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AP/CAT(2018)10

**EUROPEAN AND MEDITERRANEAN MAJOR HAZARDS AGREEMENT
(EUR-OPA)**

**RESULTS
OF THE SURVEY ON THE IMPLEMENTATION OF EUR-OPA
RECOMMENDATIONS AND GUIDELINES**

*Document prepared by the Secretariat
of the EUR-OPA Major Hazards Agreement*

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I. Introduction

The Committee of Permanent Correspondents of the EUR-OPA Major Hazards Agreement delegated to its Bureau the responsibility of gathering information on the implementation of EUR-OPA recommendations and guidelines over the past ten years and their impact on national legislations, policies and strategies for disaster risk reduction ([AP/CAT\(2017\)18](#)).

Under this mandate and in order to ensure better prevention, protection and preparation in the event of major natural or technological disasters the Bureau is asked to:

- evaluate any change in national legislations, policies, strategies and practices in response to the EUR-OPA recommendations and guidelines;
- assess the number of projects/activities implemented due to EUR-OPA tools aimed at monitoring potential hazards and improving the resilience to disasters.

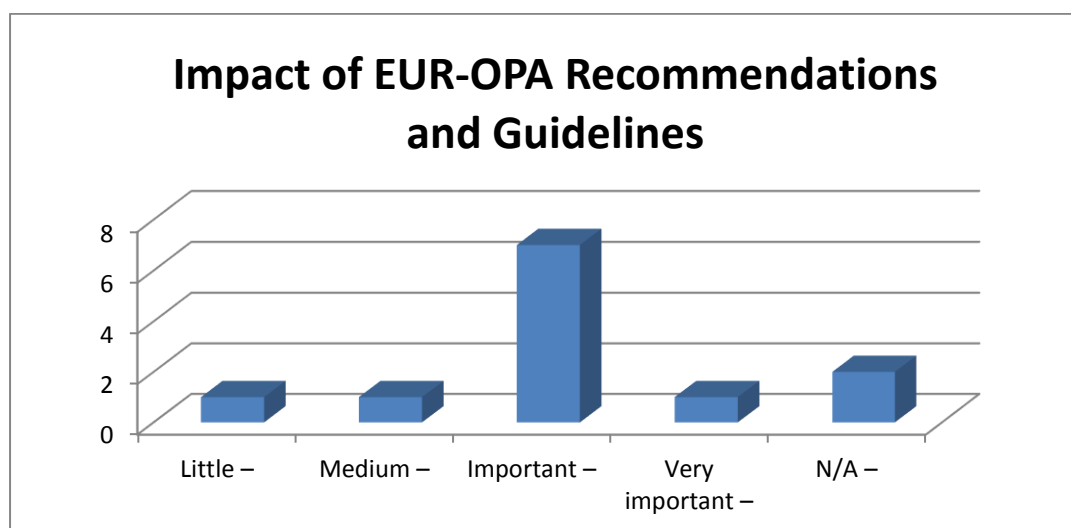
In May, the Secretariat has disseminated to EUR-OPA Member States and its network of Specialised Centres, a questionnaire aiming to assess the actions taken at national level in response to EUR-OPA recommendations and guidelines and reflect on possible further initiatives to ensure an effective implementation of the existing and new recommendations.

The replies to the questionnaire gathered from May to early September 2018 are summarised in the documents. Detailed results are available in Appendix II.

II. Main Findings

Eleven countries (through Permanent Correspondents or Specialised Centres) have contributed to this study: Bosnia and Herzegovina, Bulgaria, Croatia, Georgia, Greece, Luxembourg, Morocco, San Marino, Serbia, Slovak Republic, Ukraine.

More than 60 % of the participating countries assessed the impact of EUR-OPA recommendations and guidelines as important to very important as shown on the graphic below.



The contribution of EUR-OPA's texts to the drafting of national strategies and policies are threefold:

1. EUR-OPA texts complement other international standards with specific and adjusted guidelines.

In EUR-OPA Member States, national plan and strategies on disaster risk reduction are mainly designed in line with EU standards (compulsory requirements for EU member states or in view of EU integration) and UN standards. These standards may be seen as too general and/or difficult to implement in certain regions or countries.

While EUR-OPA recommendations are not legally binding, they help Member States in reviewing their national legislations and policies by providing tailor-made guidelines and examples of good practices adapted to the regional context and/or specific thematic areas.

Example:

Croatia : . In the last ten years Croatia has developed two laws on civil protection, national hazard assessment, national risk assessment (which is currently being updated), local and regional hazard and risk assessments and methodologies. Croatia is in the process of developing a DRR Strategy and reinforcing and better organising their legislative framework that now includes topics such as vulnerable groups in case of a disaster.

2. EUR-OPA texts contribute to raising awareness of policy makers and all stakeholders to specific subjects.

The dissemination of good practices and the exchange of positive experiences that is made possible through the activities of the agreement as well as the projects carried out by the Specialized Centres contribute to influence and support the development of new laws and strategies. Stakeholders are made aware of specific thematic areas, preparing the ground for designing innovative approach and legal changes at national level.

Example:

Bulgaria: The establishment of the risk prevention training system at school level in the Republic of Bulgaria.

3. EUR-OPA supports scientific and technological knowledge to better assess evolving risks and adapt accordingly the resilience strategies.

With its network of Specialised Centres, EUR-OPA contributes to scientific and technological knowledge in order to improve governance practices.

Example:

Greece: Activities on vulnerable groups, including persons with disabilities organised in collaboration between the General Secretariat for Civil Protection and the European Centre for Forest Fires (ECFF).

The detailed list of initiatives, strategies and policies developed with the contribution of EUR-OPA are detailed in Appendix II.

III. EUR-OPA's future

- Among the four proposals for EUR-OPA possible future actions, Item 1, 3 and 4 were noted as important to very important by the participants of the study for each of the categories.

1. Propose new recommendations and guidelines on specific topics
2. Update existing recommendations/guidelines
3. Implement follow-up projects
4. Improve the communication/visibility of recommendations and guidelines

The main recommendations for EUR-OPA's future activities are:

- Strengthening the collaboration between Specialised Centres and decision-makers. Scientific and technological knowledge as well as recommendations from the Centres aimed at improving governance practices are sometimes insufficiently taken into account by policy makers.
- The Council of Europe as whole and the EUR-OPA Agreement in particular have been facing budgetary constraints in the recent years. Therefore the Agreement should be focused on a much smaller number of targets, mainly related to its Resolution 87/2.

Three countries have indicated their preferred topics for future actions, example are listed below. A detailed list is available in Appendix II:

1. Bulgaria:
 - Promote risk culture among population; in particular children and further develop BeSafeNet e-tool;
 - Investigation of the Legal Aspects of Risk Management;
 - Support scientific research and make better use of the areas where the EUR-OPA have strong expertise (e.g. earthquakes and floods).
2. Georgia:
 - Research on Risk management (e.g.: maintaining early warning system).
3. Ukraine:
 - Strengthen governance and foster prevention (e.g. as regards to radiological risks).

IV. CONCLUSIONS

National strategies and plans in EUR-OPA Member States are principally designed in line with mandatory guidelines and standards from the EU and the UN.

EUR-OPA recommendations and guidelines are instrumental to support the preparation of these strategies by feeding into the political reflection and stimulating innovative legislation changes.

EUR-OPA work is also key to raise awareness on specific subjects and strengthen better preparedness.

EUR-OPA is expected in the future to focus on areas such as:

- Better prevention and awareness-raising programmes, in particular for vulnerable groups;
- Governance and cooperation;
- Using scientific and technical knowledge for better decision-making.

APPENDIX I

SURVEY ON THE IMPLEMENTATION OF EUR-OPA RECOMMENDATIONS AND GUIDELINES

EUR-OPA Recommendations and Guidelines

a) *In your opinion, in the last 10 years what has been the impact of EUR-OPA Recommendations and Guidelines in your country?*

Please select:

None	Little	Medium	Important	Very Important
1	2	3	4	5

b) *Explain your answer above with concrete examples.*

(e.g. new laws/policies/strategies adopted thanks to the EUR-OPA recommendations; lack of awareness/interest in the recommendations; other existing sources inspiring strategies, etc.).

c) *Detail concrete examples of national strategies, policies and good practices taken in response to EUR-OPA Recommendations and Guidelines.*

d) *Provide the number, title and the timeframe of major projects and actions implemented in response to EUR-OPA Recommendations and Guidelines.*

e) *Rate the importance of the following EUR-OPA possible future actions and provide examples.*

(1 less importance – 5 most importance)

5. Propose new recommendations and guidelines on specific topics Examples:	1	2	3	4	5
6. Update existing recommendations/guidelines Examples:	1	2	3	4	5
7. Implement follow-up projects Examples:	1	2	3	4	5
8. Improve the communication/visibility of recommendations and guidelines Examples:	1	2	3	4	5

f) *Provide any further comment and suggestion on how the EUR-OPA can ensure the development of strategies, policies and good practices in your country.*

List of EUR-OPA Recommendations and guidelines

A) Climate Change

- a. **Recommendation CM/Rec(2018)03** of the Committee of Ministers to member States on cultural heritage facing climate change: increasing resilience and promoting adaptation
- b. **Recommendation 2011 - 2** of the Committee of Permanent Correspondents on preventing and fighting wildland fires in a context of climate change, adopted at the 61st meeting of the Committee of Permanent Correspondents of the EUR-OPA Agreement, Yerevan, Armenia, 29-30 September 2011 [EN](#) | [FR](#)
- c. **Recommendation 2010 - 1** of the Committee of Permanent Correspondents on reducing vulnerability in the face of climate change, adopted at the 12th Ministerial Session of the EUR-OPA Agreement, Saint Petersburg, Russian Federation, 28 September 2010 [EN](#) | [FR](#) | [RU](#)
- d. **Recommendation 2009 - 1** on Vulnerability of Cultural Heritage to Climate Change, adopted at the 57th meeting of the Committee of Permanent Correspondents of the EUR-OPA Agreement, Dubrovnik, Croatia, 15-16 October 2009 [EN](#) | [FR](#)

B) Environment

- a. **Recommendation 2012 - 1** of the Committee of Permanent Correspondents on ecosystem-based disaster risk reduction, adopted at the 62nd meeting of the Committee of Permanent Correspondents of the EUR-OPA Agreement, Strasbourg, France, 26-27 April 2012 [EN](#) | [FR](#)
- b. **Recommendation** on Risks in coastal areas, adopted at the 53rd meeting of the Committee of Permanent Correspondents of the EUR-OPA Agreement, Bucharest, Romania, 27-28 September 2007 [EN](#) | [FR](#)

C) Governance

- a. **Recommendation** on local and regional authorities preventing disasters and facing emergencies, adopted at the 11th Ministerial Session of the European and Mediterranean Major Hazards Agreement (EUR-OPA), Marrakech, Morocco, 31st October 2006 [EN](#) | [FR](#)
- b. **Recommendation 2009 - 2** on the promotion and strengthening of national platforms for disaster risk reduction, adopted at the 57th meeting of the Committee of Permanent Correspondents of the EUR-OPA Agreement, Dubrovnik, Croatia, 15-16 October 2009 [EN](#) | [FR](#)

D) Radiation Risks

- a. **Recommendation 2011 - 1** of the Committee of Permanent Correspondents on information to the public on radiation risks, adopted at the 61st meeting of the Committee of Permanent Correspondents of the EUR-OPA Agreement, Yerevan, Armenia, 29-30 September 2011 [EN](#) | [FR](#)

- b. **Recommendation 2008 - 1** on Radiological protection of local communities : improving preparedness and response, adopted at the 55th meeting of the Committee of Permanent Correspondents of the EUR-OPA Agreement, Istanbul, Turkey, 30-31 October 2008 [EN](#) | [FR](#)

E) Vulnerable groups

- a. **Recommendation 2016 - 1** of the Committee of Permanent Correspondents on the Inclusion of Migrants, Asylum Seekers and Refugees in disaster preparedness and response, adopted at the 13th Ministerial Session of the European and Mediterranean Major Hazards Agreement (EUR-OPA), Lisbon, Portugal, 26 October 2016. [EN](#) | [FR](#)
- b. **Guidelines** for assisting migrants, asylum seekers and refugees during emergencies and disasters (2016) (AP/CAT(2016)08 [EN](#) | [FR](#)
- c. **Recommendation 2013 - 1** of the Committee of Permanent Correspondents on the inclusion of people with disabilities in disaster preparedness and response, adopted at the 64th meeting of the Committee of the European and Mediterranean Major Hazards Agreement (EUR-OPA), Paris, France, 24-25 October 2013 [EN](#) | [FR](#)
- d. *Major Hazards and People with Disabilities: a **toolkit for good practice***
- e. **Recommendation** on Disaster risk reduction through education at school, adopted at the 11th Ministerial Session of the European and Mediterranean Major Hazards Agreement (EUR-OPA), Marrakech, Morocco, 31st October 2006 [EN](#) | [FR](#)
- f. **Recommendation** on Psychosocial support and services for victims of disasters, adopted at the 53rd meeting of the Committee of Permanent Correspondents of the EUR-OPA Agreement, Bucharest, Romania, 27-28 September 2007 [EN](#) | [FR](#)

Appendix II - Strategies and plans implemented in the context of EUR-OPA Recommendations

Bulgaria The European Centre for Risk Prevention (ECRP)

Vulnerable groups

Strategies and projects

- Developing legislation on crisis management. Very important for us were the activities (F:F meetings, research and recommendations) organized by the Higher Institute of Emergency Planning (ISPU, Florival, Belgium);

- Establishing a system of risk prevention training at school level in R Bulgaria. Of particular importance was the Agreement program - FORM-OSE. VEB site "BeSafeNet";

- The use of good practices in the field of radiation protection disseminated by the European Centre in Kiev (TESEC), in planning and especially in organizing training for the protection of the population;

The co-operation with the Agreement has provided very good results for Bulgaria in the field of risk prevention education at school level. I will point out the sequence of the most important activities in this area since their inception, as it is not right to limit ourselves to only 10 years. These activities have had a significant impact on the development of this training in many of the Member States of the Agreement. On the basis of these activities, the idea emerged and the European Centre in Cyprus was set up as an important form for carrying out this training.

This is the sequence of activities in the field of risk prevention training:

International activities of European Centre (ECRP), Sofia: 1997: First European Conference: "Training in the field of Risk sciences at School Level" (14 countries and 4 international organizations) AP/CAT (97) 10

1998: Second European Conference: "Risk Prevention Training at School and Pre-School Level" (12 countries und 4 International organizations) AP/CAT (98) 78

1998: Project of The European Centre (CSLT) in framework European Training Programme in the Field of Risc Sciences (FORM-OSE): "Training at Pre-School and School Level and building up of a Global Prevention Culture" AP/CAT (98) 20 rev.

2000: Theart European Conference: "The School Community and Risk Management" (15 Countries and 4 International organizations French National Model-Plan SESAM) AP/CAT (2000) 5

2000: Working meeting: "Euro-Mediterranean network of schools for risk prevention and safety"(EDUMED)

2001: International Seminar: "Safety of the education process and of the workplace in school building" (10 countries from Europe and Africa)

2002: International Seminar "Children Security in Public Buildings and Crowded areas" (8 countries) AP/CAT (2002) 17 rev., AP/CAT (2002) 22

2002: International Work Meeting: "Risk Prevention Education at School Level" (eur-opabesafeschool.net) – Bulgaria, Italy, Cyprus. Start of "BeSafeNet" with First work Name of BeSafeNet is: eur-opabesafeschool.net, AP/CAT (2002) 51

2003: Seminar: "Risk Sciences" Programme FORM –OSE, Joint Master Programme in Relief Risk Management. University Montpellier – 1,2 and 3, University in Nîmes and and Mines School in Alès (France). Defended master's degree in Academy of Ministry of Interior - Bulgaria.

2004: International Work Meeting: "Risk Sciences". University II (Montpellier) and New Bulgarian University. The group of students from Montpellier defended master's degree in relief Risk Management. 2004: Working meeting : WEB site: BeSafeNet Bulgaria, Cyprus, Italy, France.

2005: Working meeting: "Initiatives and new tools concerning risk prevention awareness of the children at University and School Level" (5 countries) AP/CAT (2006) 10, AP/CAT (2005) 51

2006: International Seminar: "Prevention against the water harmful influence and information of the population along the Danube river valley" Project DRACE (3 countries) AP/CAT (2006) 34

2007: Workshop: "Danube a river for all, a care for everybody" (DRACE) (3 countries) AP/CAT (2007) 4

2008: Project: "Danube a river for all, a care for everybody" (DRACE). The main purpose of this project is the use of radio broadcasts in risk prevention training.

2009/2010: Participation in Project BeSafeNet. European Centre ECRP (Sofia) elaborate of the subject for the floods.

2015: International Conference: "Building a culture of prevention through increasing knowledge of the risk of disasters between children and adolescents". In framework of Bulgarian Presidency of the Council of Europe.

2015/2016: Project: "Building a Culture of Prevention: the important role of exercises in school

establishments together with the annual national campaigns”. The aim of this project was to study the state of risk prevention training at school level in the Member States of the Agreement.

On the basis of what has been said above, the two-year planning of the activities in the Agreement and the Republic of Bulgaria is very important. When the interest in the planned actions coincides, then the importance of the Agreement will also be on a higher level. To a large extent, the 2018/2019 period was partially omitted. This is due to the fact that the translation of the WEB-site “BeSafeNet” into Bulgarian was not accepted by the Agreement, which in turn did not allow this activity to be included in the National Plan (2018/2019). This organization of Bulgaria’s work with the Agreement requires a good relationship between the Director of the European Centre and the Permanent Correspondent. The agreement is open partial, which presupposes that it works primarily in the interests of its members only. The agreement was abandoned by Italy, France and Spain, which significantly reduces the financial possibilities of the activity. For greater efficiency and good results at this substantially lower budget, efforts in the Agreement should be concentrated on addressing a much smaller number of targets mainly related to Resolution 87/2.

The Group’s objective under this Resolution (87)2 is to: Perform a multidisciplinary study of methods co-operation for to prevent, protect against, and organize aid in major natural disasters and technological breakdowns.

This implies that activities should be orientated in the following areas:

- Investigation of the Legal Aspects of Risk Management (around the European Centre in Belgium);
- Develop WEB page “BeSafeNet” for all age groups and translations in all languages of the Agreement;
- The Centre in Kiev has the world’s only true radiation protection training ground, which is an important basis for the development of activities under the Agreement;
- Maintaining the earthquake warning system (European Alert System) and other related effects (via the European Centre in Luxembourg). With participation of Council of Europe – because this system is for all member state
- The Agreement has big extensive experience, expertise and capabilities in the field of earthquakes and floods who have to be used.
- Carrying out research and recommendations on preventing, protecting and organizing assistance in major natural disasters and technological emergencies. It is necessary to know that the problems of the assistance are a little studied area.
- Another activities of base of budget of the Agreement who will be effective in Risk Management area.

Future

Croatia

National Strategies and plans

In the last ten years Croatia has developed two laws on civil protection, national hazard assessment, national risk assessment (which is currently being updated), local and regional hazard and risk assessments and methodologies, is in the process of developing a DRR Strategy and reinforced and better organised legislative framework that now includes topics such as vulnerable groups in a case of a disaster.

Georgia

European Centre of Geodynamical Hazards of High Dams

Climate Change

Strategies and projects

• **Recommendation on local and regional authorities preventing disasters and facing emergencies adopted at the 11th Ministerial Session (EUR-OPA), Marrakech, 2006.**

From 1999 to 2018 the GHHD carried out activities in order to organize and operate the Centre for development of multinational, multidisciplinary approach to the problems of geodynamical hazards, generated by high dams:

- i. organization of Enguri Dam International Test Area (EDITA) for testing modern methods of dam monitoring. The real time telemetric monitoring/early warning system for analysis of dam stability is operating permanently from 2007 on Enguri dam.
- ii. Seismic hazard and risk of the Enguri area was assessed
- iii. Flood risk assessment for different scenarios of Enguri High Dam damage using program SOBEK.

	<ul style="list-style-type: none"> • The Atlas: GIS Maps of Integrated Major Hazards in the Southern Caucasus as the early warning tool was compiled and published and the International Workshop was organized (2006) • The web-page “Dam Hazards and Risks” was compiled for the web-site “Be-Safe-Net” (2009) • Recommendation 2011 - 1 and Recommendation 2008 - 1 <p>Two booklets related to EUR-OPA recommendations were translated to Georgian and distributed in schools and organizations: 1. Know how to deal with emergencies 2. Basis knowledge on nuclear hazards: lessons of Chernobil and Fukushima.</p> <ul style="list-style-type: none"> • Recommendation 2010 – 1 : Ref.No:ARN/11/19, FIMS PO No316492: “Climate Change; statistical and nonlinear dynamics predictions of regional effects”, (2011-2012) • Ref. No. ARN/2016/09 FIMS PO No. 514288 and Ref.No.GA/2017/08 FIMS PO No: 537534: <ul style="list-style-type: none"> i. Development of cost-effective ground-based and remote monitoring and early warning system for detecting debris flow/landslide initiation ii. European Landslide Hazard Maps, (2016-2017) in response to Recommendation 2012 – 1, The follow-up of this project: The project of Shota Rustaveli National Science Foundation of Georgia #216732, Cost-effective telemetric monitoring and early warning systems for signaling landslide initiation (2017-2018) is under way and will be implemented in December 2018
Future	<p>Georgia still has not the National Platform of Disaster Risk Reduction, despite numerous suggestions from our Centre. As a result, the DRR strategy is not available. There is not a governmental unit, which will be responsible for collecting detail data base (inventory) on occurred disasters (date, place, victims, economic losses, etc), which is necessary for verification of theoretical models of hazards.</p>

Greece
General Secretariat for Civil Protection

<p>Vulnerable groups</p> <p>Strategies and projects</p>	<p>Recommendation 2013 - 1 of the Committee of Permanent Correspondents on the inclusion of people with disabilities in disaster preparedness and response, adopted at the 64th meeting of the Committee, b. Major Hazards and People with Disabilities: a toolkit for good practice.</p> <p>Activities by the European Center for Forest Fires (ECFF)/ General Secretariat for Civil Protection, Greece. In an effort to activate public awareness and increase preparedness of people with disabilities upon disasters, a project was initiated by the European Center for Forest Fires (ECFF, GR), entitled “Basic Principles of Building Aseismic Code, Evacuation planning of critical infrastructures in case of an Earthquake or a Fire” that was run in cooperation with the European Centre on Prevention and Forecasting of Earthquakes (ECFPE, GR) in the EUR-OPA framework. As a result of the project and with the prospect of supporting the idea “that people with disabilities have a fundamental right to a degree of protection against disasters” a book has been prepared entitled “Evacuation Planning of Critical Infrastructures in case of an Earthquake or a Fire for People with Disabilities” (https://www.civilprotection.gr/en/ecff/introduction). This book promotes specifically Priority 1: “Understanding disaster Risk”: Promote awareness raising among vulnerable groups, such as people with disabilities and Priority 4: “Enhancing disaster Preparedness”: Inclusion of people with disabilities in disaster management cycle (preparedness & response phases) to reduce their vulnerability based on the Sendai Framework for Disaster Risk Reduction 2015- 2030. In the book a number of EUR-OPA initiatives towards this direction are presented, such as the “Toolkit for Good Practice”, together with some innovative aspects, such as the newest egress signs designed specifically for people with disabilities in light of “Universal Design”. In order to communicate key aspects of the book and to foster dialogue on further improvement regarding emergency preparedness and response issues for persons with disabilities, a Workshop on Evacuation Planning of Critical Infrastructure in case of an Earthquake or a Fire for People with Disabilities was organized in Athens, on October 2017, as a joint initiative of the Field Analytical Chemistry and Technology Unit at National Technical University of Athens (FIACU/NTUA) and the General Secretariat for Civil Protection, in cooperation with the ECFF. Under the same prospect and in order to increase the capacity of communities in regard to disasters, the General Secretariat for Civil Protection has recently published an educational video and leaflet on how to prepare Personal Emergency Evacuation Plans including vulnerable groups, such as people with disabilities</p>
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Morocco

National Strategies and plans

Morocco raised the importance of new strategies mainly inspired by EUR-PA recommendations, along with the World Bank, the ODCE etc.

Slovak Republic

National Strategies and plans

As the Slovak republic is a member of the platform only from the beginning of the 2018, the EUR-OPA Recommendations and Guidelines haven't been implemented into our system yet, thus it's practically impossible to evaluate the impact, the application and/or realisation of projects related to EUR-OPA standards within the last 10 rokov.

The Slovak republic has already in its national legal frame implemented EU and UN standards related to disaster risk reduction, hazards assessment etc. Following an accurate analysis we are going to considerate adjusting, eventually update of our national frame of the EUR-OPA Recommendations and Guidelines.

Ukraine

European Centre of Technological Safety – TESEC

National Strategies and plans

2015-2017 Greater involvement of citizens in the decision-making process to protect against disasters Democracy is a requisite if we are to build safer, more resilient societies. People have the right to be made aware of the risks surrounding them and public authorities have the duty to involve them in measures and procedures aimed to protect them from risks. One fundamental aspect of safety is access to the relevant information concerning the hazards that disasters may pose to the population. The awareness and knowledge people about nature of hazards will help you save your life. Emergency preparedness plan is a key tool of emergency preparedness. It has to be developed and clearly to define all measures for effective emergency response. It has to identify the roles and responsibilities of all the parties concerned, including the general public. It should clearly indicate co-ordination among the parties, as well as the lines of communication and the means of obtaining the necessary technical, medical information and knowledge. Public Emergency Plan (PEPL) has to be open for general public, all stakeholder involved in better protection of people from disaster. It show to people – What government doing for better protection of people and what people should doing. In 2015-2016, a first draft of structure of such a plan was developed and confirmed with National Authorities. It defined the main subjects of effective emergency management in the country. The public has to be better informing about main hazards in the regions, what authority doing for better prevention, prevention response and relief in the case of disaster. The existence of such public emergency plan for the population will contribute to make effective the protection of people from emergency and to better mutual understanding between the people and the responsible services. In 2017 Public Emergency Plan for number of countries was developed together with national authorities following agreed structure.

2011-2016 Chernobyl and Fukushima The public perception of Chernobyl and Fukushima nuclear accidents clear demonstrated tremendous inefficient informing of people on radiation hazards corresponded to radionuclides releases. The exposure doses in the Europe from iodine-131 of Fukushima release were less than 0.001 of exposure from natural radionuclides, like radon or potassium-41. But iodine-131 initiated a high fear of general public in many European cities. In the cases of nuclear accident, many people do not trust to official information of national authorities or experts on radiological risk assessment. This fact clear revealed that there is only one way to provide for people trustful information about nuclear hazard – to give them basic knowledge on radiological hazard and build their own capability for risk assessment. Council of Europe in 2011 initiated project: developing book “Basic Knowledge of Nuclear Hazards: Lessons Chernobyl and Fukushima”. This book is response to nuclear hazard – providing better information and protection for people. Book has been developed, translated to 12 languages, successfully

presented in more than 20 countries and became information tool for better protection of people.

International training course

Annually, since 1997 TESEC carries out International Summer Schools "Post-accidental Radiation Monitoring Techniques". These Summer Schools are organized to provide training and experience in: techniques of post-accidental radiation monitoring; accidental dose assessment; decision making in the case of nuclear or radiological accidents. The Chernobyl accident has provided a unique opportunity for research and training on emergency response and post-accidental radiation monitoring. It is one of only a few places in the world where effective training and experience in internal and external dose assessment, sample collection and preparation, contamination mapping and decision making can be provided in real highly contaminated area. It is important to expand such experience for development of post-accident radiation monitoring techniques and decision making in a case of nuclear or radiation accident. The curriculum is designed for emergency workers, decision-makers, graduate students, university faculty, and scientist interested in emergency preparedness and response, radiation protection and risk assessment. International Summer Schools has been participate by the representatives from Austria, Bulgaria, Brazil, Canada, Japan, France, Russia, Kosovo, Hungary, Italy, Slovenia, USA and other countries.

International conferences and Workshops

Analysis of the Ukrainian legislation on industrial, agricultural and military waste management has been made in 2005. The integration of Ukraine to European Union, maintenance of transition of Ukraine to sustainable development is referred as a priority of state policy of Ukraine and is stipulated by the Plan of actions Ukraine - EU. With that aim the Ministry of Environment of Ukraine jointly with TESEC carried out in September 6-7, 2005 the conference on "Ecological aspects of sustainable development of Ukraine". April 26, 2006 is the 20th anniversary of the Chernobyl accident. The International Conference "Twenty Years after Chernobyl accident. Future Outlook" on April 24-26, 2006 was carried out. The Chernobyl accident resulted in many changes, not only in Ukraine, Belarus and Russia, but around the whole world. International standards on radiation protection, national strategies on the development of nuclear power, strengthening of nuclear safety and radioactive waste management have been revised. Twenty years after the accident is a good time for the international community to review and discuss these issues. In the Conference activity took part the President of Ukraine V. Yushenko, other well-known politics, scientists and experts from 25 countries of the world: Australia, Austria, Armenia, Belarus, Belgium, Bulgaria, Brazil, China, Cuba, Great Britain, Hungary, Germany, Greece, Italy, Kazakhstan, Korea, Norway, Poland, Russia, USA, France, Switzerland, Sweden, Japan and known international organizations: European Commission, International Atomic Energy Agency, World Health Organisation, UN Development Program, and Council of Europe. In whole in the conference have taken part more than 900 politics, scientists and experts. It is more than 200 journalists from leading information agencies of the world lighting the conference. April 26, 2011 marks 25 anniversary of the Chernobyl accident. In many countries nuclear technology is seen as one of the increasingly important solutions for meeting rising energy demands, reducing greenhouse gas emissions, mitigating climate change, counterbalancing fluctuating prices of fossil energy sources. At the same time the Chernobyl's legacy should be carefully taken into account. How to use Chernobyl lessons for the safety of nuclear power and other hazardous technologies, to protect people and the environment from emergency - this is the main objective of the International conference "Twenty-five Years after Chernobyl Accident. Safety for the Future", Kyiv, April 20-22, 2011. 725 participants from 43 countries took a part in conference. The international workshop on the strengthening of international co-operation with using of Chernobyl experimental sites (polygons) have been carried out in 2003. Participants in the workshop were: leaders of Ministry of Ukraine of Emergencies and Affairs of Population Protection from the Consequences of Chernobyl Catastrophe, representative of the European Commission, scientists from the Institute for Radioprotection and Nuclear Safety (IRSN), France, scientists from the Institute of Reactor Safety (GRS), Germany, key Ukrainian scientists. The participants of the workshop agreed on the interest to continue international co-operation using Chernobyl experimental sites (polygons). The results of this co-operation have to be beneficial for the radiation protection of the Ukrainian population and useful for the international scientific community. The international workshop "Public authorities and civil society together for a safe European nuclear future: learning from the Chernobyl legacy to make European nuclear energy safer: the role of local communities, authorities and central governments in emergency preparedness and management" was held in Kiev, Ukraine 22-23 September, 2008. The main aim of the Workshop was to define priorities and tools for better emergency preparedness of populations living in the areas that might be affected by an accident at a Nuclear Power Plant (NPP). This should be done by disseminating best European practices on emergency planning;

co-operation between the state, local authorities and NPP operators; early warning procedures; iodine prophylaxis and other protective actions. Task Force Group Meeting “To foster better radiological protection and information for populations living in areas that might be affected in the case of an nuclear or radiation accident” was held in Kiev, Ukraine 2-4 September, 2009. The main aim was establishing a Euro-Mediterranean Network to foster better radiological protection and information for populations living in areas that might be affected in the case of an accident at a Nuclear Power Plant or any other nuclear facilities through dissemination of best European experience on emergency planning, early warning procedures, iodine prophylaxis and other elements of radiological protection. The purpose of Task Force Group (TFG) meeting was developing basis for co-operation with Group of Local Authorities with Nuclear Facilities in Europe (GMF), Spanish Group of Mayors in Municipalities with Nuclear Facilities (AMAC) and Association of Swedish Local Authorities with Nuclear Facilities (KSO). The Workshop and Task forth group meeting 2009 defined priorities and tools for better emergency preparedness of populations living in the areas that might be affected by an accident at a Nuclear Power Plant (NPP). This should be done by disseminating best European practices on emergency planning; co-operation between the state, local authorities and NPP operators; early warning procedures; iodine prophylaxis and other protective actions.

Environment
Strategies and plans

April 26, 2011 marks 25 anniversary of the Chernobyl accident. In many countries nuclear technology is seen as one of the increasingly important solutions for meeting rising energy demands, reducing greenhouse gas emissions, mitigating climate change, counterbalancing fluctuating prices of fossil energy sources. At the same time the Chernobyl’s legacy should be carefully taken into account. How to use Chernobyl lessons for the safety of nuclear power and other hazardous technologies, to protect people and the environment from emergency - this is the main objective of the International conference "Twenty-five Years after Chernobyl Accident. Safety for the Future ", Kyiv, April 20-22, 2011. 725 participants from 43 countries took a part in conference. The international workshop on the strengthening of international co-operation with using of Chernobyl experimental sites (polygons) have been carried out in 2003. Participants in the workshop were: leaders of Ministry of Ukraine of Emergencies and Affairs of Population Protection from the Consequences of Chernobyl Catastrophe , representative of the European Commission, scientists from the Institute for Radioprotection and Nuclear Safety (IRSN), France, scientists from the Institute of Reactor Safety (GRS), Germany, key Ukrainian scientists. The participants of the workshop agreed on the interest to continue international co-operation using Chernobyl experimental sites (polygons). The results of this co-operation have to be beneficial for the radiation protection of the Ukrainian population and useful for the international scientific community. The international workshop “Public authorities and civil society together for a safe European nuclear future: learning from the Chernobyl legacy to make European nuclear energy safer: the role of local communities, authorities and central governments in emergency preparedness and management” was held in Kiev, Ukraine 22-23 September, 2008. The main aim of the Workshop was to define priorities and tools for better emergency preparedness of populations living in the areas that might be affected by an accident at a Nuclear Power Plant (NPP). This should be done by disseminating best European practices on emergency planning; co-operation between the state, local authorities and NPP operators; early warning procedures; iodine prophylaxis and other protective actions. Task Force Group Meeting “To foster better radiological protection and information for populations living in areas that might be affected in the case of an nuclear or radiation accident” was held in Kiev, Ukraine 2-4 September, 2009. The main aim was establishing a Euro-Mediterranean Network to foster better radiological protection and information for populations living in areas that might be affected in the case of an accident at a Nuclear Power Plant or any other nuclear facilities through dissemination of best European experience on emergency planning, early warning procedures, iodine prophylaxis and other elements of radiological protection. The purpose of Task Force Group (TFG) meeting was developing basis for co-operation with Group of Local Authorities with Nuclear Facilities in Europe (GMF), Spanish Group of Mayors in Municipalities with Nuclear Facilities (AMAC) and Association of Swedish Local Authorities with Nuclear Facilities (KSO). The Workshop and Task forth group meeting 2009 defined priorities and tools for better emergency preparedness of populations living in the areas that might be affected by an accident at a Nuclear Power Plant (NPP). This should be done by disseminating best European practices on emergency planning; co-operation between the state, local authorities and NPP operators; early warning procedures; iodine prophylaxis and other protective actions.

	Nuclear Hazard. Chernobyl and Fukushima: Lessons for Public Awareness 2011-2017 Greater involvement citizen in the decision-making process to protect against disasters – joint emergency planning 2015-2017
Governance	see above (Environment)
Radiological Risks Strategies and projects	Training course on radiological monitoring in Chernobyl Exclusion Zone 2011-2018 international conference "Twenty-five Years after Chernobyl Accident. Safety for the Future ", Kiev, April 2011. "Public authorities and civil society together for a safe European nuclear future: learning from the Chernobyl legacy to make European nuclear energy safer: the role of local communities, authorities and central governments in emergency preparedness and management" (was held in Kiev, Ukraine 22-23 September, 2008) "Nuclear Hazard - Chernobyl and Fukushima lessons concerning population awareness" 2011-2012 To develop booklet "Basic Knowledge of Nuclear Hazards: Lessons from Chernobyl and Fukushima" 2012-2018
Future	See answers above