

Analysis of the Dutch Crisis Response System in the Context of the Common European Union Resilience

Chris van Duuren

ORCID: n/a

HHSK Dutch regional water authority in the city of Rotterdam, The Netherlands

Tomasz Zwęgliński

ORCID: 0000-0003-2652-8068

The Main School of Fire Service, Warsaw, Poland

Abstract. *The increasing integrity of the European Union member states is more and more regarding the security and civil protection aspects. On the other hand the priority in responsibility for the safety and security is still in the domain of the sovereign states. It means that the individual states of the EU are responsible for designing and managing their own security and civil protection systems. However, the integration processes within the EU trigger a significant need for an increase of common understanding of the individual member states' philosophies, approaches and systems utilized in the domain of security and civil protection. Only then if we understand how the others work, we are able to assist them in a crisis or disaster. Therefore, it is highly important to share and understand each other's systems between member states. The article presents the Dutch approach to national risk assessment as well as organizational aspects of internal security system applied in the Netherlands. It also suggest the future challenges which are at the near horizon of the system development.*

DOI: 10.5604/01.3001.0013.8205

<http://dx.doi.org/10.5604/01.3001.0013.8205>

Keywords: security system, crisis management, civil protection, risk assessment, the Netherlands

Introduction

The European Union strengthens its resilience to natural and man-made disasters through increase of cooperation between its member states. This is a fact which is proved by a number of different initiatives in the area of civil protection and security. EU has been broadly extending the Union Civil Protection Mechanism¹ and common Area of Freedom, Security and Justice². The first of them is mainly dedicated to natural and man-made disasters while the second to security threats. The political actions of the EU lead to tightening cooperation between the states and increase of regulation in the domain of dealing with threats over the borders in the full scope of crisis management.³ It is highly motivated by so called new threats i.e. cyber threats, critical infrastructure threats, as well as, by the increasing impact

¹ Decision No. 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism.

² Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007.

³ Zwęgliński T, Analiza polityczno-administracyjnych procesów decyzyjnych Unii Europejskiej w przypadku wystąpienia międzysektorowych i transgranicznych sytuacji kryzysowych, [in:] *Koncepcje i instrumenty zarządzania w administracji publicznej*. Warsaw, 2017, pp. 37–54.

of the traditional threats i.e. floods⁴ or fires, which are driven by the climate change to exceed borders affecting more frequently some beyond the divisions. Besides the universal values like solidarity there is also a pure economical reason for doing that. Simply there is no sense to maintain complex resources which are prepared for low likelihood high impact threats from a single state perspective. It could i.e. concern forest fires in the northern EU states like Scandinavian countries, which are not so likely to be affected by this type of threat. However, fires in 2018 in Sweden proved that low likelihood high impact threats from time to time happen bringing serious negative consequences. It raises a question if Sweden should expand coping capacity⁵ towards forest fires with all its consequences including financial costs of purchasing and maintaining new equipment dedicated to forest fires fighting like planes and special vehicles? Or perhaps it is more meaningful to be a part of European system and simply pull the resources which are owned by other EU countries, like France or Italy, which are more likely to respond to this specific threat. Of course being a part of such systems like the Union Civil Protection Mechanism means respecting solidarity, what in fundamental logic guaranties that we can pull others' civil protection resources but also are ready to share our own resources with others if requested. Such EU regulations optimize usage of the member states resources and increase the resilience of the region by increase of individual states' resilience. This is achieved by implementing effective system of sharing resources and information.

The integrity process of the EU which also has its dimension in civil protection and security domains is somehow limited by the law. This limitation is mainly generated by the fact that these two areas constitute a field of the sovereign states responsibility and this rule will not change very fast. It means that the cooperation in the field of civil protection and security, regulated by the EU, requires from the member states common sense of understanding of each other civil protection and security systems as well as the risk assessments results carried out by individual countries. Only by building a knowledge about the system of my neighboring country or other EU country, its risks and crisis regulations, we all could make the EU system more effective. Not understanding the system of the country we want to assist to in case of a disaster or other crisis, will definitely make the support much weaker if not impossible.

Therefore, it is highly justified to understand the civil protection and security systems of different EU states in order to be ready to share with them our resources if needed as well as request the other states for assistance and pull resources from them if we are in a critical situation which overwhelms our response potential.

The Netherlands are not the country neighboring with Poland, however, they share very similar risks. Top one is flood which is assessed as the highest risk for the country since many years. Therefore, it is meaningful to have deeper look into the Dutch system in order to answer two main questions raised for this article: What are the key risks in the Netherlands(?) and how the Dutch crisis management system is organized to be able to deal with the identified risks(?).

⁴ Zwęgliński T, European civil protection response potential in floods, [in:] *The BaltPre-Resilience Monograph Report on Awareness Raising, Bridging and Building Community Resilience in the Baltic Sea Region*. Warsaw–Karlstad, 2015.

⁵ UNISDR Terminology on Disaster Risk Reduction, United Nations International Strategy for Disaster Reduction. Geneva, Switzerland, May 2009, p. 8.

Material and methods

The research is mainly based on critical analysis of the literature and Dutch national documents dedicated to the crisis management system of the country with special attention to risk management aspects. To respond to the set questions it is required to shortly describe the country characteristics and the political system since these two elements are a kind of fundamentals for the risk assessment and crisis management structures. Further, the article focuses on the Dutch system of risk assessment including the results of this process. This lead us to discussion on the crisis management system in place in order to manage the identified risks.

Country characteristics and political system

The Kingdom of The Netherlands consists of 4 countries of which the main country (also called The Netherlands) lays in the North-west of Europe, with Belgium and Germany as its main neighbours. The other three countries (Aruba, Curacao and Sint Maarten) are islands in the Caribbean. The relationship between the countries (including mutual assistance) is described in the Kingdom charter.

The Kingdom has three more islands in the Caribbean: Bonaire, Sint Eustatius (a.k.a. 'Statia') and Saba. These three (publicly known as the BES-islands) legally aren't countries in the Kingdom, but are public entities belonging to the main country (Prodemos, 2013). The surface area of the Kingdom is approximately 37354 square km, with almost 17 million inhabitants which mostly (90%) live in urban areas. Life expectancy at birth is approximately 83 for females and 79 for males.⁶ The main country The Netherlands furthermore is composed of 12 provinces and approximately 400 municipalities. In the area of (coordinating) safety and security through extended local government, the latter work closely together in 25 so called safety regions.

Political system

The Netherlands is a decentralised unity state with a constitutional Monarchy. Regulated by the constitution, the Monarch is the official head of state. The parliament is the highest political body, to which the Monarch is subordinate. The Monarch (together with the ministers) is part of the Government but has no political responsibility whatsoever. Political responsibility fully lies with the ministers, each of them for the policy fields that resort to their ministry (consensus based, not one minister is superior to the other, not even the prime minister).

The organisation of the state is inter alia based on the separation of powers (a.k.a. *trias politica*). Which seperates judiciary, legislative and executive powers. The legislative power lays at the two chambers of the parliament and government, called the first and the second chamber. The Government cabinet serves as the executive branch. Administratively, The Netherlands has a decentralised system and is divided into provinces and municipalities.⁷

⁶ UN DATA, Country profile of The Netherlands. *Electronic source:* <http://data.un.org>, accessed: 30.05.2019.

⁷ Politics in The Netherlands, Prodemos — House for Democracy and the Rule of Law. The Hague, 2013.

The Kingdom's countries in the Caribbean (Aruba, Curacao and Sint Maarten) have an independent status, are represented by their own governments and hold their own elections. Their governments bear the responsibility for local matters e.g. Good governance and education. Matters like defence and foreign relations are on Kingdom level, executed on behalf of the island governments by the respective ministries in the main country. Of which the ministry of the Interior has a general coordinating role regarding all matters referring to all the Caribbean parts of the Kingdom.⁸

Relationship to the EU

The Kingdom of The Netherlands is a full member of the EU. However, through the Lisbon treaty, the Caribbean parts of the Kingdom (Aruba, Bonaire, Curacao, Sint Maarten, Sint Eustatius, and Saba) legally have the status of so called overseas countries and territories (OCT's) that are associated with the European Union. With the main focus on promoting their economical and social development.

Results

Characteristics of potential major risks

In the area of safety and security, In The Netherlands, the main focus is on the national level (ministries) and on the local level (municipalities, including their extended local government cooperation in safety regions).

The national level and the national risk profile

On the national level, The Netherlands works via two main interministerial strategies: the national security strategy (coordinated by the ministry of Justice and Security) and the international security strategy (coordinated by the ministry of Foreign Affairs). The national security strategy is seen as an innovative approach to strategic planning⁹, and consists of three main steps. First is the identification of what threatens the national security and how bad it is, second is the assessment if all necessary capabilities are in place for prevention or limiting consequences, third is the implementation of capabilities to be developed and strengthened in policy and measures.

For the identification of what threatens the national security and how bad it is, the Dutch national network of safety and security analysts (2017) every four years produces a National Risk Profile (NRP). The NRP is an all hazard overview of risks and threats deemed to be significant to the Dutch national security, viewed from the perspective of the national security strategy's five national security interests (territorial security, physical safety, economic security, ecological security, social and political stability). In 2018, the safety and security of cultural heritage is the sixth vital

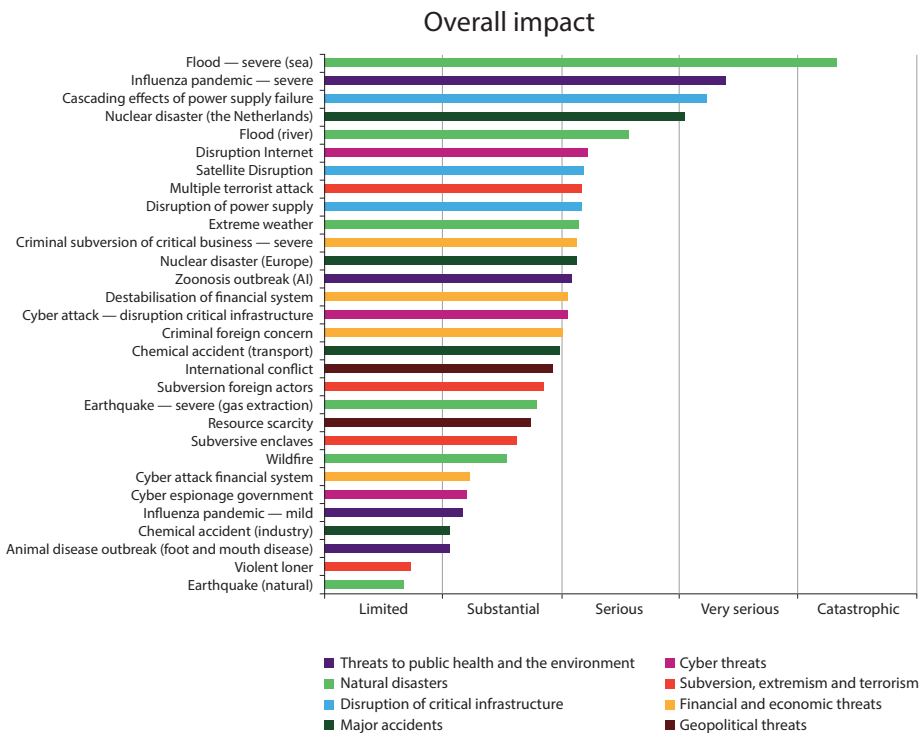
⁸ *Ibid.*

⁹ Pruyt E, Wijnmalen D, National risk assessment in The Netherlands. A Multi-Criteria Decision Analysis Approach. Berlin, 2010, pp. 133–143.

interest, but has yet to become part of the scope of the NRP. The NRP is not required by law but is seen as an important corner stone of good governance regarding crisis management on national level.

The risks and threats then are grouped into eight different themes: natural disasters (flood, extreme weather, drought and heat, wildfires, earthquakes and solar storm), threats to public health and the environment (environmental disasters, food crises, antimicrobial resistance, and infectious diseases), major accidents (nuclear disasters, chemical incidents, transport accidents), disruption of critical infrastructure (independent disructure of critical processes, independent disruption to critical infrastructure e.g. power supply, ICT and telecommunications, drinking water supply, payment and securities transactions), cyber threats (interconnectedness, digital sabotage, disruption of the internet, cyber espionage, cyber crime), subversion/extremism/terrorism (large-scale public order disturbances, subversion of the democratic system and the open society, extremism and terrorism) geopolitical threats (shifting power relations, tensions between the great powers and resource scarcity), and financial-economical threats (destabilisation of the financial system, cyber crime in the financial sector and other economic crime (e.g. Criminal interference in critical business community). After that insights are gained on their relative seriousness or impact (Figure 1).

Figure 1. Impact assessment for national threats

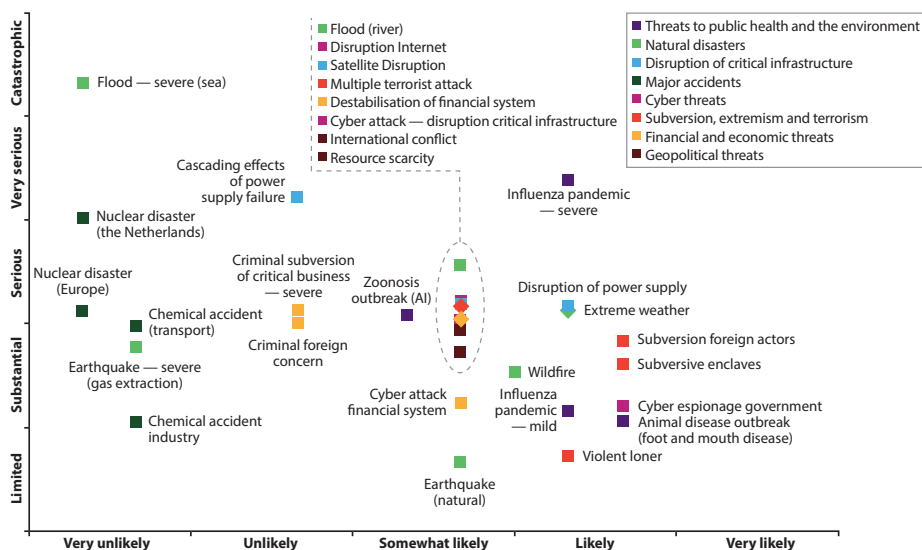


Source: compiled by authors

Besides relative seriousness or impact, the likelihood of risks and threats is important too. In the NRP, likelihood is defined as an indicator for how often a described disaster, threat or crisis takes place within a certain period of time and is based on available knowledge. In the NRP, a five years period is used as the basis for estimating likelihood. Further more (a combination of) three different characteristics are used to class it: quantitative scales for risks that can be analysed statistically or probabilistically, quantitative scales for threats of malicious nature, and qualitative scales for other risks.

Apart from risks and threats, the NRP also looks into so called autonomous developments. These are defined there as processes and trends which in themselves are not a direct threat to national security, but can have an influence on certain risks and threats. Autonomous developments are distinguished into five categories: ecological developments (climate change, loss of biodiversity, increasing environmental pressure), demographic-societal developments (population growth, ageing, urbanisation, widening between social groups, migration), international-political developments (a shifting balance of power, increasing tensions between great powers, increasing regional instability, stronger connectedness of internal and external security, an increase in hybrid conflicts), international-economic developments (growing global economic inequality, high unemployment ratio, automation and robotisation, low interest rate, shifts in economical and political influence, economical sanctions, increasing strategic economic policies, globalisation) and technological developments (nanotechnology, biotechnology, gene technology, information technology, dual-use technologies, increasing systems intelligence). In the end, the outcomes of the assessments through the NRP leads to a visualisation in the following all hazard risk diagramme (Figure 2).

Figure 2. All hazard risk diagramme



Source: compiled by authors

The local level and the regional risk profile

On local level, through the 25 safety regions in which the municipalities cooperate since the year 2010, every safety region produces its own four yearly Regional Risk Profile (RRP).¹⁰ On contrary to the National Risk Profile (NRP) the RRP is required by law and established since 2011 by following a national guideline that was developed in close cooperation between national and local actors involved in Dutch local crisismanagement. The method described in this guideline however is based upon the method used for establishing the NRP and given the amount of safety regions and risks as well as interinstitutional cooperation not stopping at region's borders leans very much on uniformity and comparability. The outcomes of the 25 RRP's are made public through the website.

Discussion

Crisis and security management process in place

The Netherlands, being a decentralised unity state, has a culture of decentralisation of responsibilities. The responsibility for (the coordination of) crisis and security management therefore lies on municipal level. With the local mayor as its principal authority. When a crisis cuts through local communities and/or overwhelms local capacity, but stays within the Safety Region borders, it is considered being a crisis of more than local meaning. Some responsibilities that normally all lay at the mayor, may be centralised to the chairman of the safety region.¹¹ Mostly being the mayor of the largest (in terms of population) municipality in that region.

Should a crisis even cut through more Safety Regions, this stays the same. Even though a crisis is then considered of more than regional meaning and the primary reflex could be ascending all responsibility to national level. In the decentralisation culture of The Netherlands, responsibilities that normally lay at local level will only be centralised up to the very national level as a last resort in very extraordinary situations, and only for the few aspects for which centralisation to the national level is deemed to be the only and best option. Far most responsibilities of local level will thus never be centralised to national level. To facilitate that, safety regions have made arrangements together and with the national operations centre (in Dutch: LOCC) on cooperation in times of crisis of more than regional significance. One of the safety regions will assume a coordinating role amongst the others involved in the crisis. And the national operations centre will support them upon request. Based on a facilitating role of the national level to the safety regions, as mentioned in the national crisis decision making manual.¹² This role also includes arranging international assistance through the Union civil protection Mechanism (UCPM),

¹⁰ Houdijk R, Regional risk assessment in The Netherlands. Misrar, The Hague, 2010.

¹¹ Kuipers S, Boin A, Crisis and Disaster Management in the Netherlands, Crisisplan BV. Leiden, 2014.

¹² National manual on Decision-making in Crisis Situations — The Netherlands. Ministry of Security and Justice. The Hague, 2013, p. 11.

should the minister responsible for civil protection deem the request to do so be eligible in the given situation.

Not all responsibilities however by default lay at local level. Some ministries have their own operational capacities e.g. Ships under centralised control. These are capacities the local level may request for assistance too. When these are put into action for crisis response on local level, the Mayor or the chairman of the Safety Region legally acts as the operational supreme commander, and through its coördination he/she will be responsible for that. Whereas being the legal owner of the capacity, the minister involved may of course decide to withhold the respective capacity from the given operation. This normally does not happen. Normalwise the availability of national capacities belonging to others for crisis response operations will be pre-arranged through public-public or public-private covenants.

Besides their regional risk profile (RRP), required to do so by law, each safety region establishes a generic regional crisis plan (RCP) in which they lay down how in times of crisis, this all will lead to efficient and effective crisismanagement. Aspects of crisis response however may also require coordination and cooperation between ministries. For that, on national level the ministries have made the generic crisis decision making manual (NHC), as well as national crisis plans (NCP's) that focus on the national dimension of specific types (e.g. flood) or aspects (e.g. large scale mandatory evacuation) of crises.

For good coördination, every safety region has its own regional crisis centre (RCC) that facilitates crisis decision making on safety region level and coordination with other safety regions and crisis centres on national level (mostly the national operations centre, the national crisis centre (NCC) and the crisis centres of the individual ministries (in Dutch: departemental crisis centres, DCC's), should the latter not be facilitated by the NCC.

Adequate information management is an important part of crisis response coordination. Under Dutch practitioners information exchange sometimes even is referred to as: the blood flow of crisismanagement. For that, the Safety Regions together have a command and control support system called LCMS (translated into English meaning: a nation wide crisismanagement system) based on and developed over the last decade from netcentric warfare principles used by NATO and the ministry of Defence. On scene command (OSC, in Dutch: COPI), the RCC's, the LOCC, and the NCC all work together on maintaining a common operational picture (COP) in LCMS and sharing new information with each other and through more traditional means e.g. e-mail and/or telephone with other stakeholders that have no access to LCMS.

Conclusions

Future challenges and development perspectives

The Dutch NRP mentioned earlier also looks ahead into developments on medium to long term, that do not constitute a direct threat for national security, but can have an yet uncertain and undefined influence on certain risks. A lot of these developments are earlier in the NRP already addressed as so called

autonomous developments, but later on in the NRP are underscored for their medium to long term role. These developments are: climate change, loss of biodiversity, increasing environmental pressure, widening between social groups, migration, a shifting balance of power, increasing tensions between great powers, increasing regional instability, an increase in hybrid conflicts, growing global economic inequality, high unemployment ratio, automation and robotisation, economical sanctions, increasing strategic economic policies, and globalisation. Further more, trends in the socio-cultural domain, technological innovations, and increasing connectedness and mutual dependency between systems also are viewed as such developments.

References

1. Decision No 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism.
2. Houdijk R, Regional risk assessment in The Netherlands. Misrar, The Hague, 2010.
3. Kuipers S, Boin A, Crisis and Disaster Management in the Netherlands, Crisisplan BV. Leiden, 2014.
4. National manual on Decision-making in Crisis Situations — The Netherlands. Ministry of Security and Justice. The Hague, 2013.
5. National risk profile 2016. An all hazard overview of potential disasters and threats in The Netherlands. National Institute for Public Health and the Environment. The Hague, 2017.
6. Politics in The Netherlands. House Democracy and Rule of Law. The Hague, 2013.
7. Pruyt E, Wijnmalen D, National risk assessment in The Netherlands. A Multi-Criteria Decision Analysis Approach. Springer, Berlin, 2010.
8. Rademaker M, National security strategy of The Netherlands: an innovative approach. Information and security. *An international journal*, Vol. 23, No 1.
9. Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007.
10. UN DATA, Country profile of The Netherlands. *Electronic source*: <http://data.un.org>.
11. UNISDR Terminology on Disaster Risk Reduction. United Nations International Strategy for Disaster Reduction. Geneva, Switzerland, May, 2009.
12. Zwęgliński T, European civil protection response potential in floods, [in:] The BaltPrevResilience Monograph Report on Awareness Raising, Bridging and Building Community Resilience in the Baltic Sea Region. Warsaw-Karlstad, 2015.
13. Zwęgliński T, Analiza polityczno-administracyjnych procesów decyzyjnych Unii Europejskiej w przypadku wystąpienia międzysektorowych i transgranicznych sytuacji kryzysowych, [in:] *Koncepcje i instrumenty zarządzania w administracji publicznej*. Warsaw, 2017.

About the Authors

Chris van Duuren, MSc, works at The Netherlands National Crisis Centre (NCC), Ministry of the Security and Justice, The Netherlands. His main field of interests is crisis management. E-mail: chris206_863@hotmail.com

Tomasz Zwęgliński, PhD, Director of Internal Security Department, The Main School of Fire Service, Warsaw, Poland. His main fields of interests: crisis management, CBRN, civil protection. E-mail: tzweglinski@sgsp.edu.pl

Streszczenie. Rosnąca integralność państw członkowskich Unii Europejskiej dotyczy w coraz większym stopniu aspektów bezpieczeństwa i ochrony ludności. Jednakże priorytet w zakresie odpowiedzialności za bezpieczeństwo oraz ochronę pozostaje nadal domeną suwerennych państw. Oznacza to, że poszczególne państwa UE są odpowiedzialne za projektowanie oraz zarządzanie własnymi systemami bezpieczeństwa i ochrony ludności. Procesy integracyjne w ramach UE wywołują jednak znaczącą potrzebę zwiększenia wspólnego rozumienia filozofii, podejść i systemów poszczególnych państw członkowskich wykorzystywanych w dziedzinie bezpieczeństwa i ochrony ludności. Tylko wtedy, gdy zrozumiemy, jak działają inni, będziemy w stanie pomóc im podczas kryzysu lub katastrofy. Dlatego bardzo ważne jest, aby dzielić się wiedzą i rozumieć wzajemnie własne systemy między państwami członkowskimi. W artykule przedstawiono holenderskie podejście do krajowej oceny ryzyka, jak również organizacyjne aspekty systemu bezpieczeństwa wewnętrznego stosowanego w Holandii. W artykule autorzy diagnozują również wyzwania, które w niedalekiej przyszłości wpłyną na rozwój systemu.

Резюме. Растущее единство государств-членов Европейского союза касается все чаще аспектов безопасности и гражданской обороны. Однако, приоритет ответственности за безопасность остается в компетенции суверенных государств. Это означает, что отдельные страны ЕС несут ответственность за разработку и управление собственными системами безопасности и гражданской обороны. Тем не менее, интеграционные процессы в рамках ЕС вызывают значительную потребность в повышении общего понимания концепции, подходов и систем каждого государства-члена ЕС в области безопасности и гражданской обороны. Только если мы поймем, как работают другие, мы сможем помочь им в случае возникновения чрезвычайной ситуации. Поэтому для государств-членов очень важным является обмен знаниями и понимание других систем. В статье представлен голландский подход к оценке национальных рисков, а также организационные аспекты системы внутренней безопасности, используемой в Нидерландах. В статье авторы определяют также вызовы, которые будут влиять на развитие системы в ближайшем будущем.