



Myndigheten för
samhällsskydd
och beredskap

A functioning society in a changing world

The MSB's report on a unified national strategy
for the protection of vital societal functions



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Swedish Civil Contingencies Agency (MSB)
Risk & Vulnerability Reduction Department
Natural Hazards & Critical Infrastructure Section

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Preface

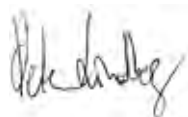
In its decision on 14 April 2010 the Swedish Government commissioned the Swedish Civil Contingencies Agency, MSB, to produce a unified national strategy for the protection of vital societal functions. The national strategy was reported 1 of March 2011.

This strategy is based on what are now and what will in the immediate future (5–10 years) be vital societal functions. Actors that operate or have an affect on vital societal functions are covered by the strategy. The private sector and individuals are included in the term “actors”.

So far in its work with the strategy the MSB is of the opinion that the process and involvement of various actors in the work has been extremely valuable and will be the key to the success of future work. The MSB has decided in the strategy not to name or suggest various authorities as responsible for the execution of activities. Responsibility for the execution of several of the proposed activities lies within the framework for MSB responsibilities, as detailed in the Government Instructions to the MSB.

The strategy has been produced in collaboration with several governmental agencies, county administrative boards, municipalities, and county councils. Representatives from the private sector who own, operate or manage large parts of the vital societal functions have participated in this collaboration and process.

The strategy should lead to a strengthening of activities related to vital societal functions on all levels, and these activities should complement each other. Sweden is dependent on what is happening elsewhere and ought to therefore, especially within the EU, take an active role and influence the design of legislation and other instruments of control. Cooperation with other countries and especially our Nordic neighbours needs also to continue to be enhanced.



Helena Lindberg
MSB Director General

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Introduction

Introduction

The government has formulated the following objectives for our safety & security:

- to protect the life and health of the population,
- to protect the functionality of society, and
- to protect our ability to maintain our fundamental values, such as democracy, law and order, human freedoms and rights.

Based on these objectives for our safety & security the government has specified the following objectives for societal emergency preparedness:

- reduce the risk for and consequences of serious disruptions, emergencies and crises,
- safeguard the health and personal safety of children, women and men, and
- prevent and limit damage to property and the environment.

The strategy is part of Sweden's emergency preparedness structure and should contribute to reducing risks, vulnerabilities and the consequences of serious societal incidents. It finds its start point in the fundamental principles for Swedish emergency preparedness: the responsibility, equality and proximity principles.

The strategy is primarily aimed at guaranteeing the functionality of society, whereas civil protection mainly focuses on the individual. Thus far there exists a distinction between the strategy and civil protection. The government has, however, stated that the foundation for societal emergency preparedness should, among other things, be comprised of work with civil protection and of the societal resources that exist during normal conditions. Accordingly, there is then no clear division between societal emergency preparedness and civil protection.

**Clearer definitions
for the main terms**

Clearer definitions for the main terms

In the government's commission to the MSB is included the task of providing clearer definitions for the main terms vital societal functions and critical infrastructure. Such a task with defining terms must in the opinion of the MSB lead to tangible benefits in the work of identifying and protecting vital societal functions. The definitions should in that case be widely supported and understood and used by actors in the field of societal emergency preparedness. The definitions cannot however claim to be relevant in all other contexts.

The criteria for the identifying and prioritising of vital societal functions that have been produced within the framework of the Styrel Project have been further enhanced in conjunction with terminology experts. This work has resulted in the following argument for clearer definitions for the terms vital societal functions and critical infrastructure.

Protection in this context refers to the measures that can and do need to be taken to guarantee the functionality and continuity of vital societal functions. Protection also refers to those activities that contribute to the ability within vital societal functions to withstand or limit the consequences of serious disruptions. Measures can be preventive (for example, to increase robustness in critical infrastructure), preparatory (for example, to train personnel and acquire materiel), operative (for example, rescue and clearing work), as well as feedback and learning (i.e. what could we do better next time).

Vital societal functions

Vital societal functions are those services and functions which are of particular importance for maintaining the functioning of society.

These differ to societal functions in general, which can be various functions and services, public and private, for the benefit of the population and the functioning of society.

Vital societal function is also used in the definition of extraordinary incident in section 4 of the Act on municipal and county council measures prior to and during extraordinary events in peacetime and during periods of heightened alert.

Definition

A **vital societal function** is defined as a function of such importance that its loss or severe disruption to it could entail major risks or hazards for the life and health of the population, the functionality of society or society's fundamental values.

Comment: A societal function that has the task of dealing with an ongoing emergency or crisis so that injury and damage are kept to as low a level as possible is also in and of itself a vital societal function.

Critical infrastructure

Critical infrastructure within the field of Swedish emergency preparedness is often mentioned in conjunction with the term vital societal function without there being a clear meaning or definition. It ought to be possible to eliminate this ambiguity via the following outlined approach:

It is suggested that critical infrastructure at national, regional and local level in *Sweden* should have an unambiguous and specific meaning as *support functions* for identified vital societal functions.

Critical infrastructure will in this way have an assuredly clear connection to vital societal functions, but despite that remain a separate phenomenon with its own definition. *Critical* infrastructure does not include activities i.e. continuous work or organisation for such work, and can as such be differentiated from the *vital societal functions* it supports.

Aspects of the societal infrastructure don't necessarily have to be critical in the strict meaning that they meet a critical dependency in order to be identified as critical infrastructure. Critical obtains instead a meaning via its relationship to vital societal function.

If critical infrastructure is to continue to retain a real significance within Swedish emergency preparedness then this approach needs to be applied. The alternative would be to abandon the term altogether and use only the term vital societal function, which would then also include support structures, such as electrical power and telephone networks, roads, railways, and water supply and sewage systems.

Now that critical infrastructure has been given its own definition the problem remains of its relationship to the term *European Critical Infrastructure* as defined by the ECI Directive, because this term doesn't only encompass physical support structures but also the various services and functions that make up vital societal functions as described above. If this discrepancy with international and European terminology cannot be resolved satisfactorily the question will need to be discussed again.

Definition

Critical infrastructure is defined as:

Physical structure, the functionality of which contributes to ensuring the maintenance of vital societal functions.

Vision

A blurred photograph of a busy public transit station. In the foreground, a person in a red shirt is walking towards the right. To their right, a person in a dark shirt is riding an escalator. In the background, another escalator is visible with several people riding it. The overall scene is a busy, modern transit hub with a sense of motion and activity.

Vision

A functioning society
in a changing world.

Aim and objectives

Aim and objectives

The strategy aims to create a more resilient society with an improved capacity for resisting and recovering from serious disruptions to vital societal functions. The strategy also aims to create the conditions for society to continue to function at an acceptable level during serious incidents and severe disruptions.

Overall objective

The overall objective of the strategy is a society with a good capacity for withstanding and recovering from serious disruptions to vital societal functions.

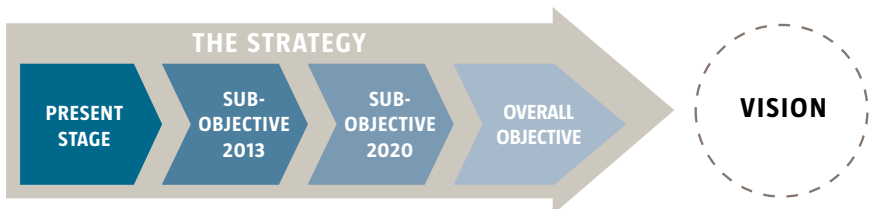
Sub-objective 2013

An action plan, based on the strategy's principles and priority activities, has been drawn up and execution is in progress. The action plan shall be produced by the MSB in close cooperation with other authorities, municipalities, county councils, county administrative boards, and the private sector.

The action plan includes details on how various actors can be supported and how application of the strategy will be followed up on.

Sub-objective 2020

Systematic safety work and continuity management are integral aspects of all vital societal functions at local, regional and national level.



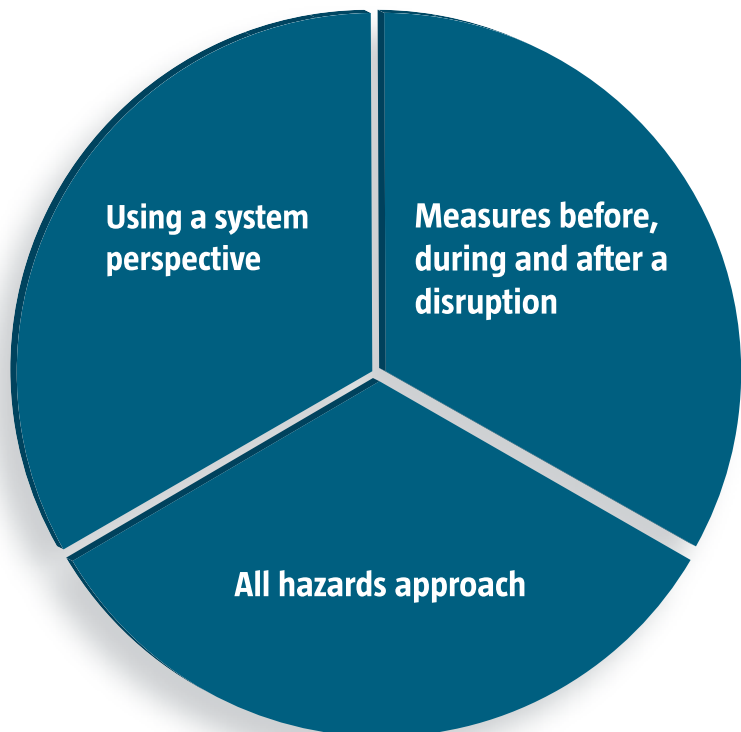
Strategic principles

Strategic principles

The functionality and continuity of vital societal functions can be strengthened if they run systematic safety programmes based on the following common principles:

- Using a system perspective
- Measures before, during and after a disruption
- All hazards approach

The principles are formulated for use collectively and simultaneously by all actors at all levels. They form together a way of thinking and a direction that leads the work towards the vision and the objective.



Both private and public sector functions will be able to benefit from the strategy, because for the most part it coincides with their own driving force - to have the capacity to deliver, despite disruptions. This is accordingly nothing new and the strategy can contribute to further improvements. The increased insight of actors about mutual dependencies, that is to say, that different functions require each other, can contribute to increased collaboration.

Collaboration between private and public actors has proved to be a good approach for guaranteeing guidelines and standards in the private sector. For private actors, collaboration offers a flexible way of meeting the public sector.

In some cases, or in some specific areas, execution of the strategy needs to be stimulated by financial means. Additionally, such stimulation measures may need to be supplemented with demands and legislation, for example, with regard to societal demands for lowest acceptable delivery levels. This can, for example, be compared with environmental quality standards for the areas of application of the Environmental Code.

Prerequisites for attaining the strategy's objective, while working towards the vision, are to consider as early on as the societal planning stage how vulnerabilities might be avoided, how various societal actors cooperate and communicate, and that they take fundamental responsibility for their own safety, security and continuity. Even the individual needs to prepare him/herself for serious disruptions and manage his/her own circumstances during such disruptions and incidents.

That which is considered a working and functional society will change over time. The strategy is however based on the current status and that which for the foreseeable future will be considered as our vital societal functions.

It is proposed that there should be a revision of the strategy every fourth year, based on the follow up of the work carried out by various actors as a result of the strategy. The MSB is responsible for ensuring that the revision work is completed and communicated.

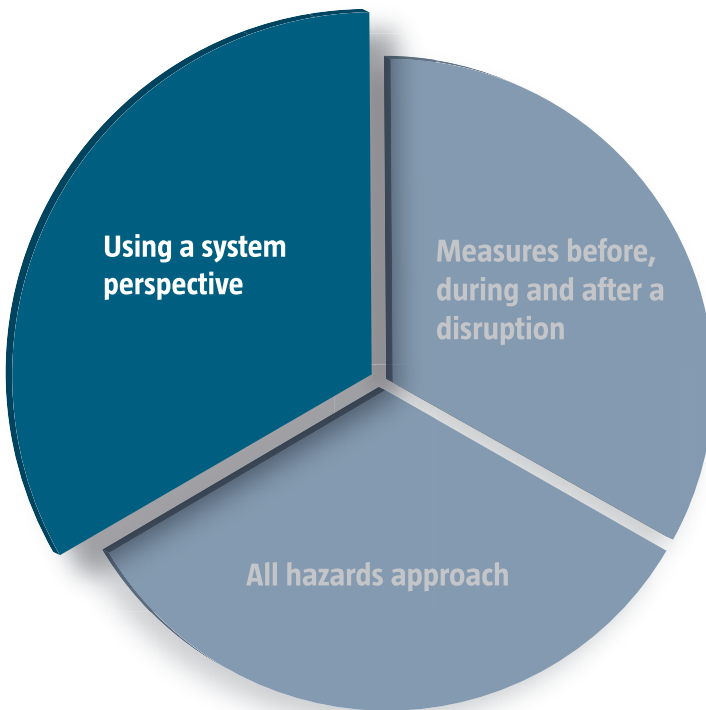
Strategic principles – description

Below are described three strategic principles. For each principle a number of priority activities have been provided. Each such



activity can be accurate under different principles, but is placed where it primarily belongs. The priority activities aim to highlight areas upon which it is particularly important to place focus. They also constitute the starting points for work on producing the action plan.

In the field of societal emergency preparedness there has been in progress for many years a process of development and alteration work. This strategy finds its starting point both in previously completed work and in current work in this field. A clear and unambiguous description of emergency preparedness as a whole also needs to be provided and communicated.

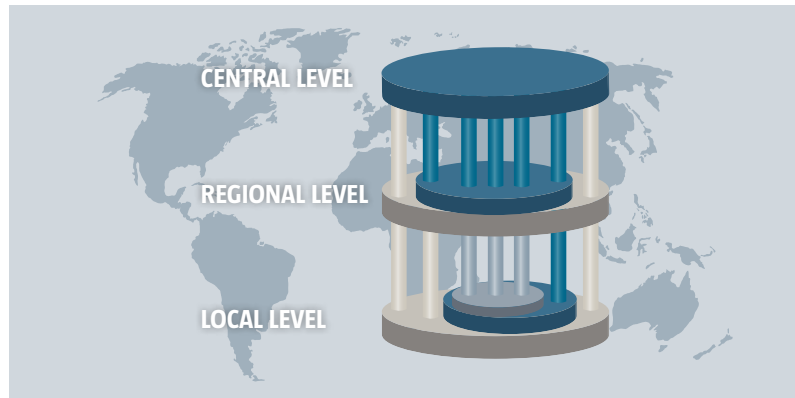


Using a system perspective

To describe what this principle means, it has been divided into three stages that comprehends to identifying vital societal functions, performing societal consequence analyses and prioritising vital societal functions.

Stage I: Identifying vital societal functions

Vital societal functions ought to be identified based on the importance of a function for society and the consequences of its loss. According to the MSB's *Instructions for Risk and Vulnerability Analyses*: governmental agencies, municipalities and county councils shall identify vital societal functions at local, regional and national level.



The identification ought to be done regardless of situation or scenario, which means that the result can be used in the work with many different scenarios

The societal sectors, within which vital societal functions can be identified, are as follows:

- Energy supply
- Financial services
- Foodstuffs
- Health, medical and care services
- Information and communication
- Public administration – management
- Safety and security
- Social insurance
- Technical municipal services
- Trade and industry
- Transport



Priority activities

- 1.1 Enhance guidance, processes and methods for governmental agencies, municipalities and county councils in their efforts to identify vital societal functions at local, regional, national and international level.
- 1.2 Specify the requirements that need to be placed both on the capacity to deliver to society, and various types of deliveries from vital societal functions. For example, this could be about services, amounts and quality. This can also be viewed as the lowest acceptable capacity or delivery level (fundamental capacity level). Critical infrastructure contributes to ensuring the maintenance of vital societal functions.

It should be possible to consider the result-goals for emergency preparedness that have been produced in conjunction with the on-going work on fundamental capacity levels.

Stage II: Performing societal consequence analyses

Society is complex and consists of many actors that need to cooperate for the whole to work. Dependency analyses for identifying, for example, common infrastructure for vital societal functions are a prerequisite for achieving continuity. The dependencies that exist within and between various functions need to be mapped out so that every actor operating a vital societal function is made aware of the prerequisites for continuous functioning.

By actors with geographical responsibilities supplementing their risk and vulnerability analyses with societal consequence analyses they are contributing to the systematic safety work that can be benefitted from by important societal actors. Consequence analyses directed at the societal level focus on what it is that a function delivers to society. The choice of method or model ought to be based on an actor's unique circumstances and situation.

Information and communication between various vital societal functions are necessary for society's ability to prevent, prepare for, deal with and recover from disruptions. That means there is a need for networking both vertically and horizontally throughout society. In this context it is important to pay attention to the individual's needs and capacity for being able to contribute, so that the system can function in a satisfactory manner.

Sector networks per societal sectors named in the strategy need to continue to be enhanced. It is of particular importance that actors and branch organisations are included in the work and also in these networks. Within the framework for the continuing development work ongoing in the cooperation networks regulated by the *Ordinance on Emergency Preparedness and heightened Alert* one should, for example, consider if there is a need to examine the list of those participating in the work as well as the need for alterations to the ordinance.

International collaboration is a necessity because the protection of vital societal functions is a cross-border issue. There is a mutual dependency between vital societal functions in Sweden and other countries.

Priority activities

1.3 Develop methods for consequence analyses at societal level. Within the framework for these analyses identify, for example, dependencies to other vital societal functions. Experience and conclusions from the work on dependency issues as well as from completed risk and vulnerability analyses can provide support for this work. These analyses could also provide foundation-data for the development of acceptable delivery levels.

To test, further develop, and create a programme for systematic work, a number of pilot projects should be run as one phase of the execution of the strategy. The pilots are planned for the period 2011–2013, as part of the work on the development of the action plan. The MSB will support the actors included in the pilot projects in this work.

1.4 Clarify roles and responsibilities for governmental agencies in each of the societal sectors (see Stage I: Identifying vital societal functions).

1.5 Improve the efficiency of private-public collaborations and partnerships in vital societal functions operated by the private sector.

1.6 Study the role and responsibility of the individual with regard to the functionality of society with the focus on the individual's capacity.

1.7 Continue to enhance networks within and between sectors from the perspective of vital societal functions. The geographical and international networks should also be further developed.

Stage III: Prioritising vital societal functions

The prioritising and division of resources need to be carried out in the event of serious incidents and disruptions that affect the functionality of society if a shortage of resources arises. The procedure for prioritising and what should be prioritised should as far as possible be made clear and ready during normal conditions.

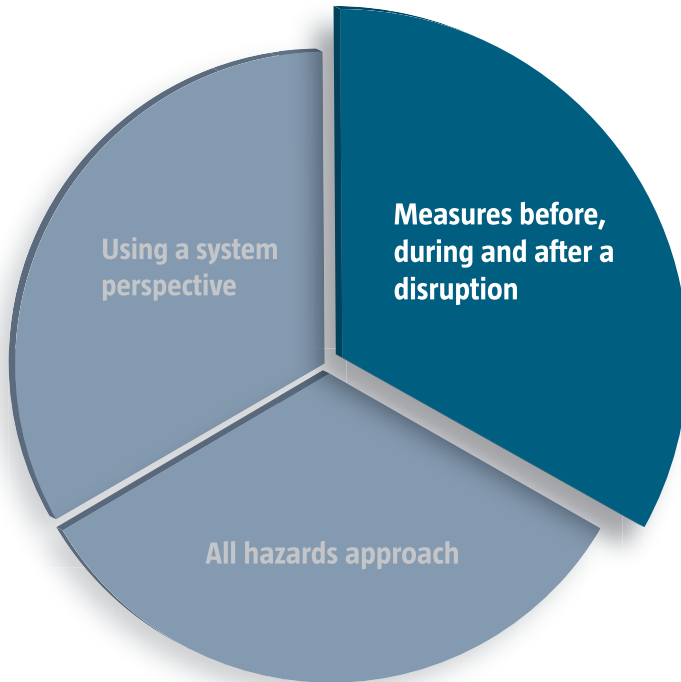
Prioritising can be performed based on how critical a given function is in a specific situation. How critical a vital societal function is varies depending on the situation, the progress of events, how serious the incident is, and how the disruption affects the functionality of society.

How prioritising should proceed ought to be based on existing and defined routines, decision making channels and principles. There may arise ethical, practical and legal problems that need to be resolved so as to enable prioritising in such a way that the vital societal functions concerned can return to normal conditions as soon as possible in the event of a serious incident.

Priority activities

- 1.8 Provide guidance for the handling and prioritising of resources in and between vital societal functions where decision making channels, legislation, ethical and practical issues are highlighted. The current work on prioritising in the Styrel Project and knowledge about critical dependencies are examples of important foundations for work with such guidance.
- 1.9 Develop the grounds for prioritising within the energy supply, transport, and information and communication sectors, based on the general guidance. These three named sectors are a prerequisite for the functioning of vital societal functions in all other sectors. Any work on grounds for prioritising should therefore initially be performed in these sectors. In the gradual approach selected for sectors in the work with the ECI directive the energy and transport sectors are those that work commenced on. The information and communication sector is proposed as the next sector for inclusion in the directive. The conclusions from the work on dependency issues also highlighted these sectors as being the most important starting points.

It is however important that grounds for prioritising should also be developed in other societal sectors.



Measures before, during and after a disruption

Attention needs to be paid to the entire cycle before, during and after serious disruptions so that society can withstand, handle, recover and learn from and develop further as a result of such disruptions. This means that a programme of systematic safety work needs to be run in vital societal functions. Working in a preventive manner with systematic safety work in conjunction with continuity management increases the chances of withstanding, handling and recovering, regardless of what happens.

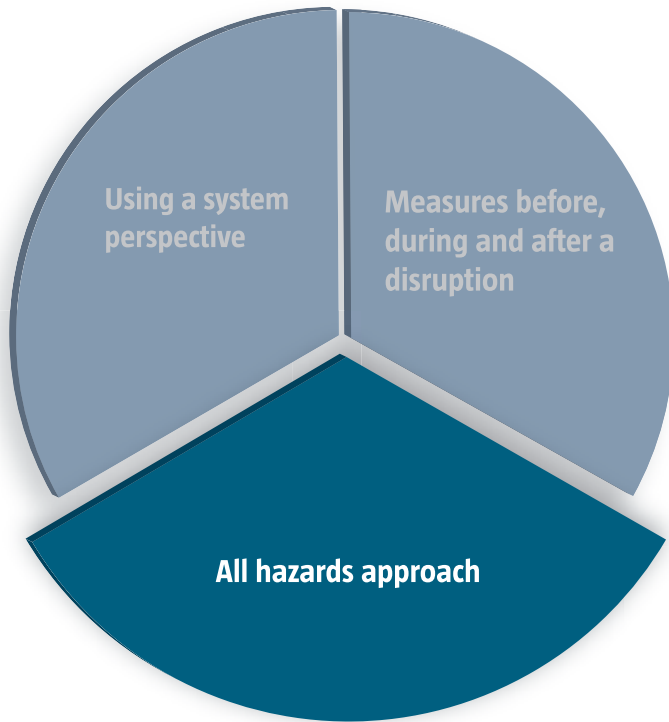


The ISO (International Organization for Standardization) is currently running a technical committee on continuity management based on a very wide societal perspective. An ISO standard can become a quality benchmark for the safety work of companies and organisations.

The *Instructions for Risk and Vulnerability Analyses* may in the future need to be adapted to the methods and standards for continuity management.

Priority activities

- 2.1 Analyse how consequence analyses at societal level can be supplemented by actors' ordinary planning, decision making processes and measures aimed at maintaining societal functionality, for example, based on the entire cycle before, during and after.
- 2.2 Clarify the incentive to private sector actors to work in a systematic manner with safety from a societal perspective, and in what ways different stimulation measures may need to be combined with legislative requirements.
- 2.3 Take stock of the need to develop new methods for evaluating and measuring the capacity to prevent, withstand and recover from disruptions.
- 2.4 Take stock of the need for new knowledge and priority research areas that focus on societal emergency preparedness.



All hazards approach

Vital societal functions can be influenced by various forms of threats and risks. It is therefore urgent that work on societal functionality is based on a wide range of threats and risks, in other words on an all hazards approach. This also means that vital societal functions must be taken into consideration in the work on limiting the threats and risks we are aware of and can predict.

Sweden has experienced many threats and risks that could have led to serious disruptions resulting in human injury and damage to property and the environment. It would be a long list but one can't predict exactly what is going to happen. There is therefore a need for fundamental work on ensuring continuity in vital societal functions, regardless of the type of incident. This needs to be combined with work on the threats and risks we are aware of and those that can occur.



The strategy implies that systematic safety work should take the form of subjecting all vital societal functions to societal consequence analyses in combination with testing various specified scenarios in order to monitor capabilities.

Priority activities

- 3.1 Pay attention to vital societal functions as part of the work on risk reduction for various serious events.
- 3.2 Develop work on risk and vulnerability analyses and intensify work with capacity assessments of a number of scenarios.

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