

Report of the **NATIONAL ENDORSEMENT WORKSHOP** on the National Framework for

Climate Services in the **REPUBLIC OF MOLDOVA**

Chisinau, 6 December 2018



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Zoï Environment Network, February 2019

Background

The Republic of Moldova is receiving support from the World Bank for the development of a National Framework for Climate Services (NFCS), which is aimed at strengthening the production, delivery and effective use of hydrometeorological and climate-related information. Partners supporting this process are the Global Framework for Climate Services (GFCS) Office, the Global Facility for Disaster Reduction and Recovery, and the World Meteorological Organization (WMO). Zoï Environment Network, a Switzerland-based international non-profit organisation specializing in environmental information, communication and capacity-building, provides hands-on support. The work is being carried out in close cooperation with Moldova's State Hydrometeorological Service (SHS) and the Ministry of Agriculture, Rural Development and the Environment.

The consultation workshop to discuss the initial outline of the NFCS in Moldova was held in Chisinau from 26 to 27 June 2018. The main objective of the meeting was to bring together the producers and users of climate information in Moldova with international organisations and experts to discuss climate services. Based on the survey of users and producers of climate information in the first half of 2018 and the feedback of the consultation workshop's participants, a concept of the NFCS was developed for Moldova, along with a draft action plan to implement it.

The NFCS concept and the action plan were presented to key NFCS stakeholders during the one-day NFCS endorsement workshop on 6 December 2018. The objectives of the workshop were to discuss the NFCS Concept and the measures proposed in the action plan, help prioritise them, and obtain specific stakeholder feedback as well as inputs for additional measures that could be included in the framework. An additional objective was to further share the experiences, perspectives and inspiration from developing climate services both globally (as seen by the World Meteorological Organization) and nationally (among others, the experience of Switzerland was presented).

The workshop consisted of a half-day plenary segment and work in breakout groups, the results of which, as well as next steps for NFCS implementation, were summarised and discussed at the end of the day. More than 50 participants took part in the event (see annex 1), representing both the users and the producers of climate information among national, local and regional authorities (including the autonomous territorial unit of Gagauzia and the Transnistrian region), NGOs, academia, research and business. The agenda of the endorsement workshop is included in annex 2.

Workshop content and summary of the discussion

The workshop opened with welcomes from the SHS and the WMO. Participants presented themselves and their organisations during a tour-de-table. The first session was dedicated to the latest trends in implementing the Global Framework for Climate Services worldwide (presented by the WMO) and Moldova’s perspective, shared by the SHS. The next plenary session contained national-scale case studies on the modalities of implementing climate services. The first was the experience and the activities of Switzerland’s National Centre for Climate Services. The second case study, by the private Austrian company, Pessl Instruments GmbH, presented the experience of financing meteor-

ological information and analysis by agricultural producers in Moldova.

The afternoon was dedicated to work in three moderated breakout groups that reviewed elements of the draft NFCS Action Plan. All the groups found that the proposed Action Plan priorities, the specific measures and their cost estimates were relevant. None of the measures were seen as redundant. Participants expressed their views on relative importance, and suggested additional measures that could be included to achieve NFCS objectives. The discussions in breakout groups are summarised below.

Priority area 1. BRINGING IN THE USERS



Regular dialogue is required both with the general public and with professional users from different sectors (e.g. agriculture, road infrastructure, etc.). The general public can be engaged through publicity (see also Priority area 5), more “attractive” meteorological forecast services, and promotion and education on TV, at schools and elsewhere.

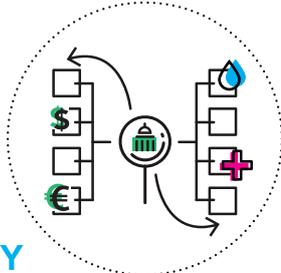
Information should be provided using modern means of communication such as mobile applications and on-line tools (websites, social media). Generally the SHS can be seen not only as the national-level integrator of processes for providing climate services, but also as a “one-stop” portal where users can access all the information produced in the country and links to foreign data and services.

Part of delivering quality services for the sectors entails involving the respective sectoral specialists who can help identify sector-specific

needs, review information products and provide comments and proposals for their improvement. Participants also proposed the creation of a database or directory of experts in the field of climate information services from whom information, technical assistance and guidance can be requested as needed.

Distinctions between services provided for free versus those provided for a payment should be clear, and users should understand the cost of the services. Regular reviews of the costing of climate information services were suggested.

Priority area 2. SHAPING GOVERNANCE & SUSTAINABILITY



Developing an NFCS coordination mechanism where all relevant stakeholders can be part of the process is very important. Depending on

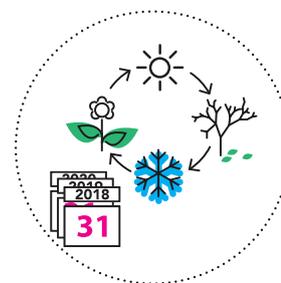
each stakeholder's role, different engagement techniques can be applied, from consultations to working groups and cooperation based on agreements with the SHS. Exchanges of experience with climate service frameworks in other countries can contribute ideas for the continued NFCS development and implementation in Moldova.

The coordination mechanism should be institutionalised, and include a clear division of tasks and responsibilities for service delivery. Work should start with renewing the legal basis: the existing Law on Hydrometeorological Activities is quite outdated. All the relevant legislation should properly reflect the actors involved (SHS, Hail Control and other services); define the rights and responsibilities of stakeholders; and clearly stipulate NFCS-related procedures and responsibilities (e.g., producers' responsibility for the quality and the timeliness of information and its delivery). Revising or updating the legal framework for exchanging data with the Transnistrian region may also be necessary. The SHS can initiate the legislation revision process by forming and facilitating an interagency and intersectoral working group, while relying on political support and leadership from the Ministry of Agriculture, Rural Development and Environment.

The SHS should become an "integrator" of all national-level processes with respect to managing climate-related information. This would require support for SHS institutional development, the improvement of its internal processes, and interagency cooperation in information management. Internationally available resources should be used to improve SHS capacities and services, such as WMO training centres and training programmes for specialists or WMO regional centres with modern modelling and forecast capabilities.

A strategic approach is needed to ensure the financial sustainability of the NFCS, and a long-term strategy is needed regarding both state and external financing. As a state service the SHS is not in a position to develop a business plan for its own operations, and a revised legal basis would be needed to allow the SHS to provide commercial services to ensure sufficient income. Possibilities of external funding for developing services and establishing data flows are to be explored (including international funding such as the Green Climate Fund). These possibilities can be pursued in partnership with other stakeholders.

Priority area **3.** **PROVIDING SEAMLESS SERVICES**



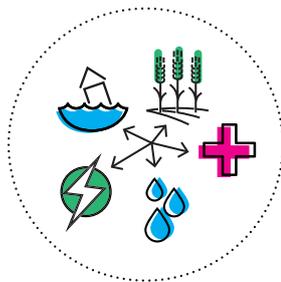
Understanding what users need is critical: quite possibly the producers of information do not make the required and expected products but may be unaware of that. Improving feedback will ensure that the information produced corresponds to needs, and is delivered on time and through effective communications channels. Mechanisms also need to be established to strengthen dialogue among the various producers of climate services in order to benefit from their complementarity (see also Priority area 1).

Climate information for the general public should be clear, simple and concise – this is key to success. Derived from climate data, more popular products such as WMO's global Atlas of Health and Climate could be nationally adapted and replicated in Moldova.

More spatially detailed hydrometeorological information would require a denser ground network, resources for which are insufficient. Participants proposed establishing an electronic register and an interactive map of all weather stations operating in Moldova, and legally ensuring that the data produced are provided to the National Fund of Hydrometeorological Data managed by the SHS. Ensuring data compatibility may also require state certification of weather stations operated outside of the SHS network. Fully closing regional gaps in observation networks (such as in the Transnistrian region) may still be difficult for political reasons. Issues remain with the lack of electronic archiving of past observation data, so far fully addressed only in the Transnistrian region.

The lack of qualified personnel is one of the main obstacles for the development of climate services in Moldova, and new approaches are needed to attract and retain specialists. To ensure sustainability, however, the problem and its possible solutions must be discussed and addressed at the governmental level. Exchanges with foreign institutions are strong motivation, but may result in people remaining abroad. To overcome this prospect, longer-term contracts may be promoted with an obligation to return and spend a certain amount of time at the parent institution.

Priority area **4.**
**ADDRESSING
PRIORITY
SECTORS**



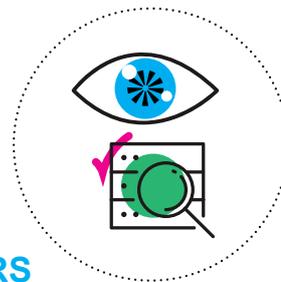
In addition to key NFCS sectors the relevance of which was reconfirmed earlier, forestry, protected areas, and the construction and building industry are among those for which climate information is strongly needed. The alternative energy sector is another potential user of such information.

Climate insurance (or insurance against natural disasters) has the potential for development, too. Judging by international experience, while domestic insurance companies often do not cover climate risks due to high risks from the lack of geographic diversification, multinational companies may be interested in entering national markets.

Climate-proofing in building and construction should become a legal obligation.

Guidelines are also needed for how climate information can be incorporated in development planning.

Priority area **5.**
**ENSURING
VISIBILITY TO
DECISION MAKERS**



Broadly promoting the notion that better use of climate and hydrometeorological information is beneficial for Moldova, and that the SHS is willing to share such information is important, as is promoting and marketing climate information services so that people understand the significance of this work. All means of communication (TV, radio, social media etc.) should be used to bring messages to users. Direct work with the population is important, too: regional or local information centres can be established in selected districts to bring information closer to users.

Legal and budgetary changes (cf. Priority area 2) are key to NFCS implementation, and properly informing decision makers and policymakers in the Government, Parliament and the regional and local authorities is a main priority in implementing the Action Plan. Best practices from the WMO and its network applied through attractive TV programmes, weather forecasts and other means can ensure NFCS visibility to decision makers.

The SHS should dedicate personnel, such as a press secretary to deal with external communications and media relations, to work on visibility on a permanent basis. The time has come to revise the legal basis of SHS work to incorporate such changes (see Priority area 2).

The way forward

The following consolidates the statements and findings from the breakout groups and plenary discussions, indicating the way forward for implementing the NFCS Concept and Action Plan.

- The meeting confirmed the commitment of key institutional stakeholders in Moldova to improving the provision, access to, and use of climate and hydrometeorological information through the introduction of a National Framework for Climate Services, as was suggested in the NFCS Concept presented.
- Stakeholders see the SHS as the central pillar and “integrator” of NFCS implementation in Moldova, working in close cooperation with other organisations providing climate information services, as well as ensuring broad and continuous engagement of and dialogue with the users of information.
- Legal and budgetary changes have been suggested to facilitate a better enabling environment for NFCS implementation, which includes the revision of the currently in force Law on Hydrometeorological Activities and the development of a long-term NFCS funding strategy making use of both nationally and internationally available financial and other resources.
- Stakeholders expect Moldova’s authorities, the World Bank, the WMO, other international organisations and bilateral donors to support and help facilitate the implementation of the NFCS in the Republic of Moldova.
- The meeting endorsed the proposed NFCS Action Plan in principle and suggested additions, corrections and clarifications, which are reflected in the revised Plan (annex 4).

Workshop evaluation by participants

Participants highly appreciated the workshop: 52% considered it “very useful” and 48% “useful”. Participants rated many plenary presentations and work in groups highly, with the event overall on the average rated 3.5 on the scale from 1 to 4 (annex 3).

In their feedback the participants commented that:

- it is important to involve both state and private actors in such processes, and the involvement of many stakeholders was a strong point of the NFCS Moldova process. This area has potential for developing public-private partnerships;
- for future events it may be good to use a sector-specific approach, as it can be difficult to follow other sectors’ needs and information issues without understanding specific sectoral details;
- working in groups was very effective, and such methods should continue to be used in the future as opposed to presentation-only workshops;
- dividing the measures into short- and long-term ones has helped identify priorities at different time intervals;
- the workshop has helped obtain a clear understanding of remaining gaps in Moldova’s climate information; and
- a positive atmosphere, good organization and useful information were the meeting’s strong points.

ANNEX 1

List of participants

Name, Surname	Organization
Ion Curagău	Ministry of Defence
Vitalie Cozmolici	Ministry of Internal Affairs
Olga Ceban	Ministry of Economy and Infrastructure
Violeta Bălan	State Hydrometeorological Service
Lidia Treșcilo	State Hydrometeorological Service
Tatiana Dabija	State Hydrometeorological Service
Tatiana Bugaeva	State Hydrometeorological Service
Tatiana Mironova	State Hydrometeorological Service
Tatiana Utina	State Hydrometeorological Service
Valeriu Cazac	State Hydrometeorological Service
Maria Alii	State Hydrometeorological Service
Aliona Isac	State Hydrometeorological Service
Cristina Movileanu	State Hydrometeorological Service
Dan Titov	State Hydrometeorological Service
Vitalie Mutaf	General Inspectorate for Emergency Situations
Sergiu Junea	General Inspectorate for Emergency Situations
Gherman Bejenaru	National Agency Moldova Waters
Valeriu Caisin	Moldsilva Agency
Victoria Popova	Hail Control Service
Sima Plamadeala	Ecological Inspectorate
Sergiu Căpățînă	State Enterprise "Administration for Roads"
Anatolie Gavrilciuc	State Enterprise "Costesti Stinca"
Roman Cotoman	Giurgulesti Port Authority
Ala Druța	Climate Change Office
Stela Drucioc	Carbon Office
Andrei Cucos	Carbon Office
Petru Lozovanu	Moldova State University
Cătălina Croitoru	Medical University
Valeriu Ivanov	Polytechnical University
Ion Mironov	Tiraspol State University
Marina Lungu	Institute of Pedology, Agrochemistry and Plant Protection
Eugeniu Revenco	NGO ACSA
Ivan Guci	Association of the hazelnut producers of the Republic of Moldova
Rebeca Mociu	Association of the hazelnut producers of the Republic of Moldova
Sergiu Smocinschi	Pessl Instruments
Lucia Capatina	Consulting Aqua Group SRL

Aliona Ursu	MoldATSA
Iordanca-Rodica Iordanov	EcoContact NGO
Ala Bragoi	Agency for regional development, Centre
Ana Ciolac	Gagauzia Autonomous Territorial Unit administration
Vera Litvin	Gagauzia Autonomous Territorial Unit administration
Irina Tucan	Gagauzia Autonomous Territorial Unit administration
Boris Gherman	Dubosari hydro-electric power station
Vitalii Kolivenko	Tiraspol Hydrometeorological Centre
Alexandr Khonitsky	Transnistrian Region administration
Maria Tarigradean	European Environment Agency
Angela Michiko Hama	Swiss Federal Office for Meteorology and Climatology (MeteoSwiss)
Milan Dacic	World Meteorological Organization
Natalia Berghi	World Meteorological Organization
Mihail Tcaciuc	OSCE, Moldova mission
Nadejda Mazur	OSCE – GEF, Dniester project
Tudor Robu	UN FAO Moldova
Nickolai Denisov	Zoï Environment Network
Ecaterina Melnicenco	Zoï Environment Network

ANNEX 2

Workshop agenda

Moldova's National Framework for Climate Services

Endorsement workshop for the NFCS Concept and Action Plan
Chisinau, 6 December 2018

9:30 Registration and welcome.

10:00 Opening and introduction

Welcome (*Ministry of Agriculture, Regional Development and the Environment, State Hydro-meteorological Service, World Bank, World Meteorological Organization*)

Introduction of participants (tour-de-table, news, insights since the consultation workshop in June 2018)

11:00 Whatsapp in Moldova and worldwide

Latest trends in the GFCS field (*WMO*)

Recent developments and prospects in Moldova's hydrometeorology (*SHS*)

11:30 *Press conference*

Coffee, tea

12:00 Financing and implementation of climate services: Case studies

State financing: Introduction and management of climate services in Switzerland (*Swiss National Centre for Climate Services*)

Private financing: Microclimate monitoring with meteorological stations from Pessl Instruments GmbH (*Sergiu Smocinschi, Product Manager, Pessl Instruments GmbH*)

Discussion

13:00 *Lunch*

14:00 NFCS Concept and Action Plan for Moldova

Moldova's National Framework for Climate Services and its implementation (*Zoi Environment Network, SHS*)

Brainstorming and discussion of key elements and actions in breakout groups

16:00 *Coffee, tea*

16:30 Stocktaking and conclusions

Reporting from breakout groups. Reflections and next steps (*SHS, Zoi, WMO, World Bank*)

ANNEX 3

Summary of participants' feedback

	Average score	Number of responses		
		Not very good / useful = 2	Good / useful = 3	Very good / useful = 4
Global framework for climate services: latest trends	3.2	9	65	26
Trends and perspectives for developing hydrometeorological services in the Republic of Moldova	3.2	4	74	22
Swiss National Centre for Climate Services	3.4	4	57	39
Microclimate monitoring with support of meteorological stations	2.9	26	57	17
Concept of NCFS and draft Action Plan for Moldova	3.2	4	70	26
Work in groups	3.5	0	52	48
Presentation of WG group results	3.5	4	43	52
Logistics of the event	3.6	0	39	61
Overall evaluation of the event	3.5	0	48	52

ANNEX 4

NFCS Action Plan modified based on workshop discussions¹

ACTIONS	Cost ²	Time frame, years		Funding sources		
		1–2	3–5	SHS	Other domestic	International
1. BRINGING IN THE USERS						
1.1 Arrange regular meetings or round-tables with users with sectorally focused rolling agenda	€	•	•	•		
1.2 Establish a directory of experts in the field of climate information services and their areas of competence for addressing user inquiries	€	•		•		
1.3 Carry out systematic surveys and focus groups to assess user demand and feedback	€	•	•	•		
1.4 Integrate user feedback management in SHS (and other NFCS partners') websites	€	•		•		•
1.5 Further modernise web and one-stop portal services, and de-velop new communication channels (sms or push messages, mobile phone applications etc.)	€€		•	•	•	•
1.6 Provide online and regularly review transparent information about cost and access rules for data and services	€	•		•	•	
1.7 Build users' capacities to understand climate and hydrometeorological information (i.a. use TV, other media, publicity, improved presentation of forecasts, education)	€€		•	•		•
2. SHAPING GOVERNANCE AND SUSTAINABILITY						
2.1 Discuss NFCS institutional arrangements and responsibilities as part of user dialogue	€	•		•		
2.2 Evaluate options for NFCS steering and coordination mechanisms, i.a. evaluating and using existing experience from other countries	€	•		•		•
2.3 Evaluate solutions for institutionalising NFCS (revised laws, cabinet and MARDE orders etc.)	€	•		•		

Substantive additions and changes in the draft Action Plan based on discussions in the workshop are marked with green color
 € – low budget requirements, €€ – moderate to significant budget requirements

ACTIONS	Cost ²	Time frame, years		Funding sources		
		1–2	3–5	SHS	Other domestic	International
2. SHAPING GOVERNANCE AND SUSTAINABILITY						
2.4 Provide support to drafting NFCS-related legislation and inputs to other relevant documents (i.a. via an interagency and intersectoral working group)	€€	•	•	•		•
2.5 Develop sustainable NFCS – SHS financial sustainability model and a long-term strategy for its implementation	€€	•		•		•
3. PROVIDING SEAMLESS SERVICES						
3.1 Evaluate user satisfaction with current climate services and develop new product and service ideas at different time and spatial scales	€	•	•	•		
3.3 Modernise and develop forecasting capacities and technologies of SHS and other NFCS partners	€€		•			•
3.3 Close gaps in regional observation networks (e. g. in the Trans-nistrian region)	€€		•			•
3.4 Develop arrangements for integration and inter-operability of, and data exchange with, various existing observation networks (common e-register and e-map, agreements, licensing)	€	•	•	•	•	•
3.5 Ensure full electronic archiving of past observation data	€€	•		•	•	•
3.6 Develop popular climate-information products for the general public (cf. WMO Atlas of Health and Climate)	€	•	•	•		•
3.7 Restore university-level hydrometeorological and climate education in Moldova and foreign exchange for young professionals	€€		•	•	•	•
4. ADDRESSING PRIORITY SECTORS						
4.1 Agree on priority sectors and information services (products) to be developed for them	€	•		•		
4.2 For a few selected NFCS sectors, develop integrated solutions climate services across the value chain and the range of providers	€€	•	•	•	•	•

Substantive additions and changes in the draft Action Plan based on discussions in the workshop are marked with green color
 € – low budget requirements, €€ – moderate to significant budget requirements

ACTIONS	Cost ²	Time frame, years		Funding sources		
		1–2	3–5	SHS	Other domestic	International
4. ADDRESSING PRIORITY SECTORS						
4.3 Investigate new longer-term service opportunities and needs for revised legislation with climate and natural disaster insurance, climate-proofing of new construction etc.	€€		•	•	•	•
4.4 Develop guidelines for incorporating climate information and perspectives into sectoral and regional development planning	€	•			•	•
5. ENSURING VISIBILITY TO DECISION MAKERS						
5.1 Collect, study and communicate to policymakers economic and non-economic benefits of the NFCS and its set-up	€€	•		•		•
5.2 Continue systematic dialogue and targeted cooperation with mass (and other) media	€	•	•	•		
5.3 Develop and institutionalise SHS (and other NFCS partners') capacities for media and public relations	€€	•			•	
5.4 Study the best communication and public relations strategies and techniques from the WMO and its member countries	€	•	•	•	•	•
5.5 Establish local climate information centres and facilities in se-lected interested regions of Moldova	€€		•	•	•	•
5.6 Develop and implement a comprehensive NFCS communication strategy for different target audiences and communication channels	€€	•	•	•	•	•

Substantive additions and changes in the draft Action Plan based on discussions in the workshop are marked with green color
 € – low budget requirements, €€ – moderate to significant budget requirements

