



PRIME Alert

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NATO Science for Peace and Security Program, SPS G8765

<https://prime-alert.finki.net.mk>

PRIME Alert (Personalised Micro Environmental Change Alert) is an innovative Artificial intelligence approach to improving safety, effectiveness and awareness of first responders/soldiers in high-risk environments such as natural disasters (hurricanes, floods, fires) and combat scenarios (nerve gas, toxins in caves/tunnels). Unlike other existing systems, this project is a comprehensive solution for real-time estimation of danger in the hazardous environments.

The expected outcomes are affiliated to the AI enhanced on-site decisions, based on three sources: vital parameters sensors (SpO2, HR, RR), micro-environmental sensors (air quality, toxins, temperature), global environmental data (obtained from radars, weather stations). This system provides real-time health monitoring, stress-level assessment, and alerting utilizing automated speech. Responders/soldiers communicate with the Command Unit, the multi-user continuous monitoring part, represented by a software platform that facilitates commands to the responders/soldiers (regrouping, extraction). The Key objectives of the proposed solution are: integration of sensors, data collection, transformation, using artificial intelligence for Alerts generation and prediction of responders stress level, AI powered Speech recognition and automated health advice to the responders/soldiers, as well as centralized connectivity with the Command Unit.

Participating partners:

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