



Development & demonstration of management plans against  
-the climate change enhanced- invasive mosquitoes in S. Europe.  
(LIFE CONOPS- LIFE12 ENV/GR/000466)



## Gestione e controllo delle specie di zanzare invasive in Europa meridionale in rapporto con il cambiamento climatico (LIFE CONOPS – LIFE 12 ENV/GR/000466)

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**Budget:** 2,989,314 €

**EU financial contribution:** 1,480,656 €



ΔΗΜΟΚΡΙΤΟΣ

ΕΘΝΙΚΟ ΚΕΝΤΡΟ ΕΡΕΥΝΑΣ ΦΥΣΙΚΩΝ ΕΠΙΣΤΗΜΩΝ



Regione Emilia Romagna

SERVIZIO SANITARIO REGIONALE  
EMILIA-ROMAGNA

SERVIZIO SANITARIO REGIONALE  
EMILIA-ROMAGNA  
Azienda Unità Sanitaria Locale di Cesena

SERVIZIO SANITARIO REGIONALE  
EMILIA-ROMAGNA  
Azienda Unità Sanitaria Locale di Ravenna



CENTRO  
agricoltura ambiente

\*Giorgio Nicoli\*



Benaki Phytopathological Institute

# La zanzara a strisce bianconere



*Aedes albopictus* o Zanzara Tigre

# La situazione in Europa

- 2007 epidemia di Chikungunya ha colpito l'Emilia Romagna con circa 250 persone coinvolte
- 2010 infezioni endemiche causate dallo stesso arbovirus sono state rilevate nel sud della Francia
- 2010 registrati casi di Dengue autoctona in Croazia
- 2012 il *Centro Ellenico di Controllo delle Malattie* ha notificato 1 caso di Dengue in un uomo di 84 anni, poi morto

# Alcune informazioni significative

- zanzare del tipo *Aedes aegypti*, dopo decenni di assenza, sono state rilevate nuovamente in Russia meridionale, in Abcasia e in Georgia. Questo tipo di zanzara è stato identificato come il vettore della recente epidemia di *Dengue tipo 1* a Madeira in Portogallo, con circa 2.000 casi riscontrati
- 1927-1928 *Aedes aegypti* responsabile della più grave epidemia di Dengue degli ultimi 90 anni documentata in Europa: circa il 90% della popolazione di Atene fu infettata e si registrarono più di 1.000 morti

# Cosa si sta facendo

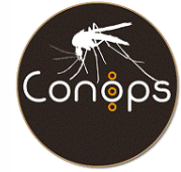
- I paesi del bacino del Mediterraneo risultano particolarmente esposti a malattie trasmesse da zanzare per l'elevata densità di popolazione dei vettori e l'estensione del periodo stagionale di attività
- Si stimano rischi per la trasmissione di Dengue a causa degli impatti del cambiamento climatico

# Cosa si sta facendo

- E' nato così a luglio 2013 un progetto per affrontare queste problematiche che vede la collaborazione di Grecia e Italia: **LIFE CONOPS** - in greco antico significa proprio zanzara -, finanziato dalla Commissione Europea
- LIFE CONOPS vuole prevenire l'ingresso delle specie invasive di zanzare che potrebbero divenire un problema sanitario per le popolazioni dei Paesi dell'Unione Europea
- Per approfondimenti <http://www.conops.gr>



# Actions plan



**A.1 Current state of the problem targeted**

**A.2 Environmental parameters affecting the invasive mosquitoes establishment**

**A.2 Environmental parameters affecting the invasive mosquitoes establishment**

**B.3 Development and production of biodegradable essential oils**

**B.5 Design of management plans**

**B.4 Future environmental data projection**

**B.1 Design and construction of the prototype invasive mosquitoes trap systems**

**B.2 Pilot monitoring**

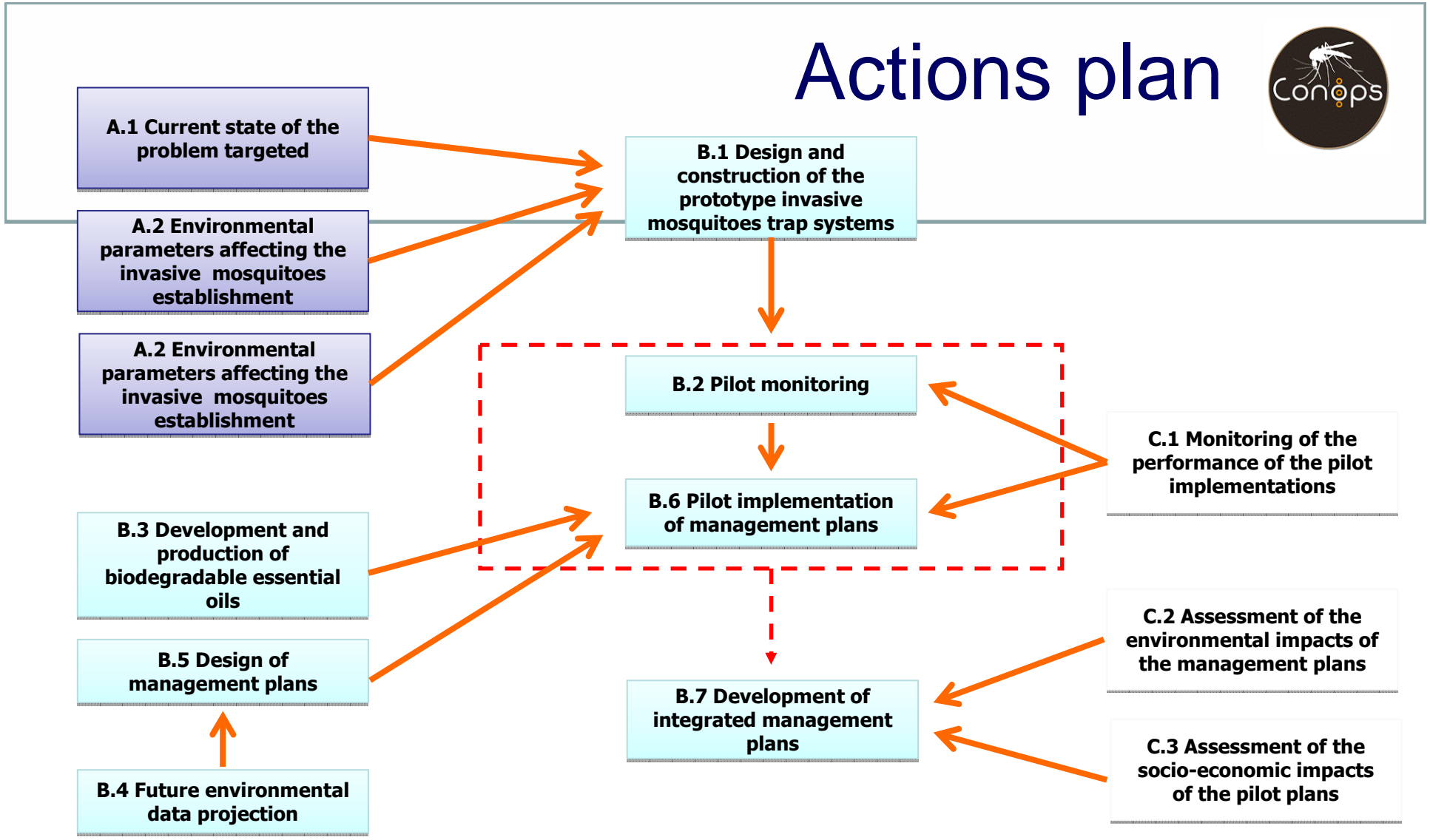
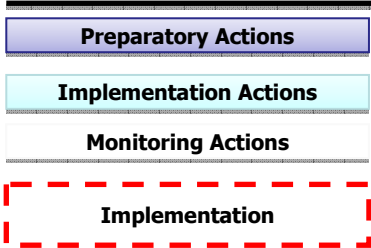
**B.6 Pilot implementation of management plans**

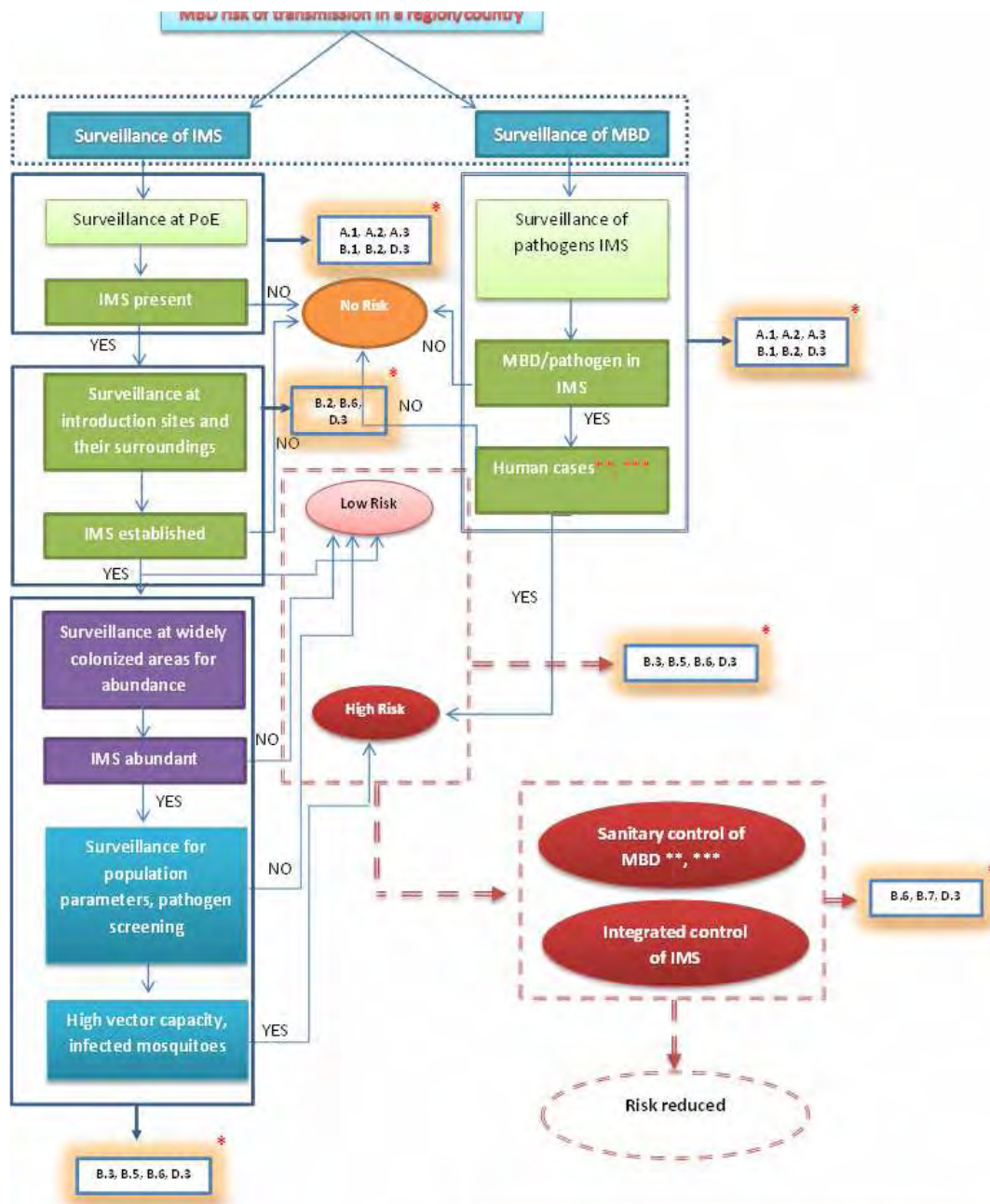
**B.7 Development of integrated management plans**

**C.1 Monitoring of the performance of the pilot implementations**

**C.2 Assessment of the environmental impacts of the management plans**

**C.3 Assessment of the socio-economic impacts of the pilot plans**





\* Actions B2 and B6 will also be supported by action C1 and action B7 by actions C2 and C3.  
 \*\* It does not fall within the scope and goals of the LIFE CONOPS  
 \*\*\*The human cases will be provided by the GR and IT Ministries of Health







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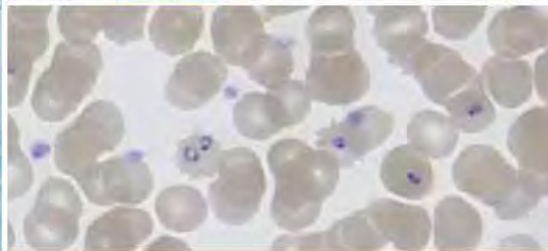


**TECHNICAL REPORT**

## Guidelines for the surveillance of invasive mosquitoes in Europe

## Framework for action

- raising awareness for action;
- integrated surveillance;
- preventing the introduction of *Aedes* mosquito species;
- preventing disease transmission;
- capacity building at national and regional levels;
- basic and applied research;
- regional and bilateral coordination;
- WHO EU Regional platform for coordination of activities among member States.



Regional Framework  
for surveillance and control  
of invasive mosquito vectors and  
re-emerging vector-borne diseases