ARPHA Conference Abstracts 9: e202263
doi: 10.3897/aca.9.e202263

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Conference Abstract

ALIEM VIGIL: a cross-border surveillance, prevention and management framework against invasive alien species in Mediterranean transit hubs

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Received: 02 Jun 2026 | Published: 02 Jun 2026

Citation: Cocco A, Barré-Cardi H, Borzatti de Loewenstern A, Cappa F, Cervo R, Corrias M, Culioli M, Demicheli F, Freudenreich M, Grech D, Migliore J, Pusceddu M, Satta A, Tricarico E, Ruiz M-C (2026) ALIEM VIGIL: a cross-border surveillance, prevention and management framework against invasive alien species in Mediterranean transit hubs. ARPHA Conference Abstracts 9: e202263. https://doi.org/10.3897/aca.9.e202263

Abstract

The Mediterranean basin is a global biodiversity hotspot where intense maritime traffic, tourism and commercial exchanges concentrate through seaports, airports and logistics platforms that act as preferential entry pathways for invasive alien species (IAS). Building on the achievements of the Interreg Italy-France Maritime projects ALIEM (2017-2020) and ALIEM APOSTROPHE (2020-2023), the ALIEM VIGIL project (2024-2027, 36 months) strengthens the coordinated prevention, early detection and management of both terrestrial and marine IAS across the French-Italian transboundary cooperation area (Corsica, Sardinia, Liguria, Tuscany and Provence-Alpes-Côte d'Azur).

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ALIEM VIGIL is structured around three complementary components. Work package 1 consolidates a cross-border surveillance network by upgrading the ALIEM NETWORK 3.0 collaborative platform, its mobile application and the GAIA mapping database, and by extending the characterisation and risk assessment of transit entry points. Work package 2 delivers joint training and awareness actions targeting port and airport authorities, transport operators, site managers and the general public, with harmonised pedagogical tools and a joint cross-border training pilot. Work package 3 designs and field-tests innovative protocols for the control and neutralisation of priority IAS, structured around an Identification–Development–Neutralisation (I-D-N) operational approach and consolidated into a single Transboundary Control Protocol.

Led by the Corsica Environment Agency (OEC), the consortium gathers eight partners from France and Italy combining regional environmental authorities, universities, a national botanical conservatory and a natural history museum. Key deliverables include a shared platform, a Transboundary Management Plan, local management plans, harmonised identification and intervention protocols, and a transferable I-D-N approach. Through this integrative, networked and action-oriented approach, ALIEM VIGIL contributes directly to the EU Biodiversity Strategy for 2030, the EU IAS Regulation 1143/2014, the Kunming-Montreal Global Biodiversity Framework (Target 6) and the 2015 transboundary cooperation agreement for the study and management of invasive species in the Mediterranean.

Keywords

Biological invasions; Cross-border cooperation; Early detection; Citizen science; ALIEM NETWORK; Interreg Italy-France Maritime; Biodiversity conservation; Management protocols

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Presented at

Neobiota 2026, the 14th International Conference on Biological Invasions

Acknowledgements

The authors warmly thank the Managing Authority (Regione Toscana) and the Joint Secretariat for their support, as well as the national contact points of France and Italy

Funding program

Interreg VI-A Italy-France Maritime 2021-2027 (Programma di Cooperazione Italia-Francia Marittimo 2021-2027)

Grant title

ALIEM VIGIL - Limitation, management and vigilance actions related to the introduction of invasive alien species in Mediterranean transit areas

Ethics and security

The project does not involve human participants in the biomedical sense, does not process special-category personal data. Minimal personal data (professional contact details of stakeholders and registered platform users) are collected for training, communication and citizen-science purposes on the ALIEM NETWORK platform, with informed consent and in full compliance with Regulation (EU) 2016/679 (GDPR).

All field activities involving sampling, identification and neutralisation of invasive alien species comply with Regulation (EU) 1143/2014 on the prevention and management of IAS, with the Nagoya Protocol (where relevant) and with the national environmental codes and wildlife protection regulations of France and Italy. Experimental control actions in natural habitats are carried out under agreements with the competent local authorities and site managers.

No dual-use or biosecurity-sensitive information is disclosed in this abstract. Data sharing follows FAIR principles through the ALIEM NETWORK / GAIA infrastructure.

Conflicts of interest

The authors have declared that no competing interests exist.