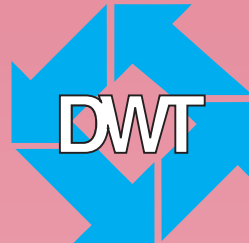


1st International Symposium on Development of CBRN Defence Capabilities

2010: A National Approach in a Multinational Environment

Review of the 2010 Conference



November 30th - December 1st, 2010

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10178 Berlin, Germany

An Event of the
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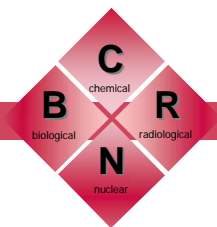


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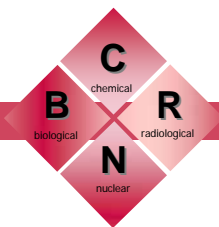


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Battle against a hidden enemy

The 1st international symposium for the development of CBRN defence capabilities

(DWT) Nobody could know in advance that the Federal Minister of the Interior Dr. Thomas de Maizière would for the first time on November 17th, 2010 at 12 p.m. explicitly warn of an acutely increased security risk situation in Germany by international terrorism just less than two weeks before the Berlin CBRN Conference. Potential plans for terrorist attacks towards the end of November were discussed. The security measures throughout Germany were immediately tightened. As yet, the emergency has not occurred. Heribert Prantl rightly commented on this in the *Süddeutsche Zeitung*: "A terror warning is not an NBC alarm". But it was not only emphasised on the almost 900 experts from 54 different countries taking part in this Congress premiere in Berlin how urgent further research and development in this field is.

The fact that the exhibition area in and around the Berlin Congress Centre (bcc) was booked solid at an early stage shows that this Congress filled a gap. Only the unexpectedly early cold spell and the extremely fierce east wind stood slightly in the way of the global information exchange. A few of the participants or exhibits did not reach the event location in time due to flights from London being cancelled, for instance, or trains being late. The Federal Ministry of Defence (BMVg), the Ministry of the Interior (BMI), the Federal Agency for Technical Relief (THW) and the Association of the German Army (FKH) provided advice and practical support after convincing themselves of the event concept.

Comprehensive approach

After two days of communicating the latest status of knowledge, retired Major General MBA Wolfgang Döring came to the conclusion: "CBRN issues are for both population and politics." This is an international task that can only be handled with a comprehensive approach. Döring is the Managing Director of the German Association for Defence Technology (Deutsche Gesellschaft für Wehrtechnik e.V. - DWT), whose Study Group (SGW) planned, organised and executed the symposium.

Talk of a comprehensive security term was common to several contributions and now also seems to have found comprehensive acceptance. Because the following applies at least for the political and institutional actors: The strategic, economical, ecological and demographic boundary conditions are similar for most states – at least for the western ones. As a result, similar consequences are principally drawn from them. The conference, which presented dozens of high-ranking lecturers, from the USA to Israel, from Brussels to neutral Switzerland with a forum, also showed how the concepts differ in details.

The concentration on the European-Atlantic area was also expressed in the subtitle of the symposium: "A National Approach in a Multinational Environment". Under the auspices of the Common Security and Defence Policy (CFSP) of the European Union, this was occasionally considered to be too narrowly interpreted. Retired Lieutenant



General (ret.) Rainer Schuwirth, Chairman of DWT.

Colonel Wolf Rauchalles, Managing Director of the SGW, gladly took up this stimulus. The next event would be named: "A European Approach in an International Environment".

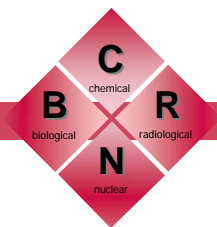
Responsibly providing information

As opposed to those responsible, the dimension of chemical, biological, radiological and nuclear threats is obviously not yet clear to the population as named by Wolfgang Döring. This was also indicated by the relative restraint of the media or even protest demonstrations. At the associated press conference, the Chairman of the DWT, retired General Rainer Schuwirth also put this down to the "extremely calm reaction of the population to the latest terror warnings". Brigadier Winfried Zimmer, Head of the Department Fü S IV at the Federal Ministry of Defence added, that CBRN is always a global threat. But the world population has – except in times of war – formerly hardly had anything to do with it.

Many lectures and discussions dealt with how fine the line is between playing down the situation and promoting fear, and between the necessary holding back of knowledge and the provision of information. The awareness for open, objective and comprehensive public relations has grown. More work is being done on crisis communications suitable for the age of the Internet, which of course needs to be well-prepared.

No theory without practice

The Berlin CBRN Congress was predominantly intended for expert exchange between specialists. This was also understood, as the large circle of participants mainly consisted of CBRN experts from national and international



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authorities and institutions with security-related tasks (BOS) and the supporting industry. The seats did not have to be filled with buses full of recruits and police cadets.

The specialist lectures and the trade exhibition distinctly showed which scientific and technical progress the companies have made. Private industry also realises that the necessary expansion of CBRN defence is a lucrative field of business. Private actors as operators of critical infrastructures or simply as a determining component of society are always also potential victims. The economic damage, even if only resulting from threatened terror attacks, can by far exceed the physical and personal damage incurred. The product, research and development projects and partly also visions presented in Berlin were versatile and imaginative.

As the schedule of the Congress also provided for several breaks, the exhibition was well-frequented; satisfaction was prevalent at the company booths. The contacts between politics, authorities, relief organisations, diplomacy, industry and science established during the program were extensively deepened at the large reception that rounded off the first day of the Congress. Only the outdoor area of the exhibition, which was able to present diverse practical demonstrations, suffered somewhat from the weather. The task forces of the Federal Armed Forces, THW and providers undauntedly defied it with the help of suitable clothing and warm drinks.

Difficult risk assessment

Plenty more knowledge was available at the young Congress series. It was frequently emphasised that CBRN dan-

gers need not always be caused deliberately. In the rapidly industrialising world in the developing countries, accidents and natural disasters with serious CBRN consequences are much more probable. The devastating catastrophes of Chernobyl, Seveso or Bhopal provide plenty of visual instruction material. And the range of possible incidents is extremely large. Risks and the place and time of their materialisation are hardly foreseeable. Therefore, prevention, protective measures, damage limitation and restoration of functionality of structures must be built up as the most flexible and modular manner possible.

Tight budgets, shrinking populations, but also the dwindling acceptance of victims in "post-heroic societies" force cooperation. The tenor of almost all contributions was the improved interlinking of military and civil, national and international forces. There was general agreement on the fact that there is no way past network-based solutions. This not only means cooperation, but increasingly also the convergence of structures, training and equipment. At the same time, remaining specialisations can be further intensified and lead to an efficient and cost-saving division of tasks.

The desirable result of such a large-scale event as the Berlin CBRN Congress is to improve the harmonisation of words and deeds. The participants agreed that declarations of intent do not ban harmful substances or warfare agents. All those involved bear a high degree of responsibility. Ambassador Jacek Bylica, "Head of Centre for Weapons of Mass Destruction" (WMDC) of the NATO, summed it up: "We are here to remind them." The Berlin Congress series will be continued, as frequently requested.

Federal Ministry of Defence (BMVg): Together we are strong

A world marked for WMD is coming up

(DWT) Brigadier Winfried Zimmer introduced the topic for the co-organiser of the conference, the German Federal Ministry of Defence (BMVg). He is Head "Fü S IV" in the Armed Forces Joint Staff. Zimmer emphasised that the "comprehensive approach" should also be aimed at in the field of CBRN hazards. This should then comprise a distribution of tasks. Only a few other states are as interested in multinational cooperation as Germany.

Non-governmental agents or organised crime are increasingly using asymmetrical violence, Zimmer says. An open global market is developing, even for mass destruction weapons. Therefore it is not impossible that they may fall into the hands of enemy forces. Their use is conceivable, not only within the framework of international stabilisation operations but also in the home countries of the sending states.

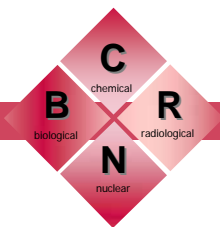
Misuse of the Media

Zimmer particularly referred to the psychological aspect. Media reporting can also be misused to generate panic, without any real background. Therefore one needs to ask



Brigadier General Winfried Zimmer

oneself whether the existing structures and capabilities are appropriate. General Zimmer suggested network-based solutions as the preferred way. There are already corresponding networks, but they need to be improved. The European Union and the European Defence Agency play an important role here. Close cooperation with science and industry is also essential. The German General assigns to the NATO above all the function as a mediator between the partners. It should state the required defence capacities.



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Lisbon: Intentions and deeds

NATO-Ambassador Jacek Bylica shows new strategic concept

(DWT) Ambassador Jack Bylica reported, just back from the NATO summit, which took place in Lisbon only one week before the conference in Berlin.

The top Polish diplomat holds the office "Head of Centre for Weapons of Mass Destruction" (WMDC) of the alliance. The member states had a New Strategic Concept and issued a summit declaration. Furthermore, a new NATO committee on the topic of proliferation was established.

Three areas were confirmed as fields of action: Reconnaissance and detection of CBRN threats, the prevention of proliferation and the actual combat of attacks. According to Bylica, the new NATO strategy has been developed to be "more transparent than ever before". A high-ranking group of experts chaired by the former US Foreign Minister Madeleine Albright had first spent months drawing up proposals. Non-member states such as Russia were also consulted. Jacek Bylica pointed out the different commitment values and durability of the Strategic Concept and the Summit Declaration. While the latter will already be replaced at the next summit, the concept targets a period of about ten years.



Multinational discussion during the breaks

Risks in the most unstable Regions

This next decade constitutes a risk "particularly in the most unstable regions of the world". The first to be named here are the Near and Middle East as well as South Asia and North-East Asia. In the Lisbon documents, Iran and North Korea are explicitly stated as seriously alarming and are requested to abide by the resolutions of the UN Security Council. Terrorism is however, also a direct threat that is intensified by access to modern technology.



NATO-Ambassador Jacek Bylica recognises increasing threats, especially in the most unstable regions of the world.

Of course, the NATO as an institution will rather play a coordinating role, Bylica states. "It is firstly a matter of the national states to invest." Actually, capacities have been reduced in the past, the alliance representative admitted;

in the CBRN sector by 31 percent. It is one thing to announce a strategy, but another to implement it. However, aims were declared at high level in Lisbon. "People tend to forget". The self-committing power of the various documents will provide strong arguments, Bylica is hoping. "Ministers do not go to their offices every morning full of the fear of war or terrorism." They are currently rather more concerned about the economic development and the Euro. In Lisbon, the partners mutually committed themselves to also provide funds.

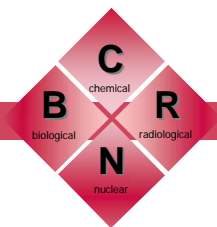
Jacek Bylica emphasised that CBRN defence is only part of the necessary investments. The use of such weapons has a tremendous effect, but is rather unlikely. "Prevention is the best restoration". The NATO wishes to further specify its ideas by the next meeting of the ministers in June 2011. Bylica again accentuated the readiness to cooperate beyond the borders of the alliance. This applies not only to Russia, but also beyond existing partner relationships, for example Saudi-Arabia or North Africa.

The New Strategic Concept of the NATO is available as a German translation at

http://www.nato.diplo.de/contentblob/2970688/Daten/971427/strat_Konzept_Lisboa_DLD.pdf,

the Summit Declaration at

http://www.nato.diplo.de/contentblob/2970690/Daten/966698/NATO_Gipfel_Erkl_DLD.pdf



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Kärcher Futuretech: Modern decontamination

Gehring: The risk for soldiers increases

(DWT) Dr.-Ing. Hagen R. Gehring, CEO of Kärcher Futuretech GmbH opened the series of industrial lectures. The company from Winnenden, which has more than doubled its turnover and workforce since 2000, is supported as a medium-sized company by the US American Alfred Kärcher Group. One of its business fields is CBRN defence. Military camp concepts, food and water supplies during military operations and supplementary services are also in the portfolio. Gehring presented "Trendsetting solutions for an efficient CBRN defence by military and civilian security forces".

The Kärcher Futuretech range is particularly suitable for mobile use, Gehring states: "The current CBRN threat has increased the probability that troops will be exposed to such situations." But the focus is also on operations in the event of environmental or natural catastrophes. Kärcher Future specialises amongst other things in methods for fast and efficient decontamination. People, vehicles of all kinds, weapons and equipment must be made ready for deployment again as quickly as possible in the case of an emergency. Of course, the health of the troops is top priority for Hagen R. Gehring, too.



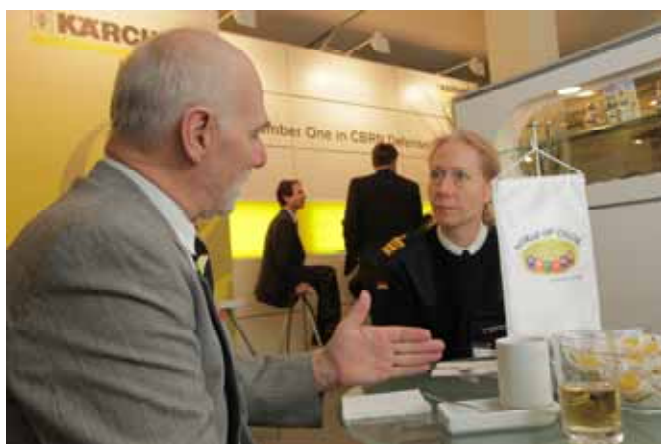
Dr.-Ing. Hagen Gehring the Managing Director of Kärcher Futuretech. The products are especially designed for high mobility.

Modular TEP 90

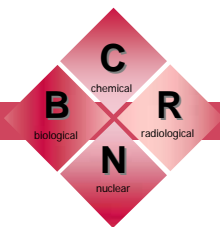
Only recently, all 73 ordered highly mobile decontamination systems "TEP 90" were delivered to the German armed forces. They are of modular structure and enable high treatment rates, about 20 to 40 people an hour. The sophisticated technology used in the TEP 90 forms the basis of an entire product family. Work is now in progress on a lighter, more easily air-transportable version. Not only high-pressure but also vacuum technology is used for decontamination purposes. A thermo-aerosol generator and spray technologies are also deployed here.

Specific agents provided

Kärcher Futuretech provides specific agents each to combat chemical, biological or nuclear/radiological substances. "A mixed solution would be feasible", Gehring says. "But we have decided not to enter into any compromises."



During the breaks, the participants used the opportunity to get in touch with the exhibitors. Kärcher Futuretech was represented with one of the largest exhibition stands at the conference centre.



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USA: In the international network in future

CBRN-Defence in a multinational approach

(DWT) The committed appearance of Rebecca Hersman showed just what significance the US government attaches to a joint strategy to combat mass destruction weapons. Since April 1st she is "Deputy Assistant Secretary of Defense for Countering WMD, Office of the Under Secretary of Defense (Policy)" in Washington, D.C. and held a keynote speech. President Obama's responsible secretary first affirmed this multilateral political approach. The CBRN danger – whether real or only threatened – requires international response. Such an attack would generally trigger a worldwide crisis, according to US strategy. Furthermore, nuclear disarmament is a particular goal of the current government.

President Obama is known to promote a new START treaty with Russia for the reciprocal reduction of nuclear arsenals. In this context it has also been examined whether the USA should definitely refrain from first-strike action. However, Hersman states that this has been rejected as "not the most reasonable declaration" for the time being. The abandonment of the use against non-nuclear states

NATO. "This will raise the awareness for joint responsibility. No-one can estimate the probability of a CBRN attack, she admitted. In this case, risk assessment is extremely difficult. Therefore there is also a whole range of potential consequences.



US-Deputy Secretary Rebecca Hersman wants to close the gap between words and deeds and prefers an optimised international cooperation in CBRN defence.

that have signed the non-distribution contract and abide by it has been specified as a doctrine. She expressed her worry regarding states such as North Korea, terrorist groups and weak or failing states. But homeland defence is equally significant. Tremendous organisational effort is being made to this end. "Perhaps there is a target in sight just around the corner."

The key to collective defence

Prevention is the key to collective defence. For this, the uncontrolled distribution of relevant knowledge must also be suppressed. On the other side of the Atlantic, work is particularly in progress to strengthen the defensive CBRN capabilities. The interoperability with the partners must be ensured. Hersman reported that the USA particularly urged to highlight this in the New Strategic Concept of the

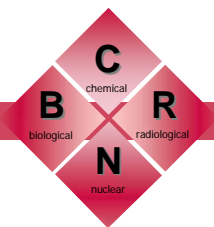
Closing the gap

It is nothing new that there is frequently a gap between words and deeds, the top US official commented on necessary investments. However, Washington has realised that there are two particular deficits: Apart from the available funds, also the personnel situation. When it came to resources, Hersman also addressed the relationship between civil defence and classic national defence: "That is complicated for all of us. We must find a balance here." On the whole, more funds are now available in the USA. The government is examining which capabilities can be provided for the respective field, and not lastly contemplating whether there is the possibility of combining the two.

The NATO cooperation platform

In view of the threat caused by mass destruction weapons, the NATO offers a suitable platform for cooperation for prevention, protection and, if applicable, restoration on a political, military and civilian level. Rebecca Hersman also requested close cooperation with industry. But above all: "We are reliant on our partners and allies."





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EDA: Great plans, low funds

The complex relation between the organisations

(DWT) "The EDA is a small organisation with only 120 employees", Jukka Juusti modestly says. The Finnish Major General has been the Director of Defence Procurement of the European Defence Agency (EDA) in Brussels since the beginning of 2008.

Finland belongs to the EU, but not to the NATO, which pre-destines Juusti to illuminate the complex relationship of the two organisations: "The possible coordination of EU and NATO is everyday business, particularly at work level. The political level is a little more complicated." The European cooperation with the alliance is an extremely political issue, Juusti remarks. "We have set up a workgroup. But it is not for the EDA to solve this problem." Double capacities should in any case be avoided.

One of Jukka Juusti's core topics was of course the contribution of the Agency for the Defence of Biological Hazards founded in 2004. It is to increasingly be given more weight in planning, research and procurement within the framework of the mutual security and defence policy. This is not yet reflected in its relatively small annual budget of approx. 30 million euros.

tems" (UAS) and "Situation Awareness" are in preparation. The three organisations must then coordinate the schedules of their respective programs. The procurement of funds however follows various mechanisms.

Contracting in 2012

For the CBRN research field an agreement has been reached for 32 individual technology segments. The appropriate contracts are to be concluded in 2012 with a duration of three to four years.

At the moment one is in the preparatory phase and is compiling reliable cost estimates, the EDA representative reports. It would then certainly still be a long way until a potential procurement. According to Juusti, the "BIRD program" (Biological Integrated Reconnaissance Defence) is in full progress.

This comprises eight individual projects that refer to the three different hazard zones in case of contamination with biological substances. Although cross-financing has been excluded as yet, Jukka Juusti is optimistic as regards the future.



Major General Jukka Juusti is Armaments Director of the European Defence Agency - in his opinion EDAs primary role is as supporter between the organisations.

Juusti stated that one of the main problems is the fact that the budget predominantly lies in the hands of the individual states: "I do not anticipate that we will receive funds directly from the EU in the coming 20 years."

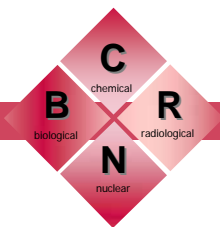
EDA in a supportive role

In the complex network of European institutions the EDA mainly has a supporting function. It is to intensify armament cooperation. In order to achieve further progress, the EDA, the EU Commission and the European Space Agency (ESA) are to synchronise their research subsidies under the "European Framework Cooperation".

First of all, suitable technology fields for this have been identified, Juusti explains. The field CBRN security is already ready to operate, the fields "Unmanned aircraft sys-



After each speech, a Q&A session took place.



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RMMV: The breakthrough against B-weapons

Growing CBRN markets expected

(DWT) The young joint enterprise RMMV (Rheinmetall MAN Military Vehicles GmbH) was presented by the majority shareholder. Rheinmetall AG holds 51 percent, MAN Nutzfahrzeuge AG 49. "We wanted to take the best of both cultures", Rheinmetall board member Peter S. H. Georgi said. The concentration process on military land systems will still continue as before.

Future mergers in the comparably fragmented industry are foreseeable. RMMV develops and manufactures a wide range of military wheeled vehicles. Georgi referred to CBRN security as one of the core competences: "We believe that there will be such threats in future."

Dr. Bernhard-Chr. Halstrup, Head of the Competence Centre NBC Defence Systems, went on in detail. The armoured transport vehicle Fuchs already had integrated



Peter Georgi, Member of the Board of RMMV expects an increasing market for CBRN-defence products.

security measures against nuclear and chemical hazards. According to Halstrup, these competences have been extended and corresponding products are in use all over the world. Faced with financial restrictions, there is generally the option of new developments, but also of upgrading weapon systems. Currently, almost 200 retrofitted systems NBC RS Fuchs are in international use. "Reconnaissance must be fast, flexible and large-scale." Military and civil defence principally need the same basic equipment. However, one has learned from foreign operations and has strengthened the defence components. The threat analysis also has the consequence that it is now finally possible to detect and identify biological weapons. The development of powerful B-sensors is a revolution.

20 substances identified

Within the three main categories of biological weapons –

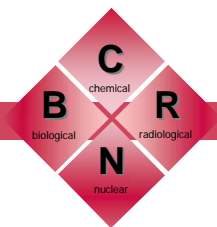
bacteria, viruses and toxins – the expert only considers the use of about 20 individual substances to be probable. Five are commercially available at the most. Efficient technology is now available for this handful of relevant substances, Halstrup says, for sampling, reagents and identification. The modular construction is suitable for various carrier vehicles. The Swiss system for Mobile NBC Verification could also be viewed within the framework of the accompanying exhibition.

Compromising the projects

Rheinmetall Manager Halstrup announced as the next step that the company will commit itself to the "Biological Equipment Development and Enhancement Program" (Bio EDEP). It comprises eight partial projects for the detection and identification of B-weapons. A European consortium with the partners Thales, the Spanish Indra and the new EADS defence technology division Cassidian is already underway. He finally named joint procurement projects with civil bodies as a further task.



Dr. Bernhard Halstrup explained the new competences for CBRN defence and the integration in new vehicles.



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NATO: Cooperation with civil defence

Improving Civil Emergency Response

(DWT) "The NATO is in a phase of fundamental transformation", Dr. Denisa-Elena Ionete from the "Civil Emergency Planning Operations Division" of the alliance admits. "It will improve its crisis management."

An important element here is the civil-military cooperation in CBRN defence. In the New Strategic Concept of the NATO, the proliferation of mass destruction weapons and their possible use by terrorists are explicitly highlighted as threats.

This would "also be dangerous for international stability and prosperity", Ionete said. "We are not able to quantify it, but the danger is there."

Cooperation with the civil side must be expanded. The model "comprehensive approach" generally applies. But the different language usage of both cultures must also be considered here. The NATO emergency planning counts on five different roles of civil forces: Support in crisis management operations and such not based on collective self-defence acc. to Article 5 of the North Atlantic Treaty, as well as the protection of the population against CBRN attacks, emergency aid and international cooperation.

This emergency planning, the Civil Emergency Planning (CEP) will be expanded in the near future, Ionete explains,



Dr. Denisa-Elena Ionete from the „Civil Emergency Planning Operations Division“ had five proposals for an optimised civil defence.

"perhaps under a new name", which may then be more appropriate. CBRN attacks or hazardous situations are one of the most significant challenges.

Support for national authorities

The planned missile defence system must also be viewed in this context. The NATO can help national authorities in preparation and reaction for helping in emergencies. For adequate preparation, a whole series of already established skills, processes and mechanisms is required. Ionete referred to the program of minimum standards for planning, training and equipment. These standards could be fulfilled by the military, but also by means of civil structu-

res. The NATO neither wants to nor will intervene in national issues, this being a voluntary process. Guidelines and consultation groups can be requested in Brussels. There is also a network of currently four regional training centres.

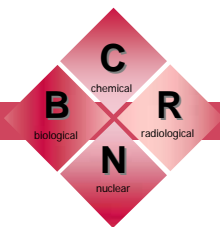
Consequences of a CBRN attack

"But what can the NATO do when it happens?" The representative answered herself. Dealing with the consequences of a CBRN situation is primarily an issue of national responsibility. However, if this is overstrained or if it affects several states, collective aid may come into question, Ionete stated. To this end there is a database with 17 different capability categories, which would be voluntarily provided by the members. Vice versa there is a network of currently approx. 360 civil experts, who – constantly reachable – could serve the alliance with their expertise. As rapid reaction teams they could be sent to capitals or headquarters within 48 hours.

EADRCC and 9/11

The Euro-Atlantic Disaster Response Coordination Center received directly after 9/11 the order to become active in CBRN situations as well. Exercises recently took place in Kazakhstan and Armenia.

Finally, Denisa-Elena Ionete had five proposals ready for the future civil-military cooperation: First of all a joint concept for dealing with CBRN events needs to be developed. Secondly it needs to be clarified whether and how joint task forces could be formed. Thirdly, communication channels to international organisations need to be extended. Fourthly, standards for joint exercises need to be drawn up and last not least the cooperation must be promoted in public relations work.



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Brussels 1: Synergies welcomed

„Pooling“ of the capabilities

(DWT) Dr. Irmtraud Taufer from the Permanent Representation of the Federal Republic of Germany at the European Union also addressed the very wide spectrum of threats in the CBRN field.

She is Head of the Division for Armament Issues there. In any case it is “time to take a lead on a European level.” CBRN dangers know no borders, “and certainly not in such a highly populated area”.

The EU had already addressed the topic in the field of security research in October 2001. According to Taufer, further important steps have followed. The Council of Defence Ministers demanded an increase of these activities in 2008. The research framework program of the Eu-



Dr. Irmtraud Taufer suggested to keep the financial aspects of CBRN defence and research in mind.

ropean Commission and the activity of the European Defence Agency (EDA) should be coordinated. Irmtraud Taufer asks “But what does that actually mean?” A framework agreement to this effect was concluded in autumn 2009. The former German EU Commissioner for Industry and Enterprise Policy, Günter Verheugen, wanted to replace the former case-related coordination with a systematic approach.

dered as a whole, the Undersecretary claimed.

Share your capabilities

In an international respect, “pooling and sharing are gaining tremendously in significance”. Not every European nation must provide all capabilities. This would mean an overextension of the existing resources. The 8th EU research framework program (FRP 8) is currently being drawn up. It stretches from 2014 to 2020. According to the German Federal Ministry of Education and Research (BMBF), the official commission proposal is planned for autumn 2011. This is not expected to be passed before the middle of 2013, the BMBF informs.

European funding for research?

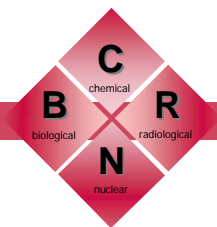
Personally, Irmtraud Taufer can imagine that defence research could be funded by the EU: “The possibilities are currently being discussed.” She also thinks it feasible “that some nations may unite and take the lead”. In particular the topics of Unmanned Aircraft Systems (UAS), “situational awareness” and CBRN defence would come into question. Hence, UAS would have equally numerous military and civil applications, for example in border surveillance. But according to Taufer: “CBRN was the topic that awakened most interest.”

Research Synergies

Taufer also sees synergies between security and defence research. To her “the term ‘dual use’ in this context has a special meaning”.

The financial aspect may not be neglected and matters with identical content must not be simultaneously subsidised. In the light of tremendous savings in all budgets, the “taxpayer can demand that the research program also brings maximum yield”. Defence strategies must be consi-





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2010: A National Approach in a Multinational Environment

Switzerland: „Europe in a nutshell“

CBRN-Defence in a comparable structure to the EU

(DWT) Dr. Marc Cadisch has been in charge of the Spiez laboratory since April 2003, this being the internationally renowned Swiss professional institute for protection against atomic, biological and chemical dangers. Switzerland is, briefly summarised, similarly structured to Europe, - with these words the expert began his first presentation of the local CBRN defence. And in the case of the confederates, there is first the cantonal responsibility with local task forces. There are three levels above this, namely the limited resources at regional level, the redundant support by the Confederation and finally the international cooperation.

At the latest since the European Football Championship jointly organised with Austria in 2008, the equipment



Dr. Marc Cadisch compared the complex federal structure of Switzerland to the European Union Member States.

standard for CBRN situations is good. However, frequent manoeuvres are required. Switzerland has eight biological laboratories; the building of a laboratory complex for hazardous substances of high-risk groups 3 and 4 should have been completed at the latest by 2011. A national CBRN Council will start its work in 2011. On a national level, „CBR Incident Response Teams“ are additionally available as well as the High-Performance Detection System SIGIS 2.

The entire civil protection in Switzerland is closely linked to the military, Cadisch says, a logical consequence of the militia organisation of the army. This adopts the transport tasks for the task forces. Preparations would be made for 14 specific scenarios – from an atomic incident over a “dirty bomb” through to an attack on hazardous goods transport.

Cadisch points out that Switzerland attaches great importance to arms control. Inspectors of the Organisation for the Prohibition of Chemical Weapons (OPCW) are also trained in Spiez. As far as cross-border cooperation is concerned, the contractual base for supporting services is principally available. Swiss units could also be deployed in South Germany, but that “has not yet been finally discussed”, Marc Cadisch sums up.

Comments of participants

Statements of visitors and exhibitors



Staff Sergeant Brigitte Gramsamer (left) and Veterinarian Officer Dr. Ilona Moosbrugger, Institute for Microbiology of the German Armed Forces, Munich

Moosbrugger: I found the event very interesting, because it provided an excellent overview of the entire theme. Including new issues on the market, in the German armed forces or on an international level.

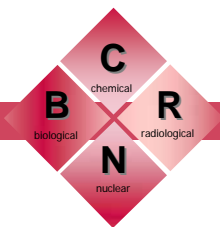
Gramsamer: Particularly interesting for me was finding out about any news in the field of protective technologies and equipment. And also the information about further

developments in the NBC platoon and civilian forces such as the THW. There was also a good overview of the various NBC safety measures in various countries.

Ilse Schedl, President of the Bavarian Police Administration office, Straubing, Germany



For the first time this was an event that summarises from the most various fields and countries what needs to be observed with regard to NBC weapons and how to combat the associated danger. It was particularly interesting that the military is rightly considering that it must seek cooperation with the civilian side in the field of the defence of its own country and in the interest of national security. I realised from discussions with representatives of our armed forces how much they have been reduced here. Cooperation is therefore important for ensuring national security. I learned a great deal at this congress. It should be continued.



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Brussels 2: Criteria for EU security research

A European approach is required

(DWT) At the end of the first long conference day, Tjien-Khoen Liem, in the Directorate General for Enterprise Policy and Industry (DG ENTR) of the EU Commission responsible for security research, refreshed the audience with his speech. He previously stated that he wishes that the title of a subsequent event may not be “A national approach in a multinational environment”.

From the Brussels perspective he would find “a European approach” more appropriate. Apart from this, Khoen Liem would like to see CBRN expand to CBRNE, a demand heard more and more frequently. “E” for Explosives – claimed many more victims, at least in the past decades.

Numerous Directorates General of the EU Commission are involved in the research of CBRN threats. Apart from the DG ENTR, these are, amongst others, the authorities for external relations (RELEX), traffic (MOVE), health and consumer protection (SANCO) as well as the only six-month old Directorate General for internal affairs (HOME). This reflects the large number of relevant actors, Khoen Liem says, whether civil or military, members of the health or transport industry, authorities and organisations with security tasks (BOS) of all kinds.

Focus on the end-user

Double or split structures are to be absolutely avoided under all circumstances. Only this way can capacity and efficiency be increased. The focus is on the end users, whose needs are yet to be discovered. “Their needs and requirements should determine all activities in the research and development of CBRN.” In order to demonstrate the final acceptance of projects and products, the representative of the Commission used the example of traffic lights. They must be simple, robust and easy to use.

7th European Framework Programme

Within its 7th Research Framework Programme (FRP 7), the EU has opened a large area for the “CBRN Demonstration Programme”. Now, at the half-time of the promotion period, demonstrations of a larger scale are due. In doing so, diverse technologies for an integrated overall system of capabilities for prevention, detection, reaction and restoration are to be demonstrated. “Programs must be as small as possible, but as large as necessary”, Khoen Liem comments. The program will be fully implemented in the tender procedure pending in July 2011 or July 2012. Three weeks before the Berlin Conference, a first large Workshop also took place on this topic in Brussels.

For research regarding CBRN defence, four projects are currently under contract within the framework of FRP 7 in area “C” with almost 13 million euros. In area “B” there are also four (12.5 m. euros) and in the area “R & N” three (8.8 m. euros). For all projects, the FRP 7 is providing approx. 98 million euros. According to Khoen Liem, 18 CBRN

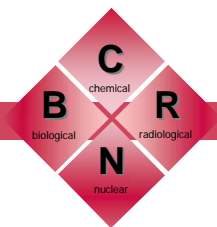


New Ideas and Impetus came Tjien-Khoen Liem, European Commission. Some of his ideas will build the main programme of the 2nd Conference in 2012.

research projects are currently being promoted, three are being negotiated. The following generally applies: “How much money we spend depends on the quality of the projects.”

Case study available soon

Khoen Liem expressed the hope that the results of the most recent “CBRN Case Study” will soon be available. It deals with international cooperation and standardisation, for instance. With regard to the issue of the relationships between civil and military security research, he briefly remarked: “As a researcher all I can say is: We are working together with the same people.”



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BMI: Reduce complexity, communicate openly

EU-Roadmap and dialogue with the citizens

(DWT) Dr. Margareta Sudhof as the representative of a co-organisier, the German Federal Ministry of the Interior (BMI), opened the second day of the conference. She is provisionally leading the Department for Crisis Management and Civil Protection (KM) there at present. The former Head of Department, Dr. Manfred Schmidt, was appointed the new President of the Federal Office for Migration and Refugees (BAMF) in Nuremberg just before the event.

Sudhof first gave a brief but not ritual overview of the danger situation. Apart from the ongoing age of terrorism, the consequences of the climate change must be considered: "Some years ago a phenomenon like a tornado was unknown in Germany. This summer there were several." Sudhof also pointed out the extreme dependency of modern societies on digital technology. The critical infrastructures are networks and are endangered by cascade effects. She named an example especially for the conference topic: "CBR contamination of our drinking water is a real threat."

tion: "It can be understood as a roadmap." Its recommendations are certainly not binding and each member state bears the responsibility itself. But the private sector should also be included, the Departmental Director demanded. There are still many unresolved questions.

In order to make modern societies less vulnerable, the reduction of complexity contrary to the trend needs to be contemplated. And the support of the public counts more than it used to. The public need to be prepared, because no government can guarantee 100 % protection against catastrophes.

Clarify the definitions

However, a few definitions need to be clarified first. Hence, the Russian ex-spy Alexander Litwinenko was poisoned with radioactive polonium 210 on November 1, 2009 in London: "Where is the difference here from classic murder?", Sudhof



Mol Representative Dr. Margareta Sudhof wants an open dialogue with the public for the preparation of major crisis and CBRN-threats

wanted to know. In order to be able to develop a joint CBRN defence strategy, one first

needs to agree on what CBRN incidents have in common.

She considers existing agreements to be outdated. 188 states may have signed the C-weapon convention. But his contract does "not really reflect our present understanding of CBRN". Many industrial products may also be potentially dangerous. Consequentially, further measures need to be taken to increase safety during the manufacture, transport and storage of hazardous substances.

EU action plan appreciated

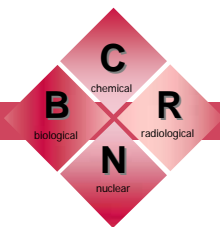
According to Margareta Sudhof, the Federal Government welcomes the CBRN action plan of the EU, which concentrates on the areas of prevention, detection and reac-

Limited capabilities in the public

Sudhof referred to the psychological effects as a "hidden danger". Task forces and helpers could also be affected. For example, during the massive Katyuscha attacks on Israel, there were 100 patients with stress symptoms for one actual victim. The number of victims, the extent of the damage and the size of the area in question were decisive for the panic reactions.

"There are only limited public self-help capacities", Sudhof remarked. She considers open information, corresponding training offers and fast and precise warnings to be antidotes. Each time a plane starts, the passengers are instructed as to how to behave in an emergency. The BMI representative draws the conclusion: "The public should generally be informed about CBRN risks." This is not possible in case of an emergency. A regular exchange with the media may be helpful in creating a climate of trust in advance. Crisis communication must be prepared long before a potential CBRN situation occurs.

From a technical point of view there are still deficits in fast and mobile CBRN detection, Sudhof states. Otherwise the health system has top priority. Storage of medication and vaccines is however difficult. CBRN situations are barely addressed in the training of task force and rescue workers: "There is hardly anyone with sufficient experience." As far as the Federal Ministry of the Interior is concerned, society should be prepared "without putting people in a constant alarm situation".



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THW: Everyday hazardous substance situations

CBRN-threats are actually abstract ones

(DWT) Albrecht Broemme provided a complementary perspective. Since 2006 he has been President of the Federal Agency for Technical Relief (THW). He was previously Regional Fire Director in Berlin and hence the chief of Germany's largest professional fire brigade. As far as organisation is concerned, the THW belongs to the business division of the Federal Ministry of the Interior and can provide up to 80,000 almost all voluntary helpers. From their viewpoint, Broemme spoke of "thank goodness very abstract" NBC dangers. The civil side is rarely heard, although they are the ones doing most of the work.

"NBC situations are much more common than most people imagine." As an example, the THW President referred to seasonal flu epidemics, which are principally also "B situations". "Short-lived radioactive elements are also transported a lot."

Normal task forces are usually only able to identify such a special situation when they arrive at the site. "The German ruling (GAMS-Regel) regarding the order of procedure in case of an emergency is really the alpha and omega, Broemme reminded. It specifies that the order of the procedure is recognising the danger, securing the site, rescuing the people involved and calling for special task forces. "Task forces need not necessarily know how to handle the ideas of Nils Bohr." After the end of the Cold War, the THW had reduced its capabilities in this field. But it is now "building up special forces units". In future there will be eight "Special NBC Recovery Units" (SEB-NBC), two are already in operation.

Responsibilities in Germany

In the federally structured German Republic the authorities of the Laender are responsible. Over the past years the fire brigades have been provided with a large number of reconnaissance vehicles. They are the first at the operation location and take over decontamination. The THW as a Federal Authority can be requested for support. It is limited however to location and recovery. The German

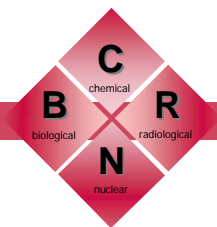


THW-President Albrecht Broemme argued that CBRN-threats are quite abstract at the moment.

Armed Forces can also be called for in case of large-scale emergencies. This was practised in the lead-up period top the World Football Championship 2006 in Germany, for instance. He is keen to take the aura out of the topic, Albrecht Broemme remarked. For example, all former attacks with B-weapons did not work out as planned. Form the viewpoint of assassins "normal bombs are the most suitable ones". Obligatory hygiene measures are most important for hazardous substances.

"If I want to prepare myself for all kinds of danger, I will arrive at the border of the impracticable". In case of large-scale incidents, the German task forces also depend on European aid, Broemme admitted: "This isn't a one-way street."





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Microbiology: Recognising the enemy

Options for Biological Defence

(DWT) Whether Ebola or Lassa, anthrax or botulin – there are a multitude of highly dangerous viruses. The corresponding NATO list of particularly dangerous B-agents is currently being revised. Colonel Prof. Dr. Lothar Zöller spoke of new medical possibilities of biological defence.

He is the Head of the Institute for Microbiology of the German Armed Forces in Munich. An outbreak “would probably occur as a cluster of incidents”, Zöller says. “The earlier treatment begins, the greater the survival rate”. Spreading can only be limited by means of fast diagnosis.

Numerous epidemics, such as the Surat epidemic in India, for example, have shown that that is often not the case. Intensive research is therefore being carried out – the German Armed Forces have also set up a Central Diagnostics Laboratory. A further problem exists in the fact that the pathogens are naturally present in many regions of the world, including operational areas.

Differentiating infections from attacks is a task for bioforensic analysis. According to Zöller, there are currently three main challenges: Closing gaps in the general diagnosis capacity, making this capacity available in mobile and global application and identifying unknown agents. To this end the institute has a quickly relocatable “BIO LAB”.



Colonel Prof. Dr. Lothar Zöller informed about new medical solutions for Bio-Defence.

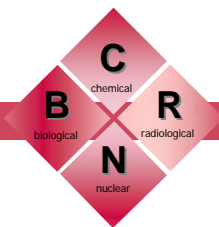
New Potentials located

Know what you are looking for

However, it is essential to know what one is looking for, Prof. Zöller adds. Therefore non-selective methods of molecular diagnostics are in development. All types of bacteria have identical genetic sequences, “others can be used as a molecular fingerprint.” Suitable instruments for this are available on the market and “very promising”, the physician reported. In bio-forensics, the issues are the expansion of existing data records, standardisation and quality control. Different methods must be used for the determination of the types of various pathogens. The Munich Institute participates in a continental data network that is promoted by the European Defence Agency.

As regards the treatment of diseases, it applies for all fields that bacterial pathogens become increasingly multi-resistant after decades of use of antibiotics. Apart from the development of new medications and vaccines, Zöller sees particular potential in human monoclonal antibodies. Some are already in clinical testing. In the event of an attack with smallpox viruses, it is important to bridge the time until sufficient vaccine is available.

Several companies have already made a great deal of progress in development here and also against anthrax, botulin or pestilence. Lothar Zöller also stated that work is in progress on fully new treatment approaches.



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BMVg 2: Comprehensive Approach

Still a lot of potentials of WMD

(DWT) In the course of the fundamental transformation of the German Armed Forces, CBRN defence capabilities are also being scrutinised. In future they will be more comprehensively applied, Colonel Dieter Jaksik, Head of Division FÜ S IV 3 in the Federal Ministry of Defence, explained. There may still be a large potential of mass destruction weapons in the world, and global industrialisation may increase the dangers: "But the largest threats are those that are most unlikely."

In the allocation of resources the probability of damage is the decision criterion. The existing CBRN capacities are still mainly oriented to high-intensity conflicts, not to homeland security.

Finding Synergies

The same applies to risk analysis and crisis management. Jaksik pleads for a synergetic system of military and civil forces: "I see a certain potential for closer cooperation." The defence capabilities of the German Armed Forces are graded – as in most armed forces. Apart from the obligatory self-protection of the individual soldier there are special operations forces at unit level and complete NBC defence units. On a multinational level, this system is supplemented by the "NATO Response Force 15" for instance, with versatile abilities.

As far as equipment is concerned, Colonel Jaksik considers the procurement harmonisation of military and civil forces to be possible. That is much more difficult for processes



Colonel Dieter Jaksik, GE MoD, said that there is still a high potential on Weapons of Mass Destructions in the world and added that the most dangerous threats are also the most unlikely.

and structures. There is still plenty of room as far as multinational cooperation is concerned. Jaksik views generally more cooperation as the future way, also with regard to funding: "We are confronted with the same type of threats and the need for detection equipment is almost identical"

Cristanini: Warfare agents in a trap

Decontamination of sensitive products

(DWT) Dr. Stefano Miorotti, Manager of the Italian CBRN defence specialist Cristanini, introduced a new way of gentle decontamination in Berlin. In 1972 the company had begun with high-pressure cleaning. The range of it globally used CBRN defence products is still large.

But highly modern technology is also very sensitive, Miorotti explains. Therefore, Cristanini developed a method for the vertical removal of harmful substances and warfare agents.



"Weapon-grade B and C warfare agents are currently being developed to bypass decontamination by penetrating surfaces", Miorotti continues.

The aim must also be to not only remove but to also destroy warfare agents.

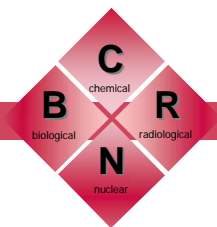
Each decontamination should result in a maximum of effectiveness, Miorotti said.

Cristanini's decontamination system SX34 is intended for sensitive equipment such as e.g. computers or sensors. A dry spray, applied like a layer of paint, and vacuum technology are

combined here. The warfare agent is so-to-speak captured in a trap, Miorotti describes.

Spray and agent are both removed upwards with an absorbent material, fluids are not used. Traditional decontamination methods are subsequently applied.

"The solution does not damage surfaces", Miorotti emphasises, the system has proven sufficient in examinations. Compared with conventional methods, this causes eight times less waste. This is particularly gentle to the environment and the lifecycle costs of the system are low.



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France: An integrated CBRN defence system

Harmonisation and Cooperation in France

(DWT) Much in common, certain differences: Brigadier General Jean-Francois Parlanti lectured in Berlin about the future orientation of the CBRN defence of the French armed forces. A national fully integrated system is planned by 2020. The French White Paper from 2008 had already extended the traditional task description to the extent that the protection of the population at home and in the country in question is to be added to the military self-protection in operation. The latter shall however remain in the foreground, Parlanti remarked.



Brigadier General Jean-Francois Parlanti remarked that international cooperation in CBRN-Defence is an important aspect in the french strategy - today the closest cooperation exists with Germany.

Harmonisation of procurement

Upon completion of phase 1 of the reform, the procurement programs are to be harmonised by 2014. The second phase ends in 2020; then the biological detection system DETECBIO V1 will be ready for operation as the first new capability. A network of automated sensors will then ensure the protection of high-grade systems and critical infrastructures against B agents. A preliminary version is intended to be introduced in 2012. "This is currently one of our most important programmes", Parlanti said.

An inter-ministerial coordination committee was created for this "comprehensive approach" as it is also referred to in Paris. It is not lastly responsible for consistent research and procurement. The operational work is performed by three departments for planning and operation guidance, training and equipment. This reform step was completed in summer 2010. In 2020, all equipment will have a dual-use character, Parlanti described a central requirement. "The standardisation of the organisation would however go too far." But the joint training of the various CBRN organisations is to have top priority.

Close cooperation with the Bundeswehr

As far as cooperation with partner nations is concerned, he expressed, the closest currently exists with Germany. A treaty regarding extended cooperation has just been concluded with the United Kingdom. "Of course we are always open for further development." The less funds are available, the more benefit has cooperation, "particularly on a European level".

ThermoFisher Scientific: Does a danger exist here?

Laser- and Infrared-technologies for identification

(DWT) Bruce Barnett held his Key-Note for the Company ThermoFisher Scientific. Analysis and diagnostics form one division of the US Group. Laser and infrared technologies are mainly used in various product lines for the identification of suspect substances in various product lines.

The hand-held device "FirstDefender", which was introduced to the market in 2005 already worked with laser spectroscopy. 3,500 of these devices are in operation



world-wide, Barnett stated, and the corresponding database comprises more than 10,500 chemical agents, from explosive over drugs through to precursor substances.

"The instrument also works underwater, which is important for the fire brigade, for example", Barnett emphasised.

The „FirstDefender“ device of Thermo Fisher has been tested successfully.

It must be operated with protective clothing, is secured by a code and equipped with a simple results display and a three-stage colour scale.

If the display responds, the headquarters can supply a more precise analysis within 20 minutes 24 hours a day. In the more recent device generation there is a clear trend towards miniaturisation.

According to Barnett, the infrared-based "TruDefender" is also conceived as a hand-held device. The complementary database of infrared spectra of all possible substances is becoming "larger every day". Both technologies complement each other each with different strengths. The limit of analysis capability is however exceeded for gases, biological substances or metals: "If something comes out of the ground and has father and mother, it is difficult to measure."

Substances such as the easily producible explosive TATP or also cocaine could however be quickly identified. Such certainty saves money, rather than possibly having to evacuate, Johnson argued. The FirstDefender was successfully applied in the case of the "Underwear bomber" as a flight passenger at Christmas 2009. Work is taking place on updated models of the device – usage by robots is being tested.

Austria: NBC defence as a multi-purpose weapon

Strong implementation in Civil Protection

(DWT) Lieutenant Colonel Franz Gaugl, Head of the CIMIC Department of the Armed Forces Command explained the Austrian approach to CBRN defence. The Austrian forces are much more involved than in Germany in population protection in the event of NBRC threats and in national and international catastrophe management. As a certain special feature, the term "NBC" protection is still preferred.

As Gaugl said, the government in Vienna must also save, hence the not yet completed army reform has already been replaced by another one. This is a little easier as the Alpine country does not maintain a marine force. Furthermore, the air force is integrated into the army.

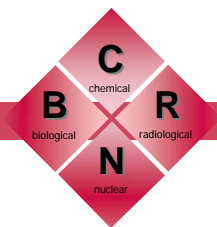
The armed forces are frequently requested in NBC situations: according to article 79 a of the Constitution, civil protection is one of their official tasks. The Austria NBC defence is a four-stage system. For Franz Gaugl, military self-protection is the most important element, as there are simply too few special forces. This NBC defence corps consists of six companies in total, which are re-located all over the country. Their equipment complies with state-of-the-art technology. Lieutenant Colonel Gaugl expressed his particular pride in the DINGO-based armoured NBC vehicle procured in 2008.

The tasks of the NBC defence companies include – classified according to platoons – reconnaissance, decontamination, search and rescue (SAR) as well as water treatment. Fire fighting is also explicitly included. "Fire is typi-

cal in NBC situations", Gaugl explained. It is also internationally unusual that a special unit of modular structure has been formed for international humanitarian operations. The national NBC defence training school in Korneuburg appears to be an overarching and coordinating element. Within international cooperation it has been particularly intensive with Germany and Switzerland (D-A-CH) since 1998, Gaugl praised. His conclusion is: The NBC defence of the Austrian armed forces is not only an instrument for military purposes but also for the entire government.



The protection of the soldier ist the most important aspect in CBRN-Defence, Gaugl said.



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Israel: The daily emergency

Routine in emergency situations

(DWT) At the end of the Congress the practical side was heard. Hardly anywhere is there a higher risk of the actual application of CBRN substances than in the Near and Far East. Israel has known this for decades. Each citizen has an NBC protection mask at home.

Major Gal Gilboa, Head of the Department for Unconventional Weapons of the Israeli Home Front Command (HFC), hit the spot of the paradox: "Emergency routine is the basis of our thinking."

The Israeli forces are territorially classified into three commands, the HFC becoming the fourth only in 1992. The civil supplementary National Emergency Management Authority (NEMA) was founded in 2007 and also reports to the Minister of Defence. The concept has been completely changed, Gilboa said – external and internal threats have different causes, but the same consequences. "The HFC is the only authority whose basic task is immediate operational readiness." The Command may cooperate with the other institutions such as the fire brigade, police or health authorities, but the larger the damage, the more the responsibility is transferred to the HFC. It is responsible for all issues of population protection, from the strategy over manoeuvres and management through to public relations.

instructions. Physical protection also includes the ability to quickly reach safe shelters. The national (early) warning system follows – as also intended in Germany – a joint,



Emergency situations are a routine situation in Israel, Galboa said. Mostly with extreme short time for reactions.

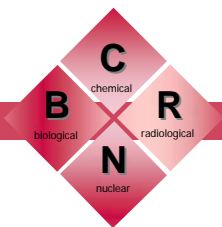
Various principles for new approaches

The basic idea of the new approach is that all organisations should follow one common doctrine, Gal Gilboa explained. But this still needs to be written; there are a vast number of different operation principles. Common manoeuvres have been taking place each year since 2006 as well as on a local level. One of the doctrines from the former Lebanon War was that no central planning worked without the local authorities. The HFC also compiles a risk analysis for each commune.

The Israeli civil defence is based on five columns: The population is warned by local authorities, aid organisations, physical protection measures as well as information and

yet modular principle. All transmission channels, whether Internet, radio or sirens will be used – "hopefully also mobile phones as of 2011", Gilboa added.

The small size of Israel leads to extremely short warning times in the event of missile attacks, in some areas it is only a matter of seconds: "This is a very common occurrence." To illustrate, Major Gilboa presented a training video for correct conduct in case of a bombardment. These short periods caused a CBRN alarm to be triggered in each case of a missile attack until 1991. For a few years now this only takes place in certain cases – depending on how probable the secret services consider the use of mass destruction weapons at the time.

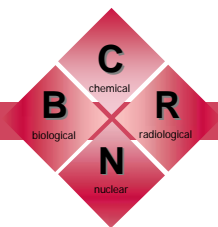


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Impressions



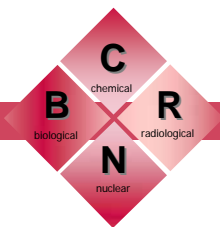


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Impressions





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Comments of participants

Statements of visitors and exhibitors

Kay Habermaier, Head of Marketing and Public Relations, Kärcher Futuretech GmbH, Winnenden, Germany

So far I have an extremely positive impression of this event. One meets a very international audience with participants from more than 50 countries. The specialists are also here. Of course one must wait and see how the general resonance turns out to be. It is an event that is held for the first time. It always takes a while until a new series of events establishes itself. It will certainly also be decisive how the German experts represent themselves here. It is still too early to make a summary. We will wait until tomorrow. There was plenty of useful information in the opening lectures today. The open platform for communication and customer contacts is very important during the breaks. Which is why we also represent ourselves as Kärcher Futuretech here, too.

Charles Call, Vice President Programs, ICx Technologies, Albuquerque, USA

It has been very interesting so far. I am looking forward to the panel discussions, particularly as we can go into more detail there. It is a short, highly focussed conference. It doesn't last a full week. Which is the reason why participation can be combined with other appointments. Personally, I come from the USA, which makes that a feasible option. The exhibition is well linked to the conference. This gives everyone the opportunity to converse with one another. I welcome the fact that Germany is staging a conference on this theme – an international conference with national focus. That is well worthwhile.



Geneviève Desautels, International Sales Manager, AirBoss-Defense, Quebec, Canada

I am very impressed by the list of participants we received. I read it carefully and analysed it. I have been visiting CBRN events worldwide for ten years. I have never registered so many participants, who are actively involved in the topic in defence ministries or NBC schools. I count 42 different armed forces – including the NATO and EDA – who are currently here in Berlin for two days. CBRN specialists and representatives of defence ministries are here, not embassy delegates

only sent to collect information. Here are the users and actual decision-makers. That is quite impressive.



Haiko Dehnen, Business Development, SELEX Systems Integration GmbH, Neuss, Germany


We are very satisfied. Our impression is very good, and that is ultimately a premiere, the first impact of this event. We had plenty of public at the booth. It couldn't have been better. This year I attended the symposium in Stockholm. That has been established much longer, but this one is already definitely comparable, particularly looking at the ranking list of the visitors. It was definitely a good decision to come here. Because the scene is manageable, especially in Germany, but also internationally, one sees many familiar faces, similar to a small family gathering. I would certainly approve of a recurrence.



Lars Deuter, Local Official Local Association Quedlinburg, Specialist Consultant Special Unit NBC, Federal Agency for Technical Relief (THW), Germany

We came to all this cold weather in Berlin with the men and women of the Special Unit NBC Salvage. But we are tough and went through our outdoor performance well. We were

impressed by the professional audience here. As opposed to other events, this was not only a matter of the number of visitors. But rather of numerous fundamental discussions. We have been able to learn a great deal from one another. This can mean small issues and certain activities: Putting on and taking off protective clothing is for example done slightly differently in the armed forces. There were also agreements on the topic of decontamination, because we as a specialist unit concentrate only on our task of salvage and detection. Therefore we rely on cooperation. Getting to know each other more closely creates the trust needed to not build up double structures. The staging of another such event is desirable.



We would like to welcome you on
October 22 - 24, 2012

in the Berliner Congress Center
to the

2nd International Symposium on
Development of CBRN Defence
Capabilities.