THE PROJECT

The TAO project, in the frame of the program POR-FESR 2014-2020 of the Emilia-Romagna Region, aims **to develop smart technologies for monitoring coastlines,** focusing its activities in the shore sector delimited by the maximum rise of the waves to the depth of closure, i.e., the maximum water depth with active interaction between waves and the seafloor. Main goals are investigating causes of coastal erosion and effectiveness of coastal defense structures.

The project combines 5 public technological transfer laboratories and 4 private companies in a public-private partnership.

OBJECTIVE

The Project TAO main objective is to develop a smart, low cost and low environmental impact technological platform composed of **fixed and mobile stations** for monitoring supra and sub littoral zones. It will be made by a set of ***ad-hoc* developed instruments** collecting morpho-batymetric, reflectivity and stratigraphic data for 3D modeling sediment transport and erosion at the seafloor and sub-seafloor. The developed technologies will also allow to collect water samples, coastline images and, through the analysis of biotic and abiotic multi-proxies, to carry out environmental status assessments.

Lead Partner:

Proambiente S.c.r.l.
Tecnopolo Bologna CNR

Research and Innovation centres:

CIRI EC
Centro Interdipartimentale per la Ricerca Industriale Edilizia e Costruzioni, Università di Bologna

CIRI MAM
Centro Interdipartimentale di Ricerca Industriale Meccanica Avanzata e Materiali, Università di Bologna

CIRI FRAME
Centro Interdipartimentale di Ricerca Industriale Fonti Rinnovabili, Ambiente, Mare ed Energia, Università di Bologna

CNA Innovazione
Area Trasferimento Tecnologico e Innovazione di Siaer

Companies:

Edil Impianti2 S.r.l
Communication Technology S.r.l.
Micoperi Blue Growth S.r.l.
Micoperi S.p.a.

POR FESR EMILIA-ROMAGNA 2014/2020 — FSC Fondo per lo Sviluppo e la Coesione — UNIONE EUROPEA Fondo europeo di sviluppo regionale — Regione Emilia-Romagna

TAO
TECNOLOGIE PER IL MONITORAGGIO COSTIERO

CLOSING MEETING
FRIDAY, 18th FEBRUARY 2022 - h 10
WebMeeting

PROGRAM: TECHNOLOGIES FOR COASTAL MONITORING

10:00 Greetings - Elisabetta Maini - *Servizio ricerca, innovazione, energia ed economia sostenibile, Regione Emilia-Romagna*

10.20 Results and methods

Giuseppe Stanghellini (*Project coordinator) - Proambiente Scrl / CNR ISMAR*
Fabrizio Del Bianco - *Proambiente Scrl*
Camilla Bidini - *CNR ISMAR*
Massimo Ponti - *CIRI Fonti Rinnovabili Ambiente Mare Energia*
Alfredo Liverani - *CIRI Meccanica Avanzata Materiali*
Renata Archetti - *CIRI Edilizia e Costruzioni*

11.45 Panel discussion: application and future developments

Stefano Valentini - *Blue Growth project coordinator presso Art-ER*
Luisa Perini - *Organizzazione Servizio Geologico Sismico e dei Suoli - RER*
Francesco Matteucci - *Program Manager in Green Technologies presso EISMEA*
Stefano Ravaioli - *Comune di Ravenna: Servizio Tutela Ambiente e Territorio*
Francesco Magagnoli - *Autorità di Sistema Portuale - Servizio Coordinamento e Politiche UE*
Massimiliano Costa - *Direttore del Parco del Delta del Po*
Gianni Biasini - *Communication Technology Srl*

Chairman - Francesco Riminucci - *Proambiente Scrl*