

Il Polo regionale ligure di Ricerca e Innovazione «EASS - Energia, Ambiente, Sviluppo Sostenibile»

Soggetto Gestore: TICASS - Tecnologie Innovative per il Controllo Ambientale e lo Sviluppo Sostenibile srl

Riunione congiunta CTS Polo EASS, CIV Polo EASS, CO Ticass
06 dicembre 2022, ore 11.00



Polo EASS → RAISE

Contributi in fase proposta -> manifestazioni di interesse aziende associate

Possibile contributo TICASS /Polo EASS per RAISE:

- come da proposta progettuale -> per Hub, Comitato di Indirizzo, Poli di ricerca e Innovazione
- supporto Spoke 5-> Formazione - Trasferimento Tecnologico
- **supporto ai singoli Spoke tematici**

Progetto RAISE - Supporto ai singoli Spoke tematici

- Collegamenti con la S3 Regionale
 - Area sicurezza e qualità della vita nel territorio (transizione energetica, sostenibilità ambientale ed economia circolare, Space economy, etc)
- Collegamento e sinergia con ecosistema polo EASS e relativi tavoli tematici (eventualmente da organizzare su specifici temi degli spoke)
- Supporto per la definizione dei bandi per le call a cascata per le aziende
- Supporto alla promozione dei bandi a cascata verso le aziende del Polo
- Anche in collegamento con lo spoke 5, supporto alle attività di Trasferimento tecnologico dei risultati

Fleets of autonomous and semi-autonomous robots (terrestrial, marine, and aerial) in port environment

Social robots and smart devices for ports and marinas

HPC/DCC for port data acquisition, processing and distribution

Robot- and AI-based inspection and predictive maintenance of port resources and infrastructures

Robotic systems and AI tools for safety and risk assessment & management

AI Devices and applications for nowcast and forecast of met-ocean conditions

AI- and ML-based detection systems for cyber and physical security of port areas

AI tools and technologies for greening ports

Innovative demand-responsive energy system for port environment

Automated systems and AI tools for optimal management of port traffic flows

Digital twins and advanced simulators of port activities

Enhanced automation for seamless operations in ship & port shared environment

AI tools and technologies for greening ports

leader: ENEA co-leader: CNR altri partecipanti: FINCANTIERI IIT UNIGE

- AI tools to evaluate energy consumption and emissions in port areas
- AI technologies for environmental sustainability by monitoring acoustic signals
- clean energy solutions for port infrastructure, vehicles, vessels
- continuous monitoring and data transmission of harbour marine environment quality
- sustainable and efficient use of water, materials and energy
- continuous monitoring and data transmission of harbour environmental quality
- management of effective hull in-water cleaning and related chemical and biological pollution
- monitoring of marine mega-fauna (e.g., fish, benthonic organisms) in the port environment
- sustainable use of resources and protection/regeneration of the natural capital
- drones powered by a hybrid (electric and fuel cells) high efficiency power recharging system

Innovative demand-responsive energy system for port environment

leader: **ALGOWATT** *co-leader:* **UNIGE** *altri partecipanti:* –

- energy management of the port system and demand response (buildings, vehicles, ships)
- assessment of the interaction of port energy/fuels assets and demands with local energy grids