



Provisional version

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Committee on Social Affairs, Health and Sustainable Development

Political strategies to prevent, prepare for, and face the consequences of natural disasters

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Report¹

A. Draft resolution²

1. Our planet is suffering the negative effects of climate change which, according to the United Nations Intergovernmental Panel on Climate Change (IPCC), is making certain “natural” disasters more frequent and their consequences more devastating. These disasters now pose a permanent and predictable threat with serious repercussions on the well-being of humanity and the global economy. The worst affected are vulnerable groups such as women, who are, according to the United Nations (UN), 14 times more likely to die than men as a result of such an event, as well as children, the elderly, and all others in vulnerable situations.

2. Türkiye has just experienced the worst natural disaster of the last 100 years in a Council of Europe member State. The Parliamentary Assembly expresses its solidarity with the Turkish and Syrian peoples, heavily hit by an earthquake which struck their countries on 6 February. It sends its condolences to both countries and to the relatives of the more than 50 000 victims. It affirms its support for the millions of people affected, including the thousands injured as well as to the Syrian refugees in Türkiye. The terrible consequences of this exceptional event will be felt for decades to come. It is a stark reminder to us of the indomitable power of nature, in the face of which human beings have no choice but to try and prevent and prepare for such events, to deal with the consequences in a rapid and urgent manner, before preparing the reconstruction, by gathering all the population and not leaving the affected populations isolated and without assistance.

3. In circumstances of such magnitude and gravity, the Assembly reiterates the importance of providing financial and technical support to Türkiye and Syria. Assistance must not only address immediate, medium- and longer-term needs but also, and above all, be based on human rights. The Assembly welcomes the extraordinary outpouring of support from the member States and the European Union. It thanks the Council of Europe Development Bank for the speed with which it has moved to assist the Turkish authorities and for its support for earthquake-related projects in the country.

4. In anticipation of the donors’ conference to address the needs of the earthquake-affected populations in central Türkiye and Syria, the Assembly calls for a broader awareness of major hazards and the handling of their consequences. This disaster is an historical event. It must make us put into question our work on prevention, preparation, consideration, and reconstruction after an extreme event. We must give a holistic response to natural risks, so that no one is forgotten, while taking into account the risks associated with the Anthropocene era. The Assembly regrets the general lack of investment by member States in Council of Europe instruments centred on nature, landscape, and major hazards, and also the inexorable withdrawal of States Parties.

5. International players specialising in extreme events having emerged since 2000, the Assembly calls for better co-operation between the United Nations, the European Union, and the Council of Europe to ensure greater complementarity when it comes to dealing with natural disasters. It reminds Council of Europe member States of the need to practise prevention by preparing national strategies for extreme events, including those linked to the Anthropocene. These strategies should involve, in a democratic manner, not only national but also regional and local authorities in order to be as responsive as possible to the needs of the populations

¹ Reference to Committee: Reference no. 4620 of 24 January 2022.

² Draft resolution adopted unanimously by the Committee on 17 March 2023.

affected by disasters, while at the same time drawing on multilateral and bilateral international co-operation between neighbouring countries. Mitigation of natural risks requires a right to awareness and reinforced information, particularly for vulnerable persons who must also prepare. The Assembly stresses the role of decentralisation policies in percolating these standards down to the local level of governance.

6. Drawing on the IPCC recommendations, the Assembly stresses the need for member States to put in place, as soon as possible, measures to adapt regulations to climate change and offset the impact of the climate crisis, including with regard to extreme events. There is no room for fatalism when it comes to natural disasters: dealing with them is the responsibility of public authorities, national and local. These authorities must anticipate the risks so that they do not become threats to the human, social and economic rights of people living in Europe and elsewhere. The Assembly hopes that the standards regarding prevention, anticipation, response, and monitoring in this area will be shared more widely. It therefore calls for more robust checks and prosecution measures where necessary to combat corruption in the (re)construction sector and in the preparation for earthquakes and extreme events in general.

7. The Assembly notes the ground-breaking role played by EUR-OPA, the Council of Europe's European and Mediterranean Major Hazards Agreement, and underlines the usefulness of this Council of Europe body in preparing standards. Its approach based on human rights and democratic participation and its regional dimension, taking into account the needs of all groups of society, are still appropriate, as they ensure that no one is left out. It calls on member States to consider the need for European standards to respond not only to exceptional natural events, but also to events arising from the Anthropocene, including major technological hazards and the impact of war.

8. The Assembly therefore calls on member States to:

8.1. show their support for the authorities of Türkiye and Syria in order to respond to the disaster that struck both countries on 6 February 2023 by providing urgent, medium- and long-term technical and financial assistance;

8.2. spread awareness of the need to prevent, anticipate, take into account and monitor extreme events in order to ensure that the most vulnerable groups do not find themselves isolated and abandoned at a time when major hazards are increasing because of the Anthropocene;

8.3. step up co-operation between peers, whether professionals or volunteers, at international level in order to make institutions more resilient;

8.4. take into account the distribution of roles between levels of governance in the fight against major hazards in order to build the capacity of local authorities, in direct contact with the population; and to;

8.5. move away from a financial approach to disaster management, by allocating the necessary funds and combating the corruption and bad governance that increase the vulnerability of those most at risk.

9. In the run-up to the 4th Council of Europe Summit and in view of the increased risk of extreme events in the context of the climate crisis, the Assembly calls on member States to put the right to a healthy environment at the top of the agenda. It asks them to start considering the added value provided by the nature-, landscape- and major hazard-centred solutions developed by the Council of Europe that use the human rights-based regional approach to protect vulnerable people and to reinforce the resilience of populations against all extreme events and their short-, middle-, and long-term consequences, including their impact on migration. It calls on member States to use the benefit from the experience gained and to ensure the sustainability of these instruments before they disappear. It invites them to co-operate further on the creation of continental standards based on human rights and democratic participation, with a regional focus.

B. Draft recommendation³

1. The Parliamentary Assembly refers to its Resolution XXX (2023) on “Political strategies to prevent, prepare for, and face the consequences of natural disasters”. It deplores the destruction, suffering and insecurity that every natural disaster brings. Because of the human causes of the climate crisis, these disasters are set to become a chronic threat with serious repercussions on human well-being, including high human and economic costs.
2. Natural disasters have a broad impact on most human rights, such as the rights to life and physical integrity, rights related to basic necessities of life, security of property, economic, social, and cultural rights, and civil and political rights. Any natural disaster radically affects society and in particular its resilience, i.e., its ability to overcome risks, conflicts, and political change. The consequences of the earthquake in Türkiye and in Syria will be felt for decades to come, including through migratory flows.
3. In the midst of this epoch-making paradigm shift that we are experiencing, the Council of Europe remains the guardian of the rule of law in Europe and a bulwark against threats to human rights and democracy, including against the effects of the Anthropocene. The Assembly underlines the need to learn from each disaster in order to improve the continent’s climate resilience. Referring to Recommendation 2214 (2021) on “The climate crisis and the rule of law”, it stresses the role of the rule of law in building the capacity of institutions to play their role with due regard for the separation of powers and when faced with adversity.
4. In its Recommendation 2211 (2021) on “Anchoring the right to a healthy environment: need for enhanced action by the Council of Europe”, the Assembly called on Europe to protect the right to a “safe, clean, healthy and sustainable environment”. With only a few weeks to go before the 4th Council of Europe summit in Reykjavík (Iceland) which will set the Organisation’s strategy in the 21st century, including in relation to the climate crisis, it firmly reiterates this call and asks the Committee of Ministers to:
 - 4.1. draw up an additional protocol to the European Convention on Human Rights (ETS No. 5) on the right to a safe, clean, healthy, and sustainable environment, based on the terminology used by the United Nations and on the text included in the Recommendation;
 - 4.2. draw up an additional protocol to the European Social Charter (ETS Nos. 35 and 163) on the right to a safe, clean, healthy, and sustainable environment;
 - 4.3. finalise the feasibility study for a “Five Ps” convention on environmental threats and technological hazards threatening human health, dignity and life;
 - 4.4. revise Recommendation CM/Rec(2016)3 on human rights and business with a view to strengthening corporate environmental responsibility for the adequate protection of the human right to a safe, clean, healthy and sustainable environment.
5. Recalling the ground-breaking role played by EUR-OPA, the Council of Europe’s European and Mediterranean Major Hazards Agreement, the Assembly emphasises the value of the agreement in preparing standards: its approach founded on human rights and democratic participation and its regional dimension are still appropriate today, as they ensure that no one is isolated or without assistance.
6. The Assembly regrets the general lack of investment by member States in Council of Europe instruments focusing on nature, landscape and major hazards, and the inexorable withdrawal of investment over the past 20 years. It therefore invites the Committee of Ministers to consider these activities as part of the core mandate of the Organisation and accordingly to incorporate funding for such activities in the ordinary budget of the Council of Europe, while at the same time ensuring that its work benefits all member States.
7. The Assembly wishes that, beyond the 4th Summit, the Council of Europe will remain a forum at the forefront, with its working method based on human rights, co-operation between peers, and democratic participation, where solutions based on nature, landscape, and major hazards are discussed. The Assembly calls on the Committee of Ministers to step up co-operation with the United Nations in setting standards for the prevention, forecasting and monitoring of extreme events and to co-ordinate its work with that of the European Union. Such co-operation should promote the sharing of good practice and strengthen co-operation between peers, whether professionals or volunteers, in the fight against extreme events. It should aim to improve the management of natural hazards and to further empower those directly affected by disasters to help themselves.

³ Draft recommendation adopted **unanimously** by the Committee on 17 March 2023.

C. Explanatory memorandum by Mr Simon Moutquin, rapporteur

1. Introduction

1. Our planet is suffering the negative effects of climate change, which is making certain “natural” disasters more frequent and their consequences more devastating. These disasters pose a global threat with serious repercussions on the well-being of humanity and a high economic cost. Vulnerable people are worst affected: a woman is 14 times more likely to die than a man as a result of such an event.⁴

2. In 2021, 432 disasters connected with natural hazards (including 56 in Europe) were recorded worldwide. They claimed 10 492 lives, affected 101.8 million people, and caused more than USD 252 billion of economic losses.⁵ According to the IPCC, some extreme weather phenomena are on the rise. At the time when work on this report began, one third of Pakistan was under water, causing 50 million climate refugees.⁶ In New Zealand, more recently, a cyclone and floods caused devastation in Auckland and the surrounding region. 241 millimetres of rain fell in 24 hours, far exceeding the previous record precipitation of 161.8 mm.⁷ The year 2021 saw a rise in the number of extreme weather events in Europe. They were responsible for 2.9% of deaths and 20.7% of global financial losses.⁸ Over 400 000 people were affected. In recent years, floods have hit central Europe (especially Germany), earthquakes have struck Italy and Greece, and a volcano has erupted on the island of La Palma (Spain), while heatwaves, forest fires and droughts have swept across Europe. There are those who have spoken of a toll demanded by nature.

3. Every natural disaster brings destruction and insecurity. In the immediate aftermath of a tragedy, a country’s physical infrastructure is damaged and many key social and political institutions are destabilised or even destroyed.⁹ Often, access to utilities (water, electricity, gas) is cut off, food and medical supplies cannot be distributed and public and essential services are suspended (education, post, telecommunications, etc.). Political instability and, in some cases, a power vacuum give criminal gangs an opportunity to prosper.¹⁰ A natural disaster radically affects society and highlights, in particular, its degree of resilience, i.e., its ability to overcome risks, conflicts and political change.¹¹

4. Natural disasters jeopardise a broad range of human rights, such as the rights to life and physical integrity, rights related to basic necessities of life, security of property, economic, social and cultural rights, and civil and political rights. In Resolution 2396 (2021), which was adopted on the basis of my report on “Anchoring the right to a healthy environment: need for enhanced action by the Council of Europe”, the Parliamentary Assembly stresses the need for Europe to protect the right to a “safe, clean, healthy and sustainable environment”. Recently, the United Nations Human Rights Council recognised that all individuals have the right to a safe, clean, healthy and sustainable environment as a human right.¹² The United Nations General Assembly has adopted a similar resolution.¹³ Denials of human rights often, unfortunately, stem from inappropriate policies or simple neglect, and the vulnerability of the people affected can result from inadequate planning and disaster preparedness.¹⁴ It is time for the Council of Europe to review its response to the major hazards that natural disasters present.

5. The events of the last few years serve as a wake-up call to us all – governments, parliamentarians, civil society and ordinary citizens – to recognise the urgency of the situation and improve our preparedness¹⁵ for the future challenges of climate change. Designing political strategies to prevent, prepare for and deal with natural disasters is essential for human rights protection and sustainable development. In her report on “The climate crisis and the rule of law,” my colleague, Edite Estrella (Portugal, SOC), alerted us to the human causes

⁴ The United Nations have used this reference since 2013. TF1, 11/12/2019, [Les femmes ont-elles 14 fois plus de risques de mourir lors de catastrophes naturelles ?](#)

⁵ [2021 Disasters in numbers – Extreme events defining our lives](#) (figures from the Emergency Event Database).

⁶ (available in French only) Ta Météo, 2/09/2022, [Pakistan : que faire des 50 millions de réfugiés climatiques ?](#)

⁷ In western Europe, a cumulative total of 50 ml in 24 hours is regarded as the critical threshold. *Futura*, 02/2023, [Inondations en Nouvelle-Zélande : comment expliquer la catastrophe qui a dévasté Auckland ?](#)

⁸ *Ibid.*

⁹ Brookings, 03/03/2010, [“Natural Disasters, Conflict, and Human Rights: Tracing the Connections”](#).

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² Resolution 48/13 entitled [“The human right to a clean, healthy and sustainable environment”](#), adopted on 8 October 2021.

¹³ United Nations General Assembly, draft resolution A/76/L.75 on [“The human right to a clean, healthy and sustainable environment”](#), adopted on 26 July 2022.

¹⁴ Brookings, 22/11/2006, [“Protecting persons affected by natural disasters – IASC operational guidelines on human rights and natural disasters”](#).

¹⁵ CNN, 24/08/2021 [“Germany’s deadly floods were up to nine times more likely because of climate change, study estimates”](#).

of the increase in extreme climate events, especially in northern Europe. We must consider the Anthropocene¹⁶ and take appropriate measures. The Assembly should explore the current situation in Europe, look at examples of good practice and make recommendations to ensure that all information required to develop the most effective political strategies and regulations is available to each member State.

6. On 4 October 2021, Mr Antonio Gutiérrez Limones and several of his colleagues tabled a motion for a resolution on “Political strategies to face the consequences of natural disasters” ([Doc 15392](#)). The motion was referred to our Committee and I was appointed rapporteur on 24 April 2022. During our meeting on 22 September 2022, the Committee amended the title to “Political strategies to prevent, prepare for, and face the consequences of natural disasters.”

7. As part of my work, I talked to experts, firstly at a hearing held as part of the meeting of the Committee on Social Affairs, Health and Sustainable Development in İzmir (Türkiye) on 22 September 2022 and then during the meeting of the Network of Contact Parliamentarians for a Healthy Environment in Strasbourg (France) on 12 October 2022. During these discussions, I gathered information from Mr Taner Yüzgeç, President of the Turkish Chamber of Civil Engineers, Mr Erdem Canbay, Professor and President of the Department of Civil Engineering at Middle East Technical University (METU, Türkiye), Mr Gianluca Silvestrini, Acting Head of the Council of Europe’s Department of Culture, Nature and Heritage, and Mr Krzysztof Zyman, Executive Secretary of the European and Mediterranean Major Hazards Agreement (EUR-OPA).

2. Getting used to more numerous and more destructive disasters

8. To understand a disaster and its impact on the population before, during or after the extreme event, the international bodies in the sector¹⁷ employ a risk-based approach. It serves to define and understand these phenomena as effectively as possible, so as to contain the panic that they legitimately cause and limit any disorientation among relief services and any fatalism, the effects of which would be equally demoralising and destructive on communities.

9. “Natural hazards” are only regarded as disasters at the point where they interact with society. According to the United Nations, natural disasters are the consequences of events triggered by natural hazards that overwhelm local response capacity and seriously affect the social and economic development of a region.¹⁸ The earthquake which hit Valdivia (Chile) in 1960 was the strongest ever recorded (9.5 on the Richter scale).¹⁹ It was felt as far away as Japan, Hawaii, and New Zealand. However, with fewer than 6 000 deaths and 2 million people displaced, its toll was limited by the low population density of the region affected. Yet it profoundly changed the topography of the region, with subsidence of some areas, lateral ground displacement, the transformation of isthmuses into islands, and coastal flooding, etc.

10. The IPCC has warned us of the rise in the number of intense climate events in Europe in a previous report. The presentation given by meteorologist Robert Vautard during the Social Affairs Committee’s hearing of 7 July 2020 was unequivocal.

11. Human-made factors can trigger additional negative impacts or amplify natural risks. Examples include greenhouse gas emissions, which accelerate climate change and increase the Earth’s surface temperature. This means that natural hazards are deviating from their usual patterns, forest fire and drought seasons are lengthening, hurricanes are becoming more violent and coastal flooding is increasing,²⁰ making predictions more difficult and disasters more likely and severe. Other factors such as ageing populations, urbanisation, changing social structures, underinvestment in public services and insufficient preparedness also compound the problems, thereby increasing the impact on citizens and the death tolls of these events.²¹

12. In a context of rampant poverty in Europe, as my colleague, Pierre-Alain Fridez, explains in his report on “Eradicating extreme child poverty in Europe: an international obligation and a moral duty,” the exposure of the most disadvantaged persons to natural hazards is worrying. As the least developed and lowest-income countries are especially vulnerable, the international community should support and supplement the efforts of

¹⁶ The term Anthropocene, which means “human era,” was popularised at the end of the 20th century by the meteorologist and atmospheric chemist, Paul Josef Crutzen, who won the Nobel Prize for Chemistry in 1995, and the biologist Eugene Stoermer, to mean a new geological epoch which they believe began at the end of the 18th century with the Industrial Revolution. (Wikipedia)

¹⁷ Three international institutions which operate in Europe and are described below.

¹⁸ Brookings, 03/03/2010, “[Natural Disasters, Conflict, and Human Rights: Tracing the Connections](#)”.

¹⁹ Futura Sciences [Quel a été le plus fort séisme de tous les temps ?](#)

²⁰ NASA Earth Applied Sciences Disasters Program Area, 15/12/2021, “[Remembering 2021's Disasters](#)”.

²¹ World Weather Attribution, 02/07/2019, “[Human contribution to record-breaking June 2019 heatwave in France](#)”.

the national and local authorities concerned to fulfil their obligations.²² Among the persons who are vulnerable, women, elderly people, and children are particularly impacted.

13. The starting point is that even a major hazard may not lead to a disaster if communities or vulnerable groups are prepared.²³ This is why prevention and immediately available emergency rescue service units for the most exposed persons are the most effective means of mitigating natural hazards. Many extreme geophysical events occur at intervals, which makes them predictable to a degree. Developing forecasting tools and methodologies should be a key aspect of any political strategy on natural disasters. When unavoidable events occur, such as volcanic eruptions, early warning systems allow communities to prepare and reduce adverse impacts. With the help of post-crisis analysis of other events, forecasters can develop disaster impact projections before new events occur, in order to assess the potential consequences of alternative hazard adjustments.²⁴

14. Governments²⁵ bear the primary responsibility for providing assistance to persons affected by natural disasters and protecting their human rights.²⁶ Central authorities intervene with support from civil society alongside local authorities, which are at the front line. Governments must always bear in mind the need to protect communities against violations of fundamental rights, by making sure that their organs and authorities respect the rights concerned and protect victims. They must ensure redress and full restitution, if a violation happens.²⁷ Governments should also ensure the public has access to all information concerning predictability, preparedness, and risk mitigation.²⁸

15. Although the authorities bear primary responsibility, they must get the whole of society on board and win their trust in terms of preparing to deal with natural hazards. This means implementing prevention policies, preparing to deal with natural hazards, when they become disasters, and also preparing for assistance after the events, as well as rebuilding. The involvement of society as a whole is a key aspect of the process of preventing and responding to events. Individuals must be involved and engaged. The keys to prevention are education, awareness-raising, and providing risk maps that list all possible threats. Not only does self-help need to be promoted and guided, but also society needs to understand better what kind of help it can expect.²⁹

16. Society must take account of natural hazards. When unpreventable natural disasters happen, adjusting human activity through regulation is often less expensive than trying to control physical forces. Administrative bans on building in flood-prone areas are a straightforward response to real threats. Against the background of the climate crisis, hazards of this kind are set to increase.

17. The roll-out of policies affects the organisation of disaster relief and also the medium- and long-term consequences of disasters for societies, such as homelessness after the evacuation of risk zones, or the mental trauma that communities suffer. In addition, post-disaster reconstruction offers an opportunity to initiate a strategic transformation process and strengthen disaster resilience, for example by adjusting land use to create sports grounds or parks near rivers, which can serve as flood plains in the event of an overflow.³⁰

18. In short, we need to arm ourselves better against natural disasters by placing maximum emphasis on prevention, preparedness and hazard reduction. At the same time, crisis management also needs to be strengthened and there needs to be long-term follow-up of victims (which involves addressing the thorny issue of compensation).³¹ Since natural hazards often result in cross-border disasters, co-operation between states and the exchange and development of good practice play a key role.

²² *Ibid.*

²³ Clay, Edward: "[Natural Disasters: What is the Role for Social Safety Nets?](#)," 2011, Social Safety Nets Primer Notes; No. 32. World Bank, Washington, DC. World Bank. Licence: CC BY 3.0 IGO.

²⁴ Why is it important to assess natural disasters? – Michael K. Lindell and Carla S. Prater: Assessing Community Impacts of Natural Disasters, in *Natural Hazards Review*, November 2003, volume 4, number 4, ASCE Library, pp. 176-185.

²⁵ Authority being exercised at the appropriate level in accordance with the distribution of powers and the subsidiarity principle.

²⁶ Brookings, 03/03/2010, "[Natural Disasters, Conflict, and Human Rights: Tracing the Connections](#)".

²⁷ Inter-Agency Standing Committee (IASC), "[IASC Operational Guidelines on the Protection of Persons in Situations of Natural Disaster](#)", published by Brookings-LES Project on Internal Displacement, September 2011.

²⁸ *Ibid.*

²⁹ Fekete, A. and Sandholz, S.: "[Here Comes the Flood, but Not Failure? Lessons to Learn after the Heavy Rain and Pluvial Floods in Germany 2021.](#)" Water 2021, 13, 3016.

³⁰ Helmholtz-Zentrum Potsdam – GFZ (German Research Centre for Geosciences), 14/07/2022, "[Flood risk management after the Eifel flood in July 2021](#)".

³¹ Programme for the 2022 Tangent Link Aerial Firefighting Conference: "[Germany's Lessons to Learn Following the 2021 Floods](#)".

19. The aim of this report is to explore the different political strategies to prevent, prepare for and face the consequences of natural disasters. Once the effectiveness of the responses has been assessed, a set of general guidelines to be implemented by member States will ultimately be developed.

20. In this regard, I make reference to Resolution 2307 (2019) on “A legal status for ‘climate refugees’”. Global warming is a concern shared by all European nations. It is estimated that 200 million people will be displaced globally by 2050, because of climate change. Clear policies towards these displaced populations are needed. States should take a more pro-active approach to protecting victims of natural or man-made disasters and improve preparedness mechanisms for these disasters. The report calls for specific measures at local, national, and international levels. They include measures to raise the resilience threshold of local communities, to improve national disaster response and management capacity, and to improve the legal protection of refugees in the context of environmental migration. Disaster risk reduction should be integrated into sustainable development and management policies. The interaction between climate change and conflict and violence should be further assessed to better understand what triggers migration. International legal developments, such as the 2009 African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention) may serve as an example to follow in relation to the obligation to protect persons displaced for environmental reasons. The report also highlights the complementarity between prevention, emergency assistance, and the search for sustainable solutions, accelerating societies’ adaptation to climate change.

3. Flood management in Germany during recent events

21. In August 2002, heavy rainfall led to floods in central Europe. Germany was hit hardest, with a damage bill running to over €11 billion. After this event, a number of weaknesses were identified in Germany’s flood risk management system, including incomplete or even non-existent flood warning systems, poor maintenance of flood protection structures, a lack of risk awareness and inadequate responses.³² The new flood risk management system led to a more effective response to the 2013 flooding of the Elbe and the Danube. However, despite its seeming preparedness, Germany experienced its worst natural disaster between 12 and 15 July 2021 in the Ahr valley. Floods caused by record rainfall claimed more than 180 lives and affected more than 40 000 people. The insured losses came to more than EUR 7 billion. Serious damage was caused to infrastructure, with the destruction of almost all bridges in the Ahr valley as well as stretches of national highways, major access routes to affected sites and gas, water and electricity supply networks. The federal government and the governments of the country’s *Länder* had to establish a special relief fund totalling EUR 30 billion to fund the reconstruction efforts.³³

22. The warmer the Earth becomes, the more frequent and intense rain events will be. The likelihood of such a disaster occurring today has increased by a factor of between 1.2 and 9 by comparison with a period when the temperature was 1.2°C cooler.³⁴ The disaster of 2021 was exacerbated by other phenomena which made the flooding more intense and more destructive, such as soil sealing and saturation, which led to funnel effects.

23. After the tragedy, investigations were carried out to establish and understand why the flooding had not been anticipated and why some areas had been completely unprepared and unaware of the threat. Although the German weather forecasting agency had issued extreme weather warnings, the authorities were responsible for deciding whether measures should be taken to evacuate people. Flood warnings had been issued for major rivers, but the information about tributaries and smaller rivers was much less detailed. Thus, in some cases, floods could not be prevented³⁵ and it was impossible to predict, even half an hour in advance, which areas would be most severely affected. The post-crisis analysis showed that the main problem was not the infrastructure itself, but rather the failings in interpreting information, communication and the exchange of data between parties. The floods severed many telephone lines, people did not have access to warning apps, some alarm chains did not work, and jurisdictional disputes arose between public bodies, rendering them less reactive. The investigations highlighted the fact that the focus should not be on dealing with the communication problems of each authority (national, regional, and local governance), but rather on circulating information and co-ordination. The studies showed that Germany also needs better risk mapping and evacuation plans.

³² [“Science for Environment Policy”](#): a news and information service of the Directorate-General for Environment of the European Commission, published under the auspices of the Science Communication Unit (SCU) at the University of West England in Bristol (UWE Bristol).

³³ Fekete, A. and Sandholz, S.: [“Here Comes the Flood, but Not Failure? Lessons to Learn after the Heavy Rain and Pluvial Floods in Germany 2021”](#). Water 2021, 13, 3016.

³⁴ World Weather Attribution, 23 August 2021, [“Heavy rainfall which led to severe flooding in Western Europe made more likely by climate change”](#).

³⁵ BBC, 19 July 2021, [“Germany floods: Government rejects criticism over flood warnings”](#).

24. The events that hit Germany and Belgium in 2021 were shocking not only because of their violence, which left behind devastation that was still visible when this report was being prepared, and the number of victims who lost their lives or homes, but also because of the damage to our cities and rural areas. We were clearly not prepared. I note that the people who experienced these extreme events felt not only amazement, but also anger. Our fellow citizens are doubtless right to lament the lack of resources allocated to dealing with natural disasters.

4. Earthquake in Türkiye

25. The earthquake which hit Türkiye was one of the most powerful tectonic events ever recorded in the world and probably one of the deadliest. At 7.8 on the Richter scale, it was so violent that it also destroyed buildings that were well designed to withstand earthquakes. It was followed by very severe aftershocks and killed at least 43 000 people in Türkiye and 5 500 in Syria; thousands suffered injuries of varying degrees of severity. At least 1.7 million people have been displaced and at least 750 000 are living in tents. Given the extremely difficult situation in Türkiye, the condition of Syrians in Syria or refugees does not bear thinking about. And given the violence of nature, I cannot but share my sorrow and extend my sympathy to the authorities in Türkiye and the survivors of such an event.

26. In connection with this report, I was intending to meet representatives of the authorities and victims of the floods that hit Germany in 2021, to analyse our societies' resilience and our ability in Europe to rebuild without leaving anybody by the wayside. Now I should like to travel to Türkiye and, if possible, Syria for the report. Pending that visit, I will draw on the proceedings of the public hearing held by the Committee on Social Affairs, Health and Sustainable Development in İzmir (Türkiye) on 22 September 2022, where I was able to gather information from national experts. I have taken the liberty of going over those accounts in the light of previous work by the Assembly concerning the earthquake which hit Türkiye and Greece in 1999. On that occasion, the Assembly issued Recommendations 1447 (2000) on the "Economic consequences of the recent earthquakes in Türkiye and Greece" and 1448 (2000) on the "Social consequences of the recent earthquakes in Türkiye."

27. I note that in Europe, there is no monitoring body to measure improvements in the resilience of our communities. The Council of Europe's monitoring bodies have demonstrated the usefulness of a peer-review process that brings about incremental progress in policies and legislation. In preparation for the 4th Council of Europe Summit due to be held in Reykjavík (Iceland) in May 2023, I intend asking the Committee of Ministers about the value added by the peer-review method employed by the Council of Europe in its monitoring bodies. There is no monitoring body for environmental rights.

28. 22 years ago, the Assembly called on the Committee of Ministers to support the Turkish and Greek authorities in the long term. It also noted that physical and environmental damage could have been avoided. In anticipation of future disasters, it stressed the role of municipalities in restoring priority services and of civil society organisations engaged in dealing with the consequences of the earthquakes, the provision of psychosocial support for victims and the rehabilitation of workers incapacitated by earthquake injuries. In its reply dated 21 March 2001, the Committee of Ministers agreed with the Assembly about the importance of international solidarity, including between neighbouring countries, and the need to learn from the August and September 1999 earthquakes in Türkiye and Greece.

29. As in 2000, the Council of Europe Development Bank has promised to respond to the appeal by the Turkish authorities. With the aid of Turkish counterparties, it is working on fast-track loan approval.³⁶ The Governor offered the Bank's assistance on 6 February. The Ankara Office is negotiating with the authorities alongside other international funders.³⁷ In addition to the facilities released, the Bank has offered its services to support the analysis of the needs of the Health Ministry and the work of ISMEP.³⁸

30. As announced in the Committee of Ministers' reply, EUR-OPA held meetings on seismic risks in Kalamata (Greece) from 2 to 4 December 2001 in the presence of representatives of 13 current Council of Europe member States and three other countries (Japan, Morocco and the Russian Federation). On that occasion, it noted recurrence, the fact that high-risk zones were well known and the unpredictability of the events as particular features of seismic risks. It therefore stressed the need to build up know-how. It recommended various short-, medium- and long-term measures for the various phases of prevention, warning, preliminary estimation of potential damage, validation of the estimates and ex post research. For instance, it recommended the drawing up and regular updating of lists of expert volunteers who were available at short notice. Among the recommendations, I note the need for preparedness and to gather together vital information

³⁶ EUR 300 million have been released for ISMEP and for urban resilience to fires and earthquakes.

³⁷ The World Bank, the European Investment Bank, and the Islamic Development Bank, etc.

³⁸ İstanbul Seismic Risk Mitigation and Emergency Preparedness Project (ISMEP).

regarding the rapid estimation of potential and then actual damage and regarding possible deformation of the landscape to help guide the rescue services. I also note the need to put in place training modules for end users. 20 years ago, EUR-OPA was already proposing measures that went beyond a purely cost-based approach. It was already predicting the serious disruption that would arise because of the risk of earthquakes, floods and fires.

31. Humanitarian support quickly swung into action. In the first 72 hours, 21 EU member states deployed 1 750 experts and 111 search dogs.

32. The city of Erzin³⁹ withstood the destruction whereas neighbouring cities were razed to the ground. This was probably because of the geology of its subsoil and also the strict application of planning and building laws in one of the most earthquake-prone areas of the world. The authorities have started arresting property developers who are suspected of having built properties that did not meet safety standards.⁴⁰

33. Apart from short-term humanitarian aid, it is essential to stress the need for prevention because other events of the same kind will occur in future.⁴¹ Even though the earthquake was unbelievably strong, I take issue with the idea of our being powerless against the forces of nature. Before February 2023, Türkiye had experienced 85 earthquakes in 100 years, which had claimed 80 000 lives. Our expert told us in September 2022 that there was a critical risk of a very strong earthquake occurring by 2030. We cannot just fatalistically accept the toll that nature demands. This most recent earthquake did not really come as a surprise. In the light of what the experts told us, I note that Türkiye is in the forefront worldwide in earthquake prevention measures. It has a body of legislation initiated in 1937, extending to over 500 pages. It has collected an earthquake tax for over 20 years.⁴² Establishing a disaster risk reduction strategy is vital. Against the background of the climate crisis, it will be necessary to deal with more natural disasters and tackle the issues relating to poverty. Although the policies and legislation may be of a high standard, there are problems with implementation. The expert also said that it was necessary to focus on modernising the most dangerous buildings and introducing effective penalties to force developers to comply with the regulations in force. When so many lives are at stake, taking a purely economic approach is no longer possible.

34. I note that this is not the time for argument about the corruption that enabled developers to circumvent town planning regulations. Following the academic studies conducted after the earthquake in Haiti, we all know exactly how corruption kills.⁴³ Once again, I would refer to the definition that extreme events only become disasters in specific circumstances in contact with human beings. We must persevere in developing tools based on nature.

4. The added value of Council of Europe instruments

35. EUR-OPA, the European and Mediterranean Major Hazards Agreement, is a platform for co-operation over major hazards between Europe and the southern Mediterranean. Its scope is disaster risk reduction, in particular knowledge, prevention, risk management and post-crisis analysis. The main objectives of the EUR-OPA Agreement are to reinforce and to promote co-operation between member States in a multi-disciplinary context to ensure better prevention and protection against risks and greater preparedness for major natural or technological disasters.⁴⁴

36. The partial agreement came into being in 1987 in the wake of the Chernobyl disaster. It is “open” because any non-member State of the Council of Europe may apply to become a member. As of January 2023, it now only comprises 20 Council of Europe member States and two third countries (Lebanon and Morocco).

37. EUR-OPA is not a technical agency. Its role is to develop standards employing Council of Europe methodology based on human rights so that no one is forgotten. Through democratic processes, it maintains co-operation between peers, i.e., all experts and volunteers who share the goal of combating extreme events. It is also the only Europe-wide player. It guides political dialogue and contributes to ongoing co-operation with other international and European organisations.

³⁹ *New York Times*, 17/02/2023, [Why Did a Turkish City Withstand the Earthquake When Others Crumbled?](#)

⁴⁰ *New York Times*, 11/02/2022, [Turkey-Syria Earthquake Death Toll Passes 28,000 as Recovery Efforts Ramp Up](#)

⁴¹ *The New Humanitarian*, 23/02/2023, [The New Humanitarian | Prevention is a 'no-brainer': top UN disaster risk reduction official on Türkiye-Syria quakes](#)

⁴² *NPR*, 9/02/2023, [As Turkey earthquake deaths rise, so does criticism of Erdogan government](#)

⁴³ *Nature*, 12/01/2011, [Corruption kills](#)

⁴⁴ [EUR-OPA in brief \(coe.int\)](#).

38. The agreement is supported by a network of specialised scientific and technical centres which enable a multinational, multi-disciplinary approach to the issue of risks. These certified centres are encouraged to co-operate and share good practices.

39. The ground-breaking EUR-OPA Agreement is the oldest forum where the community of European natural and industrial disaster professionals meets. Since its inception, the Agreement has been a source of solutions⁴⁵ which have enabled disaster risks to be gauged more accurately. The European Alert System now enables the public and authorities to be warned within tens of minutes after an earthquake occurs. It pinpoints 20 000 earthquakes every year. Forecasting of the consequences of earthquakes with the Extremum geo-information system has facilitated swift analysis of these phenomena, which are still very difficult to predict. The Agreement has also lent support to regional mapping projects so that natural hazards can be better understood. All of these advances have been made thanks to the Agreement.

40. However, there are many other challenges besides the climate crisis, which is yet another threat and tends to favour the occurrence of hazards such as flooding, droughts, sea level rises, etc., which can cause landslides and landslips. During the soon to be 36 years of EUR-OPA's existence, Europe has become increasingly urbanised up to a level of 90% in certain regions, which makes towns and their inhabitants more vulnerable. In parallel, depopulated rural areas pose problems in relation to desertification and also soil impoverishment due to intensive farming, while forest and general water management is being neglected. It is also regrettable that risk perception among the public is poor and that many people do not always consider the possibility of disasters. Work must be done to prevent people from being taken completely by surprise by these events and constantly to safeguard against these risks by engaging with the public, including schoolchildren. Anticipating the cost of preventing major risks is a way of investing in the future.

41. Despite the tangible advances to which it has led, the Agreement suffers from a persistent lack of resources. In addition to Russia's exclusion, it has also been affected by the withdrawal of certain other member States which are member States of the European Union. Belgium withdrew from the Agreement in January 2023. In 2022 alone, the partial agreement lost 52% of its budget. It is to be feared that other countries may leave EUR-OPA because the contributions nearly doubled in 2023, while the benefits remained the same.

42. The Agreement only holds ministerial meetings once every five years, for reasons of economy. The network of experts meets once or twice a year. Although it is ground-breaking, it has lost institutional memory as a result of reforms that have cut back its activities and staff. Its budget in 2023 is a third of the level in 2021. The Agreement is seen as being in competition with the United Nations and the European Union, although their role is different. Parties which announce their withdrawal by 30 June can leave the Agreement on 1 January the following year and stop contributing to its budget. EUR-OPA has never been a technical agency, but rather is a body that develops standards in the Council of Europe, enabling sharing of best practice. Its approach based on human rights and democratic participation and its regional dimension are still appropriate. During the Covid-19 pandemic, the parties to the Agreement adopted recommendations to ensure that migrants and people with disabilities would be included in emergency procedures. The Agreement continues to provide real added value, including in view of the lack of an effective due diligence system for preventing, responding to and dealing with the consequences of disasters.

43. As things stand, the continuation of the Partial Agreement's work is in jeopardy. It could cease to exist. It should be noted that the continued existence of some other Council of Europe bodies has been challenged in the past, and putting an end to decades of co-operation is never a good solution. For instance, the future of the North-South Centre was under threat at one point. However, it managed to carry out reforms and regain attractiveness in connection with the neighbourhood policy among its member States, which renewed their confidence in it in the areas global citizenship education, youth co-operation and women's empowerment.

5. How can the Agreement complement other international tools?

44. A plethora of intergovernmental or non-governmental organisations work in the field of natural disasters. The way in which they work constantly changes as awareness grows and necessitates better risk management. It reflects the necessary adaptation of these organisations to the increase in hazards and the changes in methods of mitigating their effects.⁴⁶

45. The United Nations began to address the issue of natural disaster prevention in 1989. Following on from the work done on the Yokohama Strategy and Plan of Action and the Hyogo Framework of Action, the Sendai Framework for Disaster Risk Reduction 2015-2030 aims to reduce losses of human life and collateral

⁴⁵ The Agreement published the report [Facing risks together – 25 years of co-operation \(1987-2010\)](#) in 2010.

⁴⁶ EUR-OPA lists the fields that the various bodies work in on its website in a report entitled [International Institutions and Major Hazard Management](#), which was published in 2003.

damage significantly. It was adopted in 2015. It is overseen by the [United Nations Office for Disaster Risk Reduction](#) (UNDRR). Its four priority areas, whose scope extends all the way down to local level, are: understanding disaster risk, strengthening disaster risk governance to manage disaster risk, investing in disaster risk reduction for resilience, and enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction. “The adoption of this new Framework for disaster risk reduction opens a major new chapter in sustainable development, as it outlines clear targets and priorities for action which will lead to a substantial reduction of disaster risk and losses in lives, livelihood and health,” said the Special Representative of the UN Secretary General for Disaster Risk Reduction, Ms Margareta Wahlström, at the time.⁴⁷

46. The [Sendai Framework](#) enables 195 countries and territories which are members of the United Nations to monitor seven targets and types of compliance: mortality, people affected, economic loss, critical infrastructure and services, disaster risk reduction strategies, international co-operation and early warning and risk information.

47. The European Union took disaster risks into account in the implementation of Community policies, beginning with consumer protection. It then broadened the scope of its work to include industrial disaster monitoring following the accident in Seveso in 1976 that devastated seven communities in Lombardy (Italy) by adopting a number of directives, the most recent of which – 2012/18/EU⁴⁸ – describes the prevention of, preparedness for, response to and lessons to be learned from such events. It has also taken an interest in extreme natural events such as rivers bursting their banks. Within the 30 years of its existence, DG ECHO, the European Union’s humanitarian agency, has become the Directorate-General for European Civil Protection and Humanitarian Aid Operations.

48. In 2001, the European Union established a European civil protection mechanism and initiated humanitarian aid operations for natural disasters as a response to phenomena which affected 50 million people and cost member States EUR 12 billion between 1980 and 2020. In addition to the member States of the EU, seven other countries are involved in the European mechanism (Bosnia and Herzegovina, Iceland, Montenegro, North Macedonia, Norway, Serbia and Türkiye). It comprises⁴⁹ a European Medical Corps, a Union Civil Protection Mechanism and the Emergency Response Co-ordination Centre (ERCC). It intervenes at the request of a member State at the scene of a major accident, earthquake, flood, forest fire, health emergency, marine pollution incident, population displacement, extreme weather phenomenon or other event (acts of terrorism and cyberthreats).

49. In the wake of the Covid-19 pandemic, the European Commission reviewed and strengthened its arrangements in May 2021. With this new regulation, it sought to mobilise all of its policies, including space policies, and streamline administrative procedures while adopting a gender-based dimension that could meet the needs of the most vulnerable people.

6. Advocating for a Europe that is ready for and resilient to natural disasters

50. While the impact of the climate crisis on the frequency and severity of extreme events has been accepted by the authorities worldwide, it is unclear whether it is really taken into account? In the United States, according to the Census Bureau,⁵⁰ 3.37 million residents had to leave their homes following natural disasters (mainly tornadoes, hurricanes, fires, and floods) in 2022. This is a very significant figure. It shows that one American in a hundred was affected by such extreme events in 2022.

51. The climate crisis means that it is necessary to start thinking about our vulnerabilities. In addition to countries that are in zones where tectonic plates meet, consideration needs to be given to the impact in areas that have not been affected to date. We must ask ourselves about the fate of towns and cities and, above all, the movement of coastlines, which are being threatened directly by rising sea levels! And about the consequences of high-altitude snowmelt and the risks of landslides! Not to mention the forest fires that are now affecting northern Europe. These vulnerabilities now concern all of our countries. All such events must be taken into account and analysed in our joint process of reflection.

⁴⁷ United Nations, 18 March 2015, [Historic Framework Agreement Sets Goals to Reduce Loss of Life, Livelihood, as Third World Conference on Disaster Risk Reduction Concludes](#).

⁴⁸ <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:197:0001:0037:EN:PDF>.

⁴⁹ The legal framework comprises a number of European regulations which can be viewed at https://civil-protection-humanitarian-aid.ec.europa.eu/who/about-echo/legal-framework_en.

⁵⁰ The federal bureau publishes statistics on the impact of natural disasters in the United States on its website. [Week 53 Household Pulse Survey: January 4 - January 16 \(census.gov\)](#).

52. Our goal of establishing a stable welfare society in Europe is now under serious threat from the increase in natural disasters related to the climate crisis. These events cause many violations of the right to life and other human rights.

53. It has to be recognised that because of the Anthropocene, there is no longer really such a thing as a “natural” disaster. The frequency, intensity and complexity of extreme natural events prove that humans are responsible for them and Europe is not immune from them. While climate phenomena have doubled over the last 20 years, inequality and poverty have exploded and call for greater solidarity.

54. We must also be creative and seek nature-based solutions in order to prevent the consequences of disasters on the basis of the teachings of ancestral cultures. It is no longer possible to follow a productivist path that seeks to exploit nature. It is time to invest in our capacity for resilience, to live in harmony with and to not confront nature so as to save lives and avert colossal economic losses.

55. Every nation must address this reality by developing its own disaster risk management strategy with a view to establishing a framework for operations while ensuring it is ready to deal with extreme events and responding adequately to disasters, not only by aiming to reduce disaster risks and threats but also by facilitating better reconstruction and recovery. Although these strategies are to be adopted at national level, they must facilitate co-operation between countries and involve the local dimension and individuals as well as engaging the private sector, particularly insurance companies, which play an essential role in both prevention and rebuilding.

56. The Council of Europe must renew its commitment to its policy of tackling extreme weather events and reaffirm its pioneering role founded upon human rights, democracy, and the rule of law. The current situation whereby EUR-OPA is still a partial agreement, whose budget is outside the Organisation’s ordinary budget and which the biggest member States of the Council of Europe are gradually leaving for the European Union bodies is not tenable.

57. 13 October is the International Day for Disaster Risk Reduction. The Council of Europe could mark the day, renew its commitment to its policy of tackling extreme weather events and reaffirm its pioneering role on the international arena, with the distinguishing characteristic of basing its approach on human rights, democracy and the rule of law.

58. Protecting human life must remain central to our approach and our concerns. The strength of the Council of Europe’s action in this area will lie in its ability to foster exchanges at governmental and parliamentary level and regional and local level, and in close co-operation with civil society. Its expertise in terms of gender mainstreaming, child and youth protection and participation and the protection of vulnerable groups in our societies is a key asset for demonstrating the Council of Europe’s added value among international players.

59. In conclusion, it seems there is an urgent need to recognise that disaster prevention and management should be among our concerns for the years ahead. It is time to take stock of the various mechanisms and tools that exist at international level and to pool and consolidate the community of professionals and volunteers involved in this area and to recognise that investing in prevention, both domestically and internationally, is necessary to reduce undoubted human and economic costs. I wonder whether, once again, we lack a European body which can oversee, at regional level – taking account of the case law of the European Court of Human Rights and the work done in relation to the Council of Europe’s environmental conventions, in addition to the monitoring undertaken at the UN (Sendai) – all national arrangements and strategies for the prevention and mitigation of natural disasters, as well as their consequences in all member States. Thanks to its human rights-based method, the Council of Europe should be able to share its experience of monitoring and initiate peer review cycles in order to respond to the climate crisis under a Council of Europe framework convention on the right to a healthy environment which would embody all existing environment-related conventions and agreements.

60. Therefore, in addition to my request to adopt a protocol to the European Convention on Human Rights and the revised European Social Charter, I renew my call to prepare a new binding legal instrument establishing the right to a healthy environment. I accordingly call for the finalisation of a feasibility study for a “Five Ps” convention on environmental threats and technological hazards threatening human health, dignity and life. If the idea of such an instrument is not taken up, the Council of Europe will miss the opportunity to assert its role in the 21st century. These conventions, which are blazing a trail in environmental protection, must now be given funding and a more secure framework.