



## SIXTH FRAMEWORK PROGRAMME

### SPECIFIC TARGETED RESEARCH OR INNOVATION PROJECT

**Project acronym:** RABMEDCONTROL

**Project full title:** “Identifying ecological and epidemiological key factors for rabies dynamics and control in North Africa and implications for rabies status in South West Europe”.





## Participant list

- 1-C1: Institut Pasteur, Paris, France (IPP)
- 2-C2: Institut Pasteur de Tunis, Tunisia (IPT)
- 3: Institut Pasteur d'Alger, Algeria (IPA)
- 4: Labo Régional Vétérinaires Casablanca, Morocco (LRC)
- 5: University of Barcelona, Barcelona, Spain (UB)
- 6: Agence Française de Sécurité Sanitaire et Alimentaire,  
Malzeville, France (AFSSA)
- 7: Instituto de Salud Carlos III, Madrid, Spain (ISC)
- 8: Istituto Zooprofilattico Sperimentale delle Venezie,, Italy (IZS)
- 9: Faculty of Veterinary Medicine, Egypt (FVM)





## Project objectives:

1. A global multidisciplinary approach to draw a precise picture of the rabies epidemiology in North Africa by identifying and quantifying epidemiological, ecological, sociological and vaccinological key factors for rabies dynamics, in order to provide health authorities recommendations based on scientific evidences for prevention and control strategies.
2. Study of the risk of rabies introduction to Europe from North Africa
3. Determine the possible overlapping of bat rabies epidemiological cycles between both shores.





## Work packages list

WP 1	Baseline epidemiological data
WP 2	Bats as rabies reservoirs
WP 3	Molecular epidemiology
WP 4	KAP surveys
WP 5	Project coordination and meetings





## Objectives of WP1: Baseline epidemiological data on human and animal rabies

- Incidence of human and animal rabies (historical and prospective follow-up in North African countries)
- Unveil the determining factors for post-exposure therapy failures.
- Standardize brain sampling and laboratory investigation tools.
- Establish the geographic distribution of human and animal rabies using GIS tool
- Standardize the management of people bitten by suspected animals





## Objectives of WP2: Investigation of the potential of bats as rabies reservoirs

To describe the epidemiology of bat lyssaviruses in North Africa:

- Collect bat samples for laboratory diagnosis
- Characterization of circulating bat lyssaviruses
- Identification of bat species that may act as reservoirs and vectors
- Determine the natural spread of the different bat lyssaviruses between North Africa and Europe
- Analyse the anthropogenic impact on bat habitats and its influence on bat rabies epidemiology





## Objectives of WP3: Molecular epidemiology of rabies strains

- Phylogeny of rabies isolates from North Africa
- Identify whether or not there is rabies-related lyssaviruses in North Africa
- Compare eventual North African bat lyssavirus isolates to European and Sub-Saharan African counterparts
- Detailed analysis of the genomic regions which may be involved in the animal species specificity





## **WP4: Objective1**

### **Rabies Perception by the population**

#### **Nature of the disease, its origin and its prevention**

- Role of dogs in rabies transmission
- Responsibilities of dog owners and legal texts.
- Owner attitudes towards dog divagation and vaccination
- Perception of risks by individuals and community leaders





## WP4: Objective2

### Dog ethology relevant to rabies dynamics and control

- Dog density and population turnover rate
- Percentage of owned versus ownerless dogs
- Accessibility of owned dogs to parenteral vaccination





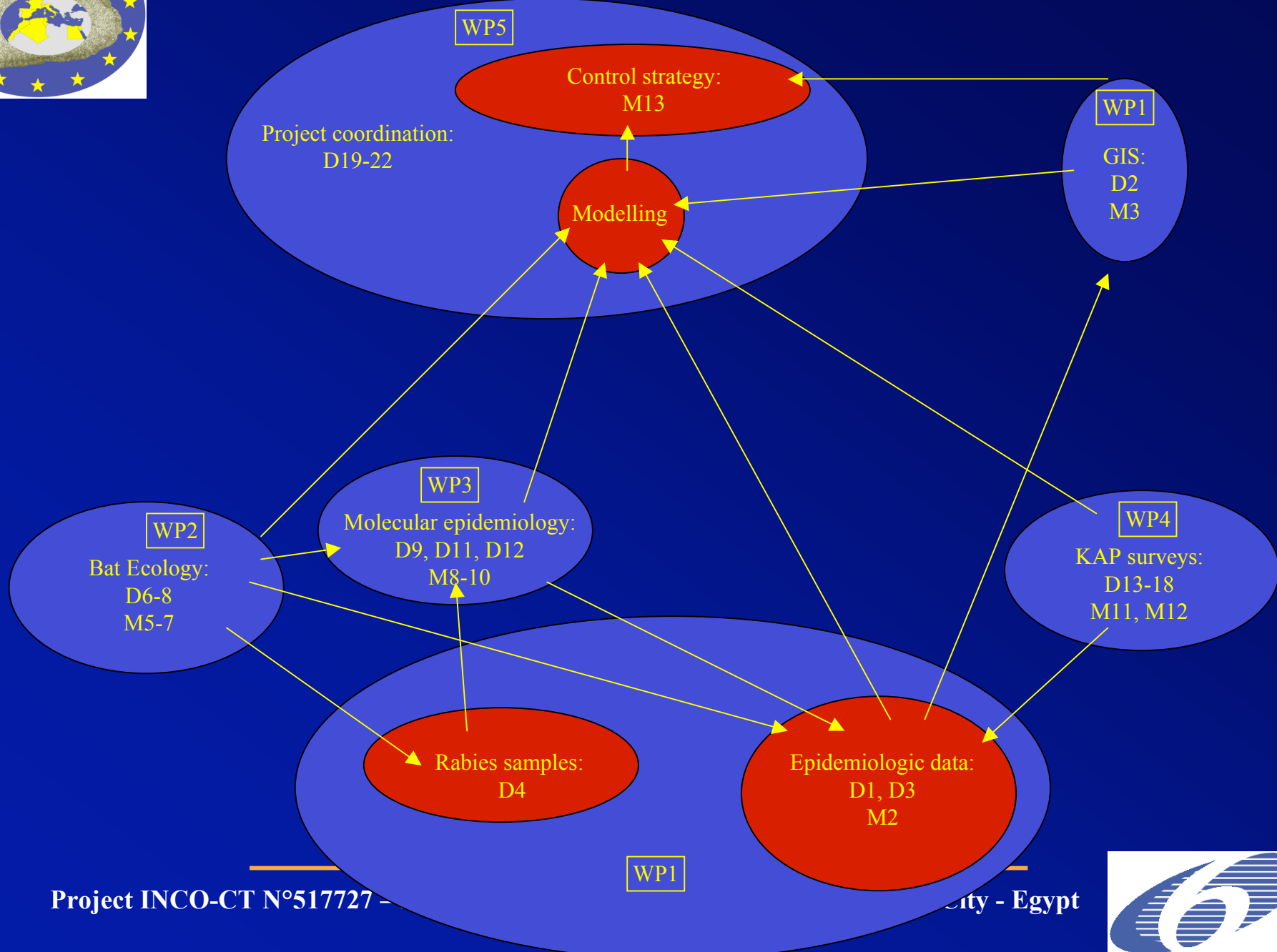
## WP5: Project coordination and meetings

1. - To initiate the project with a start meeting in order to define and coordinate precisely the intervention of each partner
2. To held an annual meeting between the partner researchers to ensure an appropriate follow up of the different work packages.
3. To held an end user conference to present the final project report of the analysed integrated data to establish a new/modified strategy of rabies control in North Africa.





# Workpackages interactions





# Project coordination

