The project in brief

- **3,4** million € of budget
- **36** months
- **2** countries
- **4** partners
- **2** final exercises
- **4** main objectives:

Improve on-site detection

Create a toolbox of laboratory methods to identify ricin and abrin

Develop forensic analysis (interventions; determination; procedures)

Define decisional strategies and procedures for first-responders and disease control institutions

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PLANT

Priority to threats posed by plant toxins

Project Partners

Co-financed by the ANR and the BMBF, the project is carried out by French-German actors of the fight against NRBCe threats (Nuclear, Radiological, Biological, Chemical, explosive) and aims at integrating first-responders feedback to expert analysis.

For this reason, the consortium gathers two scientific institutions (French Alternative Energies and Atomic Energy Commission/CEA, Robert Koch Institute/RKI) and three end-users (French General Directorate of National Police/DGPN, German Federal Criminal Police Office/BKA and RKI).

The project therefore starts from the requirements of first-responders in the public health sector and law enforcement agencies in charge of managing incidents caused by the voluntary release of ricin or abrin. Thanks to the crossed perspectives of the various participants and to the French-German cooperation, the project allows for an acceleration in the research of solutions at every level of crises management, be it on the decisional or technical and scientific side of things.

Context

Recent incidents in France, Germany and worldwide have highlighted the threat posed by biological toxins, especially the plant toxins ricin and the related abrin. The threat of bioterrorism increased over the last years and escalated in France and Germany in 2018, when the police prevented a bioterrorist attack in Cologne.

Ricin and abrin are two highly toxic elements, easily available and chemically close. Their joint consideration answers both a technical opportunity and a need for public health and safety.

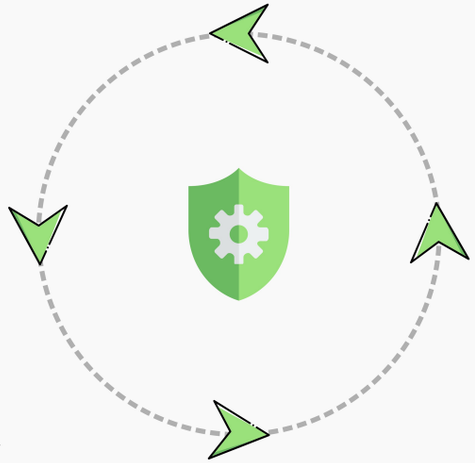
Work areas

1 **Preparedness to bioterrorist attacks**

Developement of standard operational procedures for public health services and law enforcement agencies.

2 **Prevention of further attacks**

Improving identification of perpetrators by the management of contaminated evidence and introducing molecular forenics on biotoxins.



3 **Detection of incidents**

Developing new on-site and lab analysis methods.

4 **Crisis management**

Conducting joint traning and exercises of complex bioterrorism scenarios.

5 **Recovery phase from a biological threat**

Evaluating advanced therapeutic countermeasures as well as environmental decontamination procedures against biotoxins.