

Priority actions Plan for the conservation of cetacean and sea turtles in the Adriatic Sea: *a regional approach to conservation*

Network for the Conservation of Cetaceans and Sea Turtles in the Adriatic (NETCET)

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*With the contribution of Giulia Mo (ISPRA)
& Paolo Casale (WWF)*



The project is co-funded by the European Union,
Instrument for Pre-Accession Assistance.



Toward an Italian Plan of Priority Actions for the conservation of Adriatic cetaceans & sea turtles

Modus operandi:

- Look at the Adriatic legislative context
- Look at the Adriatic species and populations status
- Look at the existing threats to Adriatic species and populations
- Define potential priority actions & discuss with relevant administration
 - Understand the administrative setup (its strengths & limits)
- Agree on a final set of Priority Actions



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International legislation

- European Union **Strategy for the Adriatic and Ionian Region & its Action Plan**
- Marine Strategy Framework Directive (**MSFD**)
- **Habitats Directive & Natura 2000**
- **Regulation (EC) n. 812/204, Regulation (EC) n. 1967/2006, Regulation (EC) n. 508/2015**
- General Fisheries Commission for the Mediterranean (**GFCM**) & **ADRIAMED**
- **ACCOBAMS** (Agreement on the Conservation of Cetaceans in the Black Sea Mediterranean Sea and Contiguous Atlantic Area)
- Convention for the Protection of the Mediterranean Sea Against Pollution (**Barcelona Convention**) & **EcAp**
- Convention on Migratory Species (**CMS**)
- **Bern Convention** on the Conservation of European Wildlife and Natural Habitats
- Convention on Biological Diversity (**CBD**)
- **Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) Directives**



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International legislation – Habitats Directive

- **Annex II – SAC designation** (cetacean: *Tursiops truncatus*; sea turtles: **Caretta caretta*, **Chelonia mydas*).
- **Annex IV – Species that require a rigorous protection** (cetacean: all species; sea turtles: *Caretta caretta*, *Chelonia mydas*, *Dermochelys coriacea*).
- **Article 2:** «*The aim of this Directive shall be to **contribute towards ensuring biodiversity** through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States to which the Treaty applies. Measures taken pursuant to this Directive shall be designed to **maintain or restore, at favourable conservation status**, natural habitats and **species** of wild fauna and flora of **Community interest**. Measures taken pursuant to this Directive shall take account of **economic, social and cultural** requirements and **regional and local characteristics**».*



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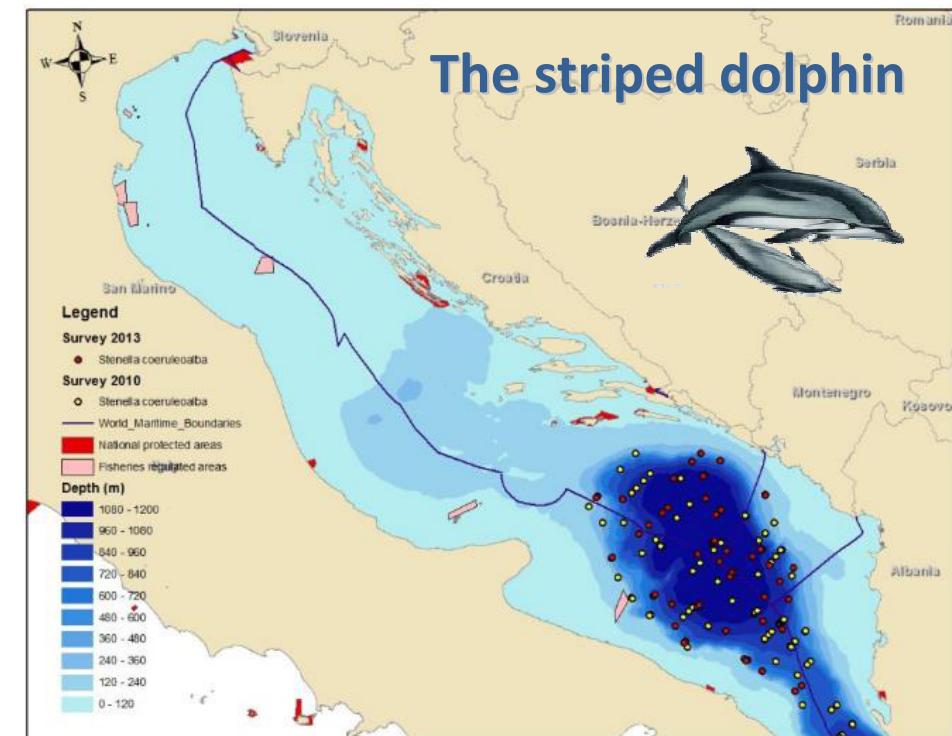
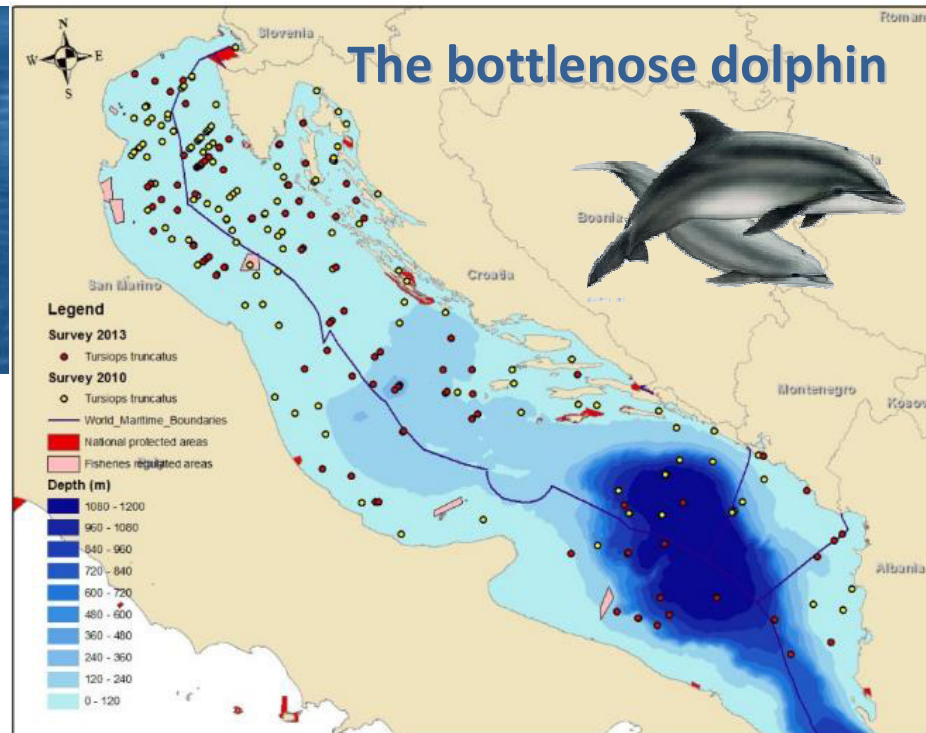
International legislation – Habitats Directive

- **Article 11:** «*Member States shall undertake **surveillance of the conservation status** of the natural habitats and species referred to in Article 2 with particular regard to priority natural habitat types and **priority species**».*
- **Article 12.4:** «*Member States shall establish a system to **monitor the incidental capture** and killing of the animal species listed in Annex IV. In the light of the information gathered, Member States shall take further **research or conservation measures** as required to ensure that incidental capture and killing does not have **a significant negative impact on the species concerned**».*



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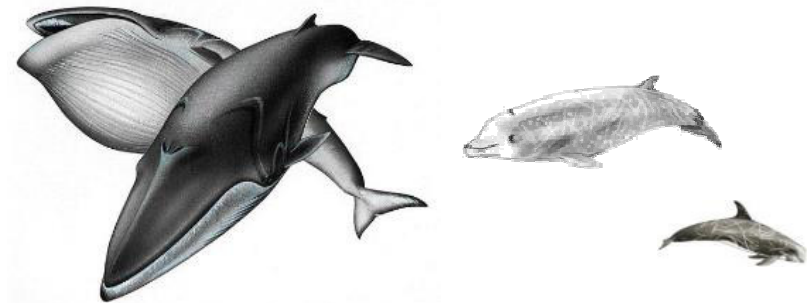
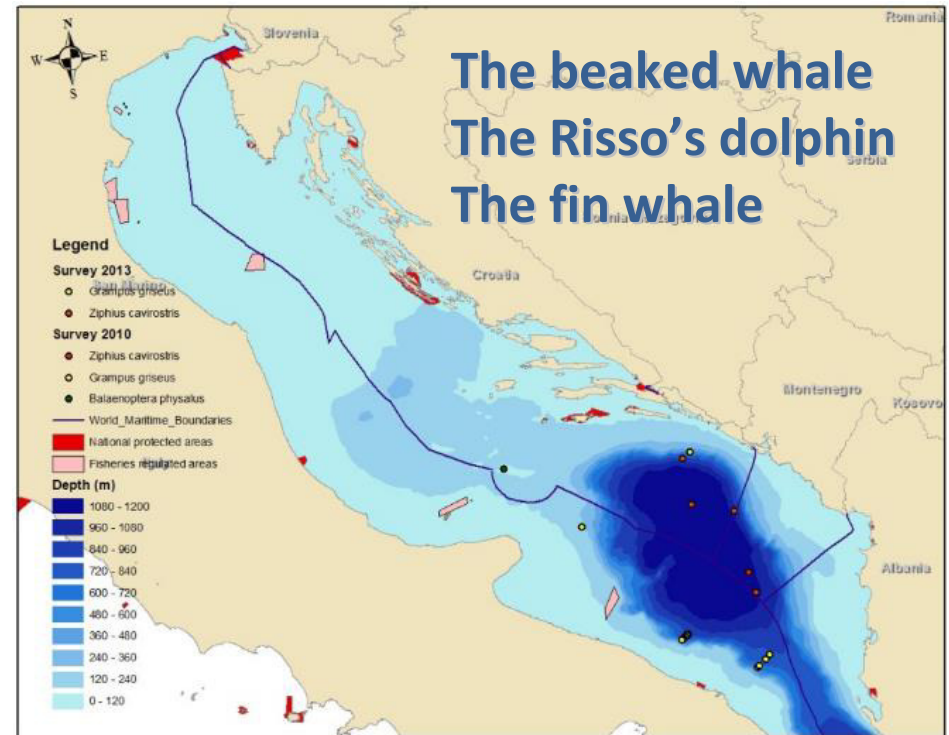


ISPRA
Istituto Superiore per la Protezione e la Ricerca Ambientale



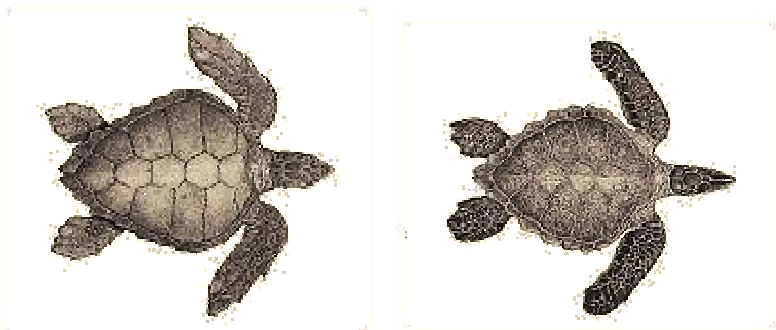
WWF
Italia



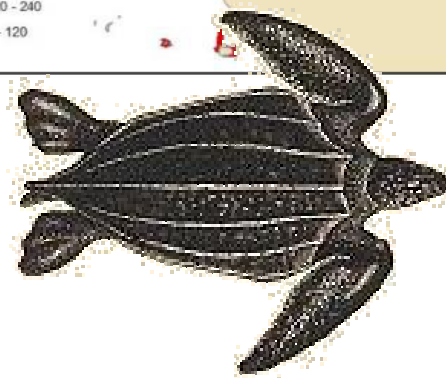
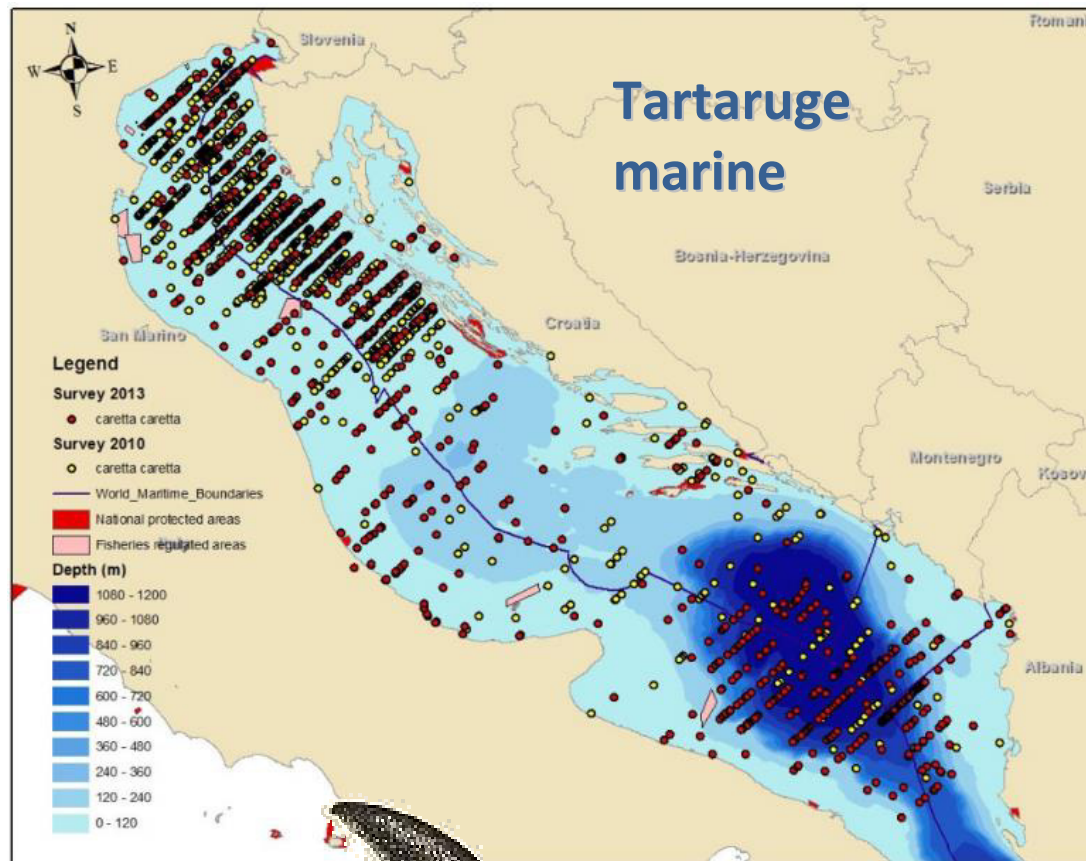


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Loggerhead & Green turtles



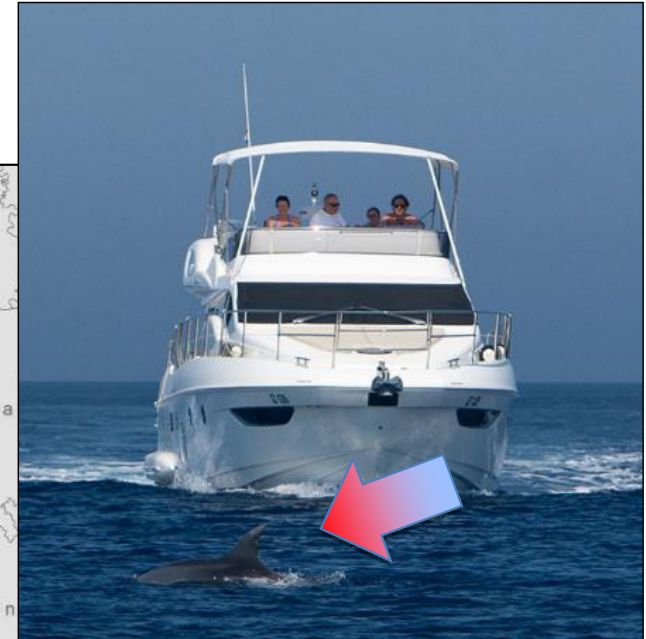
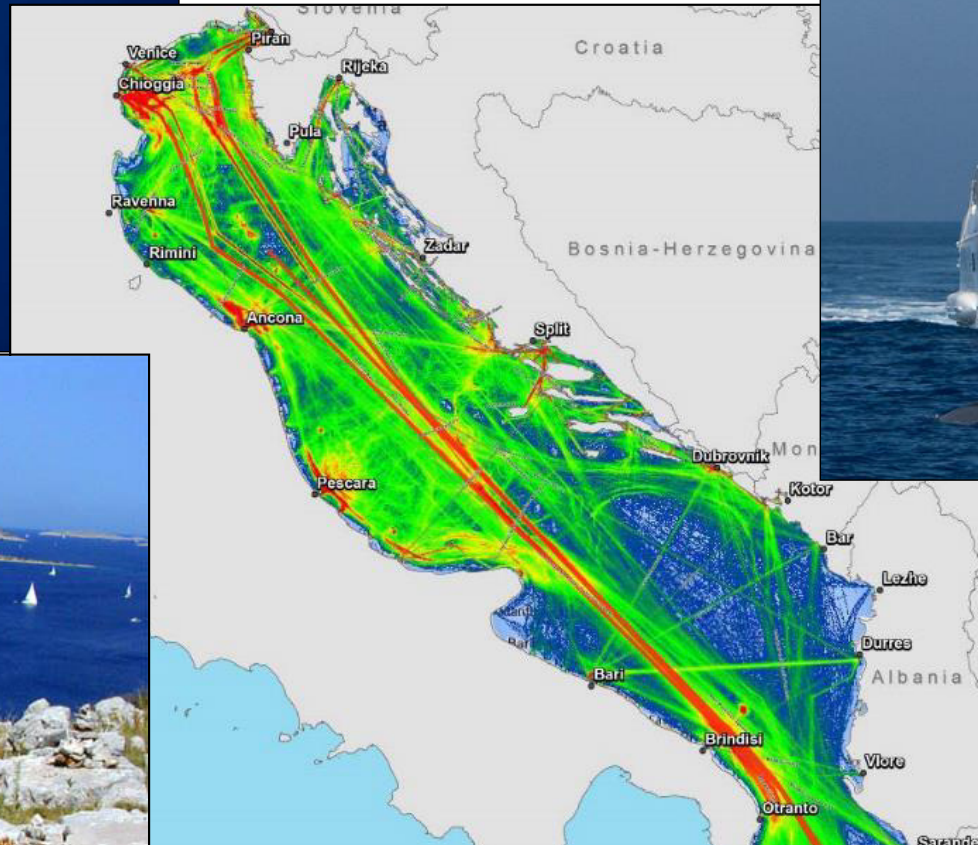
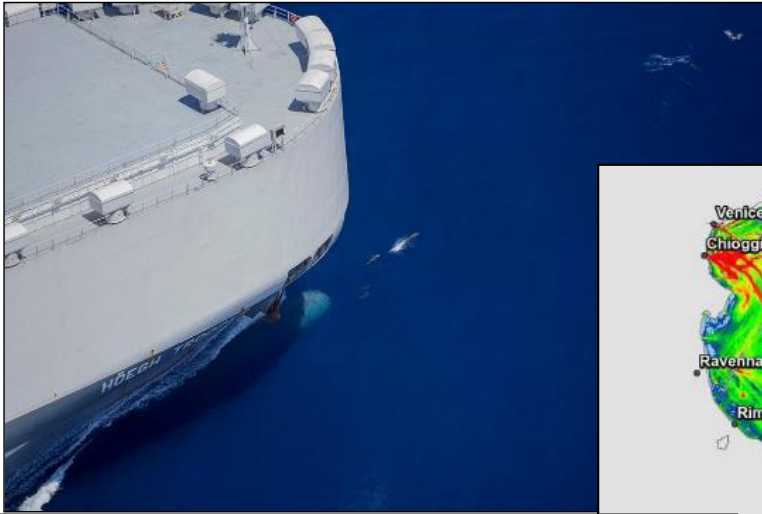
Dermochelys coriacea



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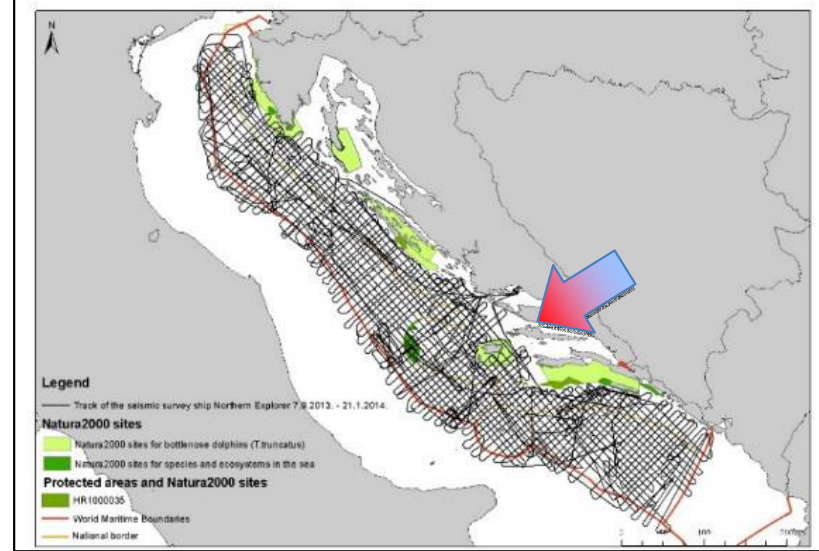
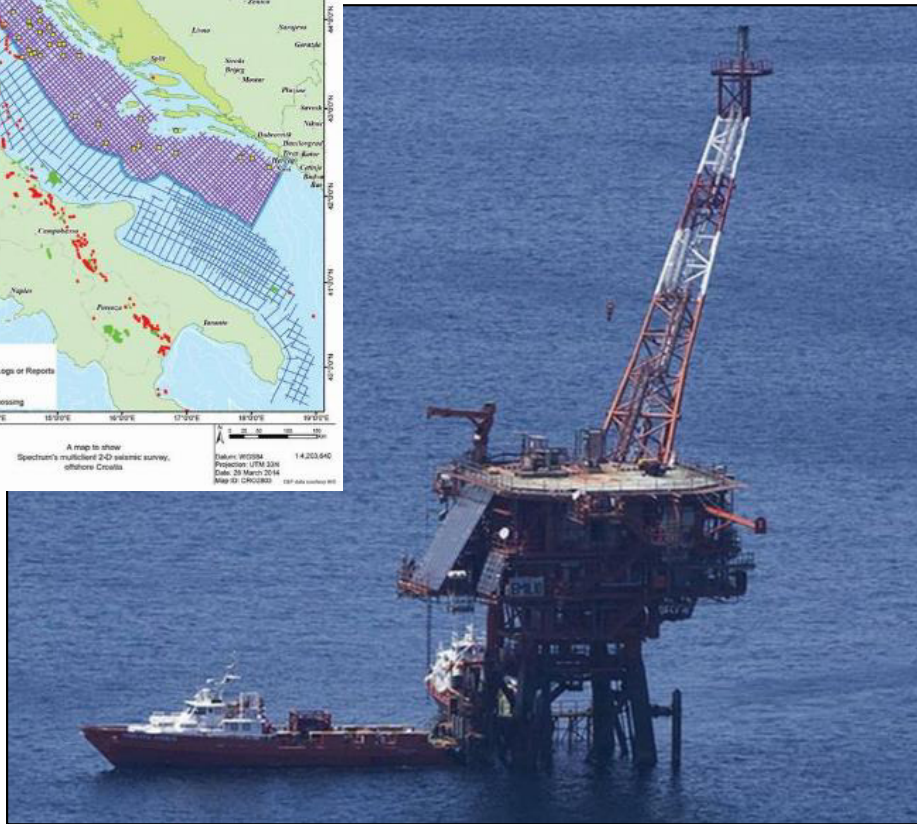
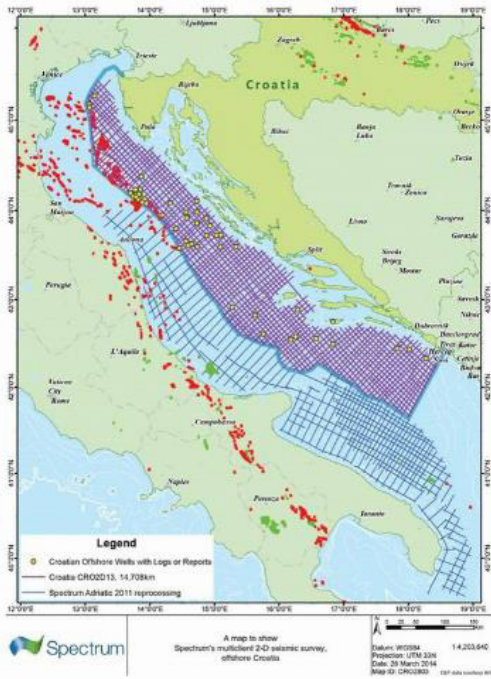


Threats: maritime traffic/nautical tourism



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Threats: hydrocarbons industry



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Threats: military sonars



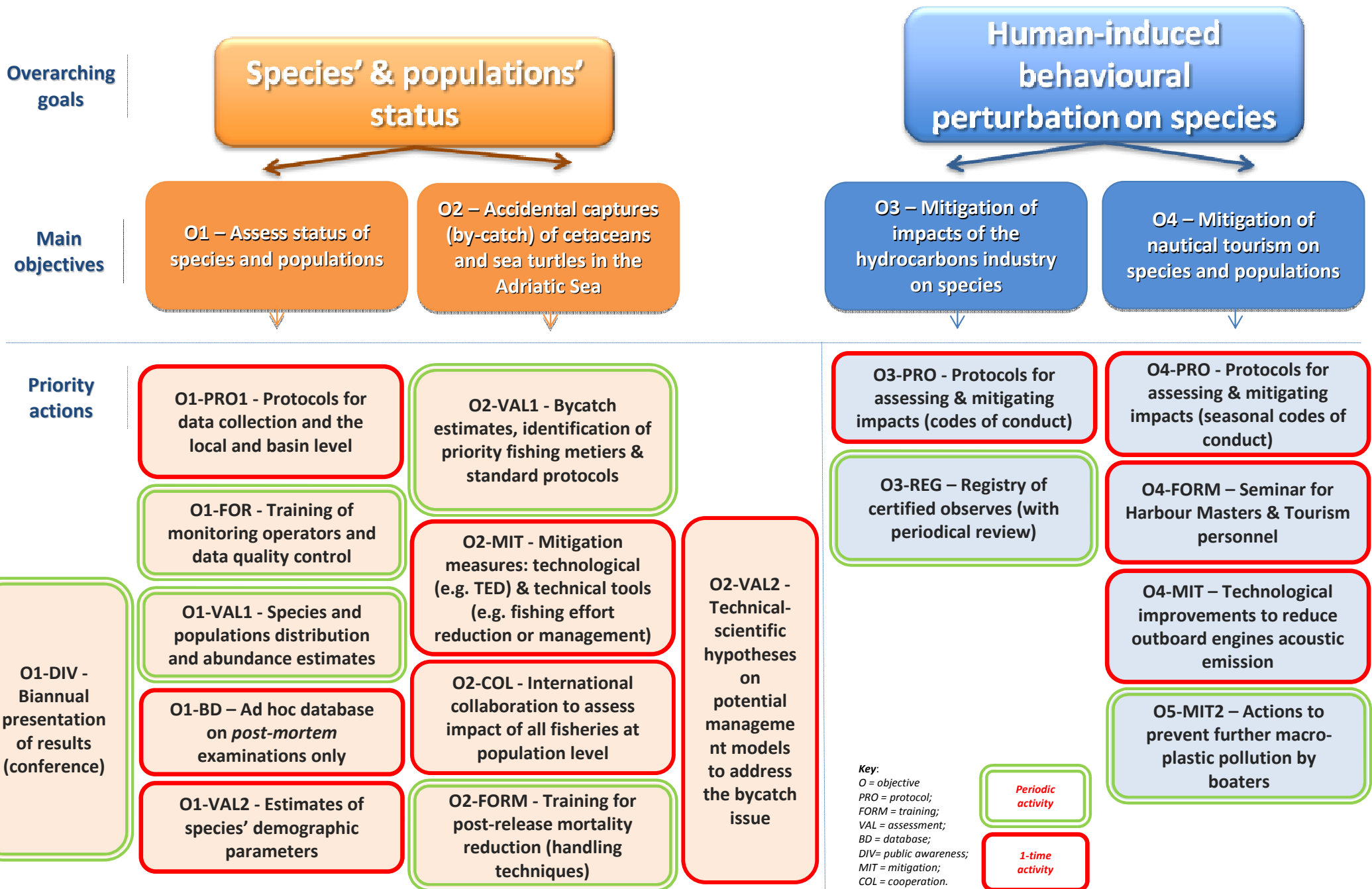
Threats: accidental captures/fishery interactions



Threats: pollution



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Overarching goals Priority objectives & Priority actions

ASSESSMENT OF SPECIES' & POPULATIONS' STATUS

- O1 – Assess the status of species and populations (six priority actions)
- O2 – Accidental captures (by-catch) of cetaceans and sea turtles in the Adriatic Sea (five priority actions)

ASSESSMENT OF HUMAN INDUCED BEHAVIOURAL PERTURBATION ON SPECIES

- O3 – Mitigation of impacts of the hydrocarbons industry on species (two priority actions)
- O4 – Mitigation of nautical tourism on species and populations (four priority actions)



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ASSESSMENT OF SPECIES' & POPULATIONS' STATUS

O1 – Assess the status of species and populations (*six priority actions*)

- O1-PRO1 - Protocols for data collection and the local and basin level
 - *Ad hoc Adriatic region protocols, agreed at the international level & ratified at the national level*
- O1-FOR - Training of monitoring operators and data quality control
 - *Directory of trained operators for monitoring and data quality control in Adriatic*
- O1-VAL1 - Species and populations distribution and abundance estimates
 - *Periodic survey on distribution and abundance at basin level (3-6 years)*
- O1-BD – *Ad hoc* database on post-mortem examinations only
 - *Database on post-mortem examinations to detect events of human-induced mortality*
- O1-VAL2 - Estimates of species' demographic parameter
 - *Demographic parameters of Adriatic cetaceans and sea turtles populations*
- O1-DIV - Biannual presentation of results (conference)



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ASSESSMENT OF SPECIES' & POPULATIONS' STATUS (1/2)

O2 – Accidental captures (by-catch) of cetaceans and sea turtles in the Adriatic Sea
(five priority actions)

- O2-VAL1 - Bycatch estimates, identification of priority fishing metiers & standard protocols
 - *Identification of potentially most impacting fishery metiers in the Adriatic*
 - *Pilot studies on selected metiers to assess the real extent of impacts*
- O2-MIT - Mitigation measures: technological (e.g. TED) & technical tools (e.g. fishing effort reduction or management)
 - *Reduction of the total observed bycatch events*
 - *Independent observers monitoring programmes (assessment of real bycatch rates)*
- O2-COL - International collaboration to assess impact of all fisheries at population level
 - *Identification of parameters to assess the real impact of bycatch at the population level*



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ASSESSMENT OF SPECIES' & POPULATIONS' STATUS (2/2)

O2 – Accidental captures (by-catch) of cetaceans and sea turtles in the Adriatic Sea

- O2-FORM - Training for post-release mortality reduction (handling techniques)
 - *Reduction of post-release mortality (medium-long term mortality)*
- O2-VAL2 - Technical-scientific hypotheses on potential management models to address the bycatch issue
 - *Definition of management models to address cetacean and sea turtle bycatch issue in the Adriatic Sea*



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HUMAN-INDUCED BEHAVIOURAL PERTURBATION ON SPECIES

O3 – Mitigation of impacts of the hydrocarbons industry on species

- O3-PRO - Protocols for assessing & mitigating impacts (codes of conduct)
- O3-REG – Registry of certified observes (with periodical review)

O4 – Mitigation of nautical tourism on species and populations

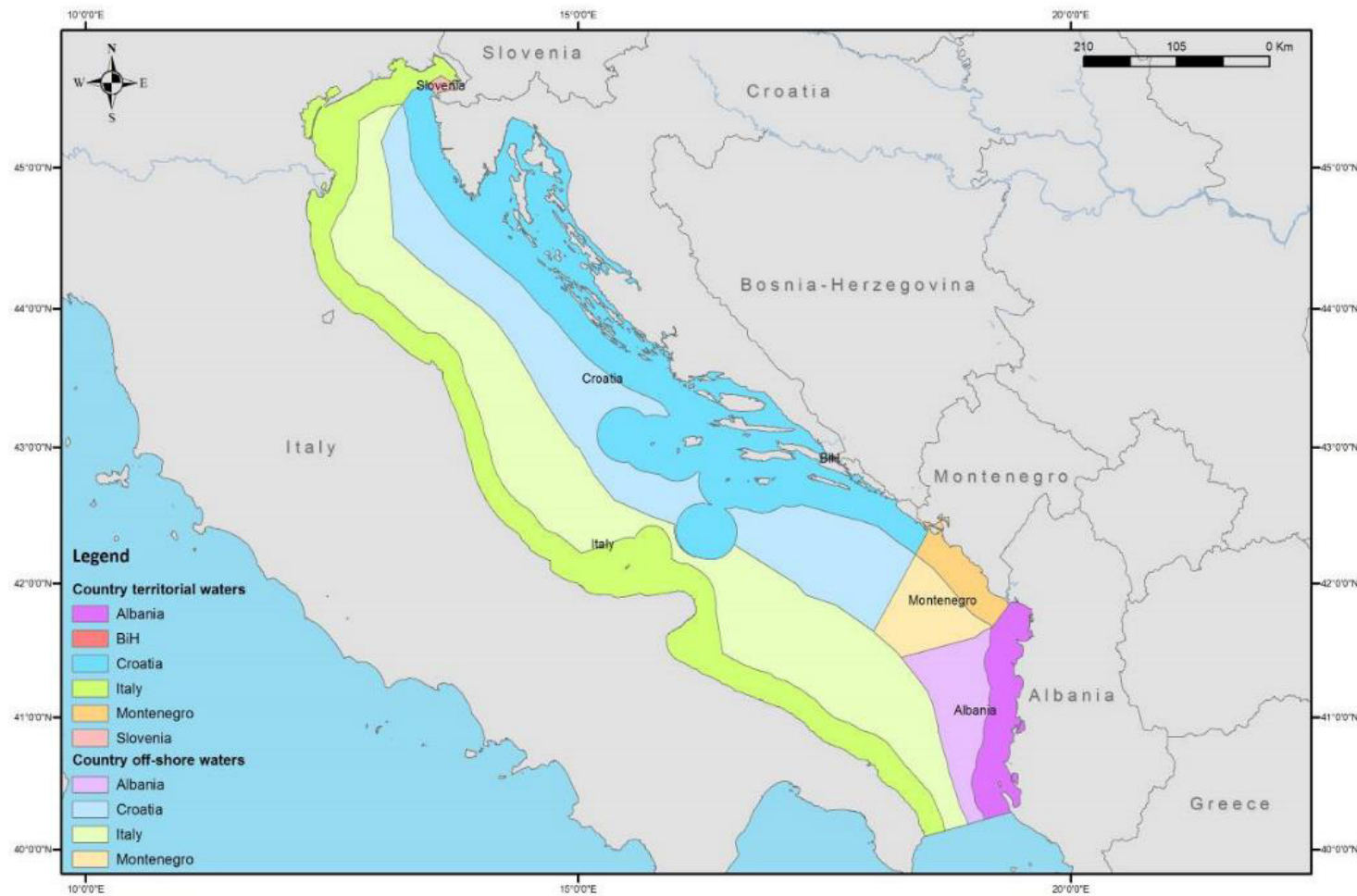
- O4-PRO - Protocols for assessing & mitigating impacts (seasonal codes of conduct)
- O4-FORM – Seminar for Harbour Masters & Tourism personnel
- O4-MIT – Technological improvements to reduce outboard engines acoustic emission
- O4-MIT2 – Actions to prevent further macro-plastic pollution by boaters



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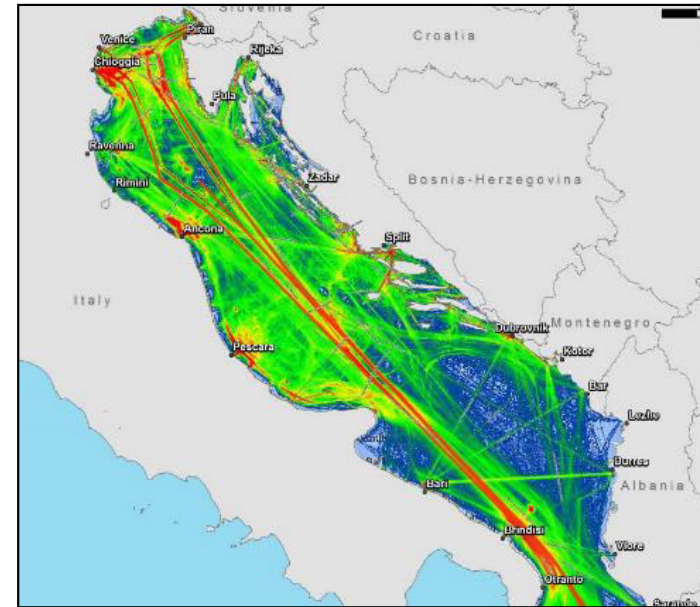
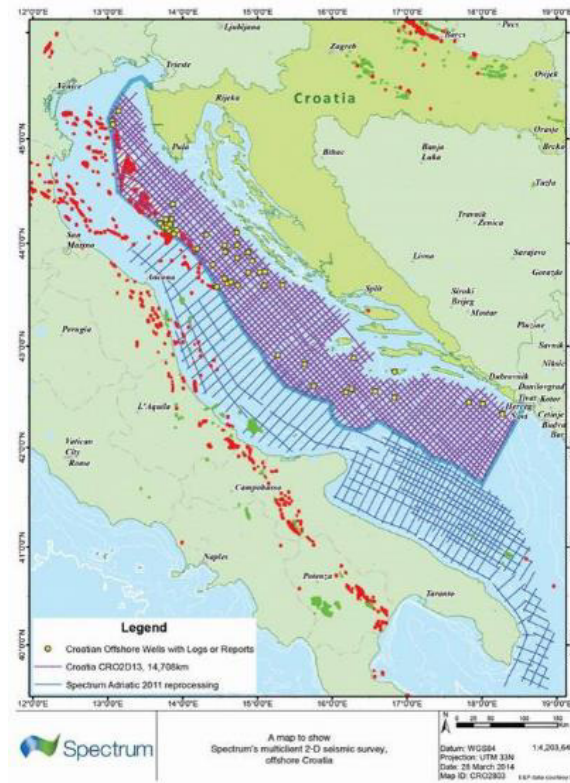
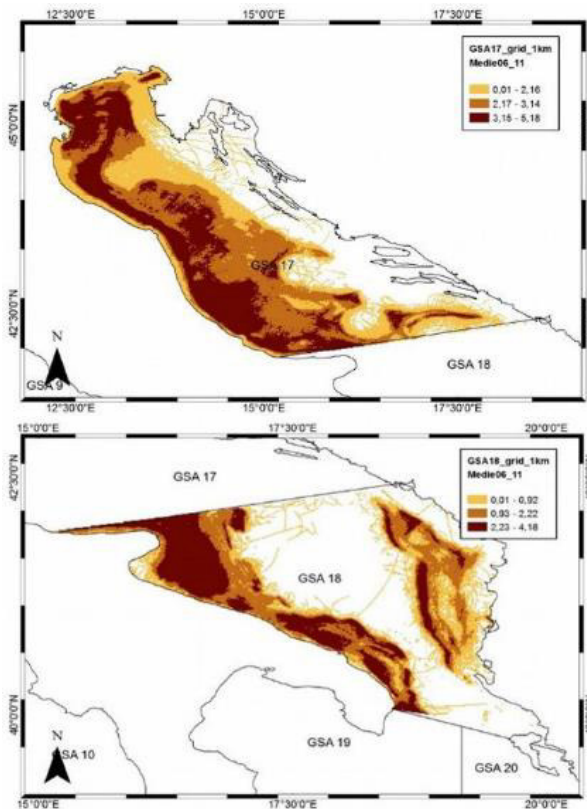
Threats: lack of international planning



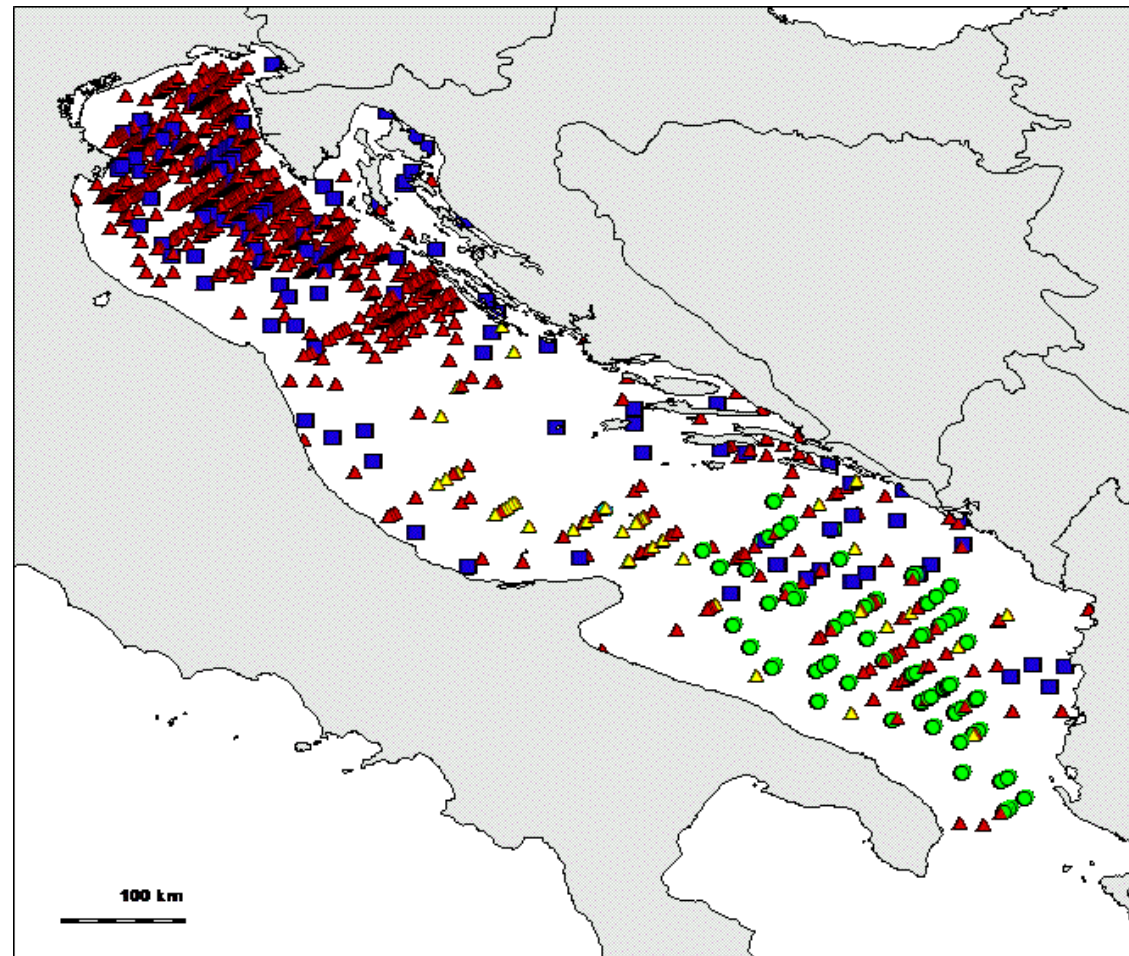
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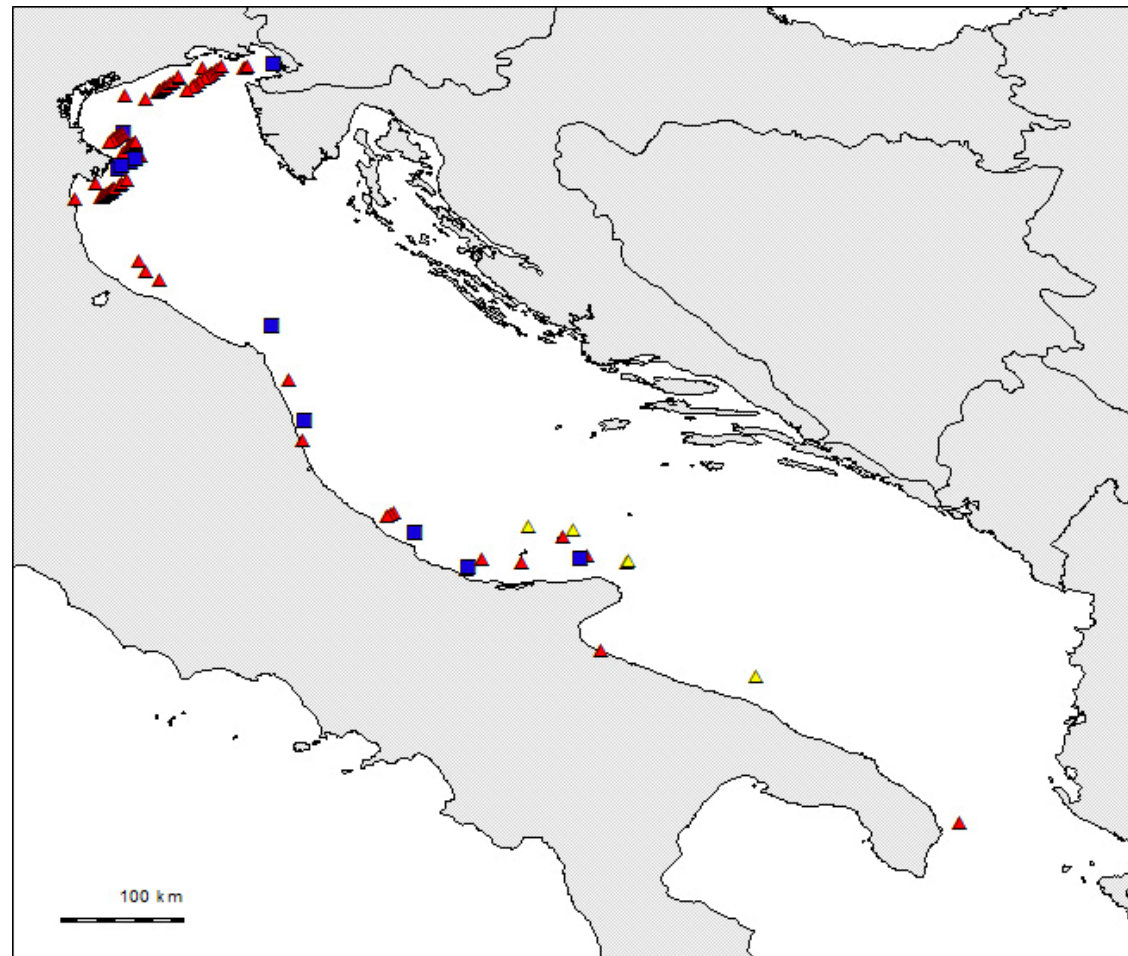


Species prospective



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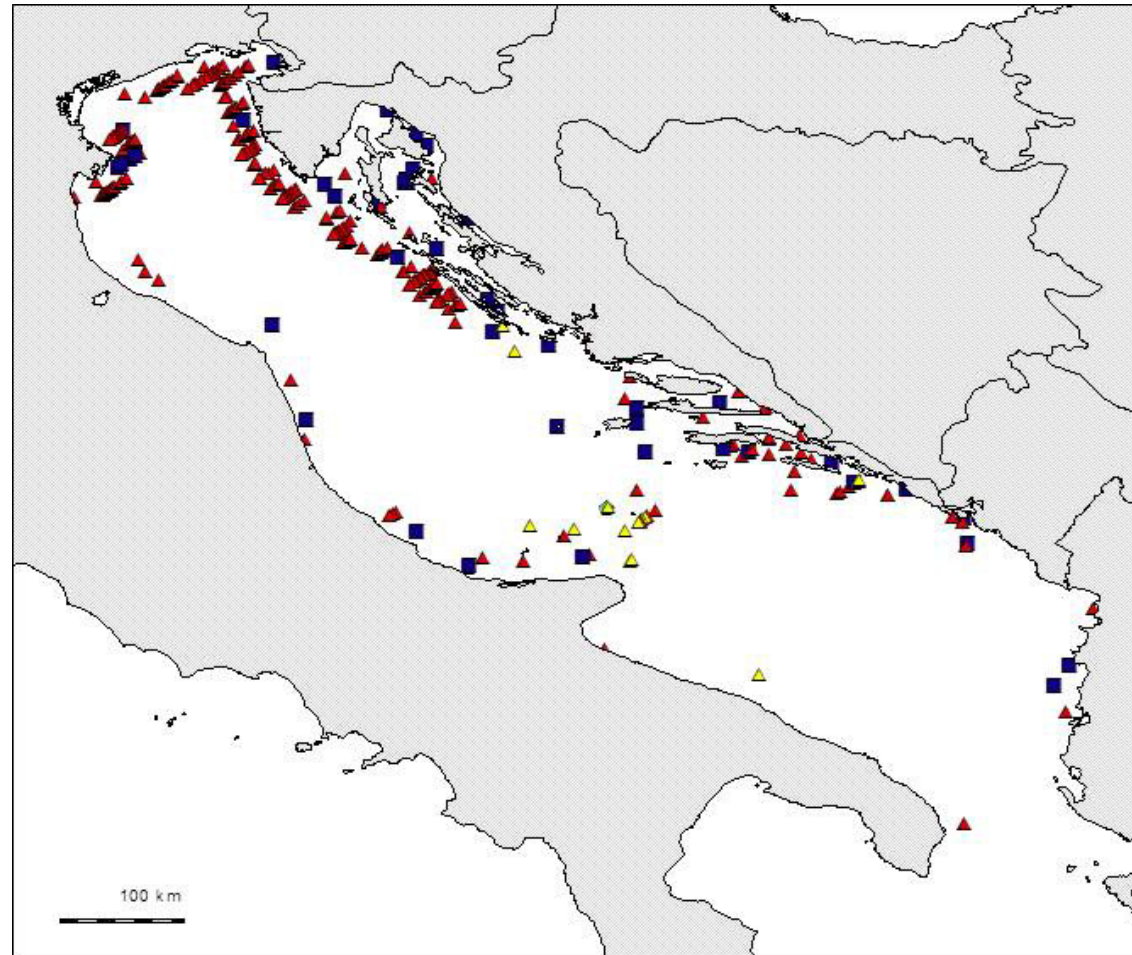
Italian prospective *12 nmi*



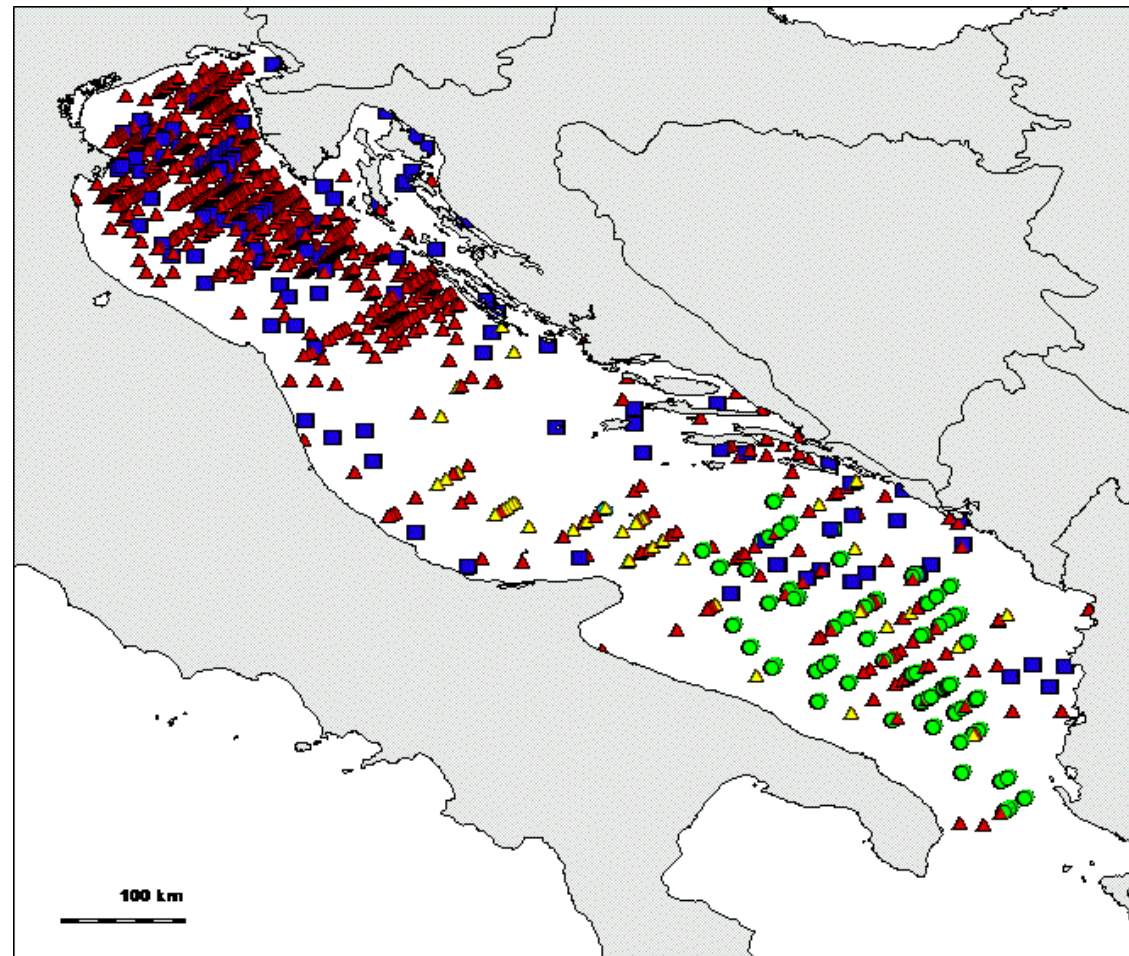
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AL, HR, IT, MN & SLO national prospective:

*if applying same
criteria with no
concrete
cooperation*



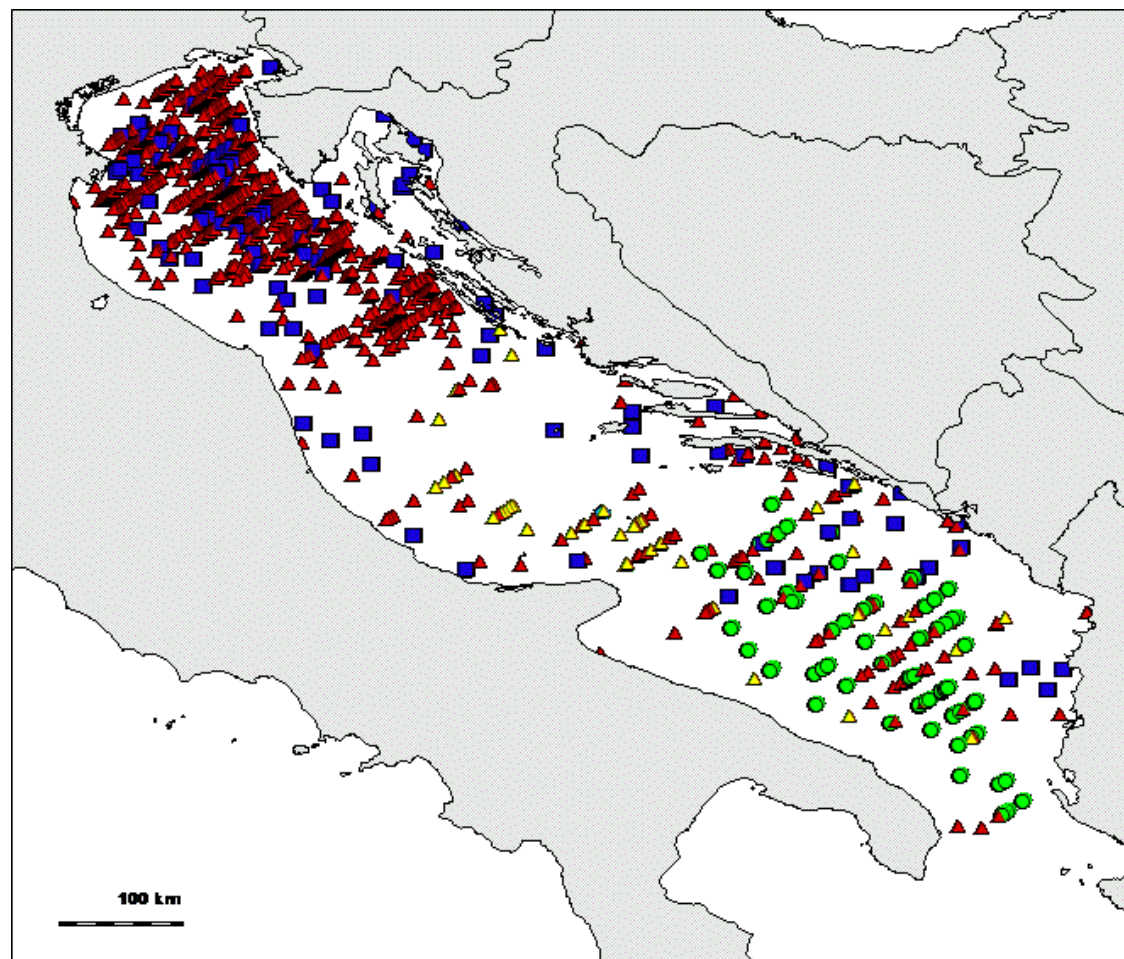
Species prospective



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**AL, HR, IT,
MN & SLO
prospective:**

*if working in
synergy*



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- **START INTERNATIONAL POLITICAL DISCUSSIONS ON AN ADRIATIC PLAN**



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Where are we now with the Italian Plan of Actions?

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*Many thanks to all
NETCET partners &
Ministries officers
for their feedbacks!*



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