

“NATO-CCMS PILOT STUDY on FOOD CHAIN SECURITY (FCS)”

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- Reducing the **environmental impact of military activities**;
- Conducting **regional studies** including cross border activities;
- Preventing **conflicts in relation to scarcity of resources**;
- Addressing **emerging risks to the environment and society** that could cause **economic, cultural and political instability**, and
- Addressing **non-traditional threats to security**.

- ***The objective*** of the PS Group is to study the safety and security of food stuffs in the face of their careless/ignorant handling as well as against expected terrorist attacks at the system which may destroy and/or degrade it at the source during distribution, processing and in the consumption phase.
- The study includes the protective and response measures which may have to be taken to reduce the risk and mitigate the consequences of these threats to the food system.

- after the tragic events of 11 September 2001 in USA, October/November 2003 in Istanbul, the 11 March in Madrid, August/September 2004 in Moscow and Beslan and in the light of the growing militancy of terrorist organizations throughout the world...
- ensuring the safety of foodstuffs and their supplies is becoming **more and more problematic** and may have a deliberate environmental effect (air, water, soil pollution, genetic distortions) and is now a genuine global challenge to contemporary society.

- The nature of the terrorist threat against the food system comprising production, distribution, processing and catering can be very diverse and unpredictable and involve chemical and biological agents of various kinds.
- Preparing for all possible contingence is **not practical**, so a “risk management approach” recommends itself for use in this study.

- Risk management is a systematic, analytical process to consider the likelihood that a threat will harm an asset or individuals and to identify actions that reduce the risk and mitigate the consequences of an attack or event.
- Risk management principles acknowledge that while risk generally cannot be eliminated, enhancing protection from known or potential threats can reduce it.

First (Kick-off meeting) Meeting

October 2-3, 2003

Istanbul, Turkey

- Participating Countries: 7

Belgium, Finland, Former Yugoslavian Republic of
Macedonia, Hungary, Turkey, USA, ESF

- 11 experts have attended.

- Director: Prof.Dr.Beyazıt Cırakoglu (TURKEY)
 - Co-Director: Dr. Sebastien Brunet (BELGIUM)
 - Co-Director: Lee Anne Jackson USA)
 - Reporteur: Assist.Prof.Dr. Hami Alpas (TURKEY)
- Advisor to Director: Prof.Dr.Faruk Bozoglu (TURKEY)
 - 3 working groups were formed.

1-Production and Distribution Systems

- -Present regulatory agencies and organizational arrangements
 - -The nature and likelihood of threat
 - -SWOT analysis
 - -The picture of food sector in general

2-Surveillance and Detection Systems

- -Medical
- -Veterinarian
 - -Agriculture
 - -Commercial
 - -Monitoring
- -Custom service
- -Consumer's view

3-Response Systems

- -Alert systems
- -Recall systems
 - -Care systems
- -Emergency measures

Second Meeting

May 21-22, 2004

Liege, Belgium

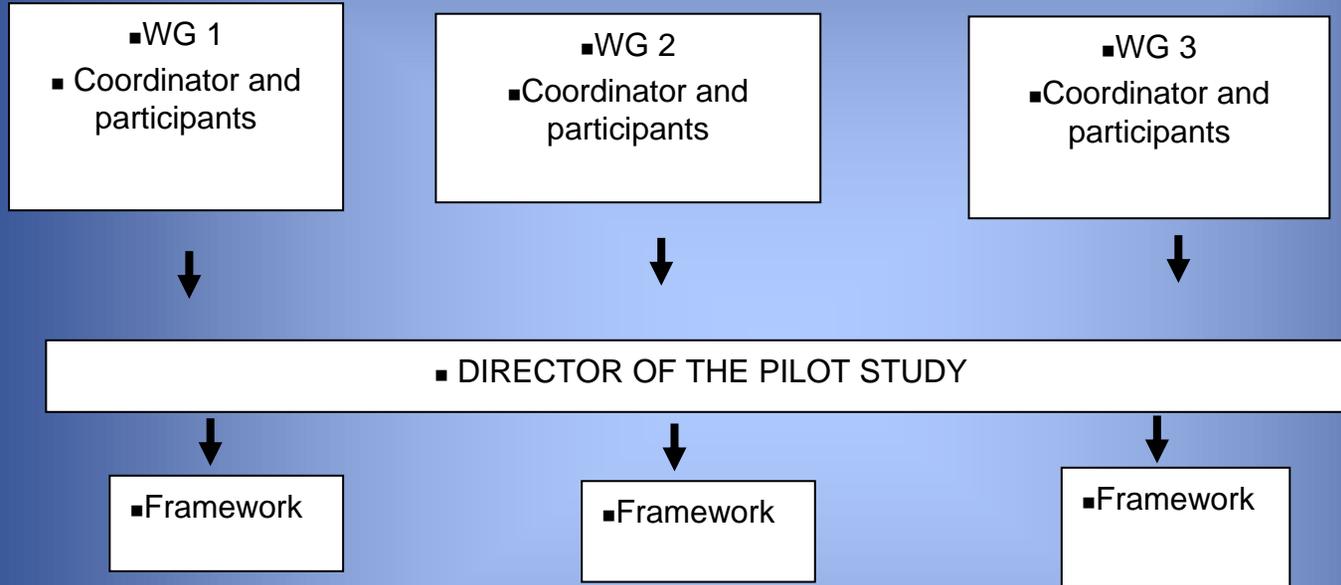
- Participating Countries: 10

Belgium, Bulgaria, Finland, Former Yugoslavian Republic of Macedonia, Hungary, Moldova, Russian Federation, Spain, Turkey, USA

- 20 experts have attended.

- The working groups do not have to be taken separately because they are complementary to each other.
- They participate to the same general picture of food security.
- The three working groups do follow a logical road from the description of the food system, to the surveillance and response systems.

- So, in order to be effective, all participants feed each of the working group with data and /or a case study.
- The guidelines and questioning for each working group will be elaborate by the coordinator and the participants designed.
- To avoid overlaps and contradiction, the guidelines and questioning have to be reviewed by the director of the pilot study”.



Topical Workshop

“Food Safety in Russia and the EECCA Region

28-29 October, 2004

Moscow-Russian Federation

- Participating countries: 11

Russian Federation (ministeries, agencies, scientific and voluntary organizations), Armenia, Belgium, Finland, Former Yugoslav Republic of Macedonia, Italy, Kyrgyzstan, Moldova, Spain, Turkey and USA.

- 55 experts have attended

At the close of the meeting participants elaborated the following proposals

- To continue exchange of experience between participating countries in the area of legal regulations, logistical and institutional aspects of food safety.
- To note the urgency of further study of issues connected with the production and use of genetically modified foodstuffs and feeds, stressing by the same token the complexity of the question and the need to devise common European standards

- To explore the possibility of organizing a pilot project involving Russian and EECCA experts under the umbrella of NATO-CCMS food safety research.
- To recommend participating countries that they involve non-governmental (NGO'S) and voluntary organizations in decision-making and monitoring on food-safety problems.

Third Meeting

March 10-11, 2005

Antalya, Turkey

- Participating Countries: 6
Belgium, Finland, Germany, Russian Federation, Spain,
Turkey
- 8 experts have attended.

The group also agreed to continue exchange of experience between participating countries in the area of legal regulations, logistical and institutional aspects of food safety in the NRC cooperation framework between the RF Ministry of Natural Resources and NATO-CCMS through our ongoing PS Food Chain Security. In this respect Dr. Beyazit Cirakoglu (Director-TR) presented the Italian Russian proposal on "Environmental and Agro Terrorism: Development and Creation of a Special International Network System for Antiterrorist Ecological Monitoring and Counteraction".

A more detailed action plan of the formed WG's and expected outputs of the PS in the light of the described purpose and scope of the study was summarized as below:

PURPOSE AND SCOPE OF THE PILOT STUDY:

Extract from the formal proposal:

"The objective of what is briefly called "Food Chain Security" is to study the safety and security of food stuffs in the face of their careless/ignorant handling as well as against expected terrorist attacks at the system which may destroy and/or degrade it at the source during distribution, processing and in the consumption phase. The study will include the protective and response measures, which may have to be taken to reduce the risk and mitigate the consequences of these threats to the food system. "

FINAL OUTPUTS

- The final outputs of this pilot study are agreed to be the followings:
To allow comparison between country partners; To identify common weaknesses of the food systems.

- The next meeting (4th meeting of the PS Group) should more concrete in terms of « risk mapping ». In order to identify the vulnerabilities of our modern societies to food terrorism, it was previously decided (in 2nd meeting of PS) to organize several working groups matching the following points in general:
 - 1 - Overview of the food system
 - 2 - Surveillance and detection systems
 - 3 - Response system

- For the next meeting, it was decided to further detail points to fill the following gaps as described below. In this respect all participants are invited to gather information (as far it is possible) about the following questions.

WG 1: Overview of the food system

1) Regulatory agencies and organizational arrangements.

- a) What are the competent authorities in charge of the food chain security?
 - a. Description of their role, mission and internal communication processes.
 - i. Are the risk identification, the risk management and the risk communication clearly distinguished?
 - b. What are their information channels?

For example: Regulars inspections; Companies; Consumers; Farmers; Intelligence services...
- b) Who take decision in crisis time?
- c) What are the international organizations in charge of the food chain security or in charge of related issues?

2) Picture of food sector

- a) What are the main national agricultural products?
- b) What are the main food industries?
- c) How do main exportations / importations look like?
- d) What are the main products consumed?

Nature and the likelihood of the threats

(see Dr. Faruk Bozoglu's (TR) questionnaire)

- a) What are the existing vulnerabilities of the food systems?
 - a. Particular agents that could be used in specific sectors
 - b. Technical / scientific vulnerabilities
 - c. Critical infrastructures
 - d. Legal / Organisational vulnerabilities
- b) Do we have data about the likelihood of such threat?
- c) What kinds of weapons could be used?
 - a. False information/rumours
 - b. Blackmail
 - c. Threats concerning information technology and communication
 - d. Threats concerning energy systems
 - e. Conventional threats
 - f. Biological threats
 - g. Chemical threats
 - h. Radiological threats
 - i. Biotoxines
 - j. Nanotechnology
 - k. Etc...

WG 2: Prevention, surveillance and detection systems

- What kind of medical information could be collected in order to identify a threat related to food?
- What kind of veterinarian information could be collected in order to identify a threat related to food?
- What kind of agricultural information could be collected in order to identify a threat related to food?
- What kind of commercial information could be collected in order to identify a threat related to food?
- What kind of consumers' information could be collected in order to identify a threat related to food?
- What kind of intelligence' information could be exchanged in order to identify a threat related to food?
- What kind of technical tools are needed to improve the surveillance and detection system?
- Which kind of information could be gathered to the private sector to prevent threats related to food?

WG 3: Response system

1) **Alert systems**

- a) What are the features of an efficient alert system?
- b) Is an alert system available in the food chain?
 - a. If not, what are the alternatives?
 - b. If yes, what are its features?

2) **Recall system**

- a) What kind of efficient recall system is needed?
- b) Is a recall system implemented for all kind of products?

3) **Health care systems**

- a) What are the available infrastructures?
- b) According to the type of threat, do we have enough and appropriate treatment?
- c) What kind of relationship is needed between the food chain security and the health care system?

4) **Emergency measures**

- a) Who is in charge of emergency measures?
- b) What could be the measures of the stakeholders in an emergency situation?
- c) Is there a specific communication policy?
- d) Is there a specific civilian emergency system?

- The PS Group has organized 2 **PS** and 1 **SE** within a year (October '03- November '04).
- One at home (Istanbul) two abroad (Liege and Moscow)
- Third meeting of the **PS** group will be in Antalya-TURKEY in February '05.
- Fourth meeting is scheduled to be in USA around October '05.
- Planned to finalize around 2007 (4 years)

- **Passive Involvement** by joining ongoing CCMS activities (*details in the next slide*)
- **Active Involvement** through new initiatives
- **Partnership** (mentorship)

- A formal request to work in one of the above mentioned working groups is a priority.
 - Director Dr. Cirakoglu e-mail: bcirak@tnn.net
- The pilot study group also agreed that the third meeting is the last opportunity to accept new participants and from thereon no new participation will be accepted.

- Offers the opportunity to search for information on NATO/CCMS activities
- Provides access to information and online publications on environmental problems
- Publishing board for results achieved and announcements

Internet Address

<http://www.nato.int/ccms/>

- Information about the meetings, meeting reports, working groups and group members can be reached from
 - E-mail group can be reached via FoodCS@yahoogleroups.com

Internet Address

<http://www.nato.int/ccms/pilot-studies/fcs/fcs-index.htm>

Thank you for your kind attention