

Terms of Reference:

Development of a Multi-Purpose Transboundary Monitoring Programme in the Extended Drin River Basin.

In the framework of:

Memorandum of Understanding for the Management of the
Extended Transboundary Drin Basin

GEF Project “Implementing the Strategic Action Programme of the
Drin Basin to strengthen transboundary cooperation and enable
integrated natural resources management”

The Coordinated Action for the implementation of the Memorandum of Understanding for the management of the Drin basin (Drin CORDA) is supported by the GEF Drin Project. The latter is implemented by the United Nations Development Programme (UNDP) and executed by the Global Water Partnership (GWP) through GWP-Mediterranean (GWP-Med), in cooperation with the United Nations Economic Commission for Europe (UNECE). GWP-Med serves as the Secretariat of the Drin Core Group, the multilateral body responsible for the implementation of the Memorandum of Understanding.

Disclaimer: The document adheres to the UN rules and policies regarding the names and international status of Riparian's and/or other geographical areas etc. The use of characterizations, names, maps or other geographical statements in this document in no way implies any political view or positions of the Parties which are executing and implementing the Project.

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A. Introduction

The Drin Basin sits in the southwestern part of the Balkan Peninsula. It comprises the transboundary sub-basins of the Drin and Buna/Bojana Rivers and of the Prespa, Ohrid and Skadar/Shkoder Lakes. The Drin River is the “connecting body” of the “extended” Drin Basin, linking the lakes, wetlands, rivers and aquatic habitats in the coastal area as well as the marine habitats in the Adriatic Sea into a single, yet complex, ecosystem of major importance. The water bodies and their watersheds are spread in a geographical area that includes Albania, Greece, North Macedonia, Montenegro and Kosovo. With its important water resources this complex system provides a wealth of services to the Drin Riparians that share the basin: energy supply, recreation and tourism, fisheries, water supply for irrigation and domestic uses, sustenance of unique endemic biodiversity, and livelihoods. The basin is home to over 1.61 million people, living in over 1,450 settlements.

The Coordinated Action for the implementation of the Drin Memorandum of Understanding

The Drin Coordinated Action (Drin CORDA) was established in 2011 and was the result of a Drin basin level multi-stakeholder policy dialogue initiated in 2009, and preparatory technical and political engagement work initiated already in 2006. The Drin CORDA is the framework set by the Drin Riparians for the implementation of the Memorandum of Understanding for the Management of the Extended Transboundary Drin Basin (Drin MoU). The Drin MoU was signed by the Ministers responsible for the management of water resources and/or environment, and high-level representatives of the Riparians in Tirana, on 25 November 2011.

The objective of the MoU is to deliver the agreed shared vision, to *“promote joint action for the coordinated integrated management of the shared water resources in the Drin Basin, as a means to safeguard and restore to the extent possible the ecosystems and the services they provide, and to promote sustainable development across the Drin Basin”*.

The Drin MoU provides the political framework for cooperation in the Drin Basin. Following the provisions of the Drin MoU an institutional structure was established. It includes:

- The Meeting of the Parties.
- The Drin Core Group (DCG). This body is given the mandate to coordinate actions for the implementation of the MoU.
- Four Expert Working Groups (EWG) to assist the DCG in its work.

The GEF Drin Project

The implementation of the Drin MoU has been supported - in addition to other transboundary and national level actions - by GEF financed projects the first of which ended in 2021. The GEF Drin I Project enabled the development and the endorsement - at Ministerial level - of a Drin Strategic Action Programme ([Drin SAP; 24 April 2020](#)) that reflects Riparian’s ownership, leadership and alignment with their mid or long-term national and transboundary strategies.

A new GEF project entitled “Implementing the Strategic Action Programme of the Drin Basin to Strengthen Transboundary Cooperation and Enable Integrated Natural Resources Management” (GEF Drin II Project) will provide support until 2029 for the implementation of priority actions under the Drin SAP.

The GEF Drin II Project is structured around four components each one including outputs and activities designed to achieve an equivalent number of outcomes:

Outcome 1: *Sustainable and climate-resilient management of the Basin’s resources enabled through development of technical and policy tools, and filling gaps in the understanding of the Drin Basin ecosystems functioning.*

Outcome 2: *Effective cooperation among Drin Riparians and socio-economic sectors succeeded through the establishment of a transboundary institutional arrangement and the development of critical transboundary policy instruments.*

Outcome 3: *SAP implementation is accelerated through regional, riparian and local solutions to address main causes of transboundary concern, promote sustainable water use and ensure ecosystem functioning and resilience.*

Outcome 4: *Long-term sustainability of achievements is enhanced through implementation of project mechanisms for stakeholder’s participation, gender mainstreaming, dissemination, coordination and monitoring progress.*

B. Background

The GEF Drin II Project aims to enhance the sustainable and climate-resilient management of the Drin Basin’s water resources through improved transboundary cooperation and technical capacity. Under Component 1, Output 1.2 focuses on the development and implementation of multi-purpose transboundary monitoring programmes across the Drin Basin.

The Drin Basin faces complex environmental challenges including water quality degradation, sediment imbalance, and biodiversity loss. Despite efforts, gaps remain in monitoring capacity, coverage, and coordination, particularly in relation multi-purpose data use. There is no coordination at transboundary level in terms of environmental monitoring. There is some exchange of hydro-meteorological data.

Effective monitoring is essential to inform policy, guide management actions, and support the implementation of the relevant EU Directives, primarily EU Water Framework Directive (WFD) and the UNECE Water Convention. It is also essential for transboundary cooperation.

To address these needs, Output 1.2 is designed to deliver:

- a. An assessment of existing national monitoring programmes, identifying existing capacities, deficiencies, gaps and needs for harmonised transboundary monitoring.
- b. A design of basin-wide transboundary monitoring programmes covering surface water, groundwater, marine waters and ecosystems.

- c. A joint agreement among Riparians on the transboundary monitoring programme.

This consultancy will support the implementation of points a. and b. above, contributing to the achievement of point c.

The programme will be developed in close coordination with national institutions and presented for adoption by the Drin Core Group (DCG). The Drin basin-wide transboundary monitoring programmes will serve the implementation of the following SAP goals.

Goal	Supported Objective
1 – Reduce Pollution	1.2 – Improve monitoring of pollution sources and water quality
2 – Protect Ecosystem	2.1 – Strengthen data on biodiversity and aquatic habitats 2.3 – Support ecosystem-based management
5 – Improve Water Use Efficiency	5.1 – Assess water availability and use 5.2 – Support sustainable water planning
6 – Strengthen Flood and Drought Management	6.1 – Improve hydrological and meteorological monitoring 6.2 – Support risk-based planning
7 – Strengthen Knowledge Base and Information Exchange	Primary alignment: 7.1 – Improve data collection and monitoring systems 7.2 – Enhance Drin-Information Management System (IMS) database¹ 7.3 – Harmonise methodologies and indicators 7.4 – Support joint assessments and reporting 7.5 – Facilitate access to information
9 – Strengthen Institutional and Human Capacities	9.2 – Enhance technical skills and knowledge 9.3 – Support training programs 9.5 – Promote exchange of expertise and best practices
10 – Strengthen Transboundary Cooperation and Governance	10.1 – Enhance coordination among riparian countries 10.3 – Promote alignment with EU directives and international conventions 10.4 – Facilitate joint planning and decision-making

C. Description of the Assignment

Objective

The objective of this assignment is to perform an assessment of existing national monitoring programmes identifying capacities, gaps and needs across the Drin River Basin and develop a multi-purpose transboundary monitoring programme to be considered by the Drin Core Group for adoption.

¹ Drin-IMS: <https://www.gwp.org/en/GWP-Mediterranean/WE-ACT/News-List-Page/2022/drin-ims/>

Scope

In the context of this ToR, the term "*monitoring*" or "*monitoring programme*" refers to monitoring activities covering surface water, groundwater, land based freshwater-dependent ecosystems and marine waters and ecosystems.

Requested Services

Task 1: Inception Phase

The Consultant² shall:

- Prepare a preliminary action plan for the implementation of the assignment and communicate this with UNECE and GWP-Med.
- Gather information relevant to the assignment and perform an initial desk-based review of national monitoring systems and programmes in order to identify data and information gaps related to the assignment and determine methods to address these gaps (information sources *may* include: legal framework including specific by-laws, national monitoring programmes, policies with budget allocations for Monitoring programmes, River Basin Management Plans and related documentation³ from each Drin riparian, existing projects and programmes in each Drin riparian on national/transboundary level that are related to, or include components for, improving national monitoring networks etc.). The Consultant is responsible to identify and use the appropriate information sources for the needs of this assignment, ensuring that all available relevant information is collected and used.
- Prepare an action plan for identifying additional information and data sources to address identified gaps.
- Perform a preliminary identification of the geographical locations in the Drin Basin that the work for the development of the transboundary monitoring programme will focus on. For this reason, use the existing river basin management plans in the Drin Riparians, the Transboundary Diagnostic Analysis and official sources from the Drin riparians, to identify the surface water bodies, underground water bodies, transitional waters, marine areas. and ecosystems that are subject to or may be influenced by pressures that are the result of causes that are transboundary in nature (e.g. transboundary pollution due to unsustainable management of agricultural or industrial activities or unsustainable management of urban wastewater, unsustainable fisheries management in shared lakes and rivers, unsustainable forestry etc.).
- Prepare a list of the assessed pressures or potential pressures for each geographical location.

² The Consultant refers to a registered company or consortium of companies. In the case of a consortium, one member shall be designated as the lead entity responsible for coordination and contractual obligations, unless otherwise specified.

³ The consultant is responsible for conducting in-depth review of available documentation from public sources and repositories. In cases some where the documentation is not readily available, GWP-Med will assist in collection with national authorities only based upon consultant request after determination that documents are not freely available for use.

- Propose adjustments to the tasks and work described in this ToRs to achieve the objective of the assignment.
- Develop a detailed workplan for the implementation of the assignment.
- Prepare an inception report encompassing the elements described above,
- Submit the inception report to UNECE and GWP-Med for approval.

The data collation format (tables and maps) for this assignment, will be agreed upon in coordination with GWP-Med to ensure conformity with the structural and technical parameters of the Drin-IMS⁴.

Deliverable 1a: Preliminary action plan for the implementation of the assignment

Deliverable 1b: Inception Report

Task 2: Review and Assessment of Existing Monitoring Programmes in the Drin Riparian Countries

Objectives

- To establish an inventory of existing monitoring networks, practices and programmes (including monitoring stations, parameters, frequency of sampling, analytical procedures and capacities etc.) in each Drin Riparian.
- To assess the scope, quality, and consistency of existing monitoring practices and programmes in relation to (1) requirements -predominately- of the EU Water Framework Directive (WFD, 2000/60/EC) and UNECE Water Convention (2) requirements -that will be defined through this assignment- for the development, establishment and operation of a transboundary monitoring programme .
- To identify gaps and recommend improvements that are necessary to be made for the development, establishment and operation of the transboundary monitoring programmes.

The following tiered framework will be undertaken by the Consultant for the achievement of the set objectives:

Tier 1: Monitoring Domains

Define and assess monitoring practices and programmes across the following physical and monitoring domains:

- Surface water (and the respective water body/basins): lakes, reservoirs, streams, rivers, canals, transitional waters (such as estuaries), wetlands like marshes and swamps, ponds, artificial ponds, and waterbodies created by dams or human infrastructure
- Groundwater and the respective water body/aquifers
- Land ecosystems dependent on freshwater resources
- Marine waters and ecosystems including coastal waters and lagoons

⁴ Dringis.org

Define the geographical domains in the Drin Basin that the work for the development of the transboundary monitoring programme will focus on. For this reason, identify the physical and monitoring domains, that are subject to or may be influenced by pressures that are the result of causes that are transboundary in nature.

The defined domains that the transboundary monitoring programme will focus on will be called from this point forward “monitoring domains”.

Tier 2: Monitoring Within Each Monitoring Domain

For each monitoring domain, identify and assess national level monitoring practices and programmes, using the EU Water Framework Directive as the primary reference. Also (based on the available data in the Drin riparians that might be limited) consider other relevant directives including the EU Floods Directive, Marine Strategy Framework Directive, Drinking Water Directive, Nitrates Directive, Bathing Water Directive, Seveso III Directive, and the Habitats Directive as well as the UNECE Convention on the Transboundary Effects of Industrial Accidents and the UNECE Water Convention, to support effective transboundary cooperation and integrated water resource management.

a) Inventory of Monitoring Stations

Compile a comprehensive inventory of all existing monitoring stations in the Drin Riparians in the Drin Basin. For each station, include (where relevant and as per available information; the final list will be agreed with UNECE and GWP-Med as part of the inception report):

- Station ID / Name
- Geographic Coordinates (WGS84 or equivalent)
- Elevation (metres above sea level)
- Water Body Type and ID (EU WFD classification, including transitional and coastal waters)
- Type of Monitoring Conducted (e.g., surveillance, operational, investigative, ecological)
- Catchment Area Characteristics (land use, hydrology, pressures)
- Designation Status (e.g., protected area, Natura 2000 site, Ramsar site, drinking water zone)
- Installation Date (if applicable)
- Responsible Operator / Agency
- Ecological Monitoring Parameters (e.g., macroinvertebrates, fish, phytoplankton, macrophytes)
- Marine and Coastal Relevance (e.g., estuarine zone, proximity to Adriatic, MSFD applicability)
- Flood Risk Monitoring (e.g., inclusion in Flood Risk Management Plans under the Floods Directive)
- Bathing Water Monitoring (e.g., microbiological parameters, seasonal classification under Bathing Water Directive)

- Industrial Risk and Hazard Monitoring (e.g., proximity to Seveso III sites, emergency planning zones)
- Transboundary Relevance (e.g., shared water body, coordination under UNECE Industrial Accidents Convention)
- Monitoring Frequency and Seasonality (e.g., monthly, seasonal, event-based)
- Data Availability and Format (e.g., national database, transboundary access, online portal)

b)

Methodology alignment

The assessment should check to what extent the national monitoring programmes align with the EU Directives and their associated guidance documents, as well as the UNECE Conventions listed in Annex 4. It should identify any gaps in the practical implementation of these frameworks.

Doing so the assessment should identify to what extent the monitoring programmes in each Drin Riparian align among each other.

Transboundary monitoring evaluation

Evaluate the current monitoring network, monitoring practices and programmes in the monitoring domains. Compare the existing characteristics with the characteristics that should be in place for performing an effective qualitative and quantitative monitoring to adhere to the requirements -predominately- of the EU Water Framework Directive (WFD, 2000/60/EC) and UNECE Water Convention. This will include the following (the list is not exhaustive and the Consultant should appropriately amend it for the needs of this assignment): Review the geographic distribution of monitoring stations and determine whether any areas lack sufficient coverage. Assess adequacy -and compatibility across Drin Riparians- of technical aspects of the network and the monitoring programme, including monitoring equipment, data collection procedures, analytical methods used, monitoring frequency, data resolution, reporting formats etc. Determine the extent to which the monitoring network and programme could support joint assessments and coordinated management, and early warning systems. Highlight any limitations that affect data comparability or integration.

Propose improvements that will allow the establishment and operation of a transboundary monitoring system.

The Consultant will undertake consultations with key institutions responsible for monitoring in the monitoring domains in each Riparian country to validate the information collated on monitoring programmes in relation to monitoring domains, and to further assess the following:

- Priority monitoring needs based on the existing gaps in either data coverage, and/or regulatory alignment
- Infrastructure requirements, including the enhancement or establishment of monitoring stations, field and laboratory equipment, and management systems
- Capacity-building needs, focusing on training and institutional strengthening to support effective implementation

- Opportunities for shared laboratory and analytical services to foster regional cooperation and harmonized reporting under the WFD
- The possibility for integration of remote sensing and automated technologies to support a multi-purpose, basin-wide monitoring framework

Deliverable 2: In-depth Inventory Review of Existing Transboundary Monitoring Programme(s) in the Drin Riparian Countries

The following components constitute the structured outputs to be included in the final deliverable for Task 1. Each item shall reflect the findings, analyses, and recommendations derived from the desk-based review and consultations with institutions in the Drin riparian countries.

- A geospatial inventory of monitoring stations, including complete metadata for each station, covering surface water, groundwater, coastal and transitional waters, (water depended) ecosystems and relevant marine interfaces.
- Summary tables and GIS maps illustrating the distribution and coverage of monitoring stations across the extended Drin River Basin.
- In the monitoring domains:
 1. A matrix detailing monitoring parameters and technical aspects of the network and the existing monitoring programmes, including monitoring equipment, data collection procedures, analytical methods used, monitoring/sampling frequency, data resolution, reporting formats, applicable analytical protocols and ISO/national standards, records for each station etc. (the final list is to be agreed with UNECE and GWP-Med as part of the inception report). The information should be organized by country and station type linked with the geospatial data provided above in one geodatabase.
 2. An assessment report on groundwater monitoring practices, including qualitative and quantitative parameters, critical transboundary aquifer indicators, and alignment with the Groundwater Directive and Drinking Water Directive.
 3. A status overview of hydrological and meteorological monitoring stations, including operational status.
 4. An assessment of water quality and quantity pressures.
 5. A comparative analysis of national monitoring programmes against standards of the EU WFD and other relevant directives, identifying gaps in application and implications for harmonisation and data comparability.
 6. A review of monitoring network and programmes adequacy to cover transboundary monitoring domains and issues, and compatibility across Drin Riparians, identifying thematic, geographic, and technical gaps.
 7. Recommendations for targeted improvements to strengthen national monitoring networks for the establishment and operation of a transboundary monitoring programme including suggestions for shared infrastructure, capacity building, and data integration.

Task 3: Design of a Multi-purpose Transboundary Monitoring Programme with Data Sharing and Reporting Framework

Review of Existing Data Sharing Provisions

Review and analyse existing provisions for data sharing and reporting as outlined in relevant MoUs and other cooperation agreements. This includes evaluating the adequacy of current data exchange protocols, validation procedures, and institutional responsibilities. The review should focus on enhancing interoperability through improved governance and technical coordination, rather than duplicating existing system specifications.

The analysis should consider alignment with international best practices⁵ and relevant regional policy frameworks⁶, while acknowledging that implementation depends on voluntary cooperation and may not be guaranteed.

Alignment with Legal and Policy Frameworks

Develop a proposal for the establishment of a transboundary monitoring programme ensuring full alignment with the EU Water Framework Directive. The programme must integrate requirements from the Floods Directive, Marine Strategy Framework Directive, Drinking Water Directive, Nitrates Directive, Bathing Water Directive, and Seveso III Directive as well as provisions under the UNECE Water Convention and the Convention on Transboundary Effects of Industrial Accidents.

Programme Design and Scope

The design shall be based on the technical analyses conducted under Task 1 and informed by in-country consultations to assess the human, technical, and financial capacities of the Drin riparian countries. The proposed monitoring programme must be multi-purpose covering the monitoring domains and including monitoring objectives and indicators, monitoring stations, monitoring parameters, harmonized methodologies (sampling/collection of information and data, analysis, assessment, interpretation etc.), quality assurance and quality control protocols, include a framework for reporting, data sharing, and coordination across borders. The list is not exhaustive and may be amended based on a proposal by the consultant as part of the inception phase and report. The programme should be technically sound, financially viable, and institutionally sustainable.

Action Plan

The specific actions required from each Drin Riparian to implement the proposed multi-stage transboundary monitoring programme will be detailed in an Action Plan, which will include the following:

- Specifications for each monitoring stage

⁵ Refers to the UNECE Guidelines on Monitoring and Assessment of Transboundary Rivers and Groundwaters; principles of the EU Water Framework Directive; the INSPIRE Directive for data interoperability; and the use of standardized formats.

⁶ Refers to the Drin Memorandum of Understanding (MoU) and its Strategic Action Programme; coordination mechanisms established under Drin CORDA; and any relevant sub-regional agreements.

- Financial and human resource needs
- Implementation timelines, and
- Responsible institutions and coordination
- including potential funding sources

Deliverable 3: Multi-staged Drin Transboundary Monitoring Programme with data sharing and reporting framework (Draft)

The final deliverable for Task 2 will present a structured, multi-phase transboundary monitoring programme for the Drin Basin covering the monitoring domains. It should include the following:

Monitoring objectives and indicators

Monitoring Network: Monitoring stations covering the monitoring domains; Geographic location and designation of stations.

Transboundary Monitoring Protocols: These protocols will define:

- Parameters to be monitored at each transboundary station
- Monitoring frequency
- Methodologies and standards to be applied (e.g. sampling/collection of information and data, analysis, assessment, interpretation of results etc.)
- (possible) shared -among the Drin Riparians- tasks in relation to the analysis of parameters
- Quality assurance and control procedures and protocols tailored to each stage of implementation

Data Sharing and Reporting Framework: This will include:

- Protocols for data exchange
- Standardised validation procedures
- Clarified institutional responsibilities
- Governance mechanisms aligned with international best practices

Roadmap for Multi-Stage Monitoring Evolution: A phased roadmap will outline the development of a multipurpose and multidomain transboundary monitoring system:

- **Stage 1:** Focus only on existing national monitoring programmes and initial domains and core parameters addressing priority transboundary issues, including identification of monitoring stations and frequency.
- **Stage 2:** Expand the scope to include complex issues and emerging needs, with recommendations for enhancing national monitoring programmes.
- **Stage 3:** Establish a fully harmonised transboundary monitoring programme.

Capacity Strategy: A strategy for addressing capacity needs in the Drin Riparians for the operation of the transboundary monitoring programme detailing for each Drin Riparian:

- Technical, financial and human resource requirements
- Implementation timelines
- Roles and responsibilities of national institutions

Joint Monitoring Document: A reference document for the implementation of the transboundary monitoring programmes. It will include:

- Procedures with stage-specific milestones
- Country-specific action plans
- Defined roles for national agencies, regional bodies, and the Drin Core Group
- Coordination mechanisms for joint campaigns and data sharing
- Standardised templates for reporting and validation

Pilot Joint Monitoring Campaign: A ready-to-launch pilot campaign will be proposed, including:

- Objectives and scope
- Selected stations and parameters
- Roles of participating institutions
- Timeline
- Budget estimates

Supporting Materials: The deliverable will be accompanied by GIS Maps and databases

Expert Working Group Consultations

The Consultant shall present the Multi-Purpose Transboundary Monitoring Programme in a number of joint technical session involving all four Expert Working Groups (EWGs):

- Water Framework Directive Implementation
- Monitoring and Information Exchange
- Biodiversity and Ecosystems
- Floods

The sessions will serve as a collaborative platform for cross-sectoral review, validation, and refinement of the proposed programme, ensuring alignment with basin-wide priorities and stakeholder expectations.

The Consultant shall:

- Present the deliverables related to the multi-purpose Transboundary Monitoring Programme.
- Tailor the presentation to address the specific mandates, interests, and technical focus of each Expert Working Group.

- Facilitate the joint review session, promoting inclusive participation, cross-sectoral dialogue, and thematic integration across the three EWGs.
- Collect, document, and synthesize feedback from the EWGs, identifying:
 - Areas of consensus
 - Technical recommendations
 - Issues requiring further refinement or clarification

Deliverable 4: Summary report and documented meeting outcomes

The Consultant will prepare a summary report of the joint review session, outlining:

- Key discussion points and Consultants reflection
- Proposed adjustments to the multi-stage transboundary monitoring programme
- Next steps for endorsement and implementation

The Consultant will draft the minutes of the joint EWG session in close collaboration with UNECE, ensuring accurate documentation of all discussions, decisions, and recommendations.

Task 4: Finalisation and Submission of the Multi-Stage Transboundary Monitoring Programme with Data Sharing and Reporting Framework

Following the joint review and refinement process, the Consultant shall prepare the final version of the Multi-Purpose Transboundary Monitoring Programme for formal submission to GWP-Med as a secretariat of the Drin Core Group. This task shall ensure that all technical inputs, stakeholder feedback, and policy considerations are fully integrated into a coherent and actionable document.

The Consultant shall:

- Integrate feedback and recommendations from the Expert Working Groups and other stakeholders into the final version.
- Submit the final transboundary monitoring programme along with supporting annexes and datasets (databases).
- Provide a brief executive summary highlighting key aspect of the monitoring programme, recommendations, and implementation pathways

Deliverable 5: Multi-Stage Transboundary Monitoring programme with data sharing and reporting framework (Final)

Contact Price, Duration, Deliverables and Payments

The maximum lump sum fee for this assignment is 85.000 USD, including VAT.

This amount includes all other costs, income taxes and any other amount payable or cost that may be required for the completion of the work/service.

All payments shall be upon reception and acceptance/verification of the deliverables, as laid out in the table below. Claims for payment will be made through an Invoice accompanied by proof of delivery.

The activity will be delivered under the lead and guidance of UNECE with input from Project Coordination Unit.

The overall duration of the contract will be for a maximum of 6 months after the contract signature.

Location and Language of the Assignment

The Consultant shall perform services from a location of their choosing.

Travel will be required within each of the Drin Riparian countries to conduct in-country consultations and to participate in the EWG meeting as outlined in Task 3.

Travel-related expenses will be covered by the consultant. UNECE will actively assist the Consultant in organising and facilitating meetings with relevant stakeholders in each riparian country, including institutional outreach. Travel related expenses for participation in the EWG meetings will be covered by the Project/Project Coordination Unit.

All documents, reports, and communications shall be conducted in English. The quality of written English must meet professional standards; failure to do so may constitute grounds for withholding the final payment.

Table 1: Schedule of payments

Tasks		Deliverables	Deadline (weeks) ⁷	Payment (%) ⁸
1a	▪ Preliminary Action Plan	1. Preliminary Action Plan	2	20
1b	▪ Inception report	2. Inception report	8	40
2	▪ Inventory and review of existing monitoring systems in the Drin Riparian Countries	3. Report: Inventory and review of existing monitoring systems in the Drin Riparian Countries	14	
3	▪ Design of a multi-stage transboundary monitoring programme with data sharing and reporting framework	4. Multi-staged Drin Transboundary Monitoring Programme with data sharing and reporting framework (Draft)	20	40
	▪ Presentation of the draft design of multi-stage transboundary monitoring programme with data sharing and reporting framework	5. Summary Report; Report of the EWG Meeting	22	
4	▪ Finalisation and submission of the Multi-staged Drin Transboundary Monitoring Programme with data sharing and reporting framework	6. Multi-staged Drin Transboundary Monitoring Programme with data sharing and reporting framework (Final)	24	

Disqualification Criteria ON/OFF

For details on the ON/OFF disqualification please refer to the Call for Offers

⁷ Weeks after contract signature

⁸ Percentage of contract price

Selection Criteria

The successful participant must:

- Provide proof of their average annual turnover for the last three (3) fiscal years being at least equivalent to the maximum amount of this Call. As supporting documentation, the participant must provide their official Financial Statements, stamped, and signed by the legal representative of the company.
- Be enrolled in one of the official professional or trade register kept in their country of registration
- Have Minimum duration of operation of Ten (10) years. Proof to be provided by the related chamber (date of registration).

Failure to comply with the above requirements and provide relevant proof with the application is considered ground for exclusion.

Qualification and Experience

Participants in the call are required to have solid experience in developing and managing complex projects in the field related to the tasks described in the ToR. This needs to be demonstrated in the Technical Offer to be submitted as part of the application. A template for the Technical Offer form is provided.

The Technical Offer Form consists of the following sections:

- Section 1: Expertise and work experience
- Section 2: Approach and Methodology

Regarding Section 1 Expertise and work experience:

- Participants in the call are required to demonstrate substantial experience in designing, implementing, and managing complex projects related to surface water and groundwater monitoring, and aquatic ecosystem evaluation. Participants must provide evidence of at least three relevant projects completed within the past ten years that reflect a comparable level of technical complexity and thematic relevance (e.g., transboundary water resource assessments, monitoring programme development or integrated water management planning).
- The assignment requires an interdisciplinary team of qualified experts with demonstrated experience in domains directly relevant to the scope of work. The team must collectively cover all mandatory areas of expertise outlined under the minimum requirement for key team members below. Experts whose qualifications span multiple areas may be assigned to more than one domain. Failure to ensure coverage of all required areas will result in disqualification.
- In addition, the Consultant may propose - as they deem appropriate - additional experts covering other specific areas of expertise. It is highly recommended to propose at least one expert from each of the Drin basin countries (local experts), so the acquisition and assessment of local data is more efficient as well as consultation and coordination activities.
- The requirements presented below are the minimum requested. Qualifications additional to the minimum requested per category will receive additional score under the evaluation process.

Minimum requirement for key team members

Key Expert 1: Team Leader - TL (Water monitoring expert and project management)

- Advanced university degree (master's or equivalent) in water resources engineering, water management, environmental science or equivalent. A degree in a related discipline may be considered if directly relevant to the assignment and supported by substantial professional experience. (Required ON/OFF)
- Minimum 15 years of relevant professional experience in water management. (Required/Evaluated)
- At least 10 years of project management experience leading multidisciplinary teams, in the context of WFD implementation and related EU directives. (Required/Evaluated)
- At least 3 projects in last 10 years with outputs related to the with implementation of the UNECE guidelines and/or EU WFD/CIS guidance documents and/or development of related monitoring programmes. (Required/Evaluated)
- Fluency in written and spoken English (Required ON/OFF);
- Fluency in at least one Drin language is desirable. (Desired/Evaluated)

Key Expert 2: Hydrology/Hydrogeology Expert

- Advanced university degree (Master's or equivalent) in hydrology, geology, water resources, civil engineering. A related degree may be accepted if aligned with the assignment scope and supported by relevant experience. (Required ON/OFF)
- Minimum 15 years of experience in hydrological/hydrogeological data analysis, water balance studies, hydrological modelling, environmental flow assessment. (Required/Evaluated)
- Demonstrated involvement in at least three projects over the past 10 years, undertaking tasks relevant to hydrological/hydrogeological assessment groundwater system characterization, aquifer dynamics in accordance with EU FWD monitoring requirement as outlined in the ToR. (Required/Evaluated)
- Fluency in written and spoken English (Required ON/OFF);
- Fluency in at least one Drin language is desirable. (Desired/Evaluated)

Key Expert 3: Environmental Chemistry Expert

- Advanced university degree (Master's or equivalent) in environmental chemistry, analytical chemistry, or water quality science. A related degree may be accepted if relevant to the assignment and supported by professional experience. (Required ON/OFF)
- Minimum 15 years of experience in monitoring programmes, pollutant sampling and analysis, QA/QC procedures under EU WFD, and interpretation of physico-chemical data for surface water, groundwater and marine waters. (Required/Evaluated)
- Demonstrated experience in at least three projects in last 10 years involving chemical monitoring, data interpretation, and compliance with WFD chemical status thresholds. (Required/Evaluated)
- Fluency in written and spoken English (Required ON/OFF);
- Fluency in at least one Drin language is desirable. (Desired/Evaluated)

Key Expert 4: Aquatic Ecology Expert

- Advanced university degree (Master's or equivalent) in aquatic ecology, biology, or environmental science. A related degree may be accepted if relevant to the assignment and supported by professional experience. (Required ON/OFF)
- Minimum 10 years of experience in biological monitoring (phytoplankton, benthic invertebrates, macrophytes, fish), ecological status assessment, and use of biological indicators. (Required/Evaluated)
- Demonstrated experience in at least three river basin management projects within the past 10 years, specifically involving ecosystem monitoring and ecological assessments aligned with WFD requirements. (Required/Evaluated)
- Fluency in written and spoken English (Required ON/OFF);
- Fluency in at least one Drin language is desirable. (Desired/Evaluated)

Key Expert 5: Data management and GIS expert

- University degree in geography, informatics, agriculture, natural sciences, mathematics or equivalent related to GIS, mapping, databases, data processing or equivalent (Required ON/OFF).
- Fluency in both written and spoken English-(Required ON/OFF).
- At least 5 years of experience in data management: GIS, mapping, databases, data processing applied in integrated water management or other related areas - (Required/Evaluated).
- Working experience in projects related to water monitoring design and/or implementation – at least one project (Desired/Evaluated)

Table 2: Workload of the key experts envisaged

Key Experts	Workload (envisaged in expert days)
1: Team Leader (Water monitoring expert and project management)	40
2: Hydrology/hydrogeology Expert	80
3: Environmental Chemistry Expert	50
4: Aquatic Ecology Expert	40
5: Data management and GIS expert	15

Notes:

- There is no limitation on the number of experts per area of expertise, but only the lead expert per area of expertise will be evaluated according to the detailed evaluation/scoring. Thus, please indicate the lead expert for each area of expertise.
- If the qualification of an expert covers the requirements of more than one area of expertise, that expert can be also proposed for these other areas.
- Additional experts, covering a range of other related expertise considered and justified as necessary by the participant will be evaluated in addition.
- The number of planned man-days per expert/area of expertise need to be indicated in the Participant's proposal. The estimated number of required expert-days per area of expertise should be indicated for all key and non-key experts.
- Failure to cover all areas of expertise is considered grounds for disqualification.
- The Participant should demonstrate ability to cooperate with local authorities for the efficient collection of data. **Inclusion of local experts (from the Drin riparian's) will be evaluated in addition.** These experts may or may not be lead experts per area of expertise.

Award Criterion and Evaluation Process

The Award criterion is the most economically advantageous tender on the basis of best price / quality ratio.

The participants should pass through two stages of evaluation, the first stage is On/Off selection criteria, who will pass through this stage will be Qualified and eligible to the second stage of evaluation which is Award Criteria according to the following criteria, please notice that the evaluation will be based on a percentage of 20% Financial and 80% Technical.

Offers qualified in terms of exclusion grounds and selection criteria will be further evaluated on the basis of the requirements presented under section “Qualification and Experience”, as follows:

(1) Criterion	(2) Weighting (w)	(3) Points of criterion (c)	(4) Score= (2) x (3)
Section 1: Expertise and work experience	80 % of total		
Participants in the call are required to demonstrate substantial experience in designing, implementing, and managing complex projects related to surface water and groundwater monitoring, and aquatic ecosystem evaluation. Participants must provide evidence of at least three relevant projects completed within the past ten years that reflect a comparable level of technical complexity and thematic relevance (e.g., transboundary water resource assessments, monitoring programme development or integrated water management planning) - (Required/Evaluated)	15%		
Key expert 1: Team Leader - TL (Water monitoring expert and project management)	15%		
Advanced university degree (master's or equivalent) in water resources engineering, water management, environmental science or equivalent. A degree in a related discipline may be considered if directly relevant to the assignment and supported by substantial professional experience. (Required ON/OFF)			
Fluency in written and spoken English (Required ON/OFF)			
Minimum 15 years of relevant professional experience in water management. (Required/Evaluated)	5%		
At least 10 years of project management experience leading multidisciplinary teams, in the context of WFD implementation and related EU directives. (Required/Evaluated)	3%		
At least 3 projects in last 10 years with outputs related to the with implementation of the UNECE guidelines and/or EU WFD/CIS guidance documents and/or development of related monitoring programmes. (Required/Evaluated)	5%		
Fluency in at least one Drin language is desirable. (Desired/Evaluated)	2%		

(1) Criterion	(2) Weighting (w)	(3) Points of criterion (c)	(4) Score= (2) x (3)
Key Expert 2: Hydrology/Hydrogeology Expert	15%		
Advanced university degree (Master's or equivalent) in hydrology, geology, water resources, civil engineering. A related degree may be accepted if aligned with the assignment scope and supported by relevant experience. (Required ON/OFF)			
Fluency in written and spoken English (Required ON/OFF)			
Minimum 15 years of experience in hydrological/hydrogeological data analysis, water balance studies, hydrological modelling, environmental flow assessment. (Required/Evaluated)	6%		
Demonstrated involvement in at least three projects over the past 10 years, undertaking tasks relevant to hydrological/hydrogeological assessment groundwater system characterization, aquifer dynamics in accordance with EU FWD monitoring requirement as outlined in the ToR. (Required/Evaluated)	7%		
Fluency in at least one Drin language is desirable. (Desired/Evaluated)	2%		
Key Expert 3: Environmental Chemistry Expert	15%		
Advanced university degree (Master's or equivalent) in environmental chemistry, analytical chemistry, or water quality science. A related degree may be accepted if relevant to the assignment and supported by professional experience. (Required ON/OFF)			
Fluency in written and spoken English (Required ON/OFF)			
Minimum 15 years of experience in monitoring programmes, pollutant sampling and analysis, QA/QC procedures under EU WFD, and interpretation of physico-chemical data for surface water, groundwater and marine waters. (Required/Evaluated)	6%		
Demonstrated experience in at least three projects in last 10 years involving chemical monitoring, data interpretation, and compliance with WFD chemical	7%		

(1) Criterion	(2) Weighting (w)	(3) Points of criterion (c)	(4) Score= (2) x (3)
status thresholds. (Required/Evaluated)			
Fluency in at least one Drin language is desirable. (Desired/Evaluated)	2%		
Key Expert 4: Aquatic Ecology Expert	10%		
Advanced university degree (Master's or equivalent) in aquatic ecology, biology, or environmental science. A related degree may be accepted if relevant to the assignment and supported by professional experience. (Required ON/OFF)			
Fluency in written and spoken English (Required ON/OFF)			
Minimum 10 years of experience in biological monitoring (phytoplankton, benthic invertebrates, macrophytes, fish), ecological status assessment, and use of biological indicators. (Required/Evaluated)	4%		
Demonstrated experience in at least three river basin management projects within the past 10 years, specifically involving ecosystem monitoring and ecological assessments aligned with WFD requirements. (Required/Evaluated)	5%		
Fluency in at least one Drin language is desirable. (Desired/Evaluated)	1%		
Key Expert 5: Data management and GIS expert	10%		
University degree in geography, informatics, agriculture, natural sciences, mathematics or equivalent related to GIS, mapping, databases, data processing or equivalent (Required ON/OFF).			
Fluency in written and spoken English (Required ON/OFF)			
At least 5 years of experience in data management: GIS, mapping, databases, data processing applied in integrated water management or other related areas - (Required/Evaluated).	5%		
Working experience in projects related to water monitoring design and/or implementation – at least one project (Desired/Evaluated)	4%		
Fluency in at least one local language is desirable. (Desired/Evaluated)	1%		

(1) Criterion	(2) Weighting (w)	(3) Points of criterion (c)	(4) Score= (2) x (3)
Section 2: Approach and Methodology	20% of total		
Approach to the requested Assignment: detailed description of the methodology of how the Consultant will achieve all objectives and tasks and deliver all outputs as described in the Terms of Reference of the assignment (including the activity plan), keeping in mind the appropriateness to local conditions. The approach should include also composition of the team (listed key and non-key experts), with envisaged No of WDs, Risks / Mitigation Measures including a) description of the potential risks for the implementation of this assignment that may impact achievement and timely completion of expected results as well as their quality, and b) description measures that will be put in place to mitigate these risks.	20%		

Failure to provide the minimum required qualifications is considered ground for disqualification.

Scoring for each evaluated section will be made as following:

Section 1 – Expertise and work experience: score starts at 100 points (when minimum requirements are met) and can reach 150 points depending on the description of the participant and the number of projects implemented in excess of those required as a minimum. (100p Base +10p for extra criteria over base up to 50 additional points)

Section 2 – Approach and Methodology: score starts at 100 points and can reach 150 points depending on the length, detail, depth, and structure of the information provided.

Each Section/evaluation criterion is evaluated autonomously. The final scoring of each evaluation criterion is the outcome of its scoring multiplied by the corresponding weighting factor. The overall score of the technical offer is the sum of the final scoring of all the Sections/evaluation criteria.

The overall score of the technical offer is calculated on the basis of the following formula:

$$B_i = w_1 \times c_1 + w_2 \times c_2 + \dots$$

For the overall score which will determine the ranking of offers, technical evaluation will be weighted with 80%, and the financial offer with 20%.

The final listing of the most advantageous offers will be made on the basis of the following formula:

$$\Lambda_i = 0.8 * (B_i/B_{max}) + 0.2 * (K_{min}/K_i).$$

Where:

- B_{max}: the max score received by the best of the technical offers received
- B_i: the score of the technical offer
- K_{min}: The cost of the financial offer with the minimum price offered.
- K_i: The cost of the financial offer

The most advantageous offers is the one with the greater value of Λ .

In case of equality of overall scores, the winning proposal is the one whose corresponding technical proposal received the highest rating.

Annex 1. Surface water quality elements for the classification of the chemical and ecological status according to WFD

Monitoring elements (parameters) for surface water bodies			Surface water bodies			
			Rivers	Lakes	Transitional Waters	Coastal Waters
Biological elements	Composition and abundance of aquatic flora		√	√	√	√
	Composition and abundance of benthic invertebrate fauna		√	√	√	√
	Composition, abundance and age structure of fish fauna		√	√	√	-
	Composition, abundance and biomass of phytoplankton		-	√	√	√
Hydro-morphological elements	Hydrological regime	Quantity and dynamics of water flow	√	√	-	-
		Connection to groundwater bodies	√	√	-	-
		Residence time	√	√	-	-
	Morphological conditions	River continuity	√	-	-	-
		Depth and width variation	√	Depth variation	Depth variation	Depth variation
		Structure and substrate of the bed	√	√	√	√
		Structure of the riparian zone	√	Structure of lake shore	Structure of lake shore	Structure of inter-tidal zone
	Tidal Regime	Freshwater flow	-	-	√	-
		Wave exposure	-	-	√	√
		Direction of dominant currents	-	-	-	√
Chemical and physico-chemical elements	General	Transparency	-	√	√	√
		Thermal conditions	√	√	√	√
		Oxygenation conditions	√	√	√	√
		Acidification status	√	√		
		Nutrient conditions	√	√	√	√
	Specific pollutants	Pollution by all priority substances identified as being discharged into the body of water	√	√	√	√
		Pollution by other substances identified as being discharged in significant quantities into the body of water	√	√	√	√

Annex 2. Minimum requirements for monitoring frequencies and intervals for the quality elements under the chemical and ecological status as defined by the EC Water Framework Directive

OM = operational monitoring; SM = surveillance monitoring; p.a. = per annum, p.m. = per month

Status Component	Quality Element	Water Category			
		Streams and Rivers	Lakes	Transitional Waters	Coastal Waters
Ecological status	Biological quality elements (BQE)				
	Phytoplankton	6× p.a. (relevant vegetation period); every 1 to 3 years per site (SM) and every 3 years per site (OM), monitored in large rivers only	6× p.a. (relevant vegetation period); every 1 to 3 years per site (SM) and every 3 years (OM)	6× p.a. (relevant vegetation period); every 1 to 3 years per site (SM) and every 3 years (OM)	6× p.a. (relevant vegetation period); every 1 to 3 years per site (SM) and every 3 years (OM)
	Large algae/angiosperms	-	-	1 to 2 times p.a., every 1 to 3 years per site (SM) and every 3 years (OM)	1 to 2 times p.a., every 1 to 3 years per site (SM) and every 3 years (OM)
	Macrophytes/phytobenthos	1 to 2 times p.a., every 1 to 3 years per site (SM) and every 3 years (OM)	1 to 2 times p.a., every 1 to 3 years per site (SM) and every 3 years (OM)	-	-
	Macroinvertebrates	1 to 2 times p.a.; every 1 to 3 years per site (SM) and every 3 years (OM)	1 to 2 times p.a.; every 1 to 3 years per site (SM) and every 3 years (OM)	1 to 2 times p.a.; every 1 to 3 years per site (SM) and every 3 years (OM)	1 to 2 times p.a.; every 1 to 3 years per site (SM) and every 3 years (OM)
	Fish	1 to 2 times p.a.; every 1 to 3 years per site (SM) and every 3 years (OM)	1 to 2 times p.a.; every 1 to 3 years per site (SM) and every 3 years (OM)	1 to 2 times p.a.; every 1 to 3 years per site (SM) and every 3 years (OM)	BQE not used under the WFD
	Hydromorphological quality elements				
	Continuity	1 time, needs-based monitoring, updated every 6 years	-	-	-

Status Component	Quality Element	Water Category			
		Streams and Rivers	Lakes	Transitional Waters	Coastal Waters
	Hydrology	Continuously	1 time per month	-	-
	Hydromorphology	1 time, needs-based monitoring, updated every 6 years	1 time, needs-based monitoring, updated every 6 years	1 time, needs-based monitoring, updated every 6 years	1 time, needs-based monitoring, updated every 6 years
	Physical and chemical quality elements				
	General physical and chemical elements	Depending on the parameters; for most parameters 4 to 13 times p.a.; at least 1× in 6 years (SM), at least 1× in 3 years (OM)	Depending on the parameters; for most parameters 4 to 13 times p.a.; at least 1× in 6 years (SM), at least 1× in 3 years (OM)	Depending on the parameters; for most parameters 4 to 13 times p.a.; at least 1× in 6 years (SM), at least 1× in 3 years (OM)	Depending on the parameters; for most parameters 4 to 13 times p.a.; at least 1× in 6 years (SM), at least 1× in 3 years (OM)
	River basin-specific pollutants	4 to 13 times p.a.; at least 1× in 6 years (SM), at least 1× in 3 years (OM)	4 to 13 times p.a.; at least 1× in 6 years (SM), at least 1× in 3 years (OM)	4 to 13 times p.a.; at least 1× in 6 years (SM), at least 1× in 3 years (OM)	4 to 13 times p.a.; at least 1× in 6 years (SM), at least 1× in 3 years (OM)
Chemical Status	Chemical quality elements (45 priority pollutants with European-wide consistent ecological quality standards)	For priority pollutants in the water phase: 12 times p.a.; at least 1× in 6 years (SM), at least 1× in 3 years (OM); For priority pollutants in biota: 1–2 times p.a.; at least 1× in 6 years (SM), at least 1× in 3 years (OM). A reduced level of monitoring is required for the so-called ubiquitous, widespread substances and substances on a mandatory watch list of the EU Commission.			

Annex 3: Key Review Criteria for Transboundary Aquifers

Transboundary Aquifer	Key Features	Critical Parameters to Assess
Skadar/Shkoder–Buna/Bojana (Albania, Montenegro)	Wetland-rich, surface–groundwater interaction, supports wetlands and agriculture	• Groundwater levels (seasonal variation) • Hydraulic conductivity & transmissivity • Nitrate and pesticide concentrations • Electrical Conductivity and salinity • Recharge rates
Prespa–Ohrid Aquifer System (Albania, North Macedonia, Greece)	Supports sensitive lakes, karstic geology, biodiversity hotspot	• Spring discharge rates • Water table fluctuations • Calcium, magnesium (karst indicators) • Isotopic tracers (for recharge source) • Temperature and Electrical Conductivity
White Drin–Peja Aquifer (Kosovo, Albania)	Drinking water source, important for irrigation	• Hydraulic conductivity and storativity • Total dissolved solids or Electrical Conductivity • Microbial indicators
Black Drin–Debar Aquifer (North Macedonia, Albania)	River corridor, potential for abstraction	• Transmissivity and specific yield • Groundwater–surface water exchange • Heavy metals • Flow direction and gradient
Gjakova–Tropoja Aquifer (Kosovo, Albania)	Less studied, mountainous terrain, likely transboundary due to geological continuity	• Recharge estimation • Water quality baseline • Vulnerability to contamination

Annex 4: Key Documents for Monitoring Alignment Assessment

Core Legal Framework for Surface Waters and Groundwaters

- **Directive 2000/60/EC** – Water Framework Directive (WFD)
- **Directive 2006/118/EC** – Groundwater Directive
- **Directive 2013/39/EU** – Amending Directive 2008/105/EC with updated priority substances
- **Commission Implementing Decision (EU) 2022/1307** – establishing a watch list of substances for Union-wide monitoring in the field of water policy pursuant to Directive 2008/105/EC

WFD CIS Guidance Documents

- **No. 6** – Towards a Guidance on Establishment of the Intercalibration Network and the Process on the Intercalibration Exercise
- **No. 7** – Monitoring under the WFD
- **No. 13** – Overall Approach to the Classification of Ecological Status and Ecological Potential
- **No. 15** – Groundwater Monitoring
- **No. 18** – Groundwater Status and Trend Assessment
- **No. 19** – Surface Water Chemical Monitoring
- **No. 24** – River Basin Management in a Changing Climate
- **No. 25** – Chemical Monitoring of Sediment and Biota
- **No. 26** – Guidance on Risk Assessment and the Use of Conceptual Models for Groundwater
- **No. 27** – Technical Guidance for Deriving Environmental Quality Standards
- **No. 32** – Biota monitoring
- **No. 33** – Analytical Methods for Biota Monitoring
- **No. 34** – Water Balances Guidance
- **Integrated Sediment Management** – Guidelines and Good Practices in the Context of the Water Framework Directive (CIS Technical Document, 2022)

Other Relevant Directives:

- **Directive 2008/56/EC** – Marine Strategy Framework Directive (MSFD)
- **Directive 2007/60/EC** – Floods Directive
- **Directive 91/676/EEC** – Nitrates Directive
- **Directive 2006/7/EC** – Bathing Water Directive
- **Directive (EU) 2020/2184** – Drinking Water Directive
- **Directive 2012/18/EU** – Seveso III Directive
- **Directive 92/43/EEC** – Habitats Directive

UNECE Water Convention Guidance

- Updated Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters (2023)

UNECE Industrial Accidents Convention Guidance

- Guidance on Implementation of the Convention on the Transboundary Effects of Industrial Accidents (2017)
- Strategic Approach to International Cooperation for Industrial Accident Prevention and Preparedness (2020)