Environment and Climate Regional Accession Network (ECRAN)

Support to the Identification of Adaptation Options (Working Group 4 on ECRAN Climate Adaptation) – Sub Tasks 4.1 b and 4.2

August 2014
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Support to Identification of Adaptation Options
Sub-Tasks 4.1b and 4.2
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I. Introduction

General

Today, all countries recognise the reality and the challenges caused by global warming and its effects. Two subsequent World Bank ‘Turn Down the Heat’ Reports\(^1\) confirm climate change as a fundamental threat to development.

Many countries are already affected by climate change including the Western Balkans and Turkey. These countries are considered to be highly vulnerable and expected to experience the effects of rising temperatures and disruption to their precipitation regimes, along with more extreme events, including droughts, floods, heat waves, windstorms and forest fires. Water availability will be affected, energy supply disturbed, food production will come under pressure and food prices will rise while biodiversity will decline.

This makes it a must to manoeuvre economic, environmental and social interests and costs to safe havens through adaptation measures. Adaptation means anticipating the adverse effects of climate change and taking the appropriate action in order to prevent or minimise the damage they can cause, or taking advantage of opportunities that may arise. Identification of vulnerabilities and risks is at the forefront of adaptation action.

Climate Change vulnerability

There are different ways in which vulnerability and risk can be defined and analysed. Vulnerability is often defined as a function of the character, magnitude, and rate of climate variation and change to which a system is exposed, together with its sensitivity and adaptive capacity. Humans can e.g. increase their vulnerability by urbanisation of coastal flood plains, by deforestation of hill slopes or by constructing buildings in risk-prone areas.

In the framework of the UNFCCC seven criteria are distinguished to identify key vulnerabilities:

- magnitude of impacts;
- timing of impacts;
- persistence and reversibility of impacts;
- likelihood (estimates of uncertainty) of impacts and vulnerabilities and confidence in those estimates;
- potential for adaptation;
- distributional aspects of impacts and vulnerabilities;
- importance of the system(s) at risk.

Key vulnerabilities are associated with many climate-sensitive systems, including food supply, infrastructure, health, water resources, coastal systems, ecosystems, global biogeochemical cycles, ice sheets and modes of oceanic and atmospheric circulation.

The National Communications to the UNFCCC of the ECRAN beneficiaries (Albania, Bosnia & Herzegovina, Croatia, former Yugoslav Republic of Macedonia, Kosovo\(^2\), Serbia, and Turkey) have identified the sectors in the Western Balkans and Turkey that are most vulnerable to climate change,

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\(^1\) From November 2012 and June 2013

\(^2\) This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ opinion on the Kosovo declaration of independence
these being water resources, biological diversity, agriculture, forestry, tourism, cultural heritage and human health.

Measures have been proposed for their vulnerability mitigation. However, the key to adaptation to climate change is the integration of the issue of climate change in the relevant sectoral strategic, planning and programme documents both on national and regional levels.

The EU’s Adaptation Strategy provides a framework for a more climate-resilient Europe by enhancing the preparedness and capacity to respond to the impacts of climate change at local, regional, national and EU levels. The Strategy consists of three priorities\(^3\): (1) Promoting action, (2) Informed Decision making and (3) Climate proofing action.

Proper information about climate vulnerabilities is an important starting point for any form of adaptation action. Detailed understanding of vulnerable areas brings focus to the adaptation priorities and the tools to be used.

An important development is the EU’s new 2014 Civil Protection Mechanism that, in legally binding terms, on top of the already existing Disaster Risk Management (DRM) initiatives such as risk assessments and risk management, also encompasses prevention and preparedness articles thus going beyond disaster response and recovery, establishing ‘adaptation mainstreaming’.

**ECRAN Support**

Within its Climate Component, ECRAN will promote ‘climate-proofing’ action by further encouraging adaptation in key vulnerable sectors ensuring that the infrastructure is made more resilient, and will support better informed decision-making by addressing gaps in knowledge about adaptation. ECRAN will address adaptation action by coordinating adaptation activities with the European Climate Adaptation Platform (Climate-ADAPT) as the ‘one-stop shop’ for adaptation information in Europe.

In September 2014 the ECRAN Climate Coordinators have been requested to nominate **NATIONAL ECRAN ADAPTATION TEAMS** which with the assistance of EU Member States experts will together go through the following four subsequent phases:

- Climate Adapt tool – Prioritisation of Adaptation Needs
- Identification of Adaptation Options
- Prioritisation of Adaptation Options
- Policy and Legal Changes

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II. ECRAN First Regional Conference on Adaptation – July 2014

Summary of Adaptation clinics programme of the Conference

At the ECRAN Conference held in Skopje on 2 and 3 July 2014 clinics were organised covering the following policy areas: Agriculture, Disaster Risk Management, Urban Areas, Water Management, and Energy. The focus of the clinics was basically on the ECRAN countries. On the basis of the observations, conclusions and recommendations of the Clinics Programme, a ‘Vulnerability Assessment and Adaptation Planning’ workshops and training programme (see below) has been prepared that will support the development of technical adaptation expertise in the Beneficiary Countries in the fields of Water Management, Urban Areas and Energy and help the countries to step-by-step develop their climate adaptation planning.

The main observations from the Conference in the selected fields are reflected below.

**Water management** is one of the key areas when addressing climate change and its effects. As a highly determining factor in most climatological situations its proper management in changing circumstances is one of the utmost challenges faced by humanity.

**Water Management Clinic – conclusions and recommendations**

Conclusions related to water use include: inefficient use (loss due to leakages); lack of waste water treatment; partly missing water harvesting; lack of irrigation-channel maintenance.

In terms of water-management there is mostly a sufficient legal basis, but countries are facing insufficient law implementation. There is a lack of cooperation between levels/players in charge, as well as a lack of evidence-based policy making (especially relating to the interaction between science and administrations), and a lack of real stakeholder involvement and public participation. Monitoring networks (hydrology, meteorology, underground water) are inadequate due to the lack of hydrological and meteorological stations and data, as well as insufficient operational budgets.
Recommendations include a need to clearer differentiate between drinking water and technical water; improved water treatment and treatment plants; increased potential for water harvesting/collection and improved maintenance of irrigation channels.

In terms of water management, it is recommended to review current implementation structures and to improve vertical and horizontal coordination and better exchange between practice, administration and science. More emphasis is required for applied and practice-oriented research, including the inclusion of science and the public in decision-making processes.

There is a need to improve data collection and to support efficient use of available funds; more sustainable long-term funding is needed.

For **urban areas** the general vulnerabilities include increased stress on ecosystems; health impacts include vector-borne diseases; heat impacts; water scarcity; less tourists resulting in a loss of revenues; waste as possible source of diseases in case of heat waves; urban heat island effect increase due to a lack of green areas in and around the cities.

In terms of the legal, regulatory and policy framework there are adaptation challenges as there is a lack of approved strategies and plans; legal measures that clearly address climate change responsibilities are missing. For instance, as evidenced by the May 2014 floods in the Western Balkans, the current regulations as regards Early Warning Systems (EWS) seem to be deficient.

There is insufficient institutional capacity to implement transposed legislation. In addition, there is a lack of human resources and a lack of specialised units in the institutions.

### Urban Areas Clinic - conclusions and recommendations

In terms of policies, mainstreaming of climate change in spatial planning should be promoted.

In terms of institutional strengthening, human resources allocated to design, implement and update local strategies (local action plans) are required. Therefore, more institutional cooperation is needed – horizontally and diagonally.

In terms of legal requirements the urgent need to improve regulations for EWS are needed. This will also require relevant supply of the impact monitoring equipment (e.g. weather) and software for the improved data collection and analysis.

In the **Energy Clinic** the discussions focused mostly on power supply, without exploring the demand side or other dimensions of the energy sector. There is a different primary energy mix across countries (e.g. thermal base, hydropower, diverse) creating opportunities for complementarity (e.g., seasonal imports or more permanent imports). A gas pipeline is being built that will allow diversification in supply; older systems have numerous inefficiencies on the supply and demand side.

Climate change is perceived as a new challenge, with a lack of personal experience and knowledge in how to handle it and a lack of information. There is a general sense of the upcoming extreme weather conditions and events; at the same time, there is low confidence in the ability to forecast such extremes. Water resources allocation between sectors is already an issue that causes lots of tensions.

There is a knowledge and skills gap, a lack of data (e.g. scenarios), information (e.g. on climate-smart solutions), and skills (e.g. how to deal with uncertainty, how to conduct vulnerability assessment).

### Energy Clinic - conclusions and recommendations
A lack of capacity causes difficulties to implement action plans/strategies given low staffing and funding. More training on how to access EU and other funds and prepare quality proposals should be organised.

Awareness is low and consideration of climate-related issues with policy-makers is absent. An ECRAN adaptation workshop for high level policy makers should be organised.

Recommendations include organising awareness raising/campaigns on Energy Efficiency/ Renewable Energy during Earth Day, etc.

There is a need to mainstream climate considerations in planning, especially at local level (e.g. on urban planning: on sources of energy, on vulnerability, etc.). Climate proofing of infrastructure, incl. transmission lines across countries is required. Regional approach, with particular focus on knowledge and learning activities, would improve cost effectiveness since energy systems of the region are connected and must be assessed holistically.

**Overall Conclusions from the July 2014 Clinics Programme**

- From a climate change perspective the interrelation between all policy areas is clear; almost all areas are interlinked, climate change affects human life in its entirety. In essence the Beneficiary Countries’ problems are the same;
- Overall, understanding seems to be in place in the region; witness to that is the vast amount of information and the level of conclusions and recommendations drawn from the clinics;
- **Budget and funding may be less of a problem than tentatively assumed**; once all policy areas are sufficiently aware of climate effects on their specific sector, this will open up sector budgets to adjust climate effects on these specific sectors. Additional budgets/funding may be needed, but in principle basic funding options are in place;
- **Most obvious is the need for enhanced cooperation and coordination.** Climate change does not stop at the artificial dividing lines between policy areas but is a cross-sector phenomenon with sector measures potentially causing cross-sector effects;
- **Confidence building, establishing trust and awareness** about climate change are the highest priorities at this point;
- Knowledge and skills of involved public administrations should be enhanced, building on the already existing knowledge and skills;
- In the Beneficiary Countries public awareness is not sufficiently developed and needs major attention;
- Climate change is global, but its effects are highly local, providing one more reason to strengthen local involvement in the actions to be taken.
III. Training and Workshops Programme outline

**General considerations**

The ECRAN Climate Programme includes a series of workshops that will guide the National ECRAN Adaptation Teams through the different stages towards developing national climate adaptation policies and legislation (Activity 4.2), combined with regional training sessions that support Beneficiary Countries’ experts from selected technical areas to carry out risk and vulnerability assessments and adaptation planning in their areas (Activity 4.1.b). The selected priority fields will be addressed in full in the training sessions.

The three regional trainings will each last for up to two days. The three priority fields that are proposed for the training:

- Water Management;
- Urban Areas (Physical Planning);
- Energy.

Each of these fields relates to a large variety of other (non-)selected fields, calling for strong cooperation among stakeholders in general and public administration sectors more in particular. The overall theme for the training inevitably includes aspects of cooperation and collaboration, adaptation mainstreaming, and inter linkages. These are aspects that are key to successful (adaptation) responses to climate vulnerabilities in each of the selected (and other) fields.

The programme outline will be as follows:

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<thead>
<tr>
<th>Step</th>
<th>Activity</th>
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<tbody>
<tr>
<td>A</td>
<td>Climate Adapt Tool - Prioritisation of adaptation needs (Act. 4.2) 27-28 November 2014 (Completed)</td>
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<tr>
<td></td>
<td>Technical experts that will contribute to the step-by-step process carried out by the ECRAN ADAPTATION TEAMS will receive specific technical training after Step A. This will enhance Beneficiary Countries’ adaptation skills securing a harmonised approach among all participants in the Teams and thus contribute to adaptation practice coherence and effectiveness.</td>
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<td></td>
<td><strong>3 targeted training programmes on vulnerability assessment and adaptation planning</strong> (Water management, Urban Areas (incl. physical planning), and Energy) <strong>will be provided</strong> (Act. 4.1.b) 19-20 January 2015 (Completed) 23-24 February 2015 (Completed) 16-17 April 2015</td>
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<tr>
<td>B</td>
<td>Report back workshop + Identify adaptation options (Act. 4.2) 28-29 May 2015</td>
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<tr>
<td>C</td>
<td>Report back workshop + Prioritise adaptation options (Act. 4.2) 15-16 October 2015</td>
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<tr>
<td>D</td>
<td>Report back workshop + Policy and legal changes (Act. 4.2) 14-15 January 2016 Report back (Act. 4.2) at Regional Adaptation Seminar 28-29 July 2016</td>
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As is shown in the outline the National Teams’ workshops and development actions will be supported through the targeted training on vulnerability assessment and adaptation planning for selected categories of technical experts (January – February 2015). ECRAN Climate Working Group 4 (Adaptation) will deliver this training helping Beneficiary Countries to further enhance their knowledge and understanding of their climate vulnerabilities and thus prepare them to take better
adaptation actions. The training will also draw on the EU Guidelines on National Adaptation Strategies and the EU’s 2014 Civil Protection Mechanism, and will strengthen regional climate adaptation networking. The outline of the trainings is basically identical for all three training sessions. However, the technical area to be addressed differs per training.

National ECRAN Adaptation Teams Workshops (Sub-Task 4.2)

As indicated above the National Adaptation Teams will, supported by EU Member States experts, carry out their activities in 4 steps (activity 4.2). These will be addressed in 4 consecutive workshops. The teams will consist of representatives of public administration sectors that are relevant for climate change adaptation. Their composition may differ per country depending on the most important adaptation aspects and current possibilities to mobilise sectors.

Workshops in the framework of activity 4.2 can accommodate up to 6 National Team members per country. The workshops will be held between November 2014 and July 2016 and include a kick-off/introductory meeting and will be concluded at the Final Regional Adaptation Seminar inter alia hosting a final ‘Report Back’ session. The workshops programme will build on the Climate Adapt Tool to establish a common framework among climate adaptation practitioners in the region while linking to the EU’s 2014 Civil Protection Mechanism and will allow sufficient space until each next workshop for the teams to carry out the national policy development activities that are required in each phase of the process.

The aim of the workshops is to achieve (per country) an adaptation policy document and/or legal requirements that form the basis for actual climate adaptation action.

As already stated above the Beneficiary Countries will stepwise be guided and coached through the process of developing their adaptation policies and/or legal requirements. Attention will be paid to the possibility of participation of Beneficiary Countries in the Civil Protection Mechanism, as is already the case with the former Yugoslav Republic of Macedonia and Montenegro. The proper management of this process falls entirely to the countries’ responsibility.

With their ‘Report Back’ element the ECRAN workshops form landmarks in the policy development process of each country, offering a distinct opportunity to share and exchange experience and lessons learned among Beneficiary countries on each of the steps taken and where beneficial to take corporate bi- or multilateral action. Each workshop will also introduce and discuss in more detail the next step in the process.

The three technical training programmes (activity 4.1.b) that will be delivered after the first workshop will provide knowledge and skills that feed into the policy development process as of the first phase of the policy development process.

Technical Training programme in more detail (Sub-Task 4.1b)

Each of the Beneficiary Countries will be invited to delegate 5 to 8 relevant staff members to each of the three trainings. Per workshop an overall number of 35 to 55 people may attend. Selection of participants with a reasonable level of working knowledge of the English language will be encouraged to enhance training effectiveness and sustainability.

The first workshop is basically meant for staff coming from the water management sector, the second workshop for the urban areas sector (mainly in physical planning), and the third workshop for the

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4 ECRAN Climate Work Programme, Activity 4.1.b

This Project is funded by the European Union

A project implemented by Human Dynamics Consortium
energy sector. At least 60% of the training participants should be full time employed in the sector that is addressed in the training.

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<tr>
<th>Date</th>
<th>Location</th>
<th>Training sector</th>
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<tr>
<td>23 – 24 February 2015</td>
<td>Podgorica, Montenegro</td>
<td>Training 2 – Urban Areas (Physical Planning)</td>
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<tr>
<td>16 – 17 April 2015</td>
<td>Tirana, Albania</td>
<td>Training 3 – Energy</td>
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Using the Climate Adapt Tools as well as other available tools the participants will be guided through the framework and process of assessing climate-related risks and vulnerabilities in their own technical areas. They will learn to assess current and future hazards, identify sources of climate data and information, assess risks and impact and assess societal components of risk and vulnerability.

In break-out sessions participants that sufficiently master the English language will learn to use online climate information and adaption support tools.

The Adaptation Planning part of the training will cover a general introduction to this area. More detailed adaptation planning training activities will be carried out under Activity 4.2 of the Programme.

The outline of each of the three workshops is identical, but the focus of the work is area specific (water, urban areas (physical planning), energy).

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**Priority 1: Promoting Action**

- Action 1: Encourage to adopt adaptation strategies
- Action 2: Provide LIFE funding to adaptation action in Europe
- Action 3: Introduce adaptation in the Covenant of Mayors framework

**Priority 2: Informed Decision making**

- Action 4: Bridging knowledge gap / vulnerability assessments
- Action 5: Climate – Adapt Tool

**Priority 3: Climate-proofing action**

- Action 6: Climate-proofing of the key Common Agricultural Policy, Cohesion Policy and Common Fisheries Policy
- Action 7: More resilient infrastructure
- Action 8: Promote insurance and other financial products for investment

Source: EU Climate Adaptation Strategy 2013
### Step B – National ECRAN Adaptation Teams: Identification of Adaptation Options

#### Agenda 28-29 May 2015

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<th><strong>Objectives</strong></th>
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<tr>
<td><strong>Wider Objective:</strong></td>
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<tr>
<td>To stimulate climate adaptation action in the Western Balkan countries and Turkey</td>
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<td><strong>Specific Objectives:</strong></td>
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<tr>
<td>To enhance the understanding about climate adaptation action among a core of Beneficiary countries’ representatives, creating climate adaptation policies and planning as a basis for action</td>
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<tr>
<th><strong>Results of this workshop</strong></th>
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<tr>
<td>The expected results are:</td>
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<tr>
<td>1. a further developed informal network of National Climate Adaptation Teams from Western Balkan countries and Turkey</td>
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<tr>
<td>2. enhanced and harmonised understanding among National Climate Adaptation Teams about the identification of adaptation options</td>
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<tr>
<td>3. improved cooperation and coordination among authorities in and between Western Balkan countries and Turkey in the area of climate adaptation action</td>
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<tr>
<td>4. increased (steps towards) climate adaptation action planning in place in the Western Balkan countries and Turkey</td>
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<tr>
<th><strong>Outline programme</strong></th>
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<tr>
<td>- Reporting back from countries’ follow-up given to the Step A workshop</td>
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• Adaptation challenges: cross-cutting issues – cooperative and coordinative approaches; interfaces between mitigation and adaptation actions
• Identification of adaptation options in Western Balkan countries and Turkey
• Countries’ planning for adaptation activities as a result of this workshop

Step C - National ECRAN Adaptation Teams: Prioritisation of Adaptation Options

Agenda  15-16 October 2015

Objectives

Wider Objective:
To stimulate climate adaptation action in the Western Balkan countries and Turkey

Specific Objectives:
To enhance the understanding about climate adaptation action among a core of Beneficiary countries’ representatives, creating climate adaptation policies and planning as a basis for action

Results of this workshop

The expected results are:

1. a further developed informal network of National Climate Adaptation Teams from Western Balkan countries and Turkey
2. enhanced and harmonised understanding among National Climate Adaptation Teams about the prioritisation of adaptation options
3. further strengthened cooperation and coordination among authorities in and between Western Balkan countries and Turkey in the area of climate adaptation action
4. further steps towards climate adaptation action planning in place in the Western Balkan countries and Turkey
5. Insight in adaptation mainstreaming as part of disaster risk management

Outline programme

- Reporting back from countries’ follow-up given to the Step B workshop
- Criteria for prioritisation – relevance, robustness, urgency, side effects, political feasibility, etc.
- Prioritisation of adaptation option in Western Balkan countries and Turkey
- The role of the EU Civil Protection Mechanism in climate adaptation action
- Countries’ planning for adaptation activities as a result of this workshop

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Step D – National ECRAN Adaptation Teams: Policy and Legal Changes

Agenda 14-15 January 2016

Objectives

**Wider Objective:**
To stimulate climate adaptation action in the Western Balkan countries and Turkey

**Specific Objectives:**
To enhance the understanding about climate adaptation action among a core of Beneficiary countries’ representatives, creating climate adaptation policies and planning as a basis for action, including in the area of disaster risk management (adaptation mainstreaming)

Results of this workshop

1. An informal network of National Climate Adaptation Teams from Western Balkan countries and Turkey in place
2. a set of recommendations to align and connect the network’s actions with the EU Civil Protection Mechanism
3. enhanced and harmonised understanding among National Climate Adaptation Teams about the development of adaptation policies and the subsequent introduction of legal changes, including the new 2014 EU Civil Protection Mechanism
4. a high level of cooperation and coordination among authorities in and between Western Balkan countries and Turkey in the area of climate adaptation action
5. climate adaptation action planning practices in place in the Western Balkan countries and Turkey

Outline programme

- Reporting back from countries’ follow-up given to the Step C workshop
- Resource requirements; education; communication
- Developing adaptation policies and legal frameworks in Western Balkan countries and Turkey
- Countries’ planning for adaptation activities as a result of this workshop