

2006 NORDIC SAFETY & SECURITY FORUM

Conference Report
January 2007

"Making Communities Safer"
October 11-12, 2006
Copenhagen, Denmark

Prepared by:
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Justice and Safety Center, EKU

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MAKING COMMUNITIES SAFER



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First Nordic-American Expert Public Safety Symposium

11-12 October 2006
Copenhagen, Denmark

“Making Communities Safer”

AGENDA

Wednesday, 11 October

09.00 – 10.00 **Registration**

10.00 – 10.30 **Welcome addresses** Michael Marklund, President NSSA
Bo Nygaard Sørensen, DIFT
Dr. Pam Collins, Executive Director, JSC, EKU
Cindy Shain, Co-Director IJSI, EKU

10.30 – 12.00 **Discussions, Part I:**

Key Preparedness Issues/Challenges

Moderator Dr. Pam Collins

A Safe and Secure Society, a Cost Research Project Kurt Petersen

- *Communications: The Importance of Risk Dialogue* Lars-Erik Warg

Experiences from Tsunami and Lebanon Peter Holström

Preparedness in Copenhagen Sören Brydholm

Vulnerability Assessment and Critical Infrastructure Dr Pam Collins
Bo Nygaard Sørensen

12.00 – 13.00 **Lunch**

13.00 – 14.30 **Discussions, Part II:**

Training issues Cindy Shain
Linda Mayberry
Bo N Sørensen

Technology Issues

- **Homeland Security** Dr. Pam Collins
- **Fire & Risk Management** Michael Marklund
- **Cyber Security** Dr. Marc Rogers
Dr. Kay Scarborough

14.30 – 15.00 **Coffee break**

15.00—16.30/17.00 **Discussions, Part III:**

Interagency Collaboration Moderator **Niels Johan Juhl Nielsen**

Fire/Emergency Medical Dr Larry Collins
Lennart Malmström
Hans Ivarsson

Interoperability Niels Johan Juhl Niel

Public Health Preparedness Freddy Lippert
Bill Wetter

Disaster Planning Dr Larry Collins

Dinner – (Restaurant in the centre of Copenhagen) Transportation Provided
Dinner hosted by the Symposium Partners:

NSSA
DIFT
EKU/IJSI

Thursday, 12 October

09.00 - 10:00 **Discussions, Part IV: *A Problem-Solving Approach to Community Safety in Local Authorities in Scotland – Neil Henson***

10:00 - 10:30 **Coffee Break**

10.30 - 12.00 **Discussions, Part V:**

International Cooperation Moderator **Niels Johan Juhl Nielsen**

Identification and discussion of current examples of cooperation:

Global terrorism Lars Erslev Andersen

International cooperation – A Nordic View Clas Herbring

International mechanisms for Cooperation Per-Erik Johansson

Expanded Security and Intersectoral Cooperation Juha Martelius

12.00 -13.00 **Lunch**

13.30 -15.00 **Discussions, Part VI:**
Open Discussion to identify areas for future international cooperation.
Discussion will include all participants.

Discussion leaders:

NSSA Michael Marklund
DIFT Bo Nygaard Sørensen
EKU – IJSI Cindy Shain

15.00 **Coffee**

15.30 **Summing up, Conclusions, Future Steps**



Conference Organizers and Sponsors

The Danish Institute for Fire and Security Technology (DIFT), the International Justice and Safety Institute (IJSI) and the Justice and Safety Center at Eastern Kentucky University, one of the leading academic centres for safety and security in USA, and the Nordic Safety and Security Academy (NSSA) sponsored the event.



The Danish Institute of Fire and Security Technology

The Danish Institute of Fire and Security Technology (DBI) is a technological service enterprise. We endeavor to protect lives and property by promoting active and passive fire prevention and by enhancing the general level of security and fire safety, both at our customers' premises and in society in general. We co-operate closely with public authorities and our customers include private and public enterprises alike.



DBI is the market's leading knowledge centre in the field of fire safety and prevention. We maintain this position by keeping in close contact with our market and through relevant participation in research and development activities. We systematically collect and process the latest information on fire safety and protection from all over the world and actively contribute to and participate in efforts to set norms and standards at national and international levels.

Based on these activities, DBI develops and maintains a programme of innovative, valuable services that assists our customers in fulfilling their goals and obligations related to fire protection and safety. By so doing, we are instrumental in maintaining a high level of safety and fire prevention in buildings and for systems, products and services.

DBI is an independent private enterprise. We are approved by the Danish Ministry of Science, Technology and Innovation as a technology service institute. As such, we are part of a ten-enterprise network, called the Advanced Technology Group, comprising more than three thousand highly-educated specialist

International Justice and Safety Center, Eastern Kentucky University



facilitates information sharing between countries about best practices, lessons learned, and new technologies pertinent to safety, security, and justice.

The International Justice & Safety Institute (IJSI) promotes global and bilateral research, education, and discussion about safety, security, and justice – key elements of democratization, modernization, market reform, civil society, and rule of law. The Institute forms partnerships with universities, academies, government agencies, and the private sector in order to increase understanding about the roles played by police, security, emergency services, and corrections in open and free societies. In addition, the IJSI



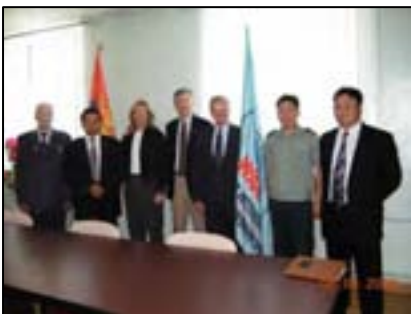
The principal U.S. members of the IJSI are four of the nation's leading academic institutions specializing in criminal justice, safety, and security:

- College of Justice & Safety, Eastern Kentucky University
- John Jay College of Criminal Justice, City University of New York
- College of Criminal Justice, Northeastern University (Boston)
- College of Criminal Justice, Sam Houston State University (Texas)



The growing list of the IJSI's international partners includes:

- International University, Moscow, Russia
- International University, St. Petersburg, Russia
- Police College of Finland
- Nordic Safety & Security Academy
- Turkish Institute of Police Studies
- National Academy of Law Sciences, Kharkiv, Ukraine



Among the more important IJSI activities to-date have been:

- Co-sponsor of the Institutes first international conference "Making Communities Safer": Nordic and American Experiences" October 11-12, 2006 in Copenhagen.
- Sponsor and host of International Police Studies Conference in June 2003 in Kentucky.

- Major participant in the 1st Joint Russian-American Law Enforcement Technology Conference in February 2004 in Anchorage, Alaska.
- Major participant in the International Fire Safety Conference in October 2004 in St. Petersburg, Russia.
- Sponsor of U.S. visits by public safety and higher education officials from Russia (Moscow and St. Petersburg), Finland, and Kazakhstan.
- International visits to Russia, Ukraine, Kazakhstan, England, Netherlands, Denmark, Sweden, and Iceland.
- Financial support for graduate students from Russia, Kazakhstan, and Turkey studying criminal justice, loss prevention, and safety at Eastern Kentucky University.

Nordic Safety and Security Academy (NSSA)



It is a non profit organization, consisting of individual members, companies, government organizations and universities, representing a variety of disciplines and lines of business. Each member is linked with the safety and security area professionally and forms together an international network of highly skilled individuals and experts, each with a long experience from their respective subject fields.

The Board is represented by members particularly from the Nordic countries. At their disposal they have a Scientific Board with members of international repute and composition, whose task it is to raise the scientific level of the Academy's activities and work to give a professional and adequate handling of issues for NSSA.



Conference Introduction:

Dr. Pam Collins, Justice & Safety Center, Eastern Kentucky University



The planning for this conference began in 2004 with meetings between Eastern Kentucky University's International Justice and Safety Institute and the Nordic Safety and Security Academy. These initial meetings involved many discussions regarding the lack of information sharing between and among the emergency response community. Most seminars, workshops, and training programs were directed at a single emergency responder such as fire or police. At the time of the planning of this conference we could not identify a mechanism that allowed for these practitioners and academics to come together collectively to talk across their different sectors and organizations. These early meetings, leading up to the "Making Communities Safer" professional forum, were the culmination of two years of conversations and conference planning between IJSI, NSSA, DIFT and representatives from the Swedish, Danish, and Iceland fire and rescue service. Since that time we are very encouraged to see several European conferences emerge that have begun to understand the need for interdisciplinary training and networking. These conferences are being developed to include all the emergency response community as well as the private sector.



While the planning for the conference between the Scandinavian countries and the United States was at times challenging, there was a commitment and determination by this early group of practitioners and academicians to host a conference that brought together in one setting, fire, security, safety, public and emergency health, and researchers in these areas.



Those efforts resulted in the "Making Communities Safer" conference which brought together Nordic, American and British experts and officials from all safety and security fields, representing government and the private sector, to share experiences and new developments and to consider how best to make communities safe in the post-9/11 world. The conference also identified strategies for future collaboration and conferences or forums of this kind. The emphasis was from an international perspective and multi-disciplinary solutions. The conference concept was refined to more accurately reflect the intent which was to bring multi-disciplinary emergency response professionals from not only fire and police but public health, emergency medical, emergency management and private sector, keep the group small in order to encourage a more

interactive environment with both presentations and discussions. This Emergency Response Forum was successful on many different levels, including the fact that we were able to have 35 representatives from 6 countries participate, and with all the Scandinavian countries represented with the exception of Iceland. The conference also attracted participants and presenters from the United Kingdom and the United States. Media was also invited to the Forum and they interacted with the participants and in some of the discussions.

As a testament to the success of the conference, the following comments were made expressing gratitude for continuing on with what represents one of the first of its kind for the Nordic region to bring many different public safety agencies together with an international forum in which many issues and practices were discussed.

Clas Herbring, Head of Development Section, Swedish Rescue Services Agency had this to say about the conference: "First of all, all my gratitude to Mrs. Flygare & Dr. Pam Collins and Dr. Gary Cordner, and Bo Sørensen, of DIFT who fulfilled the ambition and planned this meeting. International Cooperation in a Nordic view

The significance of this symposium and the importance of its outcome can be summed up in a quote from a 2005 Danish Ministry of Defense white paper entitled, "*A Robust and Safe Society*":

"A modern society must constantly strive to reduce vulnerability and increase its strength and capability to withstand new challenges and risks. Effective preparedness is not static, but requires capacity-building, organization and planning to be fit to the tasks at hand. We need to have a more comprehensive view when looking at today's threats and risks, since disaster – when it occurs – could be large enough or catastrophic enough that it affects the whole society.

Development in Denmark and in the world around us means that the conditions for and understanding of preparedness has changed. Technological development has led to a greater dependability between sectors nationally and internationally. The more complex the systems are, the greater the consequences, when the disaster occurs."

Proceedings from the Expert Public Safety Symposium – “Making Communities Safer”

Copenhagen, Denmark, October 11-12, 2006

Preface

On October 11-12, 2006, a symposium on Making Communities Safer was held in Copenhagen, Denmark. Participants – researchers and practitioners – from Sweden, Denmark, Finland and the USA took part in two intensive and fruitful days of sharing and discussions at the Danish Institute of Fire and Security Technology (DIFT) in the Copenhagen area.

It all started when the Nordic Safety and Security Academy (NSSA), and the International Justice and Safety Institute (IJSI) and the Justice and Safety Center (JSC) at Eastern Kentucky University, expressed a desire to create an interdisciplinary forum for mutual exchange of knowledge and information across sectors and borders. Eventually, DIFT became the third partner in our group.

As planned, the symposium provided an open forum for free discussion among the experts, covering many aspects of public safety. Three broad themes were emphasized throughout the symposium: Key Preparedness Issues & Challenges, Interagency Collaboration, and International Cooperation. Since major crises will have an impact across sectors and national boundaries, coordination, cooperation, and communication at different levels of government were stressed as crucial aspects in situations of public safety.

We, of NSSA, ECU, and DIFT, want to express our gratitude and warm thanks to the speakers and to those assisting with the organization and administration of this whole event.

As Tomas Ries, Director of the Swedish Institute for International Affairs said recently in SEMA magazine,

“Recent disasters and problems have demonstrated how poorly prepared we are to handle the new globalising threat environment. From yesterday’s massive but predictable Westphalian security agenda we now face a fuzzy haze of sometimes minor and sometimes potentially existential challenges. Concrete and potential examples include catastrophic terrorism, the south Asian Tsunami, hurricane Katrina, human transmitted avian flu, domestic tensions such as the revolt in the suburbs of Paris, deep dissatisfaction in several developing societies and deep misery in many of the poorest parts of the world, as well as potentially growing alienation of some major state actors from the globalising world.”



Meanwhile western states remain largely prepared and equipped for yesterday's world, when the state ruled with clearly defined borders, the threats were black, white and evident and we were familiar with the threat environment.

The world is now changing dramatically. Politically, we live in a global village, but the enormous global socioeconomic tensions make it a village on the verge of revolution. Secondly the threat spectrum has expanded beyond the political. Future risks and threats now also encompass functional and ecological security which in turn interacts with each other and with our political environment. The new threat environment is multidimensional, dynamic and fuzzy.

To handle this environment we need a new conciliatory perspective, complementing yesterday's narrow sector expertise with broad holistic analysis. Secondly we need quicker decision-making and a greater capacity to act and take responsibility in unclear situations. Thirdly we need far more flexible instruments, permitting improvised responses to the unexpected. We need a flexible network of interoperable modules from different government and private sectors: military, health, technical, scientific, law enforcement, psychologists, first responders, emergency medicals and so forth, as well as far closer interaction between public and private and government and NGO."

Making communities safer is the joint responsibility of national and local authorities. It is also the joint responsibility of police, fire, medical and emergency management, homeland security, and even defense agencies. Moreover, making communities safe is not only a government responsibility but also a private sector concern and the duty of all citizens.

Communities face a wide array of threats to safety, including natural disasters, epidemics, fires, accidents, crime, and disorder. Today, the additional threat of terrorism has surged to the head of the list in the United States and many other countries.

The "Making Communities Safer" symposium brought together Nordic, U.S. and U.K. experts and officials from all safety and security fields, representing government and the private sector. They shared experiences and new developments, considered how best to make communities safe in the post-9/11 world, and discussed strategies for collaboration. The emphasis was on international perspectives and multi-disciplinary solutions.

Wednesday, October 11th

Day 1 Morning Session

Conference Welcoming Addresses

The symposium was opened by Michael Marklund (Deputy Fire Chief and Risk Manager of Staffanstorp,) Bo Nygaard Sørensen, (NSSA & Leader of Safety and Security at DIFT, Copenhagen,) Dr. Pam Collins (Executive Director, Justice and Safety Center, ECU,) and Cindy Shain (Co-Director, International Justice & Safety Institute (ISJI), ECU.)

Dr. Pam Collins presented speakers from various key areas of Public Safety, and thanked everyone for offering their time and agreeing to share their expertise in this important symposium.

Dr. Collins also presented a plaque to Bo Nygaard Sørensen (DIFT) to commemorate the event and the start of future collaboration.

Discussions, Part I: Key Preparedness Issues & Challenges

Moderator: Dr. Pam Collins

First Speaker: Professor Kurt Petersen from LUCRAM, “A Safe and Secure Society, and the Research project COST”.

Vulnerability Assessment

Development in modern society has imposed new challenges to societal risk management. Society is increasingly vulnerable to new threats originating from technological development, globalization, climate change, terrorism and more.

A national research program on risk and vulnerability assessment financed by Sweden has been initiated. LUCRAM at Lund University is responsible for the research program covering aspects from complex network analysis, adaptive systems, organizational networks, emergency planning, risk communication, and more.

The program includes eight doctoral studies programs and is carried out in close collaboration with local, regional, and national administrations.

FRIVA

FRIVA is an integrated framework research program that began on March 1st 2004 with ten sub-projects. The research program is financed by The Swedish Emergency Management Agency (SEMA), the lead agency for overseeing the required national planning process for severe emergency preparedness. The national agencies involved are divided into several groups. These include technical infrastructure, transportation systems, toxic chemicals and explosive materials, and financial systems. The authorities within each group are jointly responsible for planning and coordinating security and emergency measures. Central to this planning process is an extensive use of risk and vulnerability analysis studies.



The objective of the framework research program is to use risk and vulnerability modelling and assessment to improve the competence of managing critical social and technological infrastructures at a national level. In order to accomplish this goal, statistics from extreme events will be used along with system dynamics modelling.

Implementing Risk and Vulnerability Analysis

At the moment, national and international research and development aims at designing methods for risk and vulnerability analysis at the municipal level. This development is primarily focused on tools for identifying and assessing vulnerability in various systems and is to constitute the basis for more cohesive vulnerability analyses. The next step must be to incorporate these methods with strategies for initiating and strengthening the crisis management capability in the municipalities. The methods must thereby become part of a process in which all players in the municipality (not only the local authorities) successively enhance their capability.

The purpose of this project is to, in close cooperation with a selection of municipalities, develop and test strategies for incorporating methods for vulnerability analysis as a natural part of crisis management in the municipalities. The project will be based on results and experiences of the project Municipal Vulnerability Analysis (SÅREV/MVA method).

COST

A Safe and Secure Society

We are exploring the possibility of launching a major European project on approaches to a safe and secure society, covering safety in a traditional sense, safety against external threats, security as it relates to comfort and quality of life, and on the relationship between safety and security. The approach will take into account the technological development, the vulnerability of modern society and the present and future trends of risks and threats. How can various actions contribute to improving safety and security? It will be most important to integrate the user aspect and the scientific aspect.

There are both scientific and practical challenges to the approach, and consequently the development and planning involves scientists, administrators, and professionals.

The concept is expected to be presented to the European Co-operation in the field of Scientific and Technical research (COST) for initial funding.

Second Speaker: Lars-Erik Warg, a Dr. of Psychology specializing in Risk Communication, "Risk Communication - The Importance of a Risk Dialogue."

To identify, estimate, reduce, and properly control the risks associated with modern society is, indeed, a great challenge of our times. All of this engages scientists, communities, politicians, non-governmental organisations (NGOs,) the media, etc. Risk different members/groups in society with different experience, knowledge, and values are crucial to the success of risk management. And the most important components of good communication are trust and credibility. Without trust among the players, the communication process will be less than effective.



In order to face different threats against society, there needs to be an understanding of what concerns the various communities and what they expect the experts to respond to. Most importantly, there must be a mutual trust between the players involved- authorities, politicians, scientists, and the experts of industry, unions, NGOs, members of the public, and the media- a

trust that is best founded in sound risk communication during a time when the community or society is fairly free from direct threat or attack..

We also have to realize that while we can protect against almost every threat, it is very difficult to protect against gossip and misinformation, which sometimes contributes to panic. The media also plays a role when it raises questions of blame, cover up, or conflict. While we may have less control over the threat of man's reaction to misinformation, we do have the ability to set the level of trust and credibility between the core group of experts who will manage any emergency.

Third Speaker: Peter Holmström, Instructor and Teacher, Revinge College, one of The Swedish Rescue Services Agency's schools for international training, "Experiences from Tsunami and Lebanon."

What is absolutely essential in responding to disasters and large scale emergencies is the ability to respond quickly with a constant and accurate flow of information, coordination among the agencies involved, trained personnel at the embassies and in the Ministry of Foreign Affairs who are prepared to respond, effective team-building, and a concrete structure already in place. The Swedish Rescue Services Agency has an assessment team ready to depart within 6 hours after a decision has been made and a support team ready to act within 12 hours.

Valuable lessons were learned after the Tsunami, and in Lebanon- the need to work more closely with other nations, to continue to build support teams, to continue training and development both in general terms as well as the specific training of Embassy personnel.

Fourth Speaker: Deputy Fire Chief Sören Brydholm, "Preparedness in the City of Copenhagen"

He shared with us the task of improving the Emergency Planning for Copenhagen, and the Danish Preparedness Act. There is a General Preparedness Plan, a Committee Plan, and a Health Plan. These outline how to respond during epidemics, hazardous material disasters, major fires, major failures at electricity plants, and other key infrastructures, riots, and terrorist acts.



The City of Copenhagen faces many risks as seen from a preparedness perspective. Copenhagen must therefore be committed to total preparation from a civilian standpoint, with an efficient and well-organized plan that addresses many different needs. For the last several years, Copenhagen's public safety organizations have been going through a process intended to raise the level of preparedness in the capital. Responding efficiently and effectively to large public safety emergencies or incidents can only be accomplished through cooperation with other first responders. In Greater Copenhagen cooperation is improved specifically in the area of rescue management in recent years.

While the normal day-to-day incidents can be handled by the city, greater incidents require help from fire brigades and neighbors. Extraordinary incidents require the involvement of a number of other agencies, authorities and even other countries. Through experience we have learned not to underestimate the benefit of a good communications plan, exercise drills, collective responsibility, and reliable plans for evacuation.

In order to improve our plans, we visited the London Resilience Team to get examples of best practice. We hope to develop a preparedness mindset to continue the development of our organization.

Fifth Speaker: Bo Nygaard Sørensen, Danish Institute of Fire and Security Technology (DIFT), “Why the Critical Infrastructure?”



Prior to 9/11, our vulnerability was perceived to come from accidents and natural disasters, but never from terrorism. Our thinking has been radically changed.

Today we have to “think the impossible”, and go beyond that. We focus on security vulnerabilities & solutions. We think about security technology all the time, but not on the human aspect of communication, training, etc.

How does management use vulnerability assessments? Are they incorporated in the business strategy? Infrastructure is critical to business activities, and management’s role and responsibility must be considered. A sound business strategy must include a security strategy, and the business world must be seen in conjunction with the political world.

Final Conclusions from Session I

The moderator, Dr Pam Collins, rounded up by also speaking on Vulnerability Assessments, and Performance Assessment.

After September 11, 2001, critical infrastructure protection became a national focus in the United States. What we quickly learned is that our critical infrastructures systems were never intended by their designers to resist the consequences of planned and malicious destruction. Also many of our critical infrastructures were built in the 1930’s and 40’s.

Clearly what is needed and in part what the Department of Homeland Security in particular has been working toward is a systematic approach to the identification of the significant relevant risks from terrorism and the development of effective measures for managing them.

Unfortunately after 5 years we are still trying to make these determinations. In part I don’t think we were prepared for the complexity of some of these systems. For example, in addition to the fact that many of these CI systems are over 60 years old there is also the vast expanse of systems to protect with an estimated:

- 170,000 public water systems consisting of reservoirs, dams, wells, and aquifers.
- An electric industry with approximately 92,000 electric generating units that services almost 130 million households and institutions.
- Oil and natural gas facilities and assets that are widely distributed, consisting of more than 300,000 producing sites.
- Crude oil transport system that includes pipelines (160,000 miles), storage terminals, ports and ships.
- A refinement infrastructure consisting of about 150 refineries that ranges in size and production capabilities from 5,000 to 500,000 barrels per day.
- More than 278,000 miles of natural gas pipelines and nearly 1.2 million miles of natural gas distribution lines in the US.

Central to the process of identifying critical infrastructures and then trying to provide some level of protection is the Risk and Vulnerability Assessment. Also along with the issue of identify risks and vulnerabilities is the need to use some type of systematic assessments with a common methodology. This should sound simple enough but unfortunately it has not been the case. Currently it is estimated that there are 28 U.S. Government sponsored vulnerability assessment models. This does not include the number of private sector programs and software tools available to communities for purchase. Needless to say there is still considerable debate as to the best methodology to use and at present DHS has moved away from endorsing any one model.

The impact on communities has been significant because they are called on by the Federal Government and in most cases by DHS to provide assessments of their critical assets and how they are being protected and identify what are the gaps or areas in need of improvement. These self assessments are often tied to becoming eligible to receive federal funding. The problem of course is that most U.S. communities do not have the internal expertise or resources to adequately make these assessments. While there are an abundance of documents and guidelines provided by the Federal government, i.e., the National Research Council report offers numerous counter terrorism recommendations for the reduction of vulnerabilities in Transportation Systems, Information Technology, Energy Systems, and so on the actual implementation of many of these recommendations by communities would impose a considerable financial burden on their limited resources. Moreover, even if the Federal Government wanted to provide the necessary resources the needs would far exceed the Federal capacity to support these communities.

What we have all come to realize, based upon these initial self assessments and what the Federal Government has identified as vulnerabilities, is that the U.S. cannot protect all of our identified vulnerabilities and critical assets. The approach needs to be more focused on assigning some sort of measurement that would not only describe the vulnerability but also the criticality of the threat.

Another concern that I would like to pose to the participants of this forum is that even if the Federal government could afford to address these threats and vulnerabilities the risk-reduction potential of proposed counter-terrorisms measures have not yet been systematically evaluated. While I would agree that extensive testing has taken place of the vulnerability assessment methodologies used by the Department of Energy and Department of Defence, these assessments generally assume absolute risk and therefore impose the highest levels of mitigation. This of course is not practical for each community throughout the U.S. to do and that is why in most cases these DOE and DOD vulnerability assessment methods are not easily transferable to non-nuclear and military applications.

What is missing, I propose, is a framework that would allow for a rigorous evaluation. A screening methodology, if you will, for the identification and prioritization of infrastructure vulnerabilities. There are currently a number of approaches being used to establish such a framework in order to manage the safety and security of complex systems. This particular approach is being developed at MIT and researchers there are recommending a scenario based methodology. This approach is currently being used for space systems, waste repositories, and nuclear power plants. The approach uses three assessment typologies:

- Probative Risk Assessment (PRA)
- Quantitative Risk Assessment (QRA)
- Performance Assessment

While this approach has demonstrated promise, there are a number of difficulties that exist. For example trying to protect complex and interconnected systems of infrastructure at the national level creates major technical challenges—primarily due to the complexity and diffuse nature of this system. Unlike technological systems, societal infrastructures are far more idiosyncratic, i.e.,

interconnected across systems; spread out geographically; societal infrastructures have overlapping ownership; and responsibility in the majority of cases (85%) is with the private sector.

Therefore, the technical complexity is matched or perhaps, exceeded by socio-political complexity. The work being done currently is exploratory and relies heavily upon the use of Value Trees and Decision Analysis Graph Theory. Their methodology makes use of a quantitative approach that supports a specific numerical comparison of the effects of various threat and targets. But certainly is promising if it can be scaled and applied across different critical infrastructure sectors and communities.

We have to identify our critical assets and how to protect them from threats. The focus of the Department of Homeland Security has changed from terror to all hazards and natural hazards, as these will probably cause greater damage and kill more people. We need a framework that will allow for legislation adapted to present and future conditions and circumstances.

Discussion Period

Dr. Collins concluded her presentation by posing a number of questions to the forum attendees, beginning with the extent to which Nordic countries use environmental evaluations tools when conducting risk and vulnerabilities. She went on to ask specifically if they use any toxicological risk analysis that concentrates on individual substances such as emissions or life cycle assessments that focuses on a product function and builds on that to define a system. The questions sparked a discussion regarding these methodologies which emerged out of a concern regarding the presence of PVC in Sweden and Chlorine in the Netherlands in the 1980's and 90's. The discussion also included the importance of placing these environmental evaluation techniques within either a Risk Assessment Framework, a more classical risk assessment approach; Strict Control Framework, which proposes that risk evaluations have limitations and Pre-Cautious Framework which takes the position that risk evaluation is too weak a basis for management. There was general consensus among the Risk and Vulnerability Assessment panel that societal infrastructures are difficult to track, and the reality is that we do not know what people will do or will not do. It is a socio-political complexity.

The most important points identified in Session 1 were communication, and the chain of communication. We have to learn to speak the same language, and also see to it that the internal communication is working.

During peace-time we should take the time to develop a good communications plan. When we have an attack on society things easily get out of control in the ensuing chaos. Communications plans should look at the role of the media, the role of the public, and intercommunication among agencies and even among nations.

We should be concerned about the media and their truth in delivery of information to the public. We should involve the media in a communications plan and define a delivery system that ensures, as much as possible, the dissemination of accurate information. While incorrect information can make a bad situation worse, lack of information could be even more damaging. Poor communication and bad information could lead to mistakes made in preparations.

There is a need to develop national and international standards as a framework for good communication.

We also have to consider, as part of a communications plan, that the general public might not always do what they are told to do, such as evacuating during a hurricane. In some cases, involvement of the public is crucial to the public health of others. In modern Western society, the general public believes that someone else will do what has to be done to ensure their safety. But the world has changed and we need to get the message across to the public that resources are scarce and individuals need to have a plan in place to care for themselves for at least five days.

Discussions, Part II: Training Issues and Technology Issues:

Linda Mayberry, Justice & Safety Center, and Cindy Shain, International Justice & Safety Institute, Eastern Kentucky University, talked about the need for training. They cited the need for strong collaboration in partnerships for training, and finding the best partners for training. Agencies should not only allow time to get their personnel trained, but should identify the best training available and set minimums for training requirements. Training should be shared with



other colleagues. Neglecting training could have disastrous consequences. Personnel should receive cross-disciplinary training, regional training, train together with partners, and as a result, demonstrate a smarter, more effective training plan that makes a wiser use of resources. There should be a move towards national training models that can be accessed by all, preferably using scenario-based training.



An important component of making communities safer is training public safety professionals, private sector security and the residents of our communities. In the United States, the fragmented and diverse nature of our system makes quality training a daunting challenge. In the law enforcement sector alone, over 18,000 federal, state, and local police and sheriffs departments terrorism awareness, intelligence sharing, and use of current technologies or securing a large special event, agency heads and trainers have sought delivery methods that ensure quality training and improvements to the effectiveness of public safety providers.

More recently an effort has been made to cross-train disciplines and to deliver an appropriate level of training to the 1,777,000 “emergency responders” in the US. A major challenge is to provide this training in a manner that takes into account the competencies and life experiences of adult learners. Delivery method is another challenge. Busy public safety and emergency responders may have limited opportunities to receive training by traditional delivery methods, requiring instead:

- train-the-trainer
- computer-based training
- web-based training
- video conferencing

Combining traditional delivery methods with alternative instructional methods constitutes the “blended” approach. This approach includes providing prerequisite learning materials through alternative media. The challenge is to make alternate delivery methods more available and just as desirable as traditional instructor led training.

Cindy Shain spoke about The Regional Community Policing Institute (RCPI) in Kentucky.

The vision of RCPI is to provide the training necessary to enhance the safety, security, and quality of life for citizens across United States. Questions to consider in providing the best training are at what level do we need to train people, who needs that training, and what should they be trained to do and in what areas. We must also consider what we want to accomplish with that training, who we want to partner with, which disciplines should be trained, how to raise the level of awareness, and how exercises and simulations can help make that training more effective and realistic. Traditional classroom training seems to be the least-desired method to receive training.

Bo Nygaard Sørensen, DIFT, pointed with great emphasis on the imminent need for security training and that it should be part of business education, as it is very much a question of perception. How do we get people to train, raising the level of awareness in an ever changing society? No one seems to take training unless it is regulated by law. We have to join forces to develop training that attracts business and never think we know everything we need to know. "Next time you think you are perfect, try walking on water."

Kay Scarborough, Eastern Kentucky University, gave a presentation on Cyber technology and emphasized that technology is beneficial to us, but can also limit us. We must be aware of technology's limitations and vulnerabilities. It must have public acceptance and be in accordance with civil liberties. Cyber technology will have a cost and an economic impact, and might mean loss of power. The good news is that we can accelerate technology transition from R & D to implementation, getting significant developments.



Mark Rogers, Associate professor, Purdue University, spoke about the need for intelligence-led policing in a cyber society. The increased use of information technology by terrorists has placed U.S. state and local law enforcement in the position of being the first line of defense and recognition for potential terrorist activities, while at the same time relying on U.S. federal agencies for support. As federal roles change to accommodate the changes in intelligence, state and local agencies must also change their roles to function more independently than they have previously. As law enforcement agencies conduct investigations dealing with digital evidence, intelligence related to terrorism as well as criminal activities will be uncovered. Cyber forensics will play a crucial role in the war on terrorism.



Discussions, Part III: Interagency Collaboration

Moderator: Niels Johan Juhl Nielsen, Special Advisor, Chairman Professional Mobile User Group

First Speaker: Dr. Larry Collins, Department Chair, Loss Prevention and Safety, Eastern Kentucky University, "History of US Fire Service and Professional Development"



Dr. Larry Collins gave a brief discussion of the diverse nature of the American fire and emergency services and the recent movement toward a national incident management system and a national professional development model integrating training, certification, and higher education.

In the post September eleventh world United States governmental agencies are mandating that all response agencies and their personnel who could be involved in emergency operations be trained and operate under a single incident management system. Police, Fire, EMS, Public Health, Public Works, and the Military are being trained in the National Incident Management System (NIMS) and the National Incident Command (NIC) model. Large scale

inter-agency operations such as the recent hurricanes Katrina and Rita in the gulf coast region have demonstrated the need for a unified command structure to maintain control of the many different types of agencies and groups who respond to mitigate incidents of this magnitude.

The professional development committee within the International Association of Fire Chiefs is working with the US Fire Academy and the Fire and Emergency Services Higher Education Consortium to develop a National Professional Development model that describes a logical pathway from an entry level firefighter to the Executive Officer level (Fire Chief). The system is based upon an analysis of the various skills and knowledge required to operate at various levels along the career ladder and attempts to eliminate duplication of learning; it integrates initial training and certification all the way through formal higher education degrees to prepare firefighters to become fire officers.

Second Speaker: Lennart Malmström, Associate Professor MD at Karolinska University Hospital, “Title”

Associate Professor Malmström gave an overview of disaster planning & preparedness from a management perspective- both on the national level and on a local hospital level in Sweden, and introduced the Swedish model of thinking with regards to the care of victims from huge accidents & terror attacks. He also described the preparedness and disaster planning associated with these scenarios.

Third Speaker: Hans Ivarsson, Head of Disaster medicine at KAMBER, “Title”

The Öresund Bridge which links Denmark and Sweden has made it both a necessity and a possibility to plan and develop reliable systems for cooperation between the two countries. It has to be noted that, in both countries, this cooperation is basically between local organisations and not on a national level. He briefly described the plan for emergencies on the bridge and tunnel the proper chain of command and system for organizing a response.



The possibility to assist each other has been evident during the planning and drafting of agreements concerning the Öresund connection and therefore the perspective has broadened. Programs for assistance have been developed between Fire brigades, health care, and police. Communication involves more than technical issues, even if these are the issues often first addressed. When two countries with similar culture and language cooperate, we often assume that we understand each other completely. Would it be easier to avoid common communication errors if we were not so alike? Legal issues regarding medical jurisdiction should also be taken into consideration.

Fourth Speaker: Niels Johan Juhl Nielsen

A discussion followed, on how issues raised in the presentations can generate a little more thought as to how we make communities safer. We are all playing by the same rules, and we are all striving for better communication. There will be new tasks ahead; we have to prioritize our efforts in interagency collaboration, and joint-training. And what is the definition of a disaster? Is it a disaster if we manage to rescue people in it? We must set a limit, because there is a limit.

Sixth Speaker: Bill Wetter, M.S./EMT-P, Manager, Office of Emergency and Public Health Preparedness, Louisville, KY Metro Health Department, “Interagency Collaboration”

What does an integrated approach to community response look like? Webster defines “integrate” as, “to make whole by bringing all the parts together.” Teamwork tells us that, “none of us are as smart as ALL of us” and for a team to work effectively together, they must...“Check their egos at the door!” Louisville’s model for teamwork and integration is called “The Group.” The Group believes that interagency collaboration during a community emergency response must play a role in at least one or more of the 4 phases of the emergency response cycle: Mitigation (Prevention), Preparedness (Planning), Response (Saving Lives) and Recovery (Return to Normalcy). Utilizing interagency collaboration is critical because no single agency has all the expertise to handle all the phases of the response cycle. A collaborative approach allows each agency to do what it does best and therefore doesn’t waste valuable resources. It avoids duplication of effort and allows the use of Mutual Aid agreements. To assure successful collaboration, all involved agencies and individuals must agree to PLAN together, TRAIN together, EXERCISE together and EVALUATE AND CHANGE together.

Thursday, October 12th

Morning Session

Discussions, Part IV:

First Speaker: Neil Henson, Problem solving trainer, Sixth Sense, “A Problem Solving Approach to Community Safety in Local Authorities in Scotland”



Henson provided an overview of the use of problem solving by the 32 local governments based Community Safety Partnerships. He began with a background to problem solving partnerships.

In the late 1990s certain aspects of government of the United Kingdom were devolved to Wales and Scotland. Scotland now has its own Parliament and focuses on a range of issues: health, education, and for us, Community Safety. They formed a Community Safety Unit within the Scottish Executive to provide the Strategic vision, requiring a problem solving approach and supporting it with funding to the Local Government Community Safety Partnerships. Their membership is made up of Council services, Police, Fire and Rescue, Health, Education, and community representatives, among others. They have to produce three-year Community Safety Strategies on how to resolve the local issues. They plan on doing this by looking at whether the problem can be eliminated or reduced either in significance or severity. They look at how they might act for efficiently to deal with the problem, do regular audits and analyze crime figures, and listen to the needs of citizens.

Strengths in the Community Safety model are that they are able to identify good practices from around the United Kingdom and apply them. They involve the community and politicians in the problem solving training. Their work is not dependant on any one agency, such as the Police. They are applying problem solving to Crime and Disorder, Calls for Service, Fear of Crime and related quality of life issues, as well as home/water/road safety.

The Problem Solving Process and Case Management system support the UK National Intelligence Model. The Community Safety Partnerships have their own Scottish Community Safety Network, which provides mutual support and the sharing of best practices.

The Scottish Executive encourages good interventions and shares the best work around all the councils through their own Safer Scotland website.

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Discussions, Part V: International Cooperation

Moderator: Niels Johan Juhl Nielsen

First Speaker: Lars Erslev Andersen, Associate professor, Institute for History, University of Southern Denmark. Research project: Terrorism and World Order. “New Terror Threats in Europe after 9/11”

If the war on terror starting with the war in Afghanistan 2001 was about the destroying of Al-Qaeda as an organization it was a success and the U.S. and the West could declare victory. If the war on terror is about fighting terrorism, the result is more blurred. At least in Europe, it seems that the threat is growing. It also seems that new types of terrorists are emerging: the home grown. It seems that the destroying of Al-Qaeda has been followed by a larger dissemination of Al-Qaeda ideology and that internet and the media play a role in this new pattern. We have to look at society and ask ourselves why someone within our own country would commit a terrorist act against their own. Could it be due to alienation? Perhaps social exclusion is the number one threat when it comes to the home-grown terrorist.

Second Speaker: Clas Herbring, Head of Development Section, Swedish Rescue Services Agency, “International Cooperation in a Nordic view”

In Sweden and the Nordic countries there are several agreements, networks, and structures for cross-border help in case of severe fires or accidents. With the ongoing globalisation and the EU, cooperation follows new possibilities for work, education, and travel. As a result, we can also expect new risks and threats to our societies that we need to handle as efficiently as possible.



In the EU, the monitoring information center is an important support mechanism for the member states and its associates. Is there need for other mechanisms and agreements? Or is the EU mechanism enough? It is extremely important for us to have regional cooperation, such as in the Nordic countries, both in cross-border help and development issues. We must also look at risk assessment and the need for optimizing resources in planning and preparedness in case of cross border operations.

The Nordred Agreement

In the Nordic countries there are several structures/agreements for cooperation in case of a major accident or disaster. The Nordred Agreement was established in the middle of 1980 and settled in April 1989 (including Land, Marine, and Environmental) and the articles include alert, cross border agreements, economy, resources, and responsibilities. The overall main issue is to reduce and eliminate obstacles for cross border help. The real basis of this agreement and its strength is all the local agreements that have been settled between communities along the Nordic borders; for example between Sweden and Norway where the border are approximately 1500 km long. Additionally it states that the countries should share development results. I will come back to this agreement later on.



Other examples of agreements in a Nordic view are The Barents Agreement, mirroring the Nordred agreement, including Russia and excluding Denmark and Iceland. In addition we (Sweden) have agreements with the Baltic States including articles of cross border help and development tasks.

Beyond the Nordic perspective at the EU level the Mechanism (MIC) is growing and decisions have been taken to improve their function and capacity. Another response center is within the NATO system; it is the EURO ATLANTIC DISASTER RESPONSE COORDINATION CENTRE. And as you all know the UN system is a major player worldwide.

In studying risks & threats from an EU perspective there are benefits to strengthening a regional perspective. Examples of severe accidents that will or could have major impact and raise demands and requests for cross border help are: natural catastrophes, sea accidents, pollution, pandemics, forest fires, and nuclear plant accidents.

If we study the risk topography in EU combined with parameters such as urban concentration, climate, geological aspects, etc. it is possible to divide EU into four risk regions combined with possible severe accidents:

- 1) The Mediterranean region has risk of forest fires, natural accidents, and marine pollution
- 2) The Western region has risk of marine pollution, and storms.
- 3) The Nordics region has risk of forest fires.
- 4) The Eastern region has risk of natural disasters.

In a first look at these possible accidents it looks more or less the same in Europe. But a most important fact is that the consequences could be very different. For example a forest fire in northern Sweden would not be as catastrophic as a forest fire in the South of France because of the differences in the geological aspects, climate, and the level of urbanization between the two regions. Additionally when planning for capacity to handle cross border incidents we have to be aware of the impact it could have on our infrastructural systems such as energy systems, oil, gas, water and information systems, which are most vulnerable..

Risk Assessment and Planning as a key

The risks we face are to some extent more or less unknown, at least concerning time; when will they occur and to what degree. Terror threats are an example of that. But we can learn a lot from accidents and incidents that already occurred. In Sweden we are rapidly learning from the study of accident and incident statistics. As statistical information improves we hope we will achieve a better foundation for our planning and preparedness. Within the framework of the Swedish Rescue Services Agency we have established a unit with a special task of learning from accidents. The risks have cross-border effect, now more than ever, so we should not only study our own country; we have to develop the ability to plan and handle the response between nations. The most natural step is to start within our region.

Another key factor when building response capacity is improved risk & vulnerability analyses. In Sweden as in many other countries world wide the use of risk and vulnerability analyses is improving rapidly. Every level in society is more or less forced to conduct such risk and vulnerability in order to develop a basis for cross-border assistance.

Better knowledge, better Risk Assessment, and cross border assessment is vital. But how good are we at conducting risk assessment with our neighbours? It is vital that we not only learn from accidents and statistical analysis, but it is essential that we plan for the unknown, such as a

terrorist attack. This year alone, there have been 3 seminars including drills within the Nordic region with a focus on terrorist acts.

Time as a key factor

Several cost benefit studies have been conducted in Sweden in the fire and rescue area. One particular study looked at the time factor in the case of an emergency; one minute difference in the time crews arrive on the scene can be the difference between saving life. In financial terms there is an increase from 1 to 30. The distance is of course one major factor when speaking of time, but the alert system and the ability to act are also factors. We all know the response time during the Tsunami was too slow and that the authorities responsible for releasing the resources were delayed because of a lack of mandate. With cooperative programs such as Nordred these problems are erased.

Functionality as a key factor

In Sweden we had a severe storm in February 2005, and a large part of southern Sweden suffered severe damage. Electrical power supply was out of order and a lot of families had to leave their homes. Sweden sent a request to the EU – Mechanism, MIC. We received several electrical grids. However, the electrical grids did not work and were more or less useless. This is one example of when sending resources doesn't always make sense or succeed and, therefore, resources for cross border help must be built into the plan ahead of time.

One can consider the international standardization ISO as a tool to for this purpose, but as we all know that most of the standardization work takes time and are we prepared to wait for result? Systems exist within the EU frame but there's a lot of work ahead before it becomes reality. It is unreasonable to assume that every country should build the capacity to handle every possible threat or emergency. If joint-planning was established, countries could divide the responsibilities, allowing them a better and more relevant response capability.

It is also important to note that culture and language play a role. In the Nordic region, we have a common history and culture, and more or less a common language, but there are some differences in Finland. English has been established as a second language that more or less every citizen speaks and may therefore be useful.

Conclusions

Finally, while I'm not saying that building large systems that cover the whole EU is wrong. However, when facing development within the union and the large amount of money being spent, we sometimes forget the importance and strengths of the regions in handling emergencies.

The possibility exists to strengthen the regional capacity of cross border help but we must develop a common risk analysis and plan. The Nordic region has come far but there is still a lot of work to be done.

Third Speaker: Per-Erik Johansson, Business Development, Public Safety, Swedish Defense Research Agency, "International Mechanisms for Cooperation"

In the area of security and safety for the society it is a necessity to study needs from different perspectives. The R&D organisations are able to develop the most fantastic technical systems for improving security. However, if it is too costly for companies to produce, or if customers

cannot afford it, then it is of no use. The same is true if the suggested security solution is perceived to interfere with the rights of the individual.



The initiative behind the European security research program started 4 years ago when a group of personalities were brought together with the task of developing a security research program. The full program is about to begin as one part of the 7th framework program. From the outset, there were three goals:

- “to contribute to the improvement of security of European citizens”
- “to enhance EU industrial competitiveness”
- And “to reinforce the basis to underpin policy decisions”

In order to build up the initiative step-by-step a preparation was initiated in 2004, with one call each year to 2006.

The experiences from the preparation so far show that:

- There is a huge interest for the area, with a lot of proposals.
- Involvement of and cooperation between universities, R&D institutes, industry, stakeholders, and end users works well.
- As a consequence of the large interest shown so far, there are large expectations of the upcoming program.

In the USA the Department of Homeland security has already created a structure like the European one for security research. A comparison of the two programs shows that the US model is well ahead. There are areas where both of us could gain from cooperation, not only in the sharing of ideas and designs, but perhaps even more in the best practices of different ways to solving security related problems without forgetting about things like the rights of individuals.

Fourth Speaker: Juha Martelius, Director of Research, Finnish Ministry of Defence, “Enlarged security and inter-sectoral cooperation”

Due to the growing heterogeneous nature of safety, security and defence questions understanding the complexity and possibilities in intersectoral cooperation is all the more important. New questions are asked when reforming security concepts: what do we mean by security; what we are trying to secure; what is important enough to secure; where should the scarce resources be allocated, and who is in charge? How do we know all that is worthwhile knowing? Is our situation awareness sufficient? Is the current security concept adequate for meeting the threats we perceive?

The clear cut distinction between international and domestic threats is ever more irrelevant in terms of defining the three main security objectives: state, societal, and human security. Instead, they all have both international and domestic spheres, which unavoidably require wide range cooperation and coordination.

One of the main challenges is the coordination itself. Decisions on the core responsibilities of the state and tasks given to the other actors by means of strategic partnerships are of central importance both during normal circumstances and crisis. Smooth interaction within the public sector, between public and private sector, governmental and non-governmental organizations and various voluntary associations is a key issue.

The objective cannot be to prepare evenly for all threats, but to prioritise and allocate resources in a flexible manner. The emphasis should lie in those threats with the heaviest potential impact or which are the most likely to occur.

The guiding principle should be that normal peace time capabilities and systems should support the prevention and management of all types of crisis.

To meet this objective, coordinated action between different sectors of society, the public and private sectors, and the voluntary activities of citizens is needed. Another important aspect is enhanced security awareness in various ministries, functional state leadership during times of lower impact crisis, and coordinated local level security related activities by different authorities. The challenges ahead include a decisive role in leadership, an integrated awareness of the situation at hand, joint interdepartmental strategy, and cooperation in the



area of scarce resources. We need to prioritize the focus on international or severe threats, involve non-governmental players, consider our resources and our budget, make use of private-public partnerships, and hold regular evaluations and exercises.

Fifth Speaker: Niels Johan Juhl Nielsen, Special Advisor and Chairman, Professional Mobile User Group, and Moderator on Interoperability.

Interoperability is not just a technological issue. It is about cooperation and transparency.

Executive Summary

The “Making Communities Safer” was a first step in creating greater awareness for the need of combined workshops, conferences, seminars, and forums that provide the venue for an interdisciplinary group of emergency responder representatives and local and governmental leadership.

This forum was successful in bringing together a diverse representation from the European, Scandinavian, and American emergency response professionals. The two day forum allowed for a broad spectrum of issues and presentations and resulted in a rich dialogue from the participants.

This conference summary annex and description of next steps clearly emphasize the need for more conferences such as this and ones that allow for even greater opportunities to discuss and debate various emergency response issues and the difficulties associated with making our communities safer in a post 9/11, 7/7 or Madrid rail bombing environment. The impacts from terrorism are felt globally; therefore our response needs to be from a global perspective.

Since the first ever multidiscipline emergency response conference was held in October of 2006, focusing on making communities safer, the NSSA, DIFT and IJSI have been in contact with the 1st European Security and Safety Summit, organized by the European Emergency Number Association (EENA) who are now planning to offer a similar program in 2007. The measure of one’s success is how do others try and emulate what you have done. This conference as well as others to come demonstrate that making communities safer is an important issue and in much more demand and discussions are taking place by various countries, governmental agencies and communities and local leadership.

If the “Making Communities Safer” conference played any role in increasing this awareness and initiating the dialogue between various emergency response providers and agencies then we consider this first ever conference to have been a tremendous success and based upon the information from our conference participants about next steps we have clearly been successful in enhancing the knowledge and awareness of the emergency response community.

Conference Benefits and Successes

Overwhelmingly the participants of the “Making Communities Safer” Forum agreed that what made this conference a success and beneficial to them personally was the opportunity to hear other perspectives and definitions of risk and preparedness. While the networking was beneficial, they would have liked even more time for this type of activity. The experiences and practices that were presented by various international emergency response professionals gave the participants the opportunity to not only view how others respond to critical events or incidents but also an opportunity for others to learn how they have handled situations and what each other has learned about what works and what does not. By broadening their perspectives they felt that they would be able to look more critically at how they have and plan to respond and in some cases make changes based upon other lessons learned.

Another interesting benefit from the conference was the opportunity to develop a greater appreciation and understanding for the terms “public safety and security” and what these things mean in different countries and applications. The value of learning about experiences of other like professionals brought clarity to many about their own policies and procedures and how they might be improved upon.

The fact that this was by design a small conference based on themes allowed for a greater opportunity for secondary collaboration and partnerships/projects. As a matter of fact a number of the participants have followed up with the colleagues they met at the conference and are continuing on with their discussions and exploring ways in which they might work together on future efforts.

Having the two days to discuss and reflect on some of our global communities worst disasters, (tsunami, 9/11, Hurricane Katrina, etc.), allowed both academics and practitioners attending the conference to participate in a intellectual dialogue about how best to respond to future events based upon what was learned by some of the worlds foremost authorities on natural and manmade disasters.

Conference Outcomes: Themes and Issues

The central theme of the “Making Communities Safer” conference focused on how the emergency response community could work together to improve the overall safety of their local communities. Also, regardless of the country or region we come from we all have similar communities in which we work and live and an innate desire to establish and maintain safety in “our” communities.

The outcomes from the October conference continued to emphasise the importance of “community” but also pointed to a number of other topics and perspectives that may want to be considered for future conferences like this. In particular there was a discussion on the importance of including examples and discussions on public private partnerships and that to be successful there must be a “bottom-up” approach.

What was not discussed at this conference but was listed as an important topic to include for future conferences was the use and success of exercises for the emergency response community and others who have a need to participate in these types of activities. There is interest in learning more about exercises such as table top and actual full scale exercises. These types of events are normally scenario driven and offer an opportunity for enhanced response. Future conferences therefore need to address the use and effectiveness of scenario driven public safety event exercises and discussion on whether or not these tend to improve response and overall community safety.

Other topics for future conferences should include both a theoretical and practical debate about the unintended consequences of the enhanced public safety continuum of issues related to a totally safe society. Discussions should be both reflective and critical regarding these consequences and also may result in affects that could contradict the desired outcome. This topic should also include issues of trust and credibility, often of the government and of the emergency response community and how the level of trust can adversely affect the ability of emergency responders to adequately respond to an event.

Other areas that were identified as having importance and should be addressed in future conferences include:

- Training, education and evaluation
- Social and human aspects of training and education
- Behavioural impacts of training
- Risk communications
- Common problems/different solutions and approaches
- Evaluation of European security programs
- Prevention and consequence management
- Review of existing U.S. and European and Nordic studies, others
- Interoperability (not in a technical sense)
- Common understanding/language
- National security and defence
- Communications – defence, law enforcement, public safety (inter-agency and intra-agency)
- Information sharing
- Catastrophic and everyday events – the continuum
- Lessons learned and take-home applications
- Transforming the homeland security model to Europe – why/why not?
- Global dialogue
- Asymmetry – proper balance between research and applied
- How do we include business and NGOs?

All of these subjects play an important role in creating a better understanding of how we continue to make our communities safer and what the emergency response providers need to know and understand that would impact their ability to respond and work with a community prior to, during and following an event.

Length and Format of Future Forum/Symposium:

The participants from the first ever conference on “Making Communities Safer” have strongly recommended that future conferences like this one be conducted on a regular basis. More specifically they would like more time to address their specific issue or event that they are sharing with the group as well as more time to allow for debate and discussion on the approach and methods used to handle a particular disaster.

Regarding the format, they would not change the model that was used for the October conference which consisted of a Symposium format rather than a traditional conference. The structure of this conference increased their ability to interact and discuss the various presentations and response techniques. Attendees suggested that we also consider selecting presenters and participants by areas of speciality to ensure that we have a balanced group from all aspects of emergency response. In addition to the response community, it is important to include local government authority to the panels and discussions.

Because we now live, more than ever, in a global community the conference needs to be international in scope and broaden beyond a more Scandinavian and American centered conference, to also include Europe and Asia. As a matter of fact, participants would prefer a more European approach to the symposium which includes a series of themes presented in blocks of time that allow for ample time for presentation and adequate discussions. While the length of our first symposium was okay they would prefer four to five days in length, four hours per theme and a format that allows for one presentation, followed by an in-depth discussion. They agree that the group size of 25 to 30 is ideal and allows for a more focused discussion. They would also like the opportunity to have the sessions taped and for participants to edit their summaries accordingly.

The symposium presentations and discussions should be published, and where possible, presented in a manner that would be suitable for an appropriate journal publication as well.

While there was no consensus on where the conference should be held, there was agreement that it should be in a place that allowed for maximum networking and concentration on the conference and not other distractions such as cell phones, emails, or local attractions. The idea is that the symposium and the location should promote reflective thinking about the ideas discussed and how best this information could be presented to allow for the greatest value to the participants; for example, something similar to a retreat environment. In order to allow for the greatest benefits and discussion symposium materials should be provided in advance for review and the time for presentations and discussions should be extended. Another element that promotes the impact value could be the addition of structured breakout sessions in which groups are given a particular problem or issue to resolve and then report back to the larger group. This type of symposium is best described as a hybrid approach of concentrated themes and general sessions.

The stakeholders for a symposium like this would consist of Fire, Law Enforcement, Public Health/Medical, EMS, Academics/Researchers, Engineers, Private sector and other relevant community and government leadership.

Finally the next steps are to wrap up the October conference and think ahead to future events. Following the completion of the report and dissemination for feedback is to begin to work collaboratively between the three sponsors, ECU/IJSI, DIFT, and NSSA to identify funding for the next multidiscipline symposium on emergency response issues. The following tasks are to be completed in order to identify and secure future funding sources:

- Visit web site of European study/framework
- Newly established NATO Science and Security for Peace, focus on civil and non-military issues

Stakeholders:

- Fire
- Law Enforcement
- Public Health/Medical
- EMS
- Academics/Researchers
- Engineers
- Private sector
- Who have we left out?

Next Steps:

- Work collaboratively to identify funding for this event
- Visit web site of European study/framework
- Newly established NATO Science and Security for Peace, focus on civil and non-military issues

Questions:

- Amount or level of theoretical and applied?
- What is this group going forward?
- Do we include diverse topics or a more focused and narrow perspective?
- Purpose
- Publications
- Scientific research and security to include both academic and practitioner perspective
- Define stakeholders for this

PRESS RELEASES

PRESS RELEASES





Making communities safer is the joint responsibility of national and local authorities. It is also the joint responsibility of police, fire, medical and emergency management, homeland security, and even defense agencies. Moreover, making communities safe is not only a government responsibility but also a private sector concern and the duty of all citizens.

Communities face a wide array of threats to safety, including natural disasters, epidemics, fires, accidents, crime, and disorder. Today, the additional threat of terrorism has surged to the head of the list in the United States and many other countries.

The “Making Communities Safer” conference will bring together Nordic and American experts and officials from all safety and security fields, representing government and the private sector, to share experiences and new developments and to consider how best to make communities safe in the post-9/11 world, and which strategies for collaboration we can find. The emphasis will be on international perspectives and multi-disciplinary solutions. We will share experiences concerning:

Homeland Security and terrorism

- Emergency Management and Natural Disasters
- Cross-sector and Cross-border collaboration
- Crisis management
- Prevention, Response, Recovery
- Public-Private Cooperation
- Best Practices
- Lessons Learned

Who should attend:

- Police, Fire, and Emergency Medical Officials
- Emergency and Crisis Management Officials
- Safety and Security professionals
- Risk Managers
- Researchers
- Other Public and Private Officials

Conference Organizers and Sponsors:

Danish Institute for Fire and Security Technology: the market’s leading knowledge centre in the field of fire safety and prevention

The Nordic Safety and Security Academy: a Nordic cross-disciplinary and cross-sector network with international partners and connections.

Eastern Kentucky University: a leading U.S. university in the fields of homeland security and public safety

Contact: Monica Flygare
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Norden og USA skal lære sikkerhed af hinanden

Nyt transatlantisk forum for samfundssikkerhed så dagens lys i Hvidovre



Symposiet i DBI's Brand & SikringsCenter lagde grunden til et nordisk/amerikansk netværks-samarbejde.

Hvad kan vi lære af hinanden, så vi kan blive bedre til at skabe tryghed og sikkerhed i vore samfund kom der mange bud på, da en række sikkerhedseksperter mødtes i oktober? Det til det første nordisk-amerikanske symposium om samfundssikkerhed.

Symposiet, der fandt sted hos Dansk Brand- og sikringsteknisk Institut (DBI) i Hvidovre, var led i et nyetableret netværkssamarbejde mellem Norden og USA. Sponsorer

for symposiet var, ud over DBI, den nordiske sikkerhedsorganisation Nordic Safety & Security Association (NSSA), og International Justice & Safety Institute (IJSI) ved Eastern Kentucky University, som er blandt USA's førende akademiske centre for sikring og sikkerhed.

Der deltog omkring 30 forskere og eksperter i det to dage lange arrangement, som havde til formål at diskutere, og udveksle erfaringer om, aktuelle sikkerhedsspørgsmål.

Temaet for symposiet var Making Communities Safe, med fokus på, hvordan myndigheder, beredskabsorganisationer og virksomheder kan bidrage til og samarbejde om at forebygge og afhjælpe naturkatastrofer, terror og andre større ulykker og katastrofer.

Dr. Pam Collins, IJSI, rejste indledningsvis det centrale spørgsmål, om vore samfund er tilstrækkeligt forberedte på dagens og fremtidens risici. Det vil sige: Er de forskellige niveauer af beredskaber gearet til de udfordringer, vi står over for?

Behov for vurdering af sårbarhed

Pam Collins, som udfører forskning inden for risiko- og sårbarhedsvurdering, var af den opfattelse, at de regionale og lokale myndigheder, som har ansvaret for en stor del af den kritiske infrastruktur, ikke har tilstrækkeligt fokus på deres sikkerhedsmæssige ansvar og opgaver. Det har blandt andet ført til, at de ikke afsætter tilstrækkelige ressourcer, at de ikke samarbejder godt nok med hinanden, og at de ikke udnytter den tilgængelige viden til vurdering og håndtering af risici og sårbarhed.



Pam Collins: Myndighederne mangler fokus på sikkerhed.

Selv om der er udviklet gode værktøjer til disse opgaver, har de fleste myndigheder ikke sat sig ind i dem og taget dem i brug. Pam Collins nævnte som et eksempel, at IJSI har udviklet et særligt softwareprogram (Country Risk & Vulnerability Assessment Tool), som man nu arbejder på at få udbredt til de relevante myndigheder i USA.

Vicebrandchef Søren Brydholm,

Bo Nygaard Sørensen: Problemer med omstilling i Danmark.



OF 2010



Lars-Erik Warg: På på klets i kommunikationen.

Københavns Brandvæsen, orienterede om det overordnede beredskabsarbejde i Københavns Kommune, og han beskrev de scenarier, som kommunen opererer med. Som et vigtigt element i dette arbejde sætter man nu på at udvikle en beredskabskultur blandt kommunens medarbejdere, så de er forberedt på de uventede, alvorlige hændelser.

Dr. Larry Collins, IJSl, redegjorde for opbygningen af det omfattende amerikanske brand- og beredskabsystem. Han omtalte herunder nogle af de dyrebare erfaringer, som brandvæsenet i New York gjorde i forbindelse med indsatsen ved terrorangrebet på World Trade Center. Disse erfaringer har betydet væsentlige ændringer af brandvæsenets indsats- og kommunikationsmetoder.

DBI's Bo Nygaard Sørensen for-



Lars-Erik Warg: På på klets i kommunikationen.

talte om problemerne med at omstille tankegangen i Danmark efter 11. september. Hidtil har vi opfattet os selv som H. C. Andersens eventyrland, hvor der var fred og ingen fare. I dag skal vi lære at tænke det utænkelige, og det har vist sig ikke at være helt let. Som et eksempel på den omstilling, som er i gang, nævnte han arbejdet med transportsikkerhed, hvor myndighederne har haft problemer med at håndtere indførelsen af de nye sikkerhedsbestemmelser og -koncepter, som det er beskrevet i henholdsvis SDR- og RID-konventionerne.

Ledelsesproblemer

Når det gælder risiko- og sårbarhedsvurderinger, har vi et generelt ledelsesproblem, både inden for det offentlige og i den private sektor. Mange ved ikke, hvordan de skal gribe opgaverne an, og det ligger der en stor udfordring i nu og fremover, ledet af Bo Nygaard Sørensen.

Han pegede også på problemer med at sikre tilstrækkelig træning af medarbejderne. Både virksomheder og det offentlige halter bagud med at indarbejde uddannelse og træning i deres beredskabsplaner. Inden for rammerne af den europæiske brand- og sikringsorganisation CFFPA arbejder DBI med et uddannelsesprojekt, som skal bidrage til at fremme bevidstheden om træning og uddannelse i strategisk sikringsledelse.

Kurt Petersen, der er professor ved Lunds Universitet i Sverige, orienterede om det omfattende og ambitiøse projektprogram, som gennemføres af LUCRAM - universitetets særlige center for risk management mv.

Forskningsprogrammet, der overordnet handler om krisestyring samt risiko- og sårbarhedsvurderinger, omfatter en række projekter, som specifikt ser på regionale forhold samt kritisk infrastruktur som telekommunikation, IT, vandforsyning og energi.

Vanskelig risikokommunikation
Psykolog Lars-Erik Warg, Örebro

Universitetssygehus, pegede på de store problemer, det kan give, når man skal kommunikere vigtige budskaber ud i forbindelse med ulykker, katastrofer, sundhedsrisici o. lign. Warg, som er specialist i risikokommunikation viste forskellige eksempler på overskrifter i medierne, der kan give problemer, når man skal kommunikere med borgerne. Fx: "Køleskabet kan gøre dig syg", "Stor asteroide på vej mod jorden" og "Hold vejret i brusebadet, eller dø".

Mediernes hang til den slags sensationsoverskrifter indebærer store udfordringer til samarbejdet med medierne og stiller krav om en professionel håndtering af kommunikationsarbejdet.

Kommunikationsproblemer kan også opstå mellem myndighederne indbyrdes. Kjell Larsson, der er operativ leder ved svenske Rådningverket, kunne blandt andet berette om de mange problemer, der opstod i forbindelse med Tsunamien i slutningen af 2004. Ud over at redningsaktionen kom langsomt i gang, kneb det gevaldigt med kommunikationen mellem både de involverede svenske myndigheder og mellem de svenske og de asiatiske myndigheder. Hertil kom interne kommunikationsproblemer under redningsarbejdet og vanskeligheder i kommunikationen med de borgere, man skulle hjælpe.

Problemerne, der har givet an-

Nordic Safety and Security Academy (NSSA) er en nordisk interesse- og netværksorganisation for personer og organisationer, som arbejder med trygheds-, sikkerheds- og risikoforhold. Hjemmeside: www.nssa-academy.org.

International Justice & Safety Institute er en del af Eastern Kentucky University, Richmond, USA. Institutet er et lærende center for forskning, uddannelse og vidensspredning inden for sikring og sikkerhed. Hjemmeside: www.jsc.edu.edu/ijl.

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Mr **Neil Henson**, Sgt, London Metropolitan Police Department

Mr **Jan Axlev**, Fire Chief, Copenhagen Fire Brigade (involved in many development activities both nationally and internationally)

Mr **Marcus Nilsson**, Deputy Rescue Manager

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