

Simplified Approval Process

Annex 7: Risk assessment and management



RISK ASSESSMENT AND MANAGEMENT

1. Risk factors and mitigations measures		
<p>Environmental and social risks are considered in the Environmental and Social Action Plan (Annex 12). Gender-specific risks are considered in the Gender Assessment and Action Plan (Annex 4).</p> <p>From a safeguards perspective, the ALBAdapt project risk is rated as Low (Category C).</p>		
Selected Risk Factor 1		
Category	Probability	Impact
Governance	Low	High
Description		
<p>The ALBAdapt project is constructed on the assumption that the government of Albania is fully committed to strengthening the National Meteorological and Hydrological Services (NMHS), National Framework for Climate Services (NFCS), multi-hazard early warning system (MHEWS) and associated services and will sustain its engagement accordingly.</p>		
Mitigation Measure(s)		
<p>The government has been a proactive partner in conceptualising the project; indeed, it was the government itself that initially invited GIZ to develop a Green Climate Fund (GCF) project addressing a climate information and early warning system (CIEWS). The project development process has been highly participatory, encompassing a broad range of different public sector (national and local), private sector and civil society institutions through bilateral interviews, dialogues and consultation workshops (see Annex 2e – Stakeholder Engagement Plan).</p> <p>All key government institutions, including the Prime Minister's Office, the Ministry of Finance and Economy, the Ministry of Tourism and the Environment, the National Designated Authority (NDA), and sector ministries and agencies, are fully supportive. The project is aligned with government priorities – including the Nationally Determined Contribution (NDC), the National Adaptation Plan (NAP), climate policies and strategies, and coastal belt development. The ALBAdapt GCF project is specifically included as Strategic Project 11 in the National Disaster Risk Reduction Action Plan (NDRRAP). The ALBAdapt project forms part of Albania's GCF Country Programme.</p> <p>A change of government administration took place during development of the project, and this had no impact on the level of political support for the project.</p>		
Selected Risk Factor 2		
Category	Probability	Impact
Technical and operational	Medium	Medium
Description		
<p>The operational capacities of the project partners, including municipalities, are not sufficient to effectively implement the project or to operate and maintain enduring climate frameworks and services.</p>		
Mitigation Measure(s)		
<p>Operational capacities vary across institutions and tasks. The Institute of Geosciences (IGEO), for example, is the only NMHS in Europe that does not operate a dedicated 24/7 service; despite its best efforts, and due to capacity, infrastructure and financial constraints, IGEO is struggling to meet the expectations placed on a modern NMHS. The National Civil Protection Agency (NCPA) was established recently – in 2019 – and only in 2020 did its staff numbers increase from nine to ~60. NCPA is still evolving and undergoing structural reform: staff training, hazard forecasting, vulnerability assessment, a functional early warning system, improved inter-institutional coordination and strengthened support to municipalities remain urgent needs. Municipalities have a formal – legally prescribed – role in civil protection, but generally lack the technical skills required to identify and assess climate risks and to draw up appropriate climate management plans.</p> <p>Thus, while 'operational capacities' are, indeed, limited in important respects, a nuanced, differentiated approach to addressing them is required. Accordingly, the project will put in place an extensive capacity building programme,</p>		

targeting different institutions in different areas of need. Broadly, this capacity building programme can be summarised as:

NMHS capacity building: The project will co-develop and implement a multi-year, multi-dimensional capacity development programme for the NMHS (Sub-Activities 1.1.1.2, 1.1.1.3), based on the new institutional duties and functions derived from the Law on Weather, Climate and Hydrological Services. The programme will work in conjunction with national stakeholders and one or more international partners, such as the World Meteorological Organisation (WMO) and/or the Network of European Meteorological Services (EUMETNET). Additionally, the project will support specialised training workshops, on-the-job training and mentoring provided by international counterparts in other NMHSs as well as from technical specialists.

NFCS partners: In order to ensure that the NFCS advances beyond an attractive concept 'on paper' and becomes an operational reality that serves to improve the provision of hydro-met and climate services by the public and private sectors to a range of end-users, a capacity building package, oriented around online and physical workshops and training materials, will be developed (Sub-Activity 1.2.1.1).

Academic: Building the capacity of the education system to support the future supply of suitably qualified skilled staff for the hydro-met sector is vital for the ongoing sustainability of the NMHS and the climate services ecosystem. Universities and vocational colleges, notably Tirana Polytechnic University, Polis University, Epoka University and others, will be supported in the development of new elective taught modules on meteorology, hydrology and climatology that students can select (on a voluntary basis) as part of their bachelor's and master's degrees in relevant subjects (primarily physics and earth sciences) (Sub-Activity 1.1.1.1). By project-end, the expectation is that the universities will have gathered sufficient experience, and the modules will have become sufficiently established / mainstreamed, that each subject (meteorology, hydrology and climatology) will become a separate degree course in its own right, potentially at master's level first before later extending to bachelor's level.

MHEWS: Based on a detailed capacity assessment of the key MHEWS institutions undertaken during project implementation (Sub-Activity 2.1.1.1), the project will develop a systematic capacity building programme (Sub-Activity 2.1.1.2).

Last mile: The project will strengthen the MHEWS-related capabilities of coastal belt municipalities – for example, building their in-house capabilities to engage with local communities (including vulnerable groups) and to formulate / update local hazard management plans (pre- and post-hazard event). This work will be conducted in collaboration with the Albanian Red Cross (ARC), which has a long track-record of working with municipalities and local communities (Sub-Activity 2.1.1.2). This work will also be closely coordinated with the Territorial Stakeholder Climate Dialogues (TSCDs) and Local Adaptation Action Plans (LAAPs) (Sub-Activity 3.2.1.1), such that the capacity building provided to municipalities addresses: (i) specific gaps in their ability to design and formulate LAAPs, as well as (ii) their ability to subsequently implement or coordinate the adaptation investments included in the LAAPs.

Selected Risk Factor 3

Category	Probability	Impact
Technical and operational	Low	Medium
Description		
A lack of coordination between different actors in the Albanian government, and between the government and civil society, serves to weaken the coherence and cohesion of the national hydro-met and early warning systems, and thereby jeopardise – or, at a minimum, complicate – project implementation.		
Mitigation Measure(s)		
Although IGEO serves in theory as 'the' NMHS, hydro-met functions are, in fact, dispersed across additional institutions, principally Albcontrol and MMS. Currently, there is limited coordination among these institutions. Links between the NMHS and the early warning system are currently administratively and operationally weak. IGEO provides warnings to NCPA for dissemination, but NCPA also issues its own warnings (independent of IGEO's). IGEO and NCPA do not currently integrate their expertise to provide multi-hazard early warnings that consider all weather and climate-related threats in a systematic and consistent manner.		
These challenges are fully acknowledged by the project – and, indeed, by the government, which is actively seeking GCF assistance to reform the hydro-met and early warning sectors in line with international best-practice and as		

applicable to the specific context of Albania. The project will put in place a number of measures specifically designed to 'join up' the hydro-met system, the early warning system and the coupling between the two. These include, inter alia:

Development of a Law on Weather, Climate and Hydrological Services: this will put in place, effectively for the first time ever (see Annex 2h), a robust legal framework for the mandate, roles and responsibilities of the NMHS, including the institutional design and associated inter-institutional coordination mechanisms (Sub-Activity 1.1.1.1. This will be backed up by capacity building and technical assistance (Sub-Activities 1.1.1.1, 1.1.1.3), focusing on political aspects (ensuring institutions have tightly-defined mandates and responsibilities), cultural aspects (ensuring institutions become more outward-facing and adopt more cooperative mind-sets) and technical aspects (ensuring institutions have the practical means to routinely exchange data and information – e.g. use of standardised data formats).

Development of the AlbaMet National Climate Information System (NCIS): this will provide an integrated data platform, bringing together hydro-met and early warning data, as well as related public sector data sources (such as national GIS maps), academic research and teaching resources, private sector climate services, etc. (Sub-Activity 1.2.1.2). As well as facilitating the use of such data (by providing a single point of access), it will also facilitate its supply by providing a single repository that uses standard data formats and IT protocols (probably in a cloud-based context). Institutions will not be required to share data with multiple other institutions, possibly in different formats and at different frequencies, but will, instead, merely be required to upload to / download from the NCIS. The NCIS will have walled-garden areas, cybersecurity systems, etc., thereby ensuring data is accessible only to those institutions with legitimate needs. An NFCS Executive Committee, consisting of representatives of member institutions, will ensure ongoing coordination and collaboration.

Development of a MHEWS Policy and revisions (as required) to the Law on Civil Protection and the Law on Climate Change: this will, inter alia, define the architecture, institutional roles, responsibilities and functions of a 'joined-up' MHEWS, including in relation to the NMHS – augmented by institutional Standard Operating Procedures (SOPs) (Sub-Activities 2.1.1.1, 2.1.1.2). Further, a MHEWS Executive Committee, consisting of representatives of member institutions, will coordinate MHEWS activities; it will also liaise with the NFCS Executive Committee on a regular basis.

An FbA Taskforce will be established to mainstream FbA into the NMHS and NCPA and ensure the use of standardised tools and methodologies across institutions (Sub-Activity 2.1.2.1).

Regional and international coordination: including with, inter alia: ECMWF to benefit from significant investment by European meteorological services in the context of the European Weather Cloud, Copernicus Climate Change Service (C3S), etc.; close cooperation with EUMETNET to help rationalise and minimise the cost of national investment in the Albanian observation network; joining the EUMETNET MeteoAlarm programme; enhanced national participation in the South-East European Climate Outlook Forum (SEECOF); full participation in the South-East European Consortium for Operational Weather Prediction (SEECOP) and the South-East Europe Multi-Hazard Early Warning Advisory System (SEE-MHEWS-A) to improve forecasts and warnings with adjacent countries; and bilateral cooperation with neighbouring NMHSs to ensure Albania can benefit from their data: e.g. radar data from Italy and hydrological data from Greece.

Selected Risk Factor 4

Category	Probability	Impact
Technical and operational	Medium	Medium
Description		
Financial resources and technical capacities are insufficient to sustain NMHS and MHEWS operations beyond the project implementation period.		
Mitigation Measure(s)		
The project is assessed as having high sustainability potential: sustained project impact is assured beyond its implementation period. The project will:		
<ul style="list-style-type: none"> Strengthen the capacities of the institutions involved in collecting and processing hydro-met data in Albania and, equally crucially, fundamentally transform the institutional underpinnings of the NMHS and MHEWS to enhance clarity of roles and responsibilities, and to facilitate information exchange in a truly 'joined up' system. Begin the process of mobilising private sector involvement in the provision of climate services, thereby partially detaching service provision from government budget constraints and introducing market discipline (user-oriented focus, dynamic adjustment, profit-seeking motivation) into the hydro-met sector. 		

- Improve the usability and usefulness of the hydro-met and early warning systems, thereby cementing their importance to policy-makers, local communities and end-users.

Specific elements of the project's sustainability strategy include: institutional and regulatory reform, capacity building, and extensive stakeholder engagement and beneficiary ownership. With regard to financial sustainability, the project will put in place the following measures:

The regulatory framework: The ALBAdapt project will ensure that the new legal framework, provided by the Law on Weather, Climate and Hydrological Services, covers defined elements of NMHS staffing, operations and maintenance costs as contributions from the state budget. The Law will also encourage the NMHS to supplement its income and expand its range of services beyond the legally prescribed minimum service levels. Further, the Law will establish the legal basis for the NFCS, which will catalyse private sector engagement with, and investment in, climate services.

Reduction of costs: There are a number of ways to achieve financial sustainability, and one is through reduced cost. This reduction of cost is embedded into the project design and implementation through several elements, including:

- Observation network design and procurement: The number of observation stations and the quality / type of station will have an impact on the network's sustainability. The project will take into consideration these aspects when designing and procuring observation stations, including economies of scale (procuring equipment at scale rather than piecemeal), equipment guarantees and quality, etc.
- Partnerships and collaboration: the project will promote: (i) the establishment of partnerships and participation in regional initiatives and networks that can provide free-of-charge data, forecasts and information, and (ii) formal arrangements with private sector actors on free dissemination of information.
- Rationalisation of operations: the current hydro-met and early warning systems are fragmented across multiple institutions and lack appropriate coordination and data-sharing practices. The project will unify, rationalise and streamline CIEWS operations, thereby generating considerable operational efficiencies (as well as improved service quality and availability).
- Software and hardware: Wherever possible, the project will use open-source software and hardware.

Operations and maintenance of investments: The project will invest in infrastructure and assets that are essential for the delivery of climate services. The government will be responsible for the operations and maintenance (O&M) costs of these investments, including (inter alia) personnel costs, materials and supplies, equipment and repairs, data storage, etc. At the mid-term of project implementation, an O&M management plan will be prepared. This will provide a detailed break-down of O&M costs based on: (i) the procurement / installation of equipment supported by the project up to that point, (ii) up-to-date information supplied by vendors (e.g. relating to product warranties), and (iii) the NMHS, NFCS and MHEWS architectures decided by national stakeholders (the details of which will be determined during project implementation).

Domestic resources mobilisation: Through knowledge products, the project will improve awareness and knowledge of the usability and usefulness of the hydro-met and early warning systems, thereby cementing their importance to policy-makers. This sensitisation will be accompanied by technical support to incorporate the allocation of budget to the CIEWS sector into the annual budget process, the medium-term budget framework and other public finance instruments (including Albanian Development Fund (ADF) operations).

Business strategy: The ALBAdapt project will work with the NMHS to develop a business strategy that is aligned with the opportunities and limitations imposed by the Law on Weather, Climate and Hydrological Services, that reflects in-house technical capabilities (current and future) and that serves particular market needs (e.g. in sectors such as agriculture, tourism or water management).

Market development: The ALBAdapt project will incentivise the commercial use of the improved NMHS and MHEWS data streams unlocked by Components 1 and 2. Specifically, Sub-Activity 3.1.1.1 will focus on climate service business ideation: i.e. development of a set of 30 high-potential climate service / product business ideas. Three of these ideas will then receive further incubation support under Sub-Activity 3.1.1.2. Market development, and specifically the promotion of private sector climate service providers, will spur innovation, nimbleness and a customer-centric mind-set: all features that are noticeably lacking in the current environment.

Selected Risk Factor 5

Category	Probability	Impact
Governance	Medium	Medium
Description		
Corruption remains a serious problem. According to the 2022 Transparency International Corruption Perception Index (CPI), Albania occupies 101 st place out of 180 countries assessed, making it one of the lowest-ranking countries in South-Eastern Europe ¹ . Sufficient safeguards must be in place to ensure proper use of project funds.		
Mitigation Measure(s)		
<p>In recent years, Albania has made substantial progress in tackling corruption, as noted by (inter alia) the European Commission², the International Monetary Fund (IMF)³ and the European Bank for Reconstruction and Development (EBRD)⁴. Following a 2020 cooperation agreement with the Financial Action Task Force (FATF) and the Council of Europe, Albania has subsequently been removed from the FATF 'grey list' of countries with heightened money laundering risks⁵.</p> <p>In the context of the 2023-2030 National Anti-Corruption Strategy and Action Plan, the government has embarked on thorough reforms of the judicial and law enforcement systems to improve their independence, professionalism and efficiency. The National Network of Anti-Corruption Coordinators, a structure that is under the Minister of Justice, became functional in 2021. The coordinators are placed in institutions that have the highest public perception of corruption. The coordinators collect, process and analyse complaints filed by citizens and businesses and report to the law enforcement authorities for further action. As a condition of achieving EU membership, and an aspect that is closely scrutinised by the European Commission, continued government action to tackle corruption is assured.</p> <p>With regard to the ALBAdapt project specifically, GIZ is the sole Executing Entity for Components 1 and 3 of the project. GIZ's robust procurement, monitoring and auditing systems will ensure that all project expenditures are appropriate and transparently executed. NCPA is a co-Executing Entity, alongside GIZ, for Component 2. Annual audits for the GCF proceeds overall will be carried out. In addition, NCPA will also be audited annually with regard to the received GCF funds.</p> <p>NCPA will disburse project funds for allocated tasks. NCPA will use its own rules and procedures to manage such expenditures within the provisions of the GIZ AE. When awarding contracts for goods, works and consulting services to be financed in full or in part from the GCF grant, NCPA shall observe the regulations for public procurement which apply in Albania. Minimum standards are presented within the project's procurement Plan in Section I.7 of Annex 8a. NCPA's rules and procedures are judged to be satisfactory by the due diligence report commissioned during ALBAdapt project preparation, and NCPA has a successful track-record of working with international development partners, including the European Commission, UNDP, the World Bank and GIZ.</p> <p>Complaints and allegations of impropriety, wrong-doing or other related issues in the project will be managed following GIZ's Compliance Management System (CMS). The CMS includes a code of ethics⁶, annual compliance reporting⁷, an anti-corruption policy⁸, and an anonymous whistleblowing procedure⁹ (see also elaborations in Section 2 below on 'prohibited practices').</p>		
Selected Risk Factor 6		
Category	Probability	Impact

¹ Transparency International (2022), *Corruption Perception Index 2022*: <https://www.transparency.org/en/cpi/2022> (last accessed: 05.01.2024).

² European Commission (2023), *European Neighbourhood Policy and Enlargement Negotiations – Albania*: https://neighbourhood-enlargement.ec.europa.eu/enlargement-policy/albania_en (last accessed: 05.01.2024).

³ IMF (2022), *Article IV Consultation – Albania*: <https://www.imf.org/-/media/Files/Publications/CR/2022/English/1ALBEA2022004.ashx> (last accessed: 05.01.2024).

⁴ EBRD (2020), *Albania Country Strategy, 2020-2025*: <https://www.ebrd.com/documents/strategy-and-policy-coordination/strategy-for-albania.pdf> (last accessed: 05.01.2024).

⁵ Council of Europe (2023), *Anti-Money Laundering and Counter-Terrorist Financing Measures: Albania – Fourth Enhanced Follow-Up Report*: <https://www.fatf-gafi.org/content/dam/fatf-gafi/fsrb-fur/Albania-MONEYVAL-2023-Follow-Up-Report.pdf.coredownload.inline.pdf> (last accessed: 05.01.2024).

⁶ <https://www.giz.de/en/downloads/Code%20of%20ethics.pdf> (last accessed: 05.01.2024).

⁷ For example, the 2022 GIZ Annual Compliance Report is available at the following link: <https://www.giz.de/en/downloads/giz2023-en-annual-compliance-report-2022.pdf> (last accessed: 05.01.2024).

⁸ <https://www.giz.de/en/downloads/giz2020-en-giz-anticorruption-policy.pdf> (last accessed: 05.01.2024).

⁹ <https://www.bkms-system.com/bkwebanon/report/clientInfo?cin=26zig7&c=-1&language=eng> (last accessed: 05.01.2024).

Technical and operational	Low	Medium
Description		
Improvements to the early warning system (quality of warnings, timeliness, expansion of platforms) may result in maladaptation by promoting end-user complacency.		
Mitigation Measure(s)		
<p>The development of a multi-hazard warning system that attracts the trust and confidence of end-users may, ironically, lead to behaviours that result in greater exposure to climate risks. For example, communities and individuals may become over-reliant upon warnings and start to disregard local – and perhaps traditional or proxy – indications of impending danger, such as soil saturation or rising stream levels. Or hotel operators may seek to construct facilities in high-risk areas, such as flood plains or coastal areas, on the assumption that early warnings will enable them to manage future risks from storm surges, flooding, etc.</p> <p>While such complacency (the so-called ‘safe development paradox’) is observed in the academic literature^{10,11}, it is certainly not a typical response and it is considered a remote possibility in the project context. The quality and timeliness of early warnings have historically not been good in Albania¹². Furthermore, post-event responses have often been slow and confused¹³. When combined with a general suspicion of government institutions, a legacy of the Communist era¹⁴, the project is far more likely to encounter the opposite problem (and one that it is prepared for): that of people not taking sufficient notice of early warnings, even though the warnings are now of far greater quality and are geographically targeted far more precisely (e.g. within the reception area of a single mobile phone mast).</p> <p>Certainly, the risk of maladaptation arising from project interventions is considered a considerably lower risk than the risk of maladaptation arising from non-action: climate risks and negative outcomes for people and communities will be far greater in the absence of a functional early warning system. Early warning systems are widely regarded, including by the IPCC¹⁵ and the IFRC¹⁶, as no/low regret measures¹⁷. The GCF itself notes that “CIEWS provide strong, evidence-based information to make informed investment decisions for a low-emissions, climate-resilient global economy...People-centred MHEWS empower individuals and communities to act in a timely and appropriate manner to protect lives and livelihoods and so reduce the impact of weather and climate extremes”¹⁸. The ALBAdapt project directly addresses Targeted Result 3 of the GCF Strategic Plan 2024-2027¹⁹.</p> <p>The project will invest in considerable capacity building, including public awareness campaigns and training, specifically oriented around the new early warning system put in place by the project. By working closely with key ‘last mile’ stakeholders (such as municipalities and the Albanian Red Cross), the project will build trust in, and understanding of, the system, as well as a balanced view on its capabilities (Sub-Activity 2.1.1.2). Furthermore, the project’s support in other areas, such as hazard risk mapping (Sub-Activities 2.1.1.2, 2.1.2.1) and the development of Local Adaptation</p>		

¹⁰ Magnan, A. et al (2016), ‘Addressing the risk of maladaptation to climate change’, *WIREs Climate Change*, 7: <https://wires.onlinelibrary.wiley.com/doi/epdf/10.1002/wcc.409> (last accessed: 05.01.2024).

¹¹ Jones, L. et al (2015), ‘(Re)conceptualising maladaptation in policy and practice: towards an evaluative framework’, *Social Science Research Network*: https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID3357364_code2434258.pdf?abstractid=2643009&mirid=1 (last accessed: 05.01.2024).

¹² World Bank (2021), *Diagnostic Report: Emergency Preparedness and Response Assessment – Albania*: <https://openknowledge.worldbank.org/bitstream/handle/10986/35716/Albania-Ready-2-Respond-Emergency-Preparedness-and-Response-Assessment-Diagnostic-Report.pdf?sequence=1&isAllowed=y> (last accessed: 05.01.2024).

¹³ World Bank and UN (2020), *Albania: Post-Disaster Needs Assessment*: https://www.undp.org/sites/g/files/zskgke326/files/migration/al/albania_post-disaster_recovery.pdf (last accessed: 05.01.2024).

¹⁴ Zentralanstalt für Meteorologie und Geodynamik (ZAMG, 2016), *Action Plan with Short-, Medium- and Long-Term Goals and Investments – Support Development of a Service Delivery Strategy and Investment Plan for the Albania Institute of Geosciences, Energy, Water and Environment*: <https://www.gfdrr.org/sites/default/files/publication/Albania%20-%20Hydromet%20-%20IGEWE%20Action%20and%20Investment%20Plan.pdf> (last accessed: 05.01.2024).

¹⁵ IPCC (2022), *Climate Change 2022: Impacts, Adaptation and Vulnerability – Working Group II Contribution to the Sixth Assessment Report*: https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf (last accessed: 05.01.2024).

¹⁶ IFRC (2014), *Community Early Warnings Systems: Training Toolkit – Field Guide*: <https://www.ifrc.org/sites/default/files/1275000-Community-Early-Warning-Systems-Toolkit-EN.pdf> (last accessed: 05.01.2024).

¹⁷ Dilling, L. et al (2015), ‘The dynamics of vulnerability: why adapting to climate variability will not always prepare us for climate change’, *WIREs Climate Change*, 15: <https://wires.onlinelibrary.wiley.com/doi/epdf/10.1002/wcc.341> (last accessed: 05.01.2024).

¹⁸ GCF (2022), *Sectoral Guide: Climate Information and Early Warning Systems*: <https://www.greenclimate.fund/sites/default/files/document/gcf-climate-information-early-warning-systems-sectoral-guide-consultation-version-1.pdf> (last accessed: 05.01.2024).

¹⁹ GCF (2023), *Strategic Plan for the Green Climate Fund, 2024-2027*: <https://www.greenclimate.fund/sites/default/files/document/strategic-plan-gcf-2024-2027.pdf> (last accessed: 05.01.2024).

Action Plans (LAAPs) (Sub-Activity 3.2.1.1), will serve to reduce the risk exposure and/or build the climate resilience of stakeholders independently of their interactions with the early warning system.

Selected Risk Factor 7

Category	Probability	Impact
Technical and operational	Low	Medium

Description

Insufficient quality and/or availability of data from the country's observational network may undermine the accuracy and usefulness of climate information services reliant on this data.

Mitigation Measure(s)

Insufficient data quality and availability have been identified as one of the key barriers for effective use of climate information by the project. In fact, the majority – and occasionally all – of IGEO's automatic meteorological stations currently do not transmit data, and 70% of the manual stations are in need of recalibration or repair. Only 10 years of meteorological data, and 20 years of hydrological data, has been digitised. The draft Country Hydromet Diagnostics Report – developed using the WMO Country Hydromet Diagnostics (CHD) tool by an NMHS peer, the Swiss Federal Office of Meteorology and Climatology (MeteoSwiss) – provides further details on the specific factors contributing to this situation (see Annex 2i).

The project directly addresses this risk by: (i) modernizing the country's observational network; (ii) supporting the database management system; and (iii) enhancing the quality control of station data.

Modernization of the observational network: The project will support the development of a network concept following the WMO Rolling Review of Requirements approach (RRR process; e.g. for network resolution, observation cycles, variables, data exchange, etc.).²⁰ In addition, approximately 35 automatic weather stations and 60 hydrological stations will subsequently be installed to implement the newly established network concept. In the preparation of the procurement process for these stations, the project will ensure that the technical specifications comply with WMO standards and regulations (e.g. requirements from the WMO Integrated Global Observing System (WIGOS) / the Global Basic Observing Network (GBON)).²¹

Database management system: Station data will be transmitted to a database system, where it is structured and stored in a data warehouse compliant with WMO standards.²² The Meteorological, Climatological and Hydrological Database Management System (MCH-DMS) that IGEO has recently started to use respects international standards, is open-source (hence preventing vendor lock-in) and has an active, worldwide online user community.²³ It can also be used as a data repository, using a standardised format, for the decades-worth of observational records that are currently stored on paper. The project will provide technical and capacity building support to ensure the MCH-DBS is maintained by the NMHS and will assist the NMHS to digitise and homogenize its paper-based archive. The latter is particularly important to improve the accuracy and usefulness of medium- to long-term climate services (as opposed to short-term predictions)²⁴, including by private sector providers in the context of the NFCS.²⁵

Quality control of station data: In order to ensure a clean and reliable data basis from all stations in the observational network and thereby assure high quality of the NMHS's services overall, the project will support the NMHS in the implementation of homogenization processes and quality control methods using software solutions. This support will

²⁰ WMO (2023), The Rolling Review of Requirements process (2023 update):

<https://community.wmo.int/en/rolling-review-requirements-process-2023-version>

²¹ WMO (2023), *Manual on the WMO Integrated Global Observing System*:

https://library.wmo.int/viewer/55063?medianame=1160_en_#page=1&viewer=picture&o=bookmark&n=0&q=

²² WMO (2019), *Manual on the High-Quality Global Data Management Framework for Climate*:

https://library.wmo.int/viewer/57727/download?file=1269_en.pdf&type=pdf&navigator=1

²³ WMO (2018), 'MCH Database Management System', *WMO Bulletin*, 67: https://reliefweb.int/attachments/ab60da31-15bf-390c-a563-046a37519a3d/WMO_Bulletin_67%281%29_en.pdf

²⁴ Wilkinson, C. et al (2019), *Best Practice Guidelines for Climate Data Rescue*, Copernicus Climate Change Service:

http://www.c3.urv.cat/docs/publicacions/2019/Deliverable_BestPracticeGuidelines_Part1.pdf

²⁵ Oui, J. (2022), 'Commodifying a 'good' weather data: commercial meteorology, low-cost stations and the global scientific infrastructure', *Science, Technology and Human Values*, 47:

<https://journals.sagepub.com/doi/pdf/10.1177/0162243921995889?download=true>

be in line with WMO's guidance for quality control and quality assurance^{26,27} as well as for the implementation of broader quality management systems²⁸, and will take into account emerging good practices from peer NMHSs in the region.²⁹ Technical quality control solutions will be augmented by the rationalised institutional set-up (clear roles and responsibilities with legal underpinning) and strengthened capacities of the institutions involved in the NMHS and MHEWS, which will also serve to improve data ownership, quality and flows.

2. AML/CFT* and Prohibited Practices compliance due diligence assessment (max. 1 page)

Category	Probability**	Impact***
ML/TF	Low	LOW (<5% OF PROJECT VALUE)
Sanctions	Low	LOW (<5% OF PROJECT VALUE)
Reputational	Low	LOW (<5% OF PROJECT VALUE)
Prohibited Practices	Low	MEDIUM (5.1-20% OF PROJECT VALUE)

*Anti-Money Laundering/Countering the Financing of Terrorism

**H: High (has significant probability), M: Medium (has moderate probability), L: Low (has negligible probability)

*** H: High (has significant impact), M: Medium (has moderate impact), L: Low (has negligible impact)

¹ Money Laundering/Terrorist Financing

² Sanction prohibitions of the United Nations, or other relevant sanctioning authorities (including the World Bank Debarred List)

³ In the context of Money Laundering/Terrorist Financing and Prohibited Practices

⁴ Abuse, Conflict of Interest, Corrupt, Retaliation against Whistleblowers or Witnesses, as well as Fraudulent, Coercive, Collusive, and Obstructive Practices

ML/TF

ML/TF risk is considered to be Low. NCPA is a public sector, not-for-profit entity and its activities are relatively straightforward. NCPA produces annual financial statements. Under Law no. 8270 (1997), the High State Control is responsible for the audit of all units in the Albanian public administration, including NCPA. There is no suggestion of NCPA involvement in money laundering or terrorist financing. The Enhanced Due Diligence report on NCPA commissioned during project preparation finds that "clear, accessible policies and training activities are in place concerning anti-fraud measures and the prevention of money laundering and financing of terrorism."

Sanctions

Sanctions risk is considered to be Low. Neither NCPA nor the government of Albania is subject to UN sanctions or is on the World Bank Debarred List. None of the project activities will be undertaken in any jurisdiction which is subject to or affected by United Nations Security Council (UNSC) Resolutions. No individual or entity that is listed on any UN sanctions list will be involved in any manner with the project or its activities, either as a counterpart, executing entity, implementation partner or beneficiary.

Reputation

Reputational risk is considered to be Low. The project is closely aligned with, and supportive, of government policies and strategies, including the NDC and NAP. The two Executing Entities are NCPA and GIZ: NCPA is a public sector institution with a legal mandate and a proven track-record of implementing donor-funded projects. NCPA is not subject to any ongoing legal disputes or proceedings. As a public entity, NCPA is required to respect Law 90/2012 on the Organisation and Functioning of the State Administration, as well as the Manual on Implementation of Civil Service and Human Resources (HR) Management Legislation. NCPA has also produced internal regulations which reflect these requirements; these are circulated to all new staff upon joining the Agency, and are also available on the intranet. Employees are obliged to acknowledge and abide by the rules of conduct defined in the relevant law for civil servants, and are informed in writing that they must avoid any action or behaviour which may damage their reputation or, by association, that of NCPA.

²⁶ WMO (2021), *Guidelines on Surface Station Data Quality Control and Quality Assurance for Climate Applications*: https://library.wmo.int/viewer/57727/download?file=1269_en.pdf&type=pdf&navigator=1

²⁷ WMO (2021), *WMO Unified Policy for the International Exchange of Earth System Data, GBON and SOFF*: https://wmoomm.sharepoint.com/:p/s/wmocpdb/Edijmvdv3fNMoJVePmSO57gBNQbHj3DS_LunhG03OPN3gg?rttime=s_ELqrRl3Eg

²⁸ WMO (2017), *Guide for the Implementation of Quality Management Systems for NMHSs and Other Relevant Service Providers*: https://library.wmo.int/viewer/50552/download?file=1100_en.pdf&type=pdf&navigator=1

²⁹ ECMWF (2019), *WIGOS Data Quality Monitoring System at ECMWF*, ECMWF Technical Memo 850: <https://www.ecmwf.int/sites/default/files/elibrary/2019/19133-wigos-data-quality-monitoring-system-ecmwf.pdf>

Prohibited Practices

Prohibited practices risk is considered to be Low.

- Abuse: NCPA staff conduct is set out in the internal guidelines issued to all staff when they join the Agency, primarily the 'Working Methods and Code of Conduct' issued in 2021; rules are also set out in Law no. 9131 (2003), on ethics in public administration.
- Conflict of Interest: NCPA has a code of conduct which all staff have to read when they commence employment with the Agency; in their first year, all staff also undergo civil servant training in which these integrity rules are repeatedly referred to. Through their induction and the training offered, staff are made aware of key legislation, such as Law 9367 on the prevention of conflicts of interest and Law 9917 on the prevention of money laundering and financing of terrorism, and have to declare that they have read and understood these. All employees also have to complete a form confirming that they do not have any conflicts of interest, while senior staff are inspected by the High Inspectorate of Declaration and Audit of Assets on an annual basis.
- Corruption: NCPA has a strategic annual audit plan and an annual audit plan, both of which have been approved by the NCPA General Director and the Ministry of Finance and Economy. Under Law no. 8270 (1997), the High State Control is responsible for the audit of all units in the Albanian public administration, including NCPA. To date, one external audit of NCPA has taken place, covering the period from 1 September 2020 to 10 December 2021. As a government agency, NCPA is obliged to respect Law 162 (2020) on public procurement. Applicable procurement regulations are summarised in an Order issued by the Ministry of Defence on 4 April 2022. NCPA can form committees for evaluation of bids, and the approval of small purchases (up to ALL 1 million). The procurement department designs an annual procurement register and sends this to the Albanian Procurement Authority (APP), the central government authority for procurement, by 10 January each year. The department requesting a specific procurement prepares technical specifications and sends these to the procurement department, which prepares the selection criteria and performs market research, collecting at least three offers in order to establish the maximum value of the request. Once they have received approval from the General Director, they send the documentation to the APP, which opens a public call for tenders for ten days. After this, the APP allows the procurement department to evaluate the bids received. The lowest-value technically compliant bid is chosen, and, within 24 hours, the winning company has to submit required documents to NCPA. Once these are received and approved, the contract is signed.
- Retaliation Against Whistle-Blowers or Witnesses: Law 60/2016 concerns reporting by, and protection of, whistleblowers. In line with this law, the NCPA General Director has set up a unit responsible for dealing with any allegations of fraud or malpractice. All staff are aware of the existence of this unit and the channels available for whistleblowing. Complaints and allegations of impropriety, wrong-doing or other related issues in the project will be managed following GIZ's Compliance Management System (CMS)³⁰. GIZ's CMS is based on Standard 980 issued by the German Institute of Public Auditors (IDW PS 980) and the international management standard ISO 37301. The CMS includes a code of ethics³¹, annual compliance reporting³² an anti-corruption policy³³, and a whistleblowing procedure³⁴. GIZ's whistle-blowing procedures include an anonymous entry channel for information on serious violations of GIZ's internal principles of conduct, internal rules as well as applicable laws (e.g. related to corruption and bribery, embezzlement, fraud, misappropriation, conflicts of interest, sexual misconduct and sexual exploitation, and violation of human rights).

3. Other potential risks on the horizon

The designs (institutional architecture, mandates, functions, services, etc.) of the NMHS and the MHEWS will be decided by project stakeholders at an early stage of project implementation. A number of technical studies on these issues have been undertaken in recent years – including by WMO, the World Bank, the Austrian Meteorological Service (ZAMG) and, most recently, the Swiss Federal Office for Meteorology and Climatology (MeteoSwiss)³⁵ – and the design options are well understood. Furthermore, there has been considerable stakeholder dialogue on these issues – with government institutions, the private sector, civil society, NGOs and academia – during project preparation. The different options present different advantages and disadvantages, as well as different implementation challenges. The project will adapt its assistance – capacity building, technical assistance, emphases on particular institutions, etc. – as the

³⁰ <https://www.giz.de/en/aboutgiz/8180.html> (last accessed: 05.01.2024).

³¹ <https://www.giz.de/en/downloads/Code%20of%20ethics.pdf> (last accessed: 05.01.2024).

³² For example, the 2022 GIZ Annual Compliance Report is available at the following link: <https://www.giz.de/en/downloads/giz2023-en-annual-compliance-report-2022.pdf> (last accessed: 05.01.2024).

³³ <https://www.giz.de/en/downloads/giz2020-en-giz-anticorruption-policy.pdf> (last accessed: 05.01.2024).

³⁴ <https://www.bkms-system.com/bkwebanon/report/clientInfo?cin=26ziq7&c=-1&language=eng> (last accessed: 05.01.2024).

³⁵ The MeteoSwiss report was developed as part of the ALBAAdapt project preparation process.

designs are selected by the national stakeholders. The project will also provide assistance during the design selection discussions to ensure that stakeholders have full information at their disposal, are aware of how other countries in the region organise their hydro-met and early warning systems, and are aware of best-practice guidelines (e.g. from WMO).