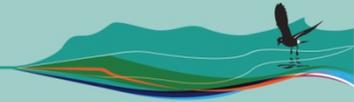




PROTECTING SEABIRDS IN THE MEDITERRANEAN:  
ADVANCING THE MARINE PROTECTED AREA NETWORK

INTERNATIONAL WORKSHOP  
23<sup>RD</sup> – 25<sup>TH</sup> NOVEMBER 2015



# Threats affecting seabirds Coastal development in Greece

Danae Portolou, Konstantina Ntemiri  
Hellenic Ornithological Society

Protecting Seabirds in the Mediterranean: Advancing the Marine Protected Area Network  
*International Workshop, 23-25 November 2015, Malta*



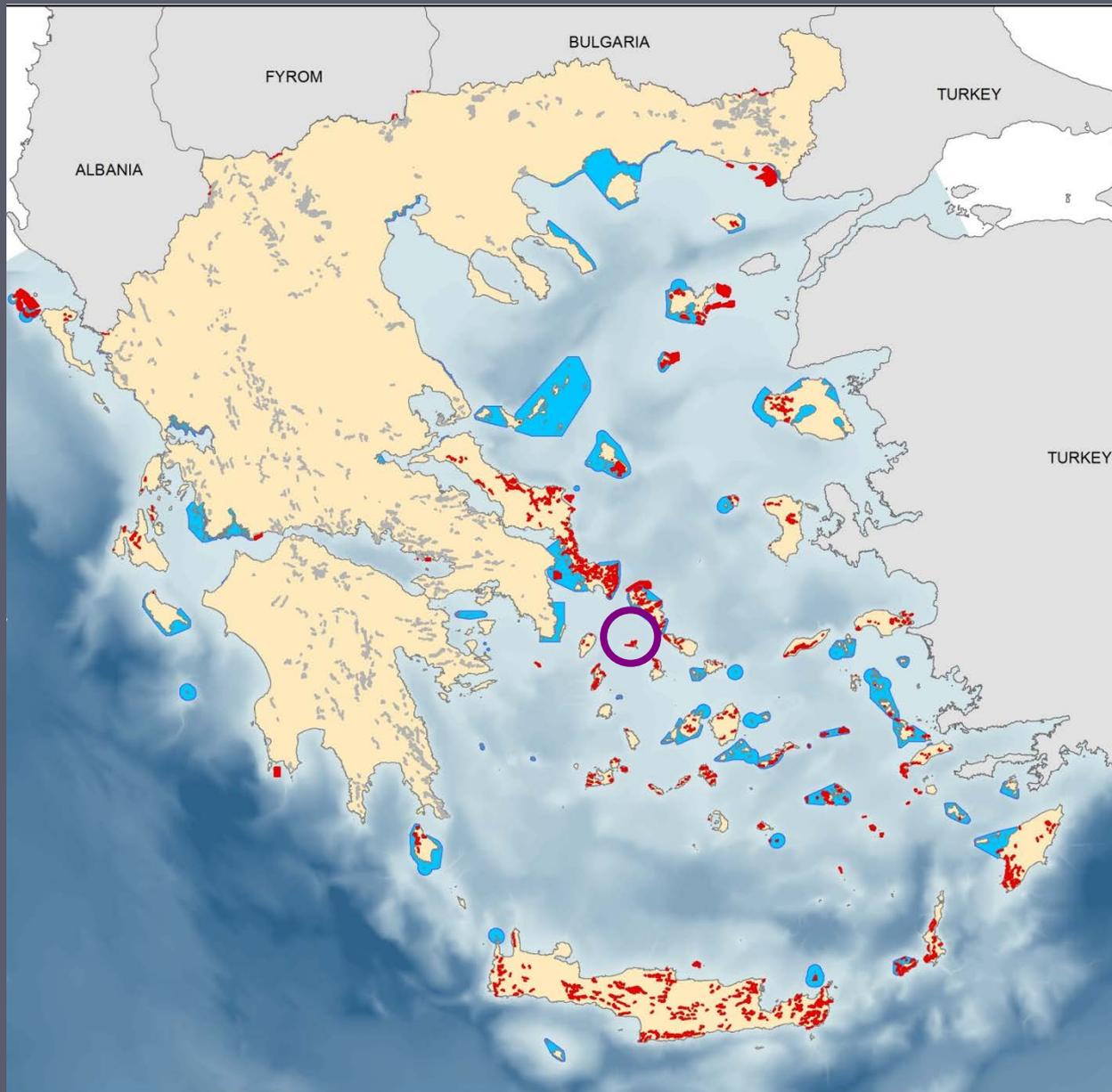
Regulatory  
Authority for  
Energy (RAE)

2,897 proposals

1,717 active (not  
rejected)

67,763 MW

349,647 ha



659 proposals in  
insular area (38%)

44,594 MW

180,290 ha

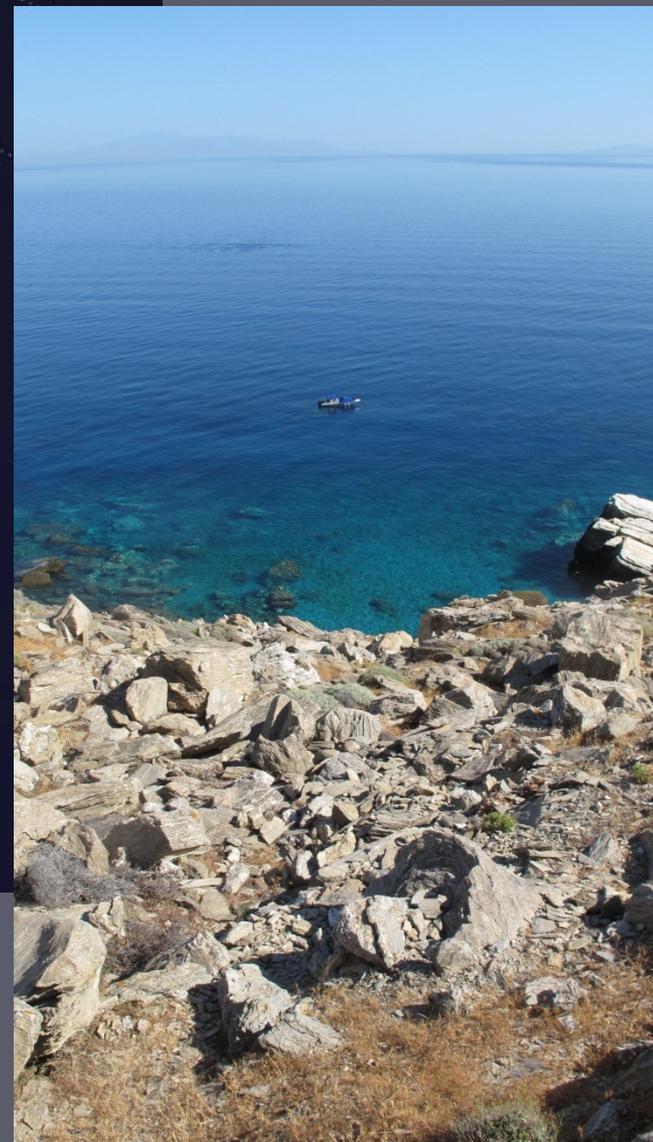
226 proposals  
inside 27 mIBAs

21,898 MW

126,656 ha

- 128 Evaluation stage
- 76 Production permit stage
- 12 Installation stage (EIA)
- 10 Operation stage

Time period 5-6 years



Habitat degradation

Breeding habitat loss

Disorientation &  
Collisions

Adult mortality



29 cases OWF

5,117 MW

62,304 ha

Centre for Renewable  
Energy Sources and  
Saving (KAPE), ENVECO  
and HCMR

Produced an  
Environmental Impact  
Assessment for the  
National Development  
Programme for Offshore  
Wind Farms (2012-17)

Greece has huge wind energy potential but restricted by large depths

During preliminary planning of OWF removed from selection process:

- > 6 nm (national waters)
- < 6 km from coast (visibility)
- > 50 m depth (stabilization of monopiles)
- Areas with other uses (army, industrial, tourism, maritime, fisheries)
- National and European Protected Areas → **Natura 2000 & mIBAs**

Final proposal includes 12 sites of which 9 require a Study of Special Ecological Evaluation including a Special Ornithological Study

→ Public consultation in 2016

Habitat degradation	Rafting / Foraging habitat loss Interference with migration routes
Disorientation & Collisions	Adult mortality

GR005

## ΘΑΠ ΑΛΕΞΑΝΔΡΟΥΠΟΛΗΣ

ΘΑΠ ΑΛΕΞΑΝΔΡΟΥΠΟΛΗΣ	Α/Γ	Ισχύς (MW)
Τυπικό ενδεικτικό σενάριο χωροθέτησης Α/Γ	78	546
Μέγιστο ενδεικτικό σενάριο χωροθέτησης Α/Γ	136	952

Πολύγωνο περιοχής εφαρμογής ΘΑΠ 

Νέο Πολύγωνο περιοχής εφαρμογής ΘΑΠ 

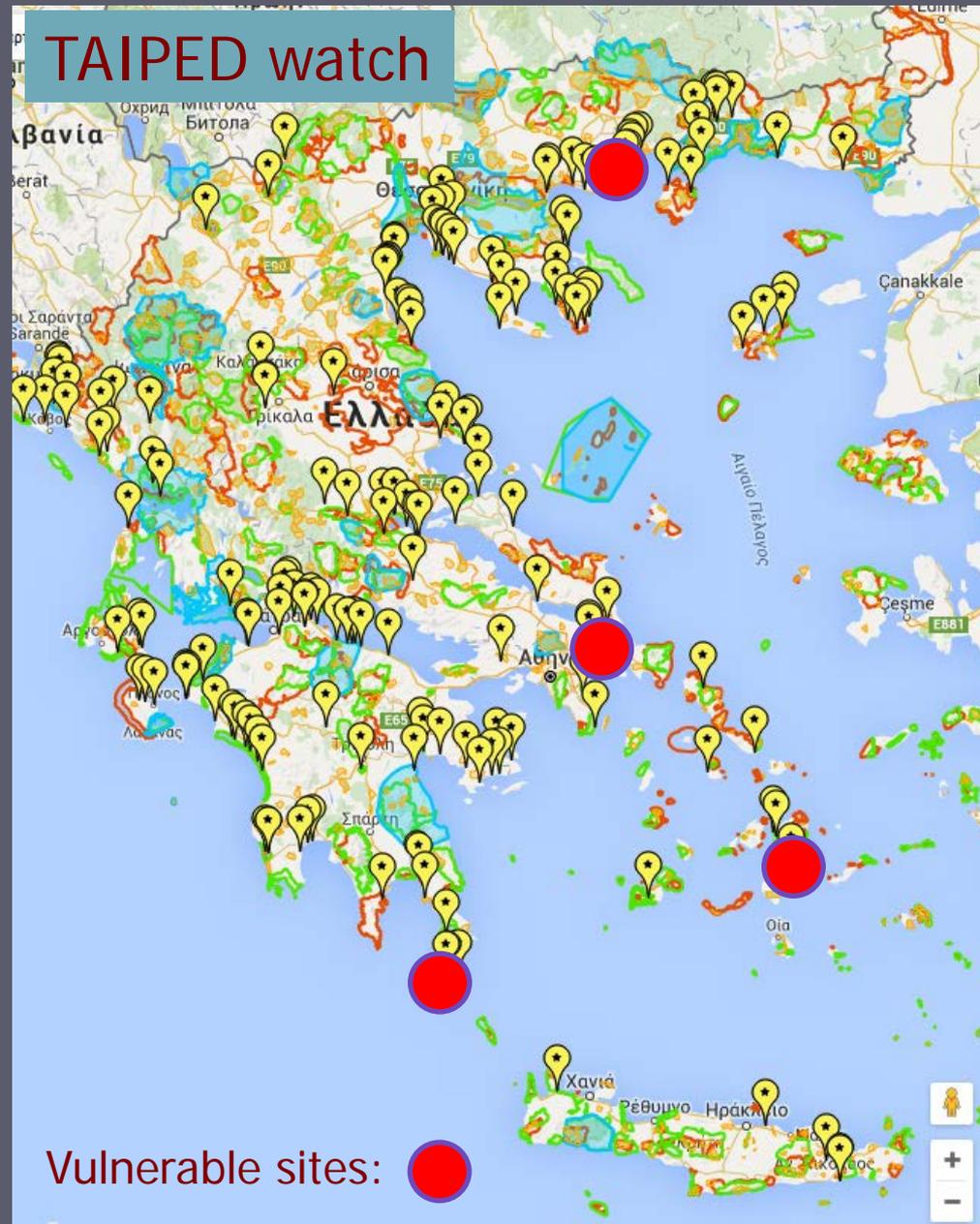
Προτεινόμενη περιοχή χωροθέτησης Α/Γ 

2011 - Hellenic Republic enforced a privatisation scheme

## Hellenic Republic Asset Development Fund (TAIPED)

- 400+ assets transferred to Fund by State.
- 5-50 year lease or sale of large plots of land to private stakeholders for development.
- Mainly coastal, many islets!

Of these **195** located within natural areas (8,800 ha)  
**47** are within Natura 2000 areas  
**41** are at a distance of 1km



Recent endeavours to change law on coastal shore

- Currently public land - 100 m
- Coastal shore not delineated

**Would lead to:**

- Decreased public access to coast
- Potential change of designation of protected areas
- Change in land-use and habitat degradation

e.g. Mass tourism developments & large hotel all-inclusive complexes on coast and on islets and relevant infrastructures

Habitat degradation	Breeding habitat loss
Disturbance at colonies	Reduced breeding success
Marine pollution	Reduced breeding success
Artificial lighting (Disorientation & Collisions)	Adult mortality

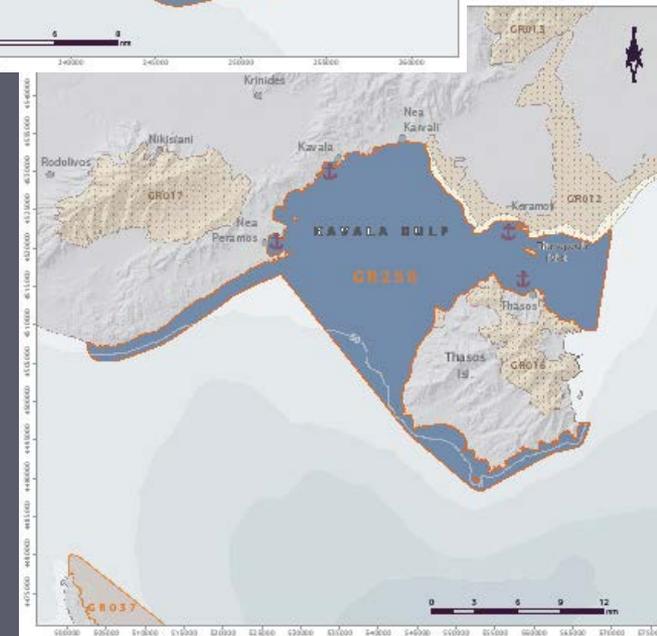
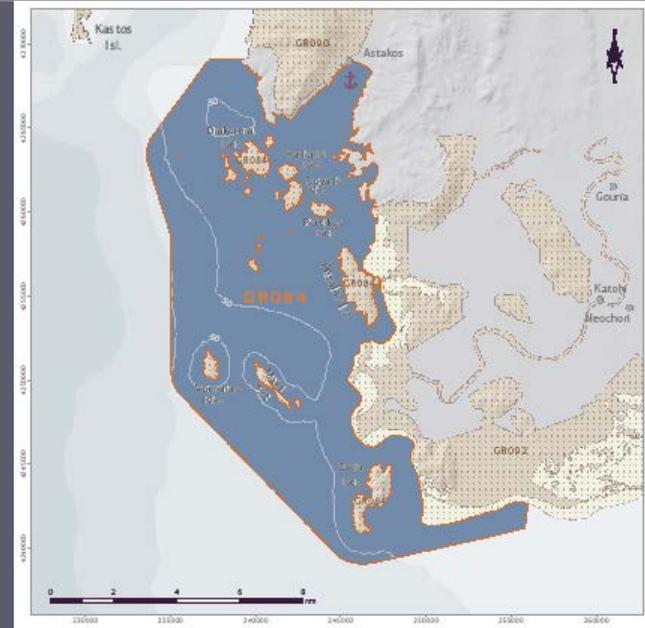
2 main areas in Greece

Ionian Sea – Echinades archipelago

Proximity to largest Scopoli's Shearwater colony in Greece

Northern Aegean Sea – Kavala Gulf

Important for migration and foraging of Yelkouan Shearwaters



Marine pollution

Reduced breeding success from reduced prey availability

Disturbance at colonies

Reduced breeding success

Disorientation & Collisions

Adult mortality

Activity	Threat	Effect
Wind farms (installation and operation)	Habitat degradation (on-shore)	Breeding habitat loss
	Habitat degradation (off-shore)	Rafts / Foraging habitat loss / migration routes
	Disorientation & Collisions	Adult mortality
Coastal (tourist) development	Habitat degradation	Breeding habitat loss
	Disturbance at colonies	Reduced breeding success
	Marine pollution	Reduced breeding success
	Artificial lighting (Disorientation & Collisions)	Adult mortality
Off-shore drilling	Marine pollution	Reduced breeding success
	Disorientation & Collisions	Adult mortality
Hydroplanes	Habitat degradation (off-shore)	Foraging habitat loss / migration routes
Fish-farm installations	Disturbance at colonies	Reduced breeding success
	Habitat degradation	Breeding habitat loss
	Disorientation & Collisions	Adult mortality

- **1997-99:** Actions for the Conservation of *Larus audouinii* in Greece (LIFE96 NAT/GR/003221)
- **2003-2007:** Conservation measures for *Falco eleonora* in Greece (LIFE03 NAT/GR/000091)
- **2007-2010:** Survey and conservation of seabirds in Greece (A.G. Leventis Foundation)
- **2008-2009:** Evaluation of 69 Important Bird Areas as Special Protection Areas
- **2009-2012:** Concrete conservation measures for the Mediterranean *Shag* and *Audouin's Gull* in Greece, including the inventory of relevant marine IBAs (LIFE07 NAT/GR/000285)
- **2013-2015:** Seabird project (A.G. Leventis Foundation)

