- implementing effective monitoring of offshore ecological management measures to ensure that the effectiveness of ecological control and management activities are assessed and any issues are promptly detected, in accordance with the Offshore Compliance Monitoring CCP (IAL00-RSK-601-Y-TTM-0023)
- ensuring that all environmental, socio-economic and cultural heritage incidents are reported and dealt with effectively and that lessons are learned in accordance with the procedures outlined in the Contractor's ESMS Framework Document (CAL00-RSK-601-Y-TTM-0001)
- keeping the COMPANY fully informed of any site environmental, socio-economic and cultural heritage issues.

CONTRACTOR shall be responsible for compiling the Offshore Ecological Management ESIP in a timely manner and submitting it to the COMPANY for review and acceptance a maximum of 30 days after Contract award. The ESIP shall not be considered "accepted for construction" until all comments raised by the COMPANY have been addressed by CONTRACTOR to the satisfaction of the COMPANY. Construction will not be allowed to commence before all relevant ESIPs are accepted.

3 Marine impact avoidance and mitigation

3.1 General

The Project in Italy crosses and is adjacent to areas of ecological importance and habitats supporting numerous species of flora and fauna. In order to avoid, or at least minimise, impact and mitigate any residual impact CONTRACTOR will ensure that all required measures are implemented and that all employees are aware of these measures.

Some commitments are qualified with “where possible”. If these cannot be implemented, CONTRACTOR shall demonstrate to the satisfaction of the COMPANY why it is not possible to comply with the commitment.

CONTRACTOR shall:

- identify measures to avoid, minimise or mitigate potentially adverse impacts and identify opportunities to conserve biodiversity where possible
- avoid significantly changing or modifying a habitat in a way that substantially reduces its ability to maintain viable population of its native species and its ecosystem functions.

In addition, where modified or newly created habitats may be impacted, CONTRACTOR should aim to minimise any further degradation or conversion of habitat.

3.2 Ecological surveys and monitoring

3.2.1 COMPANY ecological surveys

The marine ecological surveys described in Table 3-1 will be conducted by the COMPANY.

Table 3-1 Marine ecological surveys undertaken by the COMPANY

No.	Survey type	Timing	Location
1	<p>Establish a pre-construction ecology baseline from which all mitigation, restoration, and loss / degradation can be measured.</p> <p>This shall include undertaking a review of the current marine ecology baseline data compiled as part of the ESIA Italy in order to establish that it is adequate for the purposes of comparative post-construction monitoring. The COMPANY will identify any potential data gaps and establish that all information included is still current.</p> <p>Any data collection requirements identified by this review will be addressed by the COMPANY in order to ensure that a complete and up-to-date pre-construction marine ecology baseline is available. This may require additional pre-construction marine ecological surveys.</p>	Pre-construction	All marine Project affected areas
2	<p>In the area affected by the corridor for laying the pipeline and the FOC, regarding the coral massifs and the areas of "bioconstruction", reference is made to the requirements referring to the environmental frame of reference as regards the need, prior to the mapping, to carry out a detailed research on the census of these outcrops and their ecological value (IT0566)</p>	Pre-construction	Marine pipeline and FOC corridors

The COMPANY shall provide CONTRACTOR with any relevant marine baseline information prior to CONTRACTOR's commencement of construction. This will include, but not be limited to, information on the type and location of identified species, habitats and related environmental protection requirements (e.g. ensuring construction does not take place during restricted periods) and any constraints maps that the COMPANY deems are required.

During pipe laying the COMPANY will be responsible for providing CONTRACTOR with specific requirements in order to observe environmental constraints and prevent interferences with existing structures or pipelines (IT0968).

3.2.2 CONTRACTOR ecological monitoring

CONTRACTOR will conduct ecological monitoring in the Project marine area, during construction and post construction, in order to ensure the satisfactory implementation of proposed management and mitigation measures and to identify any changes that occur over the construction period. This monitoring will be undertaken in accordance with the Offshore Compliance Monitoring CCP (IAL00-RSK-601-Y-TTM-0023).

Suspended sediments levels will be monitored during excavation activities (IT0218) associated with the microtunneling construction activities and any pipeline trenching activities (in line with Ministry of Environment requirements).

For operations at sea the cloudiness of the water (suspended sediment levels) alongside the trench must be monitored during execution of the micro-tunnel, and excavation and re-covering of the pipeline through sampling at least once a day so that the effect of dispersion of the fine fraction/sand and bentonite mud (from microtunneling perforation) on the surrounding beds of seagrass can be checked. Monitoring must be performed in agreement with Puglia ARPA (IT0689). ISPRA observers will be onboard the construction vessels during pipe laying to check compliance with the requirements given (IT0691).

3.3 Footprint management

All Project work activities will stay outside any areas identified by the COMPANY or CONTRACTOR as being ecologically sensitive, unless specifically authorised by the COMPANY as part of the Project. Where possible the Project work sites will be located to reduce habitat loss (IT0308).

CONTRACTOR will avoid as far as possible any valuable environmental resource(s) identified during route refinement (applicable also to any required re-routings). Detailed routing of the offshore pipeline will avoid hard substrate, which is preferred by deepwater corals, where possible (IT0223).

COMPANY acceptance must be obtained prior to work in any proposed amendment to the agreed footprint in accordance with the Offshore Additional Land Take CCP (IAL00-RSK-601-Y-TTM-0018).

CONTRACTOR will establish exclusion zones around the marine construction spread. The exclusion zone will be monitored by guard vessels and will be marked using appropriate buoyage, as per international maritime law. For more information see the Offshore Community Safety and Security CCP (IAL00-RSK-601-Y-TTM-0022).

3.4 Restrictions on the timings of works

CONTRACTOR shall ensure that relevant construction activities and reinstatement/restoration activities adhere to the Project wildlife timing constraints outlined below:

- landfall activities will avoid the turtle nesting period (June-August) (IT0227)
- work at sea must not take place during the reproductive period of marine mammals, chelonians (turtles), fish and crustaceans, benthos and/or sedentary and permanently pelagic organisms, whose existence, even occasional, in the area concerned is ascertained by current scientific literature (IT0731). NOTE: The requirements of this commitment may alter as a result of the outcome of ongoing discussion between the COMPANY and the relevant authorities, concerning further developments in the ESIA Italy prescription requirements. Any changes will be communicated to CONTRACTOR by the COMPANY
- activities at sea will not be carried out during:
 - the peak period for the birth of bottle-nosed dolphins (i.e. the summer season) (IT0994)
 - the main period of biological reproduction to minimise potential impacts on fish stocks (IT0994).

Any proposed exceptions to this shall be reported to the COMPANY for acceptance and shall be subject to full assessment and careful planning.

The restrictions on the timings of works shall be communicated to CONTRACTOR by the COMPANY. CONTRACTOR will use this information to define the overall schedule to ensure that work does not take place within restricted periods. However, information on wildlife presence may

be updated following any additional ecological surveys, which may lead to the identification of new constraints. If any are identified, they will be notified to CONTRACTOR by the COMPANY and management and mitigation measures will be implemented as required.

3.5 Protected areas

3.5.1 Natura 2000 Sites

One Natura 2000 Site has been identified in the vicinity of the marine Project area, namely Le Cesine Site of Community Importance (SCI) (Code: IT9150032), which is located approximately 2 km to the north of the nearshore pipeline route. The offshore section of this site has been designated to protect priority habitat *Posidonia oceanica* seagrass beds.

Construction site practices to minimise potential impacts on the *Posidonia* beds are provided in Sections 3.6.1 and 3.6.2.

3.6 Construction management

Before the start of any construction activity, CONTRACTOR will ensure that it has an up-to-date COMPANY-accepted Offshore Ecological Management ESIP and the latest revision of:

- the Ecological Management Plan
- the Offshore Ecological Management CCP (this document)
- the marine ecology baseline (see Section 3.2.1)
- any marine constraints maps that the COMPANY may have produced.

Prior to offshore construction activities commencing, monitoring and prevention means (such as soft-start or interruption of activities in case of the presence of animals in the area adjacent to the excavation) will be agreed with ISPRA and Puglia ARPA, along with suitable reporting and communication protocols (IT1029).

3.6.1 General construction requirements

CONTRACTOR will adopt best construction site practices to minimise the risks of adverse effects on neighbouring habitats/species from construction activities (noise, waste disposal etc.).

CONTRACTOR will implement the following general mitigation measures:

- avoid any important sites (breeding, feeding etc.) for species, as identified/communicated to the workforce by the environmental coordinator
- use of directional lighting
- use of silt screens to minimise the spread of suspended sediments in the water column
- provision of appropriate litter collection facilities as inspected by the environmental coordinator
- prohibition of activities with the capacity to cause environmental detriment (such as anchoring and bilge water discharge) in environmentally sensitive habitats. Habitats classed as being environmentally sensitive may be identified in the marine ecology baseline or from ongoing ecological monitoring (see Section 3.2.1)
- establish minimum operating depths for vessels in nearshore areas to avoid inadvertent damage to sensitive sublittoral habitats
- ensure that all Project vessels are operated at a speed that will not cause undue disturbance to species and sensitive nearshore habitats (such as seagrass beds), when operating within shallow water areas
- if sensitive nearshore habitats are identified (see Section 3.2), buffer zones should be established around such areas and the extent of these zones communicated to all personnel involved in the works as part of training requirements
- ensure that vessel masters are provided with adequate training in vessel operations for the protection of marine mammals.

Regarding habitat loss/degradation and habitat fragmentation CONTRACTOR will:

- not take construction materials from the surrounding environment unless approved by the responsible authority
- make minor adjustments to the route (micro-siting of the route) in order to reduce potential negative impacts to the surrounding biodiversity, taking into account known flora, fauna and habitats, particularly those identified as being sensitive. This is particularly important

where areas of European Priority Habitats (e.g. *Posidonia oceanica* seagrass beds) and designated sites are identified. Any minor re-routing or micro-routing within the approved construction corridor may be undertaken by CONTRACTOR only after consultation with the COMPANY

- adopt the most appropriate measures to minimise induced vibrations at all stages of the work at sea, with the aim of protecting the *Posidonia* and *Cymodocea nodosa* beds (IT0687). For more information on vibration management and mitigation see the Offshore Pollution Prevention CCP (IAL00-RSK-601-Y-TTM-0015)
- adopt the most appropriate measures to minimise the spread of spills or leaks from vessels and equipment, with the aim of protecting the *Posidonia* and *Cymodocea nodosa* beds (IT0688). For more information on spill prevention see the Offshore Spill Prevention and Response CCP (IAL00-RSK-601-Y-TTM-0020).

Regarding species loss, disturbance and displacement CONTRACTOR will:

- relocate any sensitive/protected biota newly identified during construction, where possible to do so
- monitor impacts on flora and fauna at locations identified by the COMPANY or CONTRACTOR as being sensitive (see the Compliance Monitoring CCP (IAL00-RSK-601-Y-TTM-0023))
- prohibit the capture or killing of fauna.

3.6.2 Specific construction requirements

Regarding minimising physical disturbance to seabed from anchor handling CONTRACTOR will:

- use dynamic positioning instead of anchors (where possible)
- lift anchors, rather than dragging them, to reduce impacts on the seabed during laying of the offshore pipeline (IT0214)
- plan anchor spreads to prevent effects on the *Cymodocea* beds near the construction areas (IT0987) and ensure the anchor field does not interfere with potentially sensitive habitats while the pipeline is being pulled during pipe laying operations (IT0969)
- fit any support vessels operating within the beds of *Posidonia* and *Cymodocea* with special anchorage systems with high efficiency anchors and floating cables (IT0684) or stabilising piers (IT0685).

Regarding minimising physical disturbance to seabed from trenching handling CONTRACTOR will ensure that the open area excavation of the trench must be limited to just the transition area strictly necessary, using a single digger mounted on a platform on self-elevating legs of the backhoe crane dredge (BCD) (IT0679).

Regarding minimising physical disturbance to seabed and water column from microtunnel construction CONTRACTOR will:

- minimise the movement of dredged material (IT0215)
- reduce the seabed dredging speed, where feasible (IT0216)
- only carrying out dredging activities in calm marine and meteorological conditions, where possible (IT0217)
- only permit open trench excavation within the limits of the transition area³ - in this area, measures will be taken to protect the adjacent *Posidonia* and *Cymodocea* beds (IT0556)
- contain the width of the excavation in the transition area as far as possible (as compatible with the installation needs of the pipeline and FOC), the width of the top of the excavation in the transition area must always be less than 35 m (IT0680)
- return excavated material (following installation of the pipeline and FOC) with a hopper or equivalent that descends to the bottom of the trench so that all discharge of the material takes place within it, limiting the spread of the material into the surrounding water (IT0681)
- use a marine vessel with a fall-pipe guide to deposit the material on the bottom with great precision (assisted by an ROV) to prevent uncontrolled spread/dispersion of gravel/rock during creation of the embankment downstream of the microtunnel exit point and for installation of material to mitigate pipeline free spans (IT0682).

³ Defined in D.M. 223 11/09/2014 as the area of connection between the exit point of the microtunnel and the natural seabed.

Regarding minimising environmental impact, cultural heritage impact, and safety risks from pipeline / FOC construction CONTRACTOR will:

- carry out guided laying (laying continuously assisted by ROV) in areas extremely near to coral massifs and bioconstructions, areas of sunken war residues, areas of military firing practice, and areas of pipeline protection already in place (e.g. rock dump, gravel support) in order to lay the pipeline and FOC within a corridor of maximum width 10 m (maximum tolerance of +/- 5m) (IT0599)
- avoid the following when anchoring marine construction vessels: areas near to coral massifs and bioconstructions, areas of sunken war residues, areas of military firing practice, areas of pipeline protection already in place (e.g. rock dump, gravel support) (IT0600)
- characterise gravel for pipeline backfill and mitigation of free spans prior to construction to demonstrate compatibility with and harmlessness in relation to the environment, in terms of art 109 of D. Lgs. 152/2006 and s.m.i. (subsequent amendments and additions) . (IT0966)
- ensure pipeline route avoids major rocky outcrops to avoid sediment accumulation and/or scouring/erosion (IT1025)
- ensure any surface connections (tie-ins) and auxiliary (anchorage of marine vessels, etc.) operations and the subsequent repositioning of the welded pipeline on the seabed are performed outside the beds of *Posidonia* and *Cymodocea* and, in any case, at a suitable distance from areas with sensitive eco-systems (IT0683).

3.7 Management of marine flora and fauna

3.7.1 Phytoplankton and benthos

During the laying of the pipeline, construction of the microtunnel and any other forms of seabed intervention that may affect phytoplankton and benthos, CONTRACTOR shall put in place the following measures:

- comply fully with all MARPOL protocols
- use of silt screening during any major dredging activities
- application of correct anchor handling techniques (see Section 3.6.2) in order to minimise the re-suspension of sediments

- management of ballast water discharge as described in Section 3.8.

3.7.2 Marine mammals

CONTRACTOR shall inform the COMPANY before undertaking any particularly noisy marine construction activities that could potentially alarm marine wildlife (in particular marine mammals and fish).

In order to safeguard marine mammals from any impact caused by underwater noise, two qualified Marine Mammal Observers (MMO) from accredited agencies (including ISPRA) will be in the construction area and onboard marine vessels during the operations at sea (IT0721).

The MMOs will be employed by CONTRACTOR, and accepted by the COMPANY, and will be present onboard construction vessels during pipelaying and coastal construction works as required, depending on the specific nature of the marine activity being carried out, in order to monitor the area for marine mammals. Activities that are likely to require the presence of MMOs include, but are not limited to, significant noise-producing activities such as nearshore trenching and dredging.

CONTRACTOR will submit a list of activities for which the presence of MMOs will be required to the COMPANY for review and approval as part of its Offshore Ecological Management ESIP. CONTRACTOR will update this list should any additional noise-producing activities be identified during construction.

Protocols will be developed and implemented in the event that marine mammals are observed within a certain distance of the construction works. These protocols will follow internationally recognised best practice, and will be subject to COMPANY review and acceptance. The protocols will include, but not be limited to, the following:

- the MMOs will recommend a delay in commencing particular activities if a marine mammal is present within a prescribed area. This gives the animal a chance to move away. If the animal does not move away then the activity can commence at a slower, less intense level (if possible) (known as a soft-start) gradually increasing the activity to full intensity / frequency

- in the event that a marine mammal strays close to a particular construction operation while at normal intensity / frequency, the environmental coordinator shall advise appropriate action. A record of the occurrence and action taken will be submitted to the COMPANY in a timely manner.

The following mitigation measures will also be implemented (in line with requirements of the Ministry of Environment):

- sighting techniques will be both visual (with the aid of binoculars) and acoustic (through the use of hydrophones) (IT0722) during the 30 minutes preceding the start of the work (IT0726)
- if it is ascertained that there are marine mammals (particularly if accompanied by their young) in a radius of at least one nautical mile from the site, all activities will be suspended (IT0723) and the start of work will be deferred until the animals have departed, waiting at least 30 minutes from the time of the last sighting (IT0724)
- if animals are sighted within a distance of 1-3 nautical miles from the site, soft-start of the construction vessels and equipment will be made (IT0725)
- at the end of the construction work at sea, a report must be prepared by CONTRACTOR with:
 - the date and location of the works at sea
 - the type and specifications of the equipment used
 - the number and type of marine vessels involved
 - records of all marine mammal related events (suspensions of work, durations of suspensions, number of soft-starts etc.)
 - the methods used to sight marine mammals
 - the species, number of individuals, co-ordinates, time and weather conditions
 - the comments of the qualified MMOs
 - the report will be in both paper and electronic formats (the latter being compatible with specifications published on the Ministry of the Environment website) and sent to the Ministry of the Environment (Department for Environmental Assessments and Department for the Protection of the Countryside and the Sea) and ISPRA (IT0727).

Prior to offshore construction activities commencing, monitoring and prevention means (such as soft-start or interruption of activities in case of the presence of marine mammals in the area adjacent to the excavation) will be agreed with ISPRA and ARPA Puglia, along with suitable reporting and communication protocols (IT1029).

CONTRACTOR will ensure that best practice guidelines are included in the Offshore Ecological Management ESIP with regards protection of marine fauna from construction disturbance. It will be the responsibility of CONTRACTOR to ensure that these are adhered to and that an adequate number of MMOs are provided and are placed appropriately to sufficiently cover marine construction activities.

3.8 Invasive species

CONTRACTOR will not intentionally introduce or release any alien species into native habitats and will exercise diligence to prevent accidental or unintended introductions of alien species. CONTRACTOR will develop procedures to avoid, monitor and control marine invasive species (IT0305) following IPIECA guidance document “Alien invasive species and the oil and gas industry. Guidance for prevention and management” (www.ipieca.org/publication/alien-invasive-species-and-oil-and-gas-industry). This shall include an assessment of the risk of introducing an alien species that may have significant adverse impacts on biodiversity and the identification of measures to minimise the potential for release.

CONTRACTOR will manage ballast water discharge in order to prevent the transport of alien and invasive species. CONTRACTOR will:

- adhere to the harmonized voluntary arrangements for ballast water management in the Mediterranean region as specified in the IMO Circulation BWM.2/Circ.35, 15 August 2011 (IT0224)
- avoid the discharge of any water into the Mediterranean Sea picked up outside of the Mediterranean Sea (IT0225)
- discharge ballast waters of Mediterranean seawater only into the Mediterranean Sea (IT0226)
- ensure that applicable vessels engaged on the Project implement a Ballast Water and Sediments Management Plan, carry a Ballast Water Record Book, and carry out ballast

water management procedures to a given standard, in accordance with the requirements of the 2004 International Convention for the Control and Management of Ship's Ballast Water and Sediments. The Ballast Water Record Book will log ballast water operations such as uptake, treatment, exchange, circulation and discharge

- ensure the completed Ballast Water Record Books are made available onboard vessels for inspection by the COMPANY.

Measures will be adopted to prevent the introduction of invasive/alien species into the sea with the aim of protecting the *Posidonia* and *Cymodocea* beds. The measures to be adopted will be submitted for prior approval to ISPRA (IT0692).

Ballast water management is further described in the Offshore Waste Management CCP (IAL00-RSK-601-Y-TTM-0019).

3.9 Clean-up and restoration

CONTRACTOR will refer to the Offshore Erosion Control and Reinstatement CCP (IAL00-RSK-601-Y-TTM-0016) for the general procedures for clean-up and restoration of all construction and temporary areas.

4 Coastal impact avoidance and mitigation

4.1 General

The general requirements described in Section 3.1 also apply to the coastal section of the Project.

4.2 Ecological surveys and monitoring

4.2.1 COMPANY ecological surveys

The ecological surveys described in Table 4-1 below will be conducted by the COMPANY. The information shall be passed on to CONTRACTOR, to be reflected in its work.

Table 4-1 Coastal ecological surveys undertaken by the COMPANY

No.	Survey type	Timing	Location
1	<p>Establish a pre- post construction biodiversity baseline from which all mitigation, restoration, and loss/degradation can be measured. This shall include fauna and vegetation surveys.</p> <p>Pre-construction surveys will be undertaken to establish the baseline conditions of vegetation at the Project construction locations (IT0298).</p> <p>Any plant surveys that are required will be undertaken April – May, when the majority of species are flowering (IT0302).</p>	Pre-construction	All coastal Project affected areas
2	<p>Wildlife surveys: The COMPANY will communicate the areas where identified species are known to occur to CONTRACTOR who will use this information to define the overall schedule to ensure that work does not take place within restricted periods. However, information on wildlife presence may be updated following any additional wildlife surveys, which may lead to the identification of new constraints. If any are identified, they will be notified to CONTRACTOR by the COMPANY and management/mitigation measures will be implemented as required.</p>	Pre-construction	All coastal Project affected areas
3	<p>Undertake any amphibian translocation works after breeding in summer and prepare/identify locations for suitable translocation sites prior to removal (following Ecological Management Plan requirements .</p>	Pre-construction	Watercourse crossings

4.2.2 CONTRACTOR ecological surveys

CONTRACTOR will conduct ecological monitoring in the coastal area, during construction and post construction, in order to ensure the satisfactory implementation of proposed management and mitigation measures, and to identify any changes that occur over the construction period. This monitoring will be undertaken in accordance with the Offshore Compliance Monitoring CCP (IAL00-RSK-601-Y-TTM-0023).

It is not anticipated that any watercourse crossings will be required in the coastal areas affected by the Project in Italy. However, in the event that watercourse crossings should be required (for example in the event of a re-routing), CONTRACTOR's pre construction and post construction coastal surveys will include taking photographs before undertaking the crossing and after restoration works. This will allow comparison of before and after conditions at crossings to document channel habitat distribution and coverage.

CONTRACTOR shall provide the results of the pre-construction, during construction and post construction coastal surveys to the COMPANY in a timely manner.

4.3 Footprint management

Prior to the start of Project construction activities, CONTRACTOR will stake out the alignments, boundaries and limits of Project sites, and limit personnel and vehicle movements to within working areas.

Material staging and holding areas will be designated in coordination with the COMPANY. Any work required outside agreed areas will be subject to the requirements of the Offshore Additional Land Take CCP (IAL00-RSK-601-Y-TTM-0018).

CONTRACTOR will avoid as far as possible olive groves, woodland areas and any other valuable environmental resources identified during route refinement (applicable also to any required re-routings). Boundaries of all construction sites will be placed to avoid damage to trees (including olive trees) by machinery. The width of the working strip will be reduced to:

- 18 m when crossing olive groves (IT0700, IT0096)
- 18 m for crossings of the wooded areas (IT0698).

Prior to construction, CONTRACTOR shall place signs with environmental protection information in areas:

- identified as environmentally sensitive
- where sensitive flora and fauna species are situated immediately adjacent to construction areas and that may be inadvertently disturbed or damaged during construction.

Sensitive areas may include, but are not limited to, plant and wildlife species of high conservation value and any site-specific habitat features to be protected.

All Project work activities will stay within the staked out alignments and boundaries, and outside any areas identified by the COMPANY or CONTRACTOR as being ecologically sensitive, unless specifically authorised by the COMPANY as part of the Project. Where possible the Project work sites will be located to reduce habitat loss (IT0308).

COMPANY acceptance must be obtained prior to work in any proposed amendment to the agreed footprint in accordance with the Offshore Additional Land Take CCP (IAL00-RSK-601-Y-TTM-0018).

4.4 Restrictions on the timings of works

CONTRACTOR shall ensure that relevant clearing and construction activities and reinstatement/restoration activities adhere to the Project wildlife timing constraints outlined below:

- where possible construction will be restricted to outside the bird breeding period (1st March – 31st July) (see Table 4-2 for further requirements regarding the management of breeding birds)
- construction will not take place during the reproductive / nesting period of protected fauna species within the Natura 2000 sites (IT0718).

Any proposed exceptions to this shall be reported to the COMPANY for acceptance and shall be subject to full assessment and careful planning.

Where it is not possible to restrict the timing of construction practices, vegetation should be removed outside the breeding periods (as given above) so that works can carry on into this period unhindered.

Table 4-2 Restricted activity periods for wildlife

Species/habitat	Location	Restricted activity period	Comments
Breeding birds	Habitat used by breeding birds	1st March – 31st July	<p>If working sites are open in the period 1st March – 31st July (bird breeding season) pre-vegetation clearance surveys will be undertaken by qualified ornithologists to be employed by CONTRACTOR and approved by the COMPANY.</p> <p>To enable works during the breeding season, birds should be discouraged from breeding by installing plastic bands or flags before bird breeding season starts (1st March). In the exceptional case that work sites are opened up during the bird breeding season (March – July) without above measures having taken place, pre-vegetation clearance surveys will be undertaken by qualified ornithologists (see above).</p> <p>Should nests of species of conservation concern (i.e. species listed by the Bern Convention, EU bird directive or Italian National law) be located in the working strip, the strip shall be optimized so that no works will be carried out within a 25 m buffer of the nest site until chicks have fledged from the nest or it is abandoned.</p>
Protected species of fauna	Natura 2000 sites	Reproduction period, nesting period	Construction work in or near to this area must not take place during the reproduction/nesting period of protected species of fauna (IT0718).

The areas where these species are known to occur shall be communicated to CONTRACTOR by the COMPANY. Restrictions on timing of works shall be communicated to CONTRACTOR by COMPANY. CONTRACTOR will use this information to define the overall schedule to ensure that work does not take place within restricted periods. However, information on wildlife presence may be updated following any additional wildlife surveys, which may lead to the identification of new constraints. If any are identified by the COMPANY, they will be notified to CONTRACTOR by the COMPANY and management and mitigation measures will be implemented as required.

4.5 Protected areas

4.5.1 Natura 2000 Sites

Two Natura 2000 Sites have been identified in the vicinity of the coastal Project area. One is located 2 km to the north and the other 3 km south (see Table 4-3). CONTRACTOR will take measures not to disturb fauna in these areas (IT0719).

Table 4-3 Natura 2000 Sites present within 5 km of the pipeline working strip (adapted from: ESIA Italy – Section 6, Table 6-75)

Site	Nature 2000 Code	Name	Distance from Working Strip (km)	Reason for designation
SCI & SPA	IT9150014	Le Cesine	2	Wetland of international interest and strategic importance for protection of wild birds Protects 54 bird species of the Nature Directives and 8 habitat types of the Habitats Directive
SCI	IT9150022	Palude dei Tamari	3	Protects 14 bird species of the Nature Directives and 2 habitat types of the Habitats Directive (Mediterranean temporary ponds, and Southern riparian galleries and thickets)

4.6 Construction management

Before the start of any construction activity, CONTRACTOR will request the latest revision of the documents specified in Section 3.6 (as relevant to coastal areas) and will ensure that it has an up-to-date Offshore Ecological Management ESIP accepted by the COMPANY.

4.6.1 General requirements

The following requirements are applicable to construction activities on all coastal areas of the Project, including but not limited to the pipeline route, access roads, the microtunnel and associated temporary sites.

CONTRACTOR will implement the following general management measures:

- avoid where possible any important sites (breeding, feeding, nesting, etc.) for species, as identified/communicated to the workforce by the environmental coordinator, throughout the construction period, informed by the COMPANY and CONTRACTOR's pre-construction ecological surveys (see Section 4.2)
- use directional lighting
- use screens around work areas as buffers to visual/light/noise sources
- night-time work should be avoided. In exceptional circumstances where this is not possible, CONTRACTOR shall limit night working and minimise the use of lighting along the corridor, especially near wildlife habitats (e.g. woodlands, water bodies, etc)
- provide ecological awareness information and educational material to all stakeholders. A list of key stakeholder groups and appropriate means of engaging with them is included in the Stakeholder Engagement Strategy (TAP-HSE-ST-0009).

Regarding habitat loss/degradation and habitat fragmentation CONTRACTOR will:

- where possible, site permanent infrastructure on unused land of no particular ecological value
- take no construction materials from the surrounding environment unless approved by the responsible authority
- make minor adjustments to the route (micro-siting of the route) in order to reduce potential negative impacts to the surrounding biodiversity taking into account known flora, fauna and habitats, particularly those identified as being sensitive. This is particularly important where areas of European Priority Habitats and designated sites are affected. All required minor re-routing or micro-routing within the approved construction corridor may be undertaken by CONTRACTOR only after consultation with the COMPANY
- consider habitat compensation measures where required to replace permanently lost and damaged habitats. This may include new habitat creation, restoration of damaged habitats and habitat enhancement. The identification and development of "compensation areas" shall be the responsibility of the COMPANY (see the Offshore Erosion Control and Reinstatement CCP (IAL00-RSK-601-Y-TTM-0016)).

Regarding species loss, disturbance and displacement CONTRACTOR will (unless responsibility specified differently):

- mitigate against the loss of flora species. The mitigation hierarchy for floral species of

conservation concern within the working strip will be:

- FIRST PRIORITY: avoid by fine-tuning the route (CONTRACTOR responsibility)
 - SECOND PRIORITY: translocate to suitable nearby habitat (COMPANY responsibility pre-construction, CONTRACTOR responsibility during construction)
 - THIRD PRIORITY: develop off-set mitigation measures (COMPANY responsibility, for more information see the Offshore Erosion Control and Reinstatement CCP (IAL00-RSK-601-Y-TTM-0016) and the Erosion Control and Reinstatement Plan) (IT0303)
- relocate any sensitive/protected biota newly identified during construction, where possible to do so
 - relocate any priority plant species directly affected by the Project works to a suitable nearby habitat at the end of the growing season (IT1004)
 - reduce vehicle speed while travelling on all construction roads (20 km/h on the pipeline lane, for other access roads limits will be established in the Coastal Traffic Management Plan (TMP) (see the Offshore Community Safety and Security CCP (IAL00-RSK-601-Y-TTM-0022))
 - prohibit the capture or killing of fauna species
 - include monitoring of impacts on flora and fauna at locations identified by the COMPANY or CONTRACTOR as being sensitive (see the Offshore Compliance Monitoring CCP (IAL00-RSK-601-Y-TTM-0023)).

CONTRACTOR will adopt best construction site practices to minimise the risks of adverse effects on neighbouring habitats/species from construction activities (dust, noise, waste disposal etc.). This will include the provision of appropriate toilet and litter collection facilities as inspected by the environmental coordinator.

4.6.2 Site clearing and access

CONTRACTOR will employ the following strategies to reduce the potential ecological impacts during clearing and site preparation for all land-based work:

- minimise the cleared areas, restrict clearing to the marked boundaries and preserve natural vegetation where possible
- adult trees of a substantial size (over 30 cm trunk diameter) of a species native to Italy must be avoided/protected by the Project. Where this is not practicable, the tree must be relocated to an area which is similar to that from which it was removed (IT0655)
- undertake vegetation clearing (of trees, bushes, etc.) of pipeline working strip and work areas before or after the vegetation season, i.e. before 1 March or after 30 September
- fell trees into the surveyed clearing limits and recover all felled or leaning trees that inadvertently fall into the adjacent undisturbed vegetation, provided that further disturbance into the adjacent area can be avoided
- salvage all merchantable timber in accordance with regulatory requirements and stockpile non-merchantable timber for re-use or disposal
- ensure no material is pushed or stockpiled beyond the designated boundaries of work sites during clearing activities
- confine road construction works to the road working strip where practically possible and follow existing tracks and trails where possible during road construction and upgrades. Where a road (temporary or permanent) is constructed for the Project in an area where olive trees grow, the width of the road must be reduced to 18m or less (IT0658)
- restrict access to woodland areas during and following construction.

In habitat areas identified as being sensitive by the COMPANY or CONTRACTOR, CONTRACTOR will employ measures to discourage nesting activity by using flags or tape. Where this does discourage breeding, vegetation removal can occur (following a pre-vegetation removal check) at any time of the year unless wider disturbance is identified as a key issue.

4.6.3 Topsoil stripping, grading and construction

Disturbance to native vegetation and wildlife habitat shall be avoided or reduced to the greatest extent practical through the application of appropriate management procedures. CONTRACTOR will implement the following measures to reduce the ecological impact of topsoil stripping, grading and construction activities:

- not start grade cuts within two metres of standing trees to protect the root system. No graded material shall be stockpiled on tree roots
- where feasible, reduce grading topsoil from the construction area at watercourse approaches and grade soil away from the watercourse to reduce the risk of material entering the watercourse
- stockpile soil in a manner that does not impede the movement of wildlife and vehicles across the construction area. Gaps in the stockpile shall be left to allow wildlife passage
- ensure no material is pushed or stockpiled beyond the designated boundaries of work sites during grading, topsoil stripping or any other construction activity
- retain passages for fauna species for as long as possible across the pipeline corridor, and reinstate passages immediately following pipe section completion
- where appropriate, install temporary or permanent provisions for fauna to cross the working strip/ access roads using underpasses, tunnels or other measures
- incorporate trench plugs in all trenches. The pipeline trench and other open excavations will be inspected for trapped animals at the start of each day, and the animals released by an experienced wildlife handler before the start of construction activities (IT0315), under the supervision of the environmental coordinator
- pipe sections and lengths of welded pipeline will be capped to prevent entry of faunal species (IT0316)
- reduce the working strip where appropriate:
 - reduce the working strip to 18 m when crossing olive groves (IT0700, IT0096)
 - reduce the working strip to 18 m when crossing wooded areas (IT0698)
 - reduce the working strip in any previously identified sensitive habitats, or sensitive habitats identified during final route refinement, to the degree appropriate
- where ponds are located, efforts will be made to avoid them. Where this is not possible habitat will be removed outside of the breeding season and all efforts to remove any amphibians present, especially Italian crested newt (*Triturus carnifex*) (LC), Italian newt

(*Triturus italicus*) (LC), Appenine yellow-bellied toad (*Bombina pachypus*) (EN) and Green toad (*Bufo viridis*) (LC), will be made as well as provisions for alternative ponds for trans located species to be put in.

Additional topsoil stripping and grading requirements are included in the Offshore Erosion Control and Reinstatement CCP (IAL00-RSK-601-Y-TTM-0016).

4.6.4 Microtunnelling

Microtunnelling will be used in the landfall area to reduce any impact on the shoreline habitat (IT0309).

4.7 Watercourse crossing construction

It is not anticipated that any watercourse crossings will be required in the coastal areas affected by the Project in Italy. However, in the event that watercourse crossings should be required (for example in the event of a re-routing), CONTRACTOR shall implement the ecological requirements specified below.

The protection of fish and the ecology of watercourses is a key priority of the Project. Watercourse crossings in this CCP are primarily concerned with pipeline working strip and access road crossings.

CONTRACTOR will:

- locate staging areas at least 30 m away from watercourse banks where topographic conditions allow
- maintain a 30 m vegetated buffer zone on watercourse banks until immediately prior to construction of the watercourse crossing, where practicable
- make all possible efforts to remove amphibians where amphibian species are present, especially Italian crested newt (*Triturus carnifex*) (LC), Italian newt (*Triturus italicus*) (LC), Appenine yellow-bellied toad (*Bombina pachypus*) (EN) and green toad (*Bufo viridis*) (LC), as well as other species including common toad (*Bufo bufo*) (NT), Italian tree frog (*Hyla intermedia*) (LC) and edible frog (*Rana esculenta*) (LC)

- utilise sediment curtains to prevent dispersion of sediment plume during in-watercourse and watercourse bank works and undertake watercourse crossings during the dry season or low flow conditions where practicable.

CONTRACTOR should also refer to the following CCPs which contain requirements to be implemented when crossing watercourses:

- Offshore Pollution Prevention CCP (IAL00-RSK-601-Y-TTM-0015)
- Offshore Watercourse Crossing CCP (IAL00-RSK-601-Y-TTM-0026)
- Offshore Erosion Control and Reinstatement CCP (IAL00-RSK-601-Y-TTM-0016).

4.8 Invasive species

CONTRACTOR will not intentionally introduce or release any alien species into native habitats and will exercise diligence to prevent accidental or unintended introductions of alien species. Procedures will be developed to avoid, monitor and control invasive species. The CONTRACTOR shall develop a monitoring plan to record invasive species in the Project area (IT0305) (both terrestrial and aquatic) following IPIECA guidance document “Alien invasive species and the oil and gas industry. Guidance for prevention and management” (www.ipieca.org/publication/alien-invasive-species-and-oil-and-gas-industry). This shall include an assessment of the risk of introducing an alien species that may have significant adverse impacts on biodiversity and the identification of measures to minimise the potential for release.

CONTRACTOR shall not use or release Genetically Modified Organisms (GMOs) to the environment without approval being given by the competent authorities, or where the local authority has declared itself as GMO free.

4.9 Clean-up and restoration

CONTRACTOR will refer to the Offshore Erosion Control and Reinstatement CCP (IAL00-RSK-601-Y-TTM-0016) for the general procedures for clean-up and restoration of all construction and temporary areas.

In addition, CONTRACTOR shall install wildlife movement corridors and barriers at locations indicated by the COMPANY during the reinstatement phase of the Project.

5 Training

The training requirements relating to offshore ecological management can be found in the Offshore Employment, Training and Worksite Management CCP (IAL00-RSK-601-Y-TTM-0024).

6 Monitoring and Inspection

Monitoring and inspection requirements relating to offshore ecological management (additional to those requirements described in Section 3.2.2 and 4.2.2) can be found in the Offshore Compliance Monitoring CCP (IAL00-RSK-601-Y-TTM-0023).

7 Related documents

The following is a list of documents that, amongst others, have content relevant to this CCP:

- Onshore Ecological Management CCP (IAL00-RSK-601-Y-TTM-0004)
- Contractor's ESMS Framework Document (CAL00-RSK-601-Y-TTM-0001)
- Compliance Assurance Plan
- Offshore Resource Management CCP (IAL00-RSK-601-Y-TTM-0014)
- Offshore Pollution Prevention CCP (IAL00-RSK-601-Y-TTM-0023)
- Offshore Erosion Control and Reinstatement CCP (IAL00-RSK-601-Y-TTM-0016)
- Offshore Additional Land Take CCP (IAL00-RSK-601-Y-TTM-0018)
- Offshore Community Safety and Security CCP (IAL00-RSK-601-Y-TTM-0022)
- Offshore Compliance Monitoring CCP (IAL00-RSK-601-Y-TTM-0023)
- Offshore Employment, Training and Worksite Management CCP (IAL00-RSK-601-Y-TTM-0024)
- Offshore Watercourse Crossing CCP (IAL00-RSK-601-Y-TTM-0026)

- Ecological Management Plan
- Stakeholder Engagement Strategy (TAP-HSE-ST-0009)
- TAP Battery Limits Onshore – Offshore Sections (CPL00-ENT-100-F-DFO-0002)
- IMO. 2004. International Convention for the Control and Management of Ship's Ballast Water and Sediments. BWM.2 / Circ.35, 15 August 2011 (http://www.imo.org/blast/blastDataHelper.asp?data_id=30781&filename=35.pdf)
- IPIECA. 2010. Alien invasive species and the oil and gas industry. Guidance for prevention and management (www.ipieca.org/publication/alien-invasive-species-and-oil-and-gas-industry)
- D.M. 223 11/09/2014. Ministry of Environment. Ministerial Decree – Registration
- D. Lgs. 152/2006. Italian legislative decree 'Environmental Regulations'