

# COMBAT

## The COMBAT project - Controlling and progressively minimizing the burden of animal trypanosomosis

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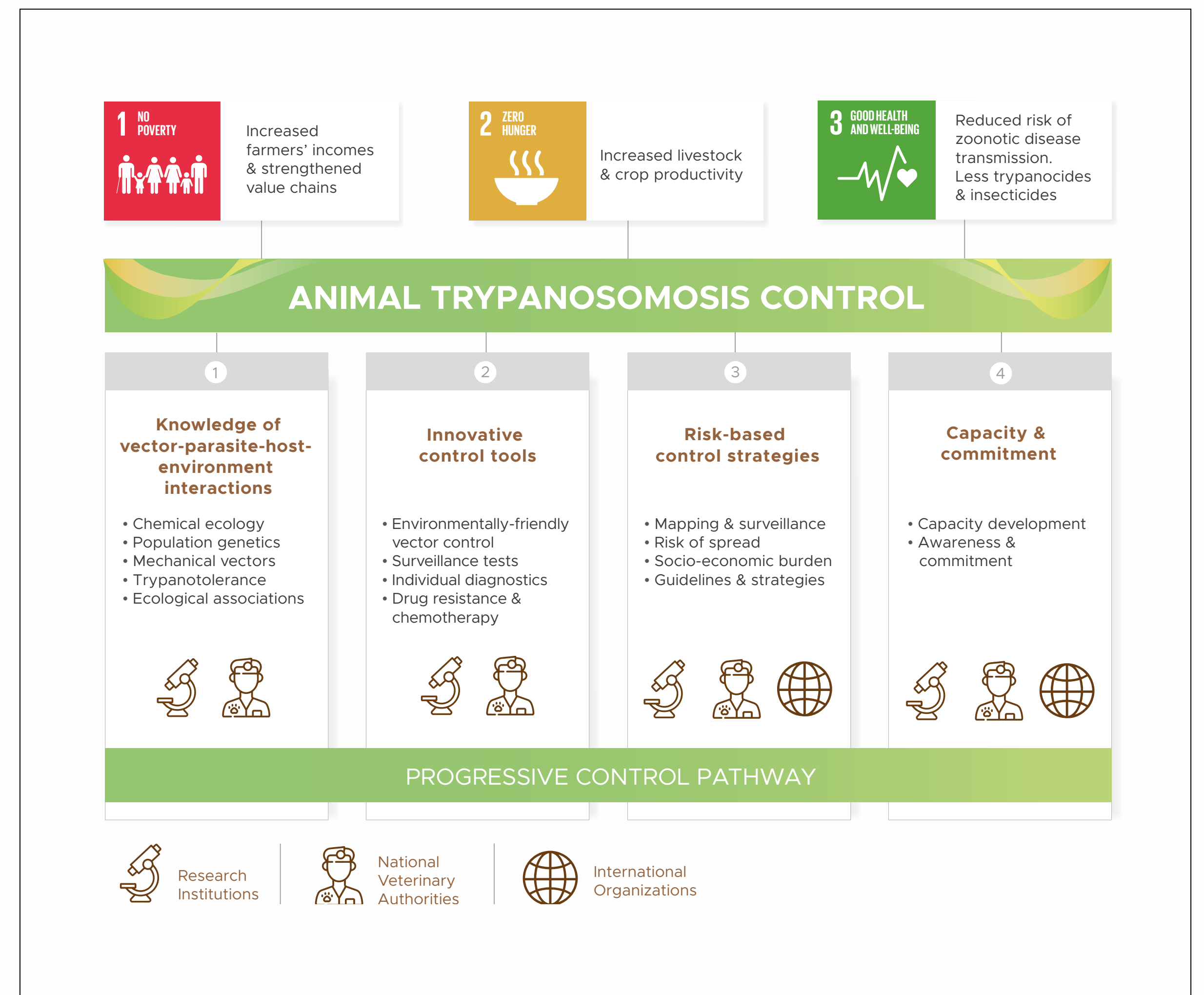
### PROJECT PILLARS

The COMBAT project started in September 2021, and its general objective is to **minimize the burden of animal trypanosomosis** in Africa by enhancing **disease control**. This contributes to the sustainable development goals of the United Nations, and especially the first three: **reduce poverty, alleviate hunger and promote good health and well-being**.

The project rests on four interconnected pillars:

- Pillar 1 - acquisition of **epidemiological knowledge** on the interactions between key players of AT in their environment;
- Pillar 2 - development of **innovative, sustainable tools** adapted to the African context to support control;
- Pillar 3 - establishment of rational, harmonized **strategies and road maps** based on sound epidemiological and socio-economic data;
- Pillar 4 - information, education and communication to ensure the **involvement of all stakeholders**.

All COMBAT activities are under the umbrella of, and contribute to, the **Progressive Control Pathway (PCP)**, an evidence-based, step by step approach to disease reduction and elimination. The PCP for AT includes **five stages**. The pre-entry level emphasizes **national commitment**. Stage 1 focuses on **mapping disease risk** and impacts, and **developing capacities** and strategies. Stage 2 aims at sustainable and profitable **reduction in AT**. Stages 3 to 5 target **disease elimination**, if and where the goal is technically feasible. Within a country, different areas can be at different stages of the PCP.



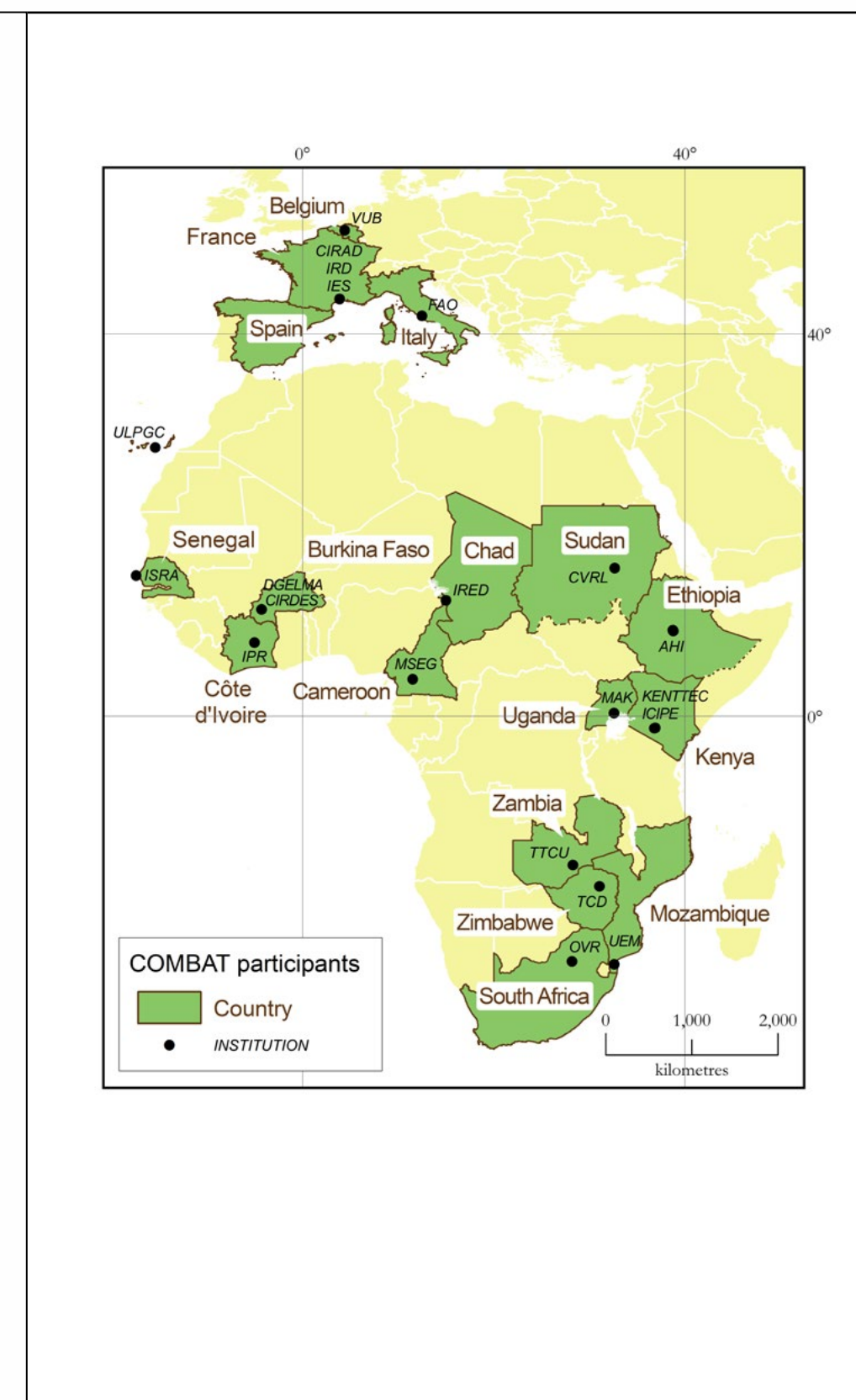
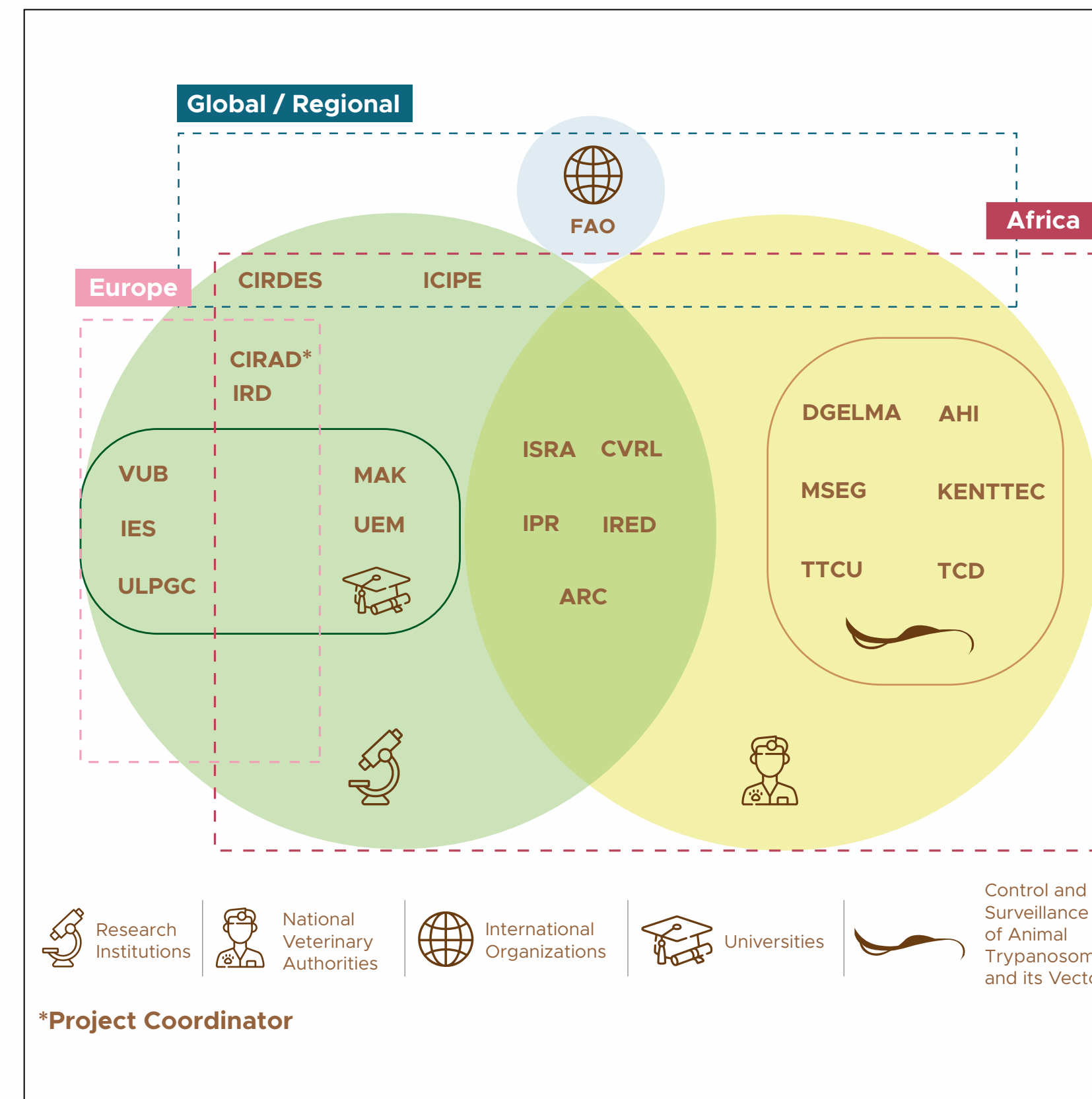
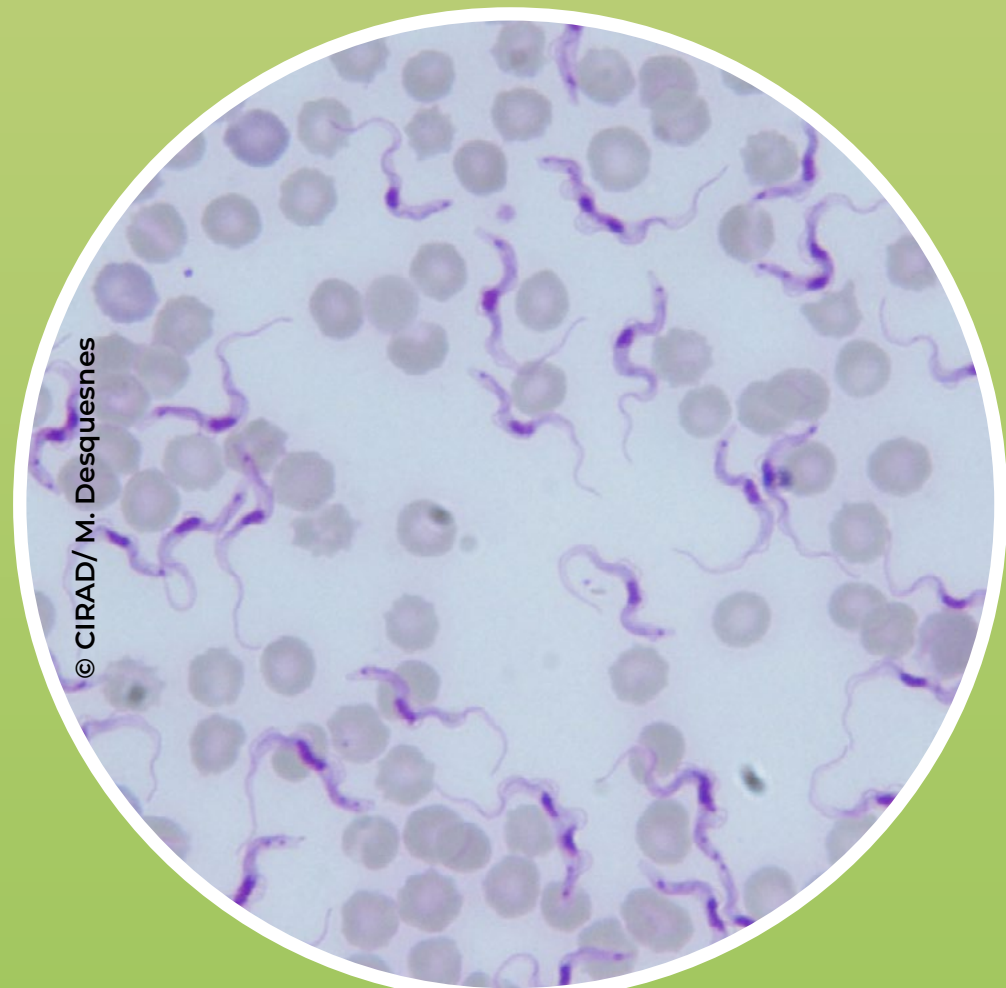
### PROJECT IN A NUTSHELL

<b>WHAT?</b>	Animal Trypanosomosis
<b>WHERE?</b>	Priority Areas: • High Impact • High Risk
<b>WHY?</b>	Burden in Africa Risk for EU
<b>HOW?</b>	Innovative Tools Robust Strategies
<b>WHO?</b>	Farmers, Veterinarians, Scientists, Politicians, Industry

**African trypanosomosis** affects both livestock and humans, with heavy socio-economic impacts in Africa. The disease is **vector-borne**, with transmission mainly carried out by **tsetse** but also by other biting flies. The animal form of the disease imposes a heavy burden on poor African livestock keepers, but it also occurs in Latin America and Asia, and incursions in mainland Europe have been reported. The human form of the disease, also known as **sleeping sickness**, is deadly, but with fewer than 1000 cases reported every year, the disease is presently targeted for elimination by the World Health Organization.

The ultimate goal of COMBAT is to alleviate the burden of **animal trypanosomosis (AT)** in Africa. The project builds on the **progressive control pathway (PCP)**, a data-driven, stepwise approach to disease reduction and elimination. COMBAT aims to improve basic knowledge of disease transmission, develop improved control tools, strengthen surveillance, rationalize control strategies, develop capacities and raise awareness. Open questions on disease epidemiology, trypanotolerance, vector ecology and competence are being investigated. Innovative, eco-friendly vector control tools and more effective diagnostics are being developed. Spatial information systems on disease and vector distribution are being created to map disease risk in Africa and beyond. Surveillance is enhanced through information technology and strengthened reporting. The burden of the disease is being estimated at different levels, from continental to local. PCP-smart control strategies and roadmaps are in the development process at country level, and they will be informed by internationally agreed guidelines.

A crucial asset of the COMBAT project is its consortium, with **21 participants**, both European and African research institutions, national veterinary authorities, a **geographically-balanced representation** across Africa, and international organizations. An authoritative External Advisory Board, a wide external network, and several regional activities will enhance the impacts of the project.



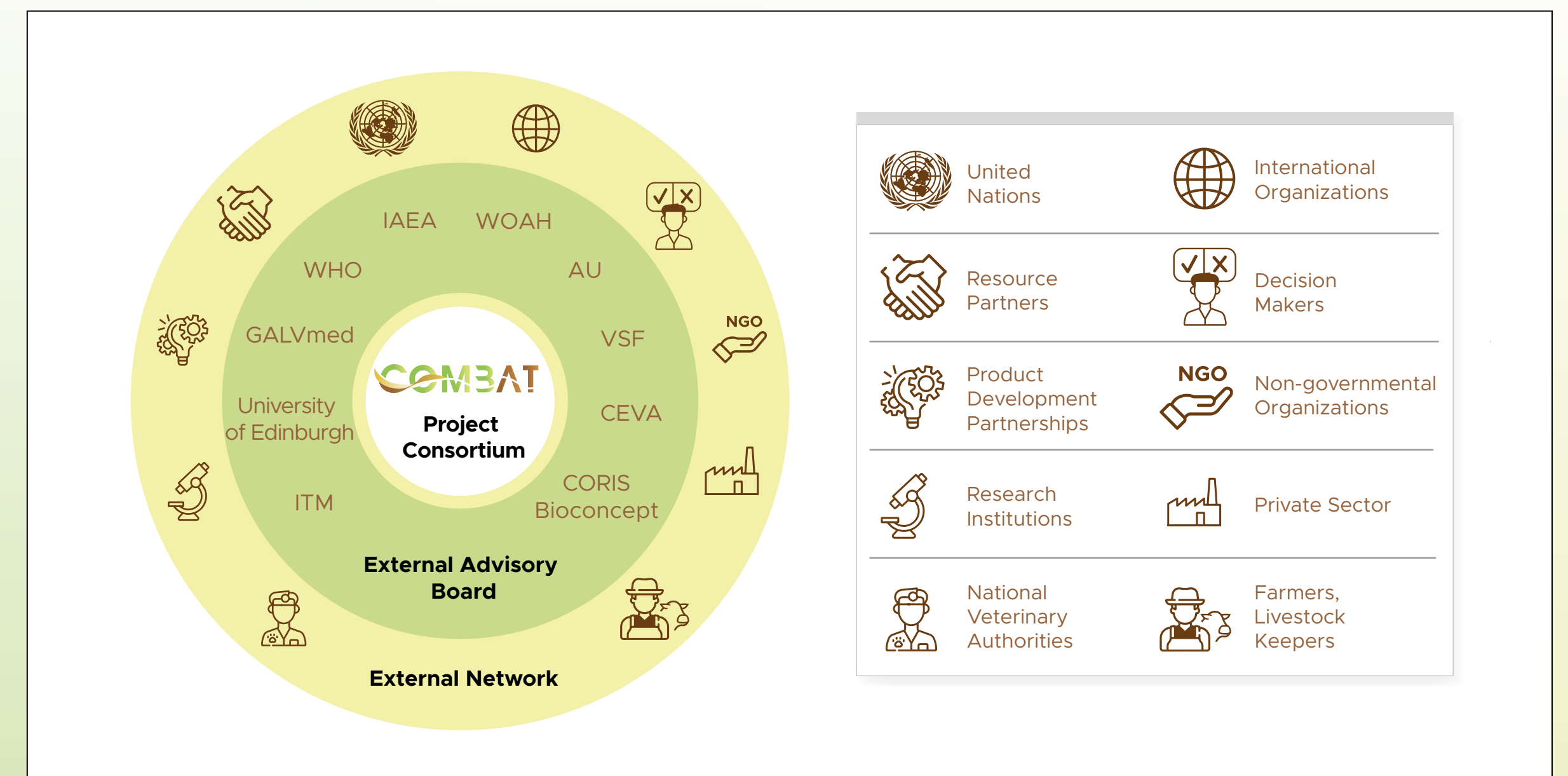
### CONSORTIUM OF EXCELLENCE

The COMBAT project brings together **21 partners** (5 European, 15 African and FAO).

The main strength of the COMBAT consortium is the broad participation of **AT-affected countries**, as well as a balanced representation of **research institutions** and **national authorities** in charge of the AT control and surveillance. Five of the African research institutions are embedded within the **national ministries of agriculture and livestock**, ensuring the link with the **veterinary services**. Of the five European institutions, two, including the project coordinator, are institutions mandated to support the **development of the South (CIRAD and IRD)**, with a long history of collaboration with AT-affected countries. The other three are universities holding highly **specialized expertise** in particular areas of research. Finally, the consortium benefits from the involvement of **FAO** with its global network of regional and country offices, which will help maximize the **project's contribution** to the PCP.

### EXTERNAL NETWORK

COMBAT is supported by a **broad network of external stakeholders**. A selected group of partners is more directly involved as advisors through an **external advisory board (EAB)**, which helps reflect in the project the **perspectives** of a wide **range of actors**. Other partners such as **decision-makers** and donors will be reached by **communication activities** and engaged through meetings and workshops. Noteworthy among the international organizations engaged in the control and elimination of African trypanosomosis and in the EAB are the World Health Organization (**WHO**), the International Atomic Energy Agency (**IAEA**), the World Organisation for Animal Health (**WOAH**) and the African Union (**AU**), which are contributing to, and benefitting from, the COMBAT project within their respective mandates and fields of expertise. Non-governmental organizations, farmers associations, other research institutions and both profit and not-for-profit organizations complete the network.



EU contribution: **5.9 M€**

### DO YOU WANT TO KNOW MORE?

Visit our website:  
[www.combat-project.eu](http://www.combat-project.eu)

Read this open letter:  
<https://doi.org/10.12688/openreseurope.14759.2>

Contact us at:  
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