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MINISTRY OF ENVIRONMENT AND ENERGY
GENERAL SECRETARIAT FOR NATURAL
ENVIRONMENT AND WATER



Project FLOODGUARD

“Integrated actions for joint coordination and responsiveness to flood risks in the Cross- Border area”

D.3.6.4 Elaboration of a detailed study on the pilot testing of the JWG

NOVEMBER 2023



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Acronyms, Abbreviations and Definitions

Abbreviations	Definitions
JPMT	Joint Project Management Team
JWG	Joint Working Group
AA	Audit Authority
MIS	Monitoring Information System
AF	Application Form
CP	Cooperation Programme
PPIM	Programme and Project Implementation Manual
CA	Certifying Authority
CP GR-BG 2014-2020	Cooperation Programme INTERREG V-A Greece-Bulgaria 2014-2020
ESIF	European Structural and Investment Funds
ETC	European Territorial Cooperation
EU	European Union
FLC	First Level Control
GoA	Group of Auditors
PA	Partnership Agreement
PB /PBs	Project Beneficiary /Project Beneficiaries
PPIM	Programme and Project Implementation Manual
CBC	Cross Border Cooperation
GR	Greece

1 Introduction

1.1 General Project Details

The FLOODGUARD project is implemented within the framework of the Partnership Program "Interreg V - A Greece - Bulgaria" 2014-2020. The legal framework of the project is according to the following:

- REGULATION (EU) no. 1303/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013, establishing common provisions for the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and for the repeal of Regulation (EC) no. 1083/2006 of the Council.
- REGULATION (EU) no. 1301/2013 OF THE EUROPEAN PARLIAMENT OF THE COUNCIL of 17 December 2013 on the European Regional Development Fund and on special provisions aimed at Investments for growth and employment and repealing Regulation (EC) no. 1080/2006.
- REGULATION (EU) no. 1299/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013, on specific provisions for the support by the European Regional Development Fund of European territorial cooperation objectives.
- COMMISSION DELEGATED REGULATION 481/2014 of 4 March 2014 supplementing Regulation (EU) no. 1299/2013 of the European Parliament and of the Council on specific rules for the eligibility of expenditure for cooperation programmes.
- COMMISSION DELEGATED REGULATION 2019/693 of 7 February 2019 amending Delegated Regulation (EU) No 1299/2013 of the European Parliament and of the Council on specific rules for the eligibility of expenditure for cooperation programs (CP). to amend the delegated regulation (EU) no. 481/2014 to supplement the regulation (EU).
- Regulation for the establishment of the GREEK MANAGEMENT AND CONTROL SYSTEM.
- Approval decision EC (2015) 6283 / 9-9-2015 of the CP and last approved version of the Cooperation Program.
- Specific national documents and legal framework applicable only to Bulgarian beneficiaries (FLC, advances, tendering rules, national legal framework for ESIFs, etc.) are available on the following official websites: Bulgarian Ministry of Regional Development: <https://www.mrrb.bg/bg/infrastruktura-i-programi/programi-za-teritorialno->

sutrudnichestvo-2014-2020/interreg-v-a-gurciya- bulgariya-2014-2020/dokumenti/.

- The main documents include national co-financing contracts, appointment of staff, procedures for first-level control requests for payments, decree for the management of irregularities, etc. procedure, organized by the EA in accordance with the applicable public procurement legislation. Bulgarian ESIF Information Portal : <https://www.eufunds.bg/bg/taxonomy/term/19>. Bulgarian legislation for ESIF and secondary legislative framework, including the Bulgarian Law for Management of ESIF funds in Bulgaria and applicable secondary legislative framework to the Programme.
- Bulgarian ESI Fund information portal: <https://www.eufunds.bg/bg/taxonomy/term/19>. Bulgarian ESIF legislation and secondary legislation, including the Bulgarian law on the management of ESIF funds in Bulgaria and the applicable secondary legislation program.

The main sources of information for documents under the Cooperation Program "Greece-Bulgaria 2014-2020" can be found:

- Project's website: <http://www.greece-bulgaria.eu/home/>

Progress report and guidelines. The main documents of the Project include the following documents and their amendments during the project implementation process:

- The Applicant Package as applicable.
- The decisions of the Monitoring Committee through the 20th written procedure completed on 10/07/2019 and the 22nd written procedure completed on 10/12/2018, and the approved Application Form.
- The partnership agreement between the PBs.
- Subsidy contract no. B4.5b.01 signed on April 1, 2019.
- Application form and its annexes, including budget justification.
- Project start-up and procurement plan.
- Rules of operation of JPMT.
- Rules of operation of JWG.

The JWG Operating Rules includes documents such as contact lists, notes and meeting minutes, which are developed, exchanged and agreed between partners during JWG meetings. Most of these documents are uploaded to MIS.

More guidance documents are available on the Program website. All project beneficiaries are responsible for regularly checking the content of the official website of the Program in order to comply with the latest requirements and editions of the program documents.

1.2 Info of Project Assignment

Lever S.A. was contracted with 23 SYMV013770237 2023-11-15 by the Hellenic Ministry of Environment and Energy, for the implementation of Deliverables D.3.6.2, D.3.6.3 and D.3.6.4 of Work Package 3 (WP3) of the project FLOODGUARD.

This deliverable belongs to work package 3 (WP3) of the project "Integrated actions for joint coordination and responsiveness to flood risks in the Cross Border area", with acronym FLOODGUARD, which is implemented within the Operational Program "European Territorial Cooperation INTERREG V-A GREECE – BULGARIA 2014-2020". CPV: 90713000 Environmental consultancy services.

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Deliverable D.3.6.4 is about:

A detailed study regarding the pilot operation of the Joint Working Group (Service contract for elaboration of a detailed study on the pilot testing of the JWG). The following will be implemented by:

- An accurate description of the operation of the Joint Working Group.
- An evaluation of the operation of the Joint Working Group.
- A proposal for a possible extension of the role of the Joint Working Group after the end of the project.

The project team of this study is:

- Yorgos CHATZINIKOLAOU, Environmentalist, MSc PhD
- Vassilis ANAGNOSTOU, Environmentalist, MSc
- Ioanna Vassiliki POTHITAKI, Economic and Regional Development, MSc
- Georgios PSATHAS, Geologist
- Artemis MARGARITIDOU, Spatial Planning & Development Engineer, MSc

1.3 The object of the contractor

The pilot Joint Working Group's (JWG) operation is assessed in the current report.

First, the subject of the joint group, the participants and the rules governing it, are reported. The operational framework, rules, frequency of meetings and manner working conduct, in the group meetings and decision-making were assessed..

Through the minutes of the meetings, the most dynamic elements and the potential challenges faced by the group were identified.

Finally, both the contribution of the JWG at the International and National level was assessed, evaluating the importance of the results, as well as the need for any continuation of the JWG.

2 Joint Working Group (JWG).

2.1 Purpose of the Joint Working Group (JWG)

The need for a common institutional approach, between Greece and Bulgaria, for flood risk management, paved the pathway to undertake this INTERREG project, and in turn that led to the creation of the JWG Joint Working Group.

Specific goals set for the effective operation of the JWG are:

- The implementation of studies and a comparative analysis of the current legislation, regarding the relevant framework in the field of flood prevention, preparedness and response in the two countries.
- The development of strategic action plans for both countries to prevent and deal with flood phenomena.
- The preparation of a simple plan to allocate responsibilities and facilitate the interaction and communication between the competent authorities from both countries.
- The identification of the main problems concerning the flood risk for both countries and the undertaking of actions with the cooperation of the two countries.

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The JWG Operating Rules have been developed:

- In the framework of the Establishment of a Joint Working Group for the prevention and response to flood phenomena,
- In the context of the Partnership Agreement for the project "Integrated actions for joint coordination and response to flood risks in the Cross-Border area", with the acronym of the FLOODGUARD project, financed under the INTERREG V-A Cooperation Program Greece-Bulgaria 2014-2020,

The formation of the Joint Working Group JWG was carried out with the aim of undertaking joint actions to strengthen prevention and action against flood phenomena, with the main objective of improving the coordination of agencies from both countries.

The working language for the operation of the JWG is English. More information on the used terminology and definitions is provided in the Program and Project documents available on the official website of the Program: <http://www.greece-bulgaria.eu>

2.2 Composition of the Joint Working Group (JWG).

The Project is implemented by seven institutional beneficiaries from the Republic of Greece and the Republic of Bulgaria. The institutional framework at the Project level includes the following Bulgarian and Greek partners, which are public bodies with responsibilities in the field of flood risk assessment, forecasting, prevention and interventions:

- Beneficiary 1 – Main Beneficiary: General Directorate of Fire Safety and Civil Protection, Ministry of Interior, Republic of Bulgaria
- Beneficiary 2: Eastern Aegean River Basin Directorate Plovdiv, Republic of Bulgaria.
- Beneficiary 3: West Aegean River Basin Directorate Blagoevgrad, Republic of Bulgaria.
- Beneficiary 4: National Institute of Meteorology and Hydrology, Republic of Bulgaria.
- Beneficiary 5: Blagoevgrad District Administration, Republic of Bulgaria.
- Beneficiary 6: General Directorate of Waters, General Secretariat of Natural Environment and Waters, Ministry of Environment and Energy, Republic of Greece.
- Beneficiary 7: Directorate of Civil Protection, Decentralized Administration of Macedonia-Thrace, Republic of Greece.

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The JWG team includes members of all project beneficiaries, as follows:

- Two members appointed by the Principal Beneficiary.
- Two members appointed by the Coordinator – PB6, one of whom is responsible for chairing each meeting, preparing the agenda, minutes and follow-up activities regarding the decisions taken
- Two members appointed by each of the Beneficiaries of the Project 2, 3, 4, 5 and 7.
- Each project beneficiary will also appoint an alternate member(s) to the JWG.
- Each Beneficiary has equal rights and obligations towards the JWG team. All members participate in planning the implementation of the goals set in an active way, thus ensuring that all experiences, practices and conclusions will be evaluated in the final results.

- Through the operation of the JWG it is ensured that all the views, ideas and concerns of the partners are taken into account. Decision making is done by consensus processes, so each member is asked to confirm and/or shape their decision, until a compromise is reached.

The decisions of the JWG are included in the meeting minutes, which are accessible to all members and project stakeholders included in the group's contact list. Amendments to the minutes may be proposed within a certain period. In case of disagreements, a consensus approach is applied to make final decisions.

The final decisions resulting from the writings are shared with the JWG members via electronic mail.

The following image shows the organizational structure of the joint working group.

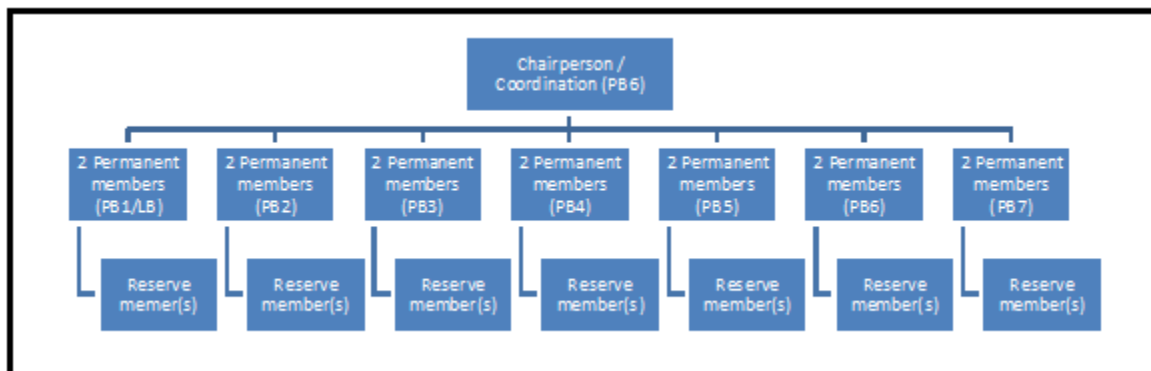


Figure 1 Organizational structure of JWG (Source: Rules for functioning of the Joint Working Group)

The JWG is coordinated by the General Secretariat for Natural Environment and Water of the Ministry of Environment and Energy of the Republic of Greece (PB6) and has the following responsibilities:

- the composition of the JWG team, including members from all project beneficiaries,
- targeting,
- organizational issues, related to the organization of meetings - agenda preparation, invitations, writing of minutes, etc.,

- the coordination of joint actions between the two countries,
- providing regular updates to team members.

The Project Beneficiaries (PB) are responsible for the following:

- Participation in meetings and the provision of logistical support for the meetings that take place,
- the appointment of permanent and alternate members to the JWG,
- ensuring the presence of representatives at group meetings,
- the provision of all necessary data and information, arising in the context of FLOODGUARD, to the coordinator,
- timely informing the coordinator of any factors that may negatively affect the implementation of WP3.

The following images show snapshots from some of the JWG meetings.



Figure 2 Snapshot from the first JWG meeting.



Figure 3 Snapshot from the 7th JWG meeting, which was held online.

2.3 Analysis of stakeholders (Greece, Bulgaria).

Based on Directive 2007/60/EC, the active participation and information of the public is required in all stages of its implementation to prevent, deal with and limit floods.

Based on the KYA, U.P. 31822/1542/E103/2010 which incorporates Directive 2007/60/EC into Greek legislation:

- The Water Directorate of each Decentralized Region, within the framework of its responsibilities, must ensure the substantial participation of the public in the Flood risk management procedures, in accordance with article 9.
- For Information – Public Involvement, flood risk assessments, flood risk and hazard maps and Flood Risk Management Plans should be publicly available.
- The Water Directorate of each Region must ensure the active participation of those interested in the preparation, review and updating of the Flood Risk Management Plans.

In addition, based on 11764/653/2006 KYA, there should be dissemination of Environmental information to the public, for this reason: Public authorities are obliged to organize the Environmental information of their competence that they possess, as

well as those that they possess or possess for their account, with the aim of their active and systematic dissemination.

Also, in the event that there is an immediate threat to human life or the Environment, due to human or natural causes, it is required to disseminate immediately without delay, all information held by public authorities, or on their behalf, which would allow to the public to take steps to prevent and limit harm from said threat. To achieve this, public authorities may satisfy the requirements of this article by using online media (website, social media, etc.).

The JWG can contribute to strengthening the information and updating of the GMPs, as well as strengthening the consultation processes. Through the consultation procedures, the main requests are:

- The investigation of the local attitudes and opinions of the inhabitants on the way proposed by the SDKPs to deal with the flood risk.
- The analysis and highlighting of the Socio-Economic and Environmental dimension of floods.
- The integration of the opinions of the local community in the planning and management of the Flood Risk.

In order to assess citizens' opinions, in addition to face-to-face meetings, various techniques can be used, such as the use of a questionnaire, the structure of which should be the result of an interdisciplinary approach.

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The social partners that can participate in a public consultation, on the flood risk, are: the State partners - Public administration, the productive classes and Citizens and civil associations.

Based on the above reasoning, the social partners that can potentially participate in a public consultation are:

A. State-administrative mechanism.

- Ministry of Agriculture
- Ministry of Environment
- Representatives of the Region, the Prefecture and the Municipalities of the region

B. Citizens and Associations of Citizens who are directly or indirectly exposed to the flood risk.

C. The scientific-research world, which has accumulated knowledge on the issues under consideration.

Today there is a need to highlight and solve the issues related to the flood risk. There is a need for consultations in a co-decision climate of various social entities, based on National and International legislation and based on the principles of water management at the catchment level. To ensure that Flood risk prevention and management is environmentally and economically supported and socially just.

In the image below, all the involved bodies are presented diagrammatically.

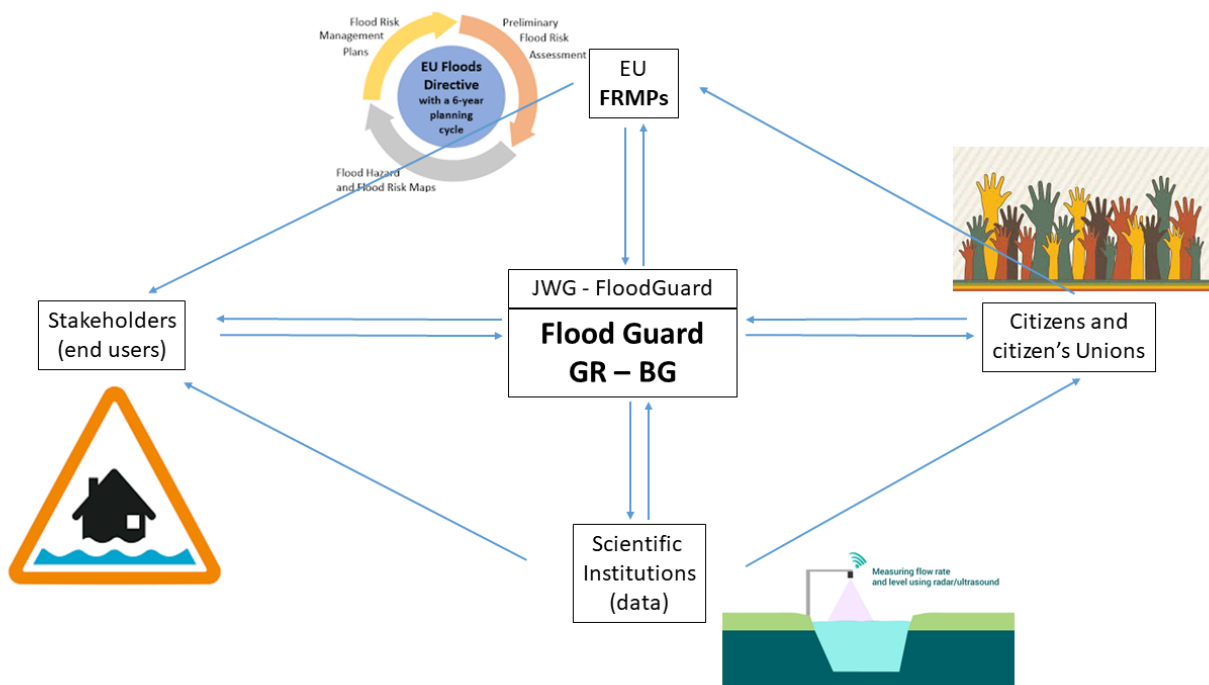


Figure 2. The involved Stakeholders.

2.4 Transnational cooperation: The Danube River case

European territorial cooperation (ETC) is a key objective of the European Union's policy on matters aimed at solving cross-border problems. Cooperation actions supported by the European Regional Development Fund (ERDF) fall under three main components: cross-border, transnational and interregional cooperation.

The 2021-2027 period marks the further development of interregional cooperation (Interreg), with enhanced cooperation with partner countries through the Interreg Facility for Pre-Accession Assistance (IPA) and Interreg NEXT, and the incorporation of a special strand for cooperation between the most outlying regions of the EU and their neighboring countries.

Cross-border cooperation (Strength A of Interreg) supports cooperation between regions from at least two different Member States located directly on or adjacent to borders. It aims to address the common challenges identified jointly in the border regions and to exploit the untapped development potential in the border regions, while strengthening the cooperation process for the purposes of the overall harmonious development of the Union.

Transnational cooperation (Strength B of Interreg) enables cooperation in wider transnational territories or around sea basins and involves national, regional and local program partners in the Member States, but, in some programmes, also in non-EU countries (such as Iceland and Liechtenstein), enlargement and neighborhood partner countries and overseas countries and territories (OCTs), with a view to achieving a higher degree of territorial integration. Transnational cooperation implemented by the outermost regions falls under a separate strand. Interreg Strand B supports a wide range of investments in projects related to innovation and the green and digital transition.

The regulation also establishes cooperation outside the EU that promotes sustainable development and good neighborly relations between EU Member States and enlargement and neighborhood countries, as well as between the EU's outermost regions and their neighbours. EU external cooperation programs cover the EU and its neighboring countries and contribute to the achievement of the objectives of three EU policies: cohesion policy, enlargement policy and neighborhood policy.

Since the Interreg Regulation is subject to the ordinary legislative procedure, the European Parliament was able to co-decide on its content on an equal footing with the Council. When negotiating cohesion policy for the period 2021-2027, the European Parliament supported the strengthening of the budget for EEC programs and simpler rules and procedures. The European Parliament actively promoted greater support for small and interpersonal projects, as well as an increased focus on climate and social issues. The European Parliament also dealt particularly with the special problems of the outermost regions.

(SOURCE: <https://www.europarl.europa.eu/factsheets/el/sheet/98>)

The transnational cooperation between Greece and Bulgaria is fully integrated and harmonized with the philosophy of the European Union.

DANUBE RIVER PROTECTION CONVENTION



Figure 3 The Danube River Basin territory (ICPDR – International Commission for the Protection of the Danube River (<https://www.icpdr.org/>))

The Convention on Co-operation for the Protection and Sustainable Use of the River Danube or in short, the Danube River Protection Convention, constitutes a legal instrument for co-operation and transboundary water management in the Danube River Basin and a best practice and example of successful implementation of an interregional river basin management strategy.

The Convention applies to the catchment area of the Danube River and apply in particular to the following planned activities and ongoing measures as far as they cause or are likely to cause transboundary impacts ((Official Journal of the European Communities (1997); Convention for the protection of the Danube; [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:21997A1212\(03\)](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:21997A1212(03))):

- a) the discharge of waste waters, the input of nutrients and hazardous substances both from point and non-point sources as well as heat discharge;
- b) b)planned activities and measures in the field of water construction works, in particular regulation as well as run-off and storage level control of water courses, flood control and lice-hazards abatement, as well as the effect of facilities situated in or aside the watercourse on its hydraulic regime;
- c) other planned activities and measures for the purposes of water use, such as water power utilization, water transfer and withdrawal;
- d) the operation of the existing hydrotechnical constructions e.g. reservoirs and water power plants; measures to prevent environmental impact, including deterioration in the hydrological conditions, erosion, abrasion, inundation and sediment flow; measures to protect the ecosystems;
- e) the handling of substances hazardous to water and the precautionary prevention of accidents.

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The Convention was signed on June 29, 1994, in Sofia, Bulgaria, by eleven of the Danube Riparian States (Austria, Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Moldova, Romania, Slovakia, Slovenia and Ukraine – and the European Community) and came into force in October 1998, aiming to ensure that surface waters and groundwater within the Danube River Basin are managed and used sustainably and equitably by all the involved countries. The Convention also established the International Commission for the Protection of the Danube River (ICPDR), an international organisation with its permanent secretariat in Vienna, with the role to ensure the joint sustainable water management of the Danube Basin, including conservation of surface and ground water, pollution reduction, and the prevention and control of floods, accidents and ice hazards.

The Convention and the ICPDR aim to plan and implement activities with transboundary scope. These actions refer to (Official Journal of the European Communities (1997); Convention for the protection of the Danube; [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:21997A1212\(03\)](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:21997A1212(03))):

- Prevention, control and reduction of transboundary impact
- Specific water resources protection measures
- Emission limitation in terms of water quality objectives and criteria

- Emission inventories and action programmes development
- Consultations and Exchange of information
- Research and Development
- Development of communication, warning and alarm systems and emergency plans

Since 2000, the ICPDR is a key organisation for the implementation of all transboundary aspects of the EU Water Framework Directive (WFD). Also, under the EU Water Framework Directive, Italy, Switzerland, Poland, Albania and North Macedonia cooperates closely with the ICPDR. The successful implementation of the WFD is therefore clearly high on the political agendas of the countries of the Danube River Basin District. Also, since 2007, the ICPDR is responsible for the coordination and implementation of the EU Floods Directive within the Danube River Basin. Within this framework, the ICPDR has undertaken the development of the co-ordinated international River Basin Management Plan for the Danube River Basin as requested by the EU Water Framework Directive, and of the co-ordinated international Flood Risk Management Plan for the Danube River Basin as requested by the EU Floods Directive.

As for the ICPDR's organisational structure, it consists of 15 contracting parties: Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Moldova, Montenegro, Romania, Slovakia, Slovenia, Serbia, Ukraine and the European Union. The Contracting Parties are represented by delegations to the ICPDR, led by Heads of Delegation.

Expert Groups (EGs) from the Contracting Parties are also part of the ICPDR providing technical support and linking the work of the commission to the national/regional administrations. Expert Groups are composed of national experts from the Contracting Parties and representatives from ICPDR observer organisations, as defined by the DRPC. There are 24 organisations with observer status in the ICPDR, representing a variety of public interests. covering social, cultural, economic and environmental interest groups adhering to the goals of the Convention. As such, the EGs report to the ICPDR and propose decisions to the commission at its plenary meetings. Currently, the ICPDR has 7 regular Expert Groups (River Basin Management, Flood Protection, Pressures and Measures, Accident Prevention and Control, Monitoring and Assessment, Information Management and Geographic Information Systems, Public Participation) and one ad-hoc Expert Group for legal and administrative questions (ad hoc Strategic EG).

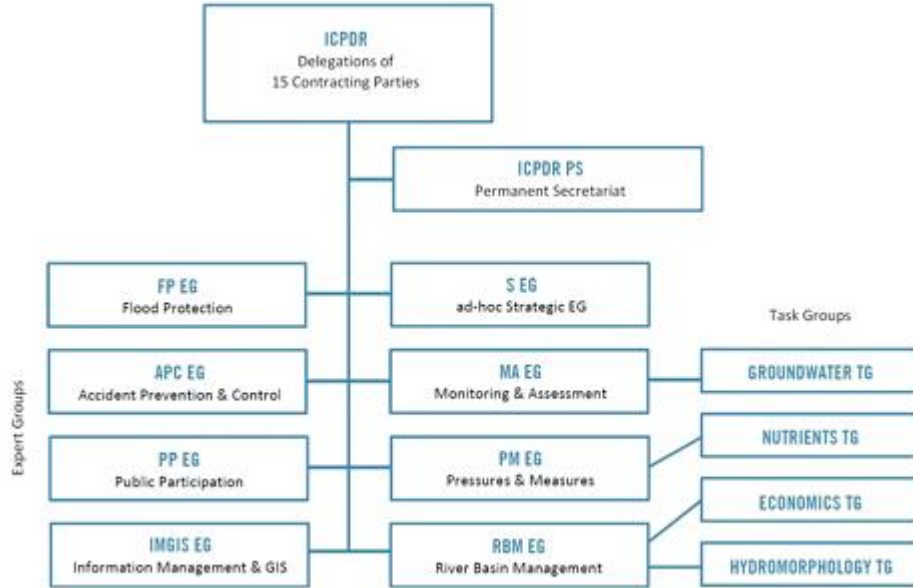


Figure 4 ICPDR Organisational Chart (ICPDR – International Commission for the Protection of the Danube River (<https://www.icpdr.org/>))

3 Operation of the Joint Working Group (JWG).

3.1 Proceedings of JWG

The Joint Working Group (JWG) was established to prevent and respond to Flood phenomena. It foresees the cooperation between Greece and Bulgaria with the aim of implementing joint actions, to improve the coordination of the agencies of both countries. For this reason, the initial planning provided for the implementation of joint regular meetings between the members of the JWG on a four-month basis, within the framework of the actions required for the project.

The effectiveness of the JWG is ensured through studies and comparative analyzes of the current legislation and the relevant framework, concerning the field of flood prevention and preparedness. The preparation of strategic studies, with the planning of actions for both countries, for the prevention and response in cases of flooding, the creation of road maps of responsibilities, the interactions and communications between the competent bodies, the identification of weaknesses and the promotion of actions and joint solutions

The aim is that the results of the Bulgarian and Greek partners complement each other and add value to the final results.

The JWG team consists of specific members from both states. Through the meetings that are implemented, the objectives of the overall agenda of the JWG are determined, meetings are organized and the agenda is prepared, invitations are made to renowned scientists, minutes of each meeting are kept and the decisions taken are monitored and implemented.

JWG members participate according to the operating framework that has been set.

As far as the part of the communication strategy is concerned, a key point is the management of the interested parties and the communication of all the information that is considered important in the context of the FLOODGUARD program, for this reason the creation of information networks is being attempted to connect all the interested parties from Greece and Bulgaria. The project's communication channels are: the Floodguard website, social media and the project's press office. The press office is responsible for the publications and press releases of the project, while at the same time, appropriate printed advertising material (leaflets, stickers, etc.) has been produced and used.

The following table shows the meetings that have been implemented so far. *Table 1. Schedule of JWG meetings.*

Table 1. JWG meeting schedule.

9 Meetings of the JWG under WP 3	Hosted by
Meeting 1 22 and 23 January 2020	General Secretariat for Natural Environment and Water, Ministry of Environment and Energy Place of event: Thessaloniki, GR General Secretariat of Natural Environment and Water, Ministry of Environment and Energy. Venue: Thessaloniki, Greece.
Meeting 2 03 and 04 June 2020	West Aegean River Basin Directorate - Blagoevgrad Place of event: Blagoevgrad, BG West Aegean River Basin Directorate - Blagoevgrad Venue: Blagoevgrad, BG.
Meeting 3 06 and 07 October 2020	Decentralized Administration of Macedonia-Thrace, Thessaloniki Place of event: Thessaloniki, GR Decentralized Administration of Macedonia-Thrace, Thessaloniki Τόπος εκδήλωσης: Θεσσαλονίκη, GR
Meeting 4 03 and 04 February 2021	East Aegean River Basin Directorate Place of event: Smolyan, BG. East Aegean Watershed Directorate Venue of the event Venue: Smolyan, BG.
Meeting 5 29 and 30 June 2021	Decentralized Administration of Macedonia-Thrace, Thessaloniki Place of event: Thessaloniki, GR. Decentralized Administration of Macedonia-Thrace, Thessaloniki Venue: Thessaloniki,
Meeting 6 13 and 14 July 2022	FSCPDG, Bulgaria Place of event: Blagoevgrad, BG. FSCPDG, Bulgaria Venue: Blagoevgrad, BG
Meeting 7 02 February 2023	General Secretariat for Natural Environment and Water, Ministry of Environment and Energy Place of event: Kavala, GR. General Secretariat of Natural Environment and Water, Ministry of Environment and Energy. Venue: Kavala, GR.

Meeting 8 16 and 17 May 2023	East Aegean River Basin Directorate Place of event Place of event: Smolyan, BG. East Aegean Watershed Directorate Venue of the event. Venue: Smolyan, BG
Meeting 9 29 and 30 November 2023	General Secretariat for Natural Environment and Water, Ministry of Environment and Energy Place of event: Kavala GR General Secretariat of Natural Environment and Water, Ministry of Environment and Energy. Venue: Kavala, GR.

For each meeting, the preparation stages are as follows:

- *Invitation.*
- *List of participants.*
- *Agenda.*
- *Presentations.*
- *Practices.*
- *Other necessary documents.*

From all the meetings, the work topics and concerns are:

- The establishment of the JWG Joint Working Group and the formal appointment of members
- The participation of experts in the meetings
- The role of the JWG, in relation to common problems and points of interest, in the context of flood risk management and the FLOODGUARD project.
- Strengthening the team's flexibility and strengthening its scientific character.
- The exchange of experiences, know-how and opinions on flood phenomena, between the two countries
- The definition of the frequency of meetings, to be every 4 months.
- The effort to resolve administrative, organizational and technical issues of the Joint Working Group.
- The official appointment of members

- The preparation of the operating regulation and its circulation among the partners.
- The preparations of physical and online meetings.
- The recording and analysis of the minutes of each meeting.
- The decision-making processes.
- The collection of information from the partners regarding comments, brief descriptions of their institution, their participation in the program, their deliverables, etc. in order to post this information on the program website.
- JWG's contribution to the development of a study on the effects of climate change in the Cross-Border area and the further exchange of weather station data from the Greek side.
- The exchange of knowledge on the inclusion of flood floods in the implementation of the Floods Directive.

3.2 Evaluation of JWG

The JWG team has managed to achieve high goals at the level of its operation so far. A very important result is the substantial and immediate exchange of data, information and know-how without the intervention of third parties. This fact already contributes to a better assessment of the flood risk compared to the past, the lack of information that existed in the past created significant weaknesses in the modeling of the flood risk.

The operation of the team is based on the substance of the FMPs (Flood Risk Management Plans), and will contribute substantially to their update, producing more complete data for the transboundary area.

The exchange of experiences, know-how and practices related to dealing with flood phenomena, can upgrade the operational capabilities of both countries, and increase the level of cooperation for their joint prevention and response.

The JWG team is interdisciplinary, including a wide range of specialist scientists with recognized expertise in their field. The specialties of the project team are: Engineers, Geologists, Foresters, Communication Specialists, etc. The interdisciplinary approach followed contributes essentially to finding solutions at the levels of prevention and response to flood events.

One of the most important results of the JWG group concerns the supply of vital data for setting up hydraulic models in the Bulgarian Basin. Then this hydraulic model will be connected to the corresponding Greek ones. The image below shows the hydraulic

model that captures the hydrographic characteristics of the cross-border area between Bulgaria and Greece.

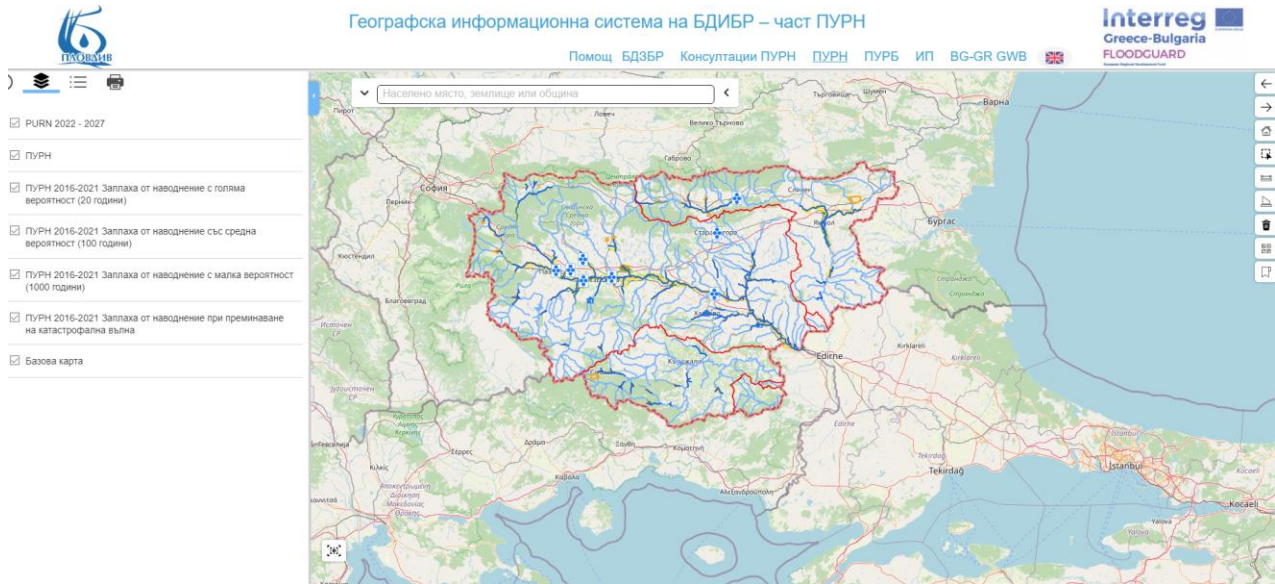


Figure 5. The environment of the hydrographic model, which was implemented in the framework of JWG collaboration.

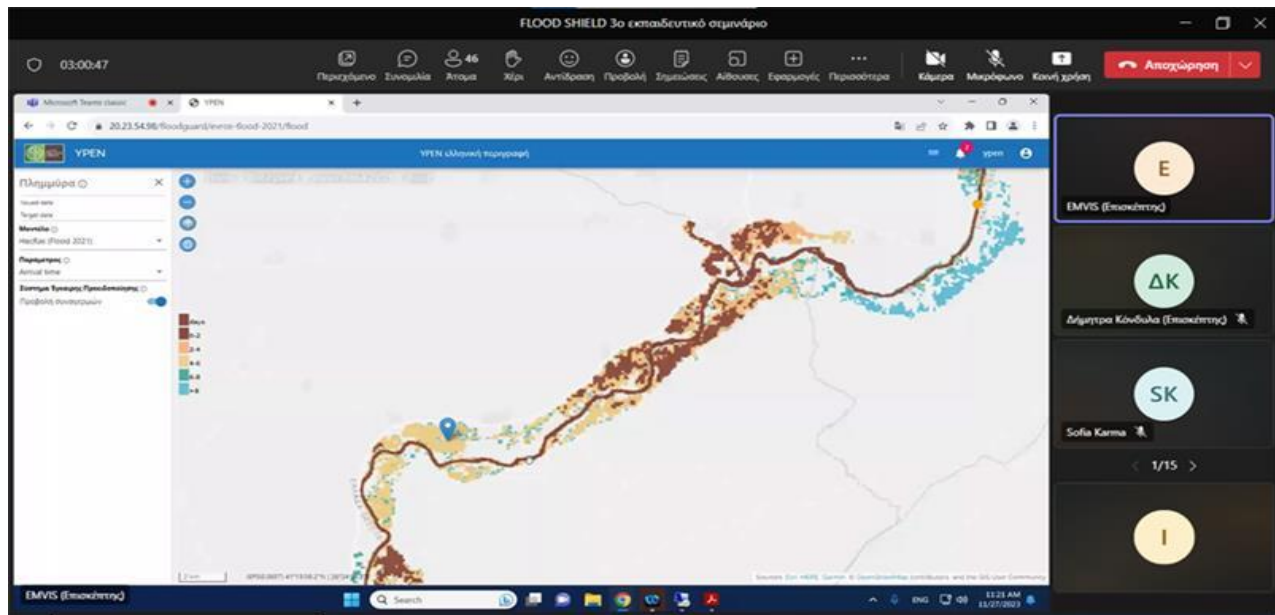


Figure 6. Presentation of the Early Warning System software – Analysis of the flood bed of the river.

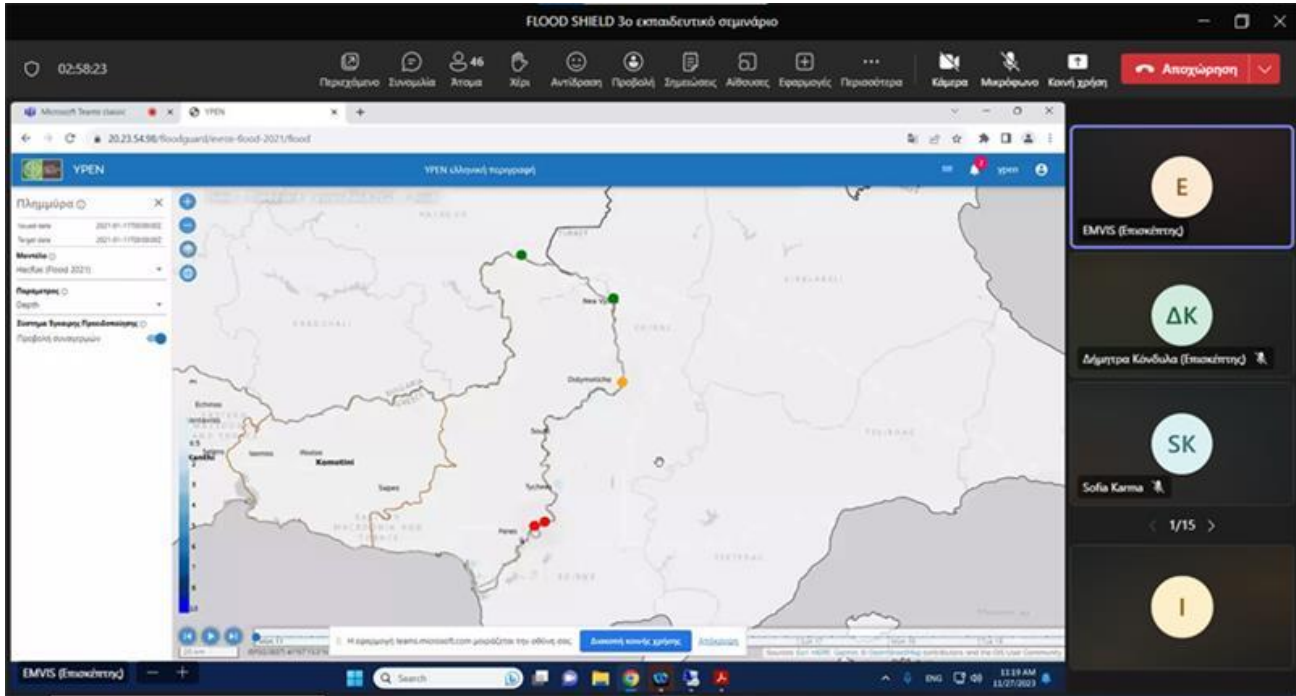


Figure 7. Presentation of the Early Warning System software – Point analysis in the river bed.

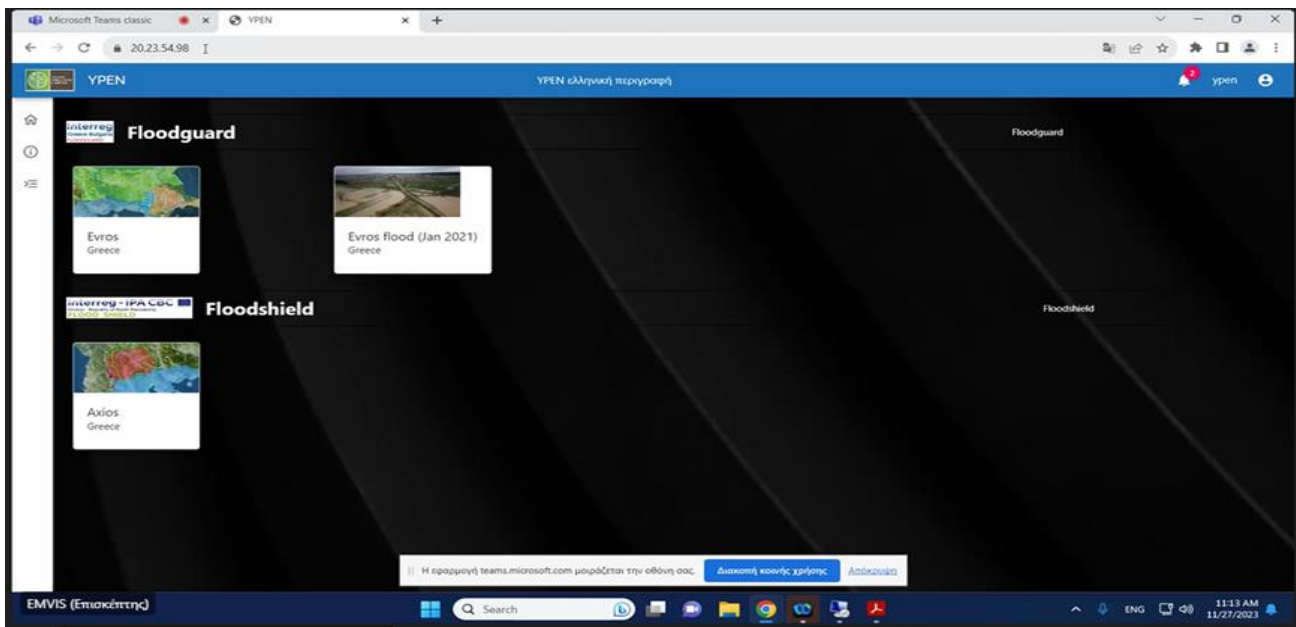


Figure 8. Presentation of the Early Warning System software – The major subject areas, as seen from the YPEN page.

During the period of operation of the group, there were some weaknesses, which are focused on:

- *In the Covid pandemic, which made it difficult to collect member data, as well as to organize live meetings.*
- *To the long delay in contracting the major deliverables, which prevented the full fulfillment of the JWG's objectives.*
- *At a structural organizational level, the group does not have members from the Directorate of Civil Protection of the Region of Macedonia and Thrace, which degrades the dynamics of the group at the operational level.*
- *There have been delays in setting up the early warning system, these delays are due to the Covid Pandemic and the Ukraine war, where due to this there have been delays in collecting the necessary data in the field.*

3.3 Necessity for the continued existence of the JWG [role of the JWG in the FloodGuard platform and provision of data]

The JWG group contributes substantially to the strengthening of cross-border cooperation for flood risk management, enhances the exchange of information and creates the appropriate conditions for common intervention procedures at the operational level.

It also promotes the exchange of knowledge, experience and expertise so as to enhance joint monitoring and assessment of flood risks.

It communicates the results of the meetings and scientific research to the local community, organizing open days for the public, and creating informative material aimed at effectively informing and raising awareness of society regarding the flood risk in the study area.

It contributes to the improvement of means and equipment in the cross-border zone, with the aim of effectively dealing with extreme flooding phenomena in the region.

It effectively enhances the assessment of flood risks and vulnerability. It also increases operational preparedness to deal with flood phenomena, when they are in progress.

The main objective of the group is the minimization of cross-border flood risks and the strengthening of cross-border cooperation between Greece and Bulgaria at the organizational, social and technological level. Achieving better assessment, monitoring, prevention and response to floods is an important issue. The awareness of the public

and citizen groups, so that they are able to protect themselves, but also to actively participate in the activities related to the prevention and response to flood phenomena.

The results of the team are very important at National and International level. It is necessary to continue the Floodguard program and strengthen its role even further.

The image below shows the devastating results of the great Flood that hit Thessaly. The JWG team with its results can contribute to the understanding of the weaknesses observed at the National and local level, in zones beyond the cross-border.



Figure 3. The devastating consequences of the recent floods in Thessaly. recent floods in Thessaly (2023), Greece.

3.4. Suggestions.

As has been mentioned, despite the adverse conditions faced by Floodguard, it achieved several important goals and brought together flood managers at the level of those who actually implement Flood Risk Management Plans (FRMs). It is therefore deemed necessary to continue Floodguard.

For the continuation of the program, potential sources of project are:

- **The program (Interreg VI-B) NEXT Black Sea Basin**

The program includes the countries Greece and Bulgaria and has financial resources aimed at increasing the preparedness and adaptability of society, regarding the risks related to the environment and Climate change. The program sets the agenda for sustainability and is instrumental in mitigation projects, it also promotes the development of smart climate change monitoring, planning and management

- **The program (Interreg VI-A) Greece-Bulgaria**

Where it foresees the expansion of the operation of Floodguard, in order to increase the capacity to respond to disasters and emergency situations for the countries of Greece and Bulgaria. The program also includes the installation of an early warning system for flood phenomena.

In the context of the period 2021-2027, the Project should comply with national and regional adaptation policies and delegated powers, in particular with Regional Adaptation, strategic plans, the National Strategy and the Flood Risk Prevention Plan.

The continuation of the floodguard is expected to increase the technical and administrative capacity for a more effective and timely response to flood events. Supporting the interoperability of national systems and better coordination in Prevention, Control and Enhanced Response to natural disasters will enhance effectiveness.

Some suggestions for improving the operation of the JWG group are the following:

- To further strengthen the scientific character of the group, the group already has an interdisciplinary character, but it is proposed to integrate other specialist scientists, knowledgeable of specialized tools, in the fields of geosciences, climatology, geostatistics and humanities. So as to further strengthen the interdisciplinary character of the group.

- The team should be more flexible in terms of meetings, and smaller working groups should be created to collaborate on individual Floodguard topics.
- In the long term, there could be cooperation with Turkey as well, as the Evros / Maritsa watershed also passes through Turkish territory. A tri-country collaboration on flood risk could be essential.
- At the operational level of the meetings, online meetings can be held earlier than the official meetings of the group, in order to: define the topic and define the representatives of the members.
- Meetings are proposed to be held every three months (instead of four as of now), so that the group interacts more and produces more meaningful conclusions.
- Many meetings will be able to be held online, to reduce the team's operating costs and environmental footprint.
- It is proposed to strengthen the team with specialist communicators, who will be able to: organize essential meetings to inform and raise awareness of the society, to edit the printed informational material of Floodguard.
- To complete and strengthen the early warning program for flooding phenomena in the cross-border area.
- The JWG should acquire members from the Directorate of Civil Protection of the region of Macedonia - Thrace, who are members of the project.
- Finally, the main issue is the improvement and strengthening of the role of the team. And its conclusions should be published and taken seriously by the agencies involved.

In the image below, a SWOT ANALYSIS of JWG is presented, indicating that STRENGTHS and OPPORTUNITIES are much more important than THREATS and WEAKNESSES.

As Strengths for the JWG, people recognize: The multidisciplinary approach of the group, that the exchange of information between the two states was achieved, and that there is now substantial cooperation in the cross-border zone.

Weaknesses are recognized: The limited promotion of JWG results to the scientific community, and to the relevant bodies. It is also recognized that there is limited information of the Society of the two states.

As opportunities are recognized: The achievement of the awareness of the citizens of the two states that are directly or indirectly threatened by the flooding phenomena of the region. The possible expansion of the partner network, as well as the operational upgrading of the two countries.

Threats are identified as: The possibility that the project will not continue due to lack of funding. And any delays in the implementation of team deliverables which are mainly due to external factors (Covid, War in Ukraine)

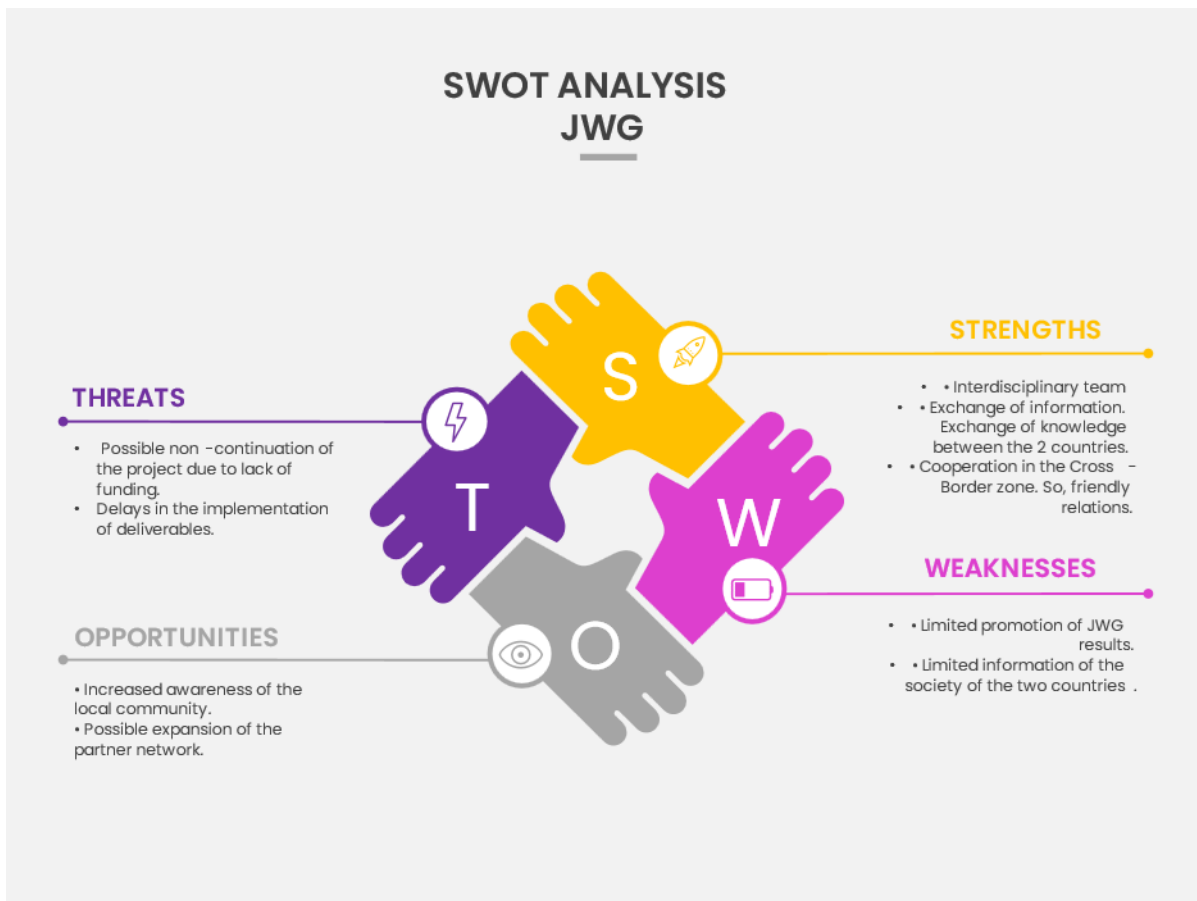


Figure 9. SWOT ANALYSIS του JWG

Therefore, STRENGTHS and OPPORTUNITIES are much more important than THREATS and WEAKNESSES.

4 Conclusions.

4.1 How important is having Floodguard?

The results of Floodguard are very valuable. The conclusions and practices co-shaped at the level of operation of the JWG group are very basic information that should be taken into account in the flood defense of countries, at all levels of planning.

Unfortunately, in the SDLAP implemented by Greece today, the elements of neighboring countries are not taken into account, even when they are members of the European Union. (SOURCE: Consultation in Alexandroupoli 17/10/2023).

It should be an important goal of the Floodguard project to highlight its results, so that they can be used at all levels, from planning and prevention, to restoration, against flood phenomena.

At the national level, all relevant bodies and stakeholders, such as: the Ministry of the Environment, the General Directorate of Water, other ministries, the regions of the wider area, the fire service, citizens and citizen associations that are immediately or indirectly at risk from the floods. The scientific and research world that has accumulated knowledge and experience about flood phenomena. They should be updated and interact with Floodguard so that information is exchanged and disseminated. The results of Floodguard should be reinforced and taken into account in the planning and prioritization of individual flood risk issues. The Flood Risk Management Plans of both countries should be based on the information obtained from the transnational cooperation of the two countries through the operation of the JWG.

4.2 What do we gain from a Greece-Bulgaria JWG?

The JWG between Greece and Bulgaria can function institutionally, organizationally and efficiently and bring significant positive results for both countries.

In order to be able to continue the specific project and to produce data critical to the flood preparedness of the two countries, it is necessary to continue the existence of the JWG (Figure 5).

The common institutional approach between Greece and Bulgaria significantly strengthens the response to flooding phenomena in the cross-border zone.



Figure 10 Snapshot from the hydrological model of the FloodGuard Project (source: <https://gis.earbd.bg/ibbdr.webNew/?configUrl=https://gis.earbd.bg/ibbdr.webNew/BaseProject/Config/purn/config2.json#>)

JWG's studies and comparative analyzes enhance flood prevention, preparedness and response. The undertaking of actions with cooperation for the two countries and the identification of the main problems, contributes to the integrated coordination and response to the flood risk.

The operational organization achieved through cross-border cooperation in flood risk management is an important benefit arising from the cooperation of JWG members. Significant deficiencies in the operational organization are registered by both countries, the organization and the exchange of experiences between them, as well as the coordination at the operational level bring about important changes, which are expected to be even more essential in the future.

The intensifying floods of recent years, due to climate change and poor management practices adopted over several decades by both countries, increase the need for a good collaboration with the JWG's multidisciplinary team. And proposals and solutions concerning adaptation to the climate crisis can emerge and be highlighted, without affecting the environmental acquis, as defined by the European Union

Enhancing the local community's knowledge and recording their views on environmental monitoring issues are important requests of the JWG, where it can benefit society through targeted flood risk updates, but without creating a sense of

insecurity among citizens. At the same time, it can cover some gaps in terms of information that is useful and managed (such as recording historical floods, etc.), by citizens, by recording the ideas and attitudes of the societies around the area of interest of FLOODGUARD.

The DWG team contributes substantially to the assessment, monitoring, prevention and response to flood phenomena. FLOODGUARD should be continued and strengthened to achieve all these results that have significant Socio-Economic and Environmental benefits for both countries.

References

Consultation in Alexandroupoli 17/10/2023,
https://www.youtube.com/live/pYn_fonLyEg?si=qAM3Fzz9o9u3LQv0]

<https://www.europarl.europa.eu/factsheets/el/sheet/98>)

Interreg (VI – B) Next Black Sea Basin Programme, November 2022

SFC 2021 Interreg Programme

Rules for functioning of the Joint Working Group, Project “Integrated actions for joint coordination and responsiveness to flood risks in the Cross Border area”, Floodguard, July 2022

Annex I

Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING (“MoU”) formalizes the partnership and commitment between the following parties:

- General Secretariat of Natural Environment and Water of the Hellenic Ministry of Environment and Energy located in Athens, Greece,
- Directorate of Civil Protection, Decentralized Administration of Macedonia-Thrace, Republic of Greece,
- General Directorate of Fire Safety and Civil Protection, Ministry of Interior, Republic of Bulgaria
- Eastern Aegean River Basin Directorate Plovdiv, Republic of Bulgaria,
- West Aegean River Basin Directorate Blagoevgrad, Republic of Bulgaria,
- National Institute of Meteorology and Hydrology, Republic of Bulgaria,
- Blagoevgrad District Administration, Republic of Bulgaria.

hereinafter referred as “Partners” of the “Joined Working Group”

for the purpose of establishing and achieving a sound flood risk governance at the cross-border areas between Bulgaria and Greece. This governance shall be in accordance with the provisions of the Flood Risk Management Directive 2007/60/EC, Article 6 (2) and Article 5 (2); as well as the maintenance of the flow of data and information, that was initiated and established by the INTERREG Greece-Bulgaria Project “FLOODGUARD”. Further expansion of the collaboration in the sector of flood protection, may happen in case of no conflicts to any Bulgarian or Greek law, bilateral agreement, European Union acquis or international convention, exist.

Article I

Joined Working Group

The Partners are committed to support the continuation of the Joined Working Group, that was established by FLOODGUARD, an INTERREG Greece-Bulgaria project.

The JWG is consisted by representatives of the partners. The number of JWG members will be equally distributed among the two countries: Bulgaria and Greece; regardless of the number of institutions that form the Partners.

In order to collaborate by strengthening existing capacity, facilitating the relevant data exchange, sharing best practices and building up partnerships, as well as raising awareness for the **flood protection and the sustainable management of water resources** and implementing of good practices:

1. The parties will establish a close cooperation and explore opportunities for greater collaboration on provision of services. This MoU aims to identify potential areas for collaboration and to establish a framework under which these actions may take place.

2. Additional areas of collaboration may be mutually agreed within the framework of this MoU. The Parties will undertake their cooperation by strengthening existing practices and technical expertise, and sharing know how.

The following guiding principles will lead the programming approach undertaken within the framework of the MoU:

- **Mutual respect**, requiring the aforementioned parties to recognize the principles of public health and safety, water protection, sustainable management of water resources and circular economy.
- **Equity and justice**, requiring the aforementioned parties to ensure equal opportunity to everyone who shares the same concerns.
- **Honesty and transparency**, being accountable at all levels for the effectiveness of the aforementioned parties' actions and open in our judgments and communications with others.
- **Independence** from any religious or party-political affiliation.

Article II **Areas of Collaboration under this MoU**

All parties shall cooperate in the areas of:

A. Flood Risk Management

- Support Full Cost Recovery of water services (financial, environmental, water resources cost)
- Ensure water affordability for all households, if necessary, through subsidies
- Provide economic incentives to control water demand to be complimented by non-economic tools
- Consider good practices concerning water tariffs such as:
 - Set Inclining Block Rates tariffing: Define categories of users according to National goals and living standards
 - Allocate the Cost of Non Revenue Water fairly between the utility and the consumers

B. Hydrological & Meteorological Data exchange

- Ensure sustainable management of water resources and environmental sustainability
- Improve water/energy synergies in existing policies
- Promote good practices relevant to water efficiency and energy recovery
- Support testing, implementation and adoption of innovative technologies and tools
- Support innovation and research on water- and energy-saving technologies
- Develop energy efficiency indicators and targets for the water sector
- Improve the gathering of data from different water uses
- Underpin decision-making with better data
- Promote public awareness and ensure stakeholder's participation

Article III

Implementation of the Parties' Partnership

The aforementioned parties will establish a mechanism for close collaboration to facilitate and manage this partnership. The parties will work together on a joint Sustainability Action Plan to implement their partnership and will meet/communicate from time to time to review their partnership, including results achieved and challenges experienced.

Specifically, the Parties shall cooperate on the subjects enlisted in Article II through:

- a) Organization of meetings, training programmes and workshops
- b) Exchange of scientific and technical information and documentation on research and development activities and management practices
- c) Exchange of researchers, advisors, experts and non-governmental organization members
- d) Exchange of new technologies
- e) Elaboration of cooperation projects
- f) Any other forms of cooperation deemed necessary by the parties.

Article IV

Financial Arrangements

- The present MoU does not imply any legal and/or financial commitments or obligations from either party to the other.
- Each party's engagement in this partnership will be subject to its mobilising sufficient financial and other resources to support its activities. Although this MoU does not have any financial obligations and/or implications for the parties, the parties commit to explore ways to mobilize external resources to expand the focus of the cooperation and to allocate own funds for joint activities, whenever possible by its respective budgets, on a case-by-case modality and agreed upon in writing. Based on mutual agreement of the Parties, subsequent arrangements may be developed to carry out the purposes of this MoU.
- However, all parties will explore ways for establishing financial cooperation to ensure sustainability of activities implemented.

Article V

Additional Terms of the Agreement

- The aforementioned parties may invite local authorities, regional organisations, government organisations, academic institutions, private enterprises and non-governmental organizations to participate in the cooperative activities within the framework of this Memorandum of Understanding.
- Upon mutual Agreement, the parties may share the results of their cooperation with the third parties in conformity with the provisions of their national legislation.
- Any dispute that may arise from interpretation or implementation of this Memorandum of Understanding shall be resolved by negotiation between the parties.

Article VI

Intellectual Property

Except as is otherwise expressly provided in this MoU, each party will retain all intellectual property and other proprietary rights including, but not limited to, patents, copyrights, and trademarks, with regard to products, processes, inventions, ideas, know-how, or documents and other materials, that the disclosing party may share with the other parties for the purposes of this collaboration.

Article VII

Privileges and Immunities

Nothing in or relating to this MoU will be deemed a waiver, express or implied, of any of the privileges and immunities of all parties and no provision of this MoU shall be interpreted or applied in a manner, or to an extent, inconsistent with such privileges and immunities.

Article VIII

Each Party Independent

Each aforementioned party is responsible for their own acts or omissions, and those of their employees, contractors or any other personnel engaged by them. All parties agree upon mutual respect of the prevailing administrative and legislative procedures of each party.

Article IX **Amendments**

The present MoU or its attachments may be modified or amended only in writing signed by all parties.

Article X **Term of this MoU**

1. This MoU shall take effect upon the day of signing by all the aforementioned parties and shall remain in force until 31 December 2023, unless terminated by either party on three (3) months' written notice to the other.
2. Upon termination, all parties shall take the necessary steps to finalize their respective activities under this MoU in a timely and organized manner for the successful completion of all pending activities of this collaboration.

IN WITNESS WHEREOF, the undersigned, duly authorized for this effect and acting in representation of the parties, have signed the present Agreement in English with equal legal status on the date indicated below.

Signed by: (Signature) _____ (Name) _____ (Position) _____ General Secretariat of Natural Environment and Water of the Hellenic Ministry of Environment and Energy Date _____	Signed by: (Signature) _____ (Name) _____ (Position) _____ Directorate of Civil Protection, Decentralized Administration of Macedonia-Thrace Date _____
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Signed by: (Signature) _____ (Name) _____ (Position) _____ General Directorate of Fire Safety and Civil Protection, Bulgarian Ministry of Interior Date _____	Signed by: (Signature) _____ (Name) _____ (Position) _____ Eastern Aegean River Basin Directorate Plovdiv Date _____
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Signed by: (Signature) _____ (Name) _____ (Position) _____ West Aegean River Basin Directorate Blagoevgrad Date _____	Signed by: (Signature) _____ (Name) _____ (Position) _____ National Institute of Meteorology and Hydrology of Bulgaria Date _____
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Signed by: (Signature) _____ (Name) _____ (Position) _____ Blagoevgrad District Administration Date _____
