



Rapidly Deployable Medical Mobile Lab for Epidemic Response and CBRN Preparedness

A Unique Achievement

Belgian Defence, Praesens Care, and LHUB-ULB (Laboratoire Hospitalier Universitaire de Bruxelles) have achieved a **world-first accreditation**: the **BIONEAR® mobile laboratory** is the **first ISO 15189-accredited mobile lab**, certified by BELAC, the Belgian Accreditation Organisation. This milestone demonstrates compliance with the same stringent quality standards as fixed laboratories—an unprecedented feat given the unpredictable and harsh conditions of field operations.

Why It Matters

- **Global Health Security:** Rapid, accurate diagnostics are critical for epidemic control and CBRN (Chemical, Biological, Radiological, Nuclear) preparedness.
 - **Bridging Gaps:** Mobile labs fill critical gaps in traditional healthcare chains, ensuring timely response in crises.
 - **International Recognition:** Accreditation opens doors for deployment in WHO-supported and other international projects.
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Dual-Use Capability

- **Civilian Applications:**
 - Epidemic response & routine diagnostics
 - Human & zoonotic disease surveillance
 - Vaccine delivery & biobanking
 - Cross-border health cooperation
- **Military Applications:**
 - Investigation & control of CBRN incidents

- Support for SIBCRA (Sampling and Identification of Biological, Chemical and Radiological Agents) teams and field hospitals (Role 2/3)
 - Genomic and epidemiological surveillance in operations
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Technology & Innovation

- **Mobile, Modular, Adaptable:** Mounted on military off-road chassis; operational in <30 minutes; deployable by road, sea, or air (A400M compatible).
 - **Advanced Biosecurity:**
 - Secure sample transfer & biosafety isolators
 - Integrated decontamination & waste management
 - Cold chain storage at +4°C, -20°C, -80°C
 - **Autonomous Systems:** Power generation, solar panels, satellite connectivity, tele maintenance.
 - **Extreme Readiness:** Designed for harsh climates (desert, arctic, tropical) and long-term remote deployment.
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Strategic Impact

This capability strengthens **Belgium's and NATO's readiness** for biological threats, pandemics, and bioterrorism, while supporting **global health resilience**.

Praesens Care & Belgian Defence: Protecting Anyone, Anywhere.



Pictures:

