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Diagnosing Crisis Management

Presentation of an Instrument for Diagnostic Observation and Inquiry into Peacetime Social Crises

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Diagnosing Crisis Management. Presentation of an Instrument for Diagnostic Observation and Inquiry into Peacetime Social Crises

Abstract (not more than 200 words)

A systematic collection of information in a crisis situation, as well on the national as on the international crisis management arena, is considered to be an advantageous method to enhance experience in the crisis management area. To render this information collection effective, a method by which the course of events in crisis situations can be systematically recorded and classified, is required.

For this purpose an inventory is developed which enables systematic classification, interpretation and analysis of information in crisis situations comprising e g severe infrastructural disruptions and disruptions of computer systems, nuclear accidents, dangerous goods' accidents, floods, migration flow, epidemics and terrorism.

The inventory is designed as a diagnostic questionnaire with complementary guidelines for observation in crisis situations by which certain factors of decisive importance in crisis management can be studies at two different levels of responsibility. These key factors are to be found in the areas of operative and strategic crisis management, coordination/communication, information processing and media handling.

The inventory in its actual form is in the shape of an all-round pool of questions and guidelines and is designated to be applied in most kinds of extraordinary events in society irrespective of their onset. The inventory is thought to be used by observers when studying crisis management structures during the different phases of an event. Depending on the selected object of study, the observer can choose from the inventory the total or a limited number of questions to be put to representatives at different crisis management response levels. By a selection of questions and guidelines, the impact of the total range of key factors or of a separate key factor on crisis management and crisis response structures can be studied.

Keywords Crisis management, extraordinary events in society, crisis response inventory, diagnostic instrument, questionnaire, key factors, command, coordination, communication, information processing, media handling.

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Rapportens titel

Att ställa diagnos på hanteringen av svåra påfrestningar på samhället

Sammanfattning (högst 200 ord)

En undersökningsdesign som möjliggör att information kan struktureras, tolkas och analyseras på ett systematiskt sätt i samband med hanteringen av svåra påfrestningar på samhället i fred (kriser) har utvecklats på FOA, Avdelningen för Försvarsanalys.

Denna design har givits formen av ett diagnostiskt observations- och frågeinstrument med vars hjälp ett antal faktorer kan studeras, vilka anses ha stor betydelse vid hanteringen av samhällskriser. Dessa faktorer är grupperade inom områdena ledning, samordning, informations- och mediahantering.

Instrumentet är utformat för att studera krishantering på olika samhälleliga aktörs- och ansvarsnivåer och består av frågor och underlag för observationer som belyser de ovan nämnda faktorerna. Observations- och frågeinstrumentet kan anpassas såväl till den typ av krissituation som man vill studera som till krishanteringens olika faser.

Om instrumentet används i sin helhet kan samtliga faktorers påverkan på krishanteringen studeras. Om man vill studera hur någon eller några av faktorerna påverkar krishanteringen i en specifik situation eller hanteringsfas, kan delar av instrumentet användas.

Nyckelord

Svåra påfrestningar på samhället i fred, kriser, krishantering, diagnostiskt instrument, frågeinstrument, nyckelfaktorer, ledning, samordning, informationshantering, mediahantering, observationer, frågebank, roll- och ansvarsfördelning, aktörer.

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CONTENTS

DIAGNOSING CRISIS MANAGEMENT: PRESENTATION OF AN INSTRUMENT FOR DIAGNOSTIC OBSERVATION AND INQUIRY INTO PEACETIME SOCIAL CRISES

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INTRODUCTION

This study has been undertaken in order to develop a method by which information concerning the management of peacetime societal crises can be systematically recorded, analysed and interpreted. Such a method has been developed in the form of an instrument for diagnostic observation and inquiry. With the aid of this instrument, a large number of factors, recognised as being important for crisis management[1], can be studied and interrelated. These factors have been grouped into the three areas of leadership, co-ordination and information (including media relations) (t'Hart, 1996). The instrument has also been designed to study crisis management at both operational and strategic levels. Indeed, it is the dynamic relationship between these levels which is an important characteristic of the crisis management process.

BACKGROUND

The type of situations referred to in the Swedish government proposition "Preparedness for Severe Peacetime Disturbances in Society"[2] (1996/97:11) can involve serious and potentially lasting consequences for society (see Appendix 1). Such types of events are not frequent in Sweden. Indeed, the historical lack of experience concerning severe peacetime disturbances in society makes for considerable uncertainty as to the actual quality and appropriateness of Swedish crisis preparedness. This concerns not only peacetime national crises, but also the traditional "defining case" of a major societal crisis in Sweden, i.e. a military invasion.

This means that it is has been difficult to build up experience of how to successfully manage such types of situations. Historically, such experience would be the natural point of departure for designing training programs and developing gaming techniques for responsible authorities at different societal levels. However, properly designed, gaming and training can compensate for the lack of actual experience. Also, knowledge about how people react and how decisions are made in critical situations in other countries can partially compensate for the lack of ones own empirical knowledge. This concerns not only a basis for training and gaming, but for society's capacity to manage crises in general.

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[1] Crisis management is a broader concept than crisis response.
[2] In this report, the term "severe peacetime disturbance" is synonymous with "peacetime crisis".

Through the systematic gathering of information on the course of events of both national and international crises, valuable experience can be gained on how different crisis management structures, systems and processes have faired in different situations. This, in turn, would involve the development of preparedness plans for the quick and effective collection of relevant information during the acute phase of a crisis. Indeed, international research groups have, with considerable success, used similar methods (t'Hart, 1991).

For such a method to be effective, one would need a conceptual framework for identifying variables and structuring empirical data, and a concrete procedure by which relevant information can be compiled in an effective way. This could take the form of a diagnostic instrument with which crisis management processes can be studied *in situ*.

Starting Point for the Study

In 1997, FOA prepared the report "Preparedness for extraordinary Events in Society – the division of Role and Responsibility in Four European Countries" (Svensson et al., 1997). The study dealt with prevailing attitudes towards preparedness planning, as these were expressed by representatives for chosen administrative organisations within the respective countries[3]. The study did not deal with *how* these attitudes are applied or *how* they function during actual crisis situations.

The purpose of the study was to show the influence of certain factors on crisis management, both on operative-functional levels and socio-political levels, during acute societal crises. The study was inspired by the research work undertaken at the University of Leiden (t'Hart, 1996). One of the main conclusions from this study was that leadership, co-ordination, information processes and media relations are central critical factors influencing how crises are perceived, experienced and responded to. Conversely, the nature of the crisis situation, its origin and scope -- and the degree to which it can be managed with the resources available -- are crucial for determining whether the situation should be managed from an operational-functional or a socio-political perspective.

In the wake of the report, a follow-up study was suggested involving the systematic analysis of how different national and international structures for crisis management actually function in real emergency situations.

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[3] The Finnish Ministry of the Interior; the French Sécretariat Général de la Défense Nationale; the Réseau National de Santé Publique; the British Home Office; the German Bundesamt fur Zivilschutz; the Lagecentrum; the Robert Koch Institut

METHOD

Theoretical Background to the Diagnostic Instrument

The situations characterised by the Swedish Parliamentary Proposition (1996/97:11) are managed primarily at the local municipal level in most countries. Responsibility for the operative level of crisis management rests, in general, with municipal rescue services and fire departments, while the responsibility for strategic leadership rests with municipal (political) authorities or their equivalents, at the next higher level of administration.

Paul t'Hart, of the University of Leiden, maintains that responsibility for crisis management at the *strategic level* not only concerns the operational-functional aspect of crisis management, but also the socio-political context. The strategic aspect of many crisis management structures is synonymous with political structure, involving political decision-makers and political advisers as principal actors, whereas actors "in the field" represent operational levels. According to t'Hart, crisis management is often portrayed simply as a collection of technical problem solving activities, whereas in many cases it deals heavily with questions concerning power structure, legitimacy and political communication.

 t'Hart has studied a number of situations which can be characterised as severe peacetime disturbances, involving severe societal stress, and has developed a conceptual framework based on the insight that crises are dealt with differently depending on the predominant disposition of the primary actors involved – i.e. whether this disposition is mainly operational-functional or socio-political in nature. Through his studies he has also found that different management and command structures, leadership styles, co-ordinating activities and relationships with the media during crises are also dependent upon which of these dispositions are predominant.

An operational-functional disposition is primarily directed towards the technical-functional aspects of command, coordination and information. This can be interpreted as the "world of the operative manual" – for those responsible, a necessary but hardly sufficient aspect of crisis management. Often, if not invariably, in order to avoid political fiasco, the socio-political disposition of the crisis manager must also express itself. According to t'Hart, this can be achieved by making the political and symbolic aspects of command and coordination explicit and distinct, and by crisis managers displaying responsible, confident roles in their dealing with media and other intermediaries. All crisis management must be seen from this dual perspective, says t'Hart.

An important feature concerning the dynamics of crisis management processes, which does not yet seem to be properly accounted for, is the shift in responsibility or authority between operational and strategic levels – so-called upscaling and downscaling. t'Hart et al. (1993) point out that the distinction between strategic versus operational crisis management, and the levels at which these function, is often neglected. One way to distinguish between these levels is to define the hierarchic, geographical and political positions that decision-makers occupy, which in turn are important for how such decision-makers perceive and understand the situation. Dynes (1970) and Quarantelli (1973) express this by saying "the position gives the perspective".

During an acute societal crisis, one of the most common reasons for a shift in responsibility and authority from a more local to a higher administrative level is a lack of technical and material resources. However, in certain cases, situations which are characterized as threats to national security will tend to be dealt with from the highest political level, e.g. in such cases as terrorism and mass migration (Svensson et al., 1997).

The mechanisms which induce higher organizational levels to intervene in the crisis management process have been the object of earlier studies. Such studies have indicated that higher organizational intervention tends to occur when decision-makers lack options in controlling the course of events (t'Hart et al, 1993). What has come to be called the "paradox of up-scaling", a term coined in the aftermath of the floods in the Netherlands 1993 and 1995, is an example of the opposite process. In spite of being monitored at the time, higher administrative levels hesitated to intervene in order not to give the impression of directing mistrust towards local actors and authorities and their way of handling the crisis (Bezeuyn, 1996).

There are even examples of cases in which operative levels have spontaneously taken control of crisis management, or, alternatively, have been formally delegated the responsibility from a higher administrative level. The mechanisms lying behind such processes are assumed to be associated with organizational form (t'Hart, 1991).

In the examples cited above, it is not entirely clear to what extent the upscaling and downscaling processes were caused by a lack of technical and other material resources. Neither have other possible reasons for why crisis management shifts from local to central authorities – and vice verse – been treated adequately.

The diagnostic instrument to be presented here is based upon the conceptual framework presented above. It is designed to be useful for studying how such central factors as command and leadership, co-ordination, information and media relations, as well as different actors' perceptions of the crisis situation, can influence crisis management procedures.

In the instrument, these factors are made operational by means of a protocol, designed as a diagnostic questionnaire and including guidelines for observation. The questionnaire and guidelines were derived from international publications documenting different kinds of crises in society (see References). The documented studies include both empirical and theoretical studies of crisis management. In this context it is important to emphasise the broad nature of the literature studied. The protocols must be able to be employed in a broad spectrum of situations – i.e. for many types of crisis, regardless of cause.

Areas of application

It would be of great value if trained observers, in place during national or international crisis situations, could use such a diagnostic instrument in order to study the structure and dynamics of the crisis management process in its particular organisational and political context.

A large, structured bank of questions and guidelines for observation are presented in the instrument. However, the questions and guidelines are designed to allow the instrument to be adapted to the specific situation studied, and to the particular phase of the crisis management.

As a whole, the instrument can be used to study the general, overreaching effects of the cited central factors: command/leadership, co-ordination and information/media relations. However, it can also be used to focus in on certain specific aspects of the crisis management process – aspects which, in a particular situation, might be judged to be of crucial importance for the outcome of the crisis. Examples of these could be the structure and composition of the decision-making group, the information process or the role of the media.

The instrument should also make it possible to examine what may seem to be superficial aspects of the crisis management process, but which nonetheless might be important. For example:

- Crucial changes in the course of events decisive to the dimensioning of resources
- Crucial changes in the roles and domains of responsibility (agencies, politicians, media and the public)
- Robustness of pre-crisis decision-making structures in face of actual crisis events.

Construction of the diagnostic instrument

The questions and guidelines for observation are divided into four sections. The sections which treat Management/Command (1), Co-ordination (2) and Information (3) have been divided into two sub-sections: Form and Content. With Form we mean organisation, whereas Content concerns what it is that is being organised.

Section 4 treats the category Media and Media Relations. This category is divided into 1) Media and the Authorities, 2) Media and Media Sources and 3) Media and Media Consumers.

Each of these categories is further divided into subcategories which are designated by letter codes (e.g. MLFF Management and Leadership Functions (Form); MPF Management and Planning (Form); MCSF Management/Command Structure (Form), etc.). The questions under each subcategory are numbered, which facilitates the systematic collection and structuring of information.

There are considerably less categories and questions in Section 2, which treat the Form and Content of crisis management co-ordination. This is because the concept of co-ordination often has to do with how the factors management/command and information processing are organised. This has made it difficult to formulate questions which, in an unqualified way, can be assigned to the categories Co-ordination (Form) and Co-ordination (Content). For this reason, there are a number of questions in the category Management/Command which are closely related to Co-ordination. The author has, however, attempted to subcategorise that part of the literature which illustrates co-ordination into horizontal and vertical co-ordination respectively.

Most of the questions relate to the functional dimension of crisis management. On the other hand, t'Hart (1996) maintains that the political dimension is primarily expressed through

questions concerning how authorities display leadership and manifest empathy and compassion. There are fewer questions of this type, but it is hoped that they will, nonetheless, help indicate to what extent the political dimension influences the crisis management process. The actual interpretations of the answers given to the questions are, of course, context dependent, both culturally and organisationally. Such contexts must studied carefully, not the least in order to reveal varying social-political attitudes.

The questions and guidelines for observation are found in Appendix 2.

Development and future areas of application

After they have been tested on actual crisis situations, the diagnostic instrument's questions and assertions should be reviewed and evaluated by responsible crisis managers with experience at relevant crisis management levels – this in order to increase the stringency of the instrument. There are also plans to employ a computer aided, non-quantitative evaluation instrument developed by the National Defence Research Establishment (CASPER: Computer Aided Scenario and Problem Evaluation Routine; Ritchey (1998)). The type of diagnostic instrument presented here can have a wider area of application within crisis management with the help of the type of structural analysis which CASPER allows.

THE LITERATURE

The literature used in developing the instrument consists of proceedings from conferences, articles in Swedish and international professional journals, monographs and edited collections of articles. A list of references is presented for each section. The authors of those materials, which were used in order to construct the diagnostic instrument, have varying degrees of experience in the area of crisis management. Some have had personal experience in the field while others have worked more on the theoretical level.

This study begins with a presentation of the concept *crisis* and *crisis management*. The following section deals with how crisis processes can be studied and what we can learn from such studies. Finally, the literature, which has been used to formulate the diagnostic questions and guidelines, is presented along with the questions and guideline themselves.

What is a crisis?

In the context of this study, *crisis* is a general term for an extraordinary series or course of events which put severe stress on society. Crises are commonly viewed as constituting a serious threat to the basic structures of the fundamental values and norms of society, which, under time pressure and uncertainty, necessitates making critical decisions (Rosenthal, et al., 1989).

At present there is neither a general theory of crises nor a general theory of crisis management, although we can begin to discern the beginnings of a theoretical framework for the latter.

What is common to all crises?

What is it about a crisis that makes those who are involved experience it as such? What are the basic elements – or combinations of elements – which define the crisis experience and which allow the involved actors to agree that it is, indeed, a crisis[4]?

The first step in creating a theoretical framework for the concept of crisis – as well as for crisis management– is to carefully define the concept. However, here one is up against the problem that certain events, which one person or group experiences as a crisis, are not necessarily experienced in the same way by other individuals or groups.

I the NATO/NACC/PfP Generic Crisis Management Handbook (1997) we find the following:

> "Whichever definition may be preferred, it is important to recognize that crisis, like beauty, is very much in the eye of the beholder. A crisis for one party may not be a crisis for another".

The research community has defined crisis as a type of collective stress situation akin to catastrophes, but at the same time can differ from a catastrophe in that involved actors can very well be in conflict with one another. And again, the way individuals and groups experience a crisis depends on situation and position both organizationally and politically (Dynes, 1970; Quarentelli, 1973).

Even the concept of *risk* can mean completely different things to different people. Individuals experience threats – a source of risk – or a risk situation from the point of view of their particular, subjective experience. This experience includes *i.a.* background, group affiliation and organizational role (Lajksjö, 1996).

Rosenthal *et. al.* (1989) state that, for most stable social structures, crises are regarded as more or less improbable occurrences and – above all – are unexpected and definitely not desired. In face of the fact that the improbable can, in fact, occur, citizens put their confidence in judicial procedure, and the technical and organizational resources that society has at its disposal in order to prevent accidents occurring or conflicts from escalating. On the other hand, Britton (1996) maintains that since major accidents are rare, society runs the risk of not being able to adapt its resources to handle such occurrences. This, in turn, creates the conditions for accusations of indifference and incompetence being made against authorities when such accidents do occur.

Society's responsibility for crisis management

Major accidents thus give rise to new and immediate needs, which cannot be provided for without society taking extraordinary measures. Under such circumstances, the public demands increased efforts in the form of collective protection and higher standards of security, as well as expecting authorities and rescue services to show greater concern for public needs. This, in

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[4] A representative for NATO's Civil Emergency Planning Directorate stated bluntly: "When we collectively agree that there is a crisis, then there is one." (Personal communication)

turn, creates a social climate in which authorities and various levels of government are constantly reminded of their judicial and ethical obligations to protect the citizenry and provide society with effective emergency planing.

t'Hart (1996) maintains that catastrophes and crises can never be regarded solely as "acts of God", for which no one – neither individuals or organisations – can be held responsible. He also contends that there is no such thing as a purely "natural catastrophe" or "natural disaster", since the amount of damage caused by such disasters depends to a large extent on the quality of society's emergency preparedness and planning. Society can, and must, be held responsible for events which affect its citizens, and responsibility for limiting the consequences of such negative events always rests with society. This may seem to be a somewhat controversial assertion, but t'Hart means that the consequences of crises and disasters – regardless of their origin – can always be reduced with suitable planning and management.

The floods in Holland in 1993 and 1995 are good examples, which t'Hart calls "policy fiascos" instead of natural disasters. Why, for instance, was planning done only for preventing the flooding of Holland's coastlines, while ignoring – or at least downplaying – the threat represented by rivers?

Toft & Reynolds (1994) maintain that all disasters display causal relationships, and that these relationships can be identified and, therefore, anticipated or prevented. The utmost consequence of this observation is that we must always be able to define society's responsibility for both emergency planning and emergency response to societal crises.

Determining relevant causal relationships and defining organisational responsibilities requires meticulous studies and involves substantial costs. t'Hart asserts that the challenge in coming to grips with this problem lies in integrating and balancing the two primary perspectives concerning crisis management – the *operational-functional* and the *socio-political.*

Managing crises

Crises require a series of decisions to be made. Characteristic features of the context of the decision-making process during a crisis are uncertainty, time press and that important, basic values are at stake.

The term crisis management is generally employed as an overall concept for both the physical and the symbolic dimensions of the crisis, as well as the evolution of the crisis process itself.

According to Pauchant and Mitroff (1992), crisis management can be divided into three types: *proactive*, *reactive* and *interactive*. Preparedness planning, preventive measures and mitigation constitute proactive management. Reactive crisis management is carried out after a crisis has developed and is focused on reducing damage and facilitating recovery. Finally, interactive crisis management aims at maintaining a continual learning process based on earlier experience with crisis situations or as part of preparedness planning. The term *active* crisis management refers implicitly to the actual acute phase of crisis management.

How can crises be studied?

Every crisis is unique. The literally infinite variety of different possible situations must be dealt with by taking into consideration a great many variables and characteristics. This, in turn, demands co-ordinated decision-making and high quality operational integration.

Only in exceptional cases are crises 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 archetypes by which different types of crises can be managed – regardless of their immediate cause or origin. To be able to identify the common characteristics of different types of crises would be of unquestionable value for actors in all sectors and levels of society.

Crisis management can also be studied through creating experience by proxy, so to speak. This can be accomplished by creating fictitious crises and scenarios in order to test the quality of already existing crisis management planning, including the actors associated with this planning.

Scenarios provide decision-makers with animated, graphic portrayals of events with can aid in the analysis of possible threats and risks. The use of scenarios as an instrument for developing and training crisis management skills is not uncontroversial. Scenario builders have been criticised for not being especially good problem solvers. Indeed, Dynes (1996) maintains that crisis management is not a question of formulating problems but of developing structures in order to solve problems.

Provided that scenarios represent events which can occur, with at least some measure of likelihood, they can be powerful instruments for studying the conditions for crisis management in the present and near future, as well as the consequences of different crisis management approaches and dispositions.

Aside from scenario and gaming techniques, the usual way to study crisis situations is to make case studies *in situ*. This is most useful when investigators wish to come into direct contact with the crisis environment and learn first hand about crisis management structure and procedures. However, when investigating crisis management procedures outside one's own native country, we must take into consideration institutional and administrative cultures – i.e. specific "rules of the game" and cultural expectations – which may differ radically from our own. This may affect the reliability of observations and, in turn, influence the interpretation of both the course of the crisis and the crisis management procedures themselves.

In order to gain insight into others' crisis management thinking, the interviewer/observer must have access to appropriate "tools" which will minimise the errors which can arise when observations are made by single individuals or small groups of individuals during a limited time period.

The possibility of developing a general system for crisis management – which does not necessarily aim at anticipating all possible courses of events and all the potential problems that can arise – has been discussed for many years within crisis management research (Dynes,

1996). One reason why such a system has not been developed is because of the limited possibilities of making generalisation on the basis of individual, specific crises -- each crisis situation being unique.

There is general agreement that societal crises can, in many ways, be treated in the same manner, regardless of origin. What is required is a method of identifying the common properties of these crisis situations. Developing a generally applicable system for responding to such situations is, according to Dynes (1996), the key successful crisis management.

What can we learn from the management of crises?

The rare occurrences of major societal crises in Sweden during the past several decades, fortunate as this may be, also means that there have been few possibilities for gaining first hand knowledge and experience of national crisis management. In order to limit the possible consequences of such events described in the Swedish Parliamentary Proposition (1996/97:11), experience both domestically and from other countries concerning such events must be systematically collected. However, Leivik Knowles (1997) points out that one must be careful when attempting to apply knowledge of past cases to future cases. Dynes (1970) and t'Hart (1996) maintain further that even if individuals often react much the same to crisis situations, the organisational, political and cultural contexts which individuals find themselves in vary significantly. The authors warn against generalising findings from one social context to another.

Nonetheless, learning of others' experiences of crises and crisis management can give returns in the form of lives saved, reduced material damage and decreased social trauma. Stern (1996) maintains that organisations, or specific organisational levels, continually fail to learn the lessons of earlier experience and to effect appropriate reforms on the basis of this. Why do some crises lead to organisational learning while others do not? Stern answers this question by making a distinction between two types of learning: "learning that" and "learning to".

"Learning that" refers to the process in which the individual's representation of the social or material environment is changed by the experienced event, i.e. the individual gains new knowledge through experience. "Learning to" refers to an increased capacity to achieve desired results, i.e. learning which helps develop new skills or methods. These two types of learning are closely related and help us understand causal relations. Gaining knowledge about why something happened (learning that) is a basic prerequisite for being able to intervene in a process in order to achieve different results in the future (learning to).

Although many are pessimistic as concerns the capacity of complex organisations to learn from experience, Stern points out that crisis situations create myriad possibilities for learning – for example, introducing new policies, which is difficult under otherwise "ordinary political circumstances".

This presentation of the research community's view of what a crises are, how they can be studied and what we can learn from them, represents a theoretical background to the diagnostic instrument to be presented.

LITERATURE PERTAINING TO SECTION 1: MANAGEMENT AND COMMAND – FORM

Subcategories: MCFF Management and Command Functions
MPF Management and Planning
MCSF Management/Command Structure
MTEF: Management and Training/Exercises
ICCF: Integrated Command and Co-ordination

Cahill (1996), who has firsthand experience of operative crisis management in the British Fire Brigade, maintains that successful crisis management depends to a large degree upon how information and resources are managed within the first critical 20 minutes of the acute crisis event. It is critically important that resources – both personnel and equipment – can be utilised effectively with this timeframe. Cahill states that the successful management of major accidents should be organised as follows:

On the operative level, an emergency service centre is usually the first organisation to be informed of a major accident. It is most important that the rescue unit which first arrives at the scene immediately report back to the centre. The report should include the following:

- Causalities: number of dead, injured and uninjured.
- Type of accident and its effect on the surrounding environment
- Precise geographical location
- Immediate and potential risks
- Available access roads for vehicles and suitable deployment areas
- Available emergency equipment
- Available personnel
- Information channels to other involved units
- The organisational possibilities of documenting measures taken

Within the first 15 minutes, the responsible rescue service commander should establish a *strategic* level emergency command unit. This *strategic* unit's primary role is to reduce the burden on the *functional* rescue command, so that this command can carry out its operative role.
Generally, as in the example above, responsibility for operative rescue command rests with the rescue and fire services, while municipal leadership is responsible for the strategic level. If the emergency cannot be managed at these levels, the command is taken over at a higher level.

The administrative levels involved here can vary substantially, depending on the nature of the emergency or crisis. Critical factors, which would involve higher administrative levels, include the need for extra resources and/or the degree to which the crisis involves "political factors" (Svensson et al., 1997).

In this context, the judicial basis and prerequisites for crisis management vary significantly between nations because of differing judicial-administrative structures. Another source of variation is the *type* of crisis situation. If the emergency situation is associated with intent or antagonistic acts, then special legislation can be applied.

In France, for example, special legislation is applied in crises associated with terrorism. In other juridical structures, e.g. in the Netherlands, certain types of major emergencies – catastrophes – can result in a "state of emergency" and/or a "catastrophe area" being declared. An example of this was the aircraft accident in Amsterdam in October 1992 (Bijlmer), in which a state of emergency was declared and Amsterdam's mayor given full authority to make critical decisions at both the operative and strategic levels (Rosenthal et. al., 1994).

In certain social systems, the official legal and administrative definition of a crisis is based on conditions which a well ordered, hierarchically constructed system implies. In this context, in case of emergencies or disasters which are not covered by the official definition of such, central governmental levels may sometimes attempt to avoid taking responsibility for the matter, even if it is clear that national values are at stake (t'Hart, 1996).

The fact that crises are defined differently both by different nations and in different regions can create considerable tension. These definitions also reflect differing public interests, as was the case with the Chernobyl accident. Here the problem was to create a functioning structure out of a multiplicity of administrative reactions (Enander, 1996).

According to researchers at Leiden University, experience from floods in the Netherlands (1993; 1995) shows the importance of the management and command structure being represented by a single person. The reason given for this is that the public needs to be able to associate the command and management function with a clearly identifiable leader or, if one will, a central function (Bezeuyn, 1996). It is further maintained that, at first sight, decision-making in crisis situations cries for centralisation, that is, the concentration of authority around a small group, a strong leader or a central government function. This central function would then be the hub, with regional and local authorities making up the periphery (t'Hart, 1993).

Apparently, the centralisation or concentration of authority is seen by many to be the functional answer to the demands which are made in critical situations. To define a societal crisis as a local matter would seem to be contrary to the general public's conception of a crisis, especially since both national and international media tend to make such events their own property. Crisis management at the national level is complicated by the fact that a central government is not automatically regarded as that level of authority which should lead the other relevant actors (ibid).

If one widens the analytical perspective of crisis management to include operative command of *international* crisis situations, even more complex questions arise -- not the least of which concerns judicial relationships. t'Hart et.al. (1993) go on to say that from a purely functional perspective, the advantages and disadvantages of centralisation are clear. Strategic centralisation, for example, attempts to increase the control which higher administrative levels have over operations, while increasing the risk that decision-makers become overloaded. Such overload can drive decision-makers to various types of inappropriate behaviour. According to the authors, the centralisation and concentration of decision-making reduces problem-solving competence.

Quarantelli (1988) maintains that representatives of official authorities are not necessarily the most competent or qualified actors to manage a crisis, and that centralisation or concentration of decision making can in fact lead to decreased efficiency and/or increased confusion. When emergencies occurs, he adds, those with organisational responsibility should be more inclined to ask questions than give answers, make request rather than give orders, and delegate and decentralise rather that concentrate decision making.

As was earlier cited, t'Hart et al (1993) state that the important distinction between crisis management leadership at the strategic and operative levels is often neglected. There are clear differences in actor-perspectives between these two levels. This is due partly to the actors' different physical and social distance to the emergency at hand, and partly to their different degrees of knowledge concerning operative and socio-political environments. Although the authors consider actions at the local level as the key to successful crisis management, they emphasise the importance of the strategic level having adequate knowledge about operative conditions, as well as the general public's conception of the situation.

Bezeuyn (1996) maintains that the successful management of the floods in the Netherlands in 1995 was based on experience of earlier flooding in 1993. This earlier experience resulted in the development of well-structured training programs by and for the key actors involved -- very probably at the local level.

On the other hand, Edward Borodzicz, a researcher at the University of Leicester (UK), reports that highly structured response plans, as instruments of crisis management, have been controversial in Great Britain. He points out that one of the most difficult tasks is actually putting such a detailed and highly structured response plan into action (Borodzicz, 1996).

LITERATURE PERTAINING TO SECTION 1. MANAGEMENT AND

COMMAND - CONTENT

Subcategories: LC   Leadership
                         DMC Decision making
                         IL/C/CC Integrated Leadership/Command/Co-ordination

Societal crises can be regarded as various types of acute, negative events which share certain key characteristics: a serious threat to life, property and/or social values; a high degree of uncertainty; and time pressure. Thus, point out t'Hart et al (1993), it is hardly surprising that predictable patterns of behaviour from the part of governments and government authorities can be discerned. These reactions point, in turn, to a growing preference for centralised decision-making.

Centralisation has become a cornerstone both concerning crisis management theory and associated administrative frameworks. However, the issue is not uncontroversial. The notion of centralised decision making is based on three interrelated phenomena:

- The concentration of authority to a limited group of actors
- The concentration of decision-making authority to more central governmental levels

- The aspiration for strong leadership

Centralised decision-making in major emergencies and crises has become more common during the past decades. In such a system, decisions are made in small groups consisting of a few leading managers and their closest advisers.

The concentration of decision-making activities to a relatively small group of managers, in close connection with the operative environment, can have a dangerous consequences during a major crisis. In highly centralised systems, interruptions in one part of the system can have a cumulative effect. Chain reactions may be set off which the rest of the system can have great difficulties in controlling[5]. Centralised operational management is especially unsuitable for national and international crises (t´Hart et al., 1993). For national crisis management, the complexity of crisis management is evident in the fact that the centralised, national level is not automatically defined as that level which is to actually lead operations. When even larger, international crisis management is called for, ambiguous legal issues can complicate the process.

The centralisation of decision-making may very well be seen as an ad hoc adaptation process. Demands for acting within the framework of strict, hierarchical/centralised principles during situations of significant threat and time stress mean that actors need to shortcut formal line and command directives, and act directly on the basis of the situation at hand. One of the obstacles which confront this type of ad hoc adaptation is the virtually universal existence of bureaucratic structures at all administrative levels of society.

Goemans (1996) points out that those bureaucratic structures, which are in place under normal circumstances, also prevail during societal crises. Furthermore, such crises can develop into arenas for bureaucratic competition, in which each organisation involved claims that its own interpretation of situation is the correct one[6].

In situations characterised by threat and uncertainty, each organisation is inclined to make relevant decisions based on its own, special criteria. As a consequence, "crises within crises" arise, and the need for quick decisions makes bureaucratic principles inapplicable. Bureaucratic or inter-organisational competition does, however, have its positive sides. It allows for open discussion, tends to counteract "group think" and stimulates to new insights.

The conclusions that can be drawn is that societal crises demand ad hoc adaptation in the form of more centralised decision-making, at the same time as factors such as time stress and information overload may demand changes toward a more decentralised and less formal decision-making structure.

Bezeuyn (1996) has studied how informal leadership effected decision-making during the floods in the Netherlands in 1993 and 1995. He found that informal co-ordination between mayors and the establishment of ad hoc co-ordination centres in the provinces had a significant effect on decision-making processes, even though formal authority was lacking.

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[5] cf. Pauchant & Mitroff, 1992
[6] cf. the Chernobyl accident (Enander, 1996).

t'Hart et al. (1993) contend that in every crisis situation, decision-makers should be classified on the basis of two decision-making contexts: the extent of their ability and means of directing the course of events in the actual situation in question, and how their roles as official crisis managers are reflected in public confidence. Decision-makers at the strategic level maintain that available options, or the lack of such, are the critical factors which determine whether or to what extent higher levels of authority intervene in the crisis management process. Decision-makers at the operative level, on the other hand, maintain that these factors are determined by technical problems. The authors say that this demonstrates how critical factors at the strategic level can be "masked" by decisions which are made at lower levels, and which are based on the kind of information estimated as critical parameters at these levels.

Borodzicz (1996) emphasises that complexity is the primary characteristic of social crises. Two factors, which are of crucial importance for the quality of decision-making, are co-ordination and ad hoc adaptation. Effective crisis communication is also essential.

According to Borodzicz, the following demands are put on crisis leadership:

1. Cognisance of the need for preparedness and adequate preparedness planning.
2. Attentiveness to poorly managed crises, awareness of "crises in general" rather than a number of particular crises, and openness to redefine given situations.
3. Cognisance of the notion of "crisis after the crisis".
4. Ability to develop advisory functions in the framework of crisis management.
5. Cognisance of the appropriateness and consequences of different crisis management approaches.
6. Acceptance of the increased need for openness in crisis management.
7. Balance between action and reflection.

Decision-makers can find themselves in a form of decision paralysis which, in the current literature, is called administrative regression. Borodzciz (1996) states that there are a number of causes for such paralysis, including deficiencies in the organisational environment and information overload.

Rosenthal (1996) offers the following advice to decision-makers subjected to information overload: take a 30 seconds break -- the "so called" 30 seconds scenario -- but not more. Thirty seconds, states Rosenthal, is that time period which is sufficient to re-evaluate or redefine the situation at hand.

One of the most important questions for crisis managers is: how do situations involving threat, uncertainty and time press -- that is to say, *stress* -- affect general performance and the capacity to function?

According to Wallenius (1996), even moderate stress reaction limits our attention to simply registering the incoming signals, which we for the moment judge as relevant. Increased stress further reduces attention, to the point where even relevant signals are disregarded, further decreasing performance. This is what is usually referred to as "tunnel vision".

Thought processes go through a similar change. Problem-solving under stress reaction tends to become ridged and formalised and is characterised by stereotype thinking, where alternative evaluations and solutions are suppressed. Stressed individuals also tend to have difficulty in

systematically seeking out or scrutinising alternative lines of action. Tolerance for contradictions and conflict is reduced, we attempt to avoid seeing negative aspects of our decisions or actions, and the capacity for abstract thinking decreases.

Our capacity to act and react adequately is negatively affected (Enander, 1996) and we tend to react in a more primitive and random manner. This results in increased miscalculation and a decreasing capacity to discriminate between dangerous and trivial situations. In the face of acute threat we tend to act quickly and on impulse, increasing the risk for major mistakes. In short, work pace increases under stress, while precision decreases.

t'Hart el al. (1993) points out that formal routines and procedures concerning authority and decision-making are abandon or circumvented in situations when important decision must be made quickly. On the other hand, both authority over a situation and intensified bureaucratic conduct increases with increasing available time for decision-making.

t'Hart also points out that there is a flora of other risk factors beyond the three key variables named earlier, i.e. *threat*, *time stress* and *uncertainty*. For example, national, local and institutional cultures and sub-cultures have significant influence in crisis situations, which has been confirmed by empirical studies. In comparative studies of how different societies react to major technological accidents, it has been shown how cultural diversion gives rise to diverse attitudes to risk, crisis preparedness, measures and actions. Similar diversion is also to be found in different organisations.

The structure and function of crisis management systems would, at least in part, appear to be associated with how the crisis itself is comprehended. Also, styles of management, which organisations display in the initial phases of a crisis, can change with developments over time. t'Hart et al. (1993) gives the example of crises which develop very slowly, e.g. ecological crises, in which decision-makers' initial tendency to misconceive or de-emphasise the situation can develop into so-called non-decision-making. However, this is a more usual occurrence in situations where time stress is extreme, or where there is bureaucratic competition.

The authors take the position that the quality of decision-making in crisis situations depends on a number of key factors, among them:

- Organisational structure
- The level at which the crisis is managed (operative or strategic)
- The degree of time stress
- Personal characteristics of the key actors involved
- Opportunities for communication
- Factors involving infrastructure

Time stress, according to t'Hart et al. (1993) is probably the most significant variable influencing both decision-making as such, and the level at which decisions are made. Time stress is experienced differently at the strategic and operative levels. At operative levels, where immediate action is often demanded, time stress is generally more direct and unconditional. This is not usually experienced in the same way at the strategic level, since activities here are often concerned more with long-term consequences and their ramifications.

Only when operative actors are short-circuited are strategic decision-makers exposed to conditions similar to those found at operative levels.

t'Hart et al. (1993) ask to what extent key variables for crisis management can in fact be identified, and if it is possible to develop a working model for crisis decision-making by studying patterns of decision-making in different crisis management systems. Such a model should emphasise how the effects of three variables are expressed by decision-making:

1. Degree of experienced time stress
2. Level of decision-making (operative or strategic)
3. The organisation's pre-crisis administrative structure

As for an organisation's pre-crisis administrative structure, the authors make a rough distinction between hierarchical and project oriented management structures. Hierarchic structures are seen as bureaucratic, formal command and co-ordination structures, while project oriented structures are often associated with some form of matrix organisation.

Project oriented organisations are thought to have less difficulties than hierarchic organisations in adapting to crisis situations. Similarly, they are more able to improvise and decentralise decision-making in the face of time stress. The three cited variables above can be combined to produce hypotheses for future empirical research.

A number of hypotheses concerning time stress are as follows:

Hypothesis 1: If the degree of experienced time stress in a crisis situation is high, and if the pre-crisis system is hierarchic, then *strategic* crisis management will be characterised by an attempt to further centralise management and decision-making.

Hypothesis 2: If the degree of experienced time stress in a crisis situation is high, and if the pre-crisis system is project oriented, then *strategic* crisis management will be characterised either by informal decentralisation or the deliberate avoidance of making decisions.

Hypothesis 3: If the degree of experienced time stress in a crisis situation is high, and if the pre-crisis system is hierarchic, then *operative* crisis management will be characterised by decision paralysis.

Hypothesis 4: If the degree of experienced time stress in a crisis situation is high, and if the pre-crisis system is project oriented, then *operative* crisis management will be characterised by situational dominance.

Similar testable hypothesis can be formulated for low time stress in cases of more drawn out situations or long term crises:

Hypothesis 5: If the degree of experienced time stress in a crisis situation is low, and if the pre-crisis system is hierarchic, then *strategic* decision-making will be characterised by centralisation and inter-organisational bureaucracy.

Hypothesis 6: If the degree of experienced time stress in a crisis situation is low, and if the pre-crisis system is project oriented, then *strategic* decision-making will be characterised by formal centralisation and bureaucracy.

Hypothesis 7: If the degree of experienced time stress in a crisis situation is low, and if the pre-crisis system is hierarchic, then *operative* decision-making will be characterised by formal and prescribed implementation and inter-organisational bureaucracy.

Hypothesis 8: If the degree of experienced time stress in a crisis situation is low, and if the pre-crisis system is project oriented, then *operative* decision-making will be characterised by several types of implementation and bureaucracy.

Non-decision-making can develop in the context of all the conditions described above. Non-decision-making, to the same extent as decision-making, can govern the development of a crisis, either in a positive or negative manner. Three separate forms of non-decision-making can be distinguished:

1. Decisions which simply are not made
2. Decisions which should not be made
3. Decisions which should not be effected (Wolfenstein, 1967)

Examples of these three forms of non-decision-making can be taken from the case of the Heizel Stadium tragedy in Brussels, 1985, where English and Italian football supporters rioted, causing 39 deaths and 450 injured.

An example of the first form of non-decision-making was the fact that no strategy had been developed for how responsible authorities were to handle incoming information, the press and TV for such a calamity.

The second form, decisions that ought not to be made, is exemplified by the decision taken by the Belgian Home Office minister during the tragedy. His decision was to remain at the Home Office and transfer decision-making to those authorities in place at the stadium. He decided not to intervene, while at the same time assuring local authorities that he would take full responsibility for each decision made by them. The minister was subsequently subjected to massive criticism, not primarily because of his decision to take a non-functional role, but because of his inability to perform certain important symbolic actions, i.e. actions expressing sympathy, which the general public is in great need of during catastrophes and other crises.

The third example concerns decisions which should not be effected. The police who were ordered to the scene for the purpose of identifying and arresting the instigators of the riot did not co-ordinate there activities with those of the public prosecutors. The prosecutors wanted arrests to be made immediately, whereas the police decided that the rioting should be stopped first. This started a long, complex and expensive -- but hardly successful -- attempt to find and prosecute the instigators.

At first sight, it would seem that decision-making during crisis situations would call for centralisation, i.e. the concentration of power and authority within a relatively small group, a governmental leadership node or even a single, influential person. Indeed, the behaviour of the

media would seem to substantiate this: since national and international media often usurp a crisis situation, no major crisis can be defined as a local matter.

A crisis is an arena for decision-making, and crisis situations often give aggressive leadership *carte blanche* authority. Skilful leaders know how important good leadership is during the first crucial hours of a crisis, and how dangerous and irrevocable badly founded decisions can be. They also know how to create and utilise valuable "moments of reflection" in the midst of chaotic situations[7], allowing them to redefine the situation and create alternative paths of action[8].

Pauchant and Mitroff (1992) point out that there is a tendency towards closed groups and institutional secrecy in crisis situations. The primary maxim is the "the government must govern". On the one hand, secrecy allows decision-makers to concentrate fully on the crisis at hand, while, on the negative side, it isolates and blocks them from gaining advantage of public debate and outside opinion.

The authors maintain that appropriate crisis management demands leaders who reflect on their role in crisis management, and who combine determined leadership with good judgement. Thoughtful leaders participate in discussions about risks and future crises, and understand the problem of vulnerability in complex systems. They also know that crises transcend national boundaries and that crisis management is no longer only a national concern.

As discussed earlier, knowledge of how individuals react in situations characterised by threat, time stress and uncertainty is essential for the study of decision-making during societal crises. Another related problem area concerning decision-making concerns the groups who are making those decisions -- their size, composition and attitudes. Group dynamics and political interests are factors which contribute to certain individuals being excluded when crucial decisions are to be made. One reason for this is the phenomenon of so-called groupthink, which, among other things, is characterised by low tolerance for deviating points of view. Another reason is collective problem avoidance, which allows groups to avoid internal conflict and maintain consensus.

It is often the case that individuals, who function quite satisfactorily in their "normal" official, administrative roles, are not those who become key actors during a crisis. Bezeuyn (1996) notes that this was the case during the floods in The Netherlands in 1993 and 1995. Without holding formal crisis management positions, the mayors of several municipalities nonetheless co-ordinated their efforts and exercised crucial influence over decision-making process during the floods. This may have been due to the fact the crisis developed relatively slowly, and it should be noted that this type of co-ordination can be considerably more difficult in crises of a more acute nature (t'Hart et al., 1993).

In order for crisis management to be successful, more is needed than simply an effective rescue operation. It is also essential that those institutions, which are ultimately responsible for managing operations, maintain an identifiable appearance that gives confidence to the general public. The Bijlmer catastrophe (1992) illustrates this point. The catastrophe involved an (Israeli) El Al air freighter which crashed in a densely populated residential area outside of

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[7] jfr Rosenthal, 1996: "the 30 sec scenario").
[8] jfr Wallenius, 1996

Amsterdam. Two high-rise apartment buildings were demolished in the crash. In accordance with Dutch law, the mayor in question is responsible for managing major accidents or catastrophes which occur in his or her political/geographical area. van Oostveen (1996), who at the time was Director of Information for greater Amsterdam, states that the mayor of Amsterdam and his crisis group created the image of an empathic authority by appearing regularly before the press twice a day[9]

In fact, it created a good deal more than this. The press conferences developed into an instrument for successfully dealing with the media. The scheduled conferences created a measure or rhythm, by which command centres could manage information. Likewise, information was successfully adapted to conform to the media's working patterns. This kept the press and other media from gathering information from other sources.

The media, in turn, could be used to supply important information to other involved authorities. van Oostveen maintains that the key to success in crisis management is in the manner in which information is presented to the media and the public.

The management of the Bijlmer catastrophe can be subdivided into the following phases:

- A centralised decision-making system was employed and preparedness plans were put into effect immediately. The proclamation of a state of emergency gave the mayor of Amsterdam full liberty to make decisions and take action. A Communication Centre was established where all incoming information was compiled.
- Immediate help and medical care was available to survivors
- Quick clearance of the catastrophe zone was achieved. Within four days, all of the dead and injured were located. A latest date for complete clearance was established, and a memorial ceremony was planned to take place within one week.
- The victims were identified and their names were made public after verification.
- Immediate crisis support was made available to survivors and relatives and plans for more long-term care were made.

van Oostveen maintains that local authorities must learn to master the heavy flow of incoming and outgoing information, if they are to escape the questions and debates which often begin to take on a life of their own and are a source of contradictory statements. All information should be sorted, compared and disseminated at a single crisis command centre, in order to avoid contradictory information and resulting confusion. It is important that the public understands that information is being handled at the proper authoritative level, and that the situation is under control.

Authorities must realise that their behaviour will be of crucial importance for success or failure during the management of a crisis. Bezeuyn (1996) illustrates this in his description of the command and co-ordination system employed during the floods in The Netherlands (1993 and 1995). Different forms of co-ordination were employed and decision-making processes changed and developed during the course of the crisis.

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[9] This is not to mean that the mayor and his group were not actually empathic. The point is, that *being* empathic and *creating the image of an empathic authority* are two different things.

The activities of the co-ordination centres were characterised by flexibility, a decentralised structure and by improvisation in decision-making. Consultation with higher administrative levels was employed in order to de-emphasise the diversification of decision-making, and to strengthen the image of its co-ordinated nature.

This, however, was not fully understood by the higher administrative levels involved, which in turn felt impelled to intervene in the crisis management process. It is has not been clear exactly why, when and on what grounds these authorities intervened. It has been maintained that this was due to conflicts developing at the lower levels, and that the higher levels had greater decision-making time at their disposal. This assertion is based on the assumption that the likelihood for intensified political activity increases with the experienced increase of decision-making time[10].

The confusion that developed created new uncertainties, which resulted in the higher administrative levels being confronted with the so-called paradox of up-scaling. They waited as long as possible before intervening in the situation, in order not to display a lack of confidence vis à vis lower operative levels. However, this hesitation resulted in intervention coming too late for it to have the desired effects.

Borodzicz (1996) describes the responsibilities of local authorities in crisis situations and gives some examples from Great Britain. He distinguishes between three phases of local authority responsibility.

During the first phase, authorities are obliged to give decision support to rescue services in their operative role. This can be in the form of providing detailed maps and other relevant information. Local authorities also have the basic role as co-ordinators for a number of volunteer organisations, and can participate in operations by co-ordinating joint activities and putting material resources at the disposal of rescue services.

The second phase begins when rescue teams are drawn in and the authorities take over responsibility for crisis management.

The third phase concerns local authorities' actions in returning to a normal situation, i.e. their responsibility for co-ordinating a number of local organisations engaged in the late stages of crisis management and handling possible long-term effects. This, perhaps, is the local authority's most important role.

The third phase is also that stage in which politics come to the fore, even though, ironically, there is little that political power can do to change the course of events. Mayors and other elected officials have an important social role to play in disasters and crises, but also have personal and/or party political needs which can stand in contradiction to the functional needs which crises evoke.

In this context, conditions in Great Britain differ from those of the rest of Europe. In Great Britain, politicians play only a very small role when it comes to making decisions about direct actions in a disaster situation. Responsibility for crisis management is at the operative-

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[10] jfr t´Hart et al., 1993

functional level. In France, on the other hand, mayors, prefects or even political actors at higher levels can make tactical decisions.

There has been great interest in identifying what factors influence the course of events in the management of a crisis. t'Hart et al. (1993) state that this is the case in almost all crisis situations, although most CM analysts concentrate mainly on conditions which concern strategic, top-level actors. Less interest has been shown towards the critical importance of operative actors in determining the course of events.

According to the authors, the shooting down of the American U2 reconnaissance plane in 1960, and likewise the Korean commercial airline in 1983, would seem to have been the result of an ad hoc decision, made under time stress, by a local commander. Similar events tend to occur in rapidly developing situations involving social unrest. Under the pressure of unexpected outbursts of activity, or of intense and unpredictable actions by crowds of people, law enforcement command and co-ordination systems can break down, leading the way to ad hoc decisions at lower levels (ibid.).

To a large extent, the media can influence the course of events in a crisis situation. During the floods in The Netherlands, for instance, the media may have contributed to hastening the rate of evacuation, while at the same time exaggerating the number of people needing shelter and unnecessarily warning the public about changes in weather conditions (Bezeuyn, 1996).

According to Fischer and Bischoff (1988), the reasons for such variations revolve around three themes:
- A great many news services get caught up in the "disaster myth"[11], which influences their outlook on news gathering and coverage.
- The way in which the media is organised for gathering and broadcasting news, i.e. their control over what is and is not news, can either strengthen or weaken the "disaster myth".
- The norms for news gathering and broadcasting which govern local and national media respectively: local media are thought to be more altruistic, i.e. attempt to help, whereas national media tend more to serve their own purposes.

LITERATURE PERTAINING TO SECTION 2: CO-ORDINATION
- FORM (Horizontal co-ordination)

Bezeuyn (1996) states that during the floods in the Netherlands, decisions to evacuate were made differently at different levels. The first decision was taken at the regional level, followed by decisions at provincial levels. Finally, the Minister of the Interior entered into the decision process in the post-crisis phase. The evacuations were, on the whole, considered to be successful operations.

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[11] Disaster myth: The belief that disasters are characterised by a loss of norms and by deviant, egoistic behaviour -- especially in the post disaster phase.

However, it was not entirely clear where different decisions were actually made and on what basis. This created some confusion at operational levels, which could only prepare for a number of different plans of action while waiting for decisions to come down from the strategic level.

Local actors seriously doubted the effectiveness of this "creeping centralisation" in decision-making. Bezeuyn (1996) maintains that this centralised crisis management model reduced speed and flexibility in carrying out the needed tasks.

As mentioned earlier, the inquiries made by local levels to higher administrative levels were initially aimed at bringing some harmony into the decisions made at different geographical levels. This, however, was interpreted by the higher levels as a sign to intervene in the management process. The fact that evacuation orders were made public during press conferences, held directly after joint meetings, gave the impression that the decisions had been made at the higher administrative level -- in many cases at the province level -- and that this higher level had taken over responsibility for managing the situation.

A further illustration of the problem of finding a functional form for administrative co-ordination in complex crisis situations is the case of the Chernobyl disaster. Here we see how tension develops when affected regions and different nations define the crisis differently, not the least on the basis of differences in social structure, public opinion and group interests.

LITERATURE PERTAINING TO SECTION 2: CO-ORDINATION - CONTENT (vertical co-ordination)

We have discussed the centralisation of the decision-making process under certain circumstances. We find a similar situation in the case of co-ordination. Factors such as growing domestic unrest and economic decline in fragile new democracies, as well as more protracted social conflicts in otherwise stable democratic societies, is associated with different forms of centralisation.

t'Hart et al. (1993) maintains that at the national level, it is not unusual for a societal crisis to move from civilian to military management and leadership. Large-scale political operations tend to be managed in the same way as military operations. The hierarchic structure, which is the consequence of such an organisation, generates a coinciding information and communication hierarchy. With this type of organisation, actors at lower levels tend to be informed only on a need-to-know basis, in order to carry out specific tasks. This, in turn, means that actors at lower levels may be poorly informed about conditions at other levels and, consequently, cannot judge the significance of their own actions in the larger context.

INFORMATION

Certain parts of the literature concerning *Information* have been assigned to the section dealing with leadership and decision-making. The section below deals with other aspects of this category.

Information, how it is treated and disseminated, is about *communication and the organisation of information.* Handling information can be seen as one-way communication (monologue), two-way communication (dialogue) or three-way communication, i.e. conveyed from a sender to a receiver by way of a carrier. One of the media's roles is to be an information carrier.

In the section below, which treats Information (Form) and Information (Content), there are elements which could be assigned to the role of the media (Section 4). However, text concerning the media as an *information carrier* is better treated together with the text involving the media, which deals with other aspects of information and its dissemination.

LITERATURE PERTAINING TO SECTION 3: INFORMATION - FORM

Subcategories: IDTAF Information dissemination to authorities
IDFAF Information dissemination from authorities
IWAF Information within authorities

When a disaster or major accident occurs, responsible authorities are expected to:
- answer telephone calls immediately
- arrange press conferences
- establish a press centre
- present background material and clarify the situation
- make technical expertise available

Borodizcz (1996) stresses the importance of all information emanating from a single crisis management centre. van Oostveen (1996), in turn, points out that local authorities must learn to master the flood of incoming and outgoing information if they are to avoid contradictory statements and misunderstandings, which often take on a life of their own. Journalists most often endeavour to find a number of different sources for a story. Each individual source will only be able to comprehend a part of the total process, and there is constant risk for sources contradicting one another. It is therefore vitally important that all actors in a crisis situation convey their information to one crisis management centre.

Regester (1987) gives the following advice on crisis communication to companies and other organisations:

- Begin by distributing background information on the company/organisation as soon as possible after a crisis occurs and display readiness to communicate all through the crisis. This makes it possible for the organisation to find time for reflection and prepare press releases concerning both the events themselves and the measures which are being taken to mitigate the situation.
- If it is difficult to obtain relevant facts about the situation, do not attempt to fill the information void with anything else than reliable information. Never attempt to make up for a lack of knowledge with speculation or fabrication.
- Issue new press releases in step with new developments or when new facts are available. Ensure that others who might be contacted by journalist also receive copies of relevant communiqués, so that everyone "sings the same song".

- Announce the time for a press conference as early as possible, in order to reduce the stress of incessant media coverage and inquiries.
- Prepare press conferences meticulously.
- Remember that mass media do not work only from 9-5, and that press service must be manned around the clock.
- When possible, find ways of using the media to help achieve mitigation.
- Avoid technical or organisational jargon.
- Ensure that the company/organisation can point to a good number of measures taken which can testify to its responsible attitude and the trustworthiness of its pronouncements during the crisis.

Wilkens and Patterson (1987) write: "A journalist's definition of a good story means a catastrophe for someone else". Crenlinsten (1994) points out that press releases and press conferences are the best way to inform the media of the latest developments, and that authorities and the media should agree upon a common model or models for information and media contacts during crisis situations. In this way, it is easier to explain to the media why certain information is sensitive and should be withheld for the time being. By maintaining openness both during the crisis and after things have gone back to normal, authorities can maintain trustworthiness, even when sometimes forced to act covertly. Crenlinsten also states that the press, i.e. newspapers, should be utilised for complex explanatory communications.

According to Flodin (1993), crisis communication is now an established concept which goes beyond other concepts of information in risk and disaster research, including research on learning in organisations. Crisis communication refers to the way in which actors at different levels in different organisations communicate in case of social disturbances, disasters and other crises. Crisis communication must address all the phases of a crisis.

t'Hart (1996) maintains that crisis communication is probably the most important factor for successful crisis management. Crisis communication cannot any longer be a strict, hierarchical and functional gathering and dissemination of information. Instead it is a non-hierarchical process subject to strong political competition.

More simply put, crisis communication is about how different actors at different levels of society communicate before, during and after an extraordinary societal occurrence. Research in this area has mostly been concentrated on the so-called acute phase of a crisis, describing the course of the immediate situation. However, how authorities and the media interact in both the pre- and post-acute phases is undoubtedly of great importance for crisis management.

Flodin (1993) gives examples of actions and conditions which can contribute to effective crisis communication. These include holding daily press conferences and coupling professional communicators to crisis centres. Conditions which hinder effective crisis communication include the lack of preparedness plans for crisis communication and the lack of contingency planning for a telecommunication overload.

van Oostveen (1996) states that local authorities have a certain predisposition to keep the press and other media at a distance as long a possible. Experience of large-scale accidents, disasters and other crises shows that it is not unusual to bring in extra personnel with the primary purpose of controlling the media. It is often the case that this personnel is not

specially trained to handle the media. Furthermore, they are often instructed to keep everyone out of the immediate, cordoned off area and not to talk to the media.

As we know, journalists, photographers and other media actors can be quite inventive in their work. Especially when hampered from carrying out their professional roles, they can always find ways of exploiting the chaotic situation, which automatically arises during societal crises. Authorities interested in carrying out effective rescue actions, and in protecting victims' rights privacy, must organise media supervision, at the scene, as quickly as possible. If the media are not able to get information from the responsible authorities, they will seek it out from others -- for instance through informal channels, from passers-by or from the victims themselves. Such information can then be used to put pressure on official channels by inviting them to either confirm or deny the assertions made. If both authorities and the media are exposed to extraordinary pressures, this can trigger reactions in which the parties involved begin to accuse and blame one another. van Oostveen further maintains that uncertainty leads to a inclination "to say nothing at all[12].

In conclusion, van Oostveen states that it is during the first hours after a disaster, when the media are most hungry for stories and pictures, that things tend to go wrong. If something important does go wrong during this critical time period, it is very difficult to set it right later on. This means this it is extremely important that the media -- under competent leadership -- are able to work on or near the scene as soon as possible. The sooner that unavoidable, initial confusion can replaced by trustworthy information, given by direct quotes and pictures, the sooner speculation and rumour can be rebutted.

If the media, in a reliable manner, can explain how both rescue personnel and the public are acting and reacting during a societal crisis, then it is likely that the receivers of this information will be able to understand the crisis in larger context.

One of the biggest problems, which arose during with the Heizel Stadium tragedy in 1985, was to co-ordinate outgoing information when the scope of the tragedy had become apparent. As mentioned before, no consistent strategy was prepared for in order to deal with the flood of telephone calls coming in from concerned friends and relatives. This is in contrast to the firm and regulated conduct of the authorities during the Bijmer catastrophe, which resulted in the public being impressed with the image of a sympathetic, responsible authority.

LITERATURE PERTAINING TO SECTION 3: INFORMATION- CONTENT

Subcatagories: IFAC: Information from authorities
IWAC: Information within authorities

t'Hart (1996) states that the interpretation and dissemination of information during a crisis should be done quickly and on a large scale. Here the media play a crucial role. However, the

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[12] But silence breeds speculation. No news is under these circumstances seen as good news- and rightly so. People want to know, to understand." (author´s comment)

disposition of the authorities involved, as well as the resources which they put at the media's disposal, are not always in tune with the circumstances at hand. Strategies to handle this problem range from attempting to oppose or beat the media at their own game, to adapting and learning how to co-operate with the media both before, during and after a crisis. Importantly, all media operations must be targeted to conform to the needs of the *receiver*.

Nohrstedt and Nordlund (1993) contend that it is not necessarily the direct effects of a disaster which determines if the situation will develop into a societal crisis. Instead, a number of other factors or aspects of a disaster situation would seem to be of more significant in this context, e.g.:

- The disaster's source or origin, i.e. natural or man-made.
- The nature of the progress of the disaster.
- The public's reaction: is the situation associated, at least in the public's mind, with great risk?
- The relevant authorities' reaction both to the disaster itself, and to demands for information.
- The media's attitude during and after the acute phase of the disaster.

Nohrstedt and Nordlund also point out another factor which must be dealt with, namely *uncertainty*. Is a threatening situation really imminent? What or who is responsible for this, and who is at risk? Situations involving considerable uncertainty are difficult to handle and more likely to lead to a full blown crisis. Put another way: Events which are characterised by considerable uncertainty generate various types of conflict, e.g. conflicts concerning time, knowledge and credibility. This, in turn, contributes to creating the crisis.

Nohrstedt and Tassew (1993) direct their attention to the expectations that the public have concerning authorities, their competence, responsibility, openness and capacity to take the initiative. Also of importance is the authorities' image of how these expectations in turn influence the public. The authors put forward three perspectives concerning how these qualities can be communicated during a crisis:

The Sender Perspective:
This form of crisis communication is "one-way", i.e. communication is only directed from the sender to the receiver. This is the classical mode of communication, in which the sender's intentions, the content of the message and the communication channel's appropriateness for reaching the target group is deemed the most important feature of communication.

The Volume Perspective:
In this case, a "softer", socially based form of communication is taken into consideration. The receiver is put into a psychological and sociological context with reference to the importance that attitudes and group attachments have for the individual's capacity to accept and adjust to recommendations given by the sender.

The Dialogue Perspective:
This perspective takes consideration of the process of interaction between the sender, the channel used to send the information and the receiver. Communication is seen as two-way, and the activities which follow from communication depend on contributions from all involved parties.

The authors maintain that in a crisis situation, it is of the utmost importance that the public have access to unbiased and trustworthy information. Trustworthiness, however, presupposes openness. The authors state that the sender perspective and dialogue perspective are the most commonly occurring types of communication in crisis situations. The sender perspective can be functional in certain circumstances, but its weakness is that it gives the impression of concealment rather than openness. This, in turn, can easily lead to complications -- especially with the media. Journalists can become overly critical and begin to speculate, questioning the trustworthiness of the authorities involved. This, in turn, is just one step away from the public questioning the authorities' general capacity to issue reliable information.

Quarentelli (1980) suggests that the three cited communication perspectives could be studied with the aid of a systems model which focuses on the interaction between sender, content and receiver. He frames the following questions:

What type of complex organisations work with catastrophe-related subjects? In this context, a distinction should be made between newscasts, entertainment and education.
What organisational demands and constraints influence the management of catastrophe-related subjects?
What norms, values and belief systems influence the organisational management of catastrophe-related subjects?

Skoglund et al. (1996) have a similar approach of this problem, and state that the interplay between authorities and the media can be quite different depending on the type of societal disruption involved. If we start from the point of view of how authorities communicate with the media, three communication models can be posited:

A transmission model in which focus is primarily placed on the effectiveness of the communication channel.
A content model in which the most important ingredient is the message.
A symmetrical model which emphasises two-way communication and mutual understanding.

The symmetrical model is seen as something of the ideal model in this context.

Finally, Nohrstedt & Tassew (1993) maintain that in the midst of a catastrophe or other societal crisis, one should always strive to attain openness and to establish two-way, symmetrical communication. This was not done, for instance, during the Chernobyl disaster, which the authors plainly state was an *information crisis*. Information crises are characterised by an acute public need of information, where the type of information issued is often erroneous or vague. This, in turn, puts the trustworthiness of the source -- e.g. a government authority -- in doubt. In itself, this could lead to a major crisis.

In summary, the authors maintain that the conflicts which easily develop during an information crisis result in government authorities and the media regarding each other as adversaries rather than partners. This can lead to a self-feeding process of increased polarisation and mutual distrust between actors.

Nohrstedt & Nordlund (1993) assert that information crises develop when authorities and the media are exposed to extraordinary pressure, which leads actors to lay blame on one another.

During the Chernobyl crisis, for instance, four out of ten Swedish citizens believed that the authorities were concealing information. One of the reasons that the Swedish Radiation Protection Agency (SSI) was thought to be concealing information was because it was not able to meet the demand for a rapidly increasing need for such information. The SSI never succeeded in communicating in dialogue form.

Another reason for this distrust may have been due to the divergence of both the quantity and content of information between national and local reporting. Local media in affected areas maintained media interest for several months after the radioactive discharge, while the interest of national media faded relatively quickly. One possible reason for this is that government authorities reported differently to different media.

LITERATURE PERTAINING TO SECTION 4: MEDIA AND GOVERNMENT AUTHORITIES

Subcategories: AIM Authorities' Information to the Media
                    AAM Authorities' Attitude to the Media

As discussed earlier, it appears that quick, unbiased and trustworthy information to the public is of the utmost importance during a major societal disruption or crisis. The task of informing the public lies primarily with government authorities and the media. The public, for their part, need trustworthy information in order to help facilitate or even contribute to rescue operations, to protect itself, or simply in order to avoid unnecessary fear or anxiety.

A large part of the information from government authorities is channelled through the media, whose job is to transmit the intended message, inform the public of prevailing conditions, comment on measures taken and maintain a balanced but critical attitude to the authorities (Hvitfelt, 1988). Clearly, the power and influence of the media will contribute to how the public comprehends the disaster or crisis at hand.

In principle, government authorities and the media have quite different, distinct tasks and goals. Traditional doctrines concerning the distribution of power in fact confer upon them more or less *opposing* roles. Authorities shall, on behalf of the public, make and carry out decisions -- in short, exercise power. The media's role is to scrutinise and, if need be, criticise that exercise of power. This, along with other factors such as a mutual ignorance of each other's working conditions, as well as the specific nature of the crisis at hand, will undoubtedly influence the interaction between authorities and the media. (Skoglund et al., 1996).

The notion of interaction is a key concept in this context. Interaction between authorities and the media assumes that the former have a duty to keep the media and the public informed, and that the media have a duty to gather information from authorities and channel it to the public. Thus, we can affirm that there exists a condition of mutual dependence between media and the authorities.

The interplay between these two actors -- i.e. how information is issued and gathered respectively, is clearly and important area of study. This interplay has critical importance for

the general public's perception of a crisis, and is therefore important for how the crisis actually develops.

Conflicts, which arise between authorities and the media, are often of the type "conflicts of time". On the one hand, authorities themselves need to gather and sort out information, and develop a overall picture of the situation. On the other hand, the media invariably has a deadline to meet, and therefore wants information, assessments and instructions from authorities quickly. Obtaining material *in time* is the primary concern. This can easily turn into a conflict concerning how authorities should best utilise their time: should they focus on assessing the actual situation and making critical decisions, or should they concentrate on issuing press releases at the right time and answering journalists' questions? (Wilkins & Patterson, 1987).

When authorities have surveyed the situation and made pertinent decisions, they have an interest in getting this particular information quickly and effectively channelled to the general public. The media, on the other hand, must satisfy the public's increased demand for crisis information on all levels. In addition to this, the media also have the role of a critical observer -- they must not behave simply as a megaphone for the authorities. Instead, they should function as a control or a check on authorities as information disseminators. (Nohrstedt & Nordlund, 1993).

Scanlon et al.(1985) maintain that government authorities and the media should very well be able to co-operate in a preparatory phase. For example, the media could be integrated into total preparedness planning, educated in disaster management, and should train together with relevant authorities, including full participation in disaster exercises.

Finally, the media have another crucial function in the preparatory phase, namely to formulate prospective threat assessments. To what degree government authorities are influenced by such threat assessments is an area worth studying. Coupled to this, Scanlon et al. also maintain that the media have an "agenda setting function".

The fact that government authorities and the media have different roles and tasks in a crisis situation is surely a factor which complicates and aggravates co-operation. Such co-operation could, however, be made easier if the actors involved had better knowledge of one another's operating conditions. Thus Scanlon et al. suggest preparatory authority-media co-operation. It would be interesting to discover if this type of co-operation were in fact feasible, in face of what seems to be the latent conflict between the actors involved.

van Oostveen (1996) maintains that, in a crisis situation, the task of gaining the public's respect for necessary measures taken -- measures which at the same time are unpopular -- is the responsibility of the authorities. However, in order to do this, the authorities must understand how the media function. No crisis situation is ever the same, and there is no fixed recipe for how the media is to be dealt with. Each situation demands its own techniques, organisation and tactics.

van Oostveen posts ten commandments which can serve as a checklist for local authorities and their information offices when contacting the media[13].

LITERATURE PERTAINING TO SECTION 4: THE MEDIA AND MEDIA SOURCES

Subcategories   MTS - Type of Source
                         MAE - Media's Attitude to Experts

Larson (1980) has analysed the contents of news articles and found that c. 2-3% of all the such articles and editorials are about disasters. Erroneous reporting during disasters occurs frequently, according to the author, mainly because of unreliable source information. The result is, that news consumers cannot determine whether the news they are receiving is correct or not. One of Larson's recommendations is that the media avoid transmitting information which has not been verified or which cannot be linked to a specific source. The author concludes his article by stating that the media is the most influential actor as concerns the publication of information, but also notes that the media does not function independently. Indeed, it reflects traditional policy structures, for instance official foreign policy, as well as traditional structures of international organisations, and even other media.

Problems arise when those with requisite expert knowledge are not able to communicate, while those that can communicate lack requisite knowledge. In crisis situations the media, in its role as a critical observer, will often seek to clarify divergent or contradictory statements made by professionals, thereby pointing out "knowledge conflicts" among the experts. On the other hand, such experts often use the opportunity to go directly to the media, with the

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1.   The media must, under proper guidance, be admitted to the disaster-site as soon as possible.
2.   No news is news too, and has therefore to be treated with equal care as any other information
3.   Information should be co-ordinated and verified.
4.   Information and communication should have an 'identifiable face'.
5.   Press conferences should be given in such a way and at such times as corresponds with the needs and working schedules of the media.
6.   Authorities should meet the media as honestly as is possible and as open as is useful.
7.   False information should immediately be contradicted.
8.   Wrong or inadequate information by the authorities themselves should be immediately corrected.
9.   Before any disaster takes place, authorities should negotiate with the media about time and space, available for official information.
10.   After a disaster, the media will need continued attention and careful guidance. "Neither for them nor for the victims do disasters end when the streets are cleaned"

consequence that their viewpoints are amplified or overexposed. This, in turn can have the effect of undermining the work of the authorities.

Journalists often feel that the information which experts think to be important is not particularly newsworthy. On the other hand, experts often feel that that they are misquoted, or that their statements are published in incomplete form, taken out of context or slanted. It is a well-known view, that when experts make statements through the media, their principle message often does not come through. Instead, information which they regard as only details is often turned into headlines by the journalists. Journalists, on their side, accuse the experts of being difficult to understand, while authorities, for their part, accuse the media of "sensational journalism".

LITERATURE PERTAINING TO SECTION 4: THE MEDIA AND MEDIA CONSUMERS

Subcategories   MP Media Praxis
                         MR Media Reporting

The role of the media is:
- To inform the public
- To alert and warn the public
- To help society to cope with collective stress
- To clarify the responsibilities of government authorities and politicians

Wilkins and Patterson (1987) discuss the media's role in getting the public's attention in cases of imminent danger. The authors maintain that the media do not report risks, but instead report the negative consequences of *providing protection against* risks. They further maintain that newscasts are to a large extent non-communicative, and that newscasts are, to their nature, event centred and based on sensation. Because of this, newscasts and risk information tend to work against each other, since news is traditionally reactive while risk communication is meant to be proactive and preventive.

Leivik-Knowles (1997), in her analysis of inter-organisational communication between authorities and the media, has found that some media researchers feel that the media have a responsibility to alert the public of risks and threats. How the media have interpreted such a responsibility, on the other hand, has not been made clear. Other media researchers go further and think that the media's role is not only to alert, but also to educate the public about risks and threats. Finally, some researches feel that the media should not be assigned such responsibilities or tasks at all, because of the selective, sensational and untrustworthy nature of news services in general.

Disaster researchers generally agree that the media, to a large extent, creates society's conception of a crisis. Norstedt & Nordlund (1993) developed a scenario to study how the media's actions can influence the development of a crisis. The authors found that timely, live newscasts, primarily from local media, were an asset because their main function is to channel information, especially during the initial phase of a crisis.

That television broadcasts have an enormous impact on all types of global events is something that we are all aware of today, especially after CNN's role during the Gulf War. The question is, to what extent government authorities are aware of the roles which local and national media play during disasters and crisis situations in general. Furthermore, Krebs (1980) states that more interest should to be directed toward the relationship between local, national and international media. One reason for this is that the environment and conditions for local media are drastically altered when a disaster occurs, with the consequence that contacts with national media can be aggravated, thus influencing news service in general.

Both Larsson (1980) and Krebs (1980) agree that live, local newscasts are a positive asset during a disaster. The authors emphasise the significant role played by local radio stations during rescue operations, because they have the trust of the local public -- which national media do not. Local radio stations also have good knowledge of local conditions and geography. This again points to the importance of making a distinction between local and national media, at least as concerns disasters and other societal crises.

Fischer (1996) found that local media can serve as a channel for the type of information which local rescue services wish to disseminate to the public. The author states, however, that there may be a question of trustworthiness here, since local authorities may have their own ideas about how people behave during a disaster -- i.e. the so-called disaster myth.

Radio, both local and national, has more than one role to play during disasters and other societal crises. On the one hand, it can have a purely operative role, such as an information centre. Another role is to channel official information from government authorities to the public, between authorities and from the public to authorities. The role of television broadcasting during disasters is not to be compared with that of radio broadcasting, because televised news is dependent on a favourable visual environment.

Fischer (1996), who has also studied the reportage environment for televised news, found that, in order to produce more newsworthy film footage, TV reporters preferred to rig up their cameras as near to the disaster area as possible, rather than around crisis command centres. When the cameras are in place, instead of seeking out an interviewee who can give a comprehensive view of the situation, TV reporters tend to bring in the "right" person to interview, i.e. one who can guarantee that the story will have a newsworthy slant. Fischer states that TV reporters feel that it is their duty to create good *visual stories*. He also maintains that reporting on the public's behaviour during crisis situations is, to a large extent, influenced by the conceptions TV reporters have concerning crisis behaviour in general, i.e. whether they buy the "disaster myth" or not.

Crenlinsten (1994) has found that different authorities prefer to work with different types of media when they disseminate information during a crisis. For example, law courts tend to prefer the press, the police prefer radio and politicians prefer TV. The author, who is strongly critical of the TV-media, maintains that during disasters, TV focuses on drama, personification and simplification. The goal of television, he states, is to give watchers the feeling that they are being informed, while keeping them entertained. He is especially critical of American TV news, which he characterises as shallow, simplified, overly concrete, ahistorical, too brief, showy and expressive, as well a favouring conflict scenarios. In consequence, there is little place for expert knowledge.

With this as a background, Crenlisten points out that crisis managers and other actors within government authorities must realise that television is a medium for *presenting* events, not for explaining them. Crisis managers should develop special strategies for dealing with television, not the least because of the effect that TV newscasts can have on the course of the crisis. In addition, the author advises politicians, who would appear before TV journalists during a disaster or major accident, to be prepared to present the situation in a calm, controlled and convincing manner without, however, seeming to be insensitive.

Quarantelli (1980) points out the differences in media coverage when dealing with foreign versus domestic disasters. When the media covers foreign disasters, they tend to emphasise political actions, while this is generally de-emphasised when dealing with domestic disasters. He also wonders why news reports, directed more towards entertainment, tend to emphasise successful actions, while "serious" news coverage is more inclined to concentrate on shortcomings or failure.

Quarantelli asks the following questions:

1. What do producers and consumers of media reports identify as constituting a disaster?
2. How is disaster conveyed?
3. What characters "manifest" disaster content?
4. What types of audiences are interested in disaster reports?
5. In what ways do audiences process the disaster content of the reports they receive?

Finally, Quarantelli points out the need for policy research concerning the *effects of preparedness plans* which are drawn up in order to improve communication processes, both with the media and the public at large. In this context, he recommends small-scale projects, such as training programs for journalists, over large-scale projects.

In 1988, Fischer and Bischoff did a content analysis of Time Magazine's disaster reporting. They found that when much of magazine's time was devoted to reporting so-called soft news, there was a clearly increased likelihood for the spread of myths about how people in the disaster zone had acted. Soft news is based mainly on interviews made just after the acute phase of the crisis aftermath. It is not unusual, state the authors, that newscasters in the "crisis niche" revel in reporting deviant behaviour and the breakdown of order, as well as society's need to take control. The authors also find instances in which the opposite happens, i.e. where the media emphasise the public's rational and altruistic behaviour. However, this is usually the case in the preparatory phase of a threatening natural disaster, for example concerning hurricane warnings.

Quarantelli (1980) maintains that during a societal crisis, the media tends to report incorrectly both on organisation and individual behaviour. He refers to research which indicates that individuals often *do* have the capacity to adapt to crisis situations, while organisations tend to behave inefficiently or even in a dysfunctional manner. For their part, the media tend to focus on negative individual behaviour while emphasising the positive aspects of organisational behaviour, i.e. exactly the opposite of the documented cases. The question of whether the media temper the effects of a societal crisis, or intensify it, has often been a point of debate. However, neither of these positions can be put on solid empirical ground, since there has been very little research done in this area.

What conclusions, then, have disaster researchers drawn? According to Quarantelli, one of the most significant and reoccurring trends found in the research literature is this: In general, people tend to act in an adequate and rational way under stress, during both natural disasters and major technical accidents. Individuals tend to be active and take initiative, and do not abandon their professional roles. This documented pattern of behaviour is quite contrary to the behaviour that the "disaster mythology" presupposes.

To conclude this section, Turner (1980) points out the media's reluctance to publicly evaluate its own earlier predictions or forecasts. For instance, instead of concluding a disaster broadcast with an analysis of earlier predictions which got things wrong, the media tends instead to loose interest in the subject at hand and look for new hunting grounds. Summing up, Turner maintains that the media tend generally to entertain the public rather than inform it, and that this pattern in news broadcasting influences the general public's capacity and will to listen to emergency messages. He suspects that one of the reasons for this is that the media strive towards reducing the perceived seriousness of risks and threats to society.

CONCLUSIONS

The way in which command, leadership, co-ordination and information processes are handled during societal crises is decisive for successful crisis management. The literature reviewed shows that these factors are of vital importance for both operative and strategic crisis management.

Of primary importance for successful crisis management is how resources and information are handled during the initial phase of the crisis, as well as how information on the continued course of the crisis is presented to the press and the public. How responsibility is shared or distributed among crisis management actors also merits further study. In many contexts, the behaviour of the responsible authorities is crucial for the success of failure of crisis management. It is therefore of the utmost importance that responsible authorities are made aware of the potential consequences of their actions during a crisis.

Major societal disturbances, and the crises that can arise out of these, create new, immediate needs which cannot be provided without extraordinary measures being taken. For instance, in cases of major accidents, the public calls for increased measures of collective protection, higher safety standards and that authorities and rescue services take greater consideration for public needs. This creates a social climate in which authorities and governments are continually reminded of their juridical and ethical obligations to protect the citizenry and provide society with effective emergency planning.

Thus, there are good grounds to maintain that besides effective rescue measures as such, successful crisis management demands the authorities exhibit an identifiable profile which the public can have confidence in. It is important for responsible authorities to be able to carry out symbolic actions, e.g. actions which express empathy and compassion, which the public is in great need of during disasters and other crisis situations.

Today, societal crises transcend national boundaries. Crisis management is no longer only a national affair. Only in rare cases are societal crises limited to a single geographical or administrative area, or to a single authoritative or crisis management level. In order to facilitate effective decision-making and co-ordination, there must be clear divisions of responsibility involving all possible actors at all societal levels.

Relevant issues concerning the peacetime management of severe societal disruptions in Sweden include the following:

- How are command and co-ordination functions to be developed and shaped?
- How should different responsibilities be defined and divided up within different social institutions from higher strategic to lower operative levels?
- How shall political leadership, in its broadest meaning, be practised?

One way to better facilitate crisis management at different societal levels would be to develop a generic approach, which could serve as a pattern or model by which crises can be studied and managed, irrespective of the cause or origin of the crisis. Thus it might be advantageous

to develop a general system for crisis management, and not to attempt to anticipate all the potential problems in advance.

By aiding the study of crisis management -- both at the strategic and operative levels -- and by facilitating the investigation of lowest common denominators for different types of crises, the diagnostic instrument presented may be one of the tools needed to accomplish this generic approach.

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APPENDIX 1

The following is a list of twelve types of major societal disturbances for which the Swedish government considers meriting special preparedness. The list includes natural catastrophes, catastrophic accidents, technical mishaps, sabotage, terrorism and mass migrations.

Radioactive fallout

Major disruptions in critical infrastructure systems
Electricity production and distribution
Telecommunications
Hospital and other healthcare systems
Water supplies
Radio and television

Floods and dam failures

Mass refugee flow or migration to Sweden

New, serious disease types

Terrorism

Major accidents with/discharge of hazardous materials on land and at sea

Disruption of critical societal IT-systems

<div align="center">(Parlamentary Proposition 1996/97:11)</div>

APPENDIX 2

**QUESTIONS FORMULATED ON THE BASIS OF BACKGROUND LITERATURE IN SECTION 1: MANAGEMENT AND COMMAND
– FORM**

MCFF Management and Command Functions
MCFF 1: What organisational units and organisational levels are responsible for crisis management and leadership during the incident in question?
MCFF 2: What legal issues are involved?
- Has a state of emergency or a disaster area been declared?
- Have emergency measures been legally sanctioned?

MCFF 3: Has the situation been officially defined as a disaster?

MCFF 4:
- What is the composition of the crisis management group?
- Do management groups exist on several different societal/administrative levels? If so, describe them.
- How large are these groups at different levels?
- Who are the key actors?

MPF Management and Planning
MPF 1: How are crisis management plans developed and formulated?
- Who/which actors have a good knowledge of these plans?
- To what degree is detailed planing carried out?

MCSF Management/Command Structure
MCSF 1: Is management/command structure centralised or decentralised?
MCSF 2: Are different areas of responsibility for different management groups clearly designated?
MCSF 3: Is there more than one government administration engaged?
- Are one or more provincial or regional administrations engaged?
- Have crisis management functions been transferred to higher administrative levels (upscaling) or been transferred horizontally?
- Are there signs that management/command functions have been transferred from higher to lower levels (downscaling)?

MCSF 4: What are the critical parameters for transferring management/command functions (upscaling/downscaling)?
- Who decides what these parameters are and who instigates upscaling or downscaling?

MCSF 5: Which administrative or societal level has dominated the crisis management process in this particular case?
- The strategic or higher administrative level?
- The more operative levels?

MTEF: Management and Training/Exercises

MTEF 1: Have crisis management groups at the strategic and operative levels experience of similar incidents?

- If so, how long ago did the incident(s) occur?

MTEF 2: Have key actors at operative and strategic levels trained for this type of incident?

ICCF: Integrated Command and Co-ordination

ICCF 1: Are command and co-ordination systems formally integrated into a hierarchical organisation?

ICCF 2: Are command and co-ordination systems informally integrated into a matrix organisation?

ICCF 3: Are command and co-ordination systems formally integrated into a hierarchical organisation at the operative crisis management level?

ICCF 4: Are command and co-ordination systems informally integrated into a matrix organisation at the operative crisis management level?

ICCF 5: How and at what point were operative and strategic command centres established?

QUESTIONS FORMULATED ON THE BASIS OF BACKGROUND LITERATURE IN SECTION 1: MANAGEMENT AND COMMAND
- CONTENT

LC Leadership
LC 1: How would you characterise the type of crisis management leadership practised?
LC 2: Is this leadership "visible"?
LC 3: How is it expressed during the initial first hours of the crisis?
LC 4: Is the media taking over leadership?
LC 5: Dynamics of group decision-making:
- Does the decision-making group contain persons who do not formally belong to the command group?
- How large is the presently acting decision-making group?
- Are there individuals or sub-groups who dominate in the decision- making? If so, which?
- Has an informal crisis leadership (individuals or groups) emerged? If so, who are they?
- What signs of conflicts, if any, have developed in the decision-making group?
- Does the group seek consensus in its decision-making?

LC 6: Leadership, visibility and influence
- How do the authorities in question exhibit leadership externally?
- Is the crisis management organisation visible and identifiable, and how is this visibility and identity manifested outwardly?
- How do responsible authorities express sympathy and understanding?
- Are responsible leaders conscious of the influence they have on the course of events?

DMC Decision-Making
DMC 1: Do decision-makers have clearly established areas of responsibility?
DMC 2: At what point in time are decisions made public by the crisis management group(s)?
DMC 3: Does the crisis management group employ external advisers, and if so, who are these?
DMC 4: Who is in charge of the information flow to decision-makers?
DMC 5: How is stress on the decision-making grouped judged and treated during the ongoing crisis, and who is responsible for this?
DMC 6: Are the signs of decision-paralysis, and if so, what are these signs?
DMC 7: How quickly are decisions being made?
DMC 8: What is the level of the perceived time-pressure in the crisis situation?

On the strategic level?
High   Medium   Low

On the operative level?
High   Medium   Low

IL/C/CC: Integrated Command and Co-ordination
ICCC 1: Are there signs of a gap between the decision-making process and co-ordinating processes during the course of the crisis?
IL/C/CC 2: How quickly has the disaster area been secured and cleared?
IL/C/CC 3: What procedures have been used to identify victims and make this information public?

IL/C/CC 4: How is crisis support organised during both the acute period and the post-crisis period?

IL/C/CC 5: Do government authorities co-operate with volunteer organisations during the crisis?

IL/C/CC 6: During which phase, and in what way, do government authorities give decision support to rescue services involved?

QUESTIONS FORMULATED ON THE BASIS OF BACKGROUND LITERATURE IN SECTION 2: CO-ORDINATION- FORM (horizontal co-ordination)

HCF 1: How many co-ordination centres are engaged in the operative process?

HCF 2: Is there co-operation between civilian and military authorities?

- If not, are there demands that co-operation between civilian and military authorities be initiated?
- If so, how is this co-operation organised?

HCF 3: Are personnel at strategic (higher administrative) levels and at operative levels used to working together?

QUESTIONS FORMULATED ON THE BASIS OF BACKGROUND LITERATURE IN SECTION 2: CO-ORDINATION - CONTENT (vertical co-ordination)

VCC 1: How are contacts for co-ordinated decision-making made between strategic (higher administrative) levels and operative levels?

VCC 2: At what point, and on what grounds, would higher administrative levels intervene in the decision-making process?

VCC 3: Do actors at the operative level check with a higher administrative level before making-decisions and carrying these out; and vice versa – do higher administrative levels check with operative levels before making decisions?

QUESTIONS FORMULATED ON THE BASIS OF BACKGROUND LITERATURE IN SECTION 3: INFORMATION - FORM

IDTAF Information to Authorities
IDTAF 1: By what channels do authorities receive the types of information listed below:
- The type of incident and extent of material damage (buildings, vehicles, etc).
- Victims: number of deaths, injured and displaced.
- Current and potential risks.
- Geographical location (how precise in this localisation?)
- Access roads and suitable grouping areas.
- The rescue equipment available and additional equipment that may be needed.
- The whereabouts of available equipment to be mobilised.
- The availability and location of personnel to be mobilised?

IDTAF 2: How are the measures taken documented?
IDTAF 3: How are other involved organisations – on different levels – informed?

IDFAF Information from authorities
IDFAF 1: How do authorities inform others of the incident?
- Who within the authority receives crisis information?
- How is this information confirmed?
- How is information disseminated externally?
- What measures are taken to prevent the collapse of the telephone net. Is technical expertise available to prevent this?

IDFAF 2: Who is authorised to inform the citizenry about the incident in question?
IDFAF 3: How is out-going information co-ordinated within and between authorities?
- What organisational level acts as a forum for the co-ordination of information dissemination to the media and the public?
- Where does this co-ordination take place geographically?
- What information channels are utilised?
- Is there a press centre?
- When is press service set up and how is it manned?
- Are press conferences arranged, and how often?
- Are the press conferences well prepared?
- When was the first press conference held?

IWAF Information within authorities
IWA 1: Is there preparedness planning for how crisis information is to be disseminated <u>within</u> the authority in question?

**QUESTIONS FORMULATED ON THE BASIS OF BACKGROUND LITERATURE
IN SECTION 3: INFORMATION - CONTENT**

IFAC Information from authorities
IFAC 1: From what perspective does the authority in question formulate its out-going information?
- A "sender perspective"?
- A "receiver or dialogue perspective"?

IFAC 2: How are messages to the media and public formulated?
- How much new information is furnished during press conferences?
- Do authorities seem to be willing to spread information?
- How do authorities support the trustworthiness of their announcements?
- How do authorities demonstrate their accountability?
- How do authorities manifest/make visible empathy and understanding?

IWAC Information within authorities
IWAC 1: How do different crisis management levels keep each other informed of how they perceive the situation at hand?
IWAC 2: How do different levels perceive the need of information at other levels?

QUESTIONS FORMULATED ON THE BASIS OF BACKGROUND LITERATURE IN SECTION 4: THE MEDIA AND GOVERNMENT AUTHORITIES

AIM Authorities' Information to the Media

AIM 1: If there is a geographical defined disaster or accident area:
- Is the media allowed access to the area, and if so, at what point in time?
- Under who's leadership?

AIM 2: How is information to the media co-ordinated and verified?

AIM 3: To what extent do authorities take into consideration the needs and working conditions (including working hours) of the media – both domestic and international?

AIM 4: To what extent is the local media used as a resource for information dissemination?

AAM Authorities' attitude to media

AAM 1: What is the relationship between the responsible authority in question and the media, in the current situation?
- Positive
- Neutral
- Negative

AAM 2: How does the authority in question regard the media: as necessary in order to facilitate good communication or as intruders?

AAM 3: Which media do authorities have most confidence in?

AAM 4: What type of contact exists between crisis management leadership and the media?
- Are there different contact patterns for different types of media?

AAM 5: Have authorities entrusted the media to supply authorised information to the public?

AAM 6: Is there a tendency for authorities to attempt to control the media?

QUESTIONS FORMULATED ON THE BASIS OF BACKGROUND LITERATURE IN SECTION 4: THE MEDIA AND MEDIA SOURCES

MS Media Sources

MS 1: What are the main sources of information for reporters immediately after the crisis situation (disaster or accident) has occurred?

MS 2: Do the media tend to look for other sources of information than the official sources?

MS 3: Who do the media seek to interview?

MS 4: Which media actively seek an official spokesman or authority?

MAE Media Attitudes to Experts

MAE 1: What type of expertise does the media consult in their news coverage?

MAE 2: Are the same experts used both in local and national coverage; by both broadcast media and the press?

QUESTIONS FORMULATED ON THE BASIS OF BACKGROUND LITERATURE IN SECTION 4: MEDIA AND MEDIA CONSUMERS

MP Media Praxis

MP 1: What media are represented?

MP 2: Which tend to dominate the coverage, and which are most active in seeking information?

MP 3: When do the different media they make their reports?

MP 4: Are there any discernible patterns in the media's activities or coverage?

MP 5: What "selection criteria" do media apply during different phases of the crisis?

MP 6.: Do journalists and other media representatives seem to be aware of the information needs of consumers' during each phase of the crisis?

MP 7.: How do media learn about these needs?

MP 8: From what location or setting do news media usually choose to report:

- From a crisis management centre or (from the media perspective) a more visually "attrcative" milieu?

MP 9: How have local broadcast media acted during the initial phase?

MR Media Reporting

MR 1: Do domestic and international media differ in their reports of what caused the crisis?

MR 2: Are their other differences in the reporting of different media?

MR 3: Does media coverage emphasise the technological causes or technical aspects of the crisis, or is the coverage more directed toward moral issues or political responsibility?

MR 4: Do the media prefer to report "soft news", d v s news based on interviews with those affected?

MR 5: How do the media cover the public's reactions to the crisis? Is the emphasis on:

- Positive organisational behaviour?
- Negative individual behaviour?
- The public's rational behaviour?
- The public's altruistic attitude?
- The breakdown of norms, i.e. "fanning the flames"?

MR 6: Are there signs that different journalists have different ethnical norms in their reporting.