The Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Market 2013-2023

Description: This report is the result of extensive market and company research covering the global CBRN defense industry. It provides detailed analysis of both historic and forecast global industry values, factors influencing demand, the challenges faced by industry participants, analysis of the leading companies in the industry, and key news.

Why was the report written?

‘The Global CBRN Defense Market 2013-2023’ offers the reader detailed analysis of the global CBRN defense market over the next ten years, alongside potential market opportunities to enter the industry, using detailed market size forecasts.

What are the key drivers behind recent market changes?

The global CBRN defense market is estimated to value US$9 billion in 2013. The market consists of CBRN protection, detection, decontamination, disposal, and simulation equipment, and is expected to witness a marginal increase during the forecast period, primarily due to modernization initiatives planned in North America and Europe, and threats from terrorism and hostile neighboring countries in the Asia Pacific and Middle Eastern regions. The market is expected to increase at a CAGR of 4.2% during the forecast period, to reach US$13.7 billion by 2023. CBRN protection equipment is expected to account for the majority of the global CBRN defense market, followed by detection and decontamination systems.

What makes this report unique and essential to read?

‘The Global CBRN Defense Market 2013-2023’ provides detailed analysis of the current industry size and growth expectations from 2013 to 2023, including highlights of key growth stimulators. It also benchmarks the industry against key global markets and provides detailed understanding of emerging opportunities in specific areas.

Key Features and Benefits

The report provides detailed analysis of the market for CBRN defense equipment during 2013-2023, including the factors that influence why countries are investing or cutting defense expenditure. It provides detailed expectations of growth rates and projected total expenditure.

Despite a number of developed countries, mostly in Europe, having called for a complete shutdown of nuclear reactors in all countries around the world, global nuclear energy generation is expected to increase significantly over the forecast period. Rapidly increasing demand for electricity, along with increasing fossil fuel prices, are making nuclear power an increasingly attractive option for many countries, especially in those where large-scale alternative energy generation such as wind and solar are not feasible. It has also been reported that over 60 power reactors are currently being constructed in 13 countries including Turkey, Taiwan, China, South Korea, Poland, Bangladesh, Russia, the UAE, and India. All of these countries will have to spend on CBRN incident protection in order to ensure that tragedies such as the Fukushima spillover are avoided.

Key Market Issues

One of the key issues facing the industry is to develop technically advanced and cost effective prototypes that can be transferred to mass production without much difficulty. The major impact is currently felt in developing advanced protective suits that need to counter changing threats while at the same time being light so as to minimize the physical load on the wearer. Specifically, companies are trying to address the heat load stress issue by aiming for a balance between a generic outfit and a highly technological garment. These innovations require significant funding and with the global economy just emerging from the economic crisis and defense budgets being cut, companies are hard pressed to get the required funding.
Since the CBRN protection industry is currently in its nascent stage, it requires considerable funding from the public and private sectors to develop effective counter measures against potential threats. However, recent years have witnessed various instances of neglect towards the CBRN sector; cancelled programs, cutbacks in research funding, and a focus on other defense sectors threaten to plague the industry. In 2004, the US Congress passed the Project BioShield Act in an effort to get the private sector to develop medical countermeasures against CBRN terrorism agents and to provide a mechanism for the government to acquire these countermeasures.

Key Highlights

One of the main factors resulting in continuous demand for CBRN protection, detection, and decontamination equipment is the dual use of these agents in everyday life. The advancement in the fields of biotechnology, nuclear energy, and life sciences has the potential to bring about significant benefits for the betterment of mankind; however, these developments can also be used for hostile purposes and to perpetrate various instances of bio-terrorism, which is why it is imperative for scientists and the security community to constantly engage with each other and devise methods to prevent or counter any forms of CBRN terrorism.

Budget cuts are expected to prompt DoDs to provide war fighters and first responders with products already on the market or about to hit the market. These budget constraints are also expected to encourage the modification and refit of existing technologies and equipment in order to enhance the capabilities of CBRN defense forces while maintaining low budgets. As has been seen in the case of the US, the UK, and Japan, budget constraints have urged procurement departments to opt for dual use COTS products, which enables defense departments to save costs while at the same time provides CBRN defense personnel with equipment that offers a range of flexibility to meet multiple scenarios and requirements.

Contents:

1 Introduction
   1.1 What is this Report About?
   1.2 Definitions
   1.3 Summary Methodology
   1.4 About Us

2 Executive Summary

3 Global CBRN Defense Market Size and Drivers
   3.1 CBRN Defense Size and Forecast 2013-2023
      3.1.1 Global CBRN Defense market expected to witness a moderate increase
   3.2 Global CBRN Defense Market - Regional Analysis
      3.2.1 North America is expected to lead the global CBRN defense market
      3.2.2 International missions, the threat of terrorism in the US, and congressional mandate towards
demilitarization to support the global CBRN defense market during the forecast period
      3.2.3 European CBRN defense market expected to account for the second highest spending over the
forecast period
      3.2.4 CBRN defense market expected to grow at a CAGR of 10% in the Asia-Pacific region
      3.2.5 Threats emanating from unstable governments and radical terrorism expected to drive investment in
CBRN defense in the Middle East
      3.2.6 Brazil expected to be the highest spender on CBRN defense in the Latin American region
      3.2.7 Markets in Africa expected to increase over the forecast period
   3.3 CBRN defense Sub-Sector Market Size Composition
      3.3.1 CBRN detection and protection to account for 60% of the market during the forecast period
      3.3.2 Market for CBRN detection to register a CAGR of 4.1%
      3.3.3 CBRN protection market to experience robust growth over the forecast period
      3.3.4 CBRN Decontamination market to grow at a CAGR of 4.5%
      3.3.5 CBRN simulation market to be driven by a rising emphasis on training and development of emergency
response teams
      3.3.6 Market for CBRN disposal to decline over the forecast period
   3.4 Demand Drivers and Growth Stimulators
      3.4.1 Threat from terrorist organizations and hostile neighboring countries expected to fuel global demand
      3.4.2 Easy availability of CBRN device technology is increasing the need for countries to take added
precaution
      3.4.3 Increasing use of nuclear energy for civilian purposes
      3.4.4 Demilitarization mandates of the US and Russia expected to remain major drivers of CBRN defense
expenditure over the forecast period
3.5 Defense Budget Spending Review
3.5.1 European capital expenditure expected to increase during the forecast period
3.5.2 Asian defense budgets expected to increase at a robust pace
3.5.3 North American defense expenditure projected to decline marginally during the forecast period
3.5.4 Modernization programs likely to drive defense expenditure in South American countries
3.5.5 Military budgets of African countries expected to increase during the forecast period
3.5.6 Defense budgets of Middle Eastern countries likely to increase during the forecast period
3.6 Defense Modernization Review
3.6.1 Debt crisis in Europe leading to postponement of modernization plans
3.6.2 Arms race in Asia reflected in modernization plans
3.6.3 North American modernization plans marginally affected by economic recession
3.6.4 Modernization programs in South America driven by replacement of obsolete armaments
3.6.5 African countries mainly spending on infantry weapons, and surveillance and monitoring equipment, to slow growing crime rate
3.6.6 Middle Eastern countries pursuing modernization of air force and air defense systems

4 Industry Trends, Recent Developments, and Challenges
4.1 Technological Developments
4.1.1 New polymer nanofibers to neutralize chemical and biological threats
4.1.2 Spain developing a new vehicle for effective CBRN detection
4.1.3 Chinese army developing decontamination cars
4.1.4 DRDO of India to test CBRN emergency mitigating technologies
4.1.5 Spain's Indra developing a vehicle for recognizing CBRN threats
4.2 Market Trends
4.2.1 Substantial funds to be directed towards COTS procurement
4.2.2 Increase in government spending on civilian protection
4.3 Industry Consolidation
4.3.1 Joint ventures and alliances for RandD and manufacturing expected to increase during the forecast period
4.3.2 The industry is witnessing a period of moderate consolidation
4.4 Key Challenges
4.4.1 The dynamic nature of CBRN threats makes it hard for companies to adapt

5 SWOT Analysis of the CBRN Defense Market
5.2 Strengths
5.2.1 Continuing demand fuelled by dual use of CBRN elements
5.2.2 The current Syrian CBRN threat
5.3 Weaknesses
5.3.1 Rarity of hostile CBRN attacks
5.3.2 Shrinking defense budgets
5.4 Opportunities
5.4.1 Demand for decontamination systems to witness robust growth over the forecast period
5.4.2 CBRN disposal equipment to witness robust demand to 2017 due to demilitarization mandates
5.5 Threats
5.5.1 Low priority could result in decreased spending
5.5.2 Insufficient research funding in the sector

6 Country Analysis - CBRN Defense
6.1 United States Market Size and Forecast 2013-2023
6.1.1 CBRN detection segment expected to account for the largest segment during the forecast period
6.1.2 Spending on the CBRN protection segment expected to grow at a CAGR of 1.9% over the forecast period
6.1.3 The CBRN disposal segment accounts for 16.5% of the market during the forecast period
6.2 UK Market Size and Forecast 2013-2023
6.2.1 CBRN protection segment expected to account for the largest segment in the UK
6.2.2 CBRN detection market to register a CAGR of 2.4% during the forecast period
6.2.3 CBRN decontamination to account for the third largest area of expenditure over the forecast period
6.3 Russia Market Size and Forecast 2013-2023
6.3.1 CBRN protection segment account for the largest area of expenditure by Russia
6.3.2 CBRN detection market to account or 23% of the Russian CBRN defense market
6.3.3 Disposal of chemical and nuclear weapons stockpile to drive CBRN disposal segment expenditure in Russia
6.4 Japan Market Size and Forecast 2013-2023
6.4.1 Protection expected to account for the largest share of the Japanese CBRN defense market
6.4.2 The market for CBRN detection in Japan expected to grow at a CAGR of 30%
6.4.3 CBRN decontamination to account for the third largest area of expenditure over the forecast period
6.5 Indian Market Size and Forecast 2013-2023
6.5.1 CBRN detection expected to grow at a CAGR of 4% over the forecast period
6.5.2 CBRN Protection is expected to account for the second largest share of expenditure by India during the forecast period
6.5.3 CBRN Decontamination to account for the third largest segment of expenditure on Indian CBRN defense
6.6 Israel Market Size and Forecast 2013-2023
6.6.1 CBRN protection market to grow at a CAGR of 12.6% during the forecast period
6.6.2 CBRN decontamination market to account for the second largest segment of investment during the forecast period
6.6.3 CBRN detection market to grow at a CAGR of 10.8% during the forecast period
6.7 UAE Market Size and Forecast 2013-2023
6.7.1 CBRN protection expected to be driven by the procurement of personnel protection equipment
6.8 Brazil Market Size and Forecast 2013-2023
6.8.1 CBRN protection segment expected to account for the largest area of expenditure during the forecast period
6.8.2 Expenditure on CBRN detection to grow at a CAGR of 8.8% over the forecast period

7 Major CBRN Defense Programs
7.1 CBRN Protection
7.1.1 US - CBDP - Installation Protection Program (IPP)
7.1.2 Australia - JP2110 Phase 1B
7.1.3 Australia - JP 3025 Deployable SOER Capability Phase 1
7.2 CBRN Detection
7.2.1 India - Wheeled NBC Recce Vehicle
7.2.2 Japan - Procurement of advanced CBRN monitoring systems
7.2.3 US - Joint Biological Point Detection Systems
7.3 CBRN Decontamination
7.3.1 US - Design and Installation of Maryland Testing System
7.3.2 US - EURODECONT program
7.3.3 US - CBDP decontamination program
7.4 CBRN Disposal
7.4.1 US - Demilitarization support program
7.5 CBRN Simulation
7.5.1 India - Procurement of CBRN training simulators
7.5.2 Canada - Procurement of training simulators

8 Competitive Landscape and Strategic Insights
8.1 Competitive Landscape Overview
8.1.1 Smiths Detection: overview
8.1.2 Smiths Detection: products and services
8.1.3 Smiths Detection: alliances
8.1.4 Smiths Detection: recent contract awards
8.1.5 FLIR Systems Inc.: overview
8.1.6 FLIR Systems Inc.: products and services
8.1.7 FLIR Systems Inc.: alliances
8.1.8 FLIR Systems Inc.: recent contract awards
8.1.9 FLIR Systems Inc.: financial analysis
8.1.10 Battelle: overview
8.1.11 Battelle: products and services
8.1.12 Battelle: alliances
8.1.13 Battelle: recent contract awards
8.1.14 MRIGlobal: overview
8.1.15 MRIGlobal: products and services
8.1.16 MRIGlobal: recent contract awards
8.1.17 AirBoss of America Corporation: overview
8.1.18 AirBoss of America Corporation: products and services
8.1.19 AirBoss of America Corporation: recent contract awards
8.1.20 AirBoss of America Corporation: financial analysis
Table 11: Japanese CBRN Defense Market Overview
Table 12: Major Japanese CBRN Defense Programs
Table 13: Indian CBRN Defense Market Overview
Table 14: Major Indian CBRN defense Programs
Table 15: Israeli CBRN Defense Market Overview
Table 16: Major Israeli CBRN Defense Programs
Table 17: UAE CBRN Defense Market Overview
Table 18: Brazilian CBRN Defense Market Overview
Table 19: Program Details - Installation Protection Program (IPP)
Table 20: Program Details - JP 2110 Phase1B
Table 21: Program Details - JP 3025 Deployable SOER Capability Phase 1
Table 22: Program Details - Wheeled NBC Recce Vehicle
Table 23: Program Details - Procurement of advanced CBRN monitoring systems
Table 24: Program Details - Joint Biological Point Detection Systems program
Table 25: Program Details - Design and Installation of Maryland Testing System
Table 26: Program Details - EURODECONT Program
Table 27: Program Details - CBDP Decontamination
Table 28: Program Details - Demilitarization Support Program
Table 29: Program Details - Procurement of CBRN training simulators
Table 30: Program Details - Procurement of Training Simulators
Table 31: Key CBRN Defense Manufacturers and Capabilities
Table 32: Smiths Detection: Alliances
Table 33: Smiths Detection: Recent Contract Awards
Table 34: FLIR Systems Inc.: Alliances
Table 35: FLIR Systems Inc.: Recent Contract Awards
Table 36: Battelle: Alliances
Table 37: Battelle: Recent Contract Awards
Table 38: MRIGlobal: Recent Contract Awards
Table 39: AirBoss of America Corporation: Recent Contract Awards
Table 40: Allen Vanguard Corporation: Alliances
Table 41: Allen Vanguard Corporation: Recent Contract Awards
Table 42: Argon Electronics: Alliances
Table 43: Argon Electronics: Recent Contract Awards
Table 44: Avon Rubber PLC: Recent Contract Awards
Table 45: Bioquell PLC: Recent Contract Awards
Table 46: Blucher GmbH: Recent Contract Awards
Table 47: Bruker Corporation: Alliances
Table 48: Bruker Corporation: Recent Contract Awards
Table 49: Federal Resources Supply Company: Alliances
Table 50: Federal Resources Supply Company: Recent Contract Awards
Table 51: PROENGIN: Recent Contract Awards
Table 52: Rheinmetall AG: Alliances
Table 53: Rheinmetall AG: Recent Contract Awards
Table 54: Temet Group: Recent Contract Awards
Table 55: Defense Capital Expenditure of Top North American Defense Spenders (US$ Billion), 2013-2023
Table 56: Defense Capital Expenditure of Top Three European Defense Spenders (US$ Billion), 2013-2023
Table 57: Defense Capital Expenditure of Top Three Asian Defense Spenders (US$ Billion), 2013-2023
Table 58: Defense Capital Expenditure of Top Three South American Defense Spenders (US$ Billion), 2013-2023
Figure 1: Global CBRN Defense Market (US$ Billion), 2013-2023
Figure 2: CBRN Defense Market Breakdown by Region (%), 2013-2023
Figure 3: North American CBRN Defense Market (US$ Billion), 2013-2023
Figure 4: European CBRN Defense Market (US$ Billion), 2013-2023
Figure 5: Asia-Pacific CBRN Defense Market (US$ Million), 2013-2023
Figure 6: Middle East CBRN Defense Market (US$ Million), 2013-2023
Figure 7: Latin American CBRN Defense Market (US$ Million), 2013-2023
Figure 8: African CBRN Defense Market (US$ Million), 2013-2023
Figure 9: CBRN Defense Market Breakdown by Segment (%), 2013-2023
Figure 10: Global CBRN Detection Market Size (US$ Billion), 2013-2023
Figure 11: Global CBRN Protection Market Size (US$ Billion), 2013-2023
Figure 12: Global CBRN Decontamination Market Size (US$ Billion), 2013-2023
Figure 13: Global CBRN Simulation Market Size (US$ Billion), 2013-2023
Figure 14: Global CBRN Disposal Market Size (US$ Billion), 2013-2023
Figure 15: Defense Capital Expenditure of Top Three European Defense Spenders (US$ Billion), 2013-2023
Figure 16: Defense Capital Expenditure of Top Three Asian Defense Spenders (US$ Billion), 2013-2023
Figure 17: Defense Capital Expenditure of Top Three South American Defense Spenders (US$ Billion), 2013-2023
Figure 18: Defense Capital Expenditure of Top Three Asian Defense Spenders (US$ Billion), 2013-2023
Figure 19: Defense Capital Expenditure of Top Three African Countries (US$ Billion), 2013-2023
Figure 20: Defense Capital Expenditure of Top Three Middle Eastern Defense Spenders (US$ Billion), 2013-2023
Figure 21: CBRN Defense Market in the US (US$ Billion), 2013-2023
Figure 22: CBRN Defense Market by Category in the US (%), 2013-2023
Figure 23: CBRN Detection Market Size in the US (US$ Billion), 2013-2023
Figure 24: CBRN Protection Market Size in the US (US$ Billion), 2013-2023
Figure 25: CBRN Disposal Market Size in the US (US$ Billion), 2013-2023
Figure 26: CBRN Defense Market in the UK (US$ Billion), 2013-2023
Figure 27: CBRN Defense Market Split by Sector in the UK (%), 2013-2023
Figure 28: CBRN Protection Market Size in the UK (US$ Million), 2013-2023
Figure 29: CBRN Detection Market Size in the UK (US$ Million), 2013-2023
Figure 30: CBRN Decontamination Market Size in the UK (US$ Million), 2013-2023
Figure 31: CBRN Defense Market in the Russia (US$ Million), 2013-2023
Figure 32: CBRN Defense Market By Category in Russia (%), 2013-2023
Figure 33: CBRN Protection Market Size in Russia (US$ Million), 2013-2023
Figure 34: CBRN Detection Market Size in Russia (US$ Million), 2013-2023
Figure 35: CBRN Disposal Market Size in Russia (US$ Million), 2013-2023
Figure 36: CBRN Defense Market in Japan (US$ Million), 2013-2023
Figure 37: CBRN defense Market Split by Sector in Japan (%), 2013-2023
Figure 38: CBRN Protection Market Size in Japan (US$ Million), 2013-2023
Figure 39: CBRN Detection Market Size in Japan (US$ Million), 2013-2023
Figure 40: CBRN Decontamination Market Size in Japan (US$ Million), 2013-2023
Figure 41: CBRN Defense Market in India (US$ Million), 2013-2023
Figure 42: CBRN Defense Market Split by Sector in India (%), 2013-2023
Figure 43: CBRN Detection Market Size in India (US$ Million), 2013-2023
Figure 44: CBRN Protection Market Size in India (US$ Million), 2013-2023
Figure 45: CBRN Decontamination Market Size in India (US$ Million), 2013-2023
Figure 46: CBRN Defense Market in Israel (US$ Million), 2013-2023
Figure 47: CBRN Defense Market Split by Sector in Israel (%), 2013-2023
Figure 48: CBRN Protection Market Size in Israel (US$ Million), 2013-2023
Figure 49: CBRN Decontamination Market Size in Israel (US$ Million), 2013-2023
Figure 50: CBRN Detection Market Size in Israel (US$ Million), 2013-2023
Figure 51: CBRN Defense Market in UAE (US$ Million), 2013-2023
Figure 52: CBRN Defense Market by Sector in the UAE (%), 2013-2023
Figure 53: CBRN Protection Market Size in the UAE (US$ Million), 2013-2023
Figure 54: CBRN Defense Market in Brazil (US$ Million), 2013-2023
Figure 55: CBRN Defense Market Split By Category in Brazil (%), 2013-2023
Figure 56: CBRN Protection Market Size in Brazil (US$ Million), 2013-2023
Figure 57: CBRN Detection Market Size in Brazil (US$ Million), 2013-2023
Figure 58: FLIR Systems Inc. - Revenue Trend Analysis (US$ Million), FY2008-2012
Figure 59: FLIR Systems Inc. - Operating Profit (US$ Million), FY2008-2012
Figure 60: FLIR Systems Inc. - Net Profit Trend Analysis (US$ Million) FY2008-2012
Figure 61: AirBoss of America Corporation - Revenue Trend Analysis (US$ Million), FY2008-2012
Figure 62: AirBoss of America Corporation - Operating Profit (US$ Million), FY2008-2012
Figure 63: AirBoss of America Corporation - Net Profit Trend Analysis (US$ Million), FY2008-2012
Figure 64: Avon Rubber PLC - Revenue Trend Analysis (£ Million), FY2008-2012
Figure 65: Avon Rubber PLC - Operating Profit Trend Analysis (£ Million), FY2008-2012
Figure 66: Avon Rubber PLC - Net Profit Trend Analysis (£ Million), FY2008-2012
Figure 67: Bioquell PLC - Revenue Trend Analysis (GBP Million), FY2008-2012
Figure 68: Bioquell PLC - Operating Profit Trend Analysis (GBP Million), FY2008-2012
Figure 69: Bioquell PLC - Net Profit Trend Analysis (GBP Million) FY2008-2012
Figure 70: Bruker Corporation - Revenue Trend Analysis (US$ Million), FY2008-2012
Figure 71: Bruker Corporation - Operating Profit Trend Analysis (US$ Million), FY2008-2012
Figure 72: Bruker Corporation - Net Profit Trend Analysis (US$ Million) FY2008-2012

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