# COMMISSION OF THE EUROPEAN COMMUNITIES



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# **COMMISSION STAFF WORKING PAPER**

ANNUAL REPORT ON THE IMPLEMENTATION OF THE COUNCIL AND COMMISSION PROGRAMME OF 20 DECEMBER 2002 TO IMPROVE COOPERATION IN THE EUROPEAN UNION FOR PREVENTING AND LIMITING THE CONSEQUENCES OF CHEMICAL, BIOLOGICAL, RADIOLOGICAL OR NUCLEAR TERRORIST THREATS

#### INTRODUCTION

- 1. The terrorist attacks in the US on 11 September 2001 and a spate of terrorist incidents since, including the anthrax attacks in the US, the ricin incident in London the adamsite attacks in Belgium and mass events attacks such as the theatre show in Moscow in October 2002, showed that terrorism, including chemical, biological, radiological and nuclear (CBRN) terrorism, has become a major threat to international peace and security. The fight against terrorism requires a comprehensive approach comprising political, economic, diplomatic, military and legal means and should also include the preparation for as well as the prevention and limitation of the consequences of an attack.
- 2. At the Ghent European Council of 19 October 2001, following the threats of the use of biological and chemical means in terrorist operations, the Heads of States and Governments asked the Council and the Commission "to prepare a programme to improve cooperation between the Member States on the evaluation of risks, alerts and intervention, the storage of such means, and in the field of research". <sup>1</sup>
- 3. The Laeken European Council on 13 and 14 December 2001 invited "the Council and the Commission to move swiftly towards finalising the programme to improve cooperation between Member States with regard to threats of the use of biological and chemical means" <sup>2</sup>. The Council agreed, on 13 June 2002, to broaden the scope of the programme so as to cover nuclear and radiological terrorism as well <sup>3</sup>. The Seville European Council of 21 and 22 June 2002 reiterated its determination to combat terrorism <sup>4</sup>.
- 4. In response to the requests by the Heads of States and Governments, the Commission adopted two communications. A first communication was issued on 28 November 2001: "Civil protection: state of preventive alert against possible emergencies". In particular, the Commission undertook to intensify its activities in current actions and programmes and to work closely with the national authorities and the industry to consolidate measures already taken.
- 5. The Commission adopted on 11 June 2002, as a follow-up to its earlier commitment, a second Communication: "Civil protection Progress made in implementing the (i.e. the Commission's) programme for preparedness for possible emergencies". This second Communication summed up the main progress made, in particular in developing and implementing interfaces between the civil protection Mechanism 7, the network for epidemiological surveillance and control of communicable

SN 4296/2/01 REV 2, p. 4, No 5.

<sup>&</sup>lt;sup>2</sup> SN 300/01, p. 5.

<sup>&</sup>lt;sup>3</sup> 9593/02 + COR 1.

<sup>&</sup>lt;sup>4</sup> SN 200/02.

<sup>&</sup>lt;sup>5</sup> COM (2001) 707 final

<sup>&</sup>lt;sup>6</sup> COM (2002) 302 final

Council Decision 2001/792/EC, Euratom of 23 October 2001 establishing a Community mechanism to facilitate reinforced cooperation in civil protection assistance interventions, OJ L 297, 15,11,2001, p. 7.

diseases 8, and activities in key complementary sectors such as research and the pharmaceutical field.

- 6. Following the request made in Laeken by the Heads of States and Governments, the programme to improve co-operation in the European Union for preventing and limiting the consequences of chemical, biological, radiological or nuclear terrorist threats (CBRN programme) was adopted by the Commission on 21 November 2002 and by the Council on 20 December 20029. This programme set out the strategic objectives that need to be addressed in order to improve the protection of the population, the environment, the food chain and property against CBRN threats and attacks and describes where there is a need for further action. On 20 December 2002, the Presidency, acting in cooperation with the Commission Services, issued an inventory of the instruments relevant for the programme <sup>10</sup>.
- 7. Paragraph 44 of the programme stipulates that "the programme will be regularly reviewed i.a. on the basis of information transmitted by the Member States and a brief status report on the progress of the programme will be presented to the Council once a year".
- 8. The present report represents the contribution from the services of the Commission to the first annual report. The report specifies, for each of the strategic objectives of the Programme, the new initiatives and measures taken by the Commission and those that are planned.

# 1-STRATEGIC OBJECTIVE 1: STRENGTHENING THE RISK ANALYSIS AND THE RISK ASSESSMENT OF THREATS OF CBRN-TERRORISM AND THEIR LINES OF PROPAGATION

Within the Commission, sectors that are vulnerable to CBRN attacks have been encouraged to include, in their risk analyses, any relevant information that they may receive on the basis of the assessment of terrorist threats in the EU.

In this context, in the sector of transport and energy, the Commission has initiated a multimodal and multisectoral reflection at the beginning of 2003. The Commission is working on risk assessment, the enactment and enforcement of a European legislation designed to reinforce security, security scenarios and preparedness for emergency response.

Within the framework of the Civil Protection Action Programme, the call for proposal 2003-2004 identifies a major project on the comparison of risk assessment and/or risk management methodologies in the sector of NBC threats. The project should establish an inventory of existing methodologies, elaborate best practise, draft common recommendations to be addressed to the Member States, and take into account scientific knowledge.

European Parliament and Council Decision 2119/98/EC of 24 September 1998 setting up a network for the epidemiological surveillance and control of communicable diseases in the Community, OJ L 268, 3.10.1998, p. 1.

<sup>14627/02</sup> 

<sup>10</sup> 15873/02

2-STRATEGIC OBJECTIVE 2: REDUCING THE VULNERABILITY OF THE POPULATION, THE ENVIRONMENT, THE FOOD CHAIN AND PROPERTY AGAINST CBRN-THREATS THROUGH PREVENTIVE MEASURES

# 2-1 implementation of preventive measures

The Commission, while respecting the necessary confidentiality requirements, has continued to develop cross-border and cross-sectoral experience-sharing in all relevant sectors.

#### 2-1-1 Human Health

A Communication (COM/2003/320 final) on progress with the implementation of the health security programme was published on 2 June 2003. The programme aims to ensure an EU-wide capability for the timely detection and identification of biological and chemical agents in laboratories, the rapid and reliable determination and diagnosis of relevant human disease cases, the availability of medicines, the coordination of emergency plans and the drafting and dissemination of rules and guidance on facing-up to attacks from the health point of view. The Communication reflects the progress made in carrying out the 25 actions which form the health security programme and describes the outlook for continuation of action at Community level in this field. Health security is a major component in the Commission's "stability and security" objective for 2003 and 2004.

#### 2-1-2 Food chain

According to the Communication on health security, there is a sufficiently well developed body of rules for alerts and contingency plans of action, both in health and economic terms, to face up to an epidemic of criminal origin in the food chain. The various means that have been established in order to guarantee safety throughout the whole food chain have functioned well in general, and the ability to respond to crises has been tested in numerous occasions.

The aspect of the fight against bioterrorism that needs developing in the future is the organisation of upstream information, investigation and information-gathering within the territory of the Community and third countries as well as an improved cooperation between authorities and those working in the food chain. Emphasis should also be given to cooperation between the food sector and other sectors of the society. In particular, the role of education in guaranteeing safety throughout the food chain must be underlined.

# 2-1-3 Animal Health

Numerous regulatory measures have been adopted at European Union level to keep animal diseases at bay and to combat outbreaks, including Community notification system and vaccine bank. Furthermore, Member States contingency plans approved at Community level ensure a fast and harmonised response to the most serious epidemics. All measures to combat diseases are taken and coordinated at Community level following comitology procedure. These measures apply whether the origin of an epidemic is accidental or the result of terrorist action. As is the case for food

safety, there is no need to establish new systems, but rather to adjust the current mechanisms taking into account the threat of bioterrorism.

#### 2-1-4 Environment

Council Directive 96/82/EC on the control of major accident hazards involving dangerous substances ("Seveso II Directive") requires operators of establishments that have dangerous substances present above certain thresholds to take all measures to prevent major accidents and to limit their consequences for man and the environment. There is a general agreement that the requirements of this Directive, such as risk analysis and external emergency planning are also appropriate should a Seveso site become a target for a terrorist attack. An amendment of the Directive following major accidents in Baia Mare, Enschede and Toulouse will be adopted shortly by the European Parliament and the Council. It will fully utilize the expertise and tools developed by the Major Accident Hazards Bureau (MAHB) at the Joint Research Centre.

The envisaged initiative on an *Infrastructure for Spatial Information in Europe* (Inspire) currently under preparation by the Commission, covers spatial data required in support of the prevention, response and recovery of CBRN threats.

#### 2-1-5 Vulnerable industries

In 2003, the Commission has taken several new initiatives and measures to reduce the vulnerability of nuclear industries to terrorist attacks and ensure a greater security in the use of nuclear materials and radioactive sources.

A proposal for a Council Directive on the control of high activity sealed radioactive sources (COM/2003/0018 final) was adopted by the Commission on 24 January 2003. This proposal is meant to contribute to a higher security for European citizens against the risks associated with the handling and storage of highly radioactive sources and to help prevent illicit trafficking of radioactive sources. The Directive was referenced in the conclusions of the G8 summit in Evian in June 2003. Enhanced traceability of sources will reduce the risk of radioactive sources being misused, e.g. for criminal purposes and will prevent sources from becoming lost from regulatory control.

On 30 January 2003, the Commission adopted a proposal for a Council Directive setting out basic obligations and general principles on the safety of nuclear installations and a proposal for a Council Directive on the management of spent nuclear fuel and radioactive waste (COM/2003/32 final). These two proposals aim at ensuring a high level of nuclear safety in the enlarged Union.

Other measures and initiatives are ongoing. The adoption of a proposal for a Commission Regulation on the application of Euratom Safeguards is expected by the end of 2003. The entry into force of additional protocols to the existing Safeguards Agreements with the IAEA is also expected by the end of 2003.

The Commission is giving consideration to extending or adapting the stringent measures or contingency plans for safety and environmental purposes set up under Directive 96/92/EC on common rules for the internal market in electricity and

Directive 98/30/EC on common rules for the internal market in gas to also cover the threat of terrorist attacks including CBRN attacks.

# 2-1-6 Transports

The terrorist attacks on 11 September 2003 have demonstrated how transport is vulnerable to terrorism. The adoption of Regulation (EC) No 2320/2002 of 16 December 2002 establishing common rules in the field of civil aviation security contributes to guarantee the provision of enhanced security level in civil aviation. Some complementary legislation has been adopted in 2003, especially Commission Regulations (EC) No 622/2003, 1217/2003 and 1486/2003 laying down measures for the implementation of common basic standards on aviation security, specifications for national quality control programmes as well as procedures for Commission inspections.

Furthermore, the Commission has adopted on 2 May 2003 a Communication on enhancing maritime transport security and a proposal for a regulation on enhancing ship and port facility security (COM/2003/229 final). The Council adopted a general approach on October, 9<sup>th</sup> 2003. The European Parliament is expected to vote in first reading by November, 18<sup>th</sup>.

In addition, the Council and the European Parliament are currently examining:

- a Proposal for a Directive on the approximation of the laws of the Member States with regard to the transport of dangerous goods by vessels on inland waterways;
- a Proposal for a Regulation amending Council Regulation (EEC) No 3922/91 of 16 December 1991 on the harmonisation of technical requirements and administrative procedures in the field of civil aviation, which concerns the procedures to be followed in case of attacks on the transport of dangerous goods by air;
- a Proposal for a Directive on minimum safety requirements for tunnels in the transeuropean road network (10903/03) (2002/0309).

The Commission services are elaborating new proposals for Directives on port security and intermodal security. The first one could be brought to the Council and the European Parliament by the end of 2003, while the second could by issued early 2004.

### 2-2 Public information

The Commission recommends guidelines and techniques for public information which pay special attention to CBRN threats.

Within the framework of the *Civil Protection Action Programme*, the call for proposal 2003-2004 identifies a major project on self-protection, in the section "information to the public". The project should focus on accident prevention and preparedness, including CBRN risks, in private households. The project should establish best practices for the appropriate behaviour in the case of an accident and major emergency. Moreover, the project should give recommendations for a basic life support kit for the European citizen at home. The support kit should encompass

the necessary physical first-aid equipment for daily risks, disasters and CBRN threats.

Furthermore, a Communication, which address the question of natural and technological hazards, is in preparation. It presents in particular the arguments in favour of improving information provided to populations likely to be affected by the consequences of a disaster.

# 3- STRATEGIC OBJECTIVE 3: ENSURING A QUICK DETECTION AND IDENTIFICATION OF AN ACTUAL ATTACK AND SPREADING OF INFORMATION (MONITORING, WARNING AND COMMUNICATIONS)

# 3-1 Detection and identification of a biological and chemical attack

The detection of deliberate releases of biological agents relies first and foremost on Member States' surveillance systems for monitoring the occurrence of infectious diseases. Co-ordination of these surveillance systems at EU level, especially for notification and exchange of information on outbreaks, is conducted under the framework of Decision 2119/98/EC of 24 September 1998 on the surveillance and control of communicable diseases. The Commission has adopted a decision on 17 July 2003 amending Commission Decision 2000/96/EC and Commission Decision 2002/253 so as to place under specific surveillance in the EU with appropriate case definitions certain pathogens that might be used in bioterrorist attacks.

In the context of the implementation of the health security programme in collaboration with the Health Security Committee, the Commission set up working groups on clinical diagnosis guidelines, laboratory issues such as networking and assistance, ring testing and quality assurance, the development of medicines, public health preparedness, response planning, incident investigation and sampling. A matrix model has been developed and used on a restricted basis for prioritising bioterror agents and actions on bioterrorism. Moreover, clinical guidelines have been adopted on 48 bioterror agents and will be published in a peer-review scientific journal.

More specifically, it is crucial to enhance safety and confidence in the early detection of infective agents and toxicants in water. Multi-barrier systems, the use of appropriate markers at key points and the introduction of an adherence to the HACCP (Hazard Analysis Critical Contact Point) system by water suppliers are being promoted in the context of the programme on health security. Moreover, during the first civil protection forum organised by the European Commission in November 2002, a restricted workshop for the intelligence community has been organised on the "safety of critical installations". Representatives from water suppliers and waste water services discussed key issues concerning the safety of water supply.

# 3-2 Cooperation between the different existing monitoring systems

The Commission has considered further the development of the cooperation between the different existing monitoring systems in the CBRN area. The Commission has therefore established efficient procedures for the exchange of information through existing operational procedures in case of a CBRN threat or attack.

#### a) coordination between networks

The Commission's Civil Protection Emergency Response Centre serves as an interface with other Community networks likely to be involved in dealing with an emergency. Measures are underway to continue to guarantee optimum co-ordination between the civil protection network and other networks such as:

# - the Rapid Alert System BICHAT of the Health Sector

The Rapid Alert System for biological and chemical attacks and threats (RAS-BICHAT) was set up to allow prompt transmission of alerts and exchange of information between the Member States and the Commission. It has been used on six occasions and tested six times and is being developed and adjusted in the light of experience and the lessons learnt so far. Effective links have been established with the other health protection-related EU rapid alert systems. The system is also linked to existing Commission systems that scan information made available through news agencies, other news media and specialised sources onto the World Wide Web. This capability is being extended to involve other sources of information, the objective being to arrive at an interconnected information system to detect rapidly, track and assess threats so that advance warning could be provided before official confirmation or news break out.

A tool to evaluate and classify the severity of an incident has been developed and is included in the RAS BICHAT system.

# -ECURIE (European Community Urgent Radiological Information Exchange)

Work is being done to further enhance the technical capability of the ECURIE radiological early notification system and to include the EU Accession States and Candidate Countries in the system.

The radiological data exchange system EURDEP (European Union Radiological Data Exchange Platform) is being included in the emergency arrangements in order to make radiological measurement data automatically available in case of a radiological accident.

Regular exercises in the field of radiological emergency preparedness will be carried out within the countries participating to the ECURIE system and in co-operation with other relevant international organisations (IAEA, WHO, WMO, NATO, OECD).

# b) establishment of a common emergency communication system (CECIS)

The Commission and the Member States are establishing a *common emergency* communication and information system (CECIS) within the framework of the Mechanism. The CECIS is an essential element of the Mechanism because it should guarantee the authenticity, integrity and confidentiality of information exchanged among the states participating in the mechanism under routine conditions as well as in emergencies.

The Commission has worked on the functionalities of the system, which will consist of a central database accessible through a common web browser. The system will ensure communication and information functions. Additional services will be included: decision support systems, GIS based risk-maps, models for forecasting the development of emergencies.

The Commission is evaluating the possibility of enhancing the end-to-end security features of the system, in view of ensuring the management of classified information.

The Commission has made provision for inter-linking this communication system with other Commission networks, in particular for radiological (ECURIE) and health emergencies (BICHAT).

The Commission will test and validate the CECIS interconnections through exercises, from alert detection to intervention team mobilisation.

# c) improvement of the alert communication systems

The planning and implementation of the response to a CBRN threat or attack requires modern and state-of-the art communications and information systems and procedures that are adapted to these new challenges. Effective communication and information systems can assist with the early detection of an event, the rapid analysis, and the alert of the population. They are therefore key instruments for preventing and mitigating the consequences of any threat or attack.

Three main areas of communications can be distinguished:

- from the public to the authorities and emergency services;
- from the authorities to the public;
- between authorities and emergency services.

A Recommendation on the processing of caller location information in electronic communication networks for the purpose of location-enhanced emergency call services has been adopted by the Commission on 25 July 2003. This initiative may lead to a major overhaul of information and communications systems of emergency services.

In order to improve the communication to the public in case of a major disaster, the Commission is trying to identify what technical systems could be used to warn the population. Several Member States have recognised the high mobile phone penetration and the granularity of the network as strengths to rapidly disseminate messages concentrated at some areas.

In order to facilitate the modernisation of emergency services, the Commission plans to set up a user group made up of officials in the field of public safety and emergency communications services. This group will bring various users together to discuss ongoing developments, specifying their needs and exchanging experiences about implementation practices. It will allow for a more permanent dialogue between emergency service operators and authorities and represent a response to the enormous challenges ahead to ensure effective and interoperable systems for emergency handling and crisis management. Although initially, the implementation of location enhanced single emergency number 112 will have priority, other issues

such as new concepts for advanced radio communications systems and public warning systems and procedures will be part of the work.

The Commission is engaging itself in a broader dialogue with private network operators, in order to forge common goals relating to the protection of Europe's critical telecommunications infrastructures. Furthermore, given the global nature of telecommunications networks and in particular the Internet, the Commission is working closely with the G8 which recently established principles for Critical Information Infrastructure Protection. The Commission has proposed the establishment of the European Network and Information Security Agency (ENISA) to build out an early warning and information-sharing network to cope with attacks or disruption of information infrastructures.

In the sector of Justice and Home Affairs, the Commission is developing close contacts with Europol in order to support the creation of an EU rapid alert system on CBRN terrorist attacks. It will be based on the communication systems amongst the EU law enforcement services and Europol. The proposal is at a very early stage but it might become a very useful communication net to support the other ones already developed in other sectors. It might be integrated in the future to the CECIS.

With the advent of GALILEO, the European satellite navigation system, the European Union contributes to improve Search and Rescue (SAR) operations dramatically, while maintaining compatibility with existing emergency transmitters onboard ships and aircraft. The distress signals must be detected under severe conditions from anywhere on Earth. GALILEO will significantly improve the system by detecting distress beacons in real time and locating them with an accuracy of a few meters. Adding a return link-from the SAR operators to the beacons will further help the rescue operations. Furthermore, GALILEO will provide a robust and access-controlled service for governmental applications. The Public-Regulated Service (PRS) will be used by groups such as police, fire, ambulance, military and customs. PRS is required to be operational at all times and in all circumstances, notably during periods of crisis, when other services may be jammed.

4- STRATEGIC OBJECTIVE 4: MITIGATING THE CONSEQUENCES OF AN ATTACK AND FACILITATING THE RETURN TO NORMAL CONDITIONS AND USING AND FURTHER DEVELOPING ALL INSTRUMENTS THAT MAY BE NEEDED FOR SUCH EFFICIENT CONSEQUENCE MANAGEMENT

The Commission has continued to give priority to implementing and maximising available Community instruments.

# 4-1 civil protection

# a) inventory of means and resources available for interventions

Common rules for the Community mechanism will be adopted. A procedure for the provision of up to date information on the resources available in the States participating in the mechanism for different types of intervention, including the response to CBRN risks, should be established, in order to facilitate, in the event of an emergency, the mobilisation of intervention teams, experts, and other resources and to ensure a better use of those resources.

Within the framework of the Mechanism, Civil Protection databases for teams and experts have been set up according to discussions with representatives from the Member States. They are updated through the Civil Protection Point of contacts. The Commission and the Member States have now available under the Mechanism a list of national contact points for networks of CBRN experts in the Member States, in EEA and candidate countries with the necessary qualifications in the CBRN field. These experts can be consulted or sent at the request of the Member States concerned to the scene where necessary.

# b) organisation of workshops

A special workshop and a full-scale exercise has been organised end 2002 to take stock of the action undertaken, the level of preparedness and response of the services concerned, the CBRN network in the Member States and the Response Centre. The final report of the workshop is identifying recommendations within the CBRN area on how to strengthen the EU's civil protection preparedness against CBRN terrorist threats. A table-top exercise "EU Response 2003" and a workshop "Florival 2-One year after" have been organised in 2003 in order to enable Member States to exchange lessons learned and experience for improving preparedness, response and incident management. The coordination of the Community networks likely to be involved in dealing with an emergency has been tested during the workshops.

#### 4-2 health

The programme of cooperation on preparedness and response to biological and chemical agent attacks (health security) agreed on 17 December 2001 by the Health Security Committee has defined actions relevant to the mitigation of the consequences of an attack.

#### a) creation of a database of relevant health specialists

General information is to be collected on medical resources for disaster medicine purposes, also pursuant to the health-related provisions of the Community Civil Protection Mechanism.

b) inventory of available medicines relative to the fight against bioterrorism

Information has been obtained and shared, on a restricted basis, on stocks of bioagent vaccines and anitbiotics in Member States. Guidance documents have been issued by the European Medicine Evaluation Agency (EMEA) on:

- the use of medicinal products against biological agents;
- the use of medicinal products against chemical threats;
- the development of vaccinia virus-based vaccines against smallpox.

#### c) stockpiling of medicines

Concerning the availability and stockpiling of medicines, the option of the establishment of a Community-level stockpile of authorised or to be authorised second generation smallpox vaccines, manufactured according to current quality standards, has been studied. The views of the Member States on this possibility were

sought in several consultations, starting with an exchange of views between Ministers at the Health Council on 23 June 2002 and continuing with the representatives of Ministers in the Health Security Committee and in technical ad hoc groups. The option of an EU stockpile was not supported and, instead, Member States continued to build their own national stockpiles.

# d) studies on dilution for smallpox vaccines

A study has been undertaken on the dilution of existing smallpox vaccines in Europe on a restricted basis and results have been made available to the members of the Health Security Committee. A project is to be launched on Vaccinia immunoglobulin development and production, a key biological substance for smallpox immunisation, necessary for mass vaccination plans.

# e) consideration of possible amendments to the pharmaceutical legislation

An amendment to the pharmaceutical legislation on liability for non-authorised products for bioterror-related purposes is currently being discussed at the European Parliament and the Council.

# f) co-ordination and evaluation of emergency plans

An exchange of information on Member States' public health emergency plans against smallpox has been completed. The Commission Task Force on Health Security has developed a table for comparison of corresponding measures and alert levels. Tests of communication channels and evaluation of existing emergency plans have been run in the form of an exercise for smallpox in the context of the Global Health Security Initiative, agreed between the G7 group of countries, Mexico, and the Commission. An EU-level exercise on biological and chemical release events will be conducted in 2004.

# g) modelling of outbreaks and data for simulation

Member States' experts and experts from the Commission Task Force on Health Security are working together to develop a generic model, which can be subsequently adapted to specific conditions in each of the Member States. They are also working on a database of models and appropriate assumptions on the basis of which models can be appropriately designed, as well as on data from which models can draw.

# 4-3 Transport

The Commission is working on the coordination of security policies and legislation. Therefore, a maritime security coordination group has been established in the Commission since January 2002, gathering staff from the following sectors: Taxation and Customs Union, External Relations, Trade, Justice and Home Affairs, and Energy and Transport.

The Commission is studying emergency response in the sector of energy and transport level and is preparing training on scenarios.

# 5-STRATEGIC OBJECTIVE 5: STRENGTHENING THE SCIENTIFIC BASIS OF THE PROGRAMME

# a) cooperation between the Commission and the Member States

Research provides the appropriate scientific basis in order to address the objectives 1-4 of the programme.

The Commission and the Member States have considered further how to improve the cooperation between their research activities on key issues such as surveillance, prevention, protection and treatment, using in particular the opportunities offered by the Sixth Framework Programme (2002-2006).

The 6th Research and Development Framework Programme provides studies opportunities for research on issues related to civil protection, crisis management, life sciences, radiation emergency management, genomics and biotechnology for health, food quality and safety, biosecurity and protection against risks arising from terrorist attacks.

In the context of "Scientific Support for Policies", four co-ordination activities, in the following areas have been identified:

- Development and commercial production of standardised assays for detection of haemorrhagic fever viruses and variola virus and their implementation in the diagnostic service of EU P4 laboratories;
- European research networking activities to develop safe products and policies to protect the citizens from the threat of anthrax attacks and other agents of bioterrorism;
- Assessment of the vulnerabilities of modern societies to terrorist acts employing radiological, biochemical or chemical agents with the view to assist in developing preventive and suppressive crisis management strategies;
- European approach to nuclear and radiological emergency management and rehabilitation strategies, to provide better coherence and transparency in decision making processes on local, national and border crossing interventions.

Under "Support for Policies", a second call for research proposals has been launched. It will cover the following areas:

- enhancement of surveillance capacity in place and development of more efficient surveillance models and early warning surveillance systems,
- improvement of infectious disease modelling tools and risk assessment models.

Moreover, the Research activities running under the sixth Research and Development Framework Programme priorities "Space and transport" and "Sustainable Surface Transport" are also relevant for the objective 2 of the CBRN Programme.

In the GMES (Global Monitoring for Environment and Security) part of the Work Programme, a proposal for a Network of Excellence in Security (Global Information Network for Security) has been retained (Global Monitoring for Security and Stability, GMOSS). The objective of this initiative is to work towards an enhanced European capability in monitoring for civil applications: humanitarian aid, reconstruction, verification of non-proliferation threats, police operations including vulnerability assessment and developing stability beyond EU's borders.

In addition to INSPIRE, a specific support action has been introduced in the Work Programme of Space on data harmonisation in order to increase the level of interoperability among geospatial information systems. The development of common standards and specifications for data documentation, collection, and exchange is central to the successful technical implementation of INSPIRE.

Furthermore, under the objective "Improving aircraft safety and security", a proposal for an Integrated Project has been retained (Security of Aircraft in the Future European Environment, SAFEE). The overall vision for SAFEE is the construction of an advanced aircraft security system designed to operate during on-board terrorist threat scenarios.

The work programme covers also maritime navigation and information services, including security in maritime operations.

# b) coordination activities

The Commission has established a Research & Development Expert Group on Countering the Effects of Biological and Chemical Terrorism, as a follow-up to the Ghent European Council of 19 October 2001. The Group has met five times around the following key-areas:

- inventory of the research activities in Member States and at EU level available for countering the effects of biological and chemical terrorism;
- examination of how these existing research initiatives and expertise could be better co-ordinated and mobilised;
- identification of the existing research gaps and of the future short and long term needs of research in the field, taking due account of the opportunities offered by the 6<sup>th</sup> Framework Programme for RTD, the activities and programmes of the Joint Research Centre, and the relevant initiatives in the Member States.

The Joint Research Centre has continued its research into diagnostics, nuclear forensics and risk communication in collaboration with international partners such as IAEA and Europol.

It will engage in research on biological countermeasures coordinating a bioresponse working group of Member State experts, on new products and processes for civil protection operations. It will continue its analysis of vulnerabilities posed by advances in science and technology.

In this context, prospective studies have been carried out on:

scientific aspects of biological and chemical terrorism;

- social, economic and psychological vulnerabilities of modern society to terrorism;
- possible scenarios involving the introduction of deliberately transformed organisms for terrorist purposes.

The Joint Research Centre is also updating its on-line database relevant to biological and chemical terrorism. This database is made available to all authorised competent services of the Commission and Member States. Finally, it has established an internal co-ordination mechanism for crisis response with specific provisions for the case of chemical, biological, radiological or nuclear emergency.

# c) Contribution from the Information Society Technologies (IST) work programme

The CBRN attack prevention and management requires also the full interoperability of the Information management systems across the public and private bodies concerned. These information management systems, due to the nature of these terrorist acts, are often required to be ad hoc by nature.

The current IST work programme 2002-2004 partly address the need for a common platform for emergency application. Further activities such as collaborative work environment, secure alert and emergency communication services and small signal detection should be included in the work programme 2004-2006.

### d) Preparatory Action on security related research

Following the different requests from the Parliament and the Council and as mentioned in the Communication (COM(2003)113) of March 2003, the Commission is preparing a Preparatory Action entitled "Enhancement of the European industrial potential in the field of Security research 2004-2006", with a view to contributing to the improvement of European citizens' security, to reinforce European technological and industrial potential in this area and to develop advanced technological tools in support of policy makers. This Preparatory Action will span from 2004 to 2006 and will prepare the basis to establish an European Security Research Programme starting in 2007, identifying the optimal EU added value and the priorities to be addressed in such a programme.

Under this Preparatory Action (PA) a series of precursory activities that are complementary to those undertaken in regional, national and inter-governmental contexts will be implemented. The PA will contribute to both Strategic Objectives 5 and 7 of the CBRN Programme. A topic on protection against bio-terrorism and other incidents with bio-chemical and other substances will be considered.

# 6-STRATEGIC OBJECTIVE 6: COOPERATING WITH THIRD COUNTRIES AND INTERNATIONAL ORGANISATIONS (INTERNATIONAL COOPERATION)

The Commission has continued as appropriate examining liaison, exchange of information and cooperation with third countries and relevant international organisations, with the aim of promoting synergies and avoiding unnecessary duplications

# **6-1 Health Security**

The Global Health Security Initiative (GHSI) was launched by the Health Ministers of the G7 group of countries together with the Health Minister of Mexico and the EU-Commissioner for Health and Consumer Protection, in the wake of the bioterrorist attacks in the USA in the autumn of 2001. WHO participates as scientific consultant organisation. To carry forward the initiative, a steering Global Health Security Action Group (GHSAG) was set up. It has in turn created several technical working groups and a laboratory network, which are addressing individual issues in their areas of expertise with an emphasis on promoting international collaboration and improving the response of the health sector to acts of biological and chemical terrorism. Various activities have taken place under this initiative, including: a smallpox train-the-trainers seminar, conferences on isolation techniques and risk communication and a large-scale tabletop exercise on smallpox ("Global Mercury" 9-10 September 2003). An incident scale for risk communication has been developed together with guidance for its application in various threat circumstances.

The Commission is also co-operating with the World Health Organisation in the context of the Ottawa initiative and of on-going initiatives by the WHO to improve the operation of its Global Outbreak Alert and Response Network and its Integrated Approach for the strengthening of Epidemiology and Laboratory capacity. In addition, the International Program on Chemical Safety (IPCS) is also collaborating with the Commission on issues concerning chemical terrorism.

# 6-2 Radiological and nuclear emergency preparedness

The Commission is co-operating with other international organisations in the field of radiological emergency preparedness in the framework of the IACRNA (Inter-Agency Committee on Response to Nuclear Accidents) in order to co-ordinate international response to radiological accidents and to organise joint exercises.

The Commission will participate in the planning and execution of the next joint international nuclear emergency preparedness exercise (*CONVEX 2005*) planned for 2005.

The Commission has also initiated a process of creating strong support links between the Commission and selected national radiological emergency preparedness organisations in order to strengthen the Commission response in the event of a radiological emergency. The support would include for instance accident technical evaluation, assessment of different countermeasures options and atmospheric dispersion modelling. Besides, the Commission is preparing the future accession of Euratom to the Convention on early notification of a nuclear accident and to the Convention on assistance in the case of a nuclear accident or radiological emergency. The adoption of proposals for Council Decisions is foreseen for the end of 2003.

#### **6-3 Civil Protection**

The Civil Protection Response Centre has established regular information exchanges with the most relevant international organisations, mainly UN and NATO.

7-STRATEGIC OBJECTIVE 7: ENSURING AN EFFICIENT OVERALL USE AND COORDINATION OF THE INSTRUMENTS USED IN IMPLEMENTING THIS PROGRAMME (COORDINATION AND IMPLEMENTATION)

The Commission and the Council have each within their respective areas of competence, ensured the efficient coordination of the relevant instruments and initiatives within the sectors relating to prevention and limiting the consequences of CBRN terrorism

The Commission had already brought the various services and networks responsible for civil protection, health protection and research expertise under one heading. Since 2002, an inter service group on civil protection has been established in order to facilitate exchange and coordination in the area of CBRN terrorism.

In this context, the Commission has organised workshops and exercises in cooperation with the Community networks likely to be involved in dealing with an emergency.

# **CONCLUSION**

In 2003, the Commission has confirmed that it is committed and ready to take all measures within its competence with a view to preparing for, preventing and limiting the consequences chemical, biological, radiological and nuclear (CBRN) terrorism may have, primarily for the population, but also for the environment, for the food chain and for property.

In this context, in 2004, the Commission will continue to review regularly the programme and to give priority to the implementation of all Community instruments that contribute to preventing and limiting the consequences of CBRN terrorist threats.