



Final Report

Project From Emergency to Crisis - A Challenge for Civil Protection -

**Akademie für Notfallplanung
und Zivilschutz
im Bundesamt für Zivilschutz**

Bad Neuenahr-Ahrweiler 1999

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Vorwort



Europa wächst zusammen. Die offenen Grenzen, die neuen Freiheiten im Handel, auf dem Arbeitsmarkt und im Verkehr haben zu erhöhter Mobilität geführt; es sind neue Chancen eröffnet. Der europäische Bürger sieht sich in den Nachbarländern aber auch neuen Gefahren ausgesetzt, über die er häufig zu wenig informiert ist, da er sie in seinem Heimatland nicht kennt.

Wie soll er sich angemessen in einem Not- oder Katastrophenfall verhalten? Wer warnt, wie wird gewarnt, wer informiert, wer ist zu informieren, wer hilft? Für diese den Bürger bewegenden Fragen müssen Antworten gegeben werden: Antworten des jeweiligen Staates an seine Bürger, aber auch Antworten an die Bürger, die in einem Land zu Gast sind. Die Sicherheit der Bürger muss europaweit gewährleistet sein.

Weil hier Europa helfen kann, wurde von der Generaldirektion XI der Europäischen Kommission das Projekt „From Emergency to Crisis – A Challenge for Civil Protection“ initiiert und finanziell unterstützt. Das Bundesministerium des Innern der Bundesrepublik Deutschland hat zusammen mit dem Freistaat Bayern – in der Durchführungsverantwortung der Akademie für Notfallplanung und Zivilschutz im Bundesamt für Zivilschutz – drei Workshops zu diesem Projekt mit 59 Teilnehmern aus 15 Ländern durchgeführt.

Neben dem Thema der Bürgerinformation ging es auch um Fragen, die für die Akteure vor und bei der Bewältigung einer Krise von Bedeutung sind: Wie werden die wesentlichen Begriffe wie Notfall, Katastrophe und Krise in den verschiedenen Mitgliedsstaaten verwendet? Wie kann man Krisen frühzeitig erkennen, wie ist die Zusammenarbeit mit den Medien in einem Krisenfall?

Das europäische Forum ist der geeignete Ort, um sich einander hinsichtlich der Unterschiede – beginnend bei den Begriffsinhalten –, aber auch der Gemeinsamkeiten auszutauschen. Bei diesem Austausch über die verschiedenen Gefahrenabwehr-, Warn- und Informationssysteme sowie der unterschiedlichen Art, Katastrophen und Krisen zu bewältigen, werden Erkenntnisse gewonnen und Impulse gesetzt, die eine Optimierung der Gefahrenabwehrsysteme für den europäischen Bürger ermöglichen.

Dies muss nicht Harmonisierung um jeden Preis bedeuten. Ich denke, die Workshop-Reihe hat Bereiche aufgezeigt, in denen Vereinfachung und Vereinheitlichung – wie z. B. bei der Warnung – erforderlich sind; sie hat aber auch verdeutlicht, dass Unterschiede, wie z. B. in Aufbau und Organisation des Zivil- und Katastrophenschutzes, hingenommen werden können, ohne dass dies dem Ziel – effektiver Schutz des Bürgers in Europa – abträglich ist.

Ich bin zuversichtlich, dass die Ergebnisse dieses Projektes Grundlage für weitere Initiativen auf europäischer und nationaler Ebene sein werden, und danke allen, die hieran mitgewirkt haben.

Otto Schily

Bundesminister des Innern

Introduction



Europe is growing together. The open borders, the new freedoms in the commercial sector, on the labour market and in the transport sector have led to higher mobility; new chances have been opened up. However, the European citizen also is exposed to new dangers in the neighbouring countries, about which he does not have sufficient information as he does not know them in his home country.

How can he respond appropriately in an emergency or disaster? Who gives a warning, how is such a warning given, who provides information and who must be informed, who renders assistance? These questions that are of concern to the citizens have to be answered: Answers have to be given by the respective state for his own citizens, but also answers to the citizens visiting the country. The safety of the citizen has to be guaranteed throughout Europe.

As Europe can lend a helping hand here, the Directorate General XI of the European Commission initiated and financially supported the project “From Emergency to Crisis – A Challenge for Civil Protection”. The Federal Ministry of the Interior of the Federal Republic of Germany, in co-operation with the Free State of Bavaria – with the Akademie für Notfallplanung und Zivilschutz im Bundesamt für Zivilschutz (Civil Emergency Planning Academy) being responsible for the implementation – organised three workshops in the context of this project, which were attended by 59 participants from 15 countries.

Apart from the subject of information for the citizen they dealt with questions that are of importance for the actors before and during the management of a crisis: How are the essential terms such as emergency, disaster and crisis used in the various Member States? How can a crisis be identified at an early stage, how is co-operation with the media in a crisis?

The European Forum is an appropriate place for an exchange on the differences – beginning with the various definitions – but also on common features. This exchange on the various systems for hazard control, warning- and information systems and the various approaches to managing disasters and crises lead to new knowledge and give impulses which allow to optimise the systems for protecting the European citizen from hazards.

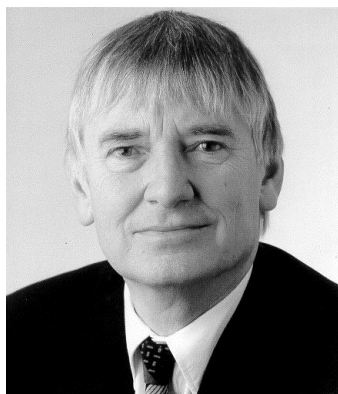
This must not mean harmonisation at any cost. I think the series of workshops has shown areas in which streamlining and harmonisation – e. g. in the field of warning – are necessary; it has also shown, however, that differences, e. g. in the structure and organisation of civil protection and disaster management, are acceptable without prejudice to the common objective, namely effective protection of the citizen in Europe.

I am confident that the results of this projects will form the basis for further initiatives at the European and national levels, and thank all those who have made their contribution.

Otto Schily

Federal Minister of the Interior

Avant-propos



L'unification européenne est en marche. Les frontières ouvertes, les libertés nouvelles dans le commerce, sur le marché de l'emploi et dans la circulation ont entraîné une mobilité accrue; il existe des chances nouvelles. Cependant, le citoyen européen se voit exposé, dans les pays voisins, à des dangers nouveaux et il n'en dispose souvent pas d'assez d'informations étant donné qu'il ne les connaît pas dans son pays d'origine.

Quel serait son comportement adéquat en cas d'urgence ou de catastrophe? Qui est responsable de l'alerte, comment l'alerte est-elle donnée, qui donne les informations, qui doit être informé et qui fournit l'aide? Ces questions qui occupent les citoyens exigent des réponses: des réponses à donner par l'Etat correspondant à ses propres citoyens, mais aussi des réponses à donner aux citoyens accueillis comme hôte dans un pays. La sécurité des citoyens doit être garantie dans l'ensemble de l'Europe.

Etant donné que l'Europe peut apporter son soutien à cet égard, la Direction générale XI de la Commission Européenne a initié et soutenu financièrement le projet "From Emergency to Crisis - A Challenge for Civil Protection". Le ministère fédéral de l'intérieur de la République fédérale d'Allemagne a organisé, en commun avec l'Etat libre de Bavière - la responsabilité de l'organisation incombant à l'Akademie für Notfallplanung und Zivilschutz (*Ecole supérieure de plans d'urgence et de protection civile*) auprès du Bundesamt für Zivilschutz (*Office fédéral de protection civile*) - trois ateliers au sujet de ce projet avec 59 participants de 15 pays.

Outre le thème de l'information des citoyens, on a également traité les questions importantes pour les acteurs avant et durant la maîtrise d'une crise: Quelles sont les modalités d'emploi des notions essentielles telles que cas d'urgence, catastrophe et crise dans les différents Etats membres? Comment peut-on reconnaître des crises à temps et comment s'effectue la coopération avec les médias en cas de crise?

Le forum européen est le lieu approprié pour procéder à un échange au sujet des différences - à commencer par le contenu des notions - mais aussi à l'égard des points communs. Cet échange au sujet des différents systèmes de la prévention de dangers, de l'alerte et de l'information et de la différente manière de maîtriser des catastrophes et des crises est susceptible de transmettre des connaissances et de donner des impulsions permettant d'optimiser les systèmes de défense contre les dangers pour le citoyen européen.

Ceci n'exige pas une harmonisation à tout prix. J'estime que la série d'ateliers a montré qu'il y a des domaines où la simplification et l'uniformisation - comme p. ex. en cas d'alerte - sont nécessaires; mais elle a également tiré au clair que des différences comme p. ex. dans la structure et l'organisation de la protection civile et de la protection contre les catastrophes peuvent être acceptées sans portant atteinte à l'objectif, à savoir la protection efficace du citoyen en Europe.

Je suis convaincu que les résultats de ce projet seront la base d'autres initiatives à l'échelon européen et au niveau national, et j'adresse mes remerciements à tous ceux qui y ont participé.

Otto Schily
Ministre fédéral de l'intérieur

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Teil A
Part A
Section A

Ergebnisse des Projekts

Das Projekt trägt die Überschrift: „From Emergency to Crisis - a Challenge for Civil Protection“. Mit diesem Titel: „Vom Notfall bis zur Krise“ soll der gesamte Umfang der Ereignisse aufgezeigt werden, auf die der Schutz der Bevölkerung ausgerichtet sein muss.

Die Herausforderungen für den Schutz der Bevölkerung bestehen dabei insbesondere in den nachfolgenden Bereichen:

- Ereignisse, die zunächst klein und unscheinbar beginnen, können sich möglicherweise zu Krisen entwickeln, wobei zwischen dem Beginn und dem Endstadium verschiedene Zwischenstufen durchlaufen werden. Daher kommt dem Faktor Zeit eine nicht unbedeutende Rolle zu.
Krisen entwickeln sich; sie fallen in der Regel nicht in ihrer Komplexität „vom Himmel“. Die Herausforderung besteht darin, Entwicklungstendenzen und Indikatoren frühzeitig zu identifizieren.
- Ereignisse und Schäden sind nicht an national staatliche Grenzen gebunden; sie können auch grenzüberschreitend sein. Die Bewältigung von Ereignissen und deren Folgen erfordert internationale Zusammenarbeit.
Die Begriffsinhalte, Definitionen und Übergangsstadien haben aber eine unterschiedliche Bedeutung in den einzelnen Ländern. Dies erschwert das Verständnis und die Kommunikation auf internationaler Ebene besonders dann, wenn die unterschiedlichen Inhalte nicht bekannt sind. Die Herausforderung besteht darin, ein gemeinsames Verständnis für die Begriffsinhalte der anderen potentiellen Partner zu entwickeln. Die Frage ist, ob es möglicherweise zu einer Harmonisierung der Begriffe und deren Inhalt in der Zukunft kommen kann.
- Für die Bewältigung von Ereignissen und die Milderung der Folgen wird das Hilfeleistungssystem zum Schutz der Bevölkerung des jeweiligen Staates aktiviert.
Bei grenzüberschreitenden Ereignissen besteht die Herausforderung darin, die Schnittstellen zu kennen, damit Information, Kommunikation und Verhaltensmaßregeln koordiniert ablaufen.
- Europa wächst zusammen. In den jeweiligen Staaten der europäischen Union haben sich viele Bevölkerungsgruppen aus unterschiedlichen Kulturkreisen angesiedelt. Der Schutz der Bevölkerung bedingt sowohl die Selbsthilfe der Bevölkerung als auch das Vertrauen des Bürgers in die notwendigen Maßnahmen der öffentlichen Verwaltung.
Es kommt entscheidend auf die Integration der unmittelbar und mittelbar Betroffenen eines Ereignisses in die Abläufe der Hilfeleistung an. Die Herausforderung besteht darin, alle Bürger - trotz des unterschiedlichen kulturellen Hintergrundes - in die Abläufe des Hilfeleistungssystems zu integrieren.

Diese Herausforderungen wurden thematisch in drei Workshops zusammengefasst:

- From Emergency to Crisis (Vom Notfall bis zur Krise)
- Information and Warning (Information und Warnung)
- Communication Problems (Kommunikationsprobleme)

In Abstimmung mit der das Projekt begleitenden, international besetzten Arbeitsgruppe wurden die inhaltlichen Schwerpunkte der Workshops sowie die von den Teilnehmern in Arbeitsgruppen zu behandelnden Themen festgelegt.

Die resultierenden Ergebnisse der einzelnen Veranstaltungen werden nachfolgend aufgelistet.

Ziel der Workshopreihe war es, sich verschiedener Problemstellungen des Krisenmanagements anzunehmen. Auf der Grundlage der Klärung solcher Begriffe, die in diesem Zusammenhang - zum Teil mit abweichenden Bedeutungen - Verwendung finden, wurden die Themen "Information und Warnung" sowie "Kommunikationsprobleme" behandelt.

- Die in den Ländern der Europäischen Union gebrauchten zentralen **Begriffe** wie "Notfall", "Krise" oder "Katastrophe" haben je nach Sprache, Kultur und gesetzlichen Regelungen Bedeutungsinhalte, die in den Mitgliedsstaaten abweichend sind. Damit ist der Austausch und das gemeinsame Verständnis der Mitgliedstaaten untereinander erschwert. Wegen der möglichen Mißverständnisse sollten die Begriffe im internationalen Austausch hinterfragt und erläutert werden.
- Gegenüber Ereignissen, die Menschen und Sachen in erheblichem Maße schädigen können, gleichgültig wie sie in einem Sprachraum benannt werden, herrscht ein Interesse vor, diese durch **Indikatoren** frühzeitig erkennen zu können, damit eine erfolgreiche Abwehr möglich wird.
- Die Bereitschaft zur Identifizierung solcher Indikatoren ist abhängig vom **Gefahrenbewußtsein der Menschen**, des betreffenden Kulturkreises und der Gesellschaft als solcher.
- Ein **Informations-Pool** auf der Ebene der Europäischen Kommission zur Früherkennung von Krisen wäre wünschenswert.
- Für **Naturereignisse** und **kerntechnische Unfälle** existieren bereits Indikatoren. Hier erscheint es sinnvoll, ein einheitliches Indikatorensystem zu entwickeln; Zweifel bestehen daran, inwieweit dies für das weite Feld der anderen, insbesondere technischen Unfälle möglich ist. Auch hieran ist zu arbeiten.
- Bei der **Information und Warnung** der Bevölkerung müssen unterschiedliche Aspekte, z.B. geographische Bedingungen, Stand der Technik usw. Berücksichtigung finden.
- Die Organisation eines gemeinsamen, länderübergreifenden **Warn- und Informationssystems** in der europäischen Union wird nicht als notwendig erachtet. Die Ebene der Mitgliedsstaaten erscheint als ausreichend.
- Sinnvoll und erstrebenswert erscheint dagegen die Vereinheitlichung und Reduzierung der akustischen Warnung (Sirensignal).

- Zur Unterstützung sollte im Bereich der visuellen Warnung ein abgestimmtes System von **Piktogrammen** die Warnung und Information der Bevölkerung erleichtern.
- Die Aufklärung und Information der Bevölkerung über die Warnzeichen und die damit verbundenen Verhaltensregeln müßten nachdrücklich, zum Beispiel durch erste Informationen bereits in den Schulen, betrieben werden.
- Unter Beibehaltung länderspezifischer Systeme sollte aber die Zusammenarbeit zwischen den Ländern der Europäischen Union intensiviert werden, besonders zwischen **Nachbarstaaten**, die an ihren Grenzen gemeinsamen Gefahren, z.B. durch Waldbrände oder Überflutungen ausgesetzt sind.
- In allen Staaten sollten rund um die Uhr an jedem Tag des Jahres **zentrale Ansprechpartner** zur Verfügung stehen, die einen effektiven Informationsaustausch gewähren.
- Dazu gehören auch **abgestimmte Begriffe und abgestimmte Verfahren** zwischen den Beteiligten.
- Neben der Information und der Warnung existiert ein weites Feld von Kommunikationsnotwendigkeiten zwischen der Bevölkerung, den Behörden und den Medien. Um den damit verbundenen Problemen der Auseinandersetzung mit den verschiedenen kulturellen und psychologischen Voraussetzungen der betroffenen Bevölkerung und der besonderen Rolle der Medien Rechnung zu tragen, bedarf es einiger **vorbereitender Maßnahmen**. Diese betreffen insbesondere das Personal, die Ausbildung und Planung. Bei der Verbesserung des Kommunikationswesens ist aber auch moderne Technik angemessen zu berücksichtigen.
- Auf Seiten der Katastrophenschutzbehörden müssen **professionelle, ausgebildete Kräfte** für die Medien als Ansprechpartner zur Verfügung stehen. Dies gilt auch für kleinere Behörden in den Städten, Gemeinden und Kreisen.
- Die Bereitschaft der Bevölkerung zur Kommunikation bei Katastrophen muß durch eine Risikokommunikation vorbereitet werden. Zentral ist das Bemühen, **Vertrauen** bei der Bevölkerung zu schaffen.
- Risikokommunikation, Arbeit mit den Medien und Vertrauen schaffen bei der Bevölkerung sind **langfristige Aufgaben**. Finden diese vorbereitenden Maßnahmen nicht statt, lassen sie sich bei einer Katastrophe oder in einer Krise nicht oder nur schwer nachholen.

Empfehlungen und Hinweise

Workshop “From Emergency to Crisis”

Nachfolgend werden Empfehlungen und Hinweise gegeben, die aus der im Abschnitt 1 aufgezeigten Zusammenfassung der Ergebnisse herrühren.

Die Begriffe “Notfall”, Katastrophe” und “Krise” sind im Bereich des Zivil- und Katastrophenschutzes von zentraler Bedeutung. Jedoch prägen die unterschiedlichen Sprachen, Kulturen und Gesetze die Bedeutung dieser Begriffe, so daß ein einheitlicher Sprachgebrauch in den Mitgliedsstaaten der Europäischen Union nicht besteht (vgl. Teil B, Ergebnisse der Workshops). Trotzdem wäre es wünschenswert, wenn ein Minimalkonsens über diese zentralen Begriffe bestünde. Dies hätte mehrere Vorteile. Die Sprache im Sinne einer gemeinsamen Semantik, also des gemeinsamen Bedeutungsgehaltes, würde dazu führen, daß gleiche Vorstellungen mit den verwendeten Worten in Verbindung gebracht werden. Gerade das Wort “Krise” scheint in den Sprachen der Europäischen Gemeinschaft durchgängig benutzt zu werden, dies zumindest als Zeichenfolge (Syntaktik), abgesehen von geringen sprachlichen Eigenheiten, wie beispielsweise das Wort “Krise” im deutschen oder “crisis” im englischen.

Der gemeinsame Begriff aber legt erst die Basis für ein gemeinsames Verstehen, nicht alleine seine Buchstabenfolge. Insofern wird eine verabredete Bedeutung schneller dazu führen, daß man sich gegenseitig besser versteht und die Voraussetzung zur Erreichung von Zielen oder von Problemlösungen schneller erreicht werden.

Aus diesem Grund bestand Einigkeit bei den Teilnehmern des Workshops “From emergency to crisis”, daß durch eine Reihe von Maßnahmen gerade die Fähigkeiten gestärkt werden müßten, zu einem gemeinsamen Verständnis bei zentralen Begriffen zu gelangen.

Um Krisen und Katastrophen effektiver vorbeugen zu können, ist es unerläßlich, über frühzeitige Hinweise auf sich entwickelnde Ereignisse zu verfügen. Die Erforschung solcher Indikatoren steckt zur Zeit noch in den Anfängen. Ausgehend von Beispielen im militärischen Bereich (vgl. Teil B, Ergebnisse des Workshops) ist zu prüfen, welche Indikatoren im zivilen Bereich systematisch entwickelt werden können, die auf Krisen und Katastrophen hinweisen können. Mit einem solchen System wäre eine bessere Vorbereitung und eine gezieltere Abwehr von Krisen und Katastrophen möglich.

Empfehlungen und Hinweise

1. Die Einrichtung einer europäischen Sammelstelle für Informationen aus dem Bereich des Zivil- und Katastrophenschutzes wäre wünschenswert mit folgenden Funktionen:
 - Zentrale Beobachtung aller Bereiche, die für den Zivil- und Katastrophenschutz relevante Informationen bereithalten (Umwelt, Technologie, Klimaforschung etc.) und Sammlung der wichtigen Informationen auch von nationalen Stellen, um – nach deren Aufbereitung - rechtzeitig und umfassend Daten zur Verfügung stellen zu können. Ein Beispiel für eine solche zentrale Sammelstelle ist die bereits existierende Einrichtung, bei der nukleare Störfälle registriert werden.
 - Solch eine Sammelstelle könnte zentrale Funktionen in einem Netzwerk mit den Mitgliedsstaaten der Europäischen Gemeinschaft haben, um den systematischen Austausch von Daten und Informationen zu gewährleisten.

- Als weitere wichtige Aufgabe hätte diese Sammelstelle Indikatoren zu sammeln, die auf Krisen und Katastrophen hinweisen. Dazu müßte aber erst das geeignete Instrumentarium für die Identifizierung von Indikatoren entwickelt werden.
 - Hierzu wäre ein Melde- und Informationswesen notwendig. Insoweit sind die Mitgliedsstaaten gefordert. Dies zu fördern, könnte für DG XI eine Aufgabe der nahen Zukunft sein.
 - Information über alle Fachkongresse, Workshops oder anderer Veranstaltungen im internationalen Bereich zur persönlichen Kontaktaufnahme mit der Möglichkeit zur Diskussion von Fachproblemen
2. Unabhängig von focussierenden Einrichtungen muß ein Erfahrungsaustausch für Fachleute gefördert werden. Die Fachleute aus den verschiedenen Bereichen des Zivil- und Katastrophenschutzes müssen sich nicht nur über Literaturrecherchen kennen, sie müssen auch persönlich Kontakt miteinander haben. Insoweit ist die Förderung solcher Veranstaltungen im Rahmen des Aktionsprogramms zu begrüßen und aufrechtzuerhalten.
 3. Gerade bei der bevorstehenden Erweiterung der Europäischen Union ist die gebündelte Sammlung der relevanten Informationen und das Angebot an Informationsveranstaltungen und Übungen für die Förderung einer raschen Integration unerlässlich.
 4. Im Rahmen der Europäischen Union gibt es auf vielen Gebieten erfolgreiche Bemühungen zur Vereinheitlichung des Sprachgebrauchs, beispielsweise bei technischen Standards. Die Aussicht auf den Zuwachs an gegenseitigem Verstehen macht den Versuch lohnenswert, eine gemeinsame Terminologie auf dem Gebiet des Zivil- und Katastrophenschutzes zu verabreden.

Auf die Wichtigkeit persönlicher Kontakte wurde bereits hingewiesen. Einerseits das Wissen über Krisen, ihre Entstehungsweise und deren Gründe und andererseits über die Faktoren beim Zustandekommen einer Katastrophe lassen es notwendig erscheinen, daß sowohl politische Verantwortungsträger als auch Führungskräfte des Zivil- und Katastrophenschutzes geschult werden.

Gerade die Früherkennung von Krisen und Katastrophen bedarf einer für entsprechende Hinweise sensibilisierten Denkweise, die in Veranstaltungen gezielt geschult werden kann. Dazu gehört auch, daß Indikatoren für Krisen und Katastrophen aufgespürt werden, die Verantwortungsträger in die Lage versetzt werden, mit diesen Informationen umzugehen und daraufhin gezielt und abgestimmt zu handeln. Im Rahmen des Zivil- und Katastrophenschutzes müssen die Verantwortungsträger bei konkreten Schadensfällen mit Fachbehörden und Fachleuten unterschiedlicher Provenienz zusammenarbeiten. Um diese Zusammenarbeit vorzubereiten und sie auf ein hohes Niveau zu bringen, sind ebenfalls Aus- und Fortbildungen notwendig.

Zivil- und Katastrophenschützer sind in der Regel "Generalisten", die nicht über alle Indikatoren und den damit zusammenhängenden Ursachen und Folgen informiert sein können wie die Spezialisten aus den jeweiligen Fachverwaltungen. Um so wichtiger ist es, daß die Fachverwaltungen über den Zivil- und Katastrophenschutz aufgeklärt werden, damit dessen Belange ausreichend bei den Fachverwaltungen berücksichtigt werden können.

Empfehlungen und Hinweise

5. Aus- und Fortbildung von Verantwortungsträgern in Zivil- und Katastrophenschutz, von politisch Verantwortlichen und Fachleuten unterschiedlicher Behörden und Organisationen sind mit dem Ziele zu intensivieren, Vorbereitungen für Krisen und Katastrophen zu optimieren. Ein wichtiges Ziel dabei ist es, ein höheres Verständnis bei Politikern und Fachverwaltungen für die Belange des Katastrophenschutzes zu erreichen. Besonders Abwehrmaßnahmen bei einem möglicherweise eintretenden Schadenereignis wären zu planen, einzuüben und bei den verschiedenen Einrichtungen aufeinander abzustimmen.

Workshop “Information and Warning”

In einem zusammenwachsenden Europa mit zahlreichen grenzüberschreitenden Katastrophen und Krisen sind die präzise und rechtzeitige Information und Warnung der jeweils betroffenen Bevölkerung auch über Landesgrenzen hinweg unerlässlich. Aber auch die gestiegene Mobilität stellt höhere Anforderungen an die Verständlichkeit von Information und Warnung. In der Europäischen Union müßte eine solche Information und Warnung der Behörden und der möglicherweise betroffenen Bevölkerung bei grenzüberschreitenden Ereignissen selbstverständlich sein. Dazu sind sowohl organisatorisch als auch technisch die geeigneten Voraussetzungen zu schaffen. Da sich in den verschiedenen Ländern der Europäischen Union zwischenzeitlich unterschiedliche Organisationsformen und technische Standards entwickelt haben, macht es keinen Sinn, insoweit Harmonisierung anzustreben. Die Beibehaltung unterschiedlicher technischer Standards ist für das Ziel der effektiven Information und Warnung nicht von entscheidender Bedeutung und sollte daher Angelegenheit eines jeden einzelnen Mitgliedsstaates bleiben.

Grenzüberschreitende Ereignisse verlangen besondere organisatorische Vorkehrungen, damit angrenzende Bereiche rechtzeitig gewarnt werden können. Beispiele in diesem Workshop belegen, wie umfangreich und zum Teil schwierig der Austausch zwischen Mitgliedsstaaten sich gestalten kann. Deshalb sind nur einfache und standardisierte Verfahren von Vorteil.

Der europaweite Austausch von Dienst- und Transportleistungen, der europäische Arbeitsmarkt oder der Tourismusbereich führen dazu, daß viele Mitbürger der Europäischen Union sich in unterschiedlichen Mitgliedsstaaten aufhalten. Alle Menschen – unabhängig von ihrem Herkunftsland -, die sich im Wirkungsbereich eines Schadenereignisses aufhalten oder denen eine akute Gefährdung droht, müssen eindeutig, rechtzeitig, umfassend, wiederholend und wirksam informiert und gewarnt werden. Ein Schutzgefälle aus Mangel an verständlicher Warnung und Information ist nicht akzeptabel. Die Betroffenen müssen Informationen über geeignete Verhaltensweisen und - nach dem Ende der Gefahr – auch klare entwarnende Hinweise erhalten.

Empfehlungen und Hinweise

In der Europäischen Union sollte es ein einheitliches Sirensignal geben, das allen Bürgern eine eingetretene oder drohende Gefahr signalisiert.

6. Ein in der Europäischen Union vereinheitlichtes System von Piktogrammen kann sowohl den Informationsaustausch zwischen Gefahrenabwehrbehörden erleichtern als auch bei der Information der Bevölkerung Hilfe leisten. Ein solches System sollte entwickelt werden.

Die Information und Warnung muß nicht nur vor bestimmten Gefahren warnen, es müssen auch erste, wenn auch vorläufige Verhaltenshinweise gegeben werden. Auch solche Verhaltenshinweise bei Gefahr sollten in den Mitgliedsstaaten einheitlich sein. In Streß- und Ausnahmesituationen kann es zu Einschränkungen der Wahrnehmung und des zielgerichteten Handelns kommen. Abhilfe bringt nur frühzeitige und ständig wiederholte Aufklärung. Diese Aufklärung muß schon bei den Kleinsten in Schulen und Kindergärten beginnen und in den späteren Jahren systematisch aufgefrischt werden. Einige Mitgliedsstaaten der Europäischen Union praktizieren dies bereits.

Bis heute sind unterschiedliche Verhaltensweisen der Bevölkerung in den Staaten der Europäischen Union auf verschiedene Formen der Warnung nicht in einer wissenschaftlich fundierten Form untersucht und damit nicht geklärt worden. Sozio-kulturelle Unterschiede, vielleicht vor dem Hintergrund tatsächlich erfahrener Praktiken bei Schadenereignissen führen zu einer ganzen Palette von Verhaltensweisen. Stereotype und Vorurteile können diese Verhaltensweisen begleiten und beeinflussen.

Empfehlungen und Hinweise

7. Um unterschiedliche Verhaltensweisen besser verstehen zu können, bedarf es einer Forschungsarbeit, die aufklärt, inwieweit und aus welchen Gründen sich Menschen bei der Information und Warnung vor Gefahren regional und in einem bestimmten sozio-kulturellen Kontext verschieden verhalten. Auf der Grundlage dieser Forschungsergebnisse könnte beurteilt werden, inwieweit allgemeine Verhaltensregeln möglich und sinnvoll oder aber gezieltere, differenzierte Hinweise für Verhaltensmaßnahmen erforderlich sind und deren Einübung regional unterschiedlich erfolgen sollte.

Workshop “Communication problems”

In Zeiten einer Informationsgesellschaft ist der Anspruch der Bevölkerung und der Medien in einer Krise oder einer Katastrophe an diejenigen sehr hoch, die Informationen bereitstellen und verfügbar machen müssen. Hinzu kommt, daß durch die Einführung und den steigenden Gebrauch des Internets die klassischen Informationsmedien wie Zeitungen, Rundfunk und Fernsehen ihr Informationsmonopol verloren haben. Wer über die technischen Möglichkeiten verfügt, sich via Internet zu informieren, hat schon in kurzer Zeit einen Informationsvorsprung vor anderen, die nicht über diese Quelle verfügen. Weltweit tätige Nachrichtensender sind mit aktuellen Informationen in kürzester Zeit präsent.

Auf diesem Hintergrund gewinnen Kommunikationsprobleme zunehmend an Bedeutung. Die im Zivil- und Katastrophenschutz Verantwortlichen haben den wichtigen Auftrag, die Medien und damit den Bürger solide und umfassend zu informieren. Das Verhältnis zwischen Bevölkerung und Behörden ist aber im Falle einer Krise oder einer Katastrophe nicht spannungsfrei. Die Medien besitzen dabei eine Doppelrolle. Sie können dazu beitragen, daß sich Krisen und Katastrophen verschärfen, sie können aber auch das Gegenteil bewirken, d.h. zu einer Verringerung von Spannungen beitragen. Entscheidend ist, daß eine Kommunikation in der Krise oder in der Katastrophe nicht zur Krise in der Kommunikation wird, weil auf der Seite der Verantwortlichen Fehler im Umgang mit den Medien und mit der Öffentlichkeit gemacht werden. Kommunikation sollte nicht erst dann beginnen, wenn es zu einer Krise oder zu einer Katastrophe gekommen ist. Bereits vorbereitend und vorbeugend müssen Verantwortliche in Behörden, Organisationen und Betrieben die Medien und die Öffentlichkeit informieren und darüber in Kenntnis setzen, was in einem Ereignisfall geschehen könnte. Eine gute Risikokommunikation ist Wegbereiter für eine effiziente Kommunikation in der Krise.

Konfliktfelder zwischen Katastrophenschutz und Medien lassen sich in verschiedenen Bereichen identifizieren. Zunächst geht es um die Medien selbst. Sie stehen im Spannungsfeld des Wettbewerbs mit anderen Medien und ihrer Aufgabe, die Öffentlichkeit zu informieren. Hinzu kommen kulturelle Unterschiede in der Auffassung von Ursachen und Wirkung bei einer Krise oder einer Katastrophe. Sie führen nicht selten zu Mißverständnissen und Unverständnis auf beiden Seiten. Das Vertrauen in die Behörden kann dabei massiv in Frage gestellt werden. Nicht selten entwickelt sich aus der Behandlung durch die Medien eine Eigendynamik die das allgemeine Verständnis der Öffentlichkeit beeinflusst und direkt (Katastrophentourismus, Telefonblockaden) oder indirekt (über die Medien) die Krisensituation zusätzlich belastet.

Diese Beeinflussung zu steuern ist eine besonders schwierige Aufgabe. Nicht zuletzt verdienen die technischen Aspekte entsprechende Beachtung. Sie können Kommunikationsprobleme hervorrufen oder sogar zur Vermeidung oder besseren Bewältigung beitragen.

Empfehlungen und Hinweise

8. Langfristig sollte auf europäischer Ebene ein Medienforum geschaffen werden, das einerseits als Katalysator zwischen den Medienvertretern und den Verantwortlichen im Katastrophenschutz auf internationaler Ebene fungiert, andererseits den Aufbau nationaler Medienforen unterstützt. Dabei muß dieses Forum gegenseitiges Verständnis fördern, Wissen erweitern und durch gezielte Aufarbeitung von Ereignissen aus kommunikativer Sicht zum Fortschritt beitragen. Ein Pilot-Workshop dazu sollte in naher Zukunft stattfinden.

9. Für beide Seiten, also für Vertreter der Medien als auch für Vertreter der für den Katastrophenschutz Verantwortung tragenden Behörden und Einrichtungen sollten – auch gemeinsame - Fortbildungsveranstaltungen eingerichtet werden.
10. Nur wer sich über lange Zeit das Vertrauen der Medien erwirbt, kann sich im Krisenfall darauf verlassen, daß die Zusammenarbeit für beide Seiten gewinnbringend funktioniert. Zu diesem Zweck sind Maßnahmen einzuleiten, die verantwortliche Personen aus dem Bereich des Katastrophenschutzes mit Hilfen ausstatten, vertrauensschaffende Risikokommunikation zu betreiben.
11. Bei einer Krise oder einer Katastrophe sind Grundregeln des Umgangs mit Medienvertretern von Seiten des Katastrophenschutzes zu beachten. Da die verantwortlichen Führungskräfte zunächst die Schadenabwehr betreiben, sind fachlich qualifizierte Personen zu benennen, welche die Medien kompetent informieren können. Dieser Personenkreis ist im Umgang mit den Medien aus- und fortzubilden. Ein Curriculum für derartige Schulungsveranstaltungen ist als Hilfestellung zu entwickeln.
12. Im Umgang mit der Bevölkerung spielen sozio-kulturelle Bedingungen eine immer größer werdende Rolle, besonders auch verursacht durch Emigranten- und Flüchtlingsströme, aber auch durch Wohnsitzwechsel von EU-Bürgern. Deshalb bedarf es spezieller “Cultural interpreter”, die Katastrophenschutzverantwortliche auf Besonderheiten in Bezug auf bestimmte Personengruppen vorbereiten oder im Schadensfall ad hoc zum Verständnis bestimmter Verhaltensweisen beitragen.

Vorschläge für anschließende Arbeiten und Aktionen

Aus den Erkenntnissen und Ergebnissen des Projektes lassen sich bereits zum jetzigen Zeitpunkt verschiedene weiterführende Fragestellungen ableiten.

Folgende Arbeiten und Aktionen ergeben daraus:

- Abklärung der Rahmenbedingungen für eine europaweite Sammelstelle von Informationen zum Zivil- und Katastrophenschutz, die auch aktiv Informationen beschafft und verteilt. Diese Stelle sollte auch als Informationsdrehscheibe für Veranstaltungen, Kongresse und ähnliches fungieren.
- Voruntersuchung zur Entwicklung eines Instrumentariums für Krisen- und Katastrophenindikatoren
- Arbeiten zur Entwicklung eines Glossars für Zivil- und Katastrophenschutz
- Untersuchung zur Entwicklung eines einheitlichen Sirensignals und daran anknüpfender Verhaltensempfehlungen, auch mit Hilfe von einheitlichen Piktogrammen.
- Entwicklung von Piktogrammen und standardisierten Vordrucken zum Informationsaustausch in der Europäischen Union.
- Forschungsaufträge zur Aufklärung regionaler und sozio-kulturell unterschiedlicher Verhaltensweisen von Menschen bei der Warnung vor einer Gefahr.
- Einrichtung eines europäischen Medienforums als Austauschstätte von Medienvertretern und Angehörigen des Zivil- und Katastrophenschutzes und für deren Fortbildung
- Durchführung eines Workshops über den Austausch der “best practise” im Umgang mit den Medien
- Einrichtung von “cultural interpreter” als Hilfen für Betroffene und Hilfskräfte

Summary of the Results

The project is entitled "From Emergency to Crisis- a Challenge for Civil Protection". This title is designed to delineate the entire scope of events which protection of the population should be based on.

The challenges for the protection of the population are in particular to be found in the following areas:

- Events which begin on a small and harmless-appearing scale but which may develop into crises, although different intermediate stages may be passed through between the beginning and the end stages. The factor of time is assigned a not unimportant role for this reason. Crisis develop; they usually do not "fall from the sky" in their complexity. The challenge is to identify developing trends and indicators at an early point in time.
- Events and damage are not constrained by national borders; they can also be of an international nature. Getting control over crises and their consequences requires international co-operation. The contents of definitions, definitions themselves and transitional stages, however, are of differing importance in the particular countries. This impedes understanding and communications at an international level, particularly when the different contents are not known. The challenge is to develop a common understanding for the contents of definition the other potential partner uses. The question is whether it may be possible to come up with a harmonisation of definitions and their contents in the future.
- The aid system for protecting the population of the respective country is activated to get control over events and ameliorate the consequences. In the case of international events, the challenge is to know the interfaces so that information, communication and codes of conduct can run in a co-ordinated manner.
- Europe is growing together. Many population groups from different cultural groups are located in the respective countries of the European Union. The protection of the population affects both the self-help of the population and the trust of citizens in the necessary measures by the public bureaucracy. The crucial factor is the integration of persons directly and indirectly affected by an effect in the processes of the aid mission. The challenge is to integrate everybody - in spite of their different cultural backgrounds - in the processes of the aid-mission system.

These challenges have been topically summarised in three workshops:

- From emergency to crisis
- Information and warning
- Communication problems

The topical focal points for the workshop as well as the topics to be addressed by the participants in the working groups have been set out in consultation with supporting working groups with an international make-up of participants.

The ensuing results from the individual seminars are listed in the following.

The goal of the workshop series was to look at different problems in the area of crisis management. The topics of "information and warning" and "communications problems" were addressed on the basis of trying to clear up terms like crisis management which are used in this context - in part with different meanings.

The central terms used in the countries of the European Union such as "emergency", "crisis" or "disaster" have certain meanings which vary among the member countries depending upon language, culture and statutory stipulations. This makes the exchange and the entire understanding of the member countries among each other more difficult. The terms used in international exchange need to be discussed and explained as a result of the possible misunderstanding.

There is an interest in being able to recognise events which can injure people and material to a significant extent, no matter what they are called in this language area in order to make it possible to successfully counteract these.

The willingness to identify such indicators depends on people's awareness of danger, the cultural group involved and the society as such.

An information pool at the level of the European Commission helping to recognise projects early on would be desirable.

There are already indicators for natural events and nuclear accidents. Here it appears to be a good idea to develop a uniform system of indicators; there is doubt as to the extent to which this is possible for the broad field of other, in particular technical, accidents. Work needs to be performed here as well.

With regard to information and warning of the population, different aspects, e.g. geographic conditions, the state of the art in technology, etc., need to be taken into account.

It is not considered necessary to organise a joint, multi-country warning and information system in the European Union. The level of the member countries appears to be sufficient.

On the other hand, a standardisation and reduction of acoustic warnings (siren signals) appears to make sense and worth striving for.

A co-ordinated system of pictograms should facilitate warning and information of the population to provide support in the area of visual warning.

Informing the population on warning signs and the codes of practice associated therewith should expressly be carried out through first information as early as in schools.

Collaboration between the countries of the European Union should be intensified while maintaining country-specific systems, however, especially between neighbouring countries which are subject to the same dangers on their borders, e.g. as a result of forest fires or floods.

There should be central contact persons available around the hour every day of the year in all countries to guarantee an effective exchange of information.

This also includes agreed-upon terms and agreed-upon procedures between the participants.

In addition to information and warning, there is an additional field of communications exigencies between the population, the authorities and the media. In order to be able to take into account the analytical problems relating with the different cultural and psychological prerequisites for the population involved and the special role of the media, some preparatory measures are necessary. These in particular involve training, personnel and planning. Modern technology, however, must also be taken into account in improving the communication system.

Professionally trained staff also need to be made available by the disaster-relief authorities as contact persons for the media. This also applies to lower-level authorities in municipalities, communities and counties.

The willingness on the part of the population to communicate in the event of disasters must be prepared by means of communicating risks. Of central importance is the effort to create trust and confidence among the population.

Communicating risk, working with the media and creating trust and confidence among the population are long-term tasks. If these preparatory measures do not take place, it is difficult or impossible to make up for it after a disaster occurs or crisis comes about.

"From Emergency to Crisis" workshop

Recommendations and notes shall be provided in the following which are based on the summary of results provided in section 1.

The terms "emergency", "disaster" and "crisis" are of central importance in the area of civil protection and disaster relief. The different languages, cultures and laws have an impact on the importance of these terms, however. Thus there is not any uniform use of language in the member countries of the European Union (c.f. part B, results of the workshop). In spite of this it would be desirable to come up with a minimum consensus on these central terms. There are several advantages to this. Language in the sense of common semantics, which is to say the same content in terms of meaning, would lead to the same ideas being connected with the words used. Especially the word "crisis" appears to be used in a comparable way in the languages of the European Union. This is at least a syntactic, with the exception of lesser language-related peculiarities, such as for example the word "Krise" in German or "crisis" in English.

It is only the common term, however, which provides the basis for a common understanding, not the sequence of letters alone. Thus an agreed-upon meaning will more quickly lead to people understanding each other better and achieve the requirements with which to attain objectives or solve problems more quickly.

For this reason there was agreement among the participants in the workshop "From emergency to crisis" that a series of measures would have to strengthen the ability to come up with a common understanding of centrally-used terms.

In order to be able to prevent crises and disasters more effectively, it is indispensable that indicators of developing events be available early on. Research on such indicators, however, is still in its beginnings. Taking examples from the military area as a start (c.f. Part B, Results of the Workshop), it should be examined which indicators can be systematically developed in the civil area which could indicate developing crises and disasters. A system like this would allow better preparation and a more targeted response to crises and disasters.

Recommendations and notes

1. The establishment of a European clearing point for information from the area of civil protection and disaster relief with the following functions would be desirable:
 - Central monitoring of all areas which are of relevance to civil protection and disaster relief (environment, technology, climate research, etc.) and collection of the most important information including from national agencies in order to provide data in good time and comprehensively - after this data has been prepared. One example of such a central clearing house is the institution which already exists for the registration of nuclear incidents.

- Such a clearing house could have a central function in a network with the member countries of the European Community in order to guarantee the systematic exchange of data and information.
 - An additional important task for this clearing point would be to gather indicators which indicate a crisis or disaster is brewing. To do this, however, a suitable set of instruments first needs to be devised to identify these indicators.
 - This would mean a reporting and information system. The member countries are called upon here. To call for the creation of such a system could be a task for the near future for DG XI.
 - Information on all technical congresses, workshops or other events in the international area relating to the initiation of personal contact with the possibility to discuss technical problems.
2. Regardless of the institutions focused along these lines, an exchange of opinion for experts also needs to take place. Experts from the various areas of civil protection and disaster relief not only need to get to know each other through research of literature - they also need to have personal contact. The call for such events within the framework of the action programme must therefore be welcomed and maintained.
 3. Especially with regard to the planned expansion of the European Union, the bundled collection of relevant information and the offer of informational events and exercises promoting rapid integration are indispensable.
 4. Within the framework of the European Union there are many areas where successful efforts are being made to standardise language use, for example with regard to technical standards. The prospect of an enhancement of mutual understanding makes the attempt to agree upon a joint terminology in the area of civil protection and disaster relief worthwhile.

Reference has already been made to the importance of personal contacts. On the one hand, knowledge of crises, how these arise and the reasons for them, and on the other the factors which cause a disaster to occur make it appear necessary for both political decision-makers as well as leaders in the area of civil protection and disaster relief to undergo training.

Especially early recognition of crises and disasters requires a mode of thinking which is sensitive to respective indicators which can be taught at seminars in a targeted manner. This also includes having indicators for crises and disasters being identified to put decision-makers in a position to deal with this information and take targeted, co-ordinated action. Decision-makers must work together with special authorities and experts from different areas in the event of actual cases of damage. In order to prepare for this co-operation and put it at a high level, training and retraining are also necessary.

People responsible for civil protection and disaster relief are as a rule generalists who cannot be informed about all the indicators and the causal factors and consequences related to these as specialists from the respective special bureaucratic agencies are. This makes it all the more important for the special bureaucratic agencies to be informed about civil protection and disaster relief in order for these needs to be sufficiently taken into account by these special bureaucratic agencies.

Recommendations and notes

5. Training and retraining of people holding responsibility in the area of civil protection and disaster relief by experts from different authorities and organisations should be intensified with the goal of optimising preparation for crises and disasters. An important goal at the same time is to achieve a greater understanding among politicians and special bureaucratic agencies for requirements in the area of disaster relief. Special measures to deal with a damage incident should be planned, practised and co-ordinated between the various institutions and agencies.

"Information and Warning" workshop

In a Europe which is growing together , with numerous cross-border disasters and crises, informing the population involved in a precise and timely manner, including beyond national borders, is absolutely indispensable. But increased mobility is also placing greater demands on the ability to understand information and warning.

In the European Union such an information and warning on the part of the authorities and the population which may be affected by cross-border events should be something which is taken for created. To provide this, both the suitable organisational and technical prerequisites need to be created. As there are by now many different forms of organisation and technical stands which have been developed in the European Union, it makes no sense to try to bring about harmonisation. Maintaining different technical standards is not of decision-making importance for the goal of effective information and warning and should therefore be left to each individual member country as an internal matter.

Cross-border events require special organisational precautions, however, in order to be able to warn bordering regions in a timely manner. Examples in this workshop show how considerable and in part difficult this exchange can be between the member countries. For this reason, only simple, standardised procedures are of advantage.

The European-wide exchange of service and transport services, the European labour market or the tourist branch are leading to many citizens of the European Union spending time in different member countries. All people - regardless of their country of origin - who are staying in an area where a damage-causing incident is having an impact or an acute danger is threatening, must be informed and warned in an unambiguous, timely, comprehensive manner which is repeated and is effective. It is not acceptable to have differing degrees of protection as a result of a lack of understandable warning and information. The persons involved must receive information on suitable modes of conduct and also clear all-clear signs upon the ending of the danger.

Recommendations and notes

There should be a uniform siren signal in the European Union that signals a danger which has materialised or which is threatening to all citizens.

6. A uniform system of pictograms in the European Union can facilitate both the exchange of information between authorities responsible for countering dangers as well as provide aid in informing the population. A system like this needs to be developed.

The information and warning must not only warn about particular dangers - it must also provide initial, if provisional, information on how to react. Such information on how to react in the event of dangers should also be uniform in all of the member countries. In stressful, exceptional circumstances this may cause limitations on faculties of perception and targeted action. Aid can only be provided by informing people in a timely and repetitive manner. This information must start with the youngest citizens in schools and nursery schools and be systematically refreshed in later years. Some members of the European Community are already practising this.

Different modes of conduct on the part of the population in the countries of the European Union have not been studied in terms of different forms of warning and thus have not yet been cleared up to date. Socio-cultural differences, perhaps also given actually experienced practises with regard to damage-related events lead to a whole range of modes of behaviour. Stereotypes and assessments can support and influence these modes of behaviour.

Recommendations and notes

7. In order to be able to understand different modes of behaviour better, research is needed to establish to what extent and for what reasons people act differently across regions and socio-cultural contexts with regard to information and warning about dangers. On the basis of these research results, it could be assessed to what extent general rules of procedure are possible and make sense, but also targeted, more discriminating information on rules pertaining to behaviour are required. These should also be practised in a differing manner in different regions.

Workshop on "communications problems"

In the era of the information society, the demands of society and the media of persons who provide information and make it available in a crisis or disaster is very great. On top of this, the introduction and constantly increasing use of the Internet, classical information media such as newspapers, radio and television have lost their monopoly on information in a brief amount of time. Anyone who has the technical possibilities of informing themselves via Internet already has an information advantage compared to those who do not have this source at their disposal. News broadcasters acting at the global level are present with up-to-date information in an extremely short amount of time.

Given this, communications problems are gaining increasing importance. The persons responsible in the area of civil protection and disaster relief have the important task of providing the media and thus the citizenry with solid, comprehensive information. The relationship between the population and the authorities in the event of a crisis or a disaster is not free of tension, however. The media plays a double role at the same time. It can contribute to an exacerbation of crises and disasters and can also bring about the opposite effect, i.e. a decrease in tension. The crucial factor is a crisis or a disaster not only leads to a crisis in communication because mistakes are made by responsible authorities in dealing with the media and the public. Communication should only be initiated when a crisis or disaster comes about. Responsible persons in the authorities, organisations and enterprises have to inform the media and the public as to what could happen in the event of an incident in a preventive manner prior to such occurring. Good communication of risks prepares the way for efficient communications during a crisis.

Fields of conflict between disaster relief and the media can be identified in various areas. These first of all involve the media itself. It is in the line of fire in competition with other types of media and the task of informing the public. On top of this, there are cultural differences in the perception of causes and impact in a crisis or a disaster. These not infrequently lead to misunderstandings and lack of understanding on both sides. Trust and confidence in the authorities can be questioned on a massive scale here. Frequently the way which the media treats an event develops a dynamic of its own which then influences the public attitude directly (disaster tourism, telephone overloading) or indirectly (via the media) to cause an additional strain in a crisis situation.

Controlling this influence is a particularly difficult task. It is not least the technical aspects which deserve proper attention. They can cause communications problems or even contribute to an avoidance of the problem or help the problem to be contained.

Recommendations and notes

8. Over the long term a media forum should be created which on the one hand acts as a catalyst between representatives of the media and persons responsible for disaster relief at the international level. At the same time, this form needs to promote mutual understanding, expand knowledge and contribute to progress through targeted analysis of events from a communications perspective in order to contribute to progress being made. A pilot workshop should take place on this topic in the near future.

9. Continuing education seminars should be held for both sides, that is, for representatives of the media and representatives of the authorities and institutions which are responsible for disaster relief - including joint seminars for both of these.
10. It is only by gaining the trust and confidence of the media over a longer period of time that one can rely on co-operation in the event of a crisis. For this purpose measures need to be instituted which provide the persons responsible for the area of disaster protection with aid in pursuing confidence-building risk communication.
11. In the event of a crisis or a disaster, basic principles need to be observed on how to deal with representatives of the media on the part of disaster relief. As the responsible leaders first of all attempt to minimise damage, technically qualified persons who can competently inform the media need to be named. This group of persons must be provided training and retraining on how to deal with the media. A curriculum must be developed for training event of this kind.
12. In dealing with the population, socio-cultural conditions are playing an increasing role, especially as a result of movements of emigrants and refugees, but also as a result of EU citizens changing their domicile. For this reason a special "cultural interpreter" is needed to prepare persons responsible for disaster relief for special factors relating to certain groups of persons or who can contribute to an understanding of certain modes of procedure in the case of a damage incident.

Proposals for follow-up work and campaigns

The knowledge gained in, and results of, the project allow various follow-up questions to be derived already here. The following work and campaigns can be proposed:

- Determine the framework conditions for a pan-European clearing office for information on civil protection and disaster relief which is also actively procured and distributed. This office should also serve as an information clearing house for events, congresses and the like.
- Prior studies on developing a set of instruments with which to develop indicators for crises and disasters.
- Work to develop a glossary for civil protection and disaster relief.
- Studies on the development of a uniform siren signal and recommendations on conduct pursuant thereto, including with the aid of uniform pictograms.
- Development of pictograms and standardised models on the exchange of information in the European Union.
- Commission research projects to delineate regional and socio-cultural differences in the behaviour of people when they are warned about a danger.
- Establishment of a European media forum as a site for exchange among representatives of the media and persons involved in civil protection and disaster relief and their further training.
- Execution of a workshop on comparing notes in the area of "best practice" in dealing with the media.
- Establishment of "cultural interpreters" as aid for persons affected and supporting staff.

Résumé des Conclusions

Le projet porte le titre : « From Emergency to Crisis – a Challenge for Civil protection ». Ce titre : « De l'urgence à la crise » suggère que l'ensemble de l'impact des événements, qui doit orienter la protection civile, devrait être mis en évidence.

Les défis pour la protection de la population concernent spécialement les domaines suivants :

- Des événements qui s'avèrent insignifiants et anodins dans un premier temps peuvent éventuellement se développer en crises réelles qui apparaissent à la suite de divers stades intermédiaires. C'est pourquoi le facteur temps acquiert une importance non négligeable. Des états de crise se développent ; en général ils ne tombent pas « d'en haut » dans toute leur complexité. Le défi consiste à identifier assez tôt tendances de développement et indicateurs.
- Evénements et sinistres ne sont pas liés aux frontières nationales des Etats ; ils peuvent également être transfrontaliers. La maîtrise des événements et de leurs conséquences requiert donc une collaboration internationale. Mais les concepts, définitions et stades intermédiaires ont une signification différente dans chacun des pays. Ceci rend plus difficiles la compréhension et la communication au niveau international, surtout si les différentes significations des concepts ne sont pas connues. Le défi consiste à développer une compréhension commune par rapport aux concepts d'autres partenaires potentiels. La question est de savoir s'il est éventuellement possible d'arriver, à l'avenir, à une harmonisation des concepts et de leur contenu.
- Le système d'assistance pour la protection de la population de chaque pays est activé afin de maîtriser les événements et d'en atténuer les conséquences. Lors événements internationaux, le challenge se trouve dans la connaissance des interfaces afin qu'information, communication et comportement se déroulent de manière coordonnée.
- L'Europe s'unifie. Dans chacun des Etats de l'Union européenne se sont établis de nombreux groupes de population issus de divers milieux culturels. La protection de la population présuppose aussi bien l'effort personnel des habitants que la confiance du citoyen dans les indispensables mesures prises par l'administration publique. Il importe d'intégrer les victimes directes et indirectes d'un événement dans le déroulement des initiatives d'assistance. Le défi est alors d'intégrer tous les citoyens – malgré leurs références culturelles différentes – dans le processus actif du système d'assistance.

Ces défis ont été groupés selon des thèmes dans trois ateliers de travail :

- | | |
|----------------------------|--------------------------------|
| - From Emergency to Crisis | (De l'urgence à la crise) |
| - Information and Warning | (Information et avertissement) |
| - Communication problems | (Problèmes de communication) |

En accord avec le groupe de travail international qui assistait le projet, on détermina les thématiques essentielles des ateliers ainsi que les thèmes à traiter par les participants dans les ateliers.

Les résultats de chacun de ces groupes seront répertoriés plus tard.

La série d'ateliers se proposait de traiter de différentes problématiques de la gestion des crises. Après avoir clarifié les notions utilisées dans ce contexte, aux significations parfois différentes, on s'est occupé des questions relatives à "L'information et l'alerte" et aux "Problèmes de communication".

- Les termes de base utilisés dans les pays de l'Union européenne, à savoir "urgence", "crise" ou "catastrophe", ont des significations différentes dans les Etats membres, selon la langue, la culture et les dispositions légales. Cela rend difficile l'échange et la compréhension des Etats membres entre eux. A cause des malentendus possibles, ces termes devraient être analysés et précisés dans l'échange international.
- En ce qui concerne les événements susceptibles de causer des dommages importants aux hommes et aux choses, quel que soit le nom qu'on leur donne dans un espace linguistique, il est important de pouvoir les dépister précocement grâce à des indicateurs, de manière à pouvoir y parer avec succès.
- La disposition à identifier de tels indicateurs dépend de la conscience du danger qu'ont les hommes, la civilisation et la société en tant que telle.
- Un pool d'information au niveau de la Commission européenne pour le dépistage précoce des crises serait souhaitable.
- Il existe déjà des indicateurs pour les catastrophes naturelles et les accidents nucléaires. Il semblerait judicieux de mettre au point un système d'indicateurs uniforme; on se demande si c'est possible dans le vaste champ des autres accidents, notamment techniques. Il faudra se pencher sur ce problème.
- En ce qui concerne l'information et l'alerte de la population, on doit prendre en compte les différents aspects, p. ex. les conditions géographiques, l'état de la technique, etc..
- On estime qu'il n'est pas nécessaire de mettre sur pied un système d'alerte et d'information commun, transfrontalier dans l'Union européenne. On estime suffisant le niveau des Etats membres.
- En revanche, la convergence et la réduction de l'alarme acoustique (signal par sirène) semble judicieux et digne d'efforts.
- A titre de soutien, dans le domaine de l'alarme optique, un système concerté de pictogrammes devrait faciliter l'alerte et l'information de la population.
- La sensibilisation et l'information de la population sur les signaux d'avertissement et les règles de comportement qui leur sont liées, devraient être faites avec fermeté: ainsi, les premières informations devraient être données dès l'école.
- Tout en conservant les systèmes nationaux spécifiques, la coopération entre les pays de l'Union européenne devrait intensifiée, notamment entre les Etats voisins qui sont sujets aux mêmes risques à leurs frontières, dus par exemple à des incendies de forêts ou des inondations.

- Dans tous les Etats, des interlocuteurs centraux qui assurent un échange d'information effectif devraient être à disposition vingt-quatre heures sur vingt-quatre tous les jours de l'année.
- Cela implique des notions et des procédures concertées entre les intéressés.
- A côté de l'information et de l'alerte, il existe un vaste champ de nécessités de communication entre la population, les pouvoirs publics et les médias. Pour prendre en compte les problèmes afférents de la discussion des différentes situations culturelles et psychologiques de la population intéressée et du rôle spécifique des médias, quelques mesures préparatoires sont nécessaires. Elles concernent en particulier la formation, le personnel et la planification. En améliorant le système de communication, il convient de tenir compte de la technique moderne.
- Du côté des autorités de la protection civile, des professionnels formés à cet effet doivent être à la disposition des médias à titre d'interlocuteurs. Cela vaut aussi pour les autorités subalternes dans les villes, les communes et les arrondissements.
- La disposition de la population à la communication en cas de catastrophe doit être préparée par une communication sur le risque. Elle est centrée sur l'effort pour obtenir la confiance de la population.
- La communication sur le risque, le travail avec les médias et la mise en confiance de la population sont des tâches de longue haleine. Si ces mesures préparatoires n'ont pas eu lieu, on peut difficilement rattraper le temps perdu en cas de catastrophe ou de crise.

Atelier "De l'urgence à la crise"

On trouvera ci-après des recommandations et des indications qui découlent du résumé des résultats à la première partie

Les notions d'"urgence", de "catastrophe" et de "crise" revêtent une importance cruciale dans le domaine de la protection civile. Or, ces notions sont marquées par les différentes langues, cultures et lois de sorte qu'elles n'ont pas une signification identique dans les Etats membres de l'Union européenne (voir partie B, conclusions de l'atelier). Il serait cependant souhaitable qu'un consensus minimal règne sur ces notions de base. Cela aurait plusieurs avantages. La langue en tant que sémantique commune, c'est-à-dire considérée du point de vue de la signification commune, devrait entraîner que les mêmes représentations soient mises en relation avec les mots utilisés. Le mot "crise" justement semble utilisé dans toutes les langues de la Communauté européenne, cela tout au moins comme suite de signes (syntactique), si l'on fait abstraction de quelques singularités linguistiques visibles par exemple dans le mot allemand "Krise" ou le mot anglais "crisis". Ce n'est toutefois que le terme commun qui pose la base d'une compréhension commune et pas seulement la combinaison de lettres. Dans ce sens, si la signification est convenue, on se comprendra mieux mutuellement et la condition de l'atteinte des objectifs ou des solutions aux problèmes sera remplie plus facilement.

Pour cette raison, les participants à l'atelier "De l'urgence à la crise" ont été bien d'accord qu'il fallait justement renforcer par une série de mesures les possibilités d'une compréhension commune en ce qui concerne ces notions de base.

Pour pouvoir prévenir plus effectivement les crises et les catastrophes, il est indispensable de disposer d'indicateurs précoces des événements qui se préparent. L'exploration de tels indicateurs en est encore à ses débuts actuellement. En partant d'exemples dans le secteur militaire (voir partie B, conclusions de l'atelier), on devra examiner quels indicateurs de crises et de catastrophes on peut développer systématiquement dans le secteur civil. Avec un tel système, on pourrait mieux se préparer et se protéger d'une manière plus ciblée contre les crises et les catastrophes.

Recommandations et indications

1. Il conviendrait d'instituer un Office central européen chargé de recueillir des informations dans le domaine de la protection civile, ayant les missions suivantes:
 - Observation centrale de tous les secteurs disposant d'informations intéressant la protection civile (environnement, technologie, recherches sur le climat, etc.) et collecte des informations importantes, détenues aussi par les instances nationales, pour pouvoir rendre disponibles les données – après leur exploitation – en temps opportun et exhaustivement. Un exemple de centre de collecte d'informations est l'institution où sont enregistrés les incidents nucléaires.
 - Un tel centre de collecte de données pourrait avoir des fonctions centrales dans un réseau avec les Etats membres de l'Union européenne en vue d'assurer l'échange systématique de données et d'informations.
 - Ce centre de collecte aurait pour autre mission importante de collecter des indicateurs avertisseurs de crises et de catastrophes. Il faudrait commencer par élaborer la panoplie appropriée pour l'identification d'indicateurs.
 - Pour cela, un système de déclaration et d'information serait nécessaire. Les Etats membres sont ici sollicités. La promotion d'un tel système pourrait être une mission de la DG XI dans le proche avenir.

- Information sur tous les symposiums, ateliers ou autres manifestations dans le domaine international en vue d'une prise de contact personnelle avec la possibilité de discuter de problèmes spécialisés.
2. Indépendamment des institutions focalisantes, il faudra promouvoir un échange d'informations entre spécialistes. Les spécialistes des différents domaines de la protection civile ne doivent pas se connaître uniquement par leurs recherches bibliographiques, ils doivent nouer aussi des contacts personnels. Dans cette mesure, on doit saluer et maintenir la promotion de telles manifestations dans le cadre du programme d'action.
 3. En raison précisément du proche élargissement de l'Union européenne, la collecte focalisée d'informations pertinentes et l'offre en manifestations d'information et d'entraînement est indispensable en vue de la promotion d'une intégration rapide.
 4. Dans le cadre de l'Union Européenne, il existe dans de nombreux domaines des efforts réussis d'uniformisation de la terminologie, par exemple dans le cas de standards techniques. La perspective d'une meilleure compréhension mutuelle est un argument en faveur de la tentative de s'accorder sur une terminologie commune dans le domaine de la protection civile.

On a déjà signalé l'importance des contacts personnels. Le savoir, d'une part sur les crises, leur mode d'émergence et leurs causes et d'autre part sur les facteurs qui interviennent dans le déclenchement d'une catastrophe, conduit à considérer comme nécessaire la formation aussi bien des décideurs politiques que des cadres de la protection civile.

En effet, le dépistage précoce des crises et des catastrophes nécessite un mode de pensée sensibilisé aux signaux correspondants. On peut l'exercer de manière ciblée dans des sessions de formation. Cela implique aussi que les indicateurs de crises et de catastrophes soient dépistés, que les décideurs soient mis en mesure de savoir utiliser ces informations et d'agir ensuite de manière ciblée et coordonnée. Dans le cadre de la protection civile, les responsables doivent coopérer en cas de sinistres concrets avec les services publics spécialisés et des spécialistes de différents horizons. Pour préparer cette coopération et la porter à un haut niveau, des sessions de formation et de perfectionnement sont également nécessaires.

Les agents de la protection civile sont en général des "généralistes" qui ne peuvent pas être informés de tous les indicateurs et des causes et effets qui leurs sont liés, il en va de même pour les spécialistes des administrations spécialisées respectives. Il est d'autant plus important que les administrations spécialisées soient informées sur la protection civile afin que les questions qui la regardent puissent être suffisamment prises en compte par les administrations spécialisées.

Recommandations et indications

5. La formation et le perfectionnement des responsables de la protection civile, des responsables politiques et des spécialistes des diverses autorités et organisations devront être intensifiés en vue d'optimiser la préparation aux crises et aux catastrophes. Un objectif important est que les politiciens et les administrations spécialisées développent un haut degré de compréhension pour les questions de la protection civile. Les mesures spécifiques de défense en cas de sinistre devraient être planifiées, exercées et coordonnées entre les différentes institutions.

Atelier "Information et alarme"

Dans une Europe en voie d'unification où les risques de catastrophes et de crises transfrontalières sont nombreux, il est absolument indispensable que la population respectivement concernée soit informée et alertée en temps opportun aussi au-delà des frontières. La mobilité accrue pose également de fortes exigences à la compréhensibilité de l'information et de l'alarme.

Dans l'Union européenne, l'information et l'alerte des autorités et de la population éventuellement touchée par des événements transnationaux devrait aller de soi. Il faut donc créer les conditions adéquates, aussi bien sur le plan organisationnel que technique. Comme entre temps, dans les différents pays de l'Union européenne, des formes organisationnelles et des standards techniques différents se sont développés, cela n'a pas de sens de chercher à les harmoniser. Le maintien de standards techniques différents n'est pas d'une importance décisive pour l'objectif d'une information et d'une alerte effectives et devrait donc rester l'affaire de chaque Etat membre.

Les événements transfrontaliers exigent des mesures organisationnelles particulières afin que la zone frontière puisse être alertée à temps. Les exemples donnés dans cet atelier prouvent à quel point l'échange entre les Etats membres peut être vaste et souvent difficile. C'est pourquoi, seules les procédures simples et standardisées présentent un avantage.

L'échange au niveau européen de prestations de services et de transport, le marché de l'emploi européen ou le secteur du tourisme font que de nombreux citoyens de l'Union européenne séjournent dans d'autres Etats membres. Tous les individus – quel que soit leur pays d'origine – qui séjournent dans la zone d'effet d'un sinistre ou qui sont menacés d'un péril aigu, doivent être informés et alertés clairement, à temps, complètement, de manière répétée et efficace. Une protection moindre par manque d'alerte et d'information compréhensibles est inacceptable. Les intéressés doivent recevoir des informations sur les comportements appropriés et aussi – une fois le péril passé – des indications claires de fin d'alerte.

Recommandations et indications

Dans l'Union européenne, il devrait exister un signal de sirène uniforme signalant à tous les citoyens qu'un risque a surgi ou menace.

6. Un système de pictogrammes uniformisé au niveau de l'Union européenne peut faciliter à la fois l'échange d'informations entre les services de défense contre les risques et fournir une aide pour informer la population. Il faudrait mettre au point un système de ce genre.

L'information et l'alerte ne doivent pas seulement mettre en garde contre certains risques, il faut qu'elles fournissent aussi de premières indications de comportements, même provisoires. Ce genre d'indication de comportement en cas de danger devrait être aussi uniformisé dans les Etats membres. Dans les situations de stress et d'exception, la perception et l'action délibérée peuvent être réduites. Seule une information précoce et sans cesse répétée peut y parer. Cette information peut déjà commencer auprès des plus petits à l'école élémentaire et dans les écoles maternelles et être révisée systématiquement les années suivantes. Quelques Etats membres le pratiquent déjà.

A ce jour, les différences de réaction de la population dans les Etats de l'Union européenne aux diverses formes d'alerte n'ont toujours pas été étudiées scientifiquement et ne sont donc toujours pas élucidées. Les différences socioculturelles, peut-être sur l'arrière-plan de pratiques réellement vécues en cas de sinistres, entraînent toute une palette de comportements. Les stéréotypes et les préjugés peuvent accompagner et influencer ces comportements.

Recommandations et indications

7. Pour pouvoir mieux comprendre les différences de comportement, on a besoin de travaux de recherche susceptibles d'informer si et pour quelles raisons les individus se comportent différemment selon les régions et dans un certain contexte socioculturel en cas d'information et d'alerte. Sur la base des conclusions de la recherche, on pourrait juger dans quelle mesure des règles de comportement générales sont possibles et judicieuses ou bien si des indications de règles de comportement plus ciblées, plus nuancées sont nécessaires et si leur entraînement doit s'effectuer différemment selon les régions.

Atelier: "Problèmes de communication"

A l'époque de la société de l'information, au cours d'une crise ou une catastrophe, la population et les médias ont de grandes exigences à l'égard de ceux qui mettent à disposition les informations et doivent les rendre disponibles. A cela s'ajoute que du fait de l'introduction et de l'utilisation croissante de l'Internet, des médias comme les journaux, la radio et la télévision ont perdu leur monopole d'information. Quiconque dispose des possibilités techniques de s'informer par l'Internet a très vite une avance d'information sur ceux qui ne disposent pas de cette source d'information. Des chaînes d'information opérant dans le monde entier présentent en un temps record les informations les plus récentes.

Sur cet arrière-plan, les problèmes de communication jouent un rôle croissant. Les responsables de la protection civile ont l'importante mission d'informer les médias et par là les citoyens d'une manière sérieuse et exhaustive. Mais les rapports entre la population et les pouvoirs publics en cas de crise ou de catastrophe ne sont pas exempts de tensions. Les médias jouent un double rôle. Il peuvent contribuer à aggraver les crises et les catastrophes ou bien en revanche faire le contraire, c'est-à-dire contribuer à diminuer les tensions. Il est décisif que la communication en cas de crise ou de catastrophe ne devienne pas une crise de communication si du côté des responsables, on a commis des fautes dans les relations avec les médias et avec le public. La communication ne doit pas commencer seulement quand une crise ou une catastrophe se produit. A titre de préparation et de prévention, les responsables dans les pouvoirs publics, les organisations et les entreprises devraient informer les médias et le public et leur faire savoir ce qui pourrait se produire en cas d'événement. Une bonne communication sur le risque est l'artisan d'une communication efficace en temps de crise.

On peut identifier les champs de conflit entre la protection civile et les médias dans différents secteurs. Ce sont d'abord les médias eux-mêmes. Ils se situent au cœur des tensions engendrées par la concurrence avec les autres médias et leur mission d'information du public. A cela s'ajoutent des différences culturelles dans l'opinion sur les causes et l'impact d'une crise ou d'une catastrophe. Il n'est pas rare qu'ils entraînent des malentendus et un manque de compréhension des deux côtés. La confiance dans les autorités peut alors être massivement mise en question. Il n'est pas rare que de la couverture médiatique se développe un dynamisme propre qui influence la compréhension générale du public et peut compromettre en outre la situation de crise directement (tourisme de catastrophe, blocage des lignes téléphoniques) ou indirectement (par les médias).

Diriger cette prise d'influence est une tâche particulièrement difficile. Les aspects techniques méritent d'être eux aussi pris en considération. Il peuvent être à l'origine de problèmes de communication ou bien au contraire contribuer à les éviter ou à mieux les maîtriser.

Recommandations et indications

8. A long terme, il conviendrait d'instituer au niveau européen un forum des médias qui jouerait d'une part le rôle de catalyseur entre les représentants des médias et les responsables dans le domaine de la protection civile et de l'autre soutiendrait la mise en place de forums des médias nationaux. Ce forum devrait promouvoir la compréhension réciproque, élargir les connaissances et contribuer au progrès par l'exploitation ciblée des événements du point de vue de la communication. Il serait bon qu'un atelier pilote dans ce domaine ait lieu dans un avenir proche.
9. Pour les deux côtés, à savoir les représentants des médias et les représentants des autorités et des institutions en charge de la protection civile, il faudrait instituer des sessions de perfectionnement – communs eux aussi.
10. Seul celui qui s'est acquis la confiance des médias par un travail de longue haleine peut être sûr qu'en cas de crise, la coopération fonctionnera à l'avantage des deux côtés. Dans ce but, il faudra initier des mesures dotant les personnes responsables du secteur de la protection civile d'aides pour mettre en œuvre des mesures de confiance dans la communication sur le risque.
11. Au cours d'une crise ou d'une catastrophe, la protection civile doit respecter certaines règles de base dans ses relations avec les représentants des médias. Comme les cadres responsables sont occupés en premier lieu à opérationnaliser la défense contre le sinistre, il faudrait désigner des professionnels qualifiés aptes à informer les médias avec compétence. Ces personnes devront être formées et qualifiées aux relations avec la presse. Il faudra élaborer un programme pour ce genre de sessions de formation.
12. Dans les relations avec la population, les conditions socioculturelles jouent un rôle toujours plus important, ce qui est dû notamment aux flux d'émigrants et de réfugiés, mais aussi aux changements de résidence des citoyens de l'UE. C'est pourquoi, on a besoin de "cultural interpreters" spéciaux pour préparer les responsables de la protection civile aux spécificités en relation avec certains groupes de personnes ou en cas de catastrophe contribuent aussitôt à la compréhension de certains comportements.

Propositions pour les travaux et les actions qui suivront

Des constatations et des résultats du projet découlent dès à présent différentes interrogations menant plus loin. Il s'ensuit les travaux et les actions suivantes:

- Clarification des conditions générales pour un Office européen de collecte d'informations pour la protection civile, chargé de fournir et de distribuer aussi activement des informations. Cet organisme devrait aussi jouer le rôle d'une plaque tournante d'informations pour les manifestations, les congrès, etc.
- Une étude préparatoire pour mettre au point une panoplie d'indicateurs de crises et de catastrophes.
- Travaux de développement d'un glossaire pour la protection civile
- Etude pour la mise au point d'un signal de sirène uniforme et des recommandations de comportement qui en découlent, à l'aide aussi de pictogrammes uniformes.
- Elaboration de pictogrammes et d'imprimés standardisés en vue de l'échange d'information dans l'Union européenne.
- Missions de recherche en vue de clarifier les différences de comportements régionaux et socioculturels des individus lors de l'alerte d'un danger.
- Institution d'un forum européen des médias en tant que lieu d'échange des représentants des médias et des membres de la protection civile et de leur perfectionnement.
- Organisation d'un atelier sur l'échange des meilleures pratiques dans les relations avec les médias.
- Création de la charge d'interprète culturel comme aide pour les intéressés et les auxiliaires.

Teil B
Part B
Section B

Workshop

**“From Emergency
to Crisis”**

Emergencies and Crisis in The Netherlands

B. Sourbag (NL)
1999

Introduction

In my speech I will present the way my government handles emergencies and crises in The Netherlands at present.

This presentation is structured as follows:

- First I will tell you something about the risks we face today.
- Then I will globally explain how we in the Netherlands handle these risks on the local, the provincial and the national level: the philosophy behind our policy and our instruments e.g. a structure for decision-making during crises, the use of scenarios. I will end with a brief outline of the current state of the discussion.

Actual risks we face

First some recent facts and figures.

At this moment we have some 530 municipalities. In most of them more 75% of the land is used for agriculture. The rest is mostly used for housing, industry, infrastructure nature and recreation. Economically is an important export and trade nation. The Netherlands is the 11th wealthiest nation in the West world. Most of the 15,5 million Dutch live below sea level. Our government likes to stress the importance of the Netherlands as a hub for international transport. The port of Rotterdam (cargo throughput of 310 million tons in 1997, largest of the world) and Amsterdam Airport (fourth largest in Europe) are seen as pillars of our economy. We have the highest population density in the Western world; 419 people per square kilometre. Germany e.g. has 230, France 108 and Belgium 333 people per square kilometre. Most people live in the major cities (Amsterdam, Rotterdam, The Hague and Utrecht), in the coastal area, along the Meuse in the province Limburg and in the province of Noord-Brabant.

The main risks we face are linked with these specific features of the Netherlands: the densely populated areas, industrial (including chemistry and biotechnology) and transport activities, the below sea level geographical position and a definite bias on economic affairs. Add to this the internationalization or globalisation of social and business life and you have a multicultural society with an easy access for unknown viruses (technological and biological) and governance challenges. Furthermore there is always the risk war (although we consider this a more or less theoretical risk at the moment) and of terrorism, including, hijacking, hostage taking and kidnapping. Another risk is a more sophisticated one. As long as no crisis occurs the (political) interest in crisis management is limited, based on the idea that one cannot plan anything for an unexpected situation and "it will not happen here". Ordinary daily problems demand so much attention that there is no time left to prepare for extraordinary situations. As a result, possible crises are evaded and ignored until one is unpleasantly surprised; then the discussion is very soon governed by the question who is, or who to blame.

2 Crises management: the philosophy and the instruments

“Some countries are corrupt, others have a proper Mafia, the Netherlands has gedogen”, a Dutch sociologist named Hans Adriaansens wrote in the Utrecht University newsletter. What this really comes down to is that the Dutch consciously allow what is officially prohibited (drugs, euthanasia) as the only viable solution that doesn’t unduly delay normal business. We Dutch have always been a practical people. The point being that these are generally prohibited elsewhere as well, but they happen there regardless, unsupervised.

We Dutch furthermore have the attitude to go for forged compromises until everyone is blur in the face. A characteristic of the Dutch way of problem solving is our consensus oriented approach towards problem solving. This has become a second nature since the end of the fifties and the beginning of the sixties, starting with the desire of all socio-economic and political partner in the Netherlands to jointly strive for more economic growth for the nation as a whole. A healthy economy was seen as a prerequisite for the realisation of social welfare and wellbeing and thus became the primary focus of public interest of all parties involved. A consensus oriented approach may be a disadvantage if you care about originality and individualism, but it’s extremely effective in terms of organization. Be practical and strive for consensus: the so-called Dutch *poldermodel*. They also form the leading principles for crisis management policy in the Netherlands.

Furthermore we hold the view that public safety is for ninety percent local affair. Hence we have a central role for our municipalities in developing and realizing a sound public safety police.

2.1 Introduction

Many different words and concepts are used when we talk about situation that present emergencies. In this field there is no uniform international use of language to describe the same situations. This may cause confusion. There fore it is always necessary to specify what we mean precisely e.g. when using the word crises.

In the Netherlands for example notions, such as incidents and disasters, are considered special forms of the concept “crisis”. This saves us a lot of explaining of subtle differences in discussions for which most people lack a genuine interest. A consequence of the interpretation of crises is e.g. that disaster relief becomes a special form of crises-management. Moreover, for the creation of tools for crises-management we can build on what is already available for disaster relief, which will make it a lot easier to explain and to implement them. However, we are aware of the fact that the word crisis can have a totally different meaning in other countries. For some the word crisis only relates to a minor incident whereas disaster cover the real big catastrophes. Others prefer the use of civil protection instead of crises as the overall concept.

2.2 The Dutch definition of crises

In the Netherlands we strongly feel that the similarities among incidents, major hazards, calamities, disasters and crises are more important than the differences. As I said earlier, we use the concept of crisis as an overall-concept to include all the different situations of emergency within the area of public safety. Our definition of crises is as follows: “*a crises is a serious disruption of basic structures or an impairment of fundamental values and standards of a social system*”.

Many environmental crises have no regard for national boundaries, while armed conflicts in other countries may cause terrorist activities, major migrant flows, or economic boycotts with immediate consequences for the Netherlands. Such a broad approach leads to the following definition of crisis management: *“crisis management is the entire set of measure taken and provisions made by the public authorities jointly with other organizations with a view to (acute) emergency situations in order to guarantee safety in a broad sense”*.

2.3 Vital interests

The keynote concept in our crisis management policy on the national level is that of the protection of four vital interests: and international law and order, public safety and economic security. These interests may be at stake in different emergency situations from accidents up to war. It is often impossible to view the various interests in isolation from each other. Particularly in the case of serious and complex threats, the interests will be closely interrelated. It is of importance to note that we do not take specific threats or risks as our keynote concept like we did before during the Cold War. As a consequence one has to do a weakness-strength analysis of the respective vital interests and one has to decide what level to maintain at what costs under crisis circumstances.

2.4 Characteristics of serious crises

So in the Netherlands a serious crises is different from a disaster in a number of ways, In the first place the media are always on top of it. Secondly is usually does not involve one single event only, but a series of events (sometimes spread over a period of time) that may result in an extraordinary serious (scale and impact) situation. In the third place, a crises may be triggered by a disaster: a natural disaster (for example a long drought) may lead to a food crises. A crises usually has a diffuse origin. This makes it difficult to have an overall view of the macro-factors directing the crises. Finally it is not always obvious what action is needed and by whom while decisions have to taken under time pressure. A feeling of uncertainty prevails. More than in the case of a disaster, a clash of interests may exist, which may lead to a conflict situation. Not everybody needs to be aware that there is a crisis situation. In the case of a crises the government must act quickly, flexibly and decisively to take control of the situation. This sets requirements for the organizations and policy makers involved.

2.5 (Inter)national crises

Crises of international scope transcend the normal divisions between policy sectors. Clear and efficient arrangements for co-ordination and decision making are therefore crucial.

A crisis may occur in the economic, social, environmental and technical areas or even more important to recognize: any combination of such. The Directorate General for Public Order and Safety of the ministry of Internal Affairs and Kingdom Relations plays a major role in stimulating other ministries to pursue uniform crises management policies so that cross sectoral crisis processes can be managed.

Coordination and communication are, of course, very important.

An international crises often involves “downscaling” i.e. that the initiative for taking measures is at national government level or by some international organization. Following these initiatives the ministries and lower tiers of government then take measures. The coordination to deal with international crises usually take place in European forums or within the North Atlantic Treaty Organization.

The main instruments we use are built upon the already existing tools for disaster relief together with a generic decision making structure on the national level and the use of scenarios. In the following I will not dwell on the tools for disaster relief as such. Instead of that I will go into further detail into our decision making system and the use of scenarios.

2.6 Decision making structure

Our policy assumption is that on the national level each ministry has individual responsibility for planing and funding crisis management measures. First and foremost this means funding preparatory measures and the assumption is without prejudice to the arrangement made for the funding of actual operations or the potential for specific arrangements. The various individual ministries are also responsible for crisis management measures taken by services, companies and institutions which fall under their aegis. The minister of Internal Affairs and Kingdom Relations acts a the coordinator. One aspect of this is that our ministry works through the National Coordination Centre to ensure coordination with other public authorities and within central government. This Centre is located in the building of our ministry and also functions as the national information point for the European Union in the case of a (potential) disaster.

Municipal and provincial authorities have their own responsibilities for responding to crises, including disasters and major accidents. As I mentioned earlier, because of the fact that public safety is for ninety percent considered a local affair, municipalities play a central role in our system.

Local disruptions are to be dealt with by authorities and organizations operation on the local level.

Depending on the type of disruption a larger number of organizations can be put into action at that local level. The fire services play a vital part. Where a crises has implications transcending the purely local, a higher level of government - provincial or central - will be involved. Some crises will require direct national control e.g. external threats.

In crises situations a clear and efficient decision making structure is necessary so that it can be applied irrespective of the type of crises. The structure must be capable of being put into operation rapidly whenever it is needed. We call this a generic approach towards decision making. In times of serious national crises it is necessary to set up a crises with the following distinct functions:

- decision making by a policy primarily concerned with crises management strategy
- advising and planing to anticipate and prepare for future developments;
- information gathering as a basis for advice and decisions;
- coordination to disseminate relevant information and ensure the coordinated implementation of measures;
- public information under the direct responsibility of the police team
- democratic answering for government action.

These functions can be organized in different ways depending on the nature and the scope of the particular crises: a minor crisis can be managed by a single ministry while a more major one will require action by several. Between minor and major there is a horizontal upgrading and therefore increasing need for coordination: from one ministry, several ministries up to the entire Council of Ministries chaired by the Prime Minister. The most extensive decision making structure will be necessary only in exceptional circumstance, but it will also rarely be the case that a crisis can be handled by one single ministry.

We have developed a National Handbook for Crisis Management that has been approved by our Council of Ministers. It contains procedures and the aforementioned generic decision making structure. Every ministry has the obligation to see to it that they are well prepared e.g. the establishment of a ministerial crises centre in case of a crises, clear procedures, sufficient training.

Another important instrument we use are scenarios.

2.7 Scenarios

We use scenarios in different ways: to encourage awareness for instance or to create a shared mental model or to create a basis for measures to be taken in the case of a risk analysis. That is why we consider scenarios as an important tool for crisis and disaster management.

Scenarios urge us to consider surprises and they are creative triggers to break through existing ways of thinking. Scenarios do not say what will happen but what can happen.

We use scenarios to encourage crisis awareness on an individual and organizational level; to enhance crisis management intelligence; to get a feeling for the crisis proneness of policies and their implementation; to stimulate cross sectoral, interactive, preparatory activities.

In our view strategic uncertainty can be made manageable e.g. by using scenarios. We have done some pilots in order to provide methods for the use of scenarios in the field of crisis management. Two of them involved several ministries and one was done exclusively within the ministry of Internal Affairs and Kingdom Relations.

Recently we also used scenarios as a tool for strategic development for our Directorate-General. In for different scenarios we imagined how the - for us - relevant world would look like in the year 2010. We did this with our middle and higher management (some thirty people). The scenarios had a qualitative - as opposed to quantitative - character and were meant to create a shared mental map or mindset among the managers.

Another way we use scenarios in developing a scenario as a plausible series of undesired events ultimately leading to a serious accident or eventually a disaster or crisis. When this scenario has been accepted by the relevant stakeholders this scenario then constitutes the basis for further action and measures to be taken.

3 The current state of the discussion

A few years ago we have come to the conclusion that framework for a good organization for disaster relief is at hand, still a lot has to be done to improve the quality of the personnel and the equipment involved. A structural financial stimulus is needed. In the last few years our ministry has put much effort in reinforcing the position of the fire services as the central organization for disaster relief. In the years to come we will continue this effort.

Apart from that we realized that also the medic part of disaster relief needs a review and a new impulse as a main target for the next future.

In the year to come we will also focus on the development of safety-indicators and quality standards as policy instruments. We want to have a tool to improve our insight in the effectiveness and efficiency of our money-spending: value for money.

Another topic in the Netherlands is that the responsibility for public safety is disseminated among many different actors: local, provincial and central authorities, relief organizations and industry. They all bring with them their own cultures, tools and priorities. It goes without saying that it's essential that we work together as much as possible. Otherwise we will end up in a chaotic, inefficient and ineffective situation creating (potential) victims instead of saving people. We call this an integral approach of public safety and we try to realize it by trying to sit around the table with our relevant partners as soon as possible in the pro-active phase and further on from there. One might call it an application of the *poldermodel*.

At present several large scale projects have our attention like underground construction (tunnels as well as buildings), the high speed train, the planned expansion of Amsterdam Airport, the expansion of the industrial zone in the neighbourhood of Rotterdam. We want to be involved from the start in the negotiating talks concerning new projects with a high risk-potential. Only then will it be possible to maximize the attention for safety aspects (financial, constructional, organizational, behavioral). However there is no such tradition in our country to do so, procedural tools are lacking and there is fear for further delaying the preparative and decision-making procedures that already many consider as being too time-consuming. Therefore our aim is to make safety-awareness part of normal procedure.

We are furthermore developing an instrument, the so-called safety effect report (in Dutch "*de veiligheidseffectrapportage*"), to help decision-makers deal with safety in a way more or less comparable with the obligatory environmental effect assessment.

Finally, in the years to come we will evaluate our system and acts to see whether they still provide a good basis for present and future needs regarding emergencies and crises.

State of Emergency and Crisis

K. Gosling (UK)
1999

This presentation aims to show the UK perspective, and to outline possible options for the future.

Introduction

Currently in the UK, Civil Protection, or emergency planning as it is more commonly known is experiencing a period of change. After a range of domestic disasters in the 1980's, the then government minister of state - known as the Home Secretary, commented that emergency planning was best done at the local level.

This was to be seen against a background of a system of local government that was in the main, stable. Outside of the major urban areas the structure was two tier - Country Councils and District Councils with local service provision for housing, social care education and others provided between the two. In major urban areas all service provision was provided by a unitary, or one level authority. The emergency planning function was located at the Country level or with the unitary authority. Police, Fire and Health provision also sat with the Country level.

Since then, the system has been changed with still some two-tier areas, but many more unitary style authorities - in some cases without direct responsibility for Emergency Services in their area, but still with an emergency planning responsibility. Since the change of National Government in 1997 more, far-reaching changes have been proposed.

Scotland, Wales and to some extent Northern Ireland are to get their own regional assemblies. In England, there is a move to regional offices of central government being given greater powers and responsibilities, an of course London is to get a Mayor and Assembly. Finally, measures are being tested to give local people more say and power as to what happens in the area in which they live, and the priorities that they feel are important. As there is no direct UK Civil Protection legislation, it is possible that the community priorities of social care, housing, crime and employment will leave no room for this critical function.

To my mind this points to a system open to confusion. Given that confusion increases in times of crisis this is a worrying state of affairs. It is possible that this will be made worse with the coming of the anticipated year 2000 (Y2K) problems. Y2K is generally held to be a chance to raise the profile of Civil Protection preparations and public servants will be held to account if arrangements and plans are not adequate. However, given the UK competitive media market, it is unlikely that stories will be told of how well everything was done!

What is Being Done?

Currently, the Central Government Department with Civil Protection responsibilities - the Home Office, have held a series of workshops and are currently bringing to a close the consultation process, on National Civil Protection Standards. This is seen as a positive move as it will provide a tool for measuring activity and the cost / benefits of such activity.

Across the Country there are many local and regional groups who already do very good work with training and rehearsing. The Home Office maintains an Emergency Planning College at which all those likely to be involved in Civil Protection can come together and examine the issues and share experience.

The Emergency Planning Society

As a diverse group of professionals, many of those involved in Civil Protection have come together to provide a focus for development and discussion under the banner of the Emergency Planning Society.

The Emergency Planning Society was formed in 1993 through the merger of the Emergency Planning Association and the Country Emergency Planning Officers Society.

The origins of these bodies lie in the wartime civil defence organisations set up to protect the civil population during the Second World War, particularly in the areas of air raid warning and air raid protection.

The post-war period brought the Cold War and fears of nuclear destruction. These wartime organisations therefore developed to prepare and protect the civil population from such an eventuality. The Association of Civil Defence Officers was formed in 1952.

The Major change in East-West relationships has introduced another element to emergency planning and management. The nature of the profession has changed and continuing to change. The reduction in the nuclear threat together with a greater focus on safety and a realisation of the potential for major disasters, particularly in transportation and hazardous industries, has tended to broaden the society from its public sector origins into the wider arena encompassing the private sector.

Aims and objectives

The primary aims of the Society are to promote effective emergency planning and management in the United Kingdom and to promote the professional interests of its members.

To achieve these aims the Society seeks to:

- provide a forum for the study of the most effective means of planning and managing local emergency preparation and response, and the dissemination of good practice,
- promote the views of its members in all issues relating to emergency planning and management,
- influence policy relating to emergency planning; encourage the professional development of its members.

Membership

Membership of the Society is open to any person who is involved in a professional, managerial or operational capacity, whether full or part-time, in emergency planning and management and who is willing and able to contribute to the objectives of the Society.

Members include representatives of the emergency services, local and central government, health services, industry, utilities, armed forces consultants and voluntary organisations involved in disaster relief.

Membership demonstrates that an individual is committed to the high professional standards expected of all Society Members. This carries with it both opportunity and responsibility.

Opportunity

- to progress in the chosen career
- to enjoy recognition professional membership will provide
- to put abilities and experience to full use in an increasingly competitive environment
- to profit from a recognised business qualification, valued throughout both public and private sectors.

Responsibility

- to maintain the high standard of professional conduct expected of an Emergency Planner, to uphold the reputation and interests of the Society in the member's continuing enthusiasm and involvement.

There are a number of specific ways a member can support the Society:

- encourage colleagues, employees, students and others to consider taking membership,
- support the local branch and attend its events,
- participate in the government of the society,
- place any special expertise at the disposal of the Society,
- attend and participate in seminars, conferences and other events organised by the Society, promote the Society's name in the workplace and community.

Professional Development

Members are required to exercise due care and diligence in performing their duties and to ensure the currency of their knowledge, skills and technical competencies in relation to their professional activities.

To assist members the Society has introduced a system of Continuing Professional Development (CPD). This is defined as:

The systematic maintenance, improvement and extension of professional necessary for the execution of professional, technical and managerial duties throughout the emergency planner's working life.

The Society has identified six categories that might contribute to CPD:

- Post qualification studies, which are assessed and lead to some form of qualification,
- Short courses, workshops, seminars, of similar events where an active contribution or exchange of views is required,
- Personal study which enhances knowledge, skills and understanding,
- Professional activities and meetings which broaden and develop individual knowledge,
- Development and implementing policies, procedures and courses.

The Society has recently employed a Business Manager and administrative support to further the aims and development of its members and the direction of the Society is controlled by a Council of volunteers. A business plan is produced against which progress is measured. The Society organises many seminars and an annual conference. In 1999 the conference will be held in Edinburgh. The Society also produces guidance for Civil Protection professionals including - „Responding to Disasters, the Human Aspects“, and „Business Continuity Demystified“.

The build-up to crisis?

In spite of what was said earlier, response to quite large scale emergencies are dealt with very well at the local level. It may be that the fragmentation has forced all involved to co-operate much more in the planning and preparation and to understand the roles and responsibilities of all involved.

I would point however, to the fact that such increased effort will reduce the capacity to cope with high volume events. The public sector relies, as does private business on a series of infrastructure links, from utility providers to agencies providing staff and contractors undertaking repairs or servicing. Such reliance was seen to be under strain in the aftermath of terrorist bombs in major UK cities in the recent past. Finally, the need for reliance on volunteers is as great as ever, but the number of such volunteers has fallen dramatically, particularly in large urban areas, in the recent past.

What could we face?

We have seen in recent years, a number of disasters with an international dimension. the news media can bring these to our lives with lightening speed. Some of these events have brought about, albeit reluctantly, some changes in practice and legislation. International Airport and Airline safety / security after Lockerbie is one example.

We have experienced some warning calls in recent times: International events such as those at Chernobyl and the rise in actual and threatened global terrorism. These show the vast speed with which an incident can escalate to a crisis and transcend international borders. A Flu pandemic such as that seen in 1919 is always a reality, an outbreak of „bird flu“ in Hong Kong was only prevented from becoming a pandemic because it did not easily bridge the species gap, thus giving the authorities time to plan. Indeed, this winter in the UK the National Health Service (NHS) became stretched as more admissions were met with fewer staff who were themselves away from work sick. One feels there are lessons for resourcing over the Y2K period to be gained.

Furthermore, the UK along with others has in recent times become a haven for those seeking refuge from conflict in their own lands. this could present, albeit temporally, a demand on local resources that may detract from dealing effectively with a crisis presented in that area.

A UK Example

During late 1996 in a small town in Scotland, an outbreak of E-Coli O 157 resulted in 21 deaths. the source of the outbreak was traced to a retail outlet supplying meat products to a variety of sources. Some of these were to commercial outlets such as hotels and care homes. The report to the fatal accident enquiry is attached to this paper as appendix A. A brief outline of events follows:

On 17 November 1996 a local retailer in the town of Wishaw, Scotland supplied a range of foodstuffs to a function at a Church hall. On the afternoon of 22 November, an outbreak of food poisoning caused by E-Coli O157 was identified. By that evening it was determined that 8 of the 9 infections were in people who had consumed food obtained at the Church hall.

J Barr & Son had supplied the food. Although outwardly a small, local butcher with adjacent bakery shop, the business was involved at the time of the outbreak in a substantial wholesale and retail trade involving the production and distribution of raw and cooked meats and bakery products from the Wishaw premises. It employed some 40 people, many on a part time basis. The possibility of others being affected was high as many of the town's population used the shop during the week. It is important to note that the 22 November was a Friday. Although in the UK, retail outlets are open for some of the weekend period. The enforcement agencies usually work Monday to Friday.

After a painstaking investigation through the company records (there was a reluctance to cooperate, truthfully by the company), it was discovered that far from being a local business, Barr's supplied over 85 outlets throughout the central belt of Scotland. This caused significant delays and the tasks of outbreak management and control were extremely difficult. By the time the outbreak was confirmed over on 20 January 1997, almost 500 people had been linked to the outbreak and 21 of the most vulnerable had died. It has not been positively identified what caused the outbreak, but it is likely that a contaminated animal carcass was delivered to Barr's who then, for mainly commercial reasons, tried to play down the extent of the business. (Had the extent of the business been known, it would have been subject to stricter and more costly health and hygiene regulations).

The points I would wish to highlight from this are:

- The speed of spread
- The unwillingness to co-operate
- What would have been the outcome if contaminated carcasses were delivered to 100 outlets?
- What if some products were to be supplied internationally?
- What measures could be used to warn the public and to stop cross contamination on such a large scale?

Common Problems - Common Solutions

If the future is to be one of complexity and speed, then the only effective counter action is accurate and timely information and intervention. To do this will require intelligence and a system that can react with greater speed. Given the normal pace of any governmental organisation, this will be a major challenge.

A strategy view must be taken with an aim to harmonise arrangements. This would include legislation covering both the preparation, execution and restoration phases. Proper enforcement to back this up with clear lines of accountability would also be essential.

Before this happens it would be prudent to try and identify if there was a level at which common ground existed and at which the warning signs could be raised. There is some precedent for such matters with the international aircraft manufactures and airlines. If a safety defect is noticed then notice is sent out to check or indeed, ground similar types. Similar protocols exist in the automobile industry.

Account should be taken of the impact of commercial and political influence on the speed of response; a programme of public education would overcome this. There are many examples of an informed population stopping a course of action chosen because it is the most profitable or most expedient. A current example in the UK is that of genetically modified foods.

To close, the message is simple: governments must own the problem and then resource the solution accordingly. Civil Protection is a national, even international, insurance policy. As individuals we are all aware of the consequences of not keeping up with the payments on, and evaluating the extent of, our own insurance policies.

APPENDIX A

1 Determination by Sheriff Principal of Sheriffdom of South Strathelyde Dumfries and Galloway into the E. coli 0157 fatal accident inquiry

This report, by the Sheriff Principal of South Strathelyde Dumfries and Galloway, presents the findings of the Fatal Accident Inquiry into the E. coli outbreak in central Scotland in 1996, which resulted in 21 deaths.

The Inquiry began on 20 April 1998 and concluded on 25 June. It was undertaken in accordance with section 6(1) of the Fatal Accident and Sudden Deaths Inquiry (Scotland)

Act 1976, which stipulates that a sheriff must make a determination in respect of each death, with consideration of the following:

- where and when the death and any accident resulting in the death took place
- the cause or causes of such death and any accident resulting in the death
- the reasonable precautions, if any, whereby the death and any accident resulting in the death might have been avoided
- the defects, if any, in any system of working which contributed to the death or any accidents resulting in the death
- any other facts which are relevant to the death.

The Inquiry investigated each of the 21 deaths resulting from the outbreak - eight people who had attended the same luncheon at a local church on Sunday 17 November 1996, five residents of the same nursing home and eight individual cases.

The church lunch

John Barr and Sons, Butchers and Bakers (Barrs) supplied, for the lunch, home-made broth as a starter; cooked stew and gravy, and pastry tops to be served with potatoes and vegetables as a main course; and ice-cream and fruit salad for dessert. The bags of stew, pastry tops and raw meat for the soup were delivered to the church on Saturday 16 November, and lay overnight, unrefrigerated, on the church premises. The stew and gravy were heated and served on the Sunday morning.

Guests first began displaying symptoms of illness on the Wednesday following the lunch - the first clue that there was an outbreak and that Barrs may be implicated occurred on the Friday. At this point, the Environmental Health Department of North Lanarkshire Council were informed.

Of the eight who attended the lunch that died, a rare strain of *E. coli* 0157 was detected in samples from six, and a pattern consistent with an *E. coli* 0157 infection, in terms of both timescale and symptoms, was evident for the remaining two. The report concludes that all eight ingested *E. coli* 0157 at the church lunch and that the most likely source was the steak and gravy provided by Barrs. A number of factors lead the Inquiry to this conclusion, notably:

- the cooked stew, pastry and boiling beef were, upon delivery, stored overnight in the church conference room, but were not in direct contact. the person responsible for preparing the meal assured the Inquiry that the ingredients of both bags of cooked stew were put into tins and that there was a surplus of gravy from both tins, which was put into

a plastic tub, which had previously contained ice cream. The cook was adamant that none of the surplus gravy was reheated or served at the lunch, hot or cold, but that it was divided at the end of the meal so that helpers could take it home with them. An unused portion of the gravy was found a week later and, when tested, was found to contain a strain of E. coli O157 identified as the outbreak strain - the same strain which a person who had purchased cooked cold roast beef from Barrs had been infected with

- There is no evidence that, at this time, the outbreak strain could be found in any food in the area or anywhere else in Scotland, where the Barrs' products would not have at least had the opportunity to contaminate
- the outbreak cannot be linked to the soup as one of the cases had eaten stew and pastry, but not soup
- although it is possible that pastry was the vehicle for infection, this is less likely as it was prepared in the bakery section of the butchers which, when tested a week later, was free from contamination. Furthermore, some cases had eaten the stew and gravy, but not the pastry.

The report discusses a number of possibilities considered by the Inquiry when trying to determine the point at which the stew and gravy were contaminated. The inquiry concluded that, as there was no evidence challenging the established belief that E. coli O157 is destroyed by heat, and there was evidence indicating that cooking procedures, the most likely source of contamination was flawed cooking procedures at Barrs. Another possibility cited is that the cooking and that the contents were contaminated at the point where they were transferred from the cooking bag to the tins. Based on the evidence available, the former is considered the most likely.

The report scrutinises each case, in accordance with the criteria set out in section 6(1) of the Fatal Accident and Sudden Deaths Inquiry (Scotland) Act 1976 (see above). The following are identified as reasonable precautions which could have been taken, and which may have prevented the incident occurring:

- a thermometer probe should have been used when the meat was being cooked in Barrs, so that the core temperature of each of the bags of stew could have been measured to ensure they reached an adequate temperature to destroy the bacteria
- once cooked, the meat should have been cooled quickly and kept refrigerated until the point of delivery at the church. It should have been ensured that the meat could not come into contact with any surface contaminated by raw meat
- upon delivery to the church, the meat and pastry should have been refrigerated at a temperature low enough to prevent the multiplication of any bacteria present.

No reasonable precautions were identified which, if taken after the incident, may have prevented the deaths.

The nursing home

It has been proved beyond reasonable argument that each of the five deaths at the nursing home were caused by infection by the outbreak strain of *E. coli* O157. At the point the first resident displayed symptoms, authorities were already aware of the outbreak and the likelihood of the link with meat from Barrs. This being the case, faecal samples were taken as soon as symptoms appeared, and these samples revealed the presence of the outbreak strain of *E. coli* O157.

As the strain was identical to that implicated in the church outbreak, and this had been linked with the Barrs' products, investigators set about determining a link between the nursing home and Barrs. It was established that each of the affected resident had consumed meat bought from a shop which Barrs had supplied, although there was no evidence that any Barrs products had actually been purchased.

The inquiry concluded that, given that the strains in both outbreaks were identical, the Barrs products had infected the meats sold to the home, through cross contamination - the products were laid out on the same trays and cut with the same slicing machines in the shop.

Each case is discussed individually and the following reasonable precautions which could have been taken are identified:

- when cooking the meat at Barrs, a probe should have been inserted in each joint, and care should have been taken to ensure a temperature sufficient to destroy the organism was achieved and maintained in the whole of the joints
- after cooking, the joints should have been removed from the boiler and put on a surface which was either adequately sanitised or used exclusively for cooked meats
- the joints should then have been cooled quickly and refrigerated.

No reasonable precautions were identified which, had they been taken, would have prevented the deaths once the incident occurred.

The report also discusses, in detail the events surrounding the deaths of each of the individual cases none of which had any connection with the church lunch or the nursing home. In each case, the individual was either confirmed to have, or suspected to have, consumed meat products emanating from, or supplied to another by, Barrs.

The report includes a section on 'reasonable precautions' which should have been taken by all parties involved, including the farmer, the abattoir and the wholesaler; Barrs itself, and the enforcement agency. Before addressing these specific areas, the report notes that no evidence was found to suggest any of the deaths could have been avoided had the medical care given before or after admission to hospital been different.

The section begins by examining the precautions that could have been taken prior to around 4.00 p.m. on Friday 22 November, as the Inquiry concluded that this is the point at which the enforcement authority had sufficient information revealing an outbreak in the area and the link with Barrs.

The reasonable precautions which might have been taken prior to 22. November are discussed under the following headings:

Reasonable precautions which, if taken, might have prevented contaminated meat arriving in Barrs' premises

With reference to the recommendations of the Pennington Report, the report discusses the need for precautions to be taken at every stage of the process - 'from the farm to the fork'. This means that the farmer, the abattoir and the wholesaler should have effective precautions in place to identified are:

- the farmer - animals should be clean when presented for slaughter, but the report recognises that no matter how much hosing down, etc the cattle is subjected to, it is still at risk of being exposed to at least particles of dung from the time it leaves the farm to the point of slaughter, and that such measures are, therefore, in no way foolproof. Specific recommendations for the farms are not provided within the report, as the precise source of the meat could not be identified
- the abattoir - Professor Pennington has surmised that the outbreak may have been caused by a heavily contaminated carcass being delivered to Barrs. The Pennington report includes advice on reactions which should be taken at abattoirs, and these are partially replicated in this report, e.g. when removing the hide, care should be taken to ensure the outside of the hide does not come into contact with the raw flesh of the animal; and when removing the gastro-intestinal tract which hosts the organisms, care should be taken to prevent the content contaminating the surface of the carcass. The report recognises that there is no guarantee, even if best practice is employed at abattoirs, that infected carcasses will be prevented from entering the food chain, However, observance of these precautions should mean the percentage of infected carcasses are far lower than the percentage of live animals carrying the organisms - an estimated 15-16 %.
- the wholesaler - after purchasing the cattle at market, the wholesaler employs an abattoir to kill the animal and remove its hide and entrails, prior to receiving the carcass. The report observes that, as there are no guarantees that the carcass will be free from infection, unless the wholesaler deals with each carcass individually and then sanitises the work bench, there is a strong potential for cross-contamination. The Inquiry did not have sufficient evidence to determine how economical or practical it would be to put in place procedures to prevent cross-contamination at this stage, but did note that, given the emphasis placed on separation at the abattoir, it seems illogical not to employ the same principles at this stage. However, it was also observed that there was no evidence that the cattle brought to Barrs was cross-contaminated as opposed to the initial carrier.

Reasonable precautions which if Barrs had taken might have prevented contaminated cooked meat products leaving their premises

Precautions which might have been employed are considered under the following headings:

- cooking methods - in addition to advising that the principles identified earlier in the report are adopted, the report cites a number of areas of concern, e.g. failure of the butcher to communicate a prescribed method of cooking to staff, either verbally, or in writing; use of a defective boiler, etc.

- work flows within the premises - the separation of raw meat and cooked meat processes is essential in preventing cross contamination. Had Barrs displayed a diagram showing this, the risks would have been made clear to all staff. Following the outbreak, a food hygiene specialist was contracted by Barrs to advise on the steps required to satisfy the Environmental Health Department that the premises were safe to re-open. the specialist obtained significant evidence of bad practice on the premises, including working procedures and lay-out - issues which the Inquiry concluded should have been clear to a butcher with even a basic knowledge of food hygiene
- cleaning of the premises - although the evidence indicated that Barrs' premises were clean and well maintained, none of the staff appeared to have been instructed on the reason for such vigilance to be maintained - that is, the need to keep surfaces free from harmful bacteria. At the time of the outbreak, accepted thinking among EHOs was that surfaces and equipment could be used for the preparation of both raw and cooked meat, provided they were washed thoroughly after being used for raw meat and a reasonable time had elapsed. This outbreak has pointed towards the importance of either using separate surfaces or ensuring an approved bactericide is used to clean surfaces. The surfaces in the premises were actually cleaned with a 'biodegradable' product, which to Barrs' senior staff was synonymous with 'bactericidal' - the report criticises the authorities for not spotting this misunderstanding sooner
- registration under the Meat Products (Hygiene) Regulations 1994 - it is now evident that Barrs required approval under these Regulations, e.g. the premises supplied to a local meat wholesaler. However, due to some confusion amongst enforcement officers and a lack of openness regarding the true nature of his operations, by the butcher, EHOs concluded that the premises were exempt from the Regulations - Barrs was informed of this in writing on 31 January 1996.

Had Barrs been required to comply with the Meat Products (Hygiene) Regulations, the report notes a number of additional safeguards which would have been required, including:

- the need for a written record of the critical points relative to the processes to be kept, and monitoring and control measures to have been in place for these critical points
- samples would have been taken for the purposes of checking, cleaning and disinfecting, and these would have been examined at an approved laboratory. This step may have uncovered the ineffectiveness of the cleaning procedures, including the failure to use a disinfectant to clean working surfaces
- Barrs would have been required to put a health mark on the invoices accompanying their goods, which would have been unique to the business and made recall procedures easier
- the 1994 Regulations also include specific requirements regarding the layout of premises, and the report surmises that, had these requirements applied, the dangers of crosscontamination would have become very apparent to Barrs and, it is likely the premises would have been subjected to more frequent inspection.

The report concludes that, if the butcher had been open about the nature of his trade, the premises would not have been found to be exempt from the Regulations, and the outbreak may well have been avoided.

Reasonable precautions which the enforcement agency could have taken.

This section discusses the quality and frequency of inspections by the environmental health department, with details of the visits made by inspectors to Barrs premises in April 1995, November 1995, January 1996, and events following 4.00pm on Friday 22 November 1996.

Key weaknesses identified were the failure to investigate fully the cooking procedures, including whether a temperature probe was used to ensure the correct temperature was reached and maintained when cooking meat, whether meat was cooled quickly after cooking and stored as soon as possible in a refrigerator, the procedures for transporting the cooked meat from the boiler to the delivery van or shop counter; and the failure to identify that the cleaning substance used to clean surfaces was not a bactericide.

The April 1995 inspection only lasted for between half an hour to an hour. The EHO made a general check on whether raw meat and cooked meat processes were separated, and to see whether a bactericidal agent was being used - evidently the cleaning agent produced was assumed to be a bactericidal agent by the EHO. The EHO conceded that he had not assessed the size of the operation or the cooking methods.

In November 1995, a six monthly inspection was carried out, one aim of which was to determine whether the premises qualified for approval under the Meat Products (Hygiene) Regulations 1994 (see above).

When questioned, the EHO stated that he had noted the premises' layout was not ideal - there was a potential for cross-contamination due to regular staff cross-over between the bakery and butchery sections - but that the risks could be reduced by effective food hygiene procedures, e.g. personal hygiene and sterilisation. Having said this, the EHO's notes do not record these concerns and, again, no investigation was made of cooking procedures.

The revised Code of Practice on Food Hygiene

Inspections (no 9), which were issued two months prior to the November inspection, state that: 'inspections should include a preliminary inspection of the food safety hazards associated with the business and look at whether the business has a satisfactory system (a 'hazard analysis system') for assessing food hazards and controlling risks'. It is also advised that, although once such a system is in place inspection arrangements should change, until this point, the authorised officer may need to carry out a fuller visual and physical examination of the premises. The report states that the EHOs involved attempted to justify their failings by suggesting the focus of inspections changed after this Code was issued. The report disagrees, stating that, until the business has an effective hazard analysis system in place, the role of the authorised officers in identifying risks is, if anything, heightened.

The final visit, prior to the outbreak, took place in January 1996. The inspectors claim they spent a significant amount of time discussing the need for Barrs to carry out a hazard analysis in relation to the premises, as it was clear no steps had been taken in this area. Given that hazard analysis arrangements were not in place, the inspectors should have concentrated on the identification of risks arising from the activities on the premises. However, although the inspectors claim some consideration was given to this, there is no mention of the hazards they claim to have identified in the letter sent to Barrs following the inspection. It appears that, other than indicating to the butcher that a risk assessment should be carried out within two months, the inspection was largely a formality.

The report discusses the contrast between these inspections and the one carried out following the outbreak, which is cited as the kind of pre-HACCP inspection which should be undertaken every time. In her appearance as an expert witness for the Crown, the consultant, employed by Barrs as a food safety consultant, conceded that there were deficiencies in the work practices at Barrs, but also claimed that a competent inspection would have identified these.

North Lanarkshire Council's approach was to blame Barrs for the outbreak, claiming unusual events, such as a breakdown in the cleaning schedule during the butcher's absence on holiday had caused problems. The report does not support the Council's account, as, although it is clear practices at Barrs were not sufficient, it is also deemed equally clear that the inspectors would have identified these problems had competent inspections been undertaken.

Events following 4.00pm on 22 November 1996

By this time a link had been established between the outbreak and Barrs. At a meeting at 6.00pm, it was decided a visit should be paid to Barrs at 7.00am the following morning, so that swabs could be taken, staff interviewed, and a food hygiene inspection undertaken. The report suggests that an immediate visit may have been more appropriate given the potential scale of the problem.

At the 7.00am visit, when asked about supplies he made to others, Barr responded that he supplied to 'a few caterers on a daily basis'. No details of who he had supplied to within the past few days were obtained and it is not clear whether he was even asked to produce such a list. Barr did not reveal at this time that he supplied to other butchers and distributors it is suggested this may have been to avoid inconsistency with claims made at the time of the Meat Products (Hygiene) Regulations 1994 application. The report cites the failure to trace Barrs' outlets as the point where the investigation broke down. Even though the extent of Barrs' operations had not been made clear to the officials, the highest priority should still have been given to preventing the consumption of potentially contaminated food, rather than gathering evidence of operating deficiencies on the premises.

The report also criticises the failure of the officials in ensuring the danger was communicated to the public. As the shop was allowed to remain open, the report suggests a notice should have been placed in the shop warning not to eat any meat recently purchased on the premises, and that the police could have been utilised in delivering this message and advising that medical attention should be sought if any symptoms arise following consumption of such food.

In conclusion, the report places blame for the escalation of the outbreak on the EHO's failure to identify the food safety hazards present in the practices undertaken at Barrs, the lack of co-operation of Barr and his staff once the premises were linked with the outbreak, and the lack of efficiency of the EHOs in responding to the outbreak, in regard to the stopping of sales and recalling of possibly contaminated food.

The appendices include a summary of the recommendations of the Pennington Group.

See also:

ed 3597 Pennington recommendations - problems off E.coli

ed 1697 E. coli outbreak 1996 in Scotland Pennington Report

Copies of the report are available from Sheriff Clerk's Office, Sheriff Court House,
4 Beckford Street, Hamilton, ML3 6AA
tel: 01698 282957

From planning to managing, reflections on some matters concerning disasters

B. Sandborgh (SWE)
1999

1. BACKGROUND/CONTEXT

The heading „from planning to managing“, and even the name of this workshop „from emergency to crisis“ underlines that we are talking about a process - a development from prevention and preparedness actions in beforehand to operations to be carried out after an accident, a disaster, a catastrophe or what ever You will call it. The scheme is the same You have to take measures in due time to be able to deal with the problems the incident may cause. The bigger and accident is, the more difficult it is to take proper decisions and preparedness actions. The bigger and more complicated the scenario is the more problematic the effects are to foresee.

The expression „crisis management“ is used in different ways in different countries and this creates special complications. From my point of view crises management is mainly based on *rescue services* in a wide meaning. But of course - there is a phase after that when it still is a crisis and a strain to deal with. For these long-term effects and for the systematically management needed the methods are not so very well developed.

However, I think we all can agree to a statement that most crisis are results of accidents or disasters of various kinds. We also can say that we talk about the situation „here in his area of this flow-chart“, and that it is necessary to make good progress in this part to get a good result here.

The crisis can appear in many shapes and can create problems of many types and within different sectors of society. Thus we are talking about technical problems as well as tasks for the science of behaviour or even the way of looking of life.

Let's look at this part of the scheme and a situation caused by a severe situation. We will see that the society rather soon gets a little bit „disturbed“ and stressed. People are worried and pessimism will grow. Then we will find that the process in certain parts is not mature. It is much to be done and the big challenge is to be creative and imaginative enough in beforehand. WE can notice that there is an increasing demand for education for this purpose for the time being but the offers are limited.

Well - Experience shows that even the most improbable events do happen. We also know that the consequences will become more severe and more unpredictable. We also know that the systems causing them are becoming more complex and difficult to handle. Experience also shows that we are not able to develop methods for taking care of the accident in comparison with the increased risks, especially when we talk about secondary results and domino effects. We notice that people involved are taken by surprise and that they often do not act with satisfying proficiency. the main reason is that they never could believe that just that incident could happen. And if it could, it wouldn't occur in their own neighbourhood or otherwise related to them. There was no reason to foresee scenario and if they had thought of it, they had found it so improbable that they never had chosen to spend resources for preventing it.

The reasoning indicates lack of knowledge, engagement and reactivity in the phase before the big accident and I want to focus on the fact that it is very difficult to act properly and consistent here to cover the huge field of effects that can appear afterwards.

However, I notice a lot for improvement for the time being. This workshop is a good exponent for this. When it comes to big disasters the international co-operation is getting better and more effective. The experiences are rapidly spread out over the world. Everybody gets the information via various media and soon enough we will realise that almost anything can happen almost everywhere.

As a science this topic is just in its infancy but I'm quite sure that the child will soon grow up.

2. FUNDAMENTAL PROBLEMS

If we want to be successful in our efforts to prepare ourselves for the situation after a disaster and even after the phase of rescue services in its widest meaning, we have to consider where the basic problems and the most important mechanisms are to be found.

According to my opinion you can find those within the field of risk acceptance and perception, administrative barriers and awareness among the public.

Thus I think it is a big need for education built upon increased efforts on development and research. Then we could reach an acceptable level among our professionals. They must be able to measure and risks obvious, put cost/benefit figures on them and so on. Today we can see unsuitable approaches, unfortunate sub-optimising and money put on miserable horses - and all due to bad knowledge and based on feelings far from competence.

We also have to raise the ability by the privy citizen to take care of himself in an emergency and do it in the best way. This is a matter of awareness both physically and mentally. Our society seems on the surface very safe and well prepared. This is in some respects an imagination. Many people are misled of this and slumbering, and for them it is not natural to think and act in terms of preparedness. This is easy to understand when we can trust in a system that for example provides us electric power with almost 100 % reliability.

Another problem is the sectored society with many responsible actors involved, watching their mandates carefully. This is a problem more in the planning process more than in the operative phase. However it must be said that all actors try to co-ordinate themselves and to do their very best when it comes to an emergency situation. On the other hand it must be underlined that many scenarios could have developed more successful if they had been more active and more skilful in the planning phase. If we talk about long-term effects and impacts on the „mental“ side I dare to say that the situation is still worse.

3. RISK-HANDLING ON SOCIETY LEVEL

This picture shows that the local community has several risk types to deal with. They could be financial, social or cultural. And they could be related to accidents where the rescue services have an important role to play. This indicates the big need for interaction and cooperation in the community's work.

The definition of risk contains both probabilities and consequences. Thus there are two different kinds of measures in a matter of principle to decrease the levels of risk. And we have to tackle both of them, if possible, at the same time.

There are different types of accident risks. Everyday risks with high frequency and rather limited consequences. Then you have large-scale accidents and national disasters with low probability but severe effects. The risk-handling concept should include all these types. The objective for a safe society must be to decrease the number of incidents and to mitigate the consequences of all types of accident risks.

Risk handling is dealt with on various levels in the society. It is important to see the work in one context and to work actively for safety in all levels. The individual, the group, the organisation and the society.

To our help we have developed this schedule or flow-chart. The risk handling must be looked at as an on-going process. You can compare it to a quality insurance system. Here we can see different activities as boxes and we put much effort on seeking weak but even strong links in the chain. For example we know that the analysis work here nowadays is rather well performed while the evaluation process is not. Here we have much to do and after some studies we have found out the following principles for risk assessment. Reduce risks as far as reasonable when it comes to economical and practical effects.

There must be an acceptable proportion for risks in relation to benefits. You must not concentrate huge risks to limited targets, but spread them out. You should never accept the really large consequences.

Risk handling on society level must be built on a co-operation among the entire resources available (Picture 7). There is no possibility that one single actor or one certain profession has appropriate knowledge and other properties for taking adequate measures. This picture underlines this need.

One of the most important tools for building a safe society is the „land use planning“ activities (Picture 8). Then it is necessary to implement the risk handling perspective in that process. The risk inventory is the starting point and that document has to be considered in the general plan. The risk analyses is an important contribution to the detailed development plan.

4. REFLECTIONS ON THE PRACTICABILITY OF THE SYSTEM, LINKED TO SOME BIG ACCIDENTS

So - we have seen the principles of thinking and our approach to these topics in our country and I hope you found it promising. If this model is carried out in a manner well adapted, we ought to be well prepared to take care of the strains that will occur after a big accident or catastrophe. Lets ask if it is like that. When we talk about the *rescue operation phase* we have legislation and tolls which make the operation possible and effective. Of course, when it comes to big scenarios and severe consequences, there are always new interactions necessary and needs and demands You never could figure out in beforehand. But anyhow - the operations have been carried out rather well even if they to some extent are solved by a kind of improvisation. There is a clear desire among people involved and they have obvious responsibilities, the personnel have good education and the leaders have far-going rights in their actions. So these factors gives merely successful results.

If we move to the phase after that, the situation is more unclear. The mandates aren't so well developed and the mechanisms in society are still more complicated. To heal the wounds after a big trauma (and they could be very different types) is a real challenge and the art of this is at least in our country in its beginning. I can in this context give my personal impressions on three serious incidents in Sweden.

Firstly - the Estonia accident in 1994. This was the statistical background. How to prepare people to a situation like this is a difficult question. We have seen a four year long drama performed - with investigations and decisions and contradictory decisions and investigations again. In short: a kind of inability to handle a trauma like this. Sometimes, I must admit it, it seems as the most important thing is to find scapegoats, guilty persons for canalising provoked feelings. Secondly - A derailment of a train loaded with different types of dangerous goods (Picture). The situation was frightening but no one got hurt and nothing was released. On the other hand it was a very complicated scenario and a difficult rescue operation. This event dominated media a whole month and the debate was not of the highest quality. The public and politicians expressed a very heavy concern. The phones were almost blocked for weeks in our office. This was the situation and it shows how sensitive the society is when it comes to this type of risks.

Thirdly and least - the big accident, the big fire last October in Gothenburg when 63 young people burned to death in a discotheque. This resulted in a big strain in, I would say, the whole Sweden and they have had a tough time in afterwards. We still do not know how the disco caught fire but we do know that there were far to much people in the room and we know that the people involved had not taken adequate prevention measures. This is an example on the thesis that reality has bigger fantasy than bureaucrats do. No one could imagine that an event like this even could create ethnic problems. The fact is that almost all the visitors in the disco were immigrants and I think we haven't yet seen all the complications that will follow on this fire.

What I want to say with this is that the crisis isn't over when the rescue operation and the restoration is finished. There is much more to take care of especially in the planning work. These questions are of increasing importance and we see it in the growing demand for education in subjects like catastrophe psychology and debriefing.

5. MANAGEMENT IN SECTORED STRUCTURES

My opinion is that we must improve the planning activities in some ways. Firstly we can realise that society in many countries are very sectorised and that responsible actors look strictly into their own „pipe“. Secondly I notice that there are pretty much prestige between sectors. It is a source for irritation when experts and generalists have to create common solutions and standpoints.

This is not surprising or anything new. The instinct to defend the district is as old as manhood itself. Because of that I think we must find better methods for co-operation. In risk handling the entire process must be looked at as a whole.

I will raise some questions on topics relevant for improvement in a sectorised society.

Does the government get a comprehensive description or a consistent basis for their decisions ?

Is there any cross-sectorial assessment made on statistics and tendencies for accidents in society ?

Are there possibilities to make cost/benefit studies or assessments on the economical consequences of risk and crisis ?

Is there any education for taking care of the effects in a long term meaning ?

Are the safety, health and environmental aspect dealt with in one context ?

Is the public properly informed ?

This list can be longer but I stop here, and raise the question on how to carry out a programme for improvement.

A least in our country everything is not solved in the utmost way, but I'm glad to tell you that I've seen good signs lately.

The accident perspective is not linked to any certain sector. Our agency, the SRSA, has an important role concerning the planning process, prevention and preparedness. On the other hand there are other bodies primarily responsible for safety programmes related to certain activities or certain products. But there is no appointed safety authority for the supervisory role or for the overall view. As the accident perspective is relevant all over, the SRSA has got the mission to outline a „consisted action programme for a safe society“. To this end we then perform a project called „SRSA - an agency for a safe society and better protection against accidents“. This approach can cause some irritation and we have to take care even if we have to be rather

offensive. Anyhow - we know that there is a huge potential to make things better and to establish a better confidence among the public.

6. CONCLUSIONS

In this presentation I have tried to put the focus on some interesting areas for change and development. The main message is that you have to look at the whole process in one context in which you have to include the entire chain, from planning to long term consequences. Specially when we talk about the long term aspects and injuries. They are often not dealt with in the planning phase and good methods for that are not available.

Furthermore we have to handle the problems caused by sectorization and lack of coordination and co-operation. The task of prevention must be considered as a responsibility for a number of actors and stakeholders - not just for one appointed responsible authority. The formal frames, legislation and so on are, when it comes to rescue services and restoring activities, rather good and satisfying. When we have passed those phases the situation is still complex but less dealt with, and I think we have to do that in a near future.

The last thing I want to emphasise is the need for some kind of supervisory body in society. Nowadays the structures are so complex, and there are so many experts in so many and various areas that it creates real problems for governments and parliaments to get an overview as well as a correct picture of needs and tendencies.

Experiences with crisis-type developments as perceived by a South European state

N. Ravara (P)
1999

1. INTRODUCTION

The world situation had suffered rapid changes in the last two or three decades, not only because there are so many natural and technological disasters which threaten to deny many of the development gains made over the last decades.

Although, during the last decade, the number of floods and major forest fires had decreased slightly with improvements in flood control and forestry management, other natural disasters, such as earthquakes, flash flood, major storms, show no sign of declining.

Through a number of demography and technological factors within the European countries, such as increasing urbanisation and increasing proximity of industries to those areas, the number of people at risk to natural and technological disasters will increase drastically in the near future.

In modern and developed societies the aim is to offer all citizens with high levels of well being and prosperity, but on the other hand they are submitted to new type of risks directly related with high technology which means the use of a great quantity of energy resources due to industrial development and urbanisation growth.

In view of this and with the experience obtained it is time for the International Community to ask itself if the existing approaches to disaster management many of which were developed in the sixties and seventies, are still adequate for the tasks that they are now facing.

It has to be recognised that national and international organisations are over charged by the magnitude and number of calamities, while non governmental organisations are equally unable to satisfy all demands for assistance.

Technological disasters are also emerging as a significant danger.

The rapid industrialisation of many developing countries has not been accompanied by implementation of the basic safety rules that could protect the population.

2. LEGISLATION

- Organisation of National Council of Civil Emergency Planning (CNPCE) Law No. 153/91;
- Basic Law of Civil Protection Law No. 113/91;
- Law n.º 510/80 - The first Organic Law of Civil Protection
- Law No. 29/82 - Law of the National Defence and of the Armed Forces.

3. NATURE AND SUBORDINATION

The National Council of Civil Emergency Planning (CNPCE) is a entity of coordination and support, with collegial character, subordinated to Prime Minister (Art. 2).

4. NATIONAL SYSTEM OF CIVIL EMERGENCY PLANNING

Comprise:

The National Council of Civil Emergency Planning
The Emergency Commissions of Planning

5. OBJECTIVES OF CNPCE

- Definition and permanent update of the policies regarding the civil emergency planning, namely in areas such as the transports, energy, agriculture, fishery and food, industry and communications, in order that, in **crisis** situation or in wartime, could ensure the functioning of government action, the survival and endurance capacity of the Nation, the support to Armed Forces, the protection of populations and safe guard of national heritage.
- In the NATO sphere, co-operate for the definition of policies and doctrines adopted under the umbrella of SCEPC (Senior Civil Emergency Planning) and assure the co-ordination of activities of the Portuguese delegates in the bodies dependent of the SCEPC.

6. COMPOSITION

The Chairman of the National Council of Civil Emergency Planning (CNPCE) is the Ministry of National Defence and is composed by a Vice-Chairman and by the following members:

- President of the Emergency Planning Commission
- **Delegate of National Service for Civil Protection**
- Delegate of Joint Chief of Staff
- Delegate of Minister of Autonomous Region of Açores
- Delegate of Minister of Autonomous Region of Madeira
- Delegate of Regional Government of Açores
- Delegate of Regional Government of Madeira

7. THE COMMISSIONS OF EMERGENCY PLANNING

- The sectorial commissions are directly subordinated to the Ministry in charge, and functionally, from the Chairman of the (CNPCE) with character of sectorial bodies of civil emergency planning and with delegates in the correspondent committees under the (SCEPC) Art. 18.º.
- **Under the tutorship of the Ministry of Industry and Energy**
- Commission of Energy Emergency Planning
 - Commission of Industrial Emergency Planning
- **Under the tutorship of the Ministry of Public Works Transport and Communications**
- Commission of Communication Emergency Planning
- Commission of Ground Transport Emergency Planning
- Commission of Aerial Transport Emergency Planning

- Commission of Maritime Transport Emergency Planning
- . **Under the tutor ship of the Ministry of Health**
 - the Commission of Health Emergency Planning
- **Under the tutor ship of the Ministry of Agriculture, Food and Fishery**
 - the Commission of Agriculture Planning Emergency Fishery and Nourishment
- **Under the tutor ship of Ministry of Interior,**
 - the **National Service for Civil Protection.**
- assure the planning of civil protection actions determined by Art. 3.º of Law No. 510/80, for times of crisis and war, and the participation in the works of SCEPC, functionally subordinated, for this purpose, to Chairman of CNPCE.

8. TASKS

From the tasks we could highlight the planning and co-ordination with the goal to establish „**plans and procedures**“ that in crisis situation or wartime could guarantee the functioning of the fundamental activities, namely dealing with the food production and supply, industry, energy, transports, communications and health.

It is very important for the security of the country, that in due time, have been already established „**plans and procedures**“ to be able to respond to serious abnormal situations, international crisis or wartime. In accordance with the Law of National Defence and Armed Forces the Prime Minister is politically responsible for the lead of the National Defence Policy, namely between other tasks the following (Art. 43.º)

- Co-ordinate and guide the action of all the Ministers in the matters related with National Defence
- Direct the interministerial activity in order to execute the National Defence Policy, and this jurisdiction, could be in total or partially, delegate on the Minister of National Defence
- The Minister of National Defence is politically responsible for the elaboration and for carrying out the military component of the National Defence (Art. 44.º)
- All other Ministers are responsible for carrying out the non military component of the National Defence Policy in the matters of their responsibility (Art. 45.º)

We are in this moment in a process of improving the management of crisis situation and with this goal we may have in the near future a National System of Crisis Management with the following tasks:

- The capacity to provide the Government with timely information to take the decision and with means of management and control of actions
- To be able to manage a crisis situation of any nature dimension or intensity, of national or international level, that could affect the Portuguese society, from any point of national territory, responding to demands of national or international source through means of direction, and control with all the national resources available
- To be able to appreciate, progressively, in accordance with the nature and the evolution of the situation

But then, what is the meaning of CRISIS.

- A crack (rupture) of the sectorial stability or total stability of a country in what concerns all types of economy, industrial or social activities
- A emergency that was incorrectly settled out or as NATO Civil Emergency Planning Directorate stated:
 - „When we collectively agree that there is a crisis, then there is one“

In what concerns the National Defence in Portugal the **crisis situation** is one that due to a serious change on the internal situation or international, induce a person that has the responsibility to decide, three simultaneous types of perceptions; **the existence of a threaten to the national vital interest; the need of adequate quick reaction and that there are a high probability to be involved in military hostilities.**

The Civil Emergency Planning, is the State entity with the planning task, in order to develop since the peace time, the capacity, due to a serious change on the internal situation or international if the decision makers so determined, take adequate action in short time, in circumstances that the national vital interest, are in danger, and that there are a high probability to be involved in military hostilities (crisis situation) of if the **crisis situation** could not be favourably resolved face the war.

Only in exceptional cases are crisis limited to a single geographical or administrative area, or to a single operative level. Ideally, in order to better facilitate decision - making and overall co-ordination, there should be a clear understanding of the sphere of responsibility for every actor and level of crisis management and for every conceivable type of crisis.

One way to achieve this would be to develop procedures which serve as models or projects by which different types of crisis can be managed, regardless of their immediate cause or origin. The ability to identify common characteristics of different types of crisis would be of unquestionable value for persons in all sectors and at all levels of society.

9. GENERAL ASSIGNMENT

Civil Protection is the activity developed by the State with co-operation of citizens in order to prevent natural or man made hazards related to major accidents disaster or calamity, mitigate his effects and relieve people any time emergency situations occur.

10. EMERGENCY SITUATION

A situation that have a time limit that results of imminence or occurrence of a disaster, major disaster or calamity that need for his surplus the urgent engagement of the appropriate resources not immediately available.

11. DISASTER

Disaster is a unexpected and unpremeditated event, caused by human action or from the environment, which results are relatively restricted in time and space susceptible to reach the people, the environment and the properties.

Disaster can happen everyday, everywhere at any time. Natural disasters unfortunately does not respect national boundaries as you certainly remember with what happen with the floods in 1997 with the Oder river.

12. VULNERABILITY

Is the result between the interaction of the ecosystem and the social economic occupation.

All disasters have one thing in common: They are due vulnerabilities created by human actions. Such phenomena, as not paying enough attention to the use of hazardous technologies, insufficiently protected populations living in danger locations, cause harmful human activities.

13. CONCLUSIONS

The National Service for Civil Protection is the entity that works on the field in situations occurred on national territory and directly dealing with the life of each one of the citizens and the safeguard of his properties.

The activity of the National council of Civil Emergency Planning is basically a activity of „planning“ that must be done in advance and strategically cover all the activities of the state in what has impact with the socio economic actions.

Finally I cope from our Prime Minister from his recent article for a magazine the following: „On his famous visit to West Germany 35 years ago President John Kennedy warned that those who look to the past or the present are certain to miss the future.

We look to the past and to the present only examples of what we are striving for, models for what we wish in our lives, and for lessons on what to avoid. It is with them in mind that we set our goal for the future, are that we are following, together the right path“

Thank you very much for your attention.

Weltweite Krisenszenarien - Krisenfrüherkennung, Ziele, Instrumente, Verfahren

H. Beinecke (D)
1999

1. Bedeutung und Grundsätze einer systematischen Krisenfrüherkennung im MilNW

Ein uraltes Phänomen im Krisenmanagement unserer Regierungen überrascht alle Verantwortlichen im Entscheidungsprozeß immer wieder aufs neue: Krisen brechen scheinbar plötzlich über sie herein, ohne daß es dazu Hinweise gibt, die eindeutig genug sind, um rechtzeitig angemessene Maßnahmen ergreifen zu können. Im Vorfeld gibt es jene Experten, die vor der Krise warnen, andere wiederum sehen das alles nicht so dramatisch und beruhigen die Gemüter. Damit steht der Entscheidungsträger nach wie vor mitten in einem Umfeld der Unsicherheit, obwohl es landesweit angesehene Organisationen mit zahlreichen Experten gibt, denen man ein treffsicheres Urteil zutrauen könnte.

Das Problem ist schon lange erkannt.

In nahezu allen Grundsatzpapieren zur Streitkräfteentwicklung und speziell zum Nachrichtenwesen findet sich die Forderung nach Krisenvorbeugung¹. Man geht, nicht erst seit der Jugoslawienkrise, davon aus, daß mit rechtzeitig eingeleiteten Maßnahmen die Konflikteskalation vermieden, mindestens aber abgemildert werden kann („Krisenmanagement“). Dieses Denken entspricht den außenpolitischen Grundsätzen aller etablierten politischen Parteien. Der politische Entscheidungsprozeß jedoch ist zeitkritisch. Je früher daher die Notwendigkeit des Eingreifens erkannt wird, desto angemessener fallen die Entscheidungen aus. Zeitgewinn ist jedoch bei widersprüchlichen Expertenmeinungen im Vorfeld einer Krise nicht zu erhalten. Der einzige Ausweg aus dem Dilemma der Widersprüchlichkeit ist die Systematisierung der Beobachtung und Bewertung. Nur der Experte, der seine Warnung aufgrund einer von allen nachvollziehbaren Systematik abgibt, wird beim Entscheidungsträger frühzeitig Gehör finden.

Somit ist der Weg und das Ziel der Krisenfrüherkennung untrennbar miteinander verbunden. Das bedeutet:

systematische Analyse des Krisenpotentials = Zeit und Qualitätsgewinn

Die systematische Analyse des Krisenpotentials beginnt bei der ganzheitlichen Betrachtung eines Landes oder einer Region.

Je weiter man in der Entstehungsgeschichte einer Krise zurückgeht, desto mehr relativiert sich der „militärische Faktor“ im Ursachenzusammenhang. Wenn militärische Krisenindikatoren offenkundig werden, ohne daß bereits zu einem früheren Zeitpunkt auf nichtmilitärische Krisenindikatoren hingewiesen wurde, hat die Krisenfrüherkennung (KFE) ihren Auftrag verfehlt.

Krisen kündigen sich weit vor kriegerischen Auseinandersetzungen an.

KFE stützt sich daher auf die Beobachtung aller Lebensbereiche und Entwicklungen wie Gesellschaft, Wirtschaft, Politik, Wissenschaft und Technologie, Infrastruktur, Ressourcen, auch, aber nicht primär, auf Streitkräfte.

Indications & Warning (I & W) und Defense Global Warning System (DGWS) sind erste Ansätze einer **Systematisierung der KFE**. Krisenindikatoren werden hier eindeutig definiert, sie legen den jeweiligen Normalzustand fest und geben an, unter welchen Bedingungen dieser Indikator „aktiv“ wird. Ein Krisenindikator kann zum Beispiel lauten Informationskampagne über den Schutz gegen „ABC-Waffen“.

Für die Definition eines Indikators ist es unerheblich, ob das in ihm beschriebene Ereignis bereits zum Zeitpunkt der Definition feststellbar ist oder ob mit der Feststellung in der Zukunft gerechnet werden muß. Erst viele Indikatoren zusammen betrachtet, geben ein annähernd zuverlässiges Bild einer krisenhaften Entwicklung.

Wenn es auf diese Weise gelingt, ein brauchbares Bild einer sich entwickelnden Krise zu bekommen, ist es leichter, die richtigen Ansatzpunkte für vorbeugende Maßnahmen zu finden. Dies wird in der Regel im Bereich der Außenpolitik, aber auch über wirtschaftliche, gesellschaftliche, wissenschaftliche und andere Kontakte geschehen.

Welche Organisationselemente stehen uns für KFE zur Verfügung?

2. Organisationsstruktur und Zusammenarbeit in der Krisenfrüherkennung

2.1 Organisationselemente

Krisenfrüherkennung als erster Schritt eines Krisenmanagements der Bw wird in enger Zusammenarbeit zwischen BMVg und ANBw praktiziert. Die **primär** betroffenen Organisationselemente auf Seiten des ANBw sind:

- das Dez II 3 „Krisenfrüherkennung“ und die Lagedezernate sowie die
- Nachrichtenzentrale der Bundeswehr

Diese verarbeiten die in das ANBw eingehenden Informationen (Inputs). Sie kommen von NATO Partnern, MilAtt, BND, Unterstützungsstellen und Medien.

Auf Seiten des BMVg sind in erster Linie beteiligt

- FüS II 3 und extra für diesen Zweck (zeitlich und thematisch begrenzt) eingerichtet, das
- KMT (Zusammenfassung aus den Bereichen FüS II / III / AnBw / FüZBw / PIStab.

Das AnBw fungiert als große Drehscheibe für Informationen. Die einzelnen Organisationselemente sind die Filter in der bestehenden Informationsflut. Relevante Informationen der Krisenfrüherkennung werden durch die Nachrichtenzentrale der Bundeswehr und die Lagedezernate ausgewertet und an das Dezernat II 3 weitergegeben. Hier wird die Übersicht über die Lage zur Krisenfrüherkennung (oder „Indikationslage“, nicht zu verwechseln mit „Krisenlage“) weltweit geführt und den Bedarfsträgern wie Dienststellen des MilNachrWBw, Partnernationen und dem BMVg in verdichteter Form zur Verfügung gestellt.

Ein Schlüsselement im Krisenmanagement ist das Krisenmonitoringteam (KMT) des BMVg. Dieses Element bildet die Schnittstelle zwischen Militärischem Nachrichtenwesen und den übrigen Stabsabteilungen des Ministeriums, insbesondere zu „Militärpolitik“, „Einsatzplanung“ und „Einsatzführung“. Demnach nehmen an dieser Besprechungsrunde, die vom Stabsabteilungsleiter des MilNachrWBw (Fü S II) geleitet wird, die Leiter/Stellvertreter des Führungszentrums der Bw, des Planungsstabes, Fü S III sowie der Amtschef ANBw teil. Das Thema trifft sich einmal wöchentlich. Mit der Entscheidung zum weiteren Vorgehen endet diese erste Phase der Krisenfrüherkennung im Krisenmanagementprozeß des BMVg. Die zweite Phase beinhaltet dann die

- weitere Lagebearbeitung durch MilNachrWBw
- Information der politischen Leitung und militärischen Führung und/oder
- weitere Stabsarbeit im BMVg zur Vorbereitung von weitergehenden Entscheidungen.

Das KMT hat damit entscheidenden Einfluß auf die Priorisierung im Krisenmanagementprozeß des BMVg. Hierauf ist in Zeiten mit begrenzten Ressourcen und einer steigenden Informationsflut besonders das MilNachrWBw angewiesen. Krisenfrüherkennung bedeutet also für MilNachrWBw auf der einen und KMT auf der anderen Seite, daß das MilNachrWBw maßgeschneiderte Informationen zur Krisenfrüherkennung liefert und das KMT dafür die Blickrichtung des MilNachrWBw lenkt, so daß Schwerpunkte in der Lagebearbeitung gesetzt werden können.

Die folgenden Phasen des Krisenmanagements (III - V) enthalten die typischen Checklisten zur näheren Bestimmung

- der Krisenproblematik,

- de Betroffenheit der Bundeswehr sowie
- der für die Bw zur Verfügung stehenden Handlungsoptionen.

Sie gleichen den allgemein gebräuchlichen Modellen der Entscheidungsfindung in großen Organisationen („Führungsmodelle“) und werden daher hier nicht näher betrachtet.

2.2. Instrumentarium

Das für die KFE zur Verfügung stehende Instrumentarium umfaßt

Instrumentarium der Krisenfrüherkennung

- DGWS
- I & W
- Indikationslage ANBw
- Krisenatlas ANBw
- Krisenhinweise BND
- Automatisierte Indikationsverarbeitung (SIGMA)

Auf der Basis einer theoretisch unendlichen Menge von Indikatoren bauen die bisher entwickelten Systeme Indications & Warning (I & W) und Defense Global Warning System (DGWS) auf. Sie repräsentieren den derzeitigen Stand der Systematisierung der KFE im militärischen Bereich.

ANBw beteiligt sich am

DGWS und I & W-System

mit der Verteilung von Meldungen und Einstufungen zu krisenhaften Ereignissen und Entwicklungen. Neben der wöchentlichen Übersicht über die national vergebenen Einstufungen werden ereignisbezogene Meldungen, insbesondere bei Höherstufung, in die Systeme eingegeben. Die DGWS-Quartalsmeldung enthält die Indikationslage zu ausgewählten Ländern und wird regelmäßig an die Partnernationen verteilt.

Die Meldungen und Einstufungen unserer Partnernationen finden andererseits Berücksichtigung in unserer eigenen Indikationslagefeststellung und werden dem KMT zur Kenntnis gebracht.

Beide Systeme sehen zwei verschiedene Bewertungskategorien vor:

1. Die Watchconditions

Watchconditions

Watchconditions sind Skalenwerte zwischen I und V, von denen I mit „extreme concern“ und V mit „no warning problem“ definiert ist. Hierbei steht die nationale bzw.

die subjektive Einschätzung oder die Besorgnis des Beurteilenden im Vordergrund. Die Subjektivität dieser Einstufung kommt dadurch zum Ausdruck, daß es in der Beurteilung verschiedener Länder durch die Partnernationen große Unterschiede gibt.

Um jedoch stabilitätsbezogene Aussagen unabhängig von dem Interesse des Bewerter eindeutig darstellen zu können, wurden „Assessments“ definiert als 2. Bewertungskategorie.

Sie decken folgende Skala ab:

Assessments

„Black“ über „Green“, „Yellow“, „Orange“ und „Red“.

„Green“ repräsentiert dabei den Normalzustand, „red“ steht sinngemäß für die ausgebrochene Krise mit erheblichen Auswirkungen auf die überregionale Stabilität.

Das Defense Global Warning System ist in Anlehnung an das NATO-I&W-System aufgebaut, unterscheidet sich davon im wesentlichen durch einen exklusiven Teilnehmerkreis (AUS, FRA, DAN, GB, ITA, KAN, USA, DEU) und einer eher formlose Austauschpraxis.

Gemeldet wird im wöchentlichen und quartalsweisen Rhythmus. Enthalten sind Lagefeststellungen und Bewertungen in Textform sowie in skaliert Form (Watchconditions I -V).

Die theoretische Grundlage des NATO I&W-Systems ist das NATO-Dokument MC 166 „NATO Indication and Warning System“. Ziel und Verfahren entsprechen in etwa denen des DGWS-Systems. I&W/NATO unterscheidet sich von DGWS im wesentlichen durch

- einen hohen Differenzierungsgrad (mehr als 1500 Indikatoren)
- fest definierte Länder, denen spezifische Indikatoren zugeordnet sind
- etwas deutlichere Unterscheidung zwischen Watchconditions und Assessments und
- die beteiligten Nationen.

Die **Indikationslage ANBw** wird wöchentlich, jeweils freitags, von ANBw herausgegeben. Sie enthält in kurzer Form

Indikationslage des ANBw/Inhalte

- die aktuellen Watchconditions des DGWS-Systems
- die Watchconditions und Assessments des I&W-Systems
- BND-Krisenhinweise
- Textteile zum beobachteten Krisenpotential
- Hintergrundinformation

Die wöchentliche Indikationslage ist als Erstinformation zu neuen krisenhaften Entwicklungen und Ereignissen gedacht und nicht als abschließende Lagebewertung zu verstehen. Sie soll Anregungen für die weitere Lagefeststellung und Bewertung geben und dem Krisenmonitoringteam (KMT) eine erste Orientierungshilfe für die Einschätzung der weltweiten Krisenlage vermitteln.

Der Krisenatlas ANBw

Die bisher vorgestellten Instrumentarien beziehen sich auf **aktuelle** Ereignisse und Entwicklungen, die krisenrelevant sind. Für diejenigen, die nicht tagtäglich mit der Lage in potentiellen Krisenländern umgehen, sind gelegentlich aufgenommene Meldungen bezogen auf deren Krisengehalt schlecht zu beurteilen.

Es fehlt eine Richtschnur, welches Krisenpotential überhaupt existiert und wo die Stufe der Normalität anzusetzen ist. Politisch motivierte Attentate sind in Algerien völlig anders zu bewerten, als beispielsweise in Mazedonien oder Serbien. Diese Lücke soll der „Krisenatlas“ schließen.

Der Krisenatlas wird kontinuierlich aktualisiert und ergänzt. Er enthält

- das identifizierte Krisenpotential eines Landes
- Hinweise auf die zukünftige Entwicklung des Krisenpotentials
- die sicherheitspolitische Position des Landes, insbes. das Verhältnis zu Deutschland
- Historische Daten zum Krisenpotential

Krisenhinweise des BND gehen ereignisorientiert ein und werden in die Indikationslage ANBw aufgenommen.

Automatisierte Meldungsverarbeitung mit SIGMA

Systematisch betriebene Krisenfrüherkennung basiert, wie bereits angesprochen, auf klar definierten Krisenindikatoren, einem definierten Normalzustand und auf

skalierfähigen Bewertungen. In der Praxis bedeutet dies jedoch, daß der Bearbeiter eines Landes bei Eingang einer jeden Meldung alle, zu diesem Land definierte Krisenindikatoren durchprüfen müßte, um eine Aussage zur Indikationslage treffen zu können.

Bei mehreren -zig Meldungen pro Tag zu einem Land und beispielsweise 139 möglichen Krisenindikatoren im Falle RUS bleibt dies ein hoffnungsloses Unterfangen, wenn technische Hilfe fehlt.

Ein Studienprogramm SIGMA

SIGMA: Speziell Indikative Graphisch geführte Meldungsverarbeitung ANBw

soll dieses Mengenproblem lösen helfen.

Darin werden Meldungen anhand von Schlüsselbegriffen auf ihren indikativen Gehalt untersucht und das Ergebnis wird angezeigt. Der Bearbeiter entscheidet über die Bewertung einer solchen Anzeige. So können viele Meldungen schnell auf ihre Bedeutung für KFE analysiert und das summierte Ergebnis kann so dargestellt werden, was besser als bisher auf eine sich möglicherweise entwickelnde Krise hinweist.

SIGMA befindet sich noch im Erprobungsstadium. Noch nicht eindeutig abzuschätzen ist zum jetzigen Zeitpunkt der Pflegeaufwand für die Indikatordatenbanken sowie die Verträglichkeit zur DV-Umgebung des ANBw. Eines steht jetzt bereits fest: SIGMA macht die Krisenfrüherkennung nicht einfacher, es macht sie jedoch systematischer, damit zuverlässiger und schneller.

Zusammenfassung und Bewertung

Die Initialphase „Krisenfrüherkennung“ im Krisenmanagement wurde in der Vergangenheit intuitiv, oft auf der Basis einzelner Expertenmeinungen betrieben. Ihre Charaktereigenschaften ließen sich am treffendsten mit „zufällig“, „bruchstückhaft“ und „subjektiv“ beschreiben. Mit den von Politik und militärischer Führung neu gesetzten Akzenten entwickelte sich die Krisenfrüherkennung seit Anfang der 90er Jahre aus in Richtung einer systematisierten Disziplin des MilNachrW. Der Weg zu einem funktionierenden nationalen oder gar internationalen System ist jedoch steinig und weit. Zunächst muß die Erkenntnis Raum greifen, daß Krisenfrüherkennung, sofern sie einen Anspruch auf größtmögliche Prognosesicherheit stellt, personelle Ressourcen bindet. Jedoch mit etwas Mut zur Aufgabe überkommener Informationsformen lassen sich diese Ressourcen an deren Stellen auch freisetzen. Als nächstes muß sich Krisenfrüherkennung als „standardisiertes System“ etablieren. Die Masse an verfügbarer krisenrelevanter Information zwingt zur Vereinheitlichung von Sprache und Instrumentarium.

So lange diese Bedingung nicht erfüllt ist, müssen wir weiterhin mit Mißverständnissen und Widersprüchen leben. Schließlich muß die Krisenfrüherkennung aus den Geheimzirkeln der Experten heraustreten. Sie als nationale Aufgabe verstanden werden. Selbst ein geeintes Europa wird in der Zukunft nicht mehr ohne eine gemeinsame und koordinierte Krisenfrüherkennung auskommen.

Developments leading to Crisis as perceived by FEMA

L. A. Elisa (USA)
1999

Introduction

It is a pleasure to be here today to discuss with you and to learn from you what is new in the field of civil emergency operations. As you know the field of civil emergency operations is an expanding and ever changing field. Just in the past few years, the world community has adopted a completely different perspective as to what constitutes emergency operations.

We live in a far more complex world today than we did even a few short years ago. Our metropolitan areas are rapidly expanding, population growth is continuing, telecommunications have become the central foundation of our lives, we run our daily lives on machines and functions that were unthinkable 20 years ago.

Political growth, urbanization, industrialization, economic and social change and new found freedoms and opportunities to expand horizons and realize wealth and opportunities have created a greater demand on local and national resources of all kinds, but nowhere has the demand been greater than in the field of emergency operations. The changes that bring about new cities, towns, industries, rail and roadways demands a heightened sense of awareness as to what responsibilities accompany the change.

More importantly, we are far more interconnected across national borders than we ever have been in the past. The rapid advances in communications in recent years have opened up information exchange on such a rapid basis that it is often difficult to keep pace. Transportation systems, electricity grids, oil pipelines, food supplies - all of these systems are interconnected far more closely than ever before. And it is not just in Europe with the European Union - it across international borders around the world.

Yet it is these same advancements, these same improvements that have made our lives so much simpler that have, at the same time, made our vulnerability to natural, technological, or man-made disasters far more serious.

As the new and developing nations of Europe take their place in the world's community, they are bringing with them new challenges for all of Europe relative to how they respond to and meet the needs of their citizens. Many of these new nations are unfamiliar with the concepts and practice of democracy and democratic control of government, but they want to learn the best ways of doing so. They also want to learn the best ways of protecting their citizens from all types of emergencies.

No matter what our national origin, no matter what style of government we practice, our citizens have one major thing in common - they all look to their governments for protection from harm and for assistance after disasters. It is a fundamental principle of government - that

government is to provide for the common good. In the case of disasters, it goes further than that. It is the fundamental means of restoring a community as closely as possible to its previous condition.

There is another interesting corollary. Citizens look first to their local governments, then to their regional governments, then to their national governments depending on the scope and severity of a disaster. We have all seen that in reports of disasters around the world. And so it should be. If government is going to provide for the common good, then it is particularly critical that it be there in times of emergency.

Now more than ever, populations are expecting that government be prepared and capable of assisting them and meeting their needs. And now, more than ever before, their needs are more often than not determined by unforeseen circumstances than those which are planned.

As we move into the new millennium and beyond, the question that faces all of us is: When disaster strikes or an emergency occurs, will we be ready? It is a common question to which the answer has, over the past few years, determined the future of politicians, appointed officials and even civil servants who were not ready to answer the need in a comprehensive and thorough manner when calamity struck.

This is not a problem just for Europe or the United States. It is a problem that all governments around the world face.

„WHEN DISASTER STRIKES...“

- Prior to 1950, the United States did not have formal programs for either civil defense or disaster relief. However, in the aftermath of World War II, the United States Congress passed the Federal Civil Defense Act of 1950 and the Disaster Relief Act of 1950.
- These programs were relatively small in retrospect, yet they laid the foundations for the current full-scale, allhazards program of emergency management that is in place today.
- The civil defense program built the nationwide infrastructure of more than 7,000 permanent or temporary emergency management organizations in every State and Territory through the local level. The Federal Government provided 50 percent of the funds for the salaries and expenses of the State and local emergency managers in fulfillment of the Federal responsibility for national security.
- The reason that 100 percent of the funds were not supported by the Federal Government is because it quickly became apparent that the emergency managers who were supposed to be preparing their communities for responding to national security concerns were equally as busy preparing their communities to respond to natural and technological disasters.
- At the same time, the Federal Government paid 100 percent of the funds for the construction of Emergency Operating Centers and provided supporting communications. This program is no longer in effect, however, without it, the infrastructure of survivable facilities and interoperable communications systems would not be in place.

- In 1979, President Carter consolidated all Federal emergency management programs into the Federal Emergency Management Agency, or FEMA. For more than 20 years, FEMA has been the single point of contact for most of the nation's emergency response issues. But the emergency management program that FEMA oversees today is a far more complex and widespread program than ever envisioned by the designers of the original disaster relief and civil defense programs.
- Today, FEMA manages, in partnership with State and local governments, comprehensive programs of mitigation, preparedness, response, and recovery. More importantly, FEMA has, during the past decade consolidated the coordinated Federal response to disasters under the Federal Response Plan.
- This has been a fundamental advancement in the way the United States responds to disasters. It marked the first time that a single Agency coordinated the activities and responsibilities of all Federal Departments and agencies with Federal disaster response and recovery functions in order to ensure that State and local governments received the most expedient and efficient forms of assistance.
- I would like to quickly discuss how this process works.
- As I mentioned earlier, emergency management is primarily a State and local responsibility. Under our system, the local government has the primary responsibility for developing an effective program of mitigation, preparedness, response, and recovery systems.
- The States have similar systems and work very closely with their local units on a day-to-day basis in preparedness, planning, training, exercising, and corrective actions to ensure that all procedures are in place when a disaster strikes. FEMA assists in these activities by providing guidelines that can be adapted to the individual community or State requirements.
- State and local governments routinely manage hundreds of emergencies throughout each year without calling for supplementary Federal disaster assistance. The emergencies range from hazardous materials incidents to hurricanes, floods, tornadoes, and other incidents. However, when a local and State governments find that the capability to respond is beyond their collective capabilities, the Governor of the State is authorized to request that the President of the United States declare a major disaster.
- The United States has two primary lines of defense against disasters.
- The first is a comprehensive program of mitigation to reduce or lessen the impact of disasters on the population and property. FEMA Director James L. Witt has initiated a program that we call *Project Impact*, that is designed to provide a partnership of Federal, State, local, volunteer, business and industry participants to identify hazards and take effective mitigation procedures to lessen their effects.

- The second is a comprehensive program of preparedness to ensure that necessary plans, procedures, communications, and facilities are in place to be ready to protect life and property in the event of a disaster.

FEMA has a vigorous educational campaign and training programs for Federal, State, and local officials, as well as the public, to ensure that people are aware of what they must do during times of disaster. Public awareness has been one of our best tools for minimizing potential emergency.

- These two programs, encompassing the enactment and enforcement of public safety, prevention and design laws, and regulations effecting the building of homes and the establishment of businesses and other enterprises, have been critical in helping to minimize possible emergencies and their impacts.
- Disaster relief in the United States is actually an interactive partnership between the Federal, State, and local levels of government. As I mentioned earlier, disaster relief is considered the primary responsibility of State and local governments.
- We emphasize our mitigation and preparedness programs at the local levels of government because, quite frankly, local officials and emergency managers know first-hand what is best for their communities. They know the particular hazards that they face, the types of preparedness and mitigation programs that are most effective and efficient for them, and they can develop the appropriate partnerships with the fire, police, public works, and other organizational elements that are critical to a disaster response operation.
- As a result, in the U.S., our State and local governments are the initial emergency responders, and often work in close partnership with private and volunteer organizations.
- If a disaster strikes and these resources prove insufficient to meet the need, State disaster officials ask the Federal Emergency Management Agency to conduct joint Preliminary Damage Assessments in the affected areas. Based on the findings of the Preliminary Damage Assessment, the Governor of the State may ask the US President to declare a major disaster.
- Early estimates are quickly developed and are one factor in determining whether the recovery effort is beyond State and local response capabilities.
- The major disaster declaration request must be based on the conclusion that the situation is so severe and the magnitude of the effective response is „beyond the capabilities of the State and local governments,“ so that Federal assistance is required. That determination is made by the Governor of the affected State, based on the information provided from the field assessments.
- The disaster declaration request must also include information concerning:
 - The amount and severity of damages,
 - The availability of State and local resources,

- Any unmet needs that require federal assistance,
- Confirmation that the Governor has directed activation of the State Operations
- A certification by the Governor that the State will comply with all applicable cost-sharing requirements of Federal regulations.
- FEMA evaluates the Governor's request, as well as the Preliminary Damage Assessment information, and forwards it to the President for final determination.
- The Governor and congressional offices representing the disaster-affected areas are immediately informed of the declaration decision.
- There are no rules within FEMA that require a specific cost threshold or that specify a minimum number of people who must be affected before a request can be considered.
- The critical consideration is whether disaster victims have uninsured needs that State, local, and/or volunteer recovery efforts cannot meet.
- A Governor's request for Federal assistance includes a dollar estimate of the damages, but these are only estimates. Actual costs can be much higher or lower.
- After the President declares a major disaster, a Federal Coordinating Officer (FCO) is appointed to act as the President's representative, and to direct Federal recovery and coordination activities.
- Presidential approval of a Governor's request for Federal assistance activates many disaster recovery programs contributed by many Federal agencies and, in some cases, those of private relief agencies.
- Specific programs and services are selected and coordinated for use based on the needs found during damage assessments and other information that may come to light later.
- Keep in mind, however, that FEMA is authorized to supplement disaster assistance available through State and local governments, **not** to supersede it.
- This could include providing emergency assistance to restore utilities, provide food, medicine, or shelter; or to perform emergency debris removal.
- Basic disaster recovery assistance from the Federal Government falls into three categories:
- **Human Services** (also called **Individual Assistance**) helps individuals, families, and business owners.
- **Infrastructure Support** (also called **Public Assistance**) helps State and local governments and certain private, nonprofit organizations with repairs of roads, bridges, buildings, utilities, and similar disaster-damaged facilities.

- **Hazard Mitigation** grants provide money to help reduce future losses of public and private property in the disaster area. Eligible applicants include States and local governments, Native American tribes, and certain private, nonprofit organizations.
- We have use two different systems that disaster victims can use to register for
- The **National Teleregistration Center** is a permanent FEMA facility housing a toll-free telephone bank. It can be activated within hours of the President's declaration to take disaster victims' applications.
- Also, **Disaster Recovery Centers** may be opened in the disaster region. They are operated jointly by Federal, State, and volunteer emergency service agencies.
- Victims, including small business owners, go to these Centers to learn about numerous government disaster relief programs and to apply for assistance on-site.
- FEMA also gives grants and technical assistance to State and local governments to repair damaged public infrastructure including schools. Debris removal, emergency communications and emergency public transportation can also be covered.
- The U.S. Transportation Department's Federal Highway Administration gives financial and technical help to rebuild major highways, smaller roads and trails, and other similar transportation routes.
- As soon as the President declares a disaster, many mitigation programs begin to function. the principle activities are:
- An **Interagency Flood Hazard Mitigation Team** consisting of experts from as many as 12 pertinent Federal agencies intensively study each flood disaster and pinpoint key mitigation opportunities for the disaster.
- A **Hazard Mitigation Plan** evaluates hazards within the disaster area and recommends corrective actions that State and local governments can implement to reduce future losses from natural hazards.
- The **Hazard Mitigation Grant Program** gives grants to States who solicit appropriate projects from eligible applicants and establish priorities for completing those projects.
- The programs I have discussed today provide only a brief overview of the programs, partnerships and initiatives that FEMA uses to constantly improve assistance to individuals and communities when disaster strikes.
- In addition to the programs available through FEMA, there are 27 Federal Departments and agencies that have disaster assistance programs available to individual disaster victims, State and local governments, or other entities in a disaster area.

- Any or all of the Federal Departments and agencies can be called upon to assist in a Presidential declared major disaster.
- FEMA works very closely with other federal Departments and agencies, as well as volunteer organizations, to ensure that they are, to the extent possible, coordinated and working together. This is accomplished under the auspices of the Federal Response Plan.
- The *Federal Response Plan* was designed with efficiency and flexibility in mind, two critical factors when responding to large-scale disasters. It is not used in all disasters – it is unnecessary in the smaller-scale disasters that occur on a regular basis. However, in the case of a major earthquake, or a hurricane, for example, it is used to marshal Federal resources on a coordinated and expedited basis.
- It is exercised, maintained and updated on a regular basis. The *Federal Response Plan* is implemented without regard to party affiliation or any other variable. It has eliminated unnecessary conflict and confusion between the various agencies on all levels of Government. It has enhanced and improved the interoperability, coordination and continuity of the delivery of services, which has resulted in the saving of lives, and property.
- I think it is very important to note that all of the functions that I have been discussing here - mitigation, preparedness, response, and recovery, as well as the coordination and implementation of the *Federal Response Plan* - are managed by a Federal Emergency Management Agency that has a staff of **less than 2,000 permanent, full-time employees**.
- The Agency has an “on-call“ cadre of more than 6,000 reservists that are used to supplement staffing requirements in disaster areas and local hires are also used to augment staffing requirements.
- I make this point because the scope of the programs and delivery of assistance that I have been discussing is rather remarkable when taken in the context of such a small Federal agency working to meet the needs of 50 States, six Territories, more than 3,000 local jurisdictions, and a population of nearly 300 million people!
- The Director of the Federal Emergency Management Agency is a member of the president’s cabinet. As a result, major initiatives or requirements in emergency management can be discussed at the highest levels of government quickly and efficiently.
- That is critical in a large-scale disaster. However, because of the partnerships that have been developed between FEMA and the other Federal Departments and agencies under the *Federal Response Plan*, we now have a very efficient system of calling on other Departments and agencies in any size disaster.
- We test and exercise our functions with the State and local governments and the other Federal Departments and agencies on a regular basis to ensure that everyone is prepared, knows their assignment, and is ready to provide assistance when called on. One of our fundamental principles is that we do not want a disaster area to be a training ground – we want to arrive on the scene and do our jobs immediately.

- We work continuously with our State and local partners to ensure that they understand all the processes and procedures involved. For example, we work with local emergency managers to ensure that they understand how to request assistance from the State and with State officials to ensure that they understand how to request assistance from the Federal Government.
- This is a critical part of our system because we do not want lives jeopardized because of a lack of knowledge about process or procedure.
- It has taken us many years to develop the system to the level of capability that it has today, but there is still much that needs to be done in establishing effective programs of mitigation to ensure that all necessary steps are taken to reduce the damage caused by disasters. And, we are continually applying lessons learned from one disaster to improve our response in the ones that follow.
- I thank you for the opportunity to speak with you today and to share our emergency management programs with you.

Ergebnisse der Arbeitsgruppen

Leitfragen

Vorbemerkung: Im Rahmen des Projektes sollen Fragestellungen bearbeitet werden, die den Katastrophen- und Zivilschutz, im weitesten Sinn den Schutz der Bevölkerung vor Natur- und technisch bedingten Gefahren betreffen. Probleme und Entwicklungen in den Bereichen der Wirtschaft, der Politik, Ökologie etc. sollen bei den nachstehenden Fragestellungen nicht betrachtet werden.

1. Welche Unterschiede gibt es aus Ihrer Sicht zwischen „Notfällen“, „Krisen“ und Katastrophen ?
2. Welche Zusammenhänge bestehen aus Ihrer Sicht zwischen „Notfällen“, „Krisen“ und Katastrophen ?
3. Gibt es Früherkennungszeichen (Indikatoren) für Krisen ? Wie lassen sie sich identifizieren ?
4. Was könnte auf europäischer Ebene hinsichtlich der Früherkennung von Krisen geleistet werden ?
5. Was sollte nach Ihrer Meinung hinsichtlich der Früherkennung von Krisen bei der Ausbildung von Führungskräften aus den Verwaltungen oder des Zivil-Katastrophenschutzes sowie bei der Information der Bevölkerung berücksichtigt werden?

Deutschsprachige Gruppe, Rapporteur H. Poser (D)

Guten Morgen meine Damen und Herren,

hoffentlich komme ich da hinten auch an. Wenn ich zu leise spreche, muß man mir das sagen. Unsere Arbeitsgruppe hat sich bei der Präsentation dieser Ergebnisse sehr eng an die Fragen gehalten. In diesem Sinne möchte ich zunächst einmal mit der 1 und 2 beginnen. Unsere Arbeitsgruppe besteht aus den Ländern Frankreich, Portugal, Österreich und Deutschland. Und unsere 1. Frage war: Welche Unterschiede gibt es aus unserer Sicht zwischen Notfällen, Krisen und Katastrophen?

Wir haben uns zunächst einmal über diese drei Bereiche versucht, etwas Klarheit zu verschaffen, und die Zusammenhänge zwischen Notfällen, Krisen und Katastrophen in Form einer Graphik darzustellen. Ich versuche jetzt einmal, diese Graphik etwas zu erläutern.

Kann man das jetzt erkennen? Erkennen, nicht hören!

Wir haben uns zunächst einmal überlegt, daß wir uns ja grundsätzlich in einer Normalität bewegen, das soll dieser grüne Kreis signalisieren. In dieser Normalität geschehen tagtäglich irgendwelche kleinen Notfälle. Das sind die roten Punkte, die wir in diese Normalität dort eingebaut haben. Wenn ein Notfall gewisse Faktoren in sich birgt, können wir in eine Krise geraten, die dann möglicherweise in eine Katastrophe mündet. Wenn wir die Katastrophe, d.h. die Auswirkungen erfolgreich bekämpft haben, läuft dieser Notfall wiederum durch die Krise in die Normalität zurück. Das ist also der Sinn, den wir uns bei diesem Kreismodell, so nenne ich es einfach einmal, gedacht haben. Aber nachdem wir eine Katastrophe erfolgreich bekämpft haben, wir zunächst einmal wieder in die Normalität zurück müssen und automatisch dann durch den Bereich der Krise wieder zurücklaufen werden.

Nun möchte ich aber zunächst einmal erläutern wie wir die Begriffe Notfall, Krise und Katastrophe definiert haben. Für den Notfall haben wir zunächst einmal festgestellt, daß die zur Verfügung stehenden Mittel, also das Personal und das Material, in ausreichender Anzahl vorhanden ist. Das ist ein sehr konkretes Ereignis, es kann ein Brand, es kann eine Explosion sein, das Leben und die Gesundheit einer begrenzten Anzahl von Personen ist bedroht oder bereits geschädigt, und das Ereignis dürfte in der Regel auch relativ eng räumlich begrenzt sein. Diese Punkte haben wir uns für den Notfall als Definition gegeben.

Katastrophe, und ich überspringe jetzt absichtlich den Bereich der Krise, ist durch ein konkretes Ereignis wiederum signalisiert, das Leben oder die Gesundheit einer Vielzahl, in diesem Fall jetzt sehr viele Menschen und Personen sind also bedroht oder bereits geschädigt durch das Ereignis. Das Ereignis kann räumlich ausgedehnt sein, und die uns zur Verfügung stehenden Mittel - Personal und Material, zur Bewältigung dieser Lage reichen nicht aus, oder wir kommen an unsere Grenzen. Und was uns auch wichtig war, daß in diesem Bereich bei dem einen oder anderen Land mit Sicherheit auch sich die gesetzlichen Grundlagen ändern können.

Zur Krise haben wir uns folgendes gedacht: Die Faktoren, die wir aus dem Notfall nehmen, lassen den Schluß zu, daß die Möglichkeit einer Katastrophe bestehen könnte. Also wir sind in diesem Vorfeldbereich, dem die Katastrophe umgebenden Bereich. Dabei kann bereits ein Notfall eingetreten sein. Er muß es aber noch nicht.

Nun haben wir uns einige Indikatoren für Krisen einmal herausgesucht. Es gibt für uns einmal welche, wo wir es relativ leicht ermitteln können, wir können uns für bestimmte Bereiche sehr leicht Indikatoren suchen. Da wären z.B. alle Veränderungen in der Natur zu nennen: Trockenheiten oder eben auch Hochwasser, die wir meßbar machen können, Stürme, die auf uns zuziehen, die uns von den Meteorologen prognostiziert werden, Lawinen können wir in gewisser Weise vorhersagen, wenn wir die Schneemengen und die Beschaffenheit des

Schnees permanent beobachten und prüfen. Wir können Vulkanausbrüche durch Messungen am Berg möglicherweise prognostizieren, wir können uns auch auf Erdbeben, aber auch nur in bestimmten Bereichen, vorbereiten. Sie sehen, die Veränderungen in der Natur, wenn man vom Hochwasser zum Erdbeben kommt, beim Hochwasser ist es wahrscheinlich sehr leicht, Indikatoren festzustellen, aber bei dem Erdbeben wird es dann schon sehr sehr problematisch und schwierig.

Dann haben wir Bereiche, in denen man nur schwer oder nur kurz vor dem Unglück Indikatoren erkennen kann. Da wären z.B. zu nennen die Flugzeugabstürze, es passiert plötzlich und überraschend, weil wir, die Katastrophenschützer, keine Informationen über den Zustand des Flugzeuges während des gesamten Fluges bekommen können, dort haben wir keine Frühwarnsysteme, genauso bei Schiffsunfällen oder Störfällen in Anlagen, Materialbruch wäre hier z.B. zu nennen, das kann plötzlich und überraschend über uns hereinbrechen. Aber es gibt auch eine Ausnahme, und zwar die Störfälle in Anlagen der Kernenergie, also Nuklearbetriebe. Dort haben wir ein sehr großes und flächendeckendes Überwachungssystem aufgebaut, und wir haben auch sehr viele Indikatoren, die wir aus der Anlage bekommen können, den Anlagenzustand, ob er kritisch ist, ob irgendwo Radioaktivität freigesetzt wird.

Wir haben jetzt einige Indikatoren, z.B. bei Hochwasser, weil es uns am plausibelsten und ich glaube auch am einfachsten ist, einmal herausgesucht. Da kann man z.B. nennen: Tauwetter oder starke Regenfälle, Stürme aus bestimmten Richtungen können dazu führen, daß in Flußläufe übermäßige Wassermengen gedrückt werden, wir können die Pegelraten am Fluß beobachten und zu dem Schluß kommen, es könnte auf uns eine Flutwelle zurollen, und der Zustand der Hochwasserschutzanlagen ist mit Sicherheit auch ein Indikator: wenn er schlecht ist, müssen wir mehr Vorsorge treffen; und welches Personal und welches Material habe ich zur Verfügung. Habe ich kein Personal und kein Material, kann selbst die kleinste Veränderung in der Natur zu großen Auswirkungen kommen, wenn ich nicht gleich zu Anfang Maßnahmen treffen kann.

Welche Leistungen könnten auf der EU-Ebene zur Früherkennung erbracht werden?

Wir denken da z.B. an den Erfahrungsaustausch über Bekämpfungsstrategien und deren Wirkung, wir denken an den Austausch von Indikatoren, die vielleicht bei uns nicht bekannt sind, in anderen Bereichen aber sehr wohl, wir möchten den Austausch von Informationen über die Entstehung von Hochwasser und über die Nukleargefahren bekommen und hierbei auch über das Hochwasser, das möglicherweise von einem Land in das andere droht, z.B. von Spanien nach Portugal, von Frankreich nach Deutschland, von Deutschland nach Holland. Oder wenn es in irgendeiner Anlage kritische Entwicklungen gibt, bei der Nukleargefahr

möchten wir das auch gerne wissen, und da wäre es nach unserer Auffassung sehr gut, wenn dort die europäische Union eine Mittlerfunktion übernehmen würde.

Und als letzten Punkt würden wir uns eine Harmonisierung des Sprachgebrauchs bei den Fakten wünschen.

Nun komme ich zu den Ausbildungen hinsichtlich der Früherkennung von Krisen. Hier waren wir der Auffassung, daß wir die Fachverwaltung hinsichtlich der Indikatoren, der Bewertung dieser und der Beratung der Katastrophenschützer intensiv ausgebildet werden müßten. Wir sind der Auffassung, daß die Katastrophenschützer bei Eintritt oder bei Veränderung von Indikatoren die erforderlichen Maßnahmen zum Schutz der Bevölkerung sicher umsetzen können. Wir sind allerdings nicht der Auffassung, daß die Katastrophenschützer als Generalisten die Indikatoren der Früherkennung so intensiv kennen müssen, daß sie selbst mehr oder weniger mit den Fachleuten eine Diskussion darüber führen können, ob nun eine Katastrophe oder eine Krise droht. Aber das Entscheidende ist, daß das Wissen der Katastrophenschützer, daß bestimmte Regionen besonders gefährdet oder besonders kritisch zu sehen sind, in die Entscheidungen der Verwaltungen einfließen müssen. Man muß in Bereichen, wo Hochwassergefahren drohen oder wo Vulkanausbrüche drohen, ja nicht unbedingt Feriendörfer anlegen.

Dann kommen wir zu dem Punkt der Information der Bevölkerung, die Frage 5 haben wir so ein bißchen geteilt. Wir brauchen eine Öffentlichkeitsarbeit zur Erläuterung der Strukturen des Katastrophenschutzes. Der Bürger muß wissen, wer für ihn zuständig ist. Wir brauchen eine Öffentlichkeitsarbeit im Hinblick auf die Gefahrenpotentiale. Wo drohen Gefahren?

Dann müssen wir die Bevölkerung dahin bekommen, daß sie Selbstschutzmaßnahmen ergreift. Jeder ist aufgefordert mitzuhelfen im Katastrophenschutz, jeder Bürger für sich. Es kann nicht sein, daß man den Katastrophenschutz nur Sache der Behörden und der Feuerwehr sein läßt. Jeder ist dort aufgefordert. Und im Ereignisfall bitten wir oder meinen wir, daß eine rechtzeitige und widerspruchsfreie Information der Bevölkerung wirklich notwendig, also rechtzeitig und widerspruchsfrei; das sind diese beiden Faktoren, die, wie wir meinen, ganz besonders wichtig sind.

Wir haben auch einige Wünsche. Die Signale, insbesondere die Sirenensignale, innerhalb der EU sollen angeglichen werden. Die Informationen dürfen nicht an nationalen Grenzen enden, sie müssen weitergeleitet werden. Und die Verantwortlichen sollten immer wieder auf ihre Pflichten hingewiesen werden, nämlich diejenigen, die in den Verwaltungen die Verantwortung haben für den Bürger, können sich nicht damit herausreden, daß es jemanden gibt, der die Aufgabe Katastrophenschutz bekommen hat, und von daher ginge sie das nichts mehr an, der hätte nun dafür zu sorgen, daß im Katastrophenschutz alles glatt läuft, und wenn

nicht, "habe ich da ja jemanden, der die Verantwortung trägt". Das ist eben nicht zu delegieren, auch politisch Verantwortliche tragen Verantwortung im Bereich des Katastrophenschutzes.

Ja, damit möchte ich enden und bedanke mich für Ihre Aufmerksamkeit.

Wenn Fragen sind, steht die Arbeitsgruppe und ich auch gerne zur Verfügung.

Englischsprachige Gruppe, Rapporteur J. Barry (IRL)

Good morning, Ladies and Gentlemen,

I admired Mr Poser's graphics and his laptop computer. I must apologize for my humble effort. It is a little bit more basic. I was thinking of the conversation I had at home with a friend. I was saying to him how wonderful my laptop computer was, my portable computer. I said, with my laptop, with my mobile phone, I can work anywhere, anytime. And he said : Oh yes, can you? You use it in the restaurant? I said : No, that would be rude. He said : You use it on the bus ? I said : No, it is too crowded. He said : You use it outdoors ? I said : No. So he said: What you really do is you carry your laptop everywhere and you are worried that you drop it and it will be stolen. And that is the truth. But I did not bring it along here. So my graphic is very simple.

On the top, I have to remind myself to speak slowly so that you can all understand me.

Looking at the questions that our group was dealing with, we looked at questions 1 and 2 together firstly and the question broadly were between the words emergency, crisis, disaster, what differences are there between them, and what connection.

Sometimes in Ireland, people ask men like me with beards very simple sometimes disarming questions. A famous question in Ireland is what's the difference between a hen ?I don't know how that will translate. But one of the questions that kept coming into my mind was 'What's the difference between a crisis ?' Because there were certain different views of what a crisis is. So, as I said, I try and reflect some of them.

So firstly, one of the meanings of crisis that we discussed was the situation where a crisis has the potential to lead to an emergency. And there were different types of crisis that we discussed. Mr. Ravara told us about the situation in Portugal where he mentioned here in this room that there has been very little rain or no rain in Portugal since October. So he said they have a crisis and they know that come the summer there will be difficulties with water supply. So they are responding to that crisis. You can choose with your potential situation : do you need to respond to it, or do you prepare for the emergency that may happen. At the moment in Portugal, Mr. Ravara says they are responding, they are in the response phase now in this crisis situation.

On the other hand, Mr. Colcerasa in Italy tells us about the situation where the populations are living in zones threatened by earthquakes, threatened by volcanoes. Again, this situation can be a crisis, or responding is not something they do because you cannot predict exactly, necessarily when the emergency may happen, but you can prepare, so they are in a preparation phase while they have this crisis, while they have potential for an emergency.

Moving on, we looked at the word emergency. We said there are a number of different types of emergencies. You can expect your emergency. If you expect an earthquake, you expect flooding, the emergencies can be expected, can be predicted. On the other hand, emergencies can happen in a non-expected way. An aircraft can fall out of the sky, a accident may be due to terrorist attack, these things can be unexpected. And in any event, in either case, in this case emergency services, civil protection organizations will respond to the emergency.

The we looked at the word disaster, and we said, we asked ourselves, how does a disaster differ from an emergency. We felt basically the difference is, there are questions of scale and nature. A very big emergency could be a disaster because of the size of the problems faced while emergency services or alternatively the nature of the situation can be regarded as a disaster for instance again maybe in the case of an air crash where all the people involved have been killed. You have a disaster, and the response of the emergency services is a recovery situation. You are recovering remains, and it does not carry the same urgency maybe as operations where urgent rescues are required. So we felt that emergencies and disasters are very much related, and it is a question of the size, the scale of the situation, and the nature of a situation that can affect whether you have an emergency, whether you have a disaster.

Lastly then another sense, if you like, of the word crisis. You may wonder why we discussed crisis again at this point in our discussion, and this was an idea put forward by Mr. Barisitsch when he visited our group. And again it found some agreement I think within the group. He suggested that a crisis can arise around or in connection with an emergency or a disaster due to some external influence. He gave the example in particular of a media influence where media coverage or media response to a situation can lead to a change in the way society views the situation, or can lead to a change in the characteristics of the situation itself and maybe can lead to a situation where the problems faced by emergency services or by public authorities are beyond their capabilities, beyond their ability to deal with the problems adequately and that this moves the situation to a phase where again the word crisis seems appropriate.

So we had a number of senses as you can see in which the word crisis can be used.

I hope I adequately did this, we spent a lot of time discussing these questions emergency - crisis - disaster, and I hope I have adequately represented the views of the group. Sometimes, particularly these words where they are used in different languages, they can have different meanings and associations, and I have tried to give a flavour of the different views in our group.

Moving on to the third question we were asked to address, and again I have to remind myself to speak slowly. So the third question was, are there early warning signs that can give an indication in terms of the evolution of a crisis. This question again had a certain amount of commonality with question 4, so some of the material on this transparency maybe relates to question 4, but I have talked about 3 and 4, maybe we moved towards a view of the group's opinions.

One suggestion in terms of early warning signs was the whole issue of identifying what are the hazards and threats that different populations face, and one suggestion was that there be an inventory of hazards and risks faced by populations and important trends in relation to those risks, how do the risks and the hazards change over time. This was felt to be an important aspect that public authorities should be aware of when trends are moving. It was suggested that a time scale of 5 to 10 years - we should be aware of trends over periods of 5 to 10 years would be appropriate. That sort of information then could be used to relate threats, relate the dependency in the society, the dependency onto something that depends on a lot of variables, complexity, the size of a community, population, what is the nature of the way the society is organized. So combining the threat and the dependency can give a measure, it was suggested, of vulnerability for particular populations, particular communities. And it was suggested that each country would be different in this respect. But that countries find it worthwhile doing this exercise and being aware of what hazards are and how they are changing over time, that this, if you like, provides the first flavour of an early warning sign.

Specific signs that were mentioned, moving on to specific signs, we have the important advice. It was suggested that information in relation to threats of vulnerability is being exchanged between adjacent countries, one of the suggestions was, don't communicate, civil protection organizations should not communicate through the foreign affairs ministry. The experience in the group was that that takes time, it can be months before information if you pass it through those official channels, it can be months before you communicate the important information. So better, it was suggested, that civil protection organizations communicate directly with each other.

Looking then at what are the specific signs, what are the actual signs that may be used, it was suggested that scientific reports could be available, again, depending on the hazard you are dealing with, seismic reports in relation to earthquakes, volcanoes, meteorological information can give predictors of weather, flooding situations, so this sort of reports we felt to be useful. Other reports we discussed yesterday, I had to ask my colleagues this morning to remind me what other reports were suggested, aircraft, satellites can give early warnings of events like forest fires in their precincts, the smallest beginning stages. Feedback from civil protection people was another suggestion. These would be the people the organizations on the

ground who are monitoring hazards, and again, maybe it leads back to our original suggestion that trends over time can be monitored as they change. So I think that civil protection people would be involved in that process. So these were some of the areas where we felt signs would be available.

Fourth question: The fourth question we dealt with was, what could be done at the European level to be able to recognize the evolution of a crisis?

And again we had some suggestions here. Firstly we felt there is a need to establish a point of contact so that at the European level information can be gathered, can be collected at some individual point. The existence of the PNNC or MPC was mentioned as one possible framework that does exist. So it does not, as we understand it, have a function to gather early warning information at the moment, but it is a system, and each country has a correspondent. And maybe that framework could be examined, it was felt. It was also suggested that in the exchange of information it was important that countries not be too optimistic and that they are honest, if you like, about the level of threat they perceive in a given situation. And that it was important at an early stage to communicate a potential situation if that situation did not arise or ultimately did not happen, it was felt, was not a problem.

Another suggestion was that such exchange between countries and between European level organizations should be on an ongoing basis so that the people involved in the exchange of information they know each other and when they are reporting to each other on different situations, that there is an understanding of the way in which the different societies, the different individuals view threats and view situations and view emergencies and disasters, rather than just meeting someone for the first time, not knowing exactly how seriously they regard a situation. So it was suggested this ongoing aspect was important.

It was also noted that within or as part of the operations of NATO, that a group exists dealing with warly warning, particularly in the area of nuclear installations. And it was suggested that an organization like that my provide a useful model whereby this sort of information can be exchanged.

Again, I have to speak slowly. This was a long question, question 5, I have written the whole of the question here. Are there factors which leaders in the bureaucracy or civil protection and disaster planning can derive and which in particular can be used in training and with regard to the information of the public ?

One of the things we were not sure about, I was not sure about anyway, was that a difficult question, or was that an easy question. We did not know. I did not know.

In the event we decided we regard it as an easy question.

So if it was an easy question we felt there would be an easy short answer. And these are some of the factors we identified.

So, we said, if early warning signs can be derived, than what kind, essentially, the question we felt was what kind the agencies, what can public authorities, civil protection organizations, what can they actually do. So we felt their activities could be in 3 main areas. Firstly they should focus information to the threatened population when a particular emergency, when an early warning sign emerged and a particular type of emergency is anticipated. The threatened population should be informed of the pending emergency and given appropriate information on how they should respond or how they should deal with the situations that may arise. Secondly, we have to adapt the infrastructure. This would be in a situation of maybe where you anticipate a flood emergency where there would be the opportunity to strengthen your flood defenses, do certain works of that structural works, maybe of that sort, this is an example. Lastly then our suggestion was the emergency service that again in the event of an anticipated emergency you should look again at your response capability, at your response personnel, look at your training, look at equipment in relation to the actual identified hazards that will be identified, the emergency that you anticipate.

Lastly I have to apologize where I have misrepresented the views of the group. We had a lot of different views on different aspects of these questions, and I may have misrepresented them, and if I have, I apologize. As I say, it is very easy to misunderstand people. Something that I talked of again during the discussions, as you know in Ireland, it is traditional to have big families. And there is a story about a German man who visited Ireland. His name was Wolfgang or something like that. And he met this Irish man, and he said to the Irish man: Do you have children? And the Irish man said: Nine (Nein). And Wolfgang said: Ah, don't worry, you're young, there is still time. So it is easy for misunderstandings to arise. I apologize if I misrepresented anything. If there is any worth or any good ideas among our views, the group should get the credit. If there is anything wrong with our views or if there are bad views, well that is my mistake. I would like to thank the group for their input and thank you all for your attention.

Englischsprachige Gruppe, Rapporteur K. Gosling (GB)

Good morning Ladies and Gentlemen,

It is a pleasure to be here back up speaking again. I will try to speak slowly as well. But I won't have to be reminded of this, but I'm sure the yellow and the orange card will waive if I don't.

I was totally unrehearsed. Last night I seem to have recalled that we thought of a perfect solution to all of the questions that we've been asked. And I think this was facilitated by the excellent hospitality that we experienced. But this morning we experienced the crisis because no one could remember exactly what it was being decided. Unfortunately, what you get now is what you see. Also the advantage of being on this slot is I think, that coffee is approaching and that all the other groups said just about everything we want to say. So I can be mercifully brief or maybe a little bit quick.

Our group which was mainly a Nordic group or at least honorary Nordic persons as well as the Nordic countries, and we had some difficulty with defining the term crisis. We agreed that we took to the question, to one question really together. We agreed that there are differences. And I think that was the easy part. But the definition was very very difficult. We found that language was one barrier. It is something that perhaps binds you, but also it forms barriers as well, and some terms are very very difficult to translate, and when they do translate, they meant slightly different things, and it is very difficult to categorize them. We also found that culture may also form some barriers, and particularly how people will react in different circumstances, how quickly will they react to authority or not. We found that the process of legislation and the forming and enforcing legislation was different as well. The issue we discussed was that communication was really the key to this, and that is better than getting hung up on a particular term such as crisis. But when you do communicate that you have a problem, that you make sure that you say exactly what the problem is, what it is that you require. And also that you are speaking to the right person. And that that person has the authority to act and to carry out some quick actions and maybe spend money. We did determine that some terms, they were common or whether where they fitted in each of the states. This is perhaps a little bit different, but disasters, major disasters, accidents, major accidents, and incidents really come under the general terms of heavy emergencies. And we are grateful to Mr. Barisich for helping us with that particular point. We should however continue in this process to try to harmonize some of the terms we use and perhaps come to some agreement about what it is that we use. We perhaps felt that we should as individual states put down what it is we think maybe the term crisis means. And then use that as a

standard for what you say is for example red alert or what is state one or state five really is immaterial. But we thought there will be a movement there in the future.

In terms of early warning and indicators, question 3, we felt it is possible for there to be some indicators, and perhaps we should start in a focused way. There will be areas where we can achieve very quick results. There are already examples of indicators. The nuclear event scale being one, that there are natural events like storms and earthquakes where we do get advanced warnings, and attaching some indicators to that process could be quite easy.

Leading on to question 4, and I think here we agreed with Mr. Barry's comments, was that there should be a focal point for collecting information. And that should be at the Commission level. And then from that, there should be developing a network that utilises any information and puts it into practice.

And question 5: There are some common factors. We felt that the public education process should be a starting point, and we used the example from Finland, the booklet that was given to the public in terms of informing them what to do with emergencies. We should also try to educate and perhaps brief political leaders and those who make political decisions. There were some cynical comments on that point on how easy it was to educate and brief politicians, but ego notwithstanding we felt we should try. And then leading on from that to the more focussed level of specific and specialist groups. where we had to concentrate on common programs, such examples being search and rescue specialists. And then we should practise and exercise, the results of all those programs, and evaluate the extent of what happened, and then after evaluation we implement any changes in developments that come from that. So that is the result of our deliberations. Sorry if it has been a little bit quick, but we were trying to summarize a lot of interesting discussion and some very few points. And again, as Mr. Barry, if I have misrepresented any of the comments, I apologize to the group, and I am sure there are questions later on that may come out. Thank you for your time and your attention.

Auswertung

Ein wesentliches Anliegen des Workshops bestand darin, die Begriffe Notfall, Katastrophe und Krise, eine mögliche Abfolge und Zusammenhänge der Zustände sowie Indikatoren für Krisen zu beleuchten.

Dabei zeigte sich deutlich, daß es Unterschiede im Verständnis zwischen den Mitgliedsstaaten gibt, die durch Sprache, Kultur und gesetzliche Regelungen bedingt sind.

- Notfall:
- räumlich begrenztes Geschehen, bei dem aber ausreichende Ressourcen zur Bewältigung vorhanden sind
 - weiterhin aber auch im Sprachgebrauch als Überbegriff zum Vorfall, Unfall, Katastrophe
- Katastrophe:
- räumlich, zeitlich ausgedehntes Geschehen mit unzureichenden Ressourcen zur Bewältigung
 - es liegen andere rechtliche Regelungen zugrunde
 - kann sich schlagartig ergeben oder aus dem Notfall entwickeln

Die inhaltliche Bedeutung des Begriffes Krise ist sehr vielschichtig:

- Zustand zwischen Notfall und Katastrophe
- Zustand im Umfeld eines Notfalles, einer Katastrophe
- Zustand, der sich aus einer Katastrophe entwickelt
- insgesamt ein Zustand mit großer Unsicherheit bezüglich der möglichen Entwicklungen
- kann aber auch ein Ereignis unabhängig von Notfall oder Katastrophe sein.

Die Frage, ob sich Indikatoren für Krisen frühzeitig erkennen lassen, ergibt unterschiedliche Antworten:

- insbesondere bei Naturereignissen und kerntechnischen Unfällen lassen sich Indikatoren identifizieren;

- bei technischen Unfällen lassen sich z.T. keine Indikatoren im Vorfeld ausmachen;
- ob sich Indikatoren erkennen lassen, hängt vom Gefahrenbewußtsein der Menschen / des Kulturkreises / der Gesellschaft ab;
- Indikatoren sollten sich ableiten und identifizieren lassen, wenn ein Gefahrenkatalog aufgestellt und auf dessen Grundlage eine Beschreibung von Gefahren / Risiken erfolgt.

Ein europäischer Beitrag zur Früherkennung von Krisen könnte bestehen in:

- der Einrichtung einer Informations-Sammelstelle.
- regelmäßigen Treffen zur Stärkung von Verständnis und Offenheit zwischen den Mitgliedsstaaten.
- der Förderung des Erfahrungsaustausches.
- der Förderung des Meldewesens / Infoaustausches
- der Harmonisierung / Vereinheitlichung der Terminologie.

Für die Verbesserung der Früherkennung und Bewältigung von Krisen erscheint es notwendig,

- politische Verantwortungsträger und Führungskräfte zu schulen.
- Fachverwaltungen und Aufsichtsbehörden bzgl. der Indikatoren und deren Beurteilung zu sensibilisieren.
- im Krisenfall eine enge Abstimmung zwischen Fachbehörden / Fachleuten und den Katastrophenschutzbehörden hinsichtlich der Umsetzung der notwendigen Maßnahmen zu betreiben.

Die behördlichen Maßnahmen bilden eine Seite der Bewältigung. Es bedarf aber auch der aktiven Einbeziehung und Mithilfe der Bevölkerung.

Deshalb erscheint es wichtig,

- die Bevölkerung frühzeitig über sich abzeichnende Ereignisse zu informieren.
- im Krisenfall situationsgerecht und regelmäßig zu informieren.
- die Strukturen des behördlichen Katastrophenschutzes und die Bedeutung und Möglichkeiten des Selbstschutzes aufzuzeigen.
- ein Gefahrenbewußtsein in der Bevölkerung zu schaffen.

Als weitere Wünsche wurden seitens der Teilnehmer artikuliert:

- die Vereinheitlichung von Informations-/Warnsignalen
- die umfassende grenzüberschreitende Information
- den Fachbehörden / Fachverwaltungen bewußt werden zu lassen, welche Bedeutung und Rolle sie im System zum Schutz der Bevölkerung haben.

Evaluation

A major concern of the workshops was to shed light on the terms of emergency, disaster and crisis, and to indicate the processes and relationships in such circumstances as well as indicators of crises.

At the same time it was clear that there are different understandings between the member states as a result of language, culture and statutory regulations.

Emergency: spatially limited events, where sufficient resources are available to deal with the emergency, however

still used as an umbrella term for incident, accident, disaster

Disaster: spatially and temporally expanded event where resources are insufficient to deal with it

it is based on different statutory regulations

it may develop suddenly or develop out of an emergency

The meaning of the term crisis is multi-layered:

Condition somewhere between emergency and disaster

Condition in the environment of a crisis, a disaster

Condition which develops from a disaster

As a whole, a condition with a great deal of insecurity with respect to possible developments

Can also be an event which is independent of an emergency or disaster.

The question as to whether indicators can be identified for crises early on produces different answers:

- in particular in the case of natural events and nuclear-power-related accidents allow indicators to be identified
- in part no indicators can be seen ahead of time in the case of technical accidents
- whether indicators can be identified or not depends on people's awareness of danger / the cultural environment / society

- indicators should be derived and be identified as to when a list of dangers can be created, on the basis of which dangers / risks can be identified.

A European contribution to early warning of crisis could be made by:

- establishing an office for information gathering
- regular meetings to strengthen understanding and openness between the member states
- promotion of an exchange of experience
- promotion of a reporting system / exchange of information
- harmonisation of terminology

In order to improve early warning and deal with crises, it appears to be necessary to

- train persons having political responsibility and leaders
- raise awareness of core government administrative agencies and supervisory agencies with regard to indicators and their evaluation
- in the event of a crisis to have close coordination between authorities / experts and disaster-relief authorities with regard to the implementation of the necessary measures.

Government measures form one side of dealing with crisis, emergencies and disasters. Active inclusion and the aid of the population is also required, however.

For this reason it is important,

- to inform the population early on about events which appear to be taking shape
- To inform the population in a manner commensurate with the situation on a regular basis in the event of a crisis
- To show the structures for official disaster relief and the importance and possibilities of self-protection
- To create an awareness of danger in the population.

The participants also articulated additional desires:

- harmonisation of information/warning signals
- comprehensive cross-border information
- to make clear to the core government agencies / core administrations, what importance and role they play in the system of protection of the population.

Rapport

Une préoccupation essentielle de l'atelier a consisté à éclairer les notions d'urgence, de catastrophe et de crise, l'enchaînement éventuel de ces événements et leurs relations entre eux, ainsi que les indicateurs de crise.

Il est apparu à l'évidence que ces notions sont entendues différemment dans les divers Etats membres, ce qui est dû à la langue, à la culture et aux dispositions légales.

Urgence: - événement limité dans l'espace, qui peut être traité toutefois avec les ressources disponibles

- ce terme continue toutefois à être employé couramment comme terme générique d'incident, accident, catastrophe

Catastrophe: - événement étendu dans l'espace et dans le temps qui dépasse le cadre des ressources disponibles

- on se base sur d'autres dispositions légales

- peut survenir inopinément ou bien découle d'une urgence

Le terme crise a des significations multiples:

- situation entre urgence et catastrophe
- situation dans l'environnement d'une urgence, d'une catastrophe
- situation qui découle d'une catastrophe
- dans l'ensemble, une situation se caractérisant par une grande incertitude quant aux évolutions éventuelles
- mais peut être aussi un événement indépendant d'une urgence ou d'une catastrophe

A la question de savoir si on peut détecter précocement des indicateurs de crise, on obtient des réponses diverses:

- on peut identifier des indicateurs, notamment par les phénomènes naturels et les accidents nucléaires;

- pour les accidents d'origine technique, on ne peut pas toujours identifier d'indicateurs au préalable;
- L'identification d'indicateurs dépend de la conscience des périls dont font preuve les individus, la civilisation, la société;
- des indicateurs devraient pouvoir être déduits et identifiés une fois qu'on a dressé un catalogue des périls et qu'on a effectué sur sa base une description des périls/risques. Une contribution européenne de détection précoce des crises pourrait consister à:
 - mettre en place un centre de collecte des informations:
 - organiser des réunions régulières visant à renforcer la compréhension et la franchise entre les Etats membres;
 - promouvoir l'échange d'expériences;
 - promouvoir le système de déclaration / l'échange d'information
 - harmoniser / uniformiser la terminologie.

Pour optimiser la détection et la gestion des crises, il apparaît nécessaire:

- de former les décideurs et les dirigeants politiques;
- de sensibiliser les administrations spécialisées et les autorités de surveillance aux indicateurs et à leur appréciation;
- qu'en cas de crise soit pratiquée une étroite coordination entre les autorités spécialisées/les spécialistes et les administrations de la protection civile en vue de mettre en œuvre les mesures nécessaires.

Les mesures prises par les autorités constituent une des faces de la gestion. Mais l'intégration active et l'aide de la population sont elles aussi nécessaires.

De là, il apparaît important:

- d'informer de bonne heure la population des événements qui se préparent;
- en cas de crise, d'informer adéquatement à la situation et régulièrement;
- de mettre en évidence les structures administratives de la protection civile et les possibilités de la protection civile;

- de créer une conscience du péril dans la population.

Les participants ont en outre exprimé les autres souhaits suivants:

- l'uniformisation des signaux d'information et d'avertissement;
- une ample information transfrontalière
- faire prendre conscience aux agences de planification sectorielle et aux administrations spécialisées de leur importance et de leur rôle dans le système de protection de la population.

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Workshop

“Information and Warning”

BASIS - Alarmierungs- und Informationssystem in Bayern

D. Hacker (D)

1998

Die Einsatzbereiche von BASIS erstrecken sich von der allgemeinen Verwaltung über die Informationsgewinnung im Einsatzfall, bis hin zur Alarmierung der Einsatzkräfte. Ausgestattet sind vorrangig alle mit der Einsatzleitung betrauten Stellen. Dies beginnt bei den alarmauslösenden Stellen, geht über die örtlichen Einsatzleiter (mobiler Kommunikationskoffer), bis hin zu den Führungseinrichtungen der einzelnen Landesebenen.

Die ersten Schritte wurden schon 1985 gemacht, allerdings noch auf einer anderen Betriebsoberfläche und als reines Verwaltungsprogramm. Nach einer Erweiterung und Anpassung an die Einsatzbedürfnisse, wurde BASIS 1992 landesweit in Bayern eingeführt. 1995 erfolgte eine Überarbeitung und Modernisierung des Alarmierungsbereiches.

BASIS ist in Module untergliedert und stellt sich folgendermaßen dar:

Hauptmodul

Sämtliche wichtigen Einstellungen, die sich auf das komplette Programm auswirken können hier vorgenommen werden. Diese beinhalten einen gesicherten Zugang zum Programm, mit anwenderbezogenen Kennungen und Modulzuweisungen, die Systemkonfiguration, eine umfassende Protokollierung, Systemprogramme, Datensicherung und zuletzt die große Adressendatenbank, von der aus Verknüpfungen zu allen Modulen bestehen.

Modul Einsatzstatistik

Einsätze mit ihren Detailangaben werden hier eingelesen und können, im Rahmen einer überregionalen Datenzusammenführung, statistisch ausgewertet werden.

Diese Auswertung ist auf Landkreis-, Regierungs- und Ministeriumsebene, je nach den benötigten Informationen, möglich.

Modul Helferverwaltung

Wichtige Daten, den einzelnen Helfer (Einsatzkraft) betreffend, werden in verschiedenen Formularen übersichtlich dargestellt.

Diese umfassen die persönlichen Daten, Untersuchungen, besuchte Lehrgänge und vieles mehr. Die Darstellung kann im Rahmen von Übersichten, aber auch durch selbst erstellte und somit angepaßte Listen erfolgen.

Modul Material- und Geräteverwaltung

Ein verwaltungsbezogenes Modul, das mit seinen Einzelangaben für jede Gerätschaft eine lückenlose, termingerechte Wartung und Pflege ermöglicht. BASIS beinhaltet einen "Zeitwächter", der auf anstehende Termine aufmerksam macht.

Modul Lehrgangsverwaltung

Durch dieses Modul wird, innerhalb Bayerns, eine einheitliche Lehrgangsanmeldung gewährleistet. Lehrgänge können einzelnen Personen, entsprechend der Platzzuteilung, zugeordnet und per Datenfernübertragung weitergemeldet werden. Übersichten und Auswertungen sind in jeder Form möglich.

Modul Kommunikation

Alle Arbeiten und Einstellungen, die das Erstellen von Exportdateien und die Datenfernübertragung betreffen, werden in diesem Modul durchgeführt. Allerdings können die Daten nur unter BASIS – Rechnern ausgetauscht werden. Eine Sicherheitsabfrage in der Übertragungssoftware verhindert ein Versenden von Daten an nicht berechtigte Rechner.

Modul Katastrophenschutzplan

In Bayern ist der Katastrophenschutzplan für alle Ebenen, durch das bayerische Staatsministerium des Innern, vorgegeben. Dieser Raster muß nur noch mit den regionalbezogenen Daten gefüllt werden.

So ergibt sich ein Überblick über die regionalen Detailinformationen, z.B. eines Landkreises. Zusätzlich können, im Rahmen des Datenaustausches, überregional interessante Daten erfaßt werden. Das können spezielle Materialien, Geräte, Einheiten, Einrichtungen usw. sein.

Mit den verschiedensten Suchfunktionen ausgestattet, wird dem Anwender das schnelle Auffinden von Einzeldaten erleichtert. Schon erstellte Formulare, wie „Warnung der Bevölkerung“, sowie die Vorbereitung „Besonderer Schadenlagen“ beschleunigen die Arbeit im Einsatzfall.

Modul Alarmplanbearbeitung

Zentrum für das Erstellen der Alarmierung eines Landkreises, unterteilt nach einzelnen Objekten und Alarmstufen.

Angaben über Einheiten, Personen, Dienststellen werden mit Funkdaten und Einzelinformationen verknüpft, aufbereitet und in einer Alarmierungskarte bereitgestellt.

Auf diese Alarmierungskarte greift BASIS im Alarmfall zurück.

Die Möglichkeiten der Informationsverknüpfung würden hier den Rahmen sprengen, werden jedoch im Modul Alarmierung an einem Beispiel gezeigt.

Modul Alarmierung

Bei BASIS handelt es sich um eine PC – gesteuerte, objektbezogene Alarmierung. Das bedeutet, nach Auswahl des betroffenen Objektes, wählt BASIS die entsprechende Alarmierungskarte aus und arbeitet die darauf vermerkten Alarmschleifen von oben nach unten ab. Einen Alternativvorschlag mit gleichem Einsatzwert, für eine schon alarmierte Einheit, kann BASIS nicht erbringen, dies leistet nur ein Einsatzdatenleitreechner.

BASIS sieht noch die Module Einsatzdatenleitreechner, Einsatzabrechnung und Gefahrstoffschnellinformation vor, diese sind jedoch in Bayern nicht eingeführt. Alternativ wird für das Modul Gefahrstoffschnellinformation das Programm CHEMIS verwendet.

Alarmierungsablauf

Nach Eingang eines Notrufes aus der Bevölkerung bei der erstalarmauslösenden Stelle (meist Polizeiinspektionen in Bayern) wird durch Aktivierung des Notrufknopfes die Schnellsuchfunktion „Objekt“ gestartet. Durch Auswahl eines Objektes gelangt der Anwender automatisch in das nächste Formular. Es erfolgt eine stichpunktartige Beschreibung des Alarmierungsgrundes und durch Anklicken die Auswahl der entsprechenden Alarmstufe (7 mögliche je nach Schweregrad und Schadenart).

BASIS schickt nun die, auf der Alarmierungskarte aufgeführten Schleifen, an den Alarmgeber und dieser sendet die Fünf – Ton – Folgen über Funk an die Meldeempfänger bzw. Sirenen.

Gleichzeitig überprüft ein Kennungsauswerter die korrekte Abstrahlung der Codes.

Nach der Abarbeitung der Alarmierungskarte durch BASIS erfolgt die Durchsage der alarmauslösenden Stelle an die Einheiten.

Parallel zu diesen Vorgängen aktiviert BASIS die Übertragungssoftware, packt die Einsatzinformationen in eine Exportdatei und versendet sie automatisch an die zuständige nachalarmierende Stelle (Einsatzzentrale der Feuerwehr).

Dort wird, von dem in Bereitschaft stehenden BASIS – System, die Exportdatei empfangen und nach Aktivierung durch den Anwender selbständig importiert. Somit hat die nachalarmierende Stelle denselben Stand wie die erstauslösende und übernimmt den Einsatz.

Im Formular „Regiezentrum“ stehen dem Disponenten der Einsatzzentrale drei Arbeitsbereiche zur Verfügung.

Einsatzbereich

Alarmstufenerhöhung, Nachalarmierung von Einheiten, Personen, Dienststellen, Material, Gerät und Einsatzfahrzeuge, können vom Disponenten ausgewählt werden.

K – Plan

Über Verzweigungen kann der Disponent wichtige Zusatzinformationen aus dem Katastrophenschutzplan entnehmen und dem Einsatz entsprechend verwerten.

Protokollierung

Eine ständige Protokollierung (mit jederzeit möglichem Ausdruck), hilft, neben einem Einsatzformular (zusätzliche Informationen, wie Stärke, Einsatzstatus usw.) den Überblick zu behalten.

Damit ist im Groben die Darstellung eines Alarmierungsablaufes beendet. Doch bietet das Alarmierungsmodul weitere, zusätzliche Möglichkeiten.

Es können im Untermenü „Warnung der Bevölkerung“ situationsbedingte Sirenenauslösungen erfaßt und ausgelöst werden.

Genauso wird die monatliche Probealarmierung automatisiert und bedarf nur noch eines Knopfdruckes, um den gesamten Ablauf in Bewegung zu setzen.

Sie haben einen kurzen Überblick über die Möglichkeiten von BASIS erhalten, ich darf aber darauf hinweisen, daß es nur ein Einsatzhilfsmittel sein kann, abhängig von geschultem Personal und technischen Voraussetzungen.

Zentrale Alarmierung und Information in Belgien

M. Bronselear (B)

1998

Grüß Gott, mein Name ist Mark Bronselear, und ich zeichne für den Aufbau des Warnnetzes in Belgien verantwortlich. 45 Minuten Sprechzeit ist nicht zuviel, um den Abriß eines Warnnetzes zu zeigen, das immerhin eine Reihe von Möglichkeiten bietet.

400 Alarmsignale werden an die Bevölkerung und auch an die verschiedenen Hilfsdienste gegeben, die in SEVESO- und Nukleargebieten wohnen, und zwar über 3 verschiedene Wege. Aber zuerst will ich etwas sagen über die Notfallplanung in Belgien.

In den belgischen Gesetzen sind 4 Alarmphasen definiert. Das bedeutet: Phase 1: Es tritt ein Problem in einer Gemeinde auf; Phase 2: wieder ein Problem in einer Gemeinde, aber die Hilfsmittel von einer Gemeinde sind unzureichend, was bedeutet, daß der Bürgermeister die Nachbargemeinde anfordern kann. Bei Phase 3 gehen wir nach der Ebene der jeweiligen Provinz vor. Das bedeutet: Das Problem tritt in mehreren Gemeinden innerhalb einer Provinz auf. Und Phase 4 sind Probleme von nuklearer oder SEVESO-Art und erstrecken sich auf mehrere Provinzen, und dann ist das nationale Ebene verantwortlich für die Warnung.

Auf dieser Folie sehen Sie, wer verantwortlich ist pro Phase. Phase 1 ist die Koordination für die Gemeinde, Koordinationsleiter ist der Feuerwehrkommandant, und politisch ist der Bürgermeister verantwortlich. Auch für Phase 2 ist das so. Phase 3: Provinzebene: Koordination liegt bei der Provinz. Der Leiter ist der Direktor der Notfallplanung in der Provinz. Politisch verantwortlich ist der Gouverneur.

Ebene 4: Nationale Koordination. Diese wird sofort bei Problemen in den Atomkraftwerken tätig. Für AKWs ist der Generalinspektor vom Innenministerium verantwortlich, und für die Koordination ist der Innenminister politisch verantwortlich.

Das Prozedere bei Notfallmeldungen ist beschrieben im Gesetz vom 22. April 1988, d.h. daß jeder Störfall jedes SEVESO-Betriebs und jedes AKWs eine Meldepflicht hat, d.h. sofort die Notzentrale 100 anrufen, und in jeder Provinz haben wir solche Zentralen. Und was ich von Herrn Hacker gesehen habe, das ist das Programm, die Software. Bei uns arbeitet man wie in Deutschland, nur mit verschiedenen Vorrichtungen, die nicht dieselben sind, da die Notrufzentralen noch nicht voll eingerichtet sind, d.h. wir haben Notrufzentralen angekauft pro Modul. Das erste Modul war die Hardware, das zweite Modul ist Software, verschiedene Softwaremodule haben wir, und das ganze Prozedere läuft noch nicht so, wie wir wollen.

Dann geht eine Meldung von der Notzentrale sofort zur Feuerwehr und dem Notfallplanungsdirektor in der Provinz. Auch geht sofort eine Meldung ins Krisenzentrum in Brüssel und zum Generalinspektor des Zivilschutzes. Natürlich gehen auch Meldungen zu den politischen Verantwortlichen und auch Warnungen an die Bevölkerung. Die Übertragung von Daten zwischen zwei Nachbarnotrufzentralen geht auch via Datenübertragung.

Natürlich hat der Notfalldirektor einen Mitarbeiterstab, den Feuerwehrkommandant, den Kommandant des Roten Kreuzes, wenn nötig, Zivilschutzkommandant, die Polizei, die Volksgesundheit, Umweltschutz und andere.

Sie haben die Möglichkeit, Personal und Material anzufordern. Und dann kommen wir zu den drei verschiedenen Wegen, um die Warnung nicht allein an die Bevölkerung, sondern auch an andere Feuerwehreinheiten und Hilfsgruppen zu schicken. Zum ersten haben wir den Rundfunk und das Fernsehen. Mit den nationalen Rundfunkanstalten haben wir bereits Abmachungen getroffen. Ein Problem in Belgien ist: Wir empfangen viele ausländische Fernsehsender, z.B. niederländisches, französisches, deutsches Fernsehen usw. , insgesamt 42 verschiedene Kanäle. Das bedeutet, daß Signale, die wir über 4 nationale Rundfunkstellen an die Bevölkerung geben, nur eine geringe Chance haben, daß die Bevölkerung die Mitteilungen hört. Das bedeutet, daß wir die Signale, Mitteilungen und Anweisungen gleichzeitig auf allen Kanälen simultan an die Bevölkerung geben. Positiv in Belgien ist, daß 99% der Wohnungen einen Kabelanschluß haben, aber negativ ist, daß wir 47 verschiedene Kabelbetriebe haben. D.h. wir müssen mit diesen 47 verschiedenen Kabelanbietern das Prozedere absprechen, um die Signale an die Bevölkerung zu schicken.

Eine zweite Möglichkeit, die wir haben, ist Voice-Mail. D.h. daß wir über Voice-Mail solche Bevölkerungskreise und Gebäude erreichen wollen, bei denen es uns aus Gründen der spezifischen Anwendungen oder Bauweise unmöglich ist, mit Hilfe unserer Warnsirenen vorzudringen. Und dasselbe System sind natürlich die Warnsirenen. Die Warnsirenen geben nicht allein ein Signal an die Bevölkerung, sondern spielen auch "Repeater" zur freiwilligen Feuerwehreinheiten.

Und das dritte System besteht aus unseren elektronischen Warnsirenen. Im Laufe des Jahres 1985 wurde ein erstes Lastenheft zum Start eines Probeprojekts erstellt. Und im Laufe des Jahres 1993 wurde dieses Projekt im Risikogebiet Decenderloh entwickelt. Zehn Geräte wurden dann dort aufgestellt und zwei Jahre lang beobachtet. Nach erfolgter Bewertung der Ergebnisse wurde ein neues Sonderlastenpflichtenheft zusammengestellt, um zur Ausschreibung übergehen zu können. Ziel ist, anhand verschiedener Bildschirme der Steuerungszentrale die Möglichkeit, das System fortzuführen.

Der nach Aktivierung der Steuerungszentrale als erstes erscheinender Bildschirm ist der Sprachwahlbildschirm. Belgien ist ein mehrsprachiges Land, daher erhält der Operator die Gelegenheit, das Verfahren in seiner Sprache auszuführen. Oben an diesem Bildschirm sehen Sie eine Anzahl Datenfelder, nämlich Windrichtung, Windgeschwindigkeit, Temperatur, Datum und die Uhrzeit von DCF 77, Synchronisationsuhr in Frankfurt. Ganz unten sehen Sie den Zustand der Wetterstation, den Zustand der Empfangs-Synchronisationsuhr und Probleme bei Empfang- und Sendemeldungen. Und hier haben Sie die Möglichkeit, die Sprache auszuwählen.

Nach der Sprachenwahl und Bestätigung durch Drücken der OK-Taste erscheint ein zweiter Bildschirm. Darin sind alle zugelassenen Operatoren aufgenommen. Der Operator muß seinen Namen mit dem Finger oder einem Stift anklicken. - es ist ein Touch-Screen-Monitor - und seinen persönlichen Code eingeben und mit OK bestätigen oder abrechnen. Ist der Code richtig, dann erscheint ein zweiter Bildschirm. Pro Zentrale sind höchstens 98 Operatoren zugangsberechtigt. Dieser Bildschirm zeigt die verschiedenen Möglichkeiten einer Zentrale. Nehmen wir zunächst den linken Teil dieses Bildschirms uns vor. Dies ist die Konfiguration des Systems. Wenn wir dieses Feld anklicken, bekommen wir einen nächsten Schirm. Das ist, wie gesagt, die Konfiguration. Zunächst sehen wir ein "Field Tip", eine zentrale Auswahlmöglichkeit, es können 3 verschiedene "Zentralentipper" verwendet werden: ein CC, das ist ein Control-Centrale, dieser Tip der Zentrale ist zu allen Operationen, wie Alarmieren, Statusabfrage und Zeitsynchronisation, fähig. Eine zweite "Tipperzentrale" ist die ACA, Alarmierungszentrale. Sie ist ausschließlich zum Alarmieren fähig. Und dann haben wir noch eine dritte, das ist ein LAL und ist ausschließlich dazu in der Lage, eine Anzahl Sirenen innerhalb ihres Risikogebietes zu aktivieren. Jede Zentrale kann auch 3 bis 4 Sende-Empfangsstufen ansteuern.

Sehen Sie hier rechts oben die Anzahl der Alarmwiederholungen und die Zeitabstand zwischen den Alarmwiederholungen. Unter Alarmwiederholung versteht man die Zahl der Alarmsequenzen derselben Art, ohne daß ein neuer Steuerbefehl abgeschickt werden muß. Dann sehen Sie hier das Feld für die zyklische Zeitsynchronisation. Die genaue Zeit spielt deswegen eine wichtige Rolle beim Kodieren der Sirene, weil der Code sich alle 5 Sekunden verändert. Daher müssen sowohl die Zentralen als auch die Sirenen über identische Daten verfügen. Die Synchronisation läuft automatisch dann auch manuell. Hierfür werden die Daten von DCF 77 in Frankfurt abgerufen. Statusabfrage: Die Zeit der zyklischen Statusabfrage ist hier einstellbar. Normalerweise machen wir das alle 24 Stunden. Wartezeit auf Antwort von den Sirenen: Wenn die Zentrale Anfragen an die Sirene schickt, um den Status abzufragen, wartet sie manchmal 6 Sekunden - in diesem Fall 6 Sekunden -, und dann fragt er den Status der nächsten ab. Und nach der wird geht es wieder zurück zu ersten.

Auch die Antwort der Zeit - Verzögerung, Statusabfrage in Sekunden - ist einstellbar pro Alarm. Hier sehen Sie schon, daß wir eine Entwarnung haben. Ein 20 kW-Test, das ist allein für die technische Hilfe. Voralarm, Schutz aufsuchen, Evakuieren und nuklearer Alarm.

Wenn wir das Feld der Sirenenliste anklicken, bekommen wir diesen Schirm. Dieser Bildschirm erlaubt die Einführung der Sirenennummer sowie der Sektoren, zu denen sie gehören. Mit unserem System sind wir in der Lage, in 30°-Segmenten auszuwählen. Hier sehen Sie die Einzelnummer der Sirene. Der Code, der an eine Sirene geht, hat 16 Bits, 16 Töne. 5 Töne brauchen wir für die Sirene, die ersten 3 Töne sind dafür, die Art des Alarmtyps mitzuteilen, und dann haben wir noch verschiedene Bits zur Kontrolle der Sirene. Individualnummer: Sender-Empfänger, mit dem die Sirene arbeitet, Gemeinde, in der die Sirene steht, und der Standort der Sirene. Hier sehen Sie die verschiedenen Sektoren, Sirene Nr. 1 arbeitet für Betrieb A00, und A00 ist das Atomkraftwerk in Doule, arbeitet in Sektor 0. Sirene Nr. 2 funktioniert in 6, und so kann man die ganze Sache definieren. Maximal 50 Sirenen pro Sektor sind möglich.

Wenn wir das Feld der Operatoren anklicken, bekommen wir einen nächsten Schirm. Dieser Bildschirm erlaubt den Operatoren die Eingabe ihrer verschiedenen Möglichkeiten und persönlichen Codes. Bei dreimaliger Falscheingabe des Codes in den 1. Schirm durch den Operator wird dieser automatisch gesperrt. Seine erneute Freigabe erfolgt durch Anklicken dieses Fensters hier: "Operator freigeben". Dreierlei Operatortypen können die Zentrale bedienen. Das bedeutet, daß ein Simulator ein Operator in der Ausbildung ist. Er kann alle Handlungen vornehmen mit Ausnahme des letzten, die Alarmierung auslösenden Befehls. Wir auch einen Alarmierungsoffizier. Er kann das System vollständig bedienen, nur nicht dimensionieren. Und dann als letztes haben wir einen Supervisor. Das ist der Systemadministrator. Haben wir auch noch ein Feld für die Historie. Aber das sind nur technische Sachen. Dann bekommen wir dieses. Dieser Bildschirm gibt eine Übersicht über alle Softwareänderungen.

Wenn wir das Feld Alarmierungsfunktion oder Warnfunktion anklicken, erhalten wir die entsprechende Warnfunktion. Das ist so: Hier haben Sie die verschiedenen Alarmtypen, Entwarnung, 20 KhzTest, Voralarm, Schutz aufsuchen, Evakuieren und Nuklearalarm. Verschiedene Sprachtexte sind dabei, und es können höchstens 3 kurze besprochene Berichte in einer Mitteilung zusammengefügt werden. Die Wahl wird durch das Berühren des Bestätigungsfelds definitiv. Hier drunter sehen Sie alle Sachen, die wir schon gemacht haben. Name des Operators, Warntyp, und die 3 verschiedenen Sprachtexte. Bei Bestätigen kommen wir zu einem nächsten Schirm. Und das ist der Bildschirm, um den Betrieb, in dem wir Probleme haben, auszuwählen. Wir haben auch die Möglichkeit, individuell Sirenen auszuwählen, z.B. einen Großalarm auszulösen, d.h. alle Sirenen eines Amtsbezirks, und wenn wir eines dieser Felder der Betriebe anklicken, soll das System sofort eine Auswahl der

verschiedenen Sirenen treffen, die in dem Amtsbezirk installiert sind. Anschließend haben wir diesen Schirm. Hier können wir je nach Windrichtung und Windgeschwindigkeit eine Wahl treffen, ob sich die Warnung auf das ganze Netz erstrecken soll, oder ob mit Teilgebieten zu arbeiten ist. Wenn wir hier drücken "ganzes Netz", dann wählen wir sofort die ganze Zone. Bei Anklicken der Teilzone können wir verschiedenen Teilzonen anklicken, maximal 6. Bei 7 nehmen wir sofort die ganze Zone. Ganz unten sehen Sie wieder, was wir schon gemacht haben, Name des Operators, Alarmfunktion, Warnung Schutz aufsuchen, Teilzonen, Betrieb, Nuklearzentrale DouL.

Wenn wir das bestätigt haben, gehen wir zum letzten Schirm der Alarmierung, und um den Alarm zu schicken, sollen wir dreimal JA antworten auf die Frage von Alarm starten - ja oder nein?

Anschließend fängt die Statusabfrage an. Das bedeutet, daß nach dem Schicken an die Sirene, 94 Sekunden, nachdem die Statusabfrage von jeder Sirene anfängt. Sie sehen hier auch die Möglichkeit, die Alarmierung zu wiederholen. Klicken Sie hier, die Anzahl der Wiederholungen ist momentan zwei, und der Zyklus für Wiederholungen beträgt 5 Minuten. Das können wir ändern, wie wir wollen.

Wir haben noch eine kleine Softwareänderung gemacht. Das bedeutet, daß wir die Zeit zwischen der ersten Wiederholung und der nächsten Wiederholung ändern können. Ist die Statusabfrage beendet, dann haben wir dieses Bild. Alarmierung ist beendet - wünschen Sie weitere Informationen? Bei Klicken auf "JA" bekommen wir eine Auflistung mit allen möglichen Problemen, die die Sirenen haben. Und auch die Mitteilung, daß eine Sirene sich nicht gemeldet hat. Welche Sirene, das sehen wir im Tagebuch bei Abdruck des Rapports.

Tagebuch pflegen: wenn wir hier klicken, bekommen wir diesen Schirm. Das bedeutet, daß um 15.59 Uhr am 12. November die Nuklearzentrale ein Alarm gegeben ist Schutz gehen mit Sprachtexten 1,2, 5 via Sender 1, Lokalalarmgeber A00, Zentrale 02 für das AKW in DouL. Auch sehen Sie sofort die Windrichtung, Windgeschwindigkeit und die Temperatur und auch die gewählten Sektoren.

Ich habe schon gesagt, daß die Zeitsynchronisation automatisch läuft, aber wir können dies auch manuell machen. Und das machen wir durch Anklicken dieses Zeitsynchronisationsfeldes. Dann bekommen wir diesen Schirm. Dann klicken wir auf Senden, und die Information über die genaue Zeit, Tag, Monat, Weg geht zu jeder Sirene. Auch den Status können wir abfragen durch Anklicken dieses Feldes "Status". Dann bekommen wir so einen Schirm und können die Sirene wählen, von der wir Informationen wünschen. Sie sehen auch noch am ersten Schirm eine Meßfunktion, das bedeutet, daß die Sirene software- und hardwaremäßig so gemacht ist, daß wir verschiedene Detektoren

anschließen können. Das kann gehen von Windgeschwindigkeit, Windrichtung oder alle Detektoren, die mit einem RS485-Interface arbeiten. Das können auch chemische Detektoren sein und nukleare. Das bedeutet, daß wir mit unserer Zentrale jede Sirene und von Detektoren die Daten abfragen können.

Noch einige Angaben zur Sirene selbst: die Leistung liegt zwischen 1.000 und 1.200 Watt. Wir arbeiten im Solarbetrieb, d.h. wir haben die Sirene so konzipiert, daß wir mit den Solarzellen in den zwei dunkelsten Monaten im Jahr, das bedeutet in Belgien Januar und Februar, die Energie nehmen können für den Betrieb der Sirenen. Täglich können wir dann noch zwei Alarme auslösen und zweimal die Statusabfrage machen. Natürlich haben wir dazu noch eine Batterie von 80 Ampère-Stunden. Die Sirenen arbeiten mit 4 Verstärkern, wobei die zwei Lautsprecher mit einem Verstärker arbeiten, das Signal ist phasenverschoben, um das Problem des weißen Lochs nicht zu haben. Meßwertgeber sind möglich, und da haben wir auch noch einen Eingang für 2 verschiedene Alarmtypen, z.B. Alarm für Feuerwehr und Betriebsalarm. Es sind verschiedene Sicherungen in die Sirene eingebaut, das bedeutet: eine Sicherung schützt auch vor Einbruch. Wenn die Tür zur Sirene geöffnet wird oder die Tür des Batteriekastens oder die Solarzellen unterbrochen sind, schickt die Sirene sofort einen Alarm zu einer CC. Und nach einer Minute gibt die Sirene Entwarnung. Das bedeutet, wir haben eine Minute Zeit, um einen Knopf zu drücken, um das System zurückzusetzen. Ja, sind da noch Fragen? Und die Sirenen, das habe ich schon gesagt, spielen auch eine Rolle für die Freiwilligen Feuerwehr und Polizei.

Überlegungen und Untersuchungen zur Festlegung des Warnkonzeptes in den Niederlanden

A. Vrolijk (NL)
1998

3,800 electronic-mechanical sirens from a more operational standpoint are no longer capable of responding to the requirements of a modern industrialized society. All sirens can only be activated in groups. Therefore a selective warning process is impossible. The mechanical sirens must for technical reasons be tested live once every month which, as a result, causes an unnecessary acoustic nuisance, and last but not least the system does not meet the requirements of the so-called post-SEVESO Guideline of the European Commission. This guideline stipulates that the siren in risk areas must be able to be heard in residential areas by 300 inhabitants or more. The existing system only reaches approx. 85 percent of the population.

Given the new system and its capabilities of giving a clear view on the major changes in the new concept, it seems best to make a comparison between the most important technical, operational and functional characteristics of the old and the new systems. You can see the old types on the left side, and the new types on the right side.

Further on, activation from regional commands and control centres: the activation of the sirens will take place in a decentralized way, according to the geography of the regions of the fire service organisation. Each region has its own command and control centre for which the sirens can be started up. The authority to decide if and when the system will be used is based on a concept of delegation. The final decision on who will activate the system depends on the seriousness of the situation. The central control station consists of a standard personal computer and a printed circuit board for communication. It also provides protection against hackers and hit tours.

Activation of the system: wireless and secure. The actual activation of the sirens is achieved by a radio signal through one of the communication networks of the fire service organisation. A simplex voice radio channel in the 440 megahertz frequency band is used to make sure that the system can be activated by authorized personnel only. The whole procedure of starting up transmission and active sound production is protected.

Electronical single generation system. I can shortly indicate how the system will be worked. I said in the control and command centre of the region is standing a personal computer linked with a printer which makes clear all commands that are to be given. When a siren has been

started, a datagram is made encrypted and sent by wireless to the siren posts, which will be triggered. This can be one, this can be two, this can be all of them, this can be any number. On top of the siren post is an antenna which picks up the signal, translates a radio wave to a sound wave and makes the speakers transmit the sound so it can be heard. The system has no break supply, works on low tension, 24 volts, and is operational with 220 volts. The alarm signals are defined in the sound library, in the software of the control unit in the siren post. The signal is described in the control station, but it is not available there. The signal is selected by means of a simple code which is detected in the control unit of the siren post. Based on this code, the signal is selected from the sound library and fed to a synthesizer. The output of the synthesizer is then fed to the power amplifiers. As the signal is determined through the software, it can be changed quite easily in the case new alarm signals are defined. Perhaps a universal European signal would use individual and/or in groups/group-wise. Each individual siren could be selected for use through its unique address. Groups of sirens can be determined by means of a software feature of the control station. When such a group is selected and activated, each siren will in principle be addressed individually. However, groups of sirens may be recognized in the selection procedure. In that case, the sirens in the group will be activated by means of a single group address, speeding up the activation. This provision enables the authorities responsible for the warning of the public to alarm and instruct the citizens who are actually frightened by the consequences of an accident or disaster.

Change in persons, but not change in the subject:

Speaker 2:

In order to enlarge the possibilities to anticipate the situation or demands, the sirens can be placed on a pylons 12, 15 or 18 meters long. Or on top of a building. We call it a building position. The definite construction will be chosen in consultation with the local authorities. The new system contains about 40 regional control stations and about 3800 sirens. The cost of these sirens for this whole system is about 180 million guilders, I think in DM it is about 150 Mio. DM. They were installed from 1993 until 1997. And by the beginning of this year, our system was operational in the whole country. Now, for the interpreters, I will switch from the English to the German language.

Ein teures Warnsystem ohne Informationen für die Bevölkerung ist nicht gut. In Holland wurde das Warnungssystem gleich mit einer Informationsstrategie für die Bevölkerung gestartet. In Holland gibt es 40 Feuerwehrregionen, und jede Region hat ihr eigenes Warnsystem. Bei der Inbetriebnahme dieses Warnsystems - jeder Bezirk hat eine andere Planung - wurde auch eine Informationsstrategie aufgelegt. D.h., daß überall in der Stadt und

im Kreis diese Poster aufgehängt sind, und jeder Haushalt in diesem Bezirk hat eine Broschüre bekommen, und in dieser Broschüre steht genau, was man tun soll, wenn die Sirene geht. Das ist ganz wichtig, denn wenn man das nicht weiß, kann man schnell in Panik geraten. Auch wird in den lokalen Sendern von Fernsehen und Radio in den regionalen Fernsehsendern und lokalen Radiosendern ein Spot aufgenommen, wo gesagt wird, was man tun soll, wenn die Sirene geht. Das alles vor Inbetriebnahme des Warnsystems. Wenn das Warnsystem in Betrieb genommen ist, und das haben wir jetzt in ganz Holland, dann wird einmal im Jahr dieses Warnsystem getestet. D.h. daß in ganz Holland in der ersten Maiwoche das Warnungssystem ausgelöst wird. Bevor das passiert, wird im April im lokalen und nationalen Fernsehen und Radio wieder dieser Spot gedreht mit diesem Jungen, der in Holland sehr bekannt ist, und er sagt genau, was man tun soll. Und die Botschaft lautet: Wenn die Sirene geht, gehe ins Haus, schließe Fenster und Türen und schalte Fernsehen und Radio an. In dieser Broschüre stand genau, daß man dann auf das regionale Fernsehen und das regionale Radio achten muß. Tritt aber die Katastrophe landesweit auf, dann kann man auch den nationalen Fernsehsender anschalten, und da kommt dann auch der Bericht. Wir haben in Holland nicht nur in den technischen Bereich, sondern auch in die Informationsstrategie investiert, denn wir sind der Meinung, daß es ganz wichtig ist, daß die Leute wissen, was sie tun sollen, wenn die Sirenen gehen. Da ist einmal im Jahr eine Informationsstrategie auf nationaler Ebene, und bei jeder Inbetriebnahme eines regionalen Warnsystems erfolgt dann eine regionale Kampagne.

The new system installed last year, and the new systems will be state property, the technical maintenance remains with the main contractor, the responsibility for adequate coverage rests with the regional fire service organisation, and actual use in emergency situations will be in the hands of the local authorities, as these are first of all responsible for local disaster relief operations. After the short period of loud testing during 6 month, the system routine of monthly loud testing will come to an end and will be replaced, as I said, by the procedure of silent testing and one loud test once a year. As part of the introduction of the new system, the development of a new signal is now under consideration. We have chosen one alarm type for all kinds of hazards. We considered using 3 or 4 types of sounds, but the population would be unsure as to what is going on. So we have chosen one type of signal. The new signal must have an optimal combination of on the one hand a maximum degree of attention and on the other hand a minimum one-sided association with war and air attacks. New reliable technology, adequate coverage, and selection of use will enable responsible authorities to effectively create the warning scenario. When the siren sounds, go inside immediately, close doors and windows, put on your local radio or TV. There is a group in Holland and also everywhere in the world who can't hear. Deaf people. We are in this moment making a system for deaf people. In the Netherlands, we have 200,000 people who cannot hear, and we are going to implement a system in the obvious way to inform these deaf people in their homes.

When a siren or a couple of sirens are activated in the area of the sirens, a couple of house-installed systems in the homes of the deaf people will be automatically activated. So it is integrated in the siren system. We have to carry out 2 or 3 pilots next year in some fire-susceptible regions, and this will be adopted in the year 2000 for this system and integrated in the siren system.

We think it is a unique system. So we will be informing you continuously. Now let me tell you about the background. What is our policy to inform the population? Warning of the population in times of threatening disaster or calamity. In times of threatening disaster or calamity, the population will be alarmed by using the local, regional radio or TV station. We call them disaster stations. The population can be informed in a very short way about what they have to do, in a secure and uncomplicated way they will be told what they have to do to reduce the consequences of a calamity. The information facility has been structured at a regional level because the regional fire department is a responsible authority in disaster management. At the operational level, different appointments have been made dependent on the regional fire department. The regional fire department can break into a life program of disaster station with a prepared sound record to inform the population. Another way is that the disaster station has made a 24-hours arrangement to be stand-by to their own staff for all kinds of hazards in times of threatening calamity. The station will be asked by the regional fire department to inform the population in the very right way. This information is just mentioned for people staying indoors. To draw attention of the people staying outdoors, a new warning system, the sirens, has been designed and installed and will be operational from 1 January of this year. It is the intention of the siren sounds to move the people staying outdoors to go into their houses or other buildings and then inform them by radio or TV what they have to do. The warning system can reach approx. 90% of the population staying outdoors. In areas with sirens, sparsely populated areas and fields for day evacuation, police cars with loudspeakers will be used. Investigations on the use of sirens for reaching people staying indoors by sirens will result in a tripling of the present number of sirens to approx. 12,000 units. For operational, technical and financial reasons, this option can't be achieved. This is the end of my story.

Das Warn- und Informationssystem für die Bevölkerung in Dänemark

S. Behrens (DE)
1998

Ladies and Gentlemen,

I will tell you and inform you about the warning and information system in Denmark. As you see on the picture here, as it is in Holland, it is part of daily life when you come to Denmark. You see the sirens here on top of most of the public buildings. This is a house for ill people in the city where I live. And as they have done in Holland also, you see the sirens on top of the masts. We have some other percentages in Denmark, it is almost half and half by us. It is a part of daily life, and as for information, if you go through a telephone book, you can see the alarm signals as the first page in the telephone book. You can see the signal how it should sound, the two signals that are used in peacetime. I will go back to the signals. And there is also information to tell the people what to do if the sounds are coming up. There is also a little information what to do about rescue things and get some first aid courses etc. And we have 2 systems like you have in Holland, we have this siren system on top of the roofs and on the masts, and we have another system with the mobile sirens. I will also tell you a little more about that.

My presentation will be in 3 parts: I will tell you a little about the policy, I will tell you a little about the system design and lessons learnt. I hope you will apologize my English, there may be some mistakes, but I will try to pronounce the words if they are not correct. And the development: it was already, as I think it was in Holland also, wartime systems, but we have been travelling the way, of course like anybody else, to peace, and it has been transferred step by step from a wartime system also to be used in peace-time. So, back to policy, basically you have to think that it is a good idea to warn the population by sirens. We do it by warning against all threats. We are not telling like in the old system what was actually the threat, but we are more informing the people what to do if the sirens are coming up. And we advise on the appropriate behaviour. And then a wide part of the system also is to reduce the stain of the population in time and area. So you have to be able to use the sirens in small areas where it is necessary, and only for the necessary time. We have split it up now, so we have warning in peace-time and here you can almost see the signal, it is a more smooth signal going down, and if the threat is increasing, we have other signals I will show you afterwards. We have a psychological institute helping us by choosing the signals so that people can hear that it is getting more and more dangerous. If we are getting a little up here, you can see it means it is telling people what they should do in the situation. They should go indoors and listen to radio

Denmark. It will then be broadcast the things that the rescue units want to be broadcasted, and it will also go to the television, to the text TV there.

If we are going to the wartime system, the signal is more dangerous. It is like the sirens in the Second World War. If you hear the sound from films, you can see on here. What people are going to do, they are going to the basements, they are going to the shelters to see the best possible shelter. The most dangerous signal is the signal for toxic gases. It is very abrupt, so quick coming down, like the sirens of the police car, if you hear that, and you go indoors, the best possible shelter, and make it gas-tight.

And the last signal is the signal for free. You are going out again, and everything is back to normal.

In peace-time, we are using the 2 signals. This signal for free, and the other signal when there is some problem coming up. The system is tested once a year, the first Wednesday of May, the signal is tested live. Otherwise, the signal is tested electronically once a day in the night-time, when it is easy and cheap to go by communication. You are going out testing every part of the system, every transistor, every battery, and conditions and things like that.

In connection to the actual test of the system, we have some information costs about that. It was asked later. It was last time in Denmark about 300,000 Kronen, it was almost the same as in French francs.

About the design: it is designed, we are putting up sirens where people live of course, and we are putting up sirens up to 80% of the Danish population, and that is as Denmark is geographically 5% of the area of Denmark. And the sirens are to be heard indoors, and you have a level above the indoors, and the level is 45 dB, so you won't be wake up if you are asleep, but if you are sitting looking television, you are having conversation, you will hear signal indoor houses. You have to be independent of 230 volts, you have to have battery back-up all the way in the system, it should be easy to use, and we have learnt some lessons - it is computer-designed - about high frequency area network, and I will go back to that. If you see of the numbers of the sirens, you have here an economy profile. You see first, you have the population here, and you have 100% out here, and with the first sirens, you almost have a linear togetherness between how many inhabitants do you reach and how many sirens do you use. When you are coming up here to 80%, it is getting more and more expensive. So you have to stop at a level. We stopped at the level of 80%, and we reach cities with more than 500 inhabitants and it means, that we have to have almost 1200 sirens for the 5 million people living in Denmark. Another lesson learnt about the design is, we had a standard system with sirens put up in 15 m height, and could you get some buildings or some masts that are a little

higher, you can see here on the foil that you cover a bigger area, and it is of course a cheaper covering as higher up you go with your sirens.

Another lesson learnt about the system: when you want to warn indoors, modern houses are insulated in the walls and in the windows. So you have to go down in frequency. That was another lesson learnt. The more low frequency you can get, the better you get into the houses. I have here a foil showing the covered area versus the frequency. The first, the pilot sirens that we made were about 200 Hertz. So you cover 100%. You see here if you go to normal systems, you do not get the same coverage as you go to 200 Hertz. Then the economy comes into it also. So we have to put the sirens about 270 Hertz, because if you are building sirens for 200 Hertz, they are getting too heavy and too big, so it is also a compromise there.

We built up a module system with three horns. It can go up to 9 horns, and you see what it sounds in the distance of 1 meter, 136 dB and almost 100 km, 1.2 m high, and coverage of 1 km². It is an efficient sound. If you see here, the sound pressure level, it is almost the threshold of pain, so we have to do when we are actually testing the sirens, we have to warn all the men doing the pipelines etc. and roofs in Denmark, we are told to. Here on the other side you see the 45 dB which the signal as a minimum must be into the covered area. It is about normal conversation in a dining room.

When you put more sirens together, you get some benefit out of it. If you put them into a network, you get benefit. So they cover more. This is the computer program for designing areas with sirens. You almost see this here, because if you did not have 2, you only have an area around here to 45 dB, but if you are putting 2 or 3 together in that work, you are getting a bigger area. You can escalate it by 5 or 6 times instead of one single siren. It should be easy to use. It is of course computerized by using it. So you can see here from an exercise on the Island of Sealand the different stages of sirens in different areas. You can see some are free?, some have a guest tight ? warning, best possible warning, and so it is on this region here on the Island of Sealand. It is easy to use, you can see it here when it was first implemented. This is our minister of the Interior Biette Weis, and the golden button here showed by one of the policeman shows how to push the button. And he pushes the button on the first Wednesday of May in 1992. This is the overall system. This is a wartime system going up here. The peace-time system is the alarm headquarters driven by the police in Denmark. They have the access to a system by a portable computer, and we have the survey in the agency here with all facilities, wartime facilities and peace-time facilities. In brief, the wartime facilities is the NBC situation, the NBC analysis system from Bionutic where you can see the atomic system and the chemical system on a screen. You have the commander control unit for the computer, so you can make the sirens do what you want them to do. You have the survey, the survey once every day, and you have an air survey also to the Nato air defence system called NADS.

So you have a overall view of all aeroplanes and whatever might be in the airspace over Europe from this system here going up to a screen. And the same they have on the local wartime units here, there are 7, and they have the same facilities. They also interact with the NBC system to the military system, so they get also information from there, and they also exchange information within the system as soon as this is reported.

What are we going to do now against peace-time, further development peace-time, we have done that as already mentioned, we have reduced the number of signals to only 2, the warning and the dewatering (all-clear signal). And there is made a system with electronic post directly to the national radio so that from the alarm headquarters can write the things that they want to be put on national radio. It was to reduce the strain of the population, you have to only point out a few sirens within the municipality, so we made a system, so if you are round a chemical factory, you can pinpoint the free sirens outside the chemical factory and put them into action.

Mobile system, a system .. mobile without the covering area the last 20% you can put some sirens, some loudspeakers on top of cars and go out in those areas. I will show you a picture later on. What are we doing now, we haven't done it yet, we are trying to reduce the maintenance costs of the system. The communication is expensive and in Belgium you mentioned the system called ESPRIT. I know about it. It is built on a Tetra technology, and we are studying that so it is evident, when you have the sirens, also to try to use radio because you have the heights to end the antennas on the sirens, and then use a radio system, and then save the communication expenses for the system.

Here you see the peace-time. It is part of the bigger one I showed you before. The police having access to the system from the alarm headquarters, alarm headquarters controlling, fire brigades, controlling ambulances, and controlling the police themselves, of course, going to our command and control centre. This is a wartime centre. Another development is that those two computers are going to be one, so if the war is coming up, you take the computer from the police station and go down to the command and control centre. So you don't need to have two communication boxes, you don't have to maintain two computers. You go down in the police district and you have the municipalities here, here and here, and you have the contact to the broadcast radio here by electronic post, and when it comes up, there is a clock and a lamp in the speaker room, and they are reading up the message coming up from the police officer here, and it is sent out to the radio system. This, the radio system, which was implemented in 1996 on the 1st or 2nd of January, and it has actually been used. At the start, there was some problems. They used the sirens, but they forgot to do the emergency messages, so what does it mean, the siren sounds, everybody goes indoors, turns their radio on, and nothing is to be heard on the radio. So there is another situation here. They used it for

emergency messages get directly to radio Denmark, because on this accident here the sirens, they didn't use the emergency messages but on the last three accidents, the system has functioned. The mobile sirens : it is loudspeakers to be mounted on every vehicle.

WARNING AND INFORMATION OF THE POPULATION IN PORTUGAL

N. Ravara (P)
1998

I. INTRODUCTION

The National Service for Civil Protection (SNPC) have as general mission:

Prevent natural or man-made hazard related to major accidents, disaster or calamity, to mitigate losses and damages upon population, material resources and environment, and to relieve population any time emergency situation occur.

2. GENERAL ASSIGNMENT

Civil Protection is the activity developed by state with co-operation of citizens in order to prevent natural or man-made hazards related to major accidents, disasters or calamities, mitigate its effects and relieve people at any time emergency situations occur.

Perhaps the most important phase of disaster management is mitigation. Mitigation encompasses each and every action and measure aimed at reducing future disaster impacts.

Thus, every other phase ... preparedness, response and recovery contributes towards achieving mitigation since every improvement in each phase has a direct impact upon reducing losses of life and damage to property.

3. RELIEF ORGANIZATION

The civil protection system integrates the National Service for Civil Protection (SNCP) the Regional Service for Civil Protection (SRPC) and the Municipal Services for Civil Protection (SMPC).

In accordance with the Portuguese Administrative Organisation Portugal has 18 districts and so we have delegations of the SNPC in each of the 18 districts.

The Prime Minister is responsible for directing the civil protection and emergency preparedness response in case of disaster at national level, this responsibility belongs to the President of Government of Azores and Madeira Autonomous Regions and to the Governors of each of the 18 districts in mainland.

At local level, responsibility belong to the mayors. The National Emergency Operations Centre (CNOEPC) is activated by the SNPC soon after a risk assessment has been done by the local authorities and the decision is that the major disaster can not be solved either by the resources available and the means assigned to the Municipality or to the District where the disaster occurred, so the CNOEPC is activated to co-ordinate and control the relief operations and logistic support to fulfil all the gaps detected.

A National Disaster Emergency Response Office works round the clock at SNPC to control and manage the current situation.

At regional and local levels, Emergency Operations Centres in Districts (CDOEPC) and in the Municipalities (CMOEPC) are activated every time a major accident or disaster takes place in their respective administrative areas.

The key among priority response issues is establishing Emergency Operations Centres.

Within the EOC's all of the co-ordination takes place for effective, efficient, and equitable resource management.

This includes establishing and maintaining Communications for emergency actions like search and rescue, damage assessment; security and control; resource identification, general public information and managing.

3.1 CIVIL PROTECTION AGENTS

The main civil protection agents are the National Fire Service (SNB), the Security Forces (Police and National Guard), the Armed Forces, the Maritime and Aeronautical Authorities, and the National Institute for Medical Emergency (INEM).

To give a broad idea about the paramount rescue forces that are located all around the country, we may say that there are (36,000 fireman as a total, from which 4.5% are professionals, 1.5% belongs to private professional corps of chemical and hazardous industries and the remaining are volunteers).

The association of volunteer firemen, health services, social institutions, NGO and other volunteer organisations, public services responsible for forest and natural environmental reserves, industry and energy, transports, communications, water resources, security and relief services belonging to private and public companies, seaports and airports, are obliged to co-operate with civil protection agents already mentioned.

Several scientific and technological institutions and organisations are particularly assigned for co-operation with SNPC, such as the National Laboratory of Civil Engineers, National Institute of meteorology, Forest Institute; etc., etc..

4. NATIONAL EMERGENCY PLAN

The National Emergency Plan (NEP) provides an overview on the jurisdiction's approach to emergency operations.

It details emergency response policies, describes the response organisation and assign tasks.

It provides risk assessments such as: earthquakes, floods, forest fires, dam failures and assign tasks.

Effective planning seeks to meet the novel demands of disaster at the minimum economic and social cost. To achieve this goal it must focus upon both anticipated

community needs and the most appropriate means to responding to them. Perhaps one of the most obvious demands is the need for warning.

Taking into account that Detection and warning Systems enable timely warning to be given to the response organisations (national and international) and the public. They also enable the effects of a disaster to be monitored in order to provide updated information to enable the appropriate civil protection measures to be taken.

Warning systems have several key elements. First, the problem must be detected. Then, the risk must be evaluated. Next, a decision must be made about what to do. Finally, that decision must be acted on: only then is a public warning issued. The warning is effective only if it is clearly understood by the target public for its accurate reaction and the appropriate civil protection measures to be taken.

5. NATIONAL PLAN OF WARNING AND ALERT

5.1 Objective

So the objective of the National Plan of Warning and Alert is to establish rules regarding the knowledge of any event or the great possibility of major accident, disaster or calamity (DETECTION), dissemination of adequate measures to population (WARNING) and preparedness of the civil protection agents in a readiness state in accordance with the detected risk (ALERT).

For the three above mentioned functions the National Plan of Warning and Alert define the responsibilities of each one of the civil protection agents, and the legal authority within the three levels of the Civil Protection System (national, regional, district and Municipal) describing also how to use the adequate means of communication.

5.2 Action Concept

Any time an agent of civil protection or other specialised institution have information about any accident that have occurred or may occur, must inform by the quickest available means at his disposal, such as “112” the legal authorities with responsibility of co-ordination actions regarding the Civil Protection. Mayor or his representative, the District Governor or the Chief of the Civil Protection District and the Minister in charge of the Civil Protection or the President of National Service for Civil Protection.

In accordance with the area involved by the emergency a risk assessment must be done immediately by the legal authority in charge taking into account: the system description, the identification of unwanted events, i.e. description of accident scenarios; estimation of probabilities; damage calculation and risk analysis: e.g. individual risk, collective risk responsibility, took the decision by what means and what kind of warning shall be disseminated to the population in danger situation.

Following this action he must provide to the civil agents of his area all the information that he, in order to keep the response forces in a state of readiness for operations.

After this has been done, he must “alert” the upper authority (Civil Governor, President of SNPC or Minister in Charge) and if it is considered suitable, the neighbourhood authority of his level.

5.3 General Responsibilities

Government/SNPC

As soon as the notice arrives with the information of an accident or that a major accident disaster or calamity has occurred, a risk assessment is done, and if it at the national level the national resources level is alerted and an adequate warning is disseminated to the population.

Civil Governor/Chief of Civil Protection District

As soon as the notice arrives with the information of a major accident, disaster or calamity has occurred, risk assessment is done and in case of the district level or if the municipality does not have the necessary resources, the district resources level are alerted and the adequate warnings are disseminated to the population, with information to neighbourhood districts and the SNPC.

Mayor or his representative

As soon as the notice arrives with information of a major accident, disaster or calamity has occurred, risk assessment is done, local resource levels are alerted and the adequate warnings are disseminated to the population, with information to neighbourhood municipalities and to the Civil Governor.

Means of communication

As a general rule in actual state of social and industrial development of the country, it is not necessary at the moment existence of a specific network for the broadcast of alerts and warnings.

So there are several means that could be used such as:

- Emergency network 112;
- Fixed “SOS” sites;
- Mobile and fixed telephones and central 112;
- Communications networks of SNPC, SNB (National Firefighting Service) police and national guard and the Armed Forces.
- Public telephone network (fax-simile, e-mail)
- Non-professional radio network and the Citizen Band;
- Public and private TV stations;
- Public and private radio networks
- Other means, such as sirens and church bells.

To overcome the reluctance to act, disaster warnings must be specific about the danger, be specific about what to do, be specific about who is being warned, be issued by all possible sources, and be based on previous education.

Those who are well informed about hazards and the risks they present will recognise warning signs and react appropriately. Research suggests that they will react especially well if they know where they are to go and how to get there.

Das Warn- und Informationssystem in der Region Belgien/Niederlande/Deutschland

Dr. D. Nüßler (D)

1998

Mr. Chairman,

Following the agenda of the day, I see that there will be two reports in French language and one in Austrian/German, so I decided to speak English for the convenience of the English speaking colleagues. So that is a very tricky thing, because what I am going to show you are results in our region, and we never speak English. So my colleagues over there won't believe that.

So just to make you aware where I am coming from: The name is Euregio. It is an official European name, Euregio-Maas-Rhein, and what I saw from the paper from the General-Directorate 16, they do not even know that this region comprises 3 countries instead of 2. So here we are. That is what I understand what is a region in the European context. It is not limited at the national borders. So we have a common culture over there. This region comprises about 4 million inhabitants, and what you see there are 5 participants in our Euregio Maas-Rhein, one coming from Aachen, Germany, the other from the province Limburg in the Netherlands, and the two provinces in Belgium, in Liège and Limburg, and what they call the so-called German-speaking community which is the third official community in Belgium. And nearby, we also have Luxembourg. So you see when we say we are in the heart of Europe, it is not so far away from the real truth. Although I know that there are several hearts of Europe on the way, we believe ourselves to be one. So what do we have there? This is a problem, but also an advantage. We have several languages. In this region there is German spoken, Dutch, and we have French within a radius of about 50 km. So what we call control rooms, we have one in Aachen, Germany, we have one in Golpen for the whole region of the Netherlands, we have one in Husselt which is responsible for the province Limburg, and we have one in Liège which is responsible for the province. We used to have another one in the German-speaking part, but unfortunately they combine it with the control room in Liège, and we do have some problems in practice with that procedure. And we have in Germany another 4 control rooms depending on the responsibility in the various regions in Germany, but my brigade - you see Aachen as the red dot - they decided that we are the control room for international cooperation in that region. So what I am going to show you are more practical things that we developed. One starting point was one big exercise named Eurocat in that particular region. And one result was that it was nicely prepared, and there were a lot of very important people on the way. And when you were on the scene, you saw

that the cooperation was limited because of the language abilities. So what we said is in our working group which is now called public safety, that we have to give them tools to communicate. And when we speak about information and warning, we decided first of all it starts with the information of the control rooms with each other. If there is an accident in one part, there should be a tool to at least inform the colleagues on the other side of the border that there is something on the way which might affect their area. And we decided to give the people on scene a little help when they are really working on scene, so what you see and what I am going to show you are 3 examples. And I would like to start with one example, it is a vocabulary, a multilingual vocabulary for terms of fire-fighting, technical rescue and hazardous materials. And it is now available in German, French, Dutch and English. It is a booklet like that. Unfortunately I cannot provide you with a private copy but at least I want to make you aware that we did something in that area. And if the operator allows me that I can show you an example, by the way, it was one example which was the reason for the Queen of the Netherlands and our Bundespräsident to visit our town and to be informed about good cooperation across border. And this little booklet was given to the Queen, for example, as a present, and it was really a good award for little work done on the local level. So what you see here is the example of French and English. It is very easy, we have an alphabetical index, and this index shows you some numbers, and from the number you find what you are looking for. In this example, we want to find what is a hose coupling wrench, and it is not only the term, but it is also the explanation what it is, and when you are looking for the explanation in the other languages, you find the same figure, and you find it in Dutch, German, French etc.. So one example was Slangenwagen, so if you know a little bit Dutch but not so much, you translate it in the wrong way because it sounds similar to a German word for snake. So you can imagine that this causes confusion if you translate it, one is the Snakewagen and the other is for the hoses. So this was just a joke, but it might be reality. And if you are technical people and you are working in your business, you tend to use abbreviations, acronyms. This does not help in cross-border cooperation. We said it does not make sense to make workshops and meetings and tell each other what our acronyms are, but we have to be aware that we should explain something.

What is now on the way, and it is even more complicated for us, is the same tool for emergency medical assistance. So with the one vocabulary we started from an ISO standard, and we only added the Dutch language, and we corrected some faults in this ISO standard. It was very interesting to do that. But now we started with the booklet with the vocabulary for people working on the rescue vehicles. This is actually what we are experiencing in our region. This is a day-to-day cross-border operation. It is not a big thing, but for example my brigade, they have cross-border operations on a daily or weekly basis. So when they go a little bit further into the neighbour's country towards Liège, they face the people, especially under pressure, when they have a problem they tend to speak their native tongue, and then they speak French. And we want to train our people, our responders to be capable of speaking 3

languages fluently. In order to get good cooperation, we thought we would give them a multilingual vocabulary so they can help each other, and they can, if they need for example a special medical tool, they only need to point at the name. end of tape

The interpreters, the firms around were very interested to get that booklet. And I think with this new one that will be even more interesting, I am planning to send this booklet when it is finished in 3 languages, German, Dutch and French, to my colleague in Paris in order to check if the French version is right. You know, with French, it is sometimes very difficult, whether you speak French in Belgium, you speak it near the border or near Brussels, or you speak it in France. So we tried to be very clear and very good on that issue, and I need to find a native English speaker working in the field of emergency medical rescue who is capable of doing the job to add the fourth language, English, to that. So these are 2 tools for people on scene. Now I will show you tools for the control rooms we developed. What we call the trilingual fax sheets. You will find some copies of that. Of course, as I said before, in that region English is not a native tongue, so you won't find in your copies the explanation in English. It is the official document, and you will only find it in the three languages German, Dutch and French. So what we are going to do if we have for example a problem in our German region, we contact our colleagues in the neighbourhood at the same time. So we send special information, if we have a problem, we start with information, we start with a start page, and you always find the 2 languages that you address. So in bold you find the colleagues cross-border, and the colleague in my control room always sees what he is crossing and what he is writing in his own mother tongue. That sounds very simple, but it is very effective. And you do not need any language training. Then we give some information the control room personnel have to fill in, and they only have to cross something which they again find in their own tongue. In this example you see it is a fire in a hospital, and they just want to give the information if there are some phone calls in your region, we do have a fire in a hospital. The reaction from the control room is nothing. Because it is only an information. But sometimes it is very important to inform your neighbours. Especially, we had an example with the neighbours from the Netherlands. When we used the sirens just for the purpose of alarming our fire fighters, and at the same time they just finished their campaign for the information of the public. There was a lot of rumour at the border because they did not get any information from the radio. But it was clear, the sound came from Germany, from that side, and from that day on, if there is something going on, at least we give some information by phone or by these fax sheets: there is something on the way! So imagine that we need some help, because we want for example to evacuate some people during that incident, a fire in a hospital, what we then do is, we again send the fax sheet, and we are asking for cooperation. We are asking for help. And what we are doing is more or less the same, and you already know, only the header is different. And in this time when we were asking for assistance, first of all we give the information what is on the way, we have a fire in a hospital,

and then in this example we were asking for the capacity to have 25 people in their hospital. And you see in this indicated by the red lines, this is the first stage asking for help. So what is going on now, now we get an offer. We do that simultaneously. We do not know whether it is possible in Liège, in Husselt or if it is possible nearby in the Dutch region. So we are concentrating now on the communication with our friends in the French speaking part, and what they send back is an offer. So they say you have asked for 25 beds, and we can offer you 20. So imagine at the same time there may be more offers, coming from the Netherlands, they offer 10, and coming from Husselt, they offer another 10, so we have more than we need. What we do then, is we go back to the control rooms and say ok, we accept 10 from Liège. So that is the procedure. We did some exercise on that, and the result was, if you use these tools for the communication for the same language, it is a little bit long-lasting. But if you do it cross-border, it is very clear. So for the sake to have a clear communication, it worked out very well, and there were no misunderstandings. And just a hint: if you want to use tools like that, you need 2 fax machines. And this was an example: when we used this information when there was a big flood in Maastricht, we did not manage to get in their control room because they only had one fax machine. What we do now, we have 1 fax machine with a hidden number, even if for identification, we gave the wrong one, so sometimes people do not use the fax number which is written in bold letter, but they use the identification number which is given automatically by the machine. So we changed that also just for the sake of having one machine free every time. So we have a sending fax and a receiving fax. So this is what we experienced when we tested out that special procedure.

Please think about that. It is a very easy thing, but it is very important if you use information exchange. So one result was also, we started with one fax sheet for the medical urgency assistance, now we developed 3, one is if we need assistance on scene, normally then we need people to get responders on the scene, or we need only assistance for transport purposes. That is more likely, or what I told you, we need only capacity in the hospitals. And then we developed another four sheets concerning the response with hazardous materials, we used an additional sheet for hazardous materials also which is used in the area around the big chemical plant in the Dutch region, and we have some additional sheets concerning fire fighting or technical assistance. You all find these examples unfortunately not in English, so take my explanation as a little help on that. This is an example of the additional sheet. So you can see, if you have an accident with hazardous materials with or without fire, with or without the release of toxic substances, you can find the number, you can find the name of the product etc. I think it is very necessary, and we experienced some releases of toxic clouds in our region to have a very straightforward information strategy.

Although it sounds very simple what I told you, we need a very strict procedure for training purposes. This is an example when a fax comes in, what the personnel has to do, and we developed that also in 3 languages, and the next example is when a fax goes out, so

everybody knows exactly what he has to do, which type of fax sheet he has to use. To be honest, we need more training. Just the other days, we decided that we are now going to make a monthly exercise so it is the task of the control rooms whenever they decide to do so to conduct training, during the night etc., just to improve the use of this communication tool.

Just to show you a simple example: when you use an abbreviation for the wind direction. First you start with the problem of the abbreviation. See in the middle, you find the French explanation, and for example when you have Northeast wind and you have the abbreviation NE, and if you have North-West, you have the abbreviation NO, that is exactly the opposite of the abbreviation you have in the German and Dutch language. If you use abbreviations and you say, ok, we have a toxic release, and you use the abbreviations, there might be a real confusion, and it is not theory. It really happens. Exactly that thing happened when there was a release from a chemical plant in the Netherlands. So there is a lot of room around, and the cloud went in the other direction. Also the problem what is wind direction. Where is the wind coming from or going to? Easy things, but if you want to establish a real good working tool, think about the easy things. First you have to solve the little problems. For example another thing, one procedure which is normal is to exchange abbreviations. Now we use any F, we use a WIM and we use a MCH, so this is used as an abbreviation. The control rooms, they know what they mean, but it was very difficult to transform that, to explain it to other control rooms, what we did, we say: I tell you my problem, and solve your problem in your own behaviour. To say, ok, if we have people who are hurt for example very badly, and we have 4 of them, send me the appropriate ambulance which you use. So for example in Germany we have 3 stages. This is an ambulance, what we call it, then we have the so-called emergency medical vehicle and then a thing in combination with a doctor. And the culture and the training for example in the Netherlands is different. And the culture and the training in the Flemish speaking part of Belgium is different. So we solve the problem and say, ok, this is our problem. React with your personnel and with your technique. I think it took us more or less 3 or 4 months to find the solution. But now it is working very well. So if you think about international cooperation, do not start with terms which are supposed to be well-known. Try to translate civil protection into your mother tongue, and then think about the culture which is behind it. This is your business, you should be aware, what it means. But this would be another workshop to come to clear understanding what we really mean when we are using other languages.

So what is the future? Just to show you, the communication of hazards, for example, is this an example coming from the field of transport of dangerous goods. What they are doing, is they are using pictograms. They are using colours, and they are using shapes of the pictograms. This is a system. It is not perfect, but it is working very well. That is the lesson we learnt over there. We did a lot with facilitating communication on the basis of the language. But this has a limit. So the next step must be visualization. And this is an example where visualization works out very nicely. So this is an example where the chemical plant is, there is the wind direction and for example if you use such a shape for the warning of the public, you can do

that only by exchanging visual information. This is very easy, you do not need to say the wind is coming from that direction or the other in a special language, and the area affected is this and this and this, use pictograms, use visual tools. This is what we are planning. We have a five-year-program in our working-group, and this is what we are actually planning to do to go one step further than we already did and try to link our control rooms in the future hopefully electronically so that we can exchange visual information only.

What is on the way now is a proposal for a risk mapping project, and perhaps we will be going to have an EU-workshop in December 1999. I know that DG 11 is not very sure if this is worth doing. At least we are very convinced in our region which is not a Belgian one, which is not a Dutch one, which is not a German one, it is our European region that we need to inform our colleagues there are several risks, and the next step should be on the basis of that risk give actual information. And another thing that is now on the way is the so-called pilot project Tetra which is communication by a digital radio. It is decided by the German government that there should be a pilot region. In the Netherlands they already decided to use Tetra with the so-called C2000 standard, and as far as I know, Belgium also decided to use the Astrid project. This is also a Tetra 25 standard. What we are going to do is to check for example whether we can use this digital radio for the transfer of data. For example data which I showed you before. So perhaps at the next workshop see you in our region Maas-Rhein. Thank you for your attention.

BRANDBEKÄMPFUNG**LUTTE CONTRE L'INCENDIE****BRANDBESTRIJDING**

Anfrage demande aanvraag	Angebot offre aanbod	Angenommen accepté aangenomen	Entsandt envoyé gestuurd	Anzahl nombre aantal
Großtanklöschfahrzeuge camions citernes tankautospuiten				30
Waldbrandlöschfahrzeuge camions feux de forêts bosbrandvoertuigen				31
Schaumlöschfahrzeuge autopompe à mousse schuimblusvoertuigen				32
Pulverlöschfahrzeuge camion à poudre poederblusvoertuigen				33
Drehleiter (DL 30, DLK 30) autoéchelle (DL 30) autoladder (DL 30)				34
Löschwasserförderung über lange Strecken in Metern possibilité d'alimentation en eau (mètres) mogelijkheden voor watertransport in meters				35
Löschwasseraußenlastbehälter für Hubschrauber poches d'eau transportables par hélicoptère bluswatertank voor helikoptertransport				36
Atemschutzgeräte / appareils respiratoires / adembeschermingsapparaten				
Preßluftatmer appareils à air comprimé persluchtapparaten				37
Sauerstoffschutzgeräte appareils à oxygène zuurstof apparaten				38
Maske mit Filter masque avec filtre gasmasker met filter				39

GEFAHRGUTEINSATZ**LUTTE CONTRE L'ACCIDENT PRODUITS DANGEREUX****BESTRIJDING VAN ONGEVALLEN MET GEVAARLIJKE STOFFEN**Anfrage
demande
aanvraag Angebot
offre
aanbod Angenommen
accepté
aangenomen Entsandt
envoyé
gestuurd

			Anzahl nombre aantal
Gefahrguttrupp équipe accident produits dangereux gevaarlijke stoffen ploeg			40
Dekontaminationstrupp équipe de decontamination decontaminatie ploeg			41
Meßtrupp équipe de mesure meetploeg			42
Vollschutzanzug combinaison de protection gaz gaspakken			43
Kontaminationsschutzanzug combinaison de protection contre les radiations ionisantes stralingsbeschermende kleding			44
Leckabdichtkissen nécessaire d'obturation de fuite afdichtingskussen			45
Ölsperre in Metern barrage flottant en mètres oilbooms in meters			46
Ölbindemittel (in kg) absorbant d'hydrocarbure (en kg) olieabsorptiemiddelen (in kg)			
	Wasser eau water	47	Land sol land
Auffangbehälter (in Liter) réservoir transportable (en litres) opvangreservoir (in liters)			
	Edelstahl acier inoxydable roestvrij staal	49	Kunststoff plastic kunststof
Atemschutzgeräte / appareils respiratoires / adembeschermingsapparaten			
Preßluftatmer appareils à air comprimé persluchtapparaten			51
Sauerstoffschutzgeräte appareils à oxygène zuurstofapparaten			52
Maske mit Filter masque avec filtre gasmasker met filter			53

INFORMATION

INFORMATION

INFORMATIE



Meidung Nr. message no. melding nr.	Datum date datum	Uhrzeit heure tijd						
Ort localité plaats	UTM-Koordinaten coordonnées-UTM UTM-coördinaten							
Grossbrand incendie important grote brand	<input type="radio"/> 1	Waldbrand feu de forêt bosbrand	<input type="radio"/> 2					
Brand in Klinik incendie d'hôpital brand in ziekenhuis	<input type="radio"/> 3	Industriebrand incendie d'usine industriebrand	<input type="radio"/> 4					
Radioaktivitätsfreisetzung retombées radioactives vrijkomen radioactiviteit	<input type="radio"/> 5	Kernkraftwerkunfall accident centrale nucléaire ongeval in kerncentrale	<input type="radio"/> 6					
Gebäudeeinsturz effondrement d'immeuble instortingen van gebouwen	<input type="radio"/> 7	verschüttete Personen personnes ensevelies bedolven personen	<input type="radio"/> 8					
Bergwerkunfall accident minier ongeval in een mijn	<input type="radio"/> 9	Höhlenunfall accident de grottes ongeval in een grot	<input type="radio"/> 10					
Strassenunfall accident routier ongeval op de openbare weg	<input type="radio"/> 11	Eisenbahnunfall accident de chemin de fer spoorwagongeval	<input type="radio"/> 12					
Flugzeugunfall accident d'avion vliegtuigongeval	<input type="radio"/> 13	Schiffahrtsunfall accident de navigation scheepvaartongeval	<input type="radio"/> 14					
Dammbruch rupture de digue oambreuk	<input type="radio"/> 15	Überschwemmung inondations overstroming	<input type="radio"/> 16					
Erdbeben séisme aardbeving	<input type="radio"/> 17	Evakuierung évacuation evacuatie	<input type="radio"/> 18					
Explosion explosion explosie	<input type="radio"/> 19							
Gefahrgutunfall accident produits dangereux ongeval gevaarlijke stoffen	ohne Brand sans feu zonder brand	<input type="radio"/> 20	mit Brand avec feu met brand	<input type="radio"/> 21				
Freisetzung von Schadstoffen fuite produits dangereux vrijkomen van gevaarlijke stoffen	in Wasser dans eau in water	<input type="radio"/> 22	in Luft dans air in lucht	<input type="radio"/> 23				
UN-nummer UN-numéro VN-nummer	Stoffname nom du produit stofnaam							
Wind aus Richtung vent venant du wind uit richting	Nord <input type="radio"/> Nord	NO <input type="radio"/> NE <input type="radio"/> NO	Ost <input type="radio"/> Est	SO <input type="radio"/> SE <input type="radio"/> ZO	Süd <input type="radio"/> Sud	SW <input type="radio"/> SO <input type="radio"/> ZW	West <input type="radio"/> Ouest West	NW <input type="radio"/> ND NW
Windgeschwindigkeit vitesse du vent windsnelheid	in m/s en m/s in m/s							
Ende der Gefährdung fin de la situation dangereuse Einde van het gevaar	Datum date datum	Zeit heure tijd						

RETTUNGSDIENST 1**MOYENS SANITAIRES 1****GENEESKUNDIGE AANGELEGENHEDEN 1**Anfrage
demande
aanvraag Angebot
offre
aanbod Angenommen
accepté
aangenomen Entsant
envoyé
gestuurd
Unterstützung am Schadensort
ondersteuning ter plaatse
aide sur lieu d'accident
Personal
Personeel
Personnel

 Notarzt (NEF) [Anzahl]
 médecin (VIM) [nombre]
 arts (MUG) [aantal] _____ 80

Rettungsdienstpersonal für
Personnel d'ambulance pour

 Personen [Anzahl]
 personnes [nombre]
 personen [aantal]
Ambulance-personeel voor

Schwerverletzte blessés graves zwaargewonden	(RTW) (ambulance) (ambulance )	.....	81
Mittelschwerverletzte blessés moyens middelz waargewonden	(RTW) (ambulance) (ambulance )	.....	82
Leichtverletzte blessés légers lichtgewonden	(KTW) (ambulance) (ambulance )	.....	83

Material
Matériel
Materiaal

Blutplasma plasma sanguin bloedplasma	(in Liter) (in litres) (in liters )	.....	84
Decken couvertures dekens		.....	85
Krankentragen brancards brancards		.....	86
Brandwundentücher draps pour brûlés metalinedekens		.....	87
Verbandpäckchen pansement urgent snelverband		.....	88
Sauerstoff-Beatmungsgeräte appareils respiratoires à oxygène zuurstof-beademingsapparaten		.....	89

RETTUNGSDIENST 2**MOYENS SANITAIRES 2****GENEESKUNDIGE AANGELEGENHEDEN 2**Anfrage
demande
aanvraag Angebot
offre
aanbod Angenommen
accepté
aangenomen Entsandt
envoyé
gestuurd
Unterstützung beim Transport
Aide avec le transport
Ondersteuning met transport
Mit Arztbegleitung
Avec d'accompagnement d'un médecin
Met begeleiding van een arts
Transportmittel für
moyens de transport et/ou de traitement
transportmiddel voorPersonen | [Anzahl]
personnes | [nombre]
personen | [aantal]

Schwerverletzte blessés graves zwaargewonden	(NEF + RTW) (VIM + ambulance) (MUG + ambulance) (crash team )	..... 90
mit Hubschrauber avec hélicoptère met heliicopter		..... 91

Ohne Arztbegleitung
Sans d'accompagnement d'un médecin
Zonder begeleiding van een arts
Transportmittel für
moyens de transport et/ou de traitement
transportmiddel voorPersonen | [Anzahl]
personnes | [nombre]
personen | [aantal]

Schwerverletzte blessés graves avec zwaargewonden	(RTW) (ambulance) (ambulance )	..... 92
Mittelschwerverletzte blessés moyens middelzwaargewonden	(RTW) (ambulance) (ambulance )	..... 93
Leichtverletzte blessés légers lichtgewonden	(KTW) (ambulance) (ambulance )	..... 94
Evakuierung, évacuation, evacuatie,	z. B. Bus p.ex. bus b.v. bus	..... 95
mit Hubschrauber avec hélicoptère met heliicopter		..... 96

27. 8.10

RETTUNGSDIENST 3**MOYENS SANITAIRES 3****GENEESKUNDIGE AANGELEGENHEDEN 3**Anfrage
demande
aanvraag Angebot
offre
aanbod Angenommen
accepté
aangenomen Entsandt
envoyé
gestuurd
Krankenhausaufnahme-Kapazitäten
Capacité d'accueil hospitalier
Capaciteit van de ziekenhuisopname

Spitelaufnahme in Klinik für accueil hospitalier pour en ziekenhuisopname voor	insgesamt total totaal	Personen personnes personen	| Anzahl | | nombre | | aantal |
	100	
Marvon / inclusive / inclusief			
Intensivstation mit Beatmungsgeräten Réanimation avec appareils respiratoires Intensive care met beademingstoestel		101
Intensivstation ohne Beatmungsgeräte Réanimation sans appareils respiratoires Intensive care zonder beademingstoestel		102
Neugeborene Prenatal Pasgeboren		103
Unfallchirurgie traumatologie traumatologie		104
Neurochirurgie neurochirurgie neurochirurgie		105
Schwerverbrannte grands brûlés grandwondencentrum		106
Vergiftete victimes d'intoxication vergift ging		107
Wirbelsäulenverletzte blessures de la moëlle épinière letsel aan de wervelkolom		108
Druckkammern moyens de traitement hyperbares behandeling in ruimten onder druk		109
Behandlung radioaktiv kontaminierter Personen traitement par irradiation behandeling radiologische besmetting		110

27. 6.1997

RETTUNGSDIENST
MOYENS SANITAIRES
GENEESKUNDIGE AANGELEGENHEDEN



Anfrage demande aanvraag	<input type="radio"/>	Angebot offre aanbod	<input type="radio"/>	Angenommen accepté aangenomen	<input type="radio"/>	Entsandt envoyé gestuurd	<input type="radio"/>
Notarzt médecin arts	{ NEF } { VIM } { MUG }	{Anzahl} {nombre} {aantal}	.....	.....	.....	.....	79
Transportmittel für moyens de transport et/ou de traitement transportmiddel voor			.....	80	Personen personnes personen	{ Anzahl } { nombre } { aantal }	
Schwerverletzte blessés graves zwaargewonden	{ NEF + RTW } { VIM + ambulance } { MUG + ambulance | | crash team |		.....	.....			81
Mittelschwerverletzte blessés moyens middelzwaargewonden	{ RTW } { ambulance } { ambulance }		.....	.....			82
Leichtverletzte blessés légers lichtgewonden	{ KTW } { ambulance } { ambulance }		.....	.....			83
Evakuierung, évacuation, evacuatie, mit Hubschrauber avec hélicoptère met heliëopter	z.B. Bus p.ex. bus d.v. bus		.....	.....			84
			.....	.....			85
Spiतालaufnahme in Klinik für accueil hospitalier pour ziekenhuisopname voor			.....	86	Personen personnes personen	{ Anzahl } { nombre } { aantal }	
Mit Intensivstation avec centre de réan mation met intensive care			.....	.....			87
Unfallchirurgie traumatologie traumatologie		88	.....	.....	Neurochirurgie neurochirurgie neurochirurgie		89
Schwerverbrannte grands brûlés Brandwundencentrum		90	.....	.....	Vergiftete victimes d'intoxication vergiftiging		91
Wirbelsäulenverletzte blessures de la moëlle ép nière letsel aan de werveikulüm			.....	.....			92
Druckkammern moyens de traitement: hyperbares behandeling in ruimten onder druk			.....	.....			93
Strahlenklinik traitement par irradiation behandeling radiologische besmetting			.....	.....			94
Blutplasma plasma sanguin bloedplasma	in Liter | in litres | in liters |		.....	.....			95
Decken couvertures dekens		96	.....	.....	Krankentragen brancards brancards		97
Brandwundentücher draps pour brûlés metalinedekens		98	.....	.....	Verbandpäckchen pansement urgent snelverband		99
Sauerstoff-Beatmungsgeräte appareils respiratoires à oxygène zuurstof-beademingsapparaten			.....	.....			100