

INTEGRATED CBRN SOLUTIONS

Defence Ready



“At OPEC we pride ourselves on the depth of our CBRN knowledge and experience in successfully delivering Defence projects since 1998. Our Defence division employs highly trained and skilled technicians – many of whom have worked in Defence, to ensure the success of every project.”

– Peter Murphy | Managing Director | OPEC Systems

With the recent increase in terrorist activities, the possibility of Defence personnel being exposed to Chemical, Biological, Radiological and Nuclear (CBRN) risks and the increased threats from naturally occurring viruses and diseases such as Ebola, OPEC Systems has created the only integrated CBRN solution in Australia; and in an Australian first, the dry decontamination system designed by OPEC. This Defence ready product brings together key equipment and provides a waterless decontamination system capable of decontaminating personnel, vehicles and equipment in both clean and hot zones; and quantifiable certification that they are clean prior to returning to operations, or exiting an area.

Through our global network of experienced Defence and first response community suppliers, we work with our clients to produce systems specific to the needs of a particular group, application or risk profile within their organisation. The OPEC integrated CBRN solution provides:

- Inter-compatibility across your complete CBRN equipment fleet
- A single point of contact, expertise and unparalleled Australia wide service
- Complete in-house system training capability.

Our Defence ready CBRN services and products include:

Physical Protection

The physical protection system provides cutaneous, respiratory and ocular protection to personnel operating within a CBRN threat environment. The capability facilitates the deployment of individual protection that is commensurate with the level of the CBRN threat or realised event. Products include protective ensemble, collective protection and individual respite.

Warning and Reporting

The warning and reporting system predicts and communicates, in near to real time, the movement of CBRN hazards encountered in the period following the detection of a contamination event. Products include weather monitoring and predictive modelling and reporting systems.

Hazard Management

The hazard management system enables the decontamination of personnel, equipment and the environment. Products include the dry decontamination system, individual decontamination, collective decontamination, equipment decontamination and environmental hazard management.

Detection, Identification and Monitoring

The detection, identification and monitoring system is intended to provide a graduated capability of CBRN hazard detection, identification and analysis. Through the deployment of multiple systems, exposure to hazards will be minimised through the provision of capabilities proportional to the CBRN threat. Products include personal detection, area detection, unmanned survey, and sampling and identification.

Medical Support

During CBRN incidents the management of medical casualties entails careful patient management procedures to prevent cross contamination. OPEC's medical support solutions assist the safe movement and effective treatment of CBRN hazard casualties. Products include contaminated casualty transport and handling, and diagnostic support.

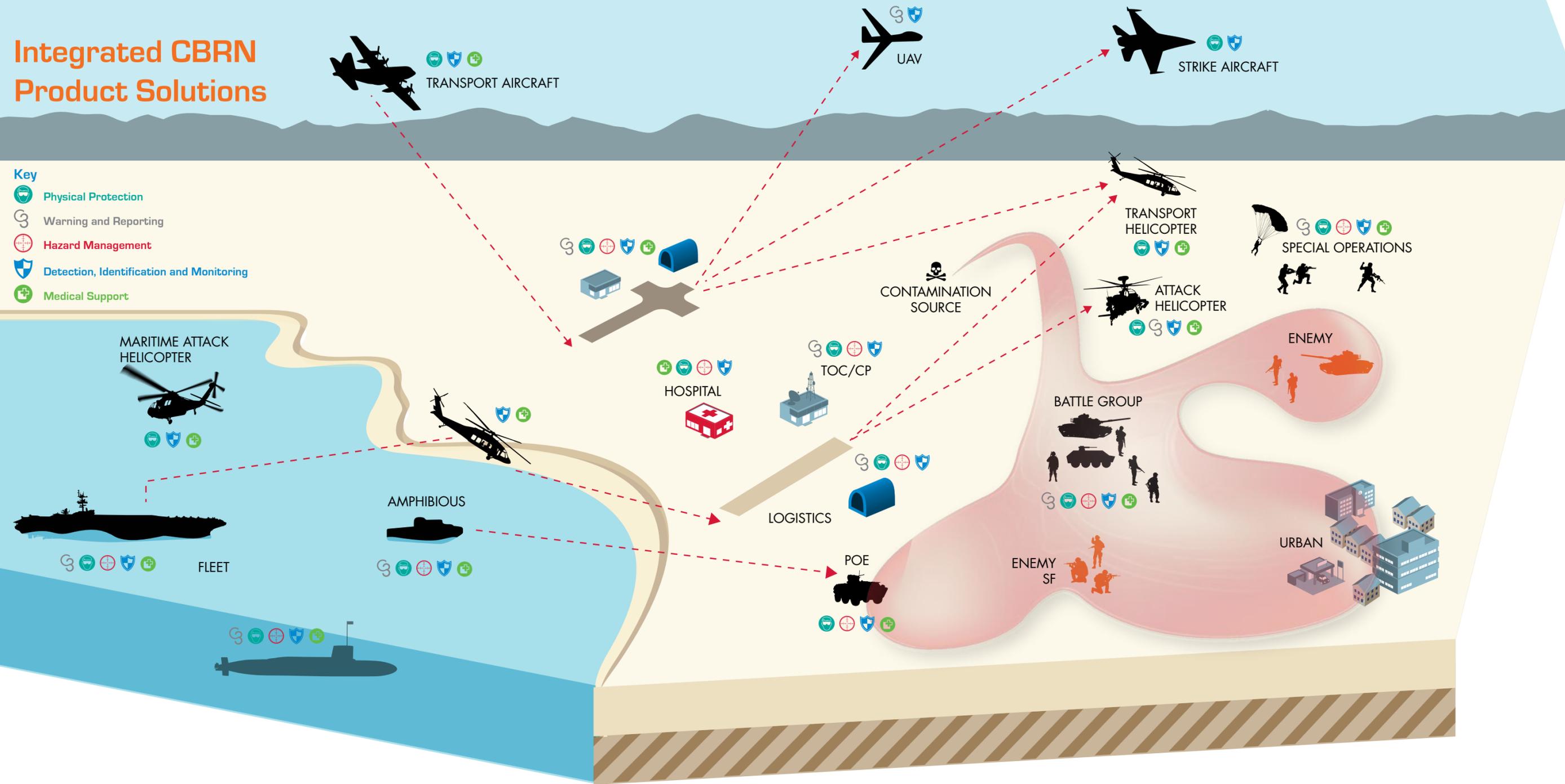
About Us

OPEC Systems is a privately owned Australian company first established in Sydney in 1992. OPEC has over 20 years' of industry experience providing equipment and services to manage risks in a broad range of hazardous land and marine based operational environments. OPEC has worked in partnership with Defence and first response industries to create and deliver workable, effective solutions for CBRN related issues.

Our carefully constructed procedures and quality management systems have seen the company achieve AS/NZS4801:2001 accreditation and ISO9001:2008 accreditation. We are also one of about 200 companies with Office of the Federal Safety Commissioner (OFSC) safety accreditation. OPEC is also a member of the Defence Environment and Heritage Panel (DEHP) as a specialist contractor on contaminated sites.

Integrated CBRN Product Solutions

- Key**
- Physical Protection
 - Warning and Reporting
 - Hazard Management
 - Detection, Identification and Monitoring
 - Medical Support



CBRN Equipment

Physical Protection

The protection of personnel in a hostile environment is the number one priority of any military or first response organisation. Having effective, portable equipment in a ready-to-deploy state is key to responding effectively. Products include:

- Alaska XP Shelter Systems revolutionary design allows for rapid setup. Shelter systems with 4 personnel provides cover within 5 minutes and complete setup within 10 minutes. Available as a COLPRO with decontamination, medical, stores and TOC/CP versions. All models can be connected using purpose designed vestibules to allow varying layouts for difficult/restricted access sites. Part of the OPEC Dry Decontamination System. The Alaska XP shelter system also provides the containment environment for OPEC's unique Dry Decontamination system.
- The Seyntex Medium Weight 1 (MW1) suit has been designed with the user in mind incorporating key features to make wearing a CBRN suit no more of a burden than a standard uniform. Compatible with all CBRN respirators, the MW1 can be laundered up to 10 times and has a 10 year shelf life.

Warning and Reporting

The CBRN contaminated environment is not a static situation but rather a constantly changing set of environmental parameters that needs ongoing real time monitoring to allow users to adjust their location and approach for optimum effect. Products include:

- CoBRA provides a large, easily searchable CBRN reference library, interactive tools to document the site, create reports, and establish stand-off distance and decontamination procedures. No network connectivity required.

Hazard Management

OPEC has a broad range of decontamination equipment to suit our clients' needs, from decontamination agents and personal applicators, through to decontamination shower systems for personnel and mass casualty decontamination. Be it a military application for individual decontamination after a Chemical Warfare Agent (CWA) event or a hospital-based system for mass decontamination. All equipment is tailored based on individual client requirement.

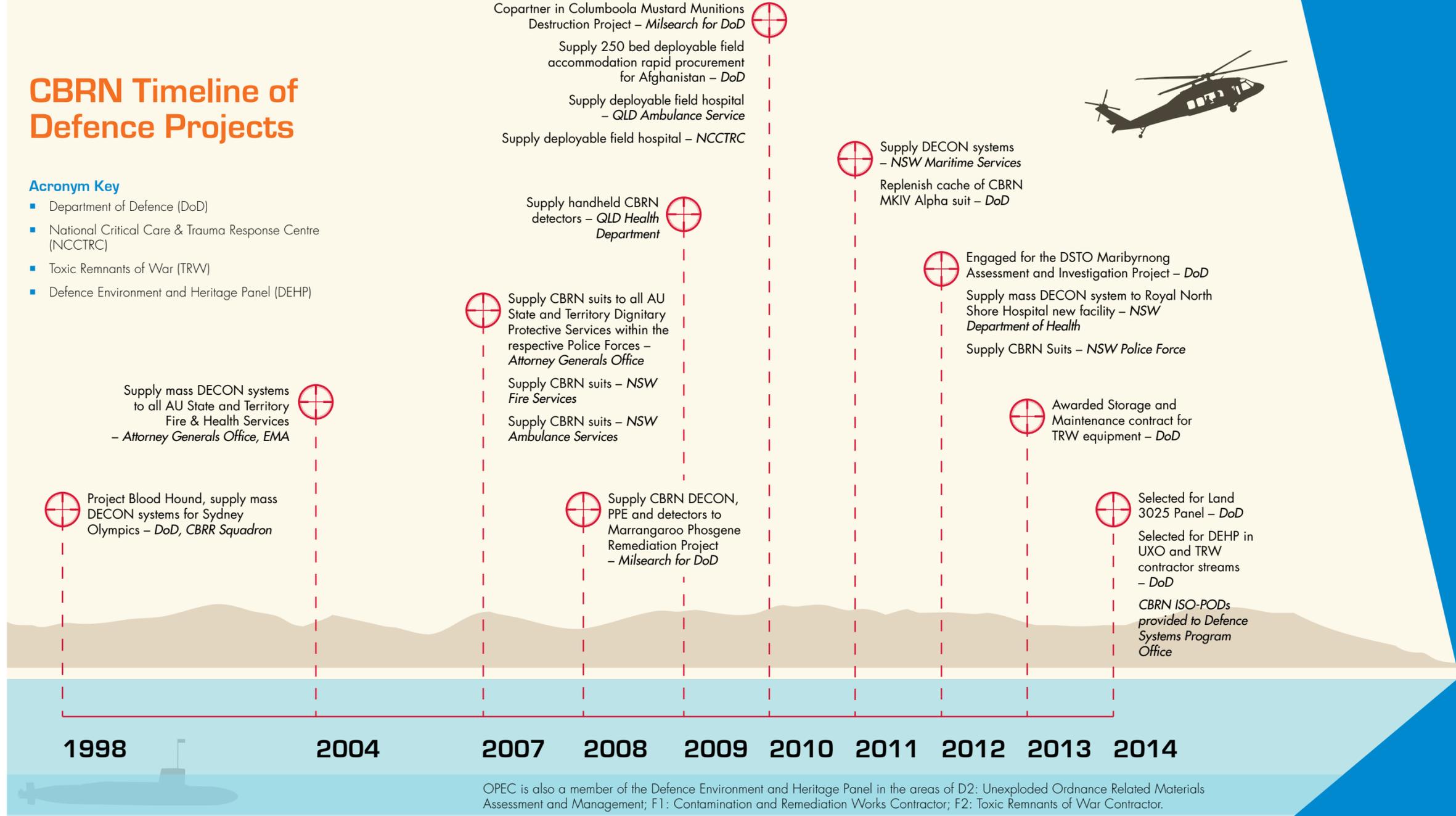
OPEC has been selected to supply decontamination systems to every Fire Brigade and Health Service in Australia as well as the Australian Defence Force. Products include:

- FAST-ACT is a micron sized material with nanomaterial properties used for absorption and neutralisation of a variety of CWA and Toxic Industrial Chemical (TIC). It can be safely applied to any surface or object contaminated by toxic liquid spill or vapour release, enabling Emergency Responders to utilise one product when faced with a wide variety of known or unknown chemical hazards. The system has been proven to quickly contain and destroy a wide range of toxic chemicals, including chemical warfare agents. FAST-ACT has been adapted by OPEC into a dry decontamination capability deployed via a dry powder extinguisher available in various sizes depending on user requirements. Additionally, the FAST-ACT Individual Decontamination Mitt contains FAST-ACT powder in a contained pad with a polyethylene backing.
- DeconGel™ is a proven, tough, professional, military-grade water soluble, and environmentally friendly product for extreme, hard-to-clean contamination remediation challenges for any industry. It is exceptionally effective against radioactive isotopes in decon operations associated with nuclear plant decommissioning and nuclear medicine spills, toxic industrial chemicals and materials such as mercury, PCB, acids, lead, asbestos, and methamphetamines.

CBRN Timeline of Defence Projects

Acronym Key

- Department of Defence (DoD)
- National Critical Care & Trauma Response Centre (NCCTRC)
- Toxic Remnants of War (TRW)
- Defence Environment and Heritage Panel (DEHP)



OPEC is also a member of the Defence Environment and Heritage Panel in the areas of D2: Unexploded Ordnance Related Materials Assessment and Management; F1: Contamination and Remediation Works Contractor; F2: Toxic Remnants of War Contractor.



Detection, Identification & Monitoring Equipment

In the event of a CBRN event, it is critical that the first responders have the information required to manage the containment and decontamination of the area and the control of personnel within the contaminated environment. OPEC is proud to represent some of the world's leaders in detection, identification, monitoring, warning and reporting of CWA and TIC contaminants. Products include:

- The MM2 from Bruker Daltronics is able to identify any organic chemical from any medium (soil, water, air) within 15 minutes via complementary sampling techniques. New libraries can be created and used by the customer. The system can be integrated into vehicles or networks of chemical and biological detectors. Low detection limits allow users to determine if personnel or equipment are truly decontaminated and clean.

Medical Support

Through our relationship with Blu-Med Response Systems, one of the world leaders in providing turn-key hospital solutions, OPEC is able to provide a large variety of military and civilian hospital solutions through its subsidiary Mobilis Medical. Products include:

- ISO-POD™ Negative and Positive Pressure Individual Isolation System – for transporting contaminated patients through a clean area or clean patients through a contaminated area. The ISO-POD protects healthcare providers and creates a positive air pressure environment for burn or immune compromised patients. The flow of air provided by the filtration system also helps cool and relax the patient.



“OPEC is unique in that not only do we sell the equipment but we also use it operationally, train with it, service it and store and maintain it. It's a complete package.”

– Connor Walsh | CEO | OPEC Systems

As a key supplier of CBRN equipment to Defence since 1998, OPEC has evolved a significant in-house capability for managing the logistics associated with our clients' CBRN equipment fleets. From fabric and frame repairs on shelter systems to the calibration and servicing of highly sensitive detectors in our climate controlled workshops, OPEC provides our clients with a full after sales service capability for any equipment which we sell.

Our Defence ready integrated CBRN solutions have been successfully implemented by the OPEC team on projects such as Bloodhound, Marrangaroo Phosgene Remediation and Columboola Mustard Munition Destruction (see CBRN Timeline of Defence Projects). Our people are the single most important factor in driving the company forward and, as such, we ensure the highest level of health, safety and welfare for our staff. Quality equipment and training is critical to achieving this.

OPEC is unique in the market in that it not only supplies and maintains the equipment, as a specialist civilian contractor in the toxic remnants of war space and a systems maintainer for Defence's CBRN fleet, we are also an everyday user of the equipment. As a result, our system user knowledge is exceptionally strong and we have the practical experience to truly support our clients in getting the best out of their equipment.

With seven bulk storage warehouses, offices and workshops across Australia, OPEC also provides a secure contract storage and maintenance service for our clients. OPEC maintains an accessible, online equipment register and maintenance schedule on behalf of Defence and other government agencies. The OPEC Stores Managers ensure that equipment is 100% functional and ready for deployment and OPEC maintains responsibility for 24 hour equipment dispatch and recovery. Providing the best equipment is only the first step in OPEC's ongoing partnership with our clients.

OPEC is able to provide all operator and maintainer training for the equipment supplied through use of our highly experienced CBRN operators and backed by OEM developed training packages which can be tailored to meet the end-users' requirements. This includes collective and individual training needs for specific equipment and integrated systems.

“Providing the best equipment is only the first step in OPEC’s ongoing partnership with our clients.”



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