

# ONSHORE & OFFSHORE

Engineering and Management of Subsea Cables and Pipelines



Theoretical  
Expertise



meets



Practical  
Experience



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**primo marine**

Independent Marine Infrastructure Expertise

## INTRODUCTION

Established in 1997, Primo Marine is an independent specialist with a wealth of experience in subsea cable engineering, from landfalls to subsea marine infrastructures.

## COMPREHENSIVE SERVICE PORTFOLIO

The provision of a full spectrum of onshore and offshore services/capabilities covering all phases of a project:

- Engineering (Pre-Construction and Installation)
- Project Management
- QHSE Management
- Offshore Services - Operations & Maintenance, Client Representation & Construction Support
- Business Continuity & Emergency Response
- Tendering, Contractual, Procurement & Financial Support

Over many years we have completed numerous scopes of work in which our contribution has had a tremendous impact on the project's outcome. Very often our expertise has added greatly to mitigate risk and optimize success.

**This was the motivation for this booklet.**



## CABLE INSTALLATION AND PROTECTION – CAPEX/OPEX

To ensure effective cable installation and protection, our focus is on careful **examination** of the sea bed, with comparison of both the project execution and the operation & maintenance phases - often leading to alternative **solutions**.

We create solutions focusing firmly on **providing** realistic CAPEX/OPEX comparisons, especially in terms of ensuring **correct cable installation management and protection** to the cable by **effective route engineering & burial** throughout the **cable's lifetime**.

With more focus during project preparation and/or execution phases, costs and risks over the lifetime of the cable are minimized considerably, especially to achieve project cost saving targets.

INTERESTED IN FINDING OUT MORE...PLEASE CONTACT US.



## DEEPER BURIAL

The solution of deeper burial has overcome challenges such as mobile sea-beds, permitting and authorities, whilst avoiding exposed cables and reducing maintenance requirements over the cable's **lifetime**..... thus saving € m's.

## PERMITTING & AUTHORITIES

Experience, knowledge and **relationships** (based upon our independent status) to interface with authorities and ensure agreements and flexibility...providing confidence in the offshore construction schedules..... thus saving € m's.

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## MICRO-RE-ROUTING OF CABLES

Micro re-routing to **improve** cable installation i.e. crossing angles and to **avoid** difficult conditions i.e boulders, steep slopes and **overcome** obstacles i.e. UneXploded Ordnance (UXO).....reducing the risk of increased installation schedules.....thus saving € m's.

## PRE-SWEEPING

Extensive solutions for pre-Sweeping and seabed preparation, especially to **overcome** challenges such as mobile sand waves.....to ensure effective burial and reduce maintenance campaigns over the cable's lifetime.....thus saving € m's.

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## CABLE BURIAL RISK ASSESSMENTS

The determination of **how deep to bury**.....overcomes challenging issues ranging from soils such as non-cohesive, cable management, cable damage, scheduling and permitting issues (negotiating with authorities) to effective risk based burial over the cable's lifetime..... thus saving € m's.

## BURIAL & TRENCH ASSESSMENTS

The determination of **how to bury**.....correct penetration and performance.....ensures offshore **schedules** and avoids the cost of failed permits, additional burial and maintenance. Plus the overcoming of contractual challenges i.e claims for increased offshore durations and additional passes.....thus saving € m's.

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