### IMPLEMENTACE AKČNÍHO PLÁNU EU PRO CBRN LÁTKY – VÝZVY V OBLASTI ŘÍZENÍ A TECHNOLOGIÍ

# EUROPEAN CBRN ACTION PLAN IMPLEMENTAION – OPERATIONAL AND TECHNOLOGICAL CHALLENGES

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### **Abstract**

Threats to the society such as industrial and natural disasters, armed conflicts, terrorism, pandemics are constantly increasing, and through on-going globalisation, the impacts of incidents have increasingly cross-border, even global consequences.

Efficient protection of citizens through anticipation, deterrence, preparedness, response and adaptation to crisis situations – in other words, maintaining disaster resilience – faces new challenges. Collaboration between national, European and international stakeholders requires unified processes and management systems as well as technical, procedural, operational and semantic interoperability. The EU CBRN Action Plan was adopted in December 2009 by the EU Council and aims to overall goal to reduce the threat of, and damage from CBRN incidents of accidental, natural and intentional origin, including terrorist acts. The Action Plan contributes to the implementation of the EU Counter Terrorism Strategy and is in line with the Internal Security Strategy. Process of future standardisation for CBRNE technologies, operations and procedures need to be implemented also for consolidation of the R&D programs such as HORIZON 2020 and related projects to improve CBRNE disaster resilience in accordance with the EU CBRN Action Plan.

Keywords: EU CBRN Action Plan, HORIZON 2020 INTRODUCTION

### 1 INTRODUCTION

Threats to the society such as industrial and natural disasters, armed conflicts, terrorism, pandemics are constantly increasing, and through on-going globalisation, the impacts of incidents have increasingly cross-border, even global consequences. Efficient protection of citizens through anticipation, deterrence, preparedness, response and adaptation to crisis situations – in other words, maintaining disaster resilience – faces new challenges. Collaboration between national, European and international stakeholders requires unified processes and management systems as well as technical, procedural, operational and semantic interoperability.

One of the main concerns between CBRNE stakeholders, practitioners and other end-user in the EU CBRN market is its fragmentation, due to which the position of the European interagency response systems and CBRN industry is relatively not fully competitive and effective in the global arena. Fragmentation leads to some functions to be doubled, while others are missing. There are gaps in integration of CBRNE detection and identification systems, personal and collective protection systems, including decontamination. Different national rescue approaches are difficult to integrate for joint emergency responses. In CBRN medical countermeasures not all EU countries are able to handle mass casualty events in fast and effective manner. Also training and higher level of education for CBRNE topics remains fragmented, not sustainable and also expensive.

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In this regards also standardisation can be a powerful tool in achieving better interoperability between various parties. However, standardisation needs to overcome lacking interest and modest participation from the stakeholders. Another problem is that promising results of research are not always used as basis for new standards. Therefore increasing disaster resilience by establishing a sustainable process to support standardisation of technologies and services is a key task within community of CBRNE stakeholders and practitioners. Process of future standardisation for CBRNE technologies, operations and procedures need to be implemented also for consolidation of the R&D programs such as HORIZON 2020 and related projects to improve CBRNE disaster resilience in accordance with the EU CBRN Action Plan.

### 2 THE EU CBRN ACTION PLAN

The EU CBRN Action Plan [1] was adopted in December 2009 by the EU Council and aims to overall goal is to reduce the threat of, and damage from CBRN incidents of accidental, natural and intentional origin, including terrorist acts. The Action Plan contributes to the implementation of the EU Counter Terrorism Strategy and is in line with the Internal Security Strategy.

The Action Plan comprises 124 actions regarding prevention, detection, preparedness & response of which 14 actions have been identified as key actions. The actions are, furthermore, divided on the basis of subject matter, i.e. chemical (C), biological (B) and radiological-nuclear (RN), and also include horizontal (H) actions. The Action Plan is implemented by EU bodies, such as the European Commission, the European External Action Service and Europol, Member States' public authorities, and other relevant stakeholders such as the private sector, the health care sector, and academic institutions. The International Atomic Energy Agency and Interpol are closely associated to the implementation of the Action Plan.

In Prevention mission area the aim is to ensuring that unauthorised access to CBRN and dualuse material of concern is as difficult as possible. The aim in detection mission area is focus to have the capability to detect CBRN materials in order to prevent or respond to CBRN events. The preparedness & response mission areas are aiming being able to efficiently respond to events involving CBRN materials and recover from them as quickly as possible with minimised impact against human health, live and living environment. The aim of "horizontal actions" mission area is oriented on international cooperation, communication with public, information tool, research& development, training, etc.

Based on Progress report on the implementation of the EU CBRN Action Plan in May 2012 it was stated that quote "Progress has been made in all the areas, C, B, RN and H, with many examples of successful activities in all these domains, however, it can be noted that the implementation of the actions has been relatively uneven, the Member States and EU bodies have made progress in the same actions to a varying extent, and many of the activities carried out so far are of preparatory nature vis-à-vis the full objectives and deliverables of the Action" end of quote. Thus the CBRN Action Plan with its 124 actions presents a real challenge to the Commission and Member States, both in terms of its sheer size, i. e. the number of actions, as well as coordination requirements.

## 2.1 EU CBRN Medical Countermeasure Preparedness in the CBRN Action Plan framework

Protecting the population from CBRN terrorist threats is of high priority for both the EU and non-EU countries worldwide. The CBRN medical countermeasures play an extremely important role in the victims' protection health, their life and guarantee the patients recovery. In fact during the CBRN accidents or attacks, CBRN medical countermeasures constitute the only

means of treating victims suffering from internal contamination compare to more generally available victims` body decontamination by removing contaminated closing and emergency decontamination provided first responders (on-site by fire service) or first receivers (off-site at health care facilities). Thus adequate levels of on-site emergency medical intervention preparedness for the victims have to be ensured.

The CBRN Action Plan in the Horizontal Actions addressed in the "Goal 2: Strengthen countermeasure capacity" also medical countermeasure in the Action H.35 when each Member State should assess the required amounts and types of medical countermeasures in case of an incident involving high-risk CBRN materials and assess the availability of medical resources for the decontamination of victims, transport and of required countermeasures in the form of technical CBRN equipment. Also in the Action H. 36 the Commission should collect and disseminate good practices among the Member States concerning the ways in which medical staff and other first responders can receive guidance on dealing with large scale CBRN emergencies and a rapid increase of the number of victims. In the Action H.9, H.10 and H.17 medical sector and services are encouraged to provide, as appropriate, adequate security information on suspicious transactions and to the entire supply chain of high-risk CBRN materials.

However, according the CBRN Action Plan Progress Report (2012) [2] summaries the key achievements in the implementation of the H-Actions, enhancing the EU's CBRN preparedness and response capabilities through increased medical countermeasures capacities is not listed by the Commission.

Consequently, the implementation process of the actions H.35 and 36 is either in its infancy stage, considered of low priority, delayed or even non-existent thus making the EU community ever more vulnerable to CBRN accidents and attacks.

Finally, it is crucial that the EU focuses on CBRN medical countermeasure capability development in order to increase its preparedness levels and respond efficiently to CBRN accidents or terrorist attacks. Nevertheless, some EU member states are progressing in their national CBRN medical preparedness, such as in UK, France, Germany and especially in Israel, worth to follow by other EU and non-EU countries.

### 2.2 Research & development projects in the cbrn action plan framework

Furthermore, the CBRN Action Plan Progress Report highlights that much effort has been made in the field of CBRN-related security research within the 7th Framework Programme (FP7). I fact around 350 projects were dedicated to CBRN topics (of which 70 are classified) during the period 2010-2013 with around € 111 million allocated for CBRNE domain.

### Challenges in CBRNE technological results

One of the indicators to measure success of CBRNE R&D programs is the products developed under each project that reached end-user through the market. Unfortunately, only four FP7 programs of fifteen produced concrete results, of which only one tenth of approximately € 15 million budget amount actually contributed to products for enhancement the capabilities of the CBRN practitioners or fundamental knowledge in CBRNE fields [3].

History of FP7 shows that over 90% of the budget was spent by the R&D project implementers that have no primarily role in CBRNE fields, lacking developing capabilities as relevant industry, or enable using the outcomes by the end-users.

Thus only 4 % of budget was spent with real CBRNE industries. Even more alarming is the fact that only 2,5 % of budget was used in support of the CBRN related response end-users. Such situation is inadequate and in reality undermining the EU community to deal effectively with current and emerging CBRNE challenges in order to implement the EU CBRN Action

Plan and related the CBRN National Emergency Plans. Opinion showed that many projects were vaguely defined and delivering of reports are preferred over projects aiming on development of technologies, capabilities and concrete (needed) products to end-user marketing through the industry.

The views, concerns and requirements of the CBRNE practitioners' community need to be taken into consideration and integrated more effectively and targeted into program planning of CBRNE R&D and manufacturing of technologies and products needed.

#### 3 CONCLUSIONS

Although, the EU adopted the CBRN Action Plan to deal with the threat of CBRN accidents and terrorist attacks, the CBRN Action Plan is non-binding and thus cannot be legally enforced. As a result, the implementation process is lengthy or even non-existent meaning that relevant security and countermeasures are not developed or delayed and thus not stocked in sufficient quantities when actually needed.

In the longer run (beyond the life cycle of the Action Plan) it would be important to get away from a pure "shopping list" of individual actions and develop a more strategic and overarching approach to CBRN policies.

Sustainable development of realistic CBRNE scenarios can be used to identify critical event parameters, crucial emergency response and technological gaps, key operational functions for emergency personnel, and also to be used for training and education programs and in validation exercises.

Funding of R&D programs and projects will require more stimulation of the whole European R&D community, market and final end-users (practitioners) not only to subsidies few industries in a few EU countries. Such approach should eliminate continuity of scepticism from industrial companies and the end-user that also follow up R&D program HORIZON 2020 as the successor of the FP7 might not fully satisfy significant progress in knowledge, technology transfers and products development.

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