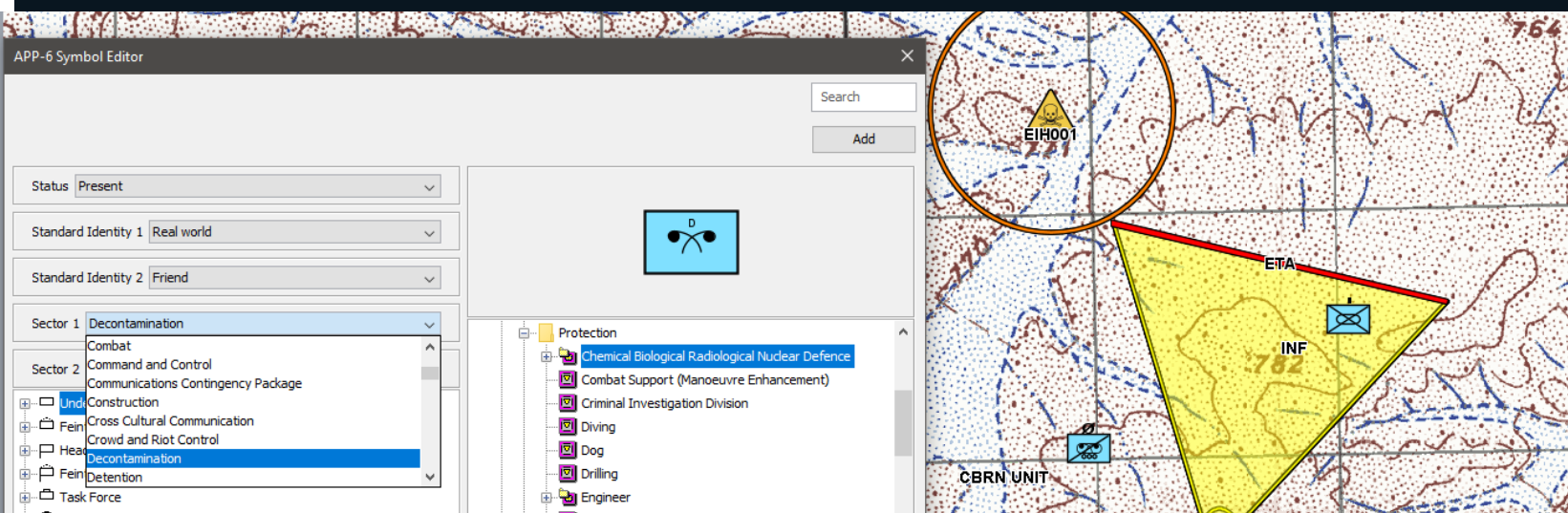# CBRN-Analysis

CBRN Defence Planning and Incident Management

Key Features

- Support the three pillars of CBRN Defence (ATP-3.8.1) – Prevent, Protect and Recover

- ATP-45 Edition F Version 2, AEP-45 Edition E Version 1 calculations and corresponding APP-11 formats, and APP-6(D) symbology

- Provides full Situational Awareness, including briefing requirements, of the CBRN Picture

- Calculation of the NATO approved Hazard Areas and Contaminated Areas for all types of CBRN Incidents (referencing Emergency Response Guide when necessary)

- Command CBRN planning and risk assessment supported by 'what-if' analysis of known or potential hazards within operational areas

- Compatible with a wide range of raster, vector and satellite image formats and support links to OGC web services with WMS data

- Generation of exercise planning material based on pre-planned incidents

- Support for HPAC (DTRA), HAPPIE (TNO) and RIMPUFF (DTU) models for Reach Back

- Integrated Modules enabling Knowledge Management including Sensor Integration, Web Map Service (WMS), CBRN Current Operational Picture (COP) Publisher, Computerised Assisted Training (CAX), and Language conversion

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Product Highlights

CBRN-Analysis is an advanced, off-the-shelf software-based CBRN Knowledge Management Application that includes Hazard Prediction and Warning and Reporting.

Configurable and modular, it provides commanders with rapid and accurate information to increase their CBRN situational awareness within an area where CBRN materials may be used.

CBRN-Analysis effectively supports and enhances risk-management in all phases of an operation, both in the planning and pre-deployment phase, in-theatre and in the post-conflict or recovery phase.

C4i Integration

- Configurable and modular integration into C4i systems better enabling interoperability between commands.

Operational Management

- The software automatically calculates the predicted CBRN hazard area and can quickly display that information on a map to the operator. The same data is used to identify key interest areas and units that are at risk.

Situational awareness

- CBRN-Analysis is designed to provide commanders with rapid and accurate information to help increase their situational awareness of the battlefield and enable informed decisions for saving lives, protecting assets and maintaining efficient operations.

"What-if" scenarios for pre-emptive planning

- CBRN-Analysis provides the user with the ability to set up defined 'risk objects' within the software. The 'risk object' can be a facility or any location that may be at risk from a CBRN incident, either as a target or as a known repository for hazardous materials.
- This 'what-if' scenario generation is a very powerful tool for effective planning; and facilitates time critical decision making and response.

Built-in briefing generation

- Briefing reports can be automatically generated as documents to provide incident and risk object information for briefing commanders or other stakeholders.
- Users can include customized operating procedures and checklists into the report template providing a complete information pack within a very short time of the incident.

NATO Compliance

- CBRN-Analysis complies with the latest NATO standards. These include the NATO publications of STANAG 2103 ATP-45 Edition F Version 2 and STANAG 2497 AEP-45 Edition E Version 1. CBRN-Analysis is continuously updated to conform to these rapidly changing standards.

Software Maintenance

- CBRN-Analysis is guaranteed to continuously comply with the latest edition of ATP-45/AEP-45 and is updated at least once a year.

Reduced procurement risk

- CBRN-Analysis can be fully interfaced and integrated across platforms, command control systems, and communication infrastructures. Integrated versions are available off the shelf for several C2 systems or as a Web Service (Service Oriented Architecture).
- Low risk sensor integration is also available via the SCIM® software application.

Product Specifications

The CBRN-Analysis package consists of
- CBRN-Analysis, Installation, Getting Started and User's Reference Guides
- Computer Aided Exercise (CAX) for getting started via self-training
- Software License Key protection
- Other modules as requested

Note - CBRN-Analysis is an Export Controlled software application covered by category ML21.b.3 in EU directive 2014/108/EU.

Technical Specifications

Hardware Requirements

Components	Requirement
Processor	Intel Core i5/AMD Ryzen 7 3700X
Free memory (after OS loaded)	≥1.5 GB
Graphics/memory	≥512 MB, ≥24-bit colours
Screen	≥1920x1080
DVD-drive	Depending on installation
Hard disk space (Application and CBRN data)	≥1 GB
Hard disk space (Map)	At least 5 GB (depends on maps to be used)
CAX module	750 MB
Network adapter	Required for communication

Note - If the program must run simultaneously with other applications, the requirements should be extended accordingly.

Software Requirements

Operating System (OS)	Service Packs
Windows 8.1 Pro, 32-bit or 64-bit	
Windows 10 Pro, 64-bit	The latest Service and Security Packs must be installed.
Windows 10 Enterprise, 64-bit	

Note - CBRN-Analysis does not support Windows Classic Theme and Windows High Contrast Themes..

Email Requirements

The optional e-mail communication capability is based on the MAPI interface supported by the following e-mail software

MAPI Interface	Service Packs
Microsoft Outlook 2013, 32-bit	
Microsoft Outlook 2016, 32-bit	The latest Service and Security Packs must be installed.
Microsoft Outlook 2019, 32-bit	
Microsoft 365, 32-bit	

Other Requirements

The briefing material capability is based on a Microsoft Word template. The following Microsoft Word versions are supported

| Document Interface	Service Packs
Microsoft Word 2013	
Microsoft Word 2016	The latest Service and Security Packs must be installed.
Microsoft Word 2019	
Microsoft 365	

Note - A PDF reader is required to open the user documentation included in the software.

Related Products

SCIM®

- SCIM® stands for "Sensor Connectivity Information Management" and is a software hub that provides sensor connectivity to multiple sensor types and brands in a single and effective display.

- The system allows collection of sensor data and formatting of that data into standard CBRN messaging for further dissemination via built-in communication applications. The software enables the capture of sensor data that can then be transmitted for further investigation. SCIM® is futureproofed as it allows any sensor or instrument to be replaced or added as technology advances.
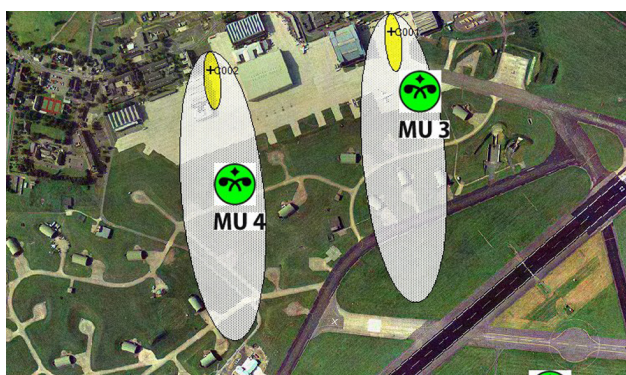
CBRN-Sim

- CBRN-Sim adds real time simulation of CBRN Ground contamination and Airborne hazards to SCIM® for Operator Sensor Integration Training.

- CBRN-Sim is a planning tool that allows an instructor to plan a scenario with chemical hazards including ground contamination and vapour, radiological hazards and nuclear fallout.

- CBRN-Sim provides the ability to add materials that generate false positive results for some of the sensor types.
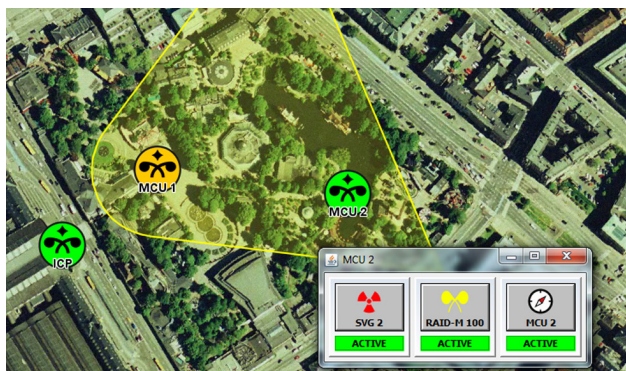
CBRNE-Frontline

- CBRNE-Frontline is a CBRNe Incident and Information management application for use in a wide range of situations requiring accurate incident and hazard prediction information to be made available to initial responders as rapidly as possible.

- CBRNE-Frontline is intuitive and easy to understand, removing some of the complexities associated with CBRNe hazard prediction and information management. This ease of use makes it an ideal tool for non-CBRNe specialists.

Additional Information

More information can be found at: **www.bruhn-newtech.com.**