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FORSKNING/STUDIE

# Risk Communication

A Comparative Study  
of Eight EU Countries

**Risk Communication: A Comparative Study of Eight EU Countries**

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# Abstract

How do EU member states communicate risks to their citizens? In this study, we define risk communication as the information provided by different levels of government to citizens regarding possible future crises. The questions serving as departure points for this study are as follows: How is the administrative system for risk communication set up in the countries studied? How are the different risk communication campaigns (provided that they exist) embedded in the larger administrative context? How is risk communication strategy formulated in each country and what kind of threats are emphasized? In order to tackle these questions, we examine the risk communication strategy of eight countries: Sweden, Finland, Germany, England, France, Estonia, Greece and Cyprus. Our data comprises governmental web sites, publications, campaigns, as well as other modes of communication, such as videos posted on YouTube, with questions centering on institutional actors, methods of delivery, content, and effectiveness. We acknowledge that risk communication aims at supporting vulnerable populations and evening out imbalances, but at the same time we flesh out the power dimension of risk. In our analysis, we search for reproduction of norms and social inequality in risk communication practices. The results show that some patterns emerge regarding the way different EU countries convey information to the public, but they do not hold strictly to geography or administrative system. Digital media are the foremost vehicle of risk communication and the message generally conveyed is geared towards traditional, middle class households with the main language of the country as their first language. Volunteer organizations are present in all the countries in question, though not at the same degree. The conveyance of “self-protection” guidelines implicitly places the responsibility of protection to the individual. The results also show that in some countries, materiality has become more prevalent than the social dimension of risk in the message the public sector conveys, and that there is a move from focusing on risk to focusing on security.

# Förord

Från och med 2017 införde Sverige en nationell krisberedskapsvecka med syfte att få privatpersoner att reflektera över hur de hanterar vardagen vid en samhällskris och hur man kan förbereda sig för att kunna tillgodose grundläggande behov som mat och vatten, utan stöd av samhället. Inledningsvis talades om minst 72 dygn, numera har denna tidsrymd sträckts ut till en vecka.

Syftet med denna studie är att undersöka hur ett antal EU-länder arbetar med riskkommunikation, särskilt spridning och budskap till sin befolkning, för att öka privatpersoners riskmedvetenhet och krisberedskap, samt att sätta Sveriges och MSB:s arbete i ett vidare sammanhang. De länder som studerats är England, Estland, Finland, Frankrike, Cypern, Tyskland, Grekland och Sverige. Länderna är valda för att ge en bred variation både geografiskt och utifrån deras respektive statsförvaltningssystem.

Riskkommunikation och vikten av att befolkningen är förberedd både mentalt och praktiskt för att kunna hantera svåra påfrestningar står tämligen högt upp på agendan i både Sverige och inom EU. Ökad kunskap om hur andra gör kan öppna för möjligheter till utbyte mellan medlemsländer, bland annat för att dra lärdomar och utveckla människors riskmedvetenhet och beredskap inför kriser och höjd beredskap.

Teoretiskt diskuterar vi både två-vägsmodeller för kommunikation och masskommunikation. En av våra utgångspunkter är att kommunikationen måste sättas i sitt sammanhang, därav inledningens beskrivning av länderna placering i Europa, samt var i det statliga systemet som kriskommunikation återfinns.

## Table of contents

<b>1. Risk Communication: A Comparative Study of Eight EU Countries</b>	<b>12</b>
1.1 Introduction	12
1.2 Theoretical Underpinnings	12
1.2.1 Basic conceptualizations of communication and risk communication	13
1.2.2 'Risk' in risk communication: A 'critical' approach	13
1.2.3 From theory to empirical practice	14
1.3 Method	15
1.4 Results	16
1.4.1 The European South	16
1.4.2 Western Europe	22
1.4.3 Northern Europe	32
1.4.4 Eastern Europe	39
1.5 Discussion	42
1.5.1 Organization: What's in a Name	43
1.5.2 The sender and risk communication techniques	44
1.5.3 The message: campaigns and general responsibility	44
1.5.4 The imagined receiver	46
1.6 Conclusions	46
1.6.1 The securitization of discourse and the commodification of risk	47
1.7 References	49
1.8 Annex 1: Supplemental links and images	55

# Sammanfattning

I denna undersökning har vi studerat åtta EU-länders riskkommunikation med fokus på myndigheters kommunikation till allmänheten. I studien ställs frågor om vilka institutionella aktörer som är involverade i riskkommunikationsprocessen inkluderat frivilligorganisationer, och vilka kommunikationsmetoder som används där vi bland annat undersökt vilka språk informationen givits på och vilka media och kanaler som använts. Vi har även sett närmare på vilka risker som fokuserats i meddelandena, om det finns meddelanden avsedda för särskilda grupper i samhället, och om någon utvärdering av riskkommunikationen gjorts. Ett särskilt fokus har lagts på kampanjer om krisberedskap till allmänheten.

De länder som studerats är Sverige, Finland, Estland, Tyskland, Frankrike, England, Grekland och Cypern. De undersökta länderna omfattade hela typologin av offentliga förvaltningssystem i Europa (Kuhlman och Wollman, 2014). Detta är relevant eftersom riskkommunikation är en del av den offentliga förvaltningsarkitekturen. Frankrike och Grekland hör till den kontinentala europeiska napoleonska modellen. Den kännetecknas av en stark centraliserad regering och en kraftfull centraliserad byråkrati. Detta innebär att de lokala nivåerna är underordnade centralmakten. Grekland präglas av en politiserad offentlig sektor och kundrelaterade relationer. Detta står i kontrast till den kontinentala europeiska federala modellen (Tyskland) där den centrala byråkratin är svagare medan de subnationella decentraliserade institutionerna har större makt. I den skandinaviska modellen (Sverige, Finland) är den administrativa strukturen starkt decentraliserad, medan den nya offentliga förvaltningen (NPM) är den mest framträdande i den anglosaxiska modellen (England och i viss mån Cypern) (Wollman, 2014). I Estland slutligen fångar vi den post-kommunistiska miljön.

Information har sökts på ländernas Våra data p, fattar webbplatser (hemsidor), i publikationer på nätet, sociala media t.ex. Facebook, Twitter och videor som lagts ut på Youtube. Vi har i de fall ett land haft kampanjer med fokus på riskkommunikation studerat dessa och undersökt om de varit en del av en mer omfattande strategi.

När något kallas ”en risk” betyder det ofta något som bör förebyggas, mildras eller åtminstone hanteras (Montelius & Giritli Nygren, 2014). När vi talar om kampanjer för riskkommunikation blir detta ännu tydligare, då dessa kampanjer strävar efter en förändring av attityder eller beteende hos mottagaren. Att tala om risk är därför att utöva makt, då det handlar om att påverka uppfattningar, beteenden och politiken. Risk bygger även på specifika intressen, normer och ideologier (Giritli Nygren et al., 2017). I vår studie har vi därför haft ett särskilt fokus på dessa frågor och undersökt i vilken grad riskkommunikationen reproducerar normer och sociala ojämlikheter i samhället. I analysen tillämpas ett intersektionellt perspektiv, där vi särskilt undersökt hur den kommunicerade.

Överlag är digitala media det främsta verktyget för ländernas riskkommunikation och Youtube används av flera, såsom Grekland som via Youtube uppmanar familjer att göra en beredskapsplan. England använder Youtubevideos med tecknade figurer som för fram budskap som "Let's get ready" och det finns även länkar till myndighetssidor som visar hur man skyddar sig själv, sitt husdjur och sitt företag under en nödsituation. Estland har idag permanenta Youtubevideos om brandsäkerhet i hemmet och säkerhet på sjön. Andra länder använder sig mer av skrivna texter. Tyskland ger också rekommendationer och riktlinjer för hur man kan förbereda sig. På Cypern är budskapet från myndigheterna att varje individ i grunden har en skyldighet att skydda sig själv och vidta nödvändiga åtgärder i god tid. Denna information återfinns i ett dokument (pdf) som talar om vad man ska göra om sirener varnar allmänheten för fientligt agerande. Den franska regeringen för fram budskap om att förberedelse ökar möjligheten att kunna agera vid en kritisk händelse och även möjligheten att hjälpa familj och vänner. Förberedelserna sker genom att fylla i ett antal nedladdningsbara formulär. På en fransk hemsida ges även videohandledning om hur ett antal risker kan hanteras.

En trend vi ser i ländernas information är att betoningen på materiella förberedelser är mer utbrett än fokus på socialt omhändertagande. Detta gäller dock inte alla länder, t.ex. har Finland behållit solidaritetsmeddelandet i sin 72-timmars kampanj och även Frankrike har viss information om att hjälpa familj och vänner. Riskkommunikation är dock i många länder instrumentell och pekar på vad man behöver ha tillgång till (mat, medicin, spel till barnen), snarare än aktivitet; vad man bör göra, t.ex. hur man tar hand om sina husdjur, äldre människor och de som behöver extra stöd. Dessutom är anvisningarna mer anpassade till den som bor i stadsmiljö än den som bor på landsbygden. Instruktioner för egenskydd förutsätter också att individer har resurser för både att förstå och att kunna införskaffa det som behövs för att vara trygga tills staten ingriper. I vissa länder, som Sverige och Tyskland, kommuniceras att den perioden kan vara ganska lång.

Ser vi till tidigare studier finns grupper i samhället som kan ha svårt att följa givna instruktioner t.ex. vissa äldre människor, nyligen invandrade och barn/unga människor. Denna typ av problem kanske skulle förbättras med kampanjer som den australiensiska "Lär känna din granne", liksom Finlands fokus på solidaritet och att hjälpa varandra under mottot "tillsammans gör vi Finland säkrare". Även i Frankrike finns det budskap som betonar betydelsen av att bygga upp en förmåga för att på så sätt även hjälpa andra. Den sociala dimensionen av riskkommunikation fanns tidigare också i Sverige i broschyren "Om kriget kommer", exempelvis att inte ta med resväskor i bilen utan i stället lämna plats så att andra kan få åka med.

De länder som har fokuserat på konsekvenser (t.ex. Sverige) snarare än risker (t.ex. Estland) har gått från ett riskperspektiv till att fokusera på säkerhet, där "att vara säker" från en ospecificerad risk skapat behov av åtgärder som kan

säkerställa säkerheten. Denna trend har kommit att likna USA där det vuxit fram en marknad för produkter specifikt inriktade mot beredskap. Det finns exempelvis svensk reklam för nödvatten som håller 50 år, och nödlådor som innehåller alla de saker som föreslagits av aktuell myndighet, dock till höga kostnader.

Ytterligare studier behövs för att undersöka effekterna av de olika typerna av riskkommunikation, kampanjer och metoder när det gäller dels människors kunskap, förståelse och förberedelse inför möjliga hot och risker, dels hur detta skiljer sig mellan olika befolkningsgrupper och därmed leder till varierande grad av sårbarhet. Vidare behövs fördjupad kunskap om motiven bakom de skilda tillvägagångssätt som olika länder tillämpar. Slutligen behövs ytterligare kunskap om hur riskkommunikationen i Europa och de länder som vi undersökt förhåller sig till riskkommunikation i andra västerländska länder, t.ex. USA, Kanada och Australien, liksom i länder i Afrika och Asien, t.ex. Sydafrika, Indien och Kina. Detta för att sätta resultaten i ett globalt perspektiv och dra lärdom från olika kontext.



# **1. Risk Communication: A Comparative Study of Eight EU Countries**

## **1.1 Introduction**

The Swedish Civil Contingencies Agency (MSB) commissioned Mid Sweden University in the spring of 2017 to conduct a comparative study among EU countries on the subject of risk communication. The purpose of this study is to provide MSB with knowledge regarding the way different countries communicate risk to their citizens. Such knowledge production has practical implications for MSB as the foremost risk communicator in Sweden in terms of benchmarking, but also in terms of lessons learnt through the understanding of the mechanisms of risk communication in other countries. The departure points for this study are as follows: How is the administrative system for risk communication set up in the countries studied? How are the different risk communication campaigns (provided that they exist) embedded in the larger administrative context? How is risk communication strategy formulated in each country and what kind of threats are emphasized?

In order to tackle these questions, we examine the risk communication strategy of eight countries: Sweden, Finland, Germany, U.K. (with a focus on England), France, Estonia, Greece and Cyprus. This report is structured as follows: this introductory section is followed by a brief theoretical overview of risk communication, at the end of which we outline the questions that guide our research. We then elaborate on case study selection, methodology and data collection, followed by a report of the results for each country. A discussion section synthesizes our results while we round up this report with some concluding remarks and suggestions for further research.

## **1.2 Theoretical Underpinnings**

Risk communication as a research area is broad and diversified, many times including other research fields such as risk perception, risk and emotions, social construction of risk, media communication, framing, social movements, public engagement and not least crisis communication (Cho, Reimer & McComas, 2015). In light of this, risk communication studies include everything from risk to crisis and disaster, from different actors and their understandings and behaviors to organizations and processes in communication models, from the individual to the societal, and so forth (Demarin et al., 2010). Therefore,

whenever we study ‘risk communication’ we need to define what exactly we mean and limit our investigation to particular aspects of this broad field. In this report we are interested in communication about possible future crises that the general public might be subjected to, communicated by, or at least organized by, public bodies where the receiver is the general public.

### **1.2.1 Basic conceptualizations of communication and risk communication**

In a very general perspective one can say that communication can be divided between interpersonal communication and mediated communication, and between individual communication and mass communication, where the latter more or less always overlaps with mediated communication. The communication process can be summarized by the classical question *Who says what to whom, how, and with what effect?* (Lasswell 1948). Here we also find the main actors of the communication process; sender, or source, message, the receiver, channel and the effect of the communication.

Over time, communication models have gone from conceptualizing the process as a message from a sender transferred to recipient, into two-way as well as dialogue focused processes, and today the environment as well as the actors’ emotions, opinions, knowledge, trust etc. are included in the communication process (Olofsson, 2009). In other words, the field has shifted from considering recipients, usually customers or the public, as passive to seeing them as active fellow communicators. In practice, this is not always the case and there are many situations where one-way mass communication is still the most important and most common feature. In some situations, for example in an emergency evacuation, many people have to be informed simultaneously and then mass communication is most effective. The awareness that the recipient is not passive and that, as a sender, one may also benefit from information from one’s intended recipients has increased, not least with the development of smart phones and social media (Andersson Odén et al., 2016). The conclusion is that people are neither passive recipients of, nor act entirely ‘rational’ on risk communication. People are actively engaged in searching, and using such information, but sometimes also make informed decisions about avoiding certain information. Reactions to (risk) communication are formed by social context, the person’s own security needs, and the credibility he or she attributes to the source of information (Alaszewski, 2005).

Mass media is an important sender and channel for risk communication. However mass media usually does not work as a strategic risk communicator until the crisis or disaster is approaching, but rather functions as an unintended risk communicator, that is, communicating about risks for other purposes than influencing risk perception, intentions and/or risk related behavior (McComas 2006). Strategic risk communication is what characterizes public bodies’, including health organizations’, communication, and is the focus of the current study. This kind of risk communication has a particular purpose, often targets particular receivers and for that reason focus on form, how to communicate, and content, what to communicate, to reach the target audience.

### **1.2.2 ‘Risk’ in risk communication: A ‘critical’ approach**

Before we turn to how we have transferred these theoretical underpinnings to our empirical investigation, in this section we say a few words about risk in theory and practice. Many social scientists argue that risk has become an organizing principle in

Europe and North America and as such, it is used as a way of governing both populations and nations (Beck, 2009). This is because when something is called a risk, action is required; it is something that should be prevented, mitigated, and at least managed (Montelius & Giritli Nygren, 2014). For risk communication campaigns, this is even more evident, since they strive for change, attitudinal or behavioral. Therefore, to speak of risk is to exercise power, since this kind of speech act aims to influence perceptions, behavior, and policies, and is based on particular interests, norms, and ideologies (Giritli Nygren et al., 2017). This accords with Latour's (2003) master narrative, in which the security of the welfare state has made societies more sensitive to risks compared to earlier periods when safety was not taken for granted. This resulted in the development of a risk paradigm through which societies understood themselves, other societies, and global institutions (Öhman et al., 2016). Risk is a social concept and what is defined as a risk, who is seen as 'at risk', or even 'risky', is influenced by beliefs about society and its inhabitants, for example by norms and discourses about gender, ethnicity, class, etc. (Giritli Nygren and Olofsson, 2014). In some cases, inequalities are (re)produced by modes of governance, including the use of "risk" as a regulatory regime that is shaped by power imbalances (Giritli Nygren et al., 2017). Needless to say, much risk communication aims to support vulnerable populations and in different ways aims to change, and to even out these kinds of imbalances. Our approach to risk does not ignore this, but by making the power dimension of risk and the way it intersects with other lines of power visible, we open up for an analysis of risk communication practices that does not hide reproduction of norms and social inequality.

### 1.2.3 From theory to empirical practice

The empirical questions guiding the analysis of our data are based on the communication process' basic components and informed by a critical risk analysis; (i) mapping the actors involved in risk communication; (ii) the communication method used; (iii) the content of the communication, and finally, (iv) the effectiveness of communication strategy. More specifically, we structured our analysis based on the following set of questions:

**Table 1.** Research guide

Category	Constituent Questions
Institutional Actors	What institutional actors are involved in the risk communication process? Are there any quangos or NGOs involved, and if so, how?
ii) Method	How is the message communicated to the public? Is the communication in any language other than the official one for each country investigated? If that is the case, is the message the same? Are there any provisions to spread the message to subgroups of the population such as <ul style="list-style-type: none"> <li>• People with disabilities</li> <li>• Nonnative speakers (tourists or immigrants)</li> <li>• People in elderly care</li> <li>• The homeless</li> </ul> What kind of media (videos, pictures, text) are used to convey the message?
iii) Content	What kind of risks and potential crises do the countries under comparison take up? Are there any campaigns (with or without a timeline) geared towards raising public awareness when it comes to crisis preparedness? If so, what do these campaigns look like?
iv) Effectiveness	Have there been any evaluations assessing the effectiveness of the risk communication tools?

### 1.3 Method

This was a comparative study with no inferential ambitions. In other words, we sought to describe the risk communication arrangements in each country under investigation rather than make causality claims as to why these arrangements play out as they do. Having said this, we aimed at a systematic comparison, with the explicit objective to capture as much variation as possible among EU member states.

The study is a small N case study of eight countries selected out of the population of EU 28. At the time of the writing of this report, the UK is still an EU member so the English context does not contravene the selection process. To fulfil the objective of maximum variation in the cases selected, the logic of comparison is a variation of the “most similar systems” logic (see for example Meckstroth, 1975; Przeworski and Teuene, 1970; Collier, 1993).

Rather than uncovering causal relationships, the eight-country comparison contrasted contexts in order to establish a framework for understanding how risk communication processes play out in different ways in each context. This interpretive dimension in social sciences is accommodated within small N comparative studies as elaborated in Skockpol and Sommers (1980).

The selection of cases covered the entire geographic gamut of the EU 28. Geography is relevant because it partly (though not exclusively) determines what kind of events might be conceived as threats by each country. Traditionally, Greece and Cyprus belong to the European South; France and Germany are

**Figure 1.** Regions of Western Europe. Source: Libraries of the University of Minnesota, 2012.



Western Europe (though Germany is sometimes classified as Central), Sweden and Finland belong to Northern Europe, while Estonia is part of Eastern Europe. The British Isles may be part of Western Europe or a Region of their own. Figure one summarizes the geography of our study.

Additionally and perhaps more importantly, the countries under examination covered the entire typology range of public administration systems in Europe (Kuhlman and Wollman, 2014). This is relevant because risk communication is part of the public administration architecture of each case in terms of institutions involved, message conveyed, etc. France and Greece belong to the Continental European Napoleonic model, characterized by a strong, centralized government, a powerful centralized bureaucracy, which means that the sub-national and local levels are considered to be subordinate. Greece specifically is also characterized by a politicized public sector, patronage and clientelistic relationships in the public service sector. In contrast, in the Continental European Federal model (Germany) the central bureaucracy is weaker whereas the subnational, decentralized institutions have more power. In the Scandinavian model (Sweden, Finland), the administrative structure is also highly decentralized, while the most salient feature of the Anglo-Saxon model (England and to a certain extent, Cyprus) is New Public Management (NPM) managerial practices (Kuhlman and Wollman, 2014). In Estonia, we capture the post-communist environment. Following is a table summarizing our case selection.

**Table 2.** The Geography and Politics of the study

<b>Public administration</b>	<b>Category</b>	<b>South</b>	<b>North</b>	<b>West</b>	<b>East</b>
	<b>Continental Napoleonic</b>	Greece		France	
	<b>Post-Communist</b>				Estonia
	<b>Continental Federal</b>			Germany	
	<b>Scandinavian</b>		Sweden, Finland		
	<b>Anglo Saxon</b>	Cyprus		UK	

## 1.4 Results

In this section, we discuss the findings of the analysis of the eight countries under comparison. We follow the framework of the questions on p.3 to structure our discussion.

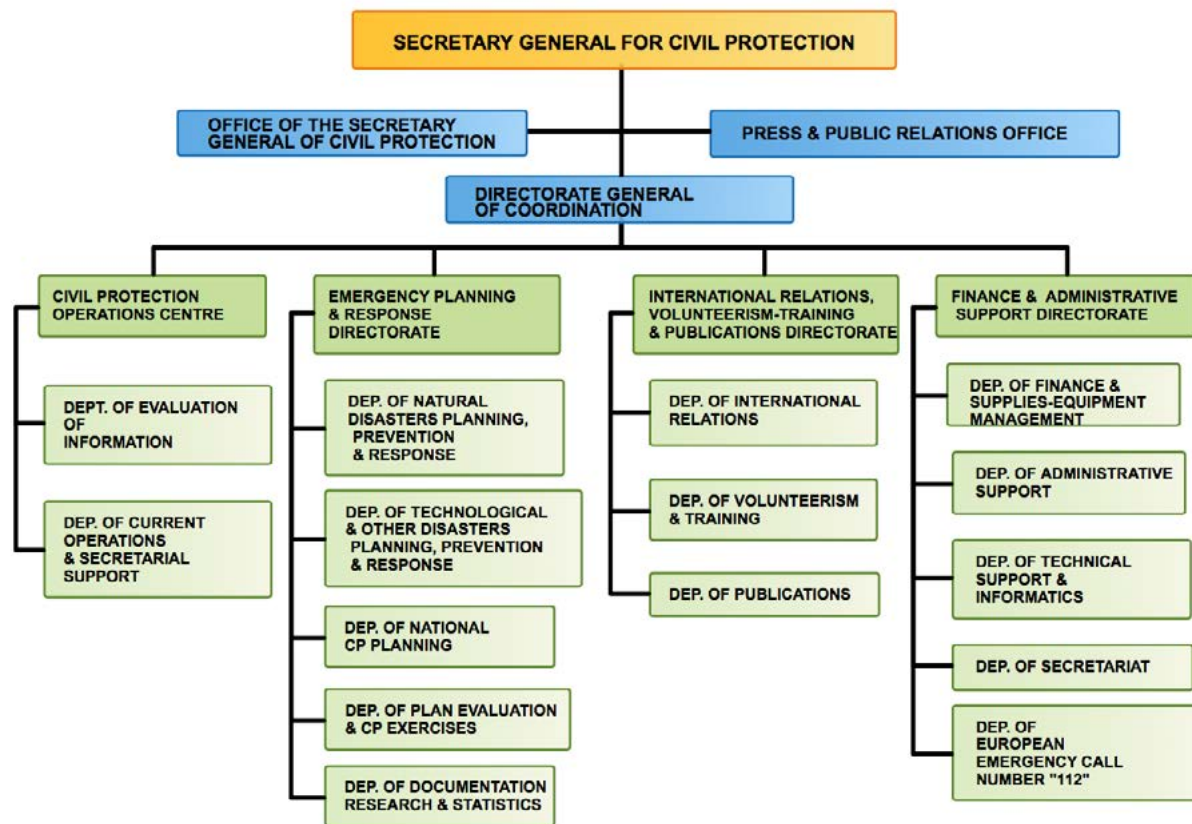
### 1.4.1 The European South

Greece

#### **Institutional actors: multilevel governance**

The governmental institution with the authority to handle civil protection issues is handled by the General Secretariat for Civil Protection (Γενική Γραμματεία Πολιτικής Προστασίας). The structure and mandate of the secretariat was decided by updating the legislation in 2002 with N. 3013/1-5-2002-ΦΕΚ-102 Α'/1.5.2002 (Republic of Greece, 2002). The secretariat is under the ministry of the interior and is structured as follows:

# Organization Chart of GSCP



**Figure 2.** Organization Chart of GSCP. Source: General Secretariat for Civil Protection, (2018a).

The organization was established in its original form in Greece in 1995 and it is responsible, among other things, to “organize and coordinate, in cooperation with the appropriate public institutions, the task of communication and education of the citizenry in the field of civil protection, both in a general information level and the corresponding level of providing specialized instructions in the case of a specific catastrophe or state of emergency” (Republic of Greece, 2002, p. 1530, translated from the Greek).

The 2002 legislation provided for a multi-level structure with three additional layers under the national level: regions, prefectures, and municipalities. Communication of hazards, risks, and imminent dangers are in the purview of regions and prefectures, but it is not something tasked at the local level.

The secretariat is also tasked with the coordination of volunteers in general, as well as specialized volunteers. These actors do not seem to have an independent presence when it comes to informing the public; rather their activities are channeled through the Secretariat at all levels of governance. As an indicative example, the web site of the Greek Red Cross focuses on aid to refugees, aid to the poor, and news from rescue missions, though there is a link to the Secretary of Civil Protection on this page <http://www.samarites.gr>, which is linked to the Red Cross, but it is a group of volunteers involved in sea rescue assignments.

## Method

The main web site of the General Secretariat for Civil Protection (at the national level) is both in Greek and in English; both versions are aesthetically pleasing and easy to use. What is more, the English version conveys the same message as the Greek one and it is professionally written that is, not the output of google translator (General Secretariat for Civil Protection, 2018b).

A tab titled 'self-protection guidelines' leads to a page with eight categories of dangers indicated by pictures, all easy to understand. They include: earthquakes, landslides, forest fires, floods, severe weather phenomena, volcanic eruptions, technological hazards and CBRN (chemical, biological, radiological, nuclear) accidents. Clicking each of these pictures when the page is set to Greek, brings up two tabs: one titled self-protection guidelines and one describing the phenomenon. This is text in eloquent language that presupposes that one is fairly fluent in Greek. The language under the tab that describes the phenomenon is rather academic (some entries even include references), providing useful information about the phenomenon at hand and would probably be geared towards those who have an interest to learn more and understand Greek at a high level. This tab is not available in the English version of the web site.

Accessible from the start page of the Secretariat's web site are self-protection guidelines in four additional languages (beyond Greek and English): French, Spanish, Albanian, and Arabic. These six languages would by-and-large cover the needs of the population living in Greece, including immigrants. The text is of professional quality in the languages other than Greek. Greece has had a large Albanian community since the 90s and of course has been one of the points of entry to the EU for many coming from the Middle East and Africa. The web site allows increasing the font, but otherwise there are no mentions or readily apparent provisions for reaching people with mental or physical disabilities. The secretariat is on Facebook and Twitter (@GSCP\_GR), with posts in Greek.

The Secretariat has additional channels of communication including maps, showing fire hazards for example, updated regularly. Their 'information kit' includes publications, other printed matter, digital documents, posters, TV spots and educational films. This material is in Greek, with the exception of a long brochure outlining self-protection guidelines also in English and is available for download here: <http://civilprotection.gr/en/media-gallery?tid=69>. The TV spots and educational films are also available on youtube in Greek only. The TV spots are of good quality, easy to understand, animated short films lasting about one minute. There is a common character in all of them, a kind of recognizable mascot in the form of a maple leaf (in Greek: *φυλλαράκι*<sup>1</sup>). The leaf is depicted in different colors depending on the season the spot refers to.

Communication to the citizens at the subnational level is uneven. In the Region of Attiki, to which Athens belongs to, risk communication is in Greek only. One arrives to the Civil Protection part of the web site through an icon menu on the right hand side [http://www.patt.gov.gr/site/index.php?option=com\\_content&view=article&id=7394&catid=451&Itemid=374](http://www.patt.gov.gr/site/index.php?option=com_content&view=article&id=7394&catid=451&Itemid=374). The Region of Attiki web site mostly refers the visitors to its web site to the national web site, though it does have its own youtube channel with informative

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1. The word means "small leaf". It is a homonym to the word meaning "buddy".



videos. The quality of the videos is markedly lower than the ones produced by the national service. The voice seems to be coming from a computer, the language is ineffective, they are aesthetically displeasing and generally not something one would voluntarily watch for more than 5 seconds. All these spots are in Greek. However, the Region of Peloponnisos, Western Greece and the Ionian Island, offers information to the public in English in pdf and are on Facebook and tweeter as well, with posts in Greek (see for example <http://www.apd-depin.gov.gr/index.php/περιβάλλον/πολιτική-προστασία.html>) The Region of Western Greece also produced a youtube video starring a Greek archery Olympian, who is also a firefighter with the purpose of informing people of the dangers of forest fires.

### **Content**

The hazard most prominent in communication to the citizens is fire. Greece, because of its topography and climate, has had a long-standing problem with forest fires. Additionally, people have intentionally set fire to areas so they can afterwards build houses. This practice is illegal but happens regardless. House fires are a concern as well, especially since the economic crisis has caused some people to use braziers. Earthquakes and extreme weather are also emphasized, and there also instructions on what to do during a CBRN accident. No specific campaigns of self-protection exist other than a youtube spot found here <https://www.youtube.com/watch?v=-Y1jXLfY2nY> urging families to make a contingency plan. This spot was produced by the Region of Attiki and one could argue that it is of questionable quality and effectiveness.

### **Effectiveness**

The Secretariat has a department of publications and the legal framework N. 3013/1-5-2002- ΦΕΚ-102 Α'/1.5.2002 (Republic of Greece, 2002) mandates evaluations, however, no such documents seem to be readily available to the public through the web site.

## **Cyprus**

All the material for this part of the report refer to actors and processes in the Republic of Cyprus. This is the southern part of the island, mainly inhabited by Greek Cypriots. No information was collected regarding practices in the so called Turkish Republic of Northern Cyprus, an entity recognized solely by Turkey.

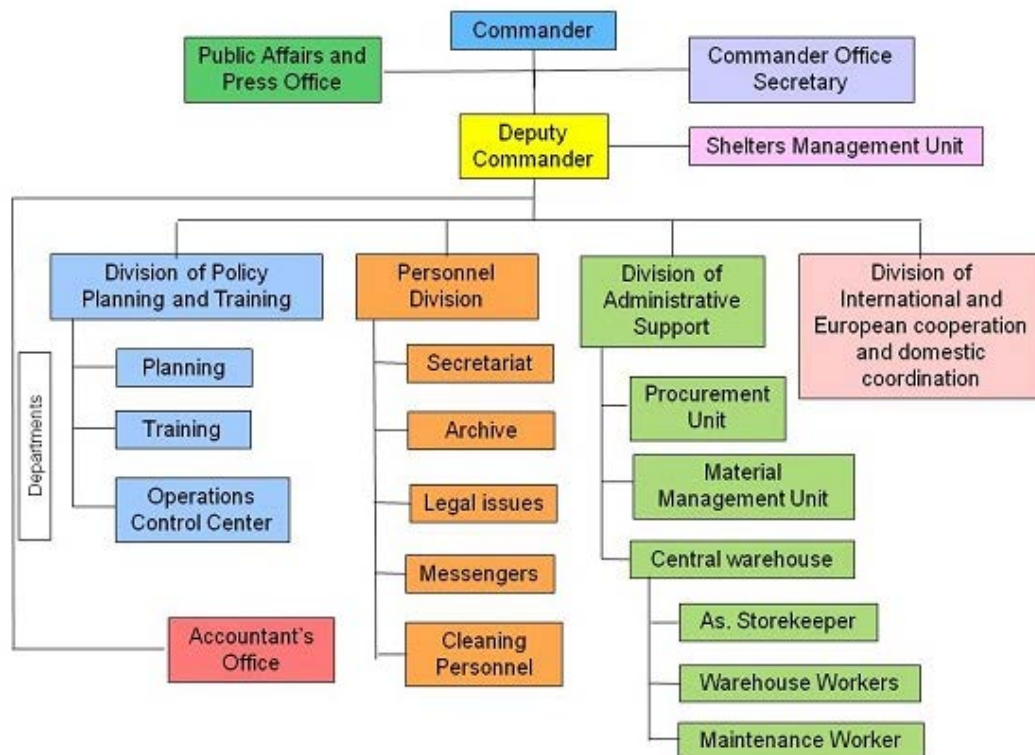
### **Institutional actors: multilevel governance**

Cyprus uses the term “civil defense” (πολιτική άμυνα) vs “civil protection” used by the Greek authorities. The Force is a department in the Ministry of the Interior, staffed by permanent personnel, volunteers, as well as conscripts assigned to serve in the Civil Defense Force. Strategic policy decisions are made by the General Civil Defense Administration, while there are also five district administrations: Nicosia, Limassol, Larnaca, Paphos, and Famagusta. These are structured as follows: (Cyprus Ministry of Interior, 2018a).

The scope of civil defense is governed by legislation enacted in 1997 and 1998, and modified in 2006 (Republic of Cyprus, 2014), while

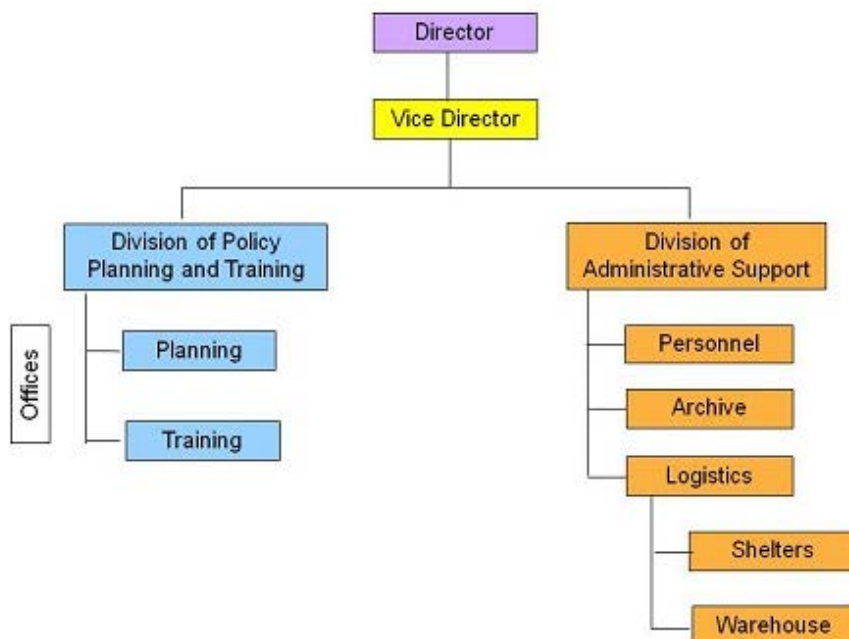


### ORGANIZATION CHART OF CIVIL DEFENCE HEADQUARTERS



**Figure 3.** Organization Chart of Civil Defense Headquarters, Cyprus. (Cyprus Ministry of the Interior, 2018b)

### ORGANIZATION CHART OF CIVIL DEFENCE DISTRICT OFFICE



**Figure 4.** Organization Chart of Civil Defense District Office, Cyprus (Cyprus Ministry of the Interior, 2018c).

[t]he main mission of Civil Defence focuses on taking measures in response to natural or man-made [sic] disasters which might cause serious consequences, the size of which may cause hazards to the life and welfare of citizens or extensive damage to the environment and natural resources of the Republic. These measures to manage the consequences of a disaster include a series of actions for the prevention, preparation, response, design, education and mitigation of the negative results. Additionally, Civil Defense Force has the responsibility of protecting the civilians in periods of hostilities (Cyprus Ministry of the Interior, 2018, n.p.).

The Force registers and administers the training and work of volunteers in the different categories of operations of civil defense, which are rescue, welfare, first-aid, neighborhood watch, and communications. Only citizens of the Republic of Cyprus may register as volunteers and only after they have submitted a relevant request to the authorities.

### **Method and Content**

Certain pages of the national web site are translated into English but not all. Though there is a tab titled “self-protection measures” in English, the material outlining these measures are in Greek only. The information provided to the public is in pdf and not in interactive form. The pdfs, which may also be downloaded and printed, provide information on what to do in case of bad weather, including tornadoes, lightning, flooding, and extreme heat. There is information on what to do in the case of earthquake, information specific to students, and guidelines on what to do in the event of a chemical, biological, or nuclear attack. Most notably, the Civil Defense force is providing information in the eventuality of hostile action (the Greek word *εχθροπραξία* conveys “act of war” rather than terrorist attack), including in the case of bombing and the fires caused by such action. Cyprus may also activate sirens as a means of warning the public of imminent hostile action.

These pdfs include some pictures, but the information is delivered by text. The sentences are long and contain at least one grammatical mistake. The message is unequivocal, however: “Self-protection is basically the responsibility of all of us. Take the necessary measures in good time” (Civil Defense Force, 2002, n.p.) This quote was notably taken from a pdf with information on what to do in case the sirens warn the public of hostile action.

Though the web site does not offer any material specific to any population subgroups, there is a provision to register people with disabilities in a database so that rescuing personnel are aware of such individuals and their residence. Registration to this database is voluntary through a form available on the Civil Defense’s web site.

What is more, the Force does not use youtube spots to communicate to the public. Searches with keywords in Greek *πολιτική άμυνα Κύπρου* or transliterated in English *politiki amyna Kyprou* result in news clips or military coverage from various parades. Finally, the district offices do not have separate web pages. Rather, their contact information is provided in a section of the national web site.

There are no special campaigns and generally there is a paucity of online communication to the public.

## Evaluation

There were no documents available to the public through electronic means regarding the evaluation of civil defense operations in Cyprus.

### 1.4.2 Western Europe

UK (with a focus on England)

Even though Cyprus follows, to a certain extent, the Anglo-Saxon model of public administration most prevalent in the UK, the structure and message of civil protection and risk communication looks very different in the latter.

The United Kingdom is a parliamentary constitutional monarchy, a Commonwealth realm, that consists of four countries: England, Scotland, Wales, and Northern Ireland (CIA, 2018). The broad structure of the public sector in the UK generally applies to all four countries, but in this study, we focused on England in order to keep the data manageable.

#### **Institutional actors: decentralization**

Emergency management in the UK is governed by the Civil Contingencies Act of 2004, which repealed all previous legislation and made a number of changes including: defining what emergency is; allocating responsibilities and defining the boundaries among actors; replacing the former system of emergency powers, giving the central government powers in case of an emergency (Kapucu, 2010; Garton Grimwood, 2017; O'Brien and Read, 2005). The organization with leading responsibilities in emergency management is the Civil Contingencies Secretariat in the Cabinet Office, established in 2001.

Having said this, the structure of emergency management in the UK is highly devolved. Emergency management in England and Wales takes place within Local Resilience Forums (LRFs), which are not legal entities, but rather “collaborative mechanisms” and “have a collective responsibility to plan, prepare and communicate in a multi-agency environment” (Cabinet Office, 2013, p. 3). Most of these follow police force boundaries (Garton Grimwood, 2017). The capital area is an exception to this structure as it is served by a single pan-London Local Resilience Area established in 2011 (Garton Grimwood, 2017). An explicit purpose of LRFs is to “deliver a systematic, planned, and coordinated approach to encourage Category 1 responders, according to their functions, to address all aspects of policy in relation to [...] arrangements to warn and inform the public” (Cabinet Office, 2013, p. 10).

At the national level, the National Steering Committee on Warning and Informing the Public (NSCWIP), which is an independent body, advises the Cabinet Office on best practices in terms of how to warn and inform the public during an emergency. This committee has an advisory role at the strategic and long-term level with such objectives as identifying that the appropriate structures are in place so that correct information to the public can be relayed in an effective and timely fashion as well as clarify the responsibilities among emergency responders so that information to the public is correct and timely (Gov.uk, 2018a).

The voluntary sector is an important actor in civil protection in the UK. At the national level and from a strategic perspective, volunteer engagement is coordinated by the Voluntary Sector Civil Protection Forum (VSCPF). The VSCPF was established by the Civil Contingencies Secretariat and the British

Red Cross, “to provide a framework for engagement between the government, emergency services, local authorities and volunteer organizations” (Gov.uk, 2018b, n.p.)

### Method

Information to the public is provided in English. However, the NSCWIP is aware of the need to reach transient populations as well as people whose first language is not English. In a newsletter from 2013, the Civil Contingencies Secretariat state a willingness to explore building capacity in this field (NSCWIP, 2013).

Because of the extreme devolved nature of civil contingency management in the UK, we examine two resilience forums in England. Even though both areas are in the north of country, their communication strategies are very different. These are: The Greater Manchester area as well as the area just to the east, encompassed by the Humber Resilience Forum. This includes the East Riding, Hull, North East Lincolnshire and North Lincolnshire City Councils. The Greater Manchester area resilience forum has a comprehensive web site, as well as a slogan (Greater Manchester Prepared) and a logo:



**Figure 5.** Greater Manchester Resilience Forum Logo (Source: GM Prepared, 2018a)

The menu on the left-hand side of the web site includes a comprehensive list of risks, starting from the definition of an emergency (following the CCA) and including risk from weather, hazardous materials, infectious diseases, cyber security, and counter terrorism. The site (<http://www.gmemergencyplanning.org.uk/site/index.php>) has links on issues such as how to protect yourself, your pet, and your business during an emergency. With the exception of a link for children that includes an interactive component, the information to the public is conveyed through text rather than videos. The text is either in pdf or as text on the web site that may be printed. The sentences are short and concise without an excess of superfluous information. There are no pictures or mascot-like figures, which may (or may not) facilitate the conveyance of information to the public. Having said that, the menu provides links to mobile apps for android and IOS that “allow users to receive push notifications tailored to their preferences” (GM Prepared 2018b, n.p.).

In comparison, the Humber Resilience Forum (<http://www.heps.gov.uk/lets-get-ready/>) has a very different graphic profile. It includes a series of thematic cartoon-like figures to mark topics such as “let’s get ready”, or “let’s get ready business”, or “let’s get ready community”. The essence of the information and the mode of delivery is, by-and-large, the same as the Greater Manchester resilience forum, despite the more playful design. The information is conveyed through text, either on the web site itself or in pdf and there is an

interactive page for kids. The language is concise and to the point, though the text can be long. The information is in English only and one may enlarge the text on the browser. The web site provides one informative video clip, filed under the constituent themes mentioned above and tabbed at the top of the page. This is the video regarding business continuity; it is almost 9 minutes long, it is well produced if similar to a PowerPoint presentation, contains quite a lot of information and it is geared toward a professional audience.

### **Content**

As mentioned above, a variety of risks is taken up on the web sites of these local resilience forums, not just the ones that are most urgent to the regions. There are no specific campaigns running in England at the time of the writing of this report, with a timeline or otherwise.

### **Effectiveness**

The Cabinet Office releases a host of publications; the closest document to civil contingencies is a Public Summary of Sector Security and Resilience Plans (Cabinet Office, 2017), though it is not exactly an evaluation of the communication strategies of the local resilience forums.

## **France**

### **Institutional Actors**

In France, the public sector has a set of sectoral plans (about twenty of them), developed at the local or national level. Each corresponds to a previously identified risk or threat. They are divided into two broad categories: national plans and territorial plans. A set of complementary plans, called the 'Pirate family' (Plan VIGIPIRATE), has been developed to optimize the capacity of the state and its partners to act in the event of terrorist threats and attacks. In addition, specific plans plan for risks such as health, natural or technological risks, including pandemics and CBRNs.

National plans are developed under the auspices of the General Secretariat for Defense and National Security [Secrétariat général de la défense et de la sécurité nationale, SGDSN] a part of the Ministry of the Interior and serve as decision support tools at the national level. In the event of a major crisis, the national plans facilitate the coordination of actions of various ministries with the ones of external partners as well as the centralization of the crisis management under the aegis of an interministerial crisis group (la Cellule Interministérielle de Crise – CIC). This organization supports the Prime and the President of the Republic in their role as crisis managers (Gouvernement, 2018a). Furthermore, the SGDSN is responsible for civil defense: fire and rescue services which are executed at departmental level (SGDSN, 2018). One of the national plans is ORSEC (Organisation de la Réponse de Sécurité Civile – Organization of Civil Security Response) which is executed at the departmental level in case of emergencies. The ORSEC plan describes the organization of crisis response that gathers the necessary means (police, rescue services, medical services, transport and transmission services) for crisis management under the authority of the prefect (head of department). The ORSEC plan furthermore provides instructions for the departments on communication measures to be taken in case of emergency. These provisions are documented in a set of guidelines published at the webpage of the Ministry of the Interior (Ministère de l'Intérieur, 2018a).

Vigipirate is the national terrorism security alert system in France. The name "Vigipirate" is an acronym of *vigilance et protection des installations contre les risques d'attentats terroriste à l'explosif* ("vigilance and protection of installations against the risk of terrorist bombings"). It was established in 1978 and was first launched in 1991 during the Gulf War. The plan, updated in 2016 after the terrorist attacks of 2015, is an important instrument of vigilance, prevention and protection against the threat of terrorism. It is designed for all state actors and offers them operational measures and a mobilizing framework to enable them to anticipate and respond to this threat. The VIGIPIRATE plan is made up of two parts; a classified defence part, and a public document that is aimed to enable public and private businesses, local authorities and each citizen to understand the functioning of the plan. The confidential document contains the assessment of the current terrorist threat and the VIGIPIRATE level is made public. The VIGIPIRATE level serves to indicate the vigilance in the face of a terrorist threat and to put the country on alert if an attack has been carried out or if there is a verified threat. The system defines three levels of threat from 'vigilance' to 'reinforced security – attack risk' and 'attack emergency'. Reporting to the Prime Minister, the VIGIPIRATE plan is a central tool in the struggle against terrorism by involving all national actors – the state, local authorities, public and private operators and citizens – a vigilance, prevention and protection approach.

According to the law of Modernization of Civil Security (2004-811) the role of the citizen is emphasized in Articles 4: 'Everyone contributes by their behaviour to the civil security' and 5: 'All students benefit through their school education from an initiation to risk prevention and the missions of the emergency services'. In an addendum, the law continues: 'Civil security is everyone's business. Every citizen contributes by their behaviour. A true culture of risk preparedness and threat must be developed.' (Legifrance, 2018a, n.p.)

### **Method and Content**

Information about risks is communicated through online media as well as through posters, leaflets and documents dispersed and on display in public as well as private establishments. At the web page of the French government there is a specific section for risk prevention: *Risques – prevention des risques majeurs* (Gouvernement, 2018b). Under the slogan: 'Better prepared, better informed, you will be able to act in case of problems and help your loved ones in the face of an emergency' a number of specific risks are addressed through video tutorials. The tutorials are focused mainly on natural hazards, but also on cyber risks and home fires. There is also a tutorial on preparing an emergency kit. All videos appear to be directed to a young audience. There are also several printable memo sheets to fill out and save to the emergency kit. At the page describing the emergency kit (Gouvernement, 2018c) there are several printable forms (on assembly points, how to turn off gas, electricity and water off if needed, etc.) that citizens can easily complete and keep at home in an emergency folder. An interesting point is that the emergency kit is clearly aimed for when citizens have to evacuate and abandon their homes. In other words, emergency kits are prepared for times when peoples' homes are not considered safe.

The public VIGIPIRATE document that can be found, for example, at the website of the government (Gouvernement, 2018d). It gives instructions to citizens on how they can contribute to protecting the nation being attentive and



**Figure 6.** Symbols displaying the three different VIGIPIRATE levels symbolizing vigilance (1), reinforced security (2) and attack emergency (3).

vigilant in everyday life as well as instructions on how they should act in case of an attack. The public VIGIPIRATE document also contains posters and leaflets that are used in public institutions throughout the country. The posters contain information on the different VIGIPIRATE levels as well as how to act in case of a terrorist attack, or when one identifies something suspect.

The Ministry of Ecological and Solidarity Transition [Ministère de la Transition Ecologique et Solidaire] manages the website Georisques ([www.georisques.gouv.fr](http://www.georisques.gouv.fr)) where citizens can learn about natural hazards and risks in their vicinity. Local information about risks is also available on municipal websites. Municipal information on risks are posted in municipal institutions and disseminated through leaflets (mandatory according to the article L. 125-2 in the Environmental Code (Legifrance, 2018b) For example, at the municipal webpage of the city of Paris several manuals (that can also be found at municipal establishments) can be downloaded and printed.

In June 2016, the Ministry of the Interior launched a specific smartphone application called SAIP – Warning and information system for the public [Système d’alerte et d’information des populations] (Ministère de l’Intérieur, 2018b, also at the site of the government: Gouvernement, 2018e). The user can receive push notifications about emergencies based on geographic preferences, or by GPS localisation. SAIP works with four major emergencies: terrorist attacks, nuclear accidents, dam failures and accidents with hazardous material. The app contains a function for ‘good practice’ where users beforehand (or during an emergency) are instructed in how to act. Depending on the user’s settings, the application’s language is in French or English. The government describes the aims of the app as following: ‘It is part of an approach to develop a culture of vigilance and security of our citizens, initiated with the awareness campaign “React in case of terrorist attack” which gives practical instructions around the triptych: “escape, hide, alert”’. (Gouvernement, 2018e). Risks are also communicated through the Facebook, Twitter and youtube accounts of different ministries and governmental agencies. The overwhelming majority of the communication is in French, but the application SAIP is also in English with the same message as the French version. The VIGIPIRATE plan and leaflet about VIGIPIRATE warning levels are offered in both French and English. A video on how to act in case of a terrorist attack (<http://www.gouvernement.fr/reagir-attaque-terroriste>) is interpreted to sign language. In order to work against terrorism and young people joining terrorist groups the government launched the site Stop Djihadisme: <http://www.stop-djihadisme.gouv.fr/> and displays a number of videos with information on the youtube channel of the Ministry of Interior Affairs.



The Ministry of Interior Affairs' web site contains a section about personal security ('Ma sécurité') where citizens can learn about ways to avoid accidents in and outside the home. There is a specific section for the elderly, where they are advised to take precautions not to be victims of robbery or mugging. There are also first aid instructions on the personal security page of the Ministry of interior affairs (see Ministère de l'Intérieur 2018c). Information is geared towards professionals working in schools and institutions of higher education, municipal agencies, cultural venues, hospitals and other care institutions, and commercial centres, on how they should act in case of a terrorist attack close to their work places. The government provides posters (Gouvernement, 2018f) on, for example, how to act in the case of a terrorist attack are made with simple language and images, so that also people with only basic understanding of French language can understand the message. Posters conveying information contain pictures and easy-to-read text. The people depicted on the pictures represent several different population groups and can be interpreted as representative for the population in France in general.

## Germany

### **Institutional actors: decentralization with federal support**

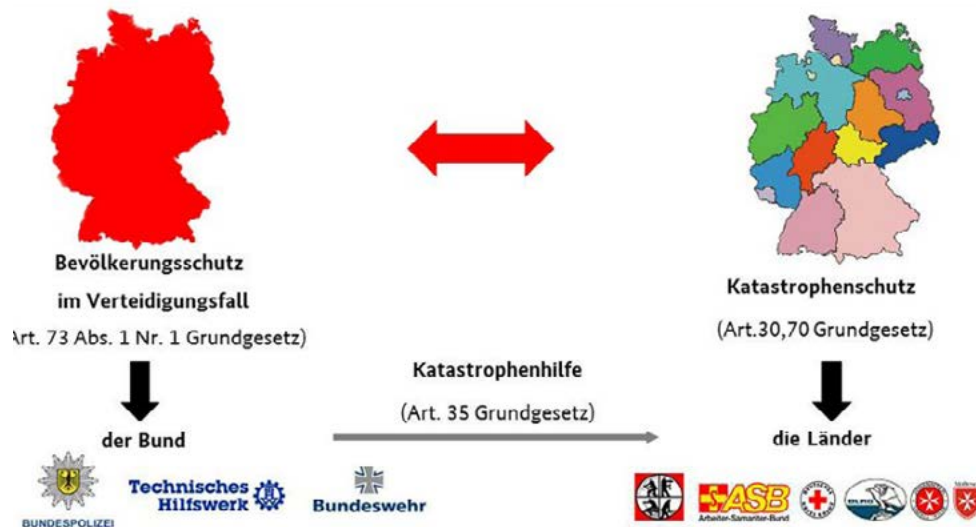
In Germany, the institution responsible for informing the public of risks and potential crises is the German Federal Office of Civil Protection and Disaster Assistance [Bundesamt für Bevölkerungsschutz und Katastrophenhilfe, (BBK)]. It is one of the most central bodies in the interior ministry (BMI), which is the highest federal authority. Generally speaking, federal risk management and risk communication in Germany is a very complex process that involves a number of institutions.

BBK is "a central organizational element working to ensure the safety of the population, combining and providing all relevant tasks and information in a single place" (BBK 2018a, n.p.). In other words, the main purpose of the BBK is to prepare the public for times of crisis, coordinate all the bodies involved before, during and after a crisis, and to provide the necessary physical and psychological support necessary for the well-being of citizens. The BBK "sees itself as a federal service center for authorities at all levels of the administration, as well as for organizations and institutions working in civil protection." (BBK 2018b, n.p.). Additionally, the Academy for Crisis Management, Emergency Response Planning and Civil protection [Akademie für Krisenmanagement, Notfallplanung und Zivilschutz (AKNZ)] prepares decision makers at various administrative levels to accurately respond to crises. These training opportunities are geared towards first responders such as firefighters, emergency services and disaster assistance organizations. This is then put into practice through Crisis Management [Krisenmanagement] and Risk Management [Risikomanagement], which are two official bodies that forecast, prepare for, manage, as well as follow up extraordinary events. (BBK 2017c).

Risk communication to the general public relies on the one hand on the communication between county administrations and municipalities and their public bodies (i.e. police, fire department, etc.) and on the other hand on communication between the responsible governmental and non-governmental organizations and the public. In Germany, several institutions share the responsibility of civil protection and disaster assistance, which involves both risk communication and crisis management.

Municipalities have to establish, encourage and direct the self-protection of the population, companies and administrations, especially against perils threat-



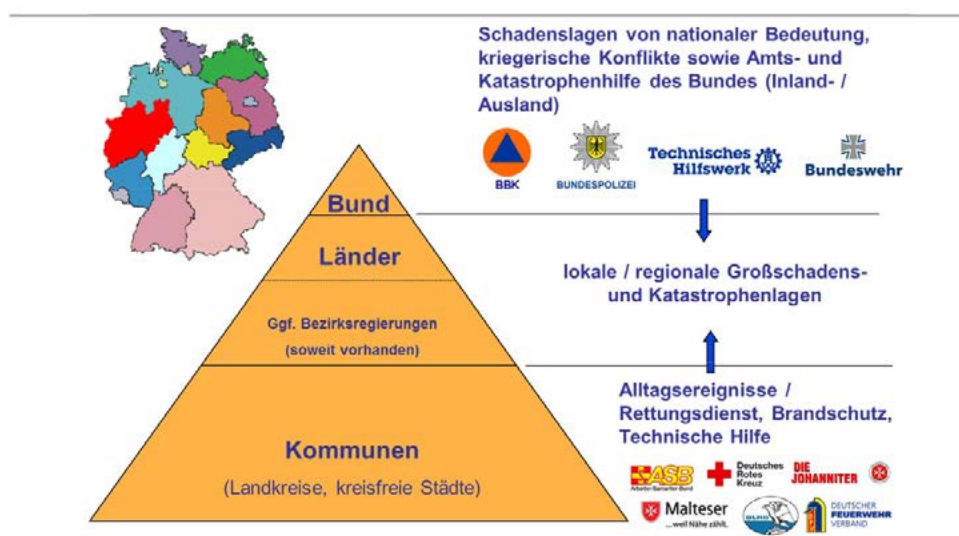


**Figure 7.** Shared Responsibility in Civil Protection and Disaster Assistance (Zivilschutz- und Katastrophenhilfegesetz – ZSKG)

ening in events of national defense (ZSKG 1997/2009, par. 5/1) and they make use of information available on the BKK web site. Central is a document with guidelines for emergency preparedness and appropriate action in emergency situations, which is in German (BBK 2017b) and in English (BBK 2017a). Nevertheless, the local and regional actors decide by themselves which information they want to share on their websites. The figure below illustrates the crisis management system. The communication of risks, preparation, civil defense and emergency response is similarly organized:

Other public, private and communal organizations involved in risk communication are the Bundesanstalt Technisches Hilfswerk (THW), Arbeiter-Samariter-Bund (ASB), Deutsche Lebens-Rettungs-Gesellschaft (DLRG), and Malteser Hilfsdienst (MHD), to mention a few.

### Integriertes Hilfeleistungssystem im föderalen Bundesstaat



**Figure 8.** Integrated System of Assistance in the Federal State

## Method

BBK's website contains a large amount of information on risk(s), including countless links to websites of supporting organizations, institutions, groups or individuals that provide further complementary information. A rich database accessible via BBK's website contains various documents about risk and crisis, yet with emphasis on the latter. Most of the information is offered in text-form, which is not every time as easy to comprehend. Additionally, the sheer amount of information makes it hard for the casual visitor to process the data. It seems like that the amount of information lacks focus.

An exception is the tab called "Vorsorge & Selbsthilfe" with a sub-tab called "Vorsorge für den Katastrophenfall", which informs on how to prepare for imminent catastrophic events. "Here you can find all the information on all the important topics...in order to prepare yourself for an emergency situation" (transl. from German, BBK 2017d). One of the recommendations here is to ensure storing enough food and water to survive for at least 2 weeks in the worst-case scenario (BBK, 2017a, p.10).

While much of the provided information intends to prepare the public for the most common disasters, it does not really communicate how to minimize risks, in particular associated with events that may be perceived as risky and, ultimately, translate into individual crises. Again, information on such topics is communicated in a retro-active rather than pro-active manner. "What can you do if ..." (translated from German, BBK 2017e), followed by examples of best practice behavior in cases one becomes a victim or witness of a "specific hazard event" (translated, BBK 2017e). Thus, it becomes clear that information on risk, how to minimize risk or even avoid it, is not easily accessible, nor is it complete and transparent (Renner and Gamp 2014). Everything seems to be about how to react to a crisis or emergency event rather than how to act before such an event takes place.

Although the BBK's website is also in English, French, as well as "Soft German" and "Sign Language", the information provided in German provides much more detail and covers significant more content compared to the other existing options. The English website targets a different audience and offers general information about the purpose and scope of the agency. The web site reaches the hearing impaired through two films in sign language as well as "Soft German" and English. Again, this information is not as comprehensive as the information provided in German. Basically, the website contains much information to the interested, German-speaking individual, to international visitors acting on behalf of public and private organizations, and to persons responsible at municipalities and local organizations, which deal with crisis management and training. However, it begs the question how much of this communication efforts reach the majority of the public.

Information is accessible in form of pictures, videos, and even a game for children is available. Most of the information, however, is offered in text-form, directly at the website and as downloadable books and leaflets. The BBK further issues a newspaper "Civil Protection" quarterly discussing current issues in the area of civil protection and disaster assistance. Moreover, the website grants visitors and employees access to a wide range of publications and newspapers in the area, issued by national and international editors (BBK 2018f).

The web site uses every day images, such as the one below, to convey directions. Pictograms are also used.



**Figure 9.** Image from information to the public on how to prepare.

Moreover, an app has been developed by the Federation for warning and information of citizens in situations of risk. This app, called NINA: Emergency Information and News App) [NINA (“Notfall- Informations- und Nachrichten- App)] is promoted on the BBK’ website and referred to by other organizations concerned with crisis management. Its aim is to inform the population about current weather situations,

national, regional and local threats and in particular large-scale emergencies [Großschadenslagen]. The dissemination of local information is limited due to the availability of the service (see Figure 10, BBK 2018c).

The BBK has acknowledged the importance of social media since the high flows situation 2013 in Germany, which affected a huge number of households, companies and public organizations. The agency has been on Twitter since 2015 (BBK 2018d), with about 14,000 followers and has a youtube channel with about 2,000 followers (BBK 2018e).

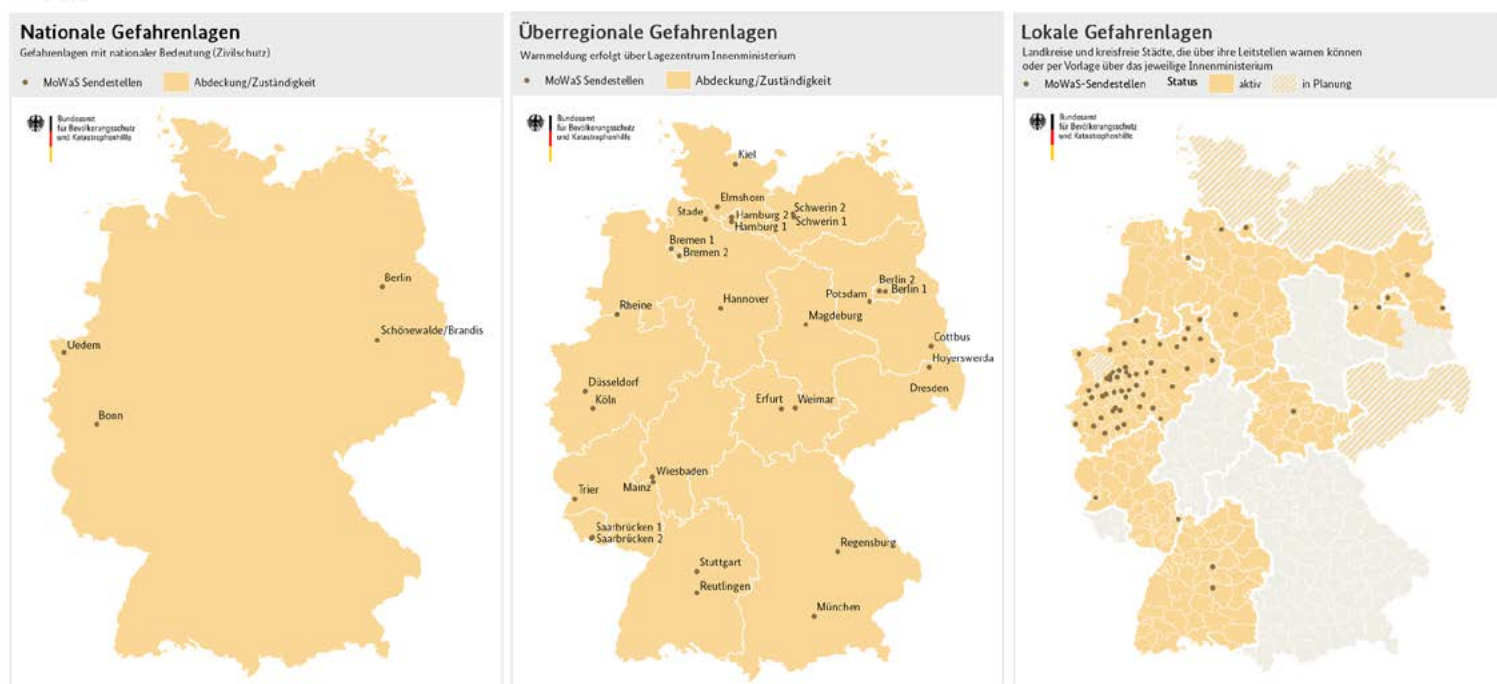
## Content

Due to weather situations such as heavy rain and high water, which affected large swaths of Germany in recent years, the risk and crisis communication revolves around such events. The scenarios are intended to raise awareness and cover heavy rain, flash flood, high water, fire, and electricity blackout. The

**Figure 10.** Availability of the service for dissemination of local information.

## Abdeckung und Sendestationen MoWaS / NINA

Stand: 20.01.2017



BBK website structures the information, similarly as the downloadable guideline do (BBK 2017a; BBK 2017b), in recommendations for individual disaster preparedness and self-protection guidelines during disaster situations and special situations of danger. Guidelines also provide information of general interest, including basic information of housekeeping, nutrition and health. Nevertheless, little is said about the probability of occurrence of these situations of risk and almost nothing about the degree of damage and harm. The information leaves the risk assessment to the reader and mostly concentrates on the threat and measures for preparedness.

**Table 3.** Suggestions for preparedness, Risks & Crises communicated in the BBK's guideline(s) and at the website (<https://www.bbk.bund.de/DE/Ratgeber/Ratgeber.html>):

Event	Consequence	Solution	Source
Fire Failure of gas pipeline	Evacuation	"nicht erst beginnen, Notgepäck zu packen": too late to pack the emergency bag	Website and Guideline (BBK 2017a; BBK 2017b)
Disaster (general) High water Avalanche/heavy snowfall/severe weather Blackout	Supply chain disturbed Medicine provision disrupted Potable water supply disrupted Power/gas supply disrupted	At home: Rapid Response Stockpile for 2 weeks Camping cooker	
No water supply	Disrupted hygiene habits	At home: Stockpile	
Bad Hygiene	Pestilence and injury	At home: Disposable cutlery; disinfectants, etc	
Accident	Injury	At home: First aid kit	

The BBK provides further suggestions for preparedness measurements but without mentioning any consequences for the following situations of risk/threats:

- severe weather, exemplified by measurements to be taken against hail, storm and thunderstorm
- fire
- high flows
- CBRNs

BBK leads exercises for civil servants, for example the Interministerial and Interstate Crisis Management Exercise [Länderübergreifende Krisenmanagementübung/ Exercise, LÜKEX].

Another type of image campaign can be seen in local activities, such as the BBK's participation in a Shrove Monday procession 2018, during which reusable merchandising bags (e.g. for candies) has been spread to visitors of the event. This event, which took place in 12th of February in Bonn 2018, involved 5.200 participants and around 1,5 million visitors were reported (BBK 2018g).



**Figure 11.** Reusable merchandising bags (BBK 2018g).

Additionally, the agency runs volunteer recruitment campaigns. The BBK refers to changing societal, demographic, and working conditions as reasons for a decreasing participation of citizens in voluntary work. In order to provide support to the local organizations, the BBK offers further publications with slogans like “Imagine, there is storm and nobody tidies up” (transl. from Germany). Mainly, such campaigns for recruiting and development of youth talents and voluntary staff perform at the local level are not well communicated, if any, on the websites of municipalities or county administrations. One good example can finally be found at Bayern’s web site. It links to information (language: German) of interest for other organizations, such as good ideas regarding the youth recruitment and a campaign for promoting voluntary work (STMI Bayern 2018i).

### **Effectiveness**

It is unclear whether there have been evaluations of the risk communication process.

## **1.4.3 Northern Europe**

### **Sweden**

The regional level in Sweden consists of 21 administrative boards, which serve as the intermediate point between the municipalities and the national government and for this reason are relevant actors in crisis management. Having said that, it is the responsibility of the municipalities to provide public services of general interest, including rescue service and crisis management. An important departure point in Swedish crisis management is that no one organization or bureaucracy has the ability to prevent or handle a crisis. For this reason, the architecture of crisis management in Sweden builds on the collaboration among different agencies and municipalities as well as the collaboration between the private sector and volunteer organizations and among private citizens. Having said this, the municipality in which the event has taken place is first responsible for handling it. If their resources are inadequate, they may seek assistance from the regional and national levels.

### **Institutional actors: collaboration and high degree of freedom**

As mentioned above, the local level is tasked with responding and handling a crisis in its jurisdiction, whereas in cases where many municipalities are involved, the



county administrative board may intervene and take leadership of the operations. The Swedish Civil Contingencies Agency (MSB) has an advisory and supportive role vis-à-vis various other agencies and organizations when large scale events take place or during national crisis communication campaigns, such as the “crisis preparedness week”. For example, MSB contributes expertise and material, such as tents, during the recent surge in refugee influx in Sweden.

The 1994 ordinance (SFS 1994:524) has recognized 18 volunteer organizations as having a significant position in emergency preparedness. Their operations include communication, recruiting, and training of volunteers in the fields of emergency preparedness and total defense. Additionally, the Volunteer Resource Group (VRG) – a municipal resource – as well as religious organizations contribute to the management of extraordinary events and collaborate with the public sector to that end. Organizations such as Missing People, Save the Children, Refugee Welcome and the Scouts are part of the voluntary organization emergency management architecture.

## **Method**

Information to the public is mainly conveyed through the national MSB channels with web sites such as [www.dinsakerhet.se](http://www.dinsakerhet.se) and [www.krisinformation.se](http://www.krisinformation.se), and a mobile app for android and IOS. Moreover, the web sites of municipalities and county administrative boards contain information conveyed to the public regularly during extraordinary events while they link to MSB’s web site if the event is national in scope. National radio and television go out with information if an event has occurred. MSB has a youtube channel as an information dissemination outlet, in Swedish only. The videos are of good quality, easy to understand, lasting for approx. 2–4 minutes. The videos are professionally made.

All such information is in Swedish (including “easy Swedish”). Translation of this information is not professionally done; rather it is available through the google translate function on these web sites with all the corollaries that entails. In practice, information is geared towards Swedish households consisting of people with Swedish as a first language.

## **Content**

Risks that are taken up at [www.dinsakerhet.se](http://www.dinsakerhet.se) include bad weather and being without electricity for some time. Information is provided on how to prepare oneself under tabs such as “safe home”, “safe leisure time”, and “accidents and crisis”. There is also information on crisis preparedness and the items that one must have at home in case of a crisis.

In order to raise public awareness, MSB run a week-long campaign on May 8, 2017, titled “Upside down” [Upp och Ner]. This was the second time MSB had a campaign on “crisis preparedness week”. The target group for this campaign was women between 45 and 64 years of age. Between 70 and 80 percent of municipalities participated in this campaign were a main actor in its implementation. Information went out on digital and social media, ads, national and local TV, the daily press, an industry periodical and the local public radio stations.

The campaign centered on disruption in electricity supply and focused on the necessities each household ought to have in order to be able to function during a days-long black out. Additionally, the campaign’s message was about what individuals can do to help themselves and their families during serious societal disruptions in general, such as for example, being an informed and engaged citizen. This campaign essentially reinforced the earlier message communicated in the



**Figure 12.** Images from Swedish information campaigns (MSB, 2018).

web sites of Swedish municipalities and county administrative boards: “what you need to have at home during a crisis” [detta behöver du ha hemma vid en kris]. In all the information packets, people were urged to visit [www.krisinformation.se](http://www.krisinformation.se) and/or [www.dinsakerhet.se](http://www.dinsakerhet.se), both MSB communication outlets. The pictures alluded to the everyday-ness of households.

An interesting externality of the focus on material things one must have in the event one’s every day turned upside down, is a marketplace for emergency materials. Several web sites now sell water online, the main selling point of which is that it keeps for 50 years (see, for example <http://www.bluecaneurope.se>, <https://beredskapskungen.se/>, <https://criseq.se/produkt-kategori/beredskapslada-krislada/>).

### Effectiveness

MSB has evaluated the campaign in terms of the support it provided to the municipalities and the county administrative boards with a view of utilizing the result for the 2018 campaign. One of the results from the evaluation was that being involved in the planning of the campaign increased awareness and competence among the public servants in the municipalities involved. Almost 80% of the municipalities participated in the campaign.

Kvarnlöf and Montelius (forthcoming) also conducted a study, but instead focused on the message of the campaign rather than its institutional mechanisms. The study discusses the devolvement of responsibility to the individual, and especially the middle-aged female subject.

## Finland

### Institutions

The Department for Rescue Services at the Ministry of the Interior is responsible for developing and coordinating national civilian crisis management capabilities among different actors in Finland such as the Police, the Border Guard, the Ministry for Foreign Affairs, the Ministry of Justice, the Ministry of Defence, and NGOs. These bodies are responsible for communicating with the public within their mission area and all institutions are to maintain the same jurisdiction of responsibility during extraordinary events as during any other time. Through the Department for Rescue Services, the Ministry of the Interior further guides and directs emergency response operations and is responsible for related legislation.

There are 22 regional rescue departments in Finland collectively managed by the municipalities in each region. The preparedness of rescue services is under the responsibility of the Ministry of the Interior, and preparedness refers to

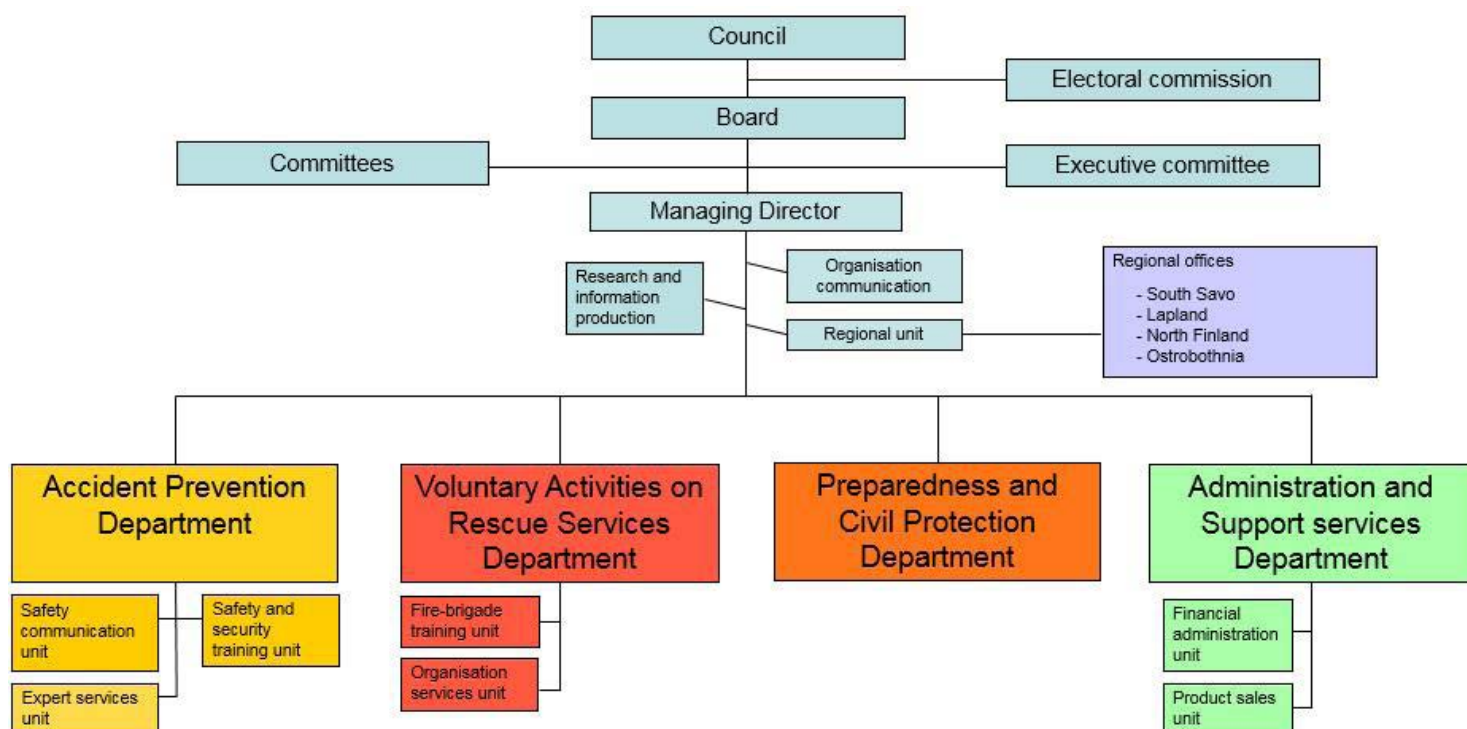
preparing in advance for social disorder caused by major accidents, crises and armed conflict. The main tasks for the rescue services is prevention of accidents, rescue work and population protection in exceptional circumstances at the regional level. The rescue services are also responsible for civil defence, focusing on the protection of, and assistance to, the public in the aftermath to armed conflict specifically and in any other kind of emergency in general (Ministry of the Interior, 2018a).

The Security committee [Turvallisuskomitea] within the Ministry of Defense is tasked with assisting the government and ministries and will act as a specialist body if incidents and emergencies occur. It is also responsible for coordinating preparedness measures by the state, municipalities, organizations and private companies in different security situations, and it coordinates the implementation of the new cyber security strategy.

Also involved in civil defense is SPEK, Suomen Pelastusalan Keskusjärjestö (the Finnish National Rescue Association), which is a national consultancy and service organization for fire and rescue services. It aims at preventing dangerous situations and accidents by increasing the resilience in Finnish society. In the 2025 SPEK strategy, public safety communication is outlined as an important task. Safety guidance, advice, education, training and information is included in their communication task according to the Finnish Rescue Act (379/2011).

Non-governmental organizations also play a vital role in ensuring preparedness and managing emergencies. In 2012 the National Emergency Supply Agency [NESA, Huoltovarmuskeskus] and the Ministry of Agriculture and Forestry gathered a number of NGOs working with food supply and home emergency preparedness and established the Committee for Home Emergency Preparedness (KOVA). The committee functions as a network and is coordi-

**Figure 13.** Figure 13: Administrative charter of SPEK, the Finnish National Rescue Association





nated by SPEK. The aim of the network is to improve households' capabilities during disruptions and emergencies and encourage them to be independent and self-sufficient. Previous experiences in Finland have shown that non-governmental organizations possess both skills and capabilities to quickly advise, assist and activate citizens in situations characterized by disruptions of the everyday life (SPEK, 2018).

The Ministry of the Interior states that 'every person should be prepared for different types of emergencies. [...] Emergency planning by individuals assists the authorities in times of crisis, since resources do not suffice to help all of those who need help and must be allocated to the most urgent cases.' (Ministry of the Interior, 2018b). However, home emergency preparedness does not only imply a basic home emergency kit; it refers to but also practical skills and it implies the preparedness to help and care for others (SPEK, 2015). The national Police is an active part of the risk communication process when it comes to issues of terrorist attacks and violence.

The KOVA committee [Kotitalouksien omatoimisen varautumisen järjestötoimikunta/Organization for the Protection of Household Self-Responsibility] consists of a number of NGOs, such as the Swedish Martha Association, the Martha Organization, the Rural Women's Advisory Organization, the National Defence Training Association of Finland, the Guides and Scouts of Finland, the Finnish 4H Federation, the Finnish Beekeepers' Association, the Home Economics Teachers' Union, the Finnish Hunters' Association, the Reindeer Herders' Association, the Federation of Finnish Fisheries Associations, the Arctic Flavours Association, the Red Cross and Women's National Emergency Preparedness Association. All these are involved in the 72hr campaign. The Ministry of Agriculture and Forestry and the Agency for Rural Affairs (MAVI) are also involved in the KOVA committee that is headed by SPEK. The members of the committee represent organizations that are involved in food security and the provision of general home preparedness.

## Method

Several authorities and agencies use social media as a tool to disseminate information on risks in the Finnish society. The Finnish Security Committee uses Facebook, Twitter and youtube in addition to their web site. The web site has detailed information in Finnish, Swedish and English with approximately the same message. In their Facebook and Twitter pages however, all information is in Finnish. The youtube channel offers a video on the Finnish security strategy in Finnish, Swedish and English with the same message – 'Together for a secure Finland'. All other videos are in English without option for subtitles or translation. The Finnish Police also has a youtube channel: Poliisitube. They offer a specific playlist with videos with Swedish subtitles (all of them exist also in Finnish versions). On Poliisitube there is also a playlist with videos geared towards children and there is even a special folder for farmers distributed through the National Emergency Supply Agency. However, the majority of the videos are in Finnish and very few items are in English. There are cases where information in Swedish is in abbreviated format. Many authorities and NGOs also provide abbreviated information in English, and in some cases also in Russian and Estonian as there are many immigrants and tourists from these countries in Finland.

The 72hr campaign is mainly built on meetings between trained educators from NGOs and the public. The campaign is partly carried out online, and

there is printed material with written text accompanied by comic-book like storyboards of a young woman with long black hair, but the main focus is on workshops where people meet eye to eye. Apart from the official 72hr website ([www.72tuntia.fi](http://www.72tuntia.fi)) that is available in identical versions in Finnish, Swedish and English several organizations, for example SPEK also distributes printed information about the 72h campaign. Notably, SPEK, who is responsible for the trainings for NGO workers, has used MSB Youtube videos in their trainings for NGO workers (in the Swedish speaking areas only) of Finland. The Regional Rescue Services have special information for the elderly in their printed information folders (see for example: [http://www.vspelastus.fi/sites/default/files/atoms/files/vs\\_swe\\_low.pdf](http://www.vspelastus.fi/sites/default/files/atoms/files/vs_swe_low.pdf), also available in Finnish, Estonian, Russian, English and a few other languages).

The Ministry of Economic Affairs and Employment, the Ministry of Social Affairs and Health, the National Emergency Supply Agency and the Regional State Administrative Agencies distribute special information to local municipalities for the supply of food in municipal establishments in the case of major social disturbances. The folder underlines the importance of preparedness for food security in institutions for the elderly, social care units, kindergartens, and care units for children and youth, as well as schools. What is more, Finnish preparedness relies on many of the over 130.000 registered NGOs in the country. The organizations have the know-how in their fields and extensive networks of trained volunteers. For many citizens, participating in activities organized by NGOs provides an excellent way to enhance their knowledge.

## **Content**

The National Risk Assessment carried out by the Ministry of the Interior in 2015 identified 21 possible emergency scenarios. Out of these 21, 6 were identified as wide-ranging affecting the functioning of society while the remaining 15 scenarios were characterized as having a regional impact.

Wide-ranging scenarios are serious disruptions in energy supply, risks in the cyber domain, serious human infectious diseases, security policy related crises, severe nuclear accidents and a 100-year risk scenario for a solar storm. Among the 15 scenarios with possible regional impacts are: extensive rapid flooding in or around urban areas, chemical accidents or explosions in a plant handling dangerous substances, major maritime accidents, major aviation accidents, major rail transport accidents, major road traffic accidents, several simultaneously occurring major forest fires, major building fires at infrastructure critical to society, extensive or extended disruptions in water supply, large-scale winter storms followed by a long cold spell, severe thunderstorms, terrorist act or terrorism targeting Finland, serious acts of targeted violence, violent, large-scale civil disturbances and mass influx of migrants.

The aim of the KOVA committee is to enable the participation of different actors in educating the public on how to increase home preparedness. In 2016, the KOVA conducted a survey and found that the level of preparedness differed between rural and urban areas. Households in rural areas were more likely to be prepared for power outage or storms (SPEK 2018b). Urban households were less prepared and deemed threats less likely to happen. The results from the survey led to the 72hr campaign, where as a first step NGOs and interested citizens were offered training to organize workshops on home preparedness for the public. The workshops were aimed at increasing the populations' abilities

to survive in exceptional circumstances without external assistance and have provisions at home for food and water, hygiene, and other necessities. There is also a particular focus in the workshops on solidarity and reaching out to help each other. Workshops for the public are advertised at the Facebook page of the 72hr campaign (<https://www.Facebook.com/72tuntia/>) and are held in libraries, community halls, schools, hotels etc. Trained instructors in different parts of Finland can be found at the 72h webpage ([www.72tuntia.fi](http://www.72tuntia.fi)). The campaign is funded by the National Emergency Supply Agency [Huoltovarmuskeskus] and urban youth and women are specific target groups. Whereas the 72h campaign is mainly directed at the urban population, SPEK also maintains a project called 'Our safe village' that aims at small town preparedness for everyday disruptions and accidents. The project aims at improving cooperation in the villages and strengthen the residents' sense of security (SPEK 2018c).

Another nationwide campaign is the the NouHätä! campaign where youth are trained in rescue skills. The campaign aims at increasing young peoples' readiness to predict and prevent dangerous situations. Youth are trained in schools from material provided by the Finnish National Rescue Association in collaboration with the Ministry of Internal Affairs, the Finnish National Agency for Education, The Emergency Services College in Kuopio, Finnish Fire Officers' Association and the Finnish Fire Protection Fund. The campaign lasts 2017–2018.

### Effectiveness

No evaluations of the campaigns or other modes of communication are offered to the public.

**Figure 14.** Image from the 72h campaign material



## 1.4.4 Eastern Europe

### Estonia

#### Institutional Actors

Emergency prevention and assistance to citizens is a central obligation of state authorities. Crisis management includes the prevention, preparation and resolution of emergencies in the context of the Estonian Emergency Act (Riigi Teataja, 2018a). The Emergency Law, one of the pillars of the Estonian crisis management system, provides the legal framework for the structure and organization of the system. The crisis management in Estonia follows four principles:

- Decentralization, whereby each ministry is responsible for the implementation of crisis management activities in its area of management;
- Inter-agency cooperation necessary for preparation and resolution of emergencies;
- Continuity of tasks, which means that all institutions and people should fulfil their tasks also in crisis situations;
- Subsidiarity, according to which crisis management activities will be implemented at the lowest possible level. (Ministry of the Interior, 2018)

Emergency risk assessments are carried out by the Estonian Rescue Board [Päästeamet]; the National Police and Border Guard Board, [Politsei- ja Piirvalamet]; the Information System Authority, [Riigi Infosüsteemi Amet]; the Environmental Board [Keskkonnaamet]; the Health Board [Terviseamet], and the Veterinary and Food Board [Veterinaar- ja Toiduamet]. These risk assessments are designed to assess various hazards and risks as part of a process for a systematic monitoring of events that may develop into an emergency. This monitoring will also map and address any weaknesses. Each authority is responsible for the publication of up-to-date information on its website.

The Estonian Rescue Board is a main actor in risk communication in Estonia and is the 3rd largest Estonian public service institution (Päästeamet, 2017). It is divided into four geographical units: the Northern Rescue Centre that includes the capital Tallinn, the Eastern Estonian Rescue Centre with the important border city Narva, the Southern Rescue Centre that includes the second Estonian city Tartu, and finally the Western Rescue Centre with holiday cities like Pärnu and islands Saaremaa and Hiiumaa. The main tasks of the four regional Rescue Centers are rescue work, fire rescue, emergency prevention work and crisis management. The Estonian Rescue Board has collaborations with private, public and third sector organizations and volunteer rescue brigades are involved not only in rescue operations but also in preventive work (Päästeamet, 2017). The Nordic countries are seen as benchmarks and the vision of the Rescue Board is that by 2025 Estonia will have reached the Nordic rescue-related safety levels in terms of the number of accidents and extent of consequences. (Päästeamet, 2017).

According to the Emergency Act Estonian government, authorities have the mandate to inform the citizens about an ongoing crisis or an emergency situation (Riigi Teataja, 2018a). Local governments, regional rescue centres and government authorities ensure the provision of crisis communication. The Emergency Act defines what a crisis is and stipulates the general procedure

and obligations for reacting to the emergency and notifying the public. The act further specifies which agency is responsible for providing notification regarding each type of emergency.

## Method

Recently, the focus of the Estonian Rescue Board has been on individual responsibility in ensuring personal and family safety. In 2014 Estonian Rescue Board launched two prevention campaigns focusing on water safety and fire safety in the home. Many of the activities were carried out online on Facebook and youtube. The water safety campaign reached over 90 % of the population (Päästeamet, 2015). The fire safe homes campaign consisted of several parts. Citizens were invited to take a web-based fire safety test online (<http://kodutuleohutuks.ee>) and would then get advice on how to make their homes safer by reducing the number of fire hazards. The test could be taken in both Estonian and Russian and is still available on the web site.

In a departure from the other countries under comparison in this study, the Estonian Rescue Board conducts home visits, during which they advise residents on how to make their home safer. In 2016, an analysis of where most home fires occur showed that socio-economic factors influence the occurrence of fires. In Tallinn, for example, home fires occur more often in residential buildings from the Soviet era, where inhabitants in general have lower income, are older, live alone and do not have Estonian as their first language. The results of this analysis have led to specific efforts on how to reach these groups with fire safety consultations. Fire consultations are also carried out in collaboration with local municipalities, social services, educational institutions, chimney sweepers and NGOs. In 2016 the Board carried out over 17 000 home consultations, covering 2,7% of Estonian households. It also organizes safety awareness days and regularly visits schools (Päästeamet, 2017).

The Estonian Rescue Board, The Technical Surveillance Authority [Tehnilise Järeelvalve Amet], and the Ministry of the Interior [Siseministeerium] regularly post information on Facebook, youtube and Twitter on self-protection measures. The Youtube channel of the Estonian Rescue Board posts videos in Estonian, Russian and English.

The 1,3 million population includes 192 national groups, with Estonians (68,8%) and Russians (25%) as the two largest groups (Statistics Estonia, 2018). Estonian is the official language and according to the Language Act from 2011 (Riigi Teataja, 2018b) national minority groups have the right to services in the language of the national minority if at least half of the permanent residents in the local government belong to the national minority group.

The web sites of the Estonian Rescue Board, the Ministry of Interior Affairs and other authorities have some information in English and some in Russian and Estonian. The information is mostly the same. The Estonian Rescue Board offers google translate as a tool for youtube videos that are not available in any other language than Estonian. However, the automatic translation is not of good quality.

The 2017 fire safety campaign includes four videos, three in Estonian and one in Russian, with the latter being identical to one of the Estonian videos. A video advising the public what to do if they find unexploded ordinance from WWII is in Estonian only. Information geared towards children is also available on the Estonian Rescue Board web site. About one out of four videos published at the Päästeamet Youtube channel the past three years is in Russian or with subtitles in Russian (non Google translated).

## Content

Risks identified by the Ministry of the Interior (2018a) are CBRNs, infectious diseases, cyber incidents, natural hazards and accidents). The Estonian Rescue Board further addresses the following issues in its risk communication activities:

- Fatalities caused by fires, water accidents, explosive accident, chemical accidents, and emergency situations headed by the rescue services.
- Treats to life, property and environment.
- Fires in residential buildings as well as buildings for industrial and business use, along with the financial damages caused from fire accident.
- Environmental accidents and damages to the environment.
- Forest- and wildfires.

In its strategy for 2015–2025 the Estonian Rescue Board also identifies a number of meta risks (issues that could hinder the effectiveness of actions taken by the Board) including economic globalization, technological advancements, changes in the socioeconomic environment (aging population, declining birth rates), and increased individualism and social media involvement, which may lead to shifting societal values. What is more, changes in international security call for increased readiness of the population as well as first responders in the event of emergency situations.

A number of video campaigns on youtube are published yearly and remain in archive. The Estonian Rescue Board carried out smoke detector and water safety campaigns. A specific webpage <http://kodutuleohutuks.ee/> ‘A fireproof home’ is published both in Estonian and Russian. A similar page on water safety is available in Estonian, Russian and English: <https://www.veeohutus.ee/>. The Information System Authority had a campaign directed towards the public in 2007–2015 to introduce e-services to the population at large. The campaign also had as one of its main goals to increase security awareness (Information System Authority, 2018).

## Effectiveness

The water safety campaign in 2014 reached 91% of the population (Päästeamet, 2015). A follow up survey on the water safety campaign showed that receivers of the campaign would be more likely than before the campaign to stop people going into the water if these people had been drinking. In 2016 the Estonian Rescue Board started to systematically gather feedback from the public to measure satisfaction and trust in the Board’s operations. Feedback was gathered after rescue events, home consultations, training sessions, safety days and construction site supervisions. Out of 1578 respondents 74% report trust in the Rescue Boards service and 62% were satisfied with the service. The feedback is used to improve the Rescue Board’s work (Päästeamet, 2017).

## 1.5 Discussion

In this report, we have compared eight EU countries, Greece, Cyprus, France, Germany, the UK, Estonia, Finland and Sweden, with a view to providing MSB with knowledge regarding the way different countries communicate risk to their citizens. The questions that guided our analysis were: How is the administrative



**Figure 15.** Image from one of Päästeamet's Youtube videos for children.

system for risk communication set up in the countries studied? How are the different risk communication campaigns (provided that they exist) embedded in the larger administrative context? How is risk communication strategy formulated in each country and what kind of threats are emphasized? The countries represent different geographical regions of Europe that not only come with particular hazards and threats but also different political and ideological systems anchored in the diverse history of Europe.

In this last section of the report, we discuss the findings in terms of patterns across countries, as well as major differences among them. The structure of the discussion is inspired by Lasswell's classical question illustrating the communication process: Who says what to whom, how, and with what effect? and is structured as follows: organization: what's in a name; the sender and risk communication techniques; the message: campaigns and general responsibility, and the imagined receiver. The section ends with conclusions, some critical reflections, and suggestions for further research.

### **1.5.1 Organization: What's in a Name**

The eight countries under comparison cover the gamut of geographies and administrative systems. What is more, there are two pairs of countries – Greece and Cyprus, and to a certain extent, Finland and Sweden, that share a common language (Greek and Swedish respectively) and the culture that comes with that. There is also a pair of countries that shares a (post) colonial relationship – UK-Cyprus. One would expect to find similarities in the communication of risks between Greece and Cyprus, both part of the European south but with different administrative systems, but that is really not the case. However, Finland runs a campaign similar to that of Sweden's shares the same message

and uses material from MSB in their information toolkit in the Swedish speaking parts of the country. Similarly, while to some extent UK and Cyprus share the same administrative system, a vestige from an earlier colonial relationship, Cyprus is alone in the degree of militarization of civil defense and UK is the foremost country arranging its risk communication structure under the term “resilience”. We will return to these observations later in the discussion.

The pattern of institutional structures that organizes risk communication in all the countries under investigation is not directly related to their administrative systems and only partially related to their geographies. The institution that deals with risk communication is a variation of a civil protection entity normally under the ministry of the interior, though in the UK the central institution (equivalent to *Kriskansliet*) is in the cabinet office, the equivalent of the prime minister’s office. Sweden and the UK use the term “civil contingencies”, whereas Finland, Cyprus and Estonia use the term “civil defense”. The remaining countries use “civil protection”. There is a marked military component in the Cypriot structure, but perhaps this is not surprising given the fact that its capital is the only remaining divided capital in the world. There are military echoes in Finland and Estonia as well, again, not a big surprise given their historical contingencies and recent geopolitical events.

The pattern of central control with decentralized input holds, more or less, in all countries, including the federal Germany. A glaring deviation is the UK, where the central level has only strategic functions, whereas all the risk communication competences have been devolved at the regional level in what is called “Local Resilience Forums”. This makes for a lack of uniformity in information that is communicated to the public as each resilience forum is region-specific. In all the other countries the regions take the lead and more often than not, reproduce the information from the national web site, which can make for a “one-size-fits-all” kind of information packet, missing local nuances such as center-periphery issues. In France there is a marked fragmentation of information disseminated to the public, with several ministries being involved in the process. Notably, this fragmentation is at the national level as the responsibility for risk communication rests with the national government. Conversely, in Greece for example, it is the Civil Contingencies Secretariat informing citizens of all possible risks, including those which are corollaries of adverse weather, whereas in France it is the Ministry of Ecological and Solidarity Transition that informs on these.

Web sites are the foremost vehicle for communicating information to the public, though in Sweden, France, England and Germany the national government also employs apps as early warning systems. The authorities also use social media to disseminate information: Facebook, Twitter, and youtube, though the extent varies among the countries under comparison. In Estonia, the public sector actually conducts home visits to disseminate self-protection guidelines, a vestige of an era of an omnipresent state and a command-and-control economy. The range of state involvement in the amount and scope of information communicated is quite broad, ranging from the aforementioned home visits to rather sparse information from the civil defense force in Cyprus, where the only videos found on youtube were recordings of military parades.

Volunteer organizations are present in all the countries in question, though not at the same degree. This ranges from a controlled registration system in Cyprus, to very active involvement in Finland, to a separate volunteer organization



coordination entity in England. Other than Germany and Finland, in which volunteer organizations provided risk communication, in most of the countries in question the communication is handled by government at various levels. For example, in Germany, crisis management rests heavily on the engagement of volunteers in local organizations, such as fire brigades and rescue services. These local organizations communicate information about both risks related to their area of responsibility, e.g. fire, and how to become a member and participate in crisis management.

### **1.5.2 The sender and risk communication techniques**

The sender of information and the public sector's involvement in the information dissemination follows the pattern of the countries' administrative systems. France and Greece are characterized by strong national control, while England is devolved. Notably, Estonia has institutionalized home visits, in line with a former control-and-command economy, while England is completely devolved.

Risk communication is disseminated first and foremost from the governmental web sites, as well as through social media such as Twitter and through youtube channels. There is a trade-off between the more nationally controlled information dissemination, such as Greece and France and the local control of information such as England, for example. This concerns whether the information provided is appropriate for the local publics. There is a continuum between one-size-fits all, as in the countries above and exclusively locally controlled information, that may miss any national uniformity, such as in England.

The issue of core-periphery and their respective needs is probably best captured by England, in which the resilience forum for London has a completely different structure and function. Otherwise, the risk communication seems to be formulated with urban environments in mind.

### **1.5.3 The message: campaigns and general responsibility**

As part of this study, we investigated the information regarding crisis management that the public receives, especially in the form of organized and specific campaigns – as opposed to the information strategies named above. To the extent that the term “campaign” refers to a focused and dynamic information conveyance to the public, they exist in several countries – though not in Cyprus, where the information seems to be static. For example, the Secretariat for Civil Protection increases the number of informational spots on youtube during forest fire season in the summer to raise public awareness to not throw cigarette butts out of car windows, for example. The underlying message of the campaigns is largely this: you, as an individual, have the obligation to be prepared for an unspecified catastrophe brought on by an unspecified (and largely irrelevant) cause that will result in extensive blackouts and a complete breakdown of social functions. During a specified ensuing period of time, you must have material things stored somewhere in your home to take care of yourself. The state cannot keep you safe, please do not contact its agents for the first X number of days.

The kind of dynamic information campaign run in Sweden (and Germany) is unprecedented, though adopted in some form by Finland. There, a 72hr campaign with focus on preparedness in the home run in the early part of 2017. The Finnish campaign is different in the sense that it includes workshops to

train representatives from different volunteer organizations, which then train the public, a train-the-trainer sort of arrangement. MSB video clips are used in the training of volunteers the Swedish speaking areas of Finland. The home visit campaign in Estonia is of different character still, partly because it is run by the emergency services, and partly because it is geared towards a specific cause: home fires and how to prevent those.

A component of the dynamic campaigns run by Germany and Sweden is the timeframe that every individual is responsible for their own safety and survival. Whereas the Swedish campaign advocates that every citizen has to be prepared with material things for a 72-hr survival without the help of the state, Germany's BBK recommends 14 days as timeframe for the preparation of a stockpile at home with regard to water and food. Public confusion emerged when the Ministry of the Interior instead mentioned a timeframe of 5 days (water) and 10 days (food) for the stockpile to store at home (BMI 2016). This lack of convergence among the national actors and lack of alignment between recommendations resulted in a skewed focus of the public discussion on risk and civil protection, which may highlight the importance of a coordinated risk communication through campaigns.

Generally speaking and probably due its nature, the conveyance of "self-protection" guidelines puts the responsibility of protection to the self that is, the individual. Having said this, the message varies. In Finland the overarching message is that "together we make Finland stronger". In Cyprus, instructions tell the public what to do in case of war and bombings and how to take care of the injured until the professionals come. In most countries, there is information to children in cartoon form. In France and in Greece, there instructions concern what one has to have on their person in order to evacuate, notably even a deck of cards or game for kids who become bored quite easily. Citizens are encouraged to have a plan. In Sweden, the instructions are fairly instrumental, with information on things that one is supposed to have in case of a large-scale emergency. However, this is hardly a one-size-fits all society, though the instructions are. They are geared to families that can afford the extra food and gear, who live in a house with a basement or garage to store all these things. People who live in small apartments without extra storage room, transient populations, institutionalized people (such as the elderly or recent immigrants in camps) would have a hard time coming up with the supplies to survive without state assistance for 72 hours.

### **1.5.4 The imagined receiver**

One way to uncover the senders' understanding of the imagined receiver of the communication is to look at the language used, both in terms of different languages, and in terms of style – is the language easy to access, what kind of metaphors and symbols are used, who is portrayed in images and photos.

A Swedish campaign, as mentioned elsewhere in this report, was geared towards middle-aged women, as the individuals who have this sort of responsibility in a household that is, to take care of the rest of the family members. Conversely in Finland, the campaign was geared towards young females in cities, where they are the least prepared according to an earlier study. The latter is an example of evidence-based policy where the investment of resources is driven by survey results.

The language in which information is conveyed is a salient component of the effectiveness of information. Language, of course, can be a powerful political

tool and a controversial issue. Most countries convey some information at least in English, though lacking in depth and detail. This is even the case in Sweden and Germany and the “easy language” version of the web sites. Where google translate is used, the results can range from the confusing to the hilarious. At the two sides of the continuum are Greece, with information in six languages total with professional translations, and Cyprus and England, with information only in Greek and English respectively. Notably in Estonia, even though Russian is not an official language, citizens have the right to use Russian when communicating with the public sector in areas where Russian speakers are in the majority.

The image of society that comes across by the risk communication content and techniques is fairly traditional in terms of family structures, households and people. Images of people with obvious disabilities for example are few and far between – though Greece included one in one video urging people to have a plan. Images in France included brown and black people, as well as covered women, for example. Finland uses a female character, an illustration alluding to comic books with connotations of (super) power, with long wavy black hair, who is helping her elderly neighbor.

Generally speaking, spatial images are generic, though the environment is implicitly urban. The population is assumed to live in dense settlements. This is deduced not necessarily by what it is said, but rather by what it is not said. For example, there is no information specific to the countryside. An exception to this is the information from the English Local Resilience Forums because they are very localized and the information fits the local context.

## 1.6 Conclusions

This study has examined eight EU countries with a variety of administrative systems and geographies. The departure point of this study was that risk communication is a member state (national) issue – the specific content and method are not governed by the European Union. Though the conveyance of risk communication did not hold throughout all the different administrative systems and geographical locations, some patterns emerge.

Greece and France exhibit central information control, whereas England is devolved. The risks countries take up are largely contextualized – forest fires and earthquakes in Greece and Cyprus, home fires pretty much in all the countries, war in Cyprus, all hazards in England. Sweden and Germany alone focus on the consequences rather than the causes. The two Scandinavian countries (Sweden and Finland) show similarities, with Finland adopting policies from Sweden.

What is more, in the brief theoretical section of this report, we noted that risk communication is closely related to power and governance since it aims to influence perceptions, behavior, and policies, and is based on particular interests, norms, and ideologies (Giritli Nygren et al., 2017). Although the purpose of risk communication campaigns like the ones we have reviewed here is to support people in general, and often vulnerable populations in particular, the technique, messages, campaigns etc. do not go far enough in evening out structural inequalities. Considering the power of risk messages and the widespread approach in risk communication campaigns, it is important to reflect upon what taken-for-granted-norms and social hierarchies the communication might reproduce. We also seek to uncover the power dimension of risk and make visible the way in

which it intersects with other lines of power.

Risk communication is fairly instrumental pointing to what one needs to have, rather than the active part of crisis management and what one should do, for example with one's pets, older people, and those who may need extra support. What is more, such instructions are based on an urban environment, contributing to a one-size-fits-all risk communication. The self-protection instructions assume that individuals have the resources to understand, act, as well purchase, the necessary material they need to have in their possession in order to keep themselves safe until the state intervenes a period of time that can be quite long. Transient populations, older people or recent immigrants would have a hard time complying with these instructions. The social aspect of risk communication found in campaigns such as "Get to know your neighbor" would go some way in ameliorating the issue of access to resources. The social dimension of risk communication was also evident in the older brochure "If the war comes" [Om kriget kommer], which emphasized making sure that everybody is safe, by for example leaving suitcases behind to allow for more people in the car. In contemporary risk communication campaigns, material things are more prevalent as the state has retreated. This is not true for all the campaigns, as Finland has managed to maintain the message of solidarity in its 72-hr campaign.

### **1.6.1 The securitization of discourse and the commodification of risk**

The countries that have focused on consequences rather than risks have moved from focusing on risk to focusing on security. The emphasis is on being secure from an unspecified risk and the (often material) measures one can take in order to ensure security. The concomitant emphasis on materiality has created an externality similar to the one in the US—a marketplace for products. One can shop water that lasts 50 years, or a kit that holds all the things suggested by public sector, a sort of one-stop-shop. At the same time, the discourse is securitized, lacking a social component.

More knowledge is needed regarding the effects of campaigns and risk communication activities directed toward the general public, both in terms of people's understanding, knowledge and preparedness, and in terms of possible differences between population groups' diverse resources to respond. Furthermore, there is a need for a better understanding of the motives behind the various approaches that different countries apply. Finally, to put the results in a global perspective and draw lessons from different contexts further information is also needed about how risk communication in Europe and the countries investigated for the purpose of this report relates to risk communication in other western countries, e.g. USA, Canada and Australia, as well as in countries in Africa and Asia, e.g. South Africa, India and China.

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## 1.8 Annex 1: Supplemental links and images

Here we provide some links of interest from some of the countries under investigation.

### Estonia

Twitter accounts

Ministry of Interior Affairs: <https://Twitter.com/sisemin>

Päästeamet: Estonian Rescue Board: <https://Twitter.com/paasteamet>

Estonian Police: <https://Twitter.com/Politsei>

Youtube accounts

Päästeamet: Estonian Rescue Board: <https://www.youtube.com/user/EstonianRescueBoard/featured>

Facebook accounts

Päästeamet: Estonian Rescue Board: <https://www.Facebook.com/paasteamet>

Siseministeerium: Ministry of the Interior: <https://www.Facebook.com/siseministeerium/>

Tehnilise Järeelvalve Amet: Technical Surveillance Authority:  
<https://www.Facebook.com/tehnilisejareelvalveamet/>

Web sites

Kodu tuleohutuks (Fire safety at home): <http://kodutuleohutuks.ee>

Veeohutus (Water Safety): <https://www.veeohutus.ee>

### France

DICRIM

<http://www.georisques.gouv.fr/articles/le-document-dinformation-communal-sur-les-risques-majeurs-dicrim>

The French Institute for Education on Major Risks

<https://www.iffor-me.fr/>

<http://www.risques-affiches.info/> Templates to create posters and leaflets for educational establishments

Ministère de la Transition Écologique et Solidaire

<https://www.ecologique-solidaire.gouv.fr/prevention-des-risques-majeurs#e1>

Ministère de Solidarité et de la Santé

<http://solidarites-sante.gouv.fr/ministere/defense-et-securite-hfds/article/plans-de-defense-actions-de-prevention-gestion-de-crise>

Vigicrue: Flood information

<https://www.vigicrues.gouv.fr/>

## VIGIPIRATE

<http://solidarites-sante.gouv.fr/ministere/defense-et-securite-hfds/article/plans-de-defense-actions-de-prevention-gestion-de-crise>

## OTHER PLANS

Pirate plans: <http://www.gouvernement.fr/risques/les-autres-plans-pirate>

Flu pandemic plan: <http://www.gouvernement.fr/risques/plan-pandemie-grippale>

Ebola plan: <http://www.gouvernement.fr/risques/plan-ebola>

Plan to respond to a major nuclear accident: <http://www.gouvernement.fr/risques/plan-national-de-reponse-a-un-accident-nucleaire-ou-radiologique-majeur>

## Municipal examples

<https://www.paris.fr/services-et-infos-pratiques/prevention-et-securite/la-prevention/la-prevention-des-risques-majeurs-4789>

<http://www.montpellier.fr/4302-affiche-communale-sur-les-risques-majeurs.htm>

[http://www.ville-dunkerque.fr/fileadmin/user\\_upload/prevention-des-risques/Savoir\\_reagir\\_a\\_une\\_alerte.pdf](http://www.ville-dunkerque.fr/fileadmin/user_upload/prevention-des-risques/Savoir_reagir_a_une_alerte.pdf)

[https://www.ville-dunkerque.fr/fileadmin/user\\_upload/prevention-des-risques/2016-04-DICRIM-V4.pdf](https://www.ville-dunkerque.fr/fileadmin/user_upload/prevention-des-risques/2016-04-DICRIM-V4.pdf) DICRIM for Dunkerque

## Legal documents

<https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000629409&dateTexte=>

[https://www.legifrance.gouv.fr/affichCodeArticle.do;jsessionid=BF5435C3BE3B3C18A15A8C625E48388B.tpdjo09v\\_1?idArticle=LEGARTI000006835053&cidTexte=LEGITEXT000006074220&categorieLien=id&dateTexte=20131209](https://www.legifrance.gouv.fr/affichCodeArticle.do;jsessionid=BF5435C3BE3B3C18A15A8C625E48388B.tpdjo09v_1?idArticle=LEGARTI000006835053&cidTexte=LEGITEXT000006074220&categorieLien=id&dateTexte=20131209)

[https://www.legifrance.gouv.fr/affichCodeArticle.do;jsessionid=B-F5435C3BE3B3C18A15A8C625E48388B.tpdjo09v\\_1?idArticle=LEGIARTI000006835053&cidTexte=LEGITEXT000006074220&categorieLien=id&dateTexte=20131209](https://www.legifrance.gouv.fr/affichCodeArticle.do;jsessionid=B-F5435C3BE3B3C18A15A8C625E48388B.tpdjo09v_1?idArticle=LEGIARTI000006835053&cidTexte=LEGITEXT000006074220&categorieLien=id&dateTexte=20131209)

[https://www.legifrance.gouv.fr/affichCode.do;jsessionid=6FA2DD768AA7323B130F65CADB0BBA7C.tpdjo14v\\_2?idSectionTA=LEGISCTA000006182838&cidTexte=LEGITEXT000006071307&dateTexte=20090529](https://www.legifrance.gouv.fr/affichCode.do;jsessionid=6FA2DD768AA7323B130F65CADB0BBA7C.tpdjo14v_2?idSectionTA=LEGISCTA000006182838&cidTexte=LEGITEXT000006071307&dateTexte=20090529)

## DDRM Examples

[http://www.dordogne.gouv.fr/content/download/16660/132149/file/DDRM-2014-DEF\\_d%C3%A9grad%C3%A9.pdf](http://www.dordogne.gouv.fr/content/download/16660/132149/file/DDRM-2014-DEF_d%C3%A9grad%C3%A9.pdf)

<http://www.rhone.gouv.fr/Politiques-publiques/Securite-et-protection-de-la-population/La-securite-civile/Les-risques-majeurs/Les-risques-majeurs-dans-le-Rhone/Le-Dossier-Departemental-sur-les-Risques-Majeurs>

[http://www.cantal.gouv.fr/IMG/pdf/DDRM\\_2013\\_optimise\\_cle5411b6.pdf](http://www.cantal.gouv.fr/IMG/pdf/DDRM_2013_optimise_cle5411b6.pdf)

<http://www.sgdsn.gouv.fr/missions/preparer-la-reponse-aux-crises/>

## Twitter accounts

Paris Police Department: [https://Twitter.com/prefpolice](https://twitter.com/prefpolice)

Ministry of Interior Affairs: [https://Twitter.com/Place\\_Beauvau](https://Twitter.com/Place_Beauvau)

Government: [https://Twitter.com/gouvernementFR](https://twitter.com/gouvernementFR)

National Police: <https://Twitter.com/PoliceNationale>

Réseau Risques: <https://Twitter.com/ReseauRisques>

## Youtube accounts

Ministry of Interior Affairs: <https://www.youtube.com/user/MinistereInterieur>

Government: <https://www.youtube.com/user/gouvernementFR>



## Finland

### Web sites

72h campaign: <http://72tuntia.fi>

NuoHätä! campaign: <http://nouhata.fi>

Our Safe Village: <http://www.kylaturvallisuus.fi/opas/Etusivu>

### Facebook accounts

72h campaign: <https://www.Facebook.com/72tuntia/>

SPEK: <https://www.Facebook.com/suomenpelastusalankeskusjarjesto/>

Security Committée: <https://www.Facebook.com/turvallisuuskomitea/>

## Germany

Example Video: Thunderbolt – How to protect buildings:

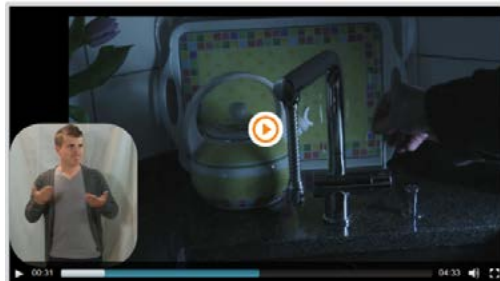
BBK: <https://www.youtube.com/watch?v=Ot-8x-NwQ7A> (assessed 2018-03-05)

Issued newspaper:

BBK: [https://www.bbk.bund.de/DE/Service/Publikationen/BS-Magazin/Archiv/BS-Archiv\\_node.html](https://www.bbk.bund.de/DE/Service/Publikationen/BS-Magazin/Archiv/BS-Archiv_node.html). (assessed: 2018-03-05)

### Communication to children

The BBK provides a website with content that targets children, parents and teachers. There are videos, paint templates and an interactive game available. One video covers for example a blackout situation (with a sign language translator included) and encourage the viewer to establish a stockpile and an emergency kit with flashlights for example.



BBK: [https://www.max-und-flocke-helferland.de/DE/Filme/filme\\_node.html](https://www.max-und-flocke-helferland.de/DE/Filme/filme_node.html) (assessed 2018-03-05)

Another video shows how the youth fire brigade maintains an emergency well and encourage the young viewer to join the local voluntary fire brigade.

Aside from paint templates, riddles, a lexicon and content for teachers and parents, which intend to assist in communicating disasters and correct actions to children, the website offers an interactive game. This game applies a comic style and provide five sequences with different ways of playing to foster the children's learning of correct conduct in different emergencies.

BBK: <https://www.max-und-flocke-helferland.de/static/muf2/index.html> (assessed 2018-02-19)



## Greece

Youtube links with comments

<https://www.youtube.com/watch?v=gOGGnTCLf5w> fire: bright colors, well produced, very good language, easy to understand. Educational, not out to scare people.

<https://www.youtube.com/watch?v=cp-NDjmUTJA>: fire tied to house heating – same graphic profile, bright colors, well done, also mentioning maggalia. (fb/Twitter)

<https://www.youtube.com/watch?v=b0ksZ9IWvsI> – traveling in the winter, same as the three above, well done, what not to do, bright colors.

<https://www.youtube.com/watch?v=E42NKUZE1g> General, national level, general info. Very well done. GSCP Παρουσίαση αποστολής, έργου και αρμοδιοτήτων ΓΤΠΠ.

All the three above are animated.

<https://www.youtube.com/watch?v=AicMpk8QmaQ> Specifically about protecting the forest, 2013, produced by the Region of Western Greece. Φωτεινή Βαβάτση (Πυραγός, 5η Ολυμπιονίκης το 2014 στην Τοξοβολία). In slow motion, rather melodramatic music, Common goal

[https://www.youtube.com/watch?v=gmbji\\_AEtTQ](https://www.youtube.com/watch?v=gmbji_AEtTQ) From the Region of Western Greece Fire: Arson

### In the Region of Attiki

<https://www.youtube.com/watch?v=-Y1jXLfY2nY> family plan.

Animated, boring, awful music, unfriendly language. Longer than 2 min

<https://www.youtube.com/watch?v=kq8eo6SwNnE> seismic protection. Same style as the one above. Quite substandard quality. Voice is so bad, that it seems like a joke.

<https://www.youtube.com/watch?v=L11Rr2t4Kq4> First aid kid. Same as the others. Rather bad quality. Their youtube channel here: <https://www.youtube.com/channel/UCqX54Z2vjrV1raPaY5-Uj0w>

## Sweden

<https://www.msb.se/RibData/Filer/pdf/28250.pdf> The campaign material from MSB.

<https://www.msb.se/sv/Forebyggande/Krisberedskap/MSBs-krisberedskapsvecka/Kampanjmaterial/Filmer-Krisberedskapsveckan/> Video clips on MSB home page. Professionally made.

<https://www.youtube.com/watch?v=NvUF0dLej04>  
Information video in case of a black out.

<https://www.msb.se/sv/Om-MSB/Nyheter-och-press/Presstjanst/Pressbilder/Pressbilder-Krisberedskapsveckan-2017-/> Press photos from the crisis preparedness week.



<http://www.ragunda.se/nyhetsarkiv/nyhetsarkiv-/2017-04-24-krisberedskapsveckan-2017.html> Information from a municipal homepage. The page is only in Swedish.

Twitter: #Krisberedskapsveckan





Swedish Civil  
Contingencies  
Agency