

Adaptation preparedness scoreboard:

Country fiche for Slovakia

NOTE TO THE READER

Under Action 1 of the EU's Strategy on adaptation to climate change (COM(2013)216), in collaboration with the Member States, the Commission developed an 'adaptation preparedness scoreboard'. Using the scoreboard, the Commission prepared country fiches on each Member State in an iterative consultation process. The country fiches assess the Member States' adaptation policy as of June 2018, including the content of NASs and plans, for the following aspects:

- Institutional structure
- Quality of national vulnerability assessments
- Knowledge creation (national observation systems in relevant sectors² and climate modelling), transfer and use
- Action plans:
 - Quality (incl. the basis used for assessment of adaptation options)
 - Actual implementation mechanisms
- Funding mechanisms
- Mainstreaming into sectoral policies, in particular:
 - Disaster risk reduction
 - Spatial planning
 - Environmental impact assessment (EIA) (how the Directive is transposed)
 - Insurance policy
- Transboundary cooperation
- Monitoring mechanisms in different sectors and governance levels

¹ The first versions of the fiches, prepared in consultation with the Member States in 2014-15, were unpublished and used to fine-tune the scoreboard. The second drafts were published, after consulting the Member States, as background documents to the public consultation on this evaluation in December 2017. https://ec.europa.eu/clima/consultations/evaluation-eus-strategy-adaptation-climate-change_en The final Member State consultation on the draft fiches took place in June 2018.

² These relate for example to meteorology, floods, drought, sea level, coastal erosion, biodiversity, human/animal/plant health etc.

The fiches are based on internal work by the Commission and on targeted assistance from an external contractor. They also served as input to the assessment of Action 1 of the Strategy during its evaluation. Annex IX of the Commission's SWD(2018)461 on the evaluation of the Strategy presents a horizontal assessment of the 28 country fiches, while Annex X presents the list of scoreboard indicators and the methodology used in applying them.

The assessments in the country fiches (yes/no/in progress) need to be read in conjunction with the narrative that accompanies them. They assess the state of play within each EU Member State. While all effort has been made to ensure the coherence across fiches in the assessment of the same indicator, it should not be directly compared across the Member States. Two countries with a "yes" on the same indicator could have a different national situation leading to that assessment. Not all indicators have the "in progress" status, some can only be "yes" or "no".

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List of abbreviations

DRR Disaster risk reduction

EIA Environmental Impact Assessment

MZP Ministry of Environment of the Slovak Republic

NAP National Adaptation Plan

NAS National Adaptation Strategy

OP Operational Programme

RBMP River Basin Management Plans

SEA Strategic Environmental Assessment

Danube macro-region

SHMU Slovak Hydrometeorological Institute

ZMOS Association of Towns and Municipalities of Slovakia

POLICY FRAMEWORK

Adaptation strategies

A1. National adaptation strategy

Slovakia adopted its National Adaptation Strategy (NAS) – "The strategy of adaptation of the Slovak Republic to the adverse impacts of climate change" – by Government Resolution No 148/2014 in March 2014.³ The main objective of the NAS is to provide information on current adaptation measures and actions in Slovakia, and, based on these, to propose a coordination framework for their implementation, as well as to increase awareness about this thematic area. The current NAS examines the climate impacts and proposes adaptation options in a number of areas, such as: environment, biodiversity, built environment, public health, agriculture, forestry, water management and transport. It proposes priority actions and identifies potential funding sources. It also presents the proposed overall institutional framework for coordinating and implementing future adaptation actions, as well as a proposal for monitoring and evaluation arrangements.

In 2016, the government adopted a progress report "Information on the progress made in implementing adaptation measures in the Slovak Republic", which analyses the process of adaptation in Slovakia between April 2014 and April 2016. The short timeframe for evaluation (approximately 1.5 years) made it difficult to quantify the progress made on implementing adaptation measures. The report deals mainly with qualitative characteristics of adaptation efforts in Slovakia and has the following structure: information on NAS, priority areas, monitoring of the environment, adaptation in the area of health, adaptation at local level, conclusion.

In the beginning of 2017, the Ministry of Environment (MZP) launched the revision and update of the NAS.⁵ In March 2017, the members of the expert group on adaptation evaluated the NAS and proposed new texts. In June 2017, the first draft of the updated NAS was discussed. The high-level commission on climate change policy also considered the draft in June. In September 2017, the process of strategic environmental assessment (SEA) for the NAS was launched. Within this process, there was also public consultation on a further revision of the NAS⁶ that took account of the published results of the SEA assessment.⁷ The

URL: http://enviroportal.sk/sk/eia/detail/strategia-adaptacie-slovenskej-republiky-na-nepriaznive-dosledky-zmeny, Date accessed: 17/5/2018

³ Uznesenie Vlády Slovenskej Republiky c. 148 z 26. marca 2014 k Stratégii adaptácie SR na nepriaznivé dôsledky zmeny klímy (Government Resolution No 148/2014),

 $[\]label{eq:url:http://www.rokovania.sk/File.aspx/ViewDocumentHtml/Uznesenie-14024?prefixFile=u, Date accessed: 4 May 2018$

⁴ Informácia o dosiahnutom pokroku pri realizácii adaptačných opatrení v SR (2016),

URL: http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=25576

⁵ Enviroportal website,

⁶ The consulted draft of the revised adaptation strategy can be found here:

URL: http://www.minzp.sk/files/odbor-politiky-zmeny-klimy/strategia-adaptacie-sr-nepriaznive-dosledky-zmeny-klimy-aktualizacia.pdf, Date accessed: 1/6/2018

⁷ The announcement on the beginning of the strategic environmental assessment and the draft of the NAS is available in Slovak at

final result was published in June2018 and its results were incorporated to the annex of the NAS⁸. It is anticipated that the updated NAS will be submitted to the Government for approval by 31 October 2018. It was postponed from 30 April 2018 because of the lengthy strategic environmental assessment (SEA) process.⁹

In addition to the NAS, the Ministry of Environment (MZP) is preparing the Slovak National Strategy for the Environment to 2030 – Zelenšie Slovensko ("Greener Slovakia", approval foreseen in 2018, currently under the SEA process)¹⁰. It includes a chapter on climate mitigation and adaptation. However, chapters on the protection of the environment and water management are also relevant to adaptation.

A2. Adaptation strategies adopted at subnational levels

According to the current NAS, there is currently no systematic approach to adaptation at regional or sub-regional level, as climate change and its impacts are not part of the standard planning processes at regional and local levels. The revised NAS (to be adopted) seeks improvements in vertical integration of adaptation processes at regional and current levels and proposes several measures to do so.

Currently, vulnerability assessments and planning documents have not been systematically developed at "kraje" level (the highest-level of administrative units in the country), although some examples exist. The first sub-regional adaptation strategy was adopted for region Horná Ondava in March 2015. It has three main parts: a strategy, an action plan, and a catalogue of adaptation measures (Regionálna adaptačná stratégia Hornej Ondavy)¹¹.

Bratislava Self-Governing Region adopted a catalogue of adaptation measures for towns and villages in April 2017 (Katalóg adaptačných opatrení miest a obcí BSK na nepriaznivé dôsledky zmeny klímy)¹². This also includes the assessment of the climate in the Bratislava region, a strategy and action plan and a catalogue of adaptation measures.

The population coverage of these two regions is around 638 400 inhabitants in the Bratislava region and around 8 400 in Horná Ondava, corresponding to around 12% of the total Slovak population.

URL: http://www.minzp.sk/aktualne/oznamenie-vypracovani-strategickeho-dokumentu-strategia-adaptacie-slovenskej-republiky-nepriaznive-dosledky-zmeny-klimy.html, Date accessed: 17/5/2018; Personal communication with MS contact.

http://www.minzp.sk/iep/strategicke-materialy/envirostrategia-2030/;

http://enviroportal.sk/sk/eia/detail/zelensie-slovensko-strategia-environmentalnej-politiky-slovenskej-repu, Date accessed: 17/5/2018

⁸ Personal communication with MS contact.

⁹ Personal communication with MS contact.

¹⁰ Personal communication with MS contact; Zelenšie Slovensko stratégia, URL:

¹¹ Regionálna adaptačná stratégia Hornej Ondavy, 2015, URL:

http://www.ondavaprezivot.sk/download/RASHO%20WEB/16 P1 Katalog opatreni f15.pdf, Date accessed: 17/5/2018

¹² Katalóg adaptačných opatrení miest a obcí BSK na nepriaznivé dôsledky zmeny klímy, 2017, URL: http://www.region-bsk.sk/koncepcne-materialy.aspx, Date accessed: 17/5/2018

At the local level, various initiatives have been launched. Slovakia has to date 10 signatories to the Covenant of Mayors for Climate & Energy with respect to adaptation. The capital city of Bratislava acceded to the Mayors Adapt initiative in April 2012, other cities only did so in 2016-2017.

The current adaptation strategies at city level are:

- The Adaptation Strategy of Bratislava, which was adopted in September 2014. 14
- The proposal for an adaptation strategy of Spišská Nová Ves and its surroundings (2012)¹⁵
- The Adaptation Strategy of Košice Západ districts on heat waves (2014)¹⁶
- The Adaptation Strategy of Trnava on heat waves (2015)¹⁷
- The Adaptation Strategy of Zvolen on rainwater utilisation (2015)¹⁸
- The Adaptation Strategy of Kežmarok on heavy rainfall (2015). 19
- A pilot study on adaptation measures in Čierny Balog (2016)²⁰

These cities and towns cover approximately 20% of the population of Slovakia.

Adaptation action plans

B1. National adaptation plan

The MZP in cooperation with the Slovak Academy of Sciences launched the preparation of the national adaptation action plan (NAP) in April 2018. The outputs of a preparatory project conducted together with the Slovak Academy of Sciences in the form of a final report will be used to formulate the NAP.

On 14 March 2018, the Government approved the first NAP addressing drought and water scarcity, called "H2ODNOTA JE VODA" (Water is value), prepared by the MZP, as a follow

¹³ Covenant of Mayors for Climate & Energy, Adaptation, Slovakia, URL:

https://www.covenantofmayors.eu/about/covenant-community/signatories.html (accessed on 24 April 2018)

¹⁴ Adaptation Strategy of Bratislava (2015), Shorter version, the City of Bratislava, URL:

http://www.bratislava.sk/VismoOnline ActionScripts/File.ashx?id org=700000&id dokumenty=11051660, Date accessed: 17/5/2018

¹⁵ Stratégia adaptácie na dopady zmeny klímy v meste Spišská Nová Ves a okolí (2012), URL: http://www.spisskanovaves.eu/fileadmin/snv/user-upload/editor/editor1/dokumenty/projekty/strategicke-dokumenty/Strategia adaptacie navrh 3-2012.pdf, Date accessed: 17/5/2018

¹⁶ Adaptation Strategy of Kosice on heat waves – Zapad districts (2014), the City of Kosice, URL: http://www.kri.sk/web_object/435.pdf

¹⁷ Adaptation Strategy of Trnava on heat waves (2015), the City of Trnava, available at URL: http://www.trnava.sk/userfiles/download/attachment/Strategia_adaptacie_Trnava%20schv%C3%A1len%C3%A1.pdf, Date accessed: 17/5/2018

¹⁸ Adaptačná stratégia na zmenu klímy –využitie dažďovej vody (2015), available in Slovak at URL: http://www.zvolen.sk/download_file_f.php?id=603216, Date accessed: 17/5/2018

¹⁹ Stratégia adaptácie mesta Kežmarok na zmenu klímy so zameraním na rast častosti intenzívnych zrážok (2015), available in Slovak at URL: https://www.kezmarok.sk/download_file_f.php?id=806813, Date accessed: 17/5/2018

²⁰ Adaptačné opatrenia na zmenu klímy – projektová štúdia pre Čierny Balog (2016), available in Slovak at LIRL:

http://www.obnovadediny.sk/Upload/POD/priklady/dokumentacia/2016 %C4%8Cierny%20Balog.pdf, Date accessed: 17/5/2018

up to the Water Management Plan of Slovakia and the current NAS.²¹ The NAP proposes measures in the area of water management, agriculture and forestry management, urban areas, and science and research (for identifying vulnerabilities). It also proposes measures on monitoring and early warning systems for drought and disaster risk management.²²

B2. Adaptation plans adopted at sub-national level

There is no specific regional adaptation action plan adopted, as yet.

At the city level, the Adaptation Action Plan of Bratislava 2017-2020 was adopted in March 2017²³.

B3. Sectoral adaptation plans

In Slovakia, there are no sectoral adaptation plans. Where relevant, adaptation measures are integrated in sectoral strategies and action plans.²⁴ Several examples are given in relation to Indicator 8d (below).

As noted in Section B1, there is an action plan addressing drought and water scarcity, which was adopted in March 2018. Some adaptation actions are included in the existing sectoral strategies and plans for water management (flood risk management), agriculture, forestry and disaster risk management.

SCOREBOARD

Step A: Preparing the ground for adaptation

1. Coordination structure

1a. A central administration body officially in charge of adaptation policy making

Yes / No

The MZP²⁵, Directorate for Climate Change and Air Protection, Department of Climate Change Policy is the central body designated to coordinate the adaptation policy-making

²¹ The Action Plan HODNOTA JE VODA (2018), URL: http://www.minzp.sk/plan-riesenie-dosledkov-sucha-nedostatku-vody.pdf; Announcement can be found here in Slovak, <a href="http://www.minzp.sk/tlacovy-servis/tlacove-spravy/tlacove-spravy-2018/tlacove-spravy-2018/tlacove-spravy-2018/tlacove-spravy-marec-2018/svetovy-den-vody-si-envirorezort-pripomenie-pracou-lepsej-ochrane-vodnych-zdrojov.html; http://www.rokovania.sk/Rokovanie.aspx/NezaradenyMaterialDetail?idMaterial=27274, Date accessed: 17/5/2018

²² Ministry of Environment news item, URL: http://www.minzp.sk/tlacovy-servis/tlacove-spravy/tlacove-spravy/tlacove-spravy/tlacove-spravy/tlacove-spravy/tlacove-spravy-tlacove-spravy-nedostatku-vody-pomozu-zlepsit-zivotne-prostredie-aj-kvalitu-zivota-ludi.html, Date accessed: 1/6/2018

²³ Akčný plán adaptácie na nepriaznivé dôsledky zmeny klímy na území hlavného mesta Slovenskej republiky Bratislavy na roky 2017-2020 (2017), URL: https://zastupitelstvo.bratislava.sk/data/att/14595.pdf
²⁴ Personal communication with MS contact.

²⁵ Ministry of Environment of the Slovak Republic website, URL: http://www.minzp.sk/, Date accessed: 1/6/2018

process.²⁶ It is responsible for the development and implementation of climate change policy, including climate adaptation.

1b. Horizontal (i.e. sectoral) coordination mechanisms exist within the governance system, with division of responsibilities

Yes / In progress / No

Before the adoption of the current NAS in 2014, a High-Level Committee for Coordination of the Climate Change Policy was established on 15 January 2012. A special working group on adaptation was created under this committee designated to focus on the NAS and to continue the work on adaptation. This working group meets at least once a year, the next meeting is scheduled in the second half of 2018.²⁷ The members include representatives from other ministries (the Ministry of Education, Science, Research and Sport, the Ministry of Health, the Ministry of the Economy, the Ministry of the Interior, the Ministry of Agriculture and Rural Development, the Ministry of Transport and Construction), and other institutions, such as the Public Health Authority of the Slovak Republic, the Slovak Hydrometeorological Institute (SHMU), the Slovak Academy of Science and other professional institutions, research and non-governmental organisations as the Carpathian Development Institute, the Association of Towns and Municipalities of Slovakia or the Union of Slovak Cities. The 2014 NAS identified clear tasks for ministries and municipalities to achieve the objectives of the NAS.

Regarding the draft of the revised NAS (to be adopted in 2018), the working group on adaptation commented on the progress report "Information on the progress made in implementing adaptation measures in the Slovak Republic" and facilitated the development of the updated version of the NAS. There was coordination with the Ministry of the Interior with regard to the management of security risks, which include natural hazards and disaster risk management.

Besides the regular meetings of the adaptation working group, there are further bilateral or multilateral meetings arranged on an *ad hoc* basis. These meetings are aimed to address any issues that have arisen throughout the process.

1c. Vertical (i.e. across levels of administration) coordination mechanisms exist within the governance system, enabling lower levels of administration to influence policy making

Yes / In progress / No

²⁶ Climate Adapt website, URL: http://climate-adapt.eea.europa.eu/countries-regions/countries/slovakia, Date accessed: 4 May 2018.

²⁷ Personal communication with MS contact.

The NAS Resolution No 148/2014 recommends that municipalities and cities take on the responsibilities in implementing the NAS.²⁸ The Association of Towns and Municipalities of Slovakia and the Union of Slovak Cities are part of the adaptation working group.

Moreover, MZP communicates with the Association of Towns and Municipalities of Slovakia (ZMOS) and the Union of Slovak Cities (consultations, meetings, gathering of ideas, disseminating of current information). ZMOS and the Union of Cities are a link in the process of translating national content and providing information to/from lower levels. During the SEA process of the updated NAS, all self-governing regions were approached and involved in the process of assessing impacts and commenting on the NAS. The national project²⁹ of the Slovak Environmental Agency also plans to organise meetings at the level of municipalities, starting from fall 2018/spring 2019.³⁰

2. Stakeholders' involvement in policy development

2a. A dedicated process is in place to facilitate stakeholders' involvement in the preparation of adaptation policies

Yes / No

The Working Group on Adaptation has involved multiple government stakeholders, other institutions and public bodies, research organisations and NGOs in the preparation of the current NAS, as well as the revised version (still to be adopted). The list of consulted representatives has been recently extended.

The National Contact Point on Adaptation (MZP) provides communication with international and European organisations and coordinates national activities in collaboration with the Working Group on Adaptation.³¹ Furthermore, the Slovak authorities have reported that the private sector and the wider public were duly informed during the process. For example, the revised draft of the NAS was made available for public consultation³² and due to the involvement of stakeholders in the revision process, the deadline to submit the revised NAS to the Government was prolonged.³³

2b. Transboundary cooperation is planned to address common challenges with relevant countries

Yes / No

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²⁸ The NAS Resolution No 148/2014 http://www.rokovania.sk/File.aspx/ViewDocumentHtml/Uznesenie-14024?prefixFile=u, Date accessed: 17/5/2018

²⁹ Information on the national project, URL: http://www.sazp.sk/projekty/narodne-projekty/, Date accessed: 17/5/2018

³⁰ Personal communication with MS contact.

³¹ Climate Adapt website, URL: http://climate-adapt.eea.europa.eu/countries-regions/countries/slovakia, Date <a href="http://climate-adapt.eea.europa.eu/countries-regions/countries-regio

³² See the announcement, Oznámenie o vypracovaní strategického dokumentu "Stratégia adaptácie Slovenskej republiky na nepriaznivé dôsledky zmeny klímy - aktualizácia,"

URL: http://www.minzp.sk/aktualne/oznamenie-vypracovani-strategickeho-dokumentu-strategia-adaptacie-slovenskej-republiky-nepriaznive-dosledky-zmeny-klimy.html, Date accessed: 4 May 2018

³³ Personal communication with MS contact.

The current NAS discusses transnational and/or cross-border cooperation (see NAS Chapter 6.6) and this issue will be also part of the new NAS to be adopted later in 2018. Slovakia is also part of various transnational initiatives focusing on adaptation. Transnational cooperation is currently ongoing with the other European countries crossed by the Carpathians under the Carpathian Convention. In 2014, the Fourth Meeting of the Conference of the Parties to the Carpathian Convention adopted the Strategic Agenda on Adaptation to Climate Change in the Carpathian Region, which is being implemented mainly through the activities of the Working Group on Adaptation to Climate Change under the Convention. In October 2017, a new Article 12 on "Climate Change" was adopted at the Fifth Meeting of the Conference of the Parties.

Transnational cooperation is currently ongoing with the other European countries crossed by the Danube river for tackling flood risks, preparing anti-flooding action plans, and building flood defences. In the framework of the International Commission for the Protection of the Danube, a climate adaptation strategy was adopted in 2012.³⁶

Slovakia has been involved in other cross-border cooperation through Interreg/ERDF funded projects, such as "Green and blue space adaptation for urban areas"³⁷, and "Regio Clima"³⁸. Regional and cross-border cooperation is also implemented through other regional conventions, such as the Carpathian Convention³⁹, where specific adaptation projects have received EU funding (e.g. CARPIVIA), or the Ramsar Convention.⁴⁰

Moreover, some Slovak institutions are participating in several international research projects, for example, the Comenius University participates in the CC-TAME Project (Terrestrial Adaptation & Mitigation in Europe) and RESIN project (Bratislava Municipality and Comenius University are partners from the Slovak side). The SHMU participates in the project Joint Disaster Management Risk Assessment and Preparedness in the Danube macroregion (SEE Risk), which is focused on risk assessment and which seeks to foster awareness

³⁴ Fourth Meeting of the Conference of the Parties to the Framework Convention on the Protection and Sustainable Development of the Carpathians, URL:

http://www.carpathianconvention.org/tl_files/carpathiancon/Downloads/03%20Meetings%20and%20Events/COP/2014_COP4_Mikulov/Follow%20Up/DOC5_Joint%20AplineCarpathianStatement_FINAL.pdf, Date accessed: 15/5/2018

³⁵ Carpathian Convention website, URL:

http://www.carpathianconvention.org/tl_files/carpathiancon/Downloads/03%20Meetings%20and%20Events/COP/2017_COP5_Lillafuered/outcomes_documents/Article%20on%20Climate%20Change_FINAL_ADOPTED.pdf, Date accessed:

³⁶ Strategy and background study available on the International Commission for the Protection of the Danube River website, URL: www.icpdr.org/main/activities-projects/climate-change-adaptation, Date accessed: 4 May 2018

³⁷ GRaBS: Green and Blue Space Adaptation for Urban Areas and Eco Towns, URL: http://climate-adapt.eea.europa.eu/metadata/projects/green-and-blue-space-adaptation-for-urban-areas-and-eco-towns, Date accessed: 1/6/2018

³⁸ Regioclima, URL: http://www.interreg4c.eu/projects/project-details/index-project=19-regional-cooperation-towards-adaptation-to-climate-change&.html, Date accessed: 1/6/2018

³⁹ Carpathian Convention, URL: http://www.carpathianconvention.org/, Date accessed: 1/6/2018

⁴⁰ Ramsar Convention, URL: http://www.ramsar.org/, Date accessed: 1/6/2018

and effectiveness of the measures in emergency situations caused by climate change.⁴¹ The SHMU also participates in the project DriDanube focusing on drought in the Danube region.⁴² Slovak institutions also participated in the international project 'Modelling the impact of climate change on heat load increase in Central European cities',⁴³.

Step B: Assessing risks and vulnerabilities to climate change

3. Current and projected climate change

3a. Observation systems are in place to monitor climate change, extreme climate events and their impacts

Yes / In progress / No

The Slovak Hydro-meteorological Institute (SHMU) monitors climate change and extreme weather events on an ongoing basis and has its own research capacity. Thus, it plays a key role in providing data and research for climate adaptation and indeed was a source of expertise and knowledge for drafting the current NAS. The website of the institute provides potential warnings for floods, wind, drought and heatwaves in the summer period. There is a section on climate impacts in Slovakia.⁴⁴

SHMU also provides information on drought monitoring, climate change, Slovak climate, station infrastructure etc. In 2015, the Climate Atlas of the Slovak Republic was published by the SHMU⁴⁵. SHMU operates the Climatological Information System of the Slovak Republic and is involved in the National Climate Program of the Slovak Republic, under which various tasks related to monitoring of climate change are taking place.

The framework for complex environmental monitoring in Slovakia is determined by the resolutions of the Slovak Government No. 623/1990 Coll., No. 449/1992 Coll. and No. 620/1993 Coll. The Monitoring Subsystem "Meteorology and Climatology" is one of the most important ones, which includes the observing networks of monitoring stations, remote sensing measurements and observations of some biological subjects (phenology). Other subsystems are focused on air, water and radioactivity monitoring.

Within the framework of the national environmental monitoring system of the Slovak Republic there are different sub-systems: air, water (including mineral and mining waters), land, biota (fauna, flora), forests, geological factors, waste, foreign substances in food and feed, meteorology and climatology and radioactivity in the environment. The SHMU is responsible for: air, water, meteorology and climatology and radioactivity in the environment.

⁴¹ Climate Adapt website, URL: http://climate-adapt.eea.europa.eu/countries-regions/countries/slovakia, Date <a href="http://climate-adapt.eea.europa.eu/countries-regions/countries-regio

⁴² DRIDANUBE project, URL: http://www.interreg-danube.eu/approved-projects/dridanube. Date accessed: 1/6/2018

⁴³ See at: http://www.meteo.fr/icuc9/LongAbstracts/ccma2-5-3151332 a.pdf, Date accessed: 17/5/2018

⁴⁴ Slovak Hydrometeorological Institute, URL: http://www.shmu.sk/sk/?page=1, Date accessed: 4/May/2018

⁴⁵ Slovak Hydrometeorological Institute, URL: http://klimat.shmu.sk/kas/, Date accessed: 17/5/2018

3b. Scenarios and projections are used to assess the economic, social and environmental impacts of climate change, taking into account geographical specificities and best available science (e.g. in response to revised IPCC assessments)

Yes / In progress / No

Climate projections are available from the Climate Change and Adaptation Report of the SHMU project⁴⁶ for eight selected sectors from 2011, mainly from downscaling the outputs of GCM and RCM models. These climate projections were used in assessing the economic and environmental impacts of climate change in the priority sectors considered by the current NAS.

The climate change studies in Slovakia use the outputs from several Global General Circulation Models and Regional General Circulation Models. These outputs enable development of sub-regional and national climate change scenarios by statistical and dynamic downscaling with the use of measured data from Slovak meteorological stations gathered in the period 1951-2010. From 2010 to 2014 the GCMs CGCM3.1 (Canada) and ECHAM5 (Germany), Regional General Circulation Models KNMI (Netherlands) and MPI (Germany) outputs were applied.⁴⁷

3c. Sound climate risks/vulnerability assessments for priority vulnerable sectors are undertaken to support adaptation decision making

Yes / In progress / No

The SHMU 2011 report⁴⁸ describes in detail the analyses, mentioned under Indicator 3b (above), for eight sectors, which were covered by the NAS as well: agriculture, forestry, biodiversity, energy, water management, transport, tourism, and health. The SHMU report feeds into decision making via the NAS, because the adaptation measures were selected on the basis of a vulnerability assessment, which comes from the SHMU report. The current NAS particularly uses this study to briefly describe the impacts and vulnerabilities in the sectors covered.⁴⁹ The NAS does not refer to any specific sources that were used to provide these assessments (besides the SHMU study).⁵⁰

The updated NAS includes additional areas/sectors and additional adaptation measures for sectors not covered in the current NAS: soil, industry, energy and private sector, and tourism. The impacts and vulnerability assessments in the revised NAS are still based on the SHMU 2011 report.

⁴⁶ Climate Change and Adaptation Report of the Slovak Hydrometeorological Institute (SHMU) Project, 2011 (EFRA, Dôsledkz klimatickej zmeny a možné adaptačné opatrenia v jednotlivých sektoroch)

⁴⁷ Climate Adapt website, URL: http://climate-adapt.eea.europa.eu/countries-regions/countries/slovakia, Date accessed 4 May 2018

⁴⁸ Climate Change and Adaptation Report of the Slovak Hydrometeorological Institute (SHMU) Project, 2011 (EFRA, Dôsledkz klimatickej zmeny a možné adaptačné opatrenia v jednotlivých sektoroch)

⁴⁹ The National Adaptation Strategy of the Slovak Republic, January 2014

⁵⁰ Climate Change and Adaptation Report of the Slovak Hydrometeorological Institute (SHMU) Project, 2011 (EFRA, Dôsledkz klimatickej zmeny a možné adaptačné opatrenia v jednotlivých sektoroch)

3d. Climate risks/vulnerability assessments take transboundary risks into account, when relevant

Yes / In progress / No

Slovakia is involved in the Danube Region Strategy and the Carpathian Convention with all relevant countries, which addresses a wide range of issues, including environmental risks.⁵¹ The SEERISK project is a transnational project for disaster risk management and preparedness in the Danube macro-region, which developed and tested a Common Risk Assessment Methodology for the region.⁵² Hence, transboundary risks are taken into account in climate risk/ vulnerability assessments for this sector.

However, there is not yet evidence of systematic consideration (e.g. as part of the NAS) of the cross-border climate risks when carrying out vulnerability and risks assessments.

4. Knowledge gaps

4a. Work is being carried out to identify, prioritise and address the knowledge gaps

Yes / In progress / No

A science-policy adaptation working group was established to prepare the NAS (both the current version and forthcoming revision). Various research institutes and the national meteorological administration provided valuable feedback in that process.

The current NAS does not provide information on identified knowledge gaps, nor is there a process outlined on how to address potential knowledge gaps.

Main objectives of the updated NAS from 2018 are raising public awareness about climate impacts and developing a knowledge base to address adaptation more effectively. Chapter 6.3 of this revised NAS provides information on the planned national project of the Slovak Environmental Agency to address the knowledge gaps. However, this has not been implemented yet, as the revised NAS will be submitted to the Government only at the end of October 2018.

5. Knowledge transfer

5a. Adaptation relevant data and information is available to all stakeholders, including policy makers (e.g. through a dedicated website or other comparable means)

Yes / In progress / No

The MZP website hosts a section dedicated to climate change, including adaptation information. The adaptation sub-section⁵³ presents some general information, documents (the

⁵¹ Danube Region Strategy, URL: http://www.danube-region.eu/, Date accessed: 4 May 2018

⁵² SEERISK project, URL: http://www.seeriskproject.eu/seerisk/index.zul#main, Date accessed: 4 May 2018

⁵³ Ministry of Environment website, adaptation related information URL: http://www.minzp.sk/sekcie/temy-oblasti/ovzdusie/politika-zmeny-klimy/aktualne-temy/adaptacia.html, Date accessed: 1/6/2018

Resolution⁵⁴, the NAS⁵⁵ and the SHMU 2011 study⁵⁶), and links that are relevant for adaptation (including links to Climate-ADAPT and DG Climate Action of the EU). This subsection only provides basic information. There are no data or projections presented, only a link to the documents mentioned above. There is no section on planned activities or follow up. It is not clear from the website what has been done to implement the current NAS since its adoption in 2014.

After the updated NAS has been approved by the Government, the first results from the elaboration of the NAP will be available, and the first materials from the national project of the Slovak Environmental Agency will be prepared and published. An update of the website information is scheduled for 2019.⁵⁷

Some additional relevant information can be found on the website of the Slovak Environment Agency.⁵⁸

5b. Capacity building activities take place; education and training materials on climate change adaptation concepts and practices are available and disseminated

Yes / In progress / No

There is little evidence on any capacity building activities or education and training activities in the field of climate adaptation since the adoption of the current NAS in 2014. The current NAS itself acknowledges that information campaigns and training on adaptation are not implemented systematically and based on a specific concept, but rather *ad hoc* and irregularly, through conferences, lectures and articles in professional journals. Other sources of information include the results of scientific tasks and projects that are published on the internet portals of professional bodies.

In 2018, the preparation for the implementation of a national project by the Slovak Environmental Agency called "Improvement of information and advice on improving the quality of the environment in Slovakia" has started. This national project is funded under the Operational Programme Quality of the Environment 2014-2020 and has six main activities. Key Activity 6 focuses on climate adaptation and risk management. The aim of the project is to improve the awareness on climate change and adaptation among experts as well as the public, regions and schools. Key Activity 6 includes a number of tasks to improve communication and raise awareness, such as organising conferences on climate change, seminars for regions, thematic and informational days for the public, festivals, competitions

⁵⁴ The NAS Resolution No 148/2014 http://www.rokovania.sk/File.aspx/ViewDocumentHtml/Uznesenie-14024?prefixFile=u, Date accessed: 17/5/2018

⁵⁵ The National Adaptation Strategy of the Slovak Republic, January 2014

⁵⁶ Climate Change and Adaptation Report of the Slovak Hydrometeorological Institute (SHMU) Project, 2011 (EFRA, Dôsledkz klimatickej zmeny a možné adaptačné opatrenia v jednotlivých sektoroch)

⁵⁷ Personal communication with MS contact.

⁵⁸ Slovak Environment Agency, URL: http://www.sazp.sk/zivotne-prostredie/starostlivost-o-zivotne-prostredie-3976/zmena-klimy/zmena-klimy.html, Date Accessed: 17/5/2018

for schools, publishing publications as well as for example making a documentary film on climate change and adaptation processes in the Slovak Republic.⁵⁹

Step C: Identifying adaptation options

6. Adaptation options' identification

6a. Adaptation options address the sectoral risks identified in 3c, the geographical specificities identified in 3b and follow best practices in similar contexts

Yes / No

The current NAS presents adaptation options and measures for almost all sectors analysed in the NAS. The revised NAS also proposes adaptation options and measures for those sectors not included in the current NAS (soil, energy and industry, tourism). Adaptation options proposed in the current NAS for the priority sectors are based on expert judgement, after considering the sectoral climate impacts. The measures seem to build on good practices identified elsewhere for similar contexts, with some stronger sectors leading and capitalising on more detailed expertise on adaptation (e.g. agriculture, forestry, water management). However, the use of sectoral risk assessments in the process is not totally clear. Adaptation options also do not address regional specificities.

6b. The selection of priority adaptation options is based on robust methods (e.g. multicriteria analyses, stakeholders' consultation, etc.) and consistent with existing decisionmaking frameworks

Yes / No

Chapter 9 of the current NAS describes the criteria for prioritisation of adaptation options and measures. The adaptation options described in the current NAS have been reported as being based on objective methods (e.g. expert judgement, consultations among organisations or with stakeholders, using guidelines). More detailed prioritisation will be carried out as part of the NAP preparation. Some measures have already been prioritised (e.g. on drought).

6c. Mechanisms are in place to coordinate disaster risk management and climate change adaptation and to ensure coherence between the two policies

Yes / In progress /No

The current and revised NAS describe the synergies between adaptation and disaster risk management. A mechanism in the form of working groups is in place to coordinate climate adaptation and disaster risk management strategies and actions.

The Ministry of Interior of the Slovak Republic is the national contact point for the Sendai framework for disaster risk reduction 2015 - 2030 and the responsible body for the national Strategy on the Management of Security Risks. MZP cooperates with a representative from the Ministry of Interior of the Slovak Republic responsible for these issues, while the same

⁵⁹ Personal communication with MS contact.

representative is also a member of the Working Group on Adaptation. Concurrently, the representative of the MZP is a member of a working group under the Ministry of Interior, and is engaged in the process of updating the national Strategy on the Management of Security Risks. Based on these facts, active communication takes place in the preparation of documents in each of the aforementioned areas.⁶⁰

Moreover, there is the Joint Disaster Management Risk assessment project in the Danube macro-region⁶¹, where stakeholders for the two communities are well integrated.

7. Funding resources identified and allocated

7a. Funding is available to increase climate resilience in vulnerable sectors and for cross-cutting adaptation action

Yes / In progress /No

Chapter 10 of the current NAS discusses the financial instruments that can be used to finance adaptation measures in Slovakia from 2014. The chapter explains the different funding programmes (national and EU) that are available for financing adaptation projects. In Annex 2 of the current NAS, there is an overview of all projects with an adaptation element financed through these programmes (one table per programme) after 2013.

The funding programmes include:

- National revitalisation and integrated management of floods programme
- EU Operational Programme (OP) for Environment (2007-2013), and EU Operational Programme (OP) for the Quality of Environment (2014-2020) European programming cycle will include over EUR 730 million from the European Structural and Investment Funds (ESIF) for adaptation projects (which will tackle flood risks and address specific issues in agriculture, forestry and biodiversity). National funding supported adaptation measures in agriculture, forestry and water management. Annual reports of the OP Environment include a list of financed projects, some of which tackle these sectors. 63
- The European Economic Area grants and Norway grants.
- The LIFE programme (3rd phase) and LIFE+
- Transnational cooperation programmes.

The current NAS mentions that one of its mid-term and long-term goals is to map the use of financial instruments for planned and pro-active adaptation and, if possible, to monitor the link between the costs and benefits of such investments. Similar information on funding mechanisms for adaptation can be found in the revised NAS.

⁶⁰ Personal communication with MS contact.

⁶¹ SEERISK project, URL: http://www.seeriskproject.eu/seerisk/#main. Date accessed: 1/6/2018

⁶² The National Adaptation Strategy of the Slovak Republic, January 2014

⁶³ Operačný program Životné prostredie, URL: http://www.opzp.sk/, Date accessed: 1/6/2018

There is no dedicated budget available for financing cross-cutting/coordinated adaptation action.

The progress report on the implementation of adaptation measures in the Slovak Republic mentions that cities are not motivated to develop local or regional adaptation strategies, as financing of adaptation strategies does not fall under the activities of operation programmes. The local adaptation strategies that do exist are usually funded by international projects.⁶⁴

Step D: Implementing adaptation action

8. Mainstreaming adaptation in planning processes

8a. Consideration of climate change adaptation has been included in the national frameworks for environmental impact assessments

Yes / No

Slovakia has transposed the revised Environmental Impact Assessment (EIA) Directive. The amendment transposing the new EIA Directive, Act (142/2017) (amending Act (24/2006), has been in force since 15th June 2017 and considers climate change, including adaptation. The amendment requires the assessment of project impacts related to climate change and vulnerabilities, including natural hazards. The EU SEA Directive is transposed into the Slovak legislation by the same Act (24/2006) and its amendments, hence climate change, including adaptation, is considered in the same way as EIA.

8b. Prevention/preparedness strategies in place under national disaster risk management plans take into account climate change impacts and projections

Yes / **No**

A national framework for single and multi-hazard risk assessment is in place and considers some current climate-related risks (notably floods). Strategies are in place for tackling those risks, i.e. the Management of Flood Risks plan from 2012⁶⁵, Strategy of Floods protection until 2020 from 2013⁶⁶. The first flood management plans from the end of 2015⁶⁷ consider climate impacts and adaptation.⁶⁸

The current NAS quotes several civil protection legislative provisions, and calls for consideration of climate adaptation within complex risk assessment activities linked to civil protection. As mentioned in relation to Indicator 6c, there is a close cooperation between the

⁶⁴ Informácia o dosiahnutom pokroku pri realizácii adaptačných opatrení v SR, 2016, URL: <a href="http://www.rokovania.sk/Rokovania.s

⁶⁵ MZP SR, ČASOVÝ AVECNÝ HARMONOGRAM PRÍPRAVY NÁVRHU PRVÝCH PLÁNOV MANAŽMENTU POVODŇOVÉHO RIZIKA, URL: http://www.minzp.sk/files/sekcia-vod/casovy-a-vecny-harmonogram-navrhu-prvych-planov-mananazmentu-povovodnoveho-rizika.pdf, Date accessed: 17/5/2018

⁶⁶ Stratégia protipovodňovej ochrany do roku 2020, URL: http://www.minzp.sk/sekcie/temy-oblasti/voda/ochrana-pred-povodnami/strategia-protipovodnovej-ochrany-sr-do-roku-2020/

⁶⁷ Spravne uzemie povodia Dunaja a Visly, URL: http://www.minzp.sk/mpr/, Date accessed: 1/6/2018

⁶⁸ Ministry of Environment website, floods protection related information, URL: http://www.minzp.sk/sekcie/temy-oblasti/voda/ochrana-pred-povodnami/povoden-uvod.html, Date accessed: 1/6/2018

national climate adaptation and disaster risk management policies. Similarly, the national Strategy on the Management of Security Risks considers future climate impacts and risks.

8c. Key land use, spatial planning, urban planning and maritime spatial planning policies take into account the impacts of climate change

Yes / No

Chapter 11 of the current NAS advocates mainstreaming adaptation into the national legislation on land-use planning, for instance, when it comes to investments with a long lifecycle, such as industry or energy infrastructure. The Urban Development Framework of the Slovak Republic until 2030⁶⁹ mentions the need to consider adverse climate impacts in city and spatial planning.

8d. National policy instruments promote adaptation at sectoral level, in line with national priorities and in areas where adaptation is mainstreamed in EU policies

Yes / In progress / No

Mainstreaming of adaptation into sectoral policies is driven by the NAS. Adaptation to the adverse effects of climate change is included, for example, in the following sectoral strategies and plans:

- Updated National Biodiversity Strategy for 2020
- Orientation, principles and priorities of the Slovak water policy until 2027, Water Plan of Slovakia, Plans for Flood Risk Management of the Slovak Republic
- Strategy of Urban Development of the Slovak Republic
- Action Plan for the Environment and Health of the Slovak Republic IV,
- Strategy of agricultural development of the Slovak Republic for 2013 2020,
- National Forestry Program (NLP)
- National Strategy for Risk Management of the Slovak Republic.

The interest in adaptation is growing in other sectors and the extent of inclusion of adaptation concerns in sectoral policies is improving.⁷⁰

Currently, the Ministry of Economy is preparing a new Economic Policy Strategy 2030, which should integrate climate adaptation concerns. Currently, the Strategy is in the SEA process.⁷¹

⁶⁹ https://www.mindop.sk/ministerstvo-1/mestsky-rozvoj-6/mestsky-rozvoj/dokumenty/koncepcia-mestskehorozvoja-slovenskej-republiky-do-roku-2030, Date accessed: 17/5/2018

⁷⁰ Further information can be found in the draft of the updated adaptation strategy (Chapter 3, Conceptual and Legislative Framework, and Annex 3, 4), URL: https://www.enviroportal.sk/sk/eia/detail/strategia-adaptacie-slovenskej-republiky-na-nepriaznive-dosledky-zmeny, Date accessed: 17/5/2018

⁷¹ STRATÉGIA HOSPODÁRSKEJ POLITIKY SLOVENSKEJ REPUBLIKY DO ROKU 2030, URL: http://www.enviroportal.sk/de/eia/detail/strategia-hospodarskej-politiky-slovenskej-republiky-do-roku-2030, Date accessed: 17/5/2018

8e. Adaptation is mainstreamed in insurance or alternative policy instruments, where relevant, to provide incentives for investments in risk prevention

Yes / No

The current and updated NAS includes an extensive section on Insurance, which recognises the relevance of this instrument in adaptation, and the need to take into account climate impacts. However, no evidence could be found that adaptation is mainstreamed in insurance policies or alternative policy instruments to provide incentives for investments in risk prevention.

9. Implementing adaptation

9a. Adaptation policies and measures are implemented, e.g. as defined in action plans or sectoral policy documents

Yes / In progress / No

As mentioned in Section A1, in 2016, the government adopted a progress report "Information on the progress made in implementing adaptation measures in the Slovak Republic", ⁷² which analyses the process of adaptation in Slovakia between April 2014 and April 2016. The report deals mainly with qualitative characteristics of the adaptation efforts in Slovakia. The progress report shows that adaptation concerns were included in several sectoral strategies and plans, and that the situation in this respect has improved. Adaptation concerns are included already at the concept phase of developing sectoral strategies and plans, or added at later stages (during the SEA process or inter-ministerial consultations of the documents). ⁷³

As mentioned in Section B, the national action plan, H2ODNOTA JE VODA, addresses drought and water scarcity, and the Adaptation Action Plan of Bratislava for years 2017-2020.

There are no specific sectoral action plans proposed, as adaptation concerns are directly included in their own strategies and plans (as explained above).⁷⁴

Implementing adaptation measures are also included in the Operational Programme for the Environment, 2014-2020.⁷⁵ With regard to floods protection, there is further action under the Rural Development Programme of the Slovak Republic 2014-2020, the Integrated Regional Operational Programme 2014-2020. In addition, there are several local initiatives launched since 2014, as specified in Section A2, which is relatively recent.

⁷² Informácia o dosiahnutom pokroku pri realizácii adaptačných opatrení v SR, URL: http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=25576, Date accessed: 17/5/2018

⁷³ Personal communication with MS contact.

⁷⁴ Personal communication with MS contact.

⁷⁵ Climate Adapt website, URL: http://climate-adapt.eea.europa.eu/countries-regions/countries/slovakia, Date accessed: 1/6/2018

9b. Cooperation mechanisms in place to foster and support adaptation at relevant scales (e.g. local, subnational)

Yes / No

The Ministry of Transport and Construction developed and published a guideline in 2015 on how to help implement adaptation options included in the current NAS within land-use and spatial plans at a local level.⁷⁶ The guideline was provided to all municipalities and will be updated after the adoption of the revised NAS.⁷⁷

In January 2018, the Urban Development Framework of the Slovak Republic until 2030 was approved. It mentions the need for climate adaptation, as one of the main future challenges for cities and municipalities.⁷⁸ One of the measures in this framework is to support cities in implementing local adaptation options.

The Ministry of Transport and Construction, as well as regional and local authorities, intend to focus more on implementing adaptation measures.⁷⁹ Several cities as mentioned in Section A2 have already begun implementation. Moreover, there are several funding mechanisms, which can provide financial support to regional and local authorities.

9c. Procedures or guidelines are available to assess the potential impact of climate change on major projects or programmes, and facilitate the choice of alternative options, e.g. green infrastructure

Yes / No

The Ministry of Transport and Construction of the Slovak Republic in cooperation with the Transport Research Institute issued a manual entitled: "Climate Change Assessment – Creation of methodology and incorporation of climate impact assessments on infrastructure plans/projects into existing processes at national level". This manual is being further developed. Additionally, an accompanying report "Methodological guidebook for climate impact assessment on large projects in the transport sector" is currently being discussed by the working group established under the Ministry of Transport.

The revised NAS mentions the preparation of this manual, and is expected to be updated to reflect the development of the latest manual.

⁷⁶ Metodické usmernenie MDVRR SR odboru územného plánovania k zabezpečeniu plnenia uznesenia vlády SR č.148/2014 z 26.3.2014 k Stratégii adaptácie SR na nepriaznivé dôsledky zmeny klímy, URL: https://www.mindop.sk/ministerstvo-1/vystavba-5/uzemne-planovanie/metodicke-usmernenia-oznamenia-stanoviska-pokyny, Date accessed: 18/5/2018

⁷⁷ Personal communication with MS contact.

⁷⁸ Koncepcia mestského rozvoja Slovenskej republiky do roku 2030, URL: http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=27130, Date accessed: 18/5/2018
⁷⁹ Personal communication with MS contact.

⁸⁰ Ministerstvo dopravy a výstavby SR v spolupráci s Výskumným ústavom dopravným vydalo príručku s názvom: Posúdenie klimatických zmien – tvorba metodiky a zakomponovanie posudzovaní dopadov na zmeny klímy infraštruktúrnych plánov/projektov do existujúcich procesov na národnej úrovni.

9d. There are processes for stakeholders' involvement in the implementation of adaptation policies and measures

Yes / No

Non-governmental organisations are actively participating in the implementation of adaptation measures, especially at the local level. They provide help on the development of local adaptation strategies, apply for projects in cooperation with municipalities and also realise awareness-raising activities. The most active NGO is the Carpathian Development Institute.

The energy sector and industry stakeholders can be involved through the SEA and EIA consultation processes. They can then choose whether they consider the impacts of climate change in their business activities and implement adaptation measures.⁸¹

Step E: Monitoring and evaluation of adaptation activities

10. Monitoring and reporting

10a. NAS/NAP implementation is monitored and the results of the monitoring are disseminated

Yes / No

The schedule of the periodic review of the NAS is determined in Resolution No 148/2014 of the Government of the Slovak Republic. The deadline to publish information on the progress of implementation of adaptation measures was 31 May 2016. In line with the Resolution, in 2016, the Government adopted a progress report "Information on the progress made in implementing adaptation measures in the Slovak Republic", which analysed the process of adaptation in Slovakia between April 2014 and April 2016. The short timeframe for evaluation (approximately 1.5 years) made it difficult to quantify progress with implementation. The report dealt mainly with qualitative characteristics of the adaptation efforts in Slovakia and has the following structure: information on the NAS, priority areas, monitoring of the environment, adaptation in the area of health, adaptation at local level, conclusion.⁸² This report provides information on possible funding mechanisms that can be used to finance adaptation related measures and projects. However, no information is given on the amount of funding.

As indicated above, the NAS is currently being revised. Furthermore, as part of the preparation of the NAP in 2019, a monitoring, reporting and evaluation framework will be elaborated.83

⁸¹ Personal communication with MS contact.

⁸² Informácia o dosiahnutom pokroku pri realizácii adaptačných opatrení v SR, URL: http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=25576, Date accessed: 17/5/2018

⁸³ Personal communication with MS.

10b. The integration of climate change adaptation in sectoral policies is monitored and the results of the monitoring are disseminated

Yes / No

A short chapter on adaptation actions in key sectors is available in the report mentioned under Indicator 10a.

10c. Regional-, sub-national or local action is monitored and the results of the monitoring are disseminated

Yes / No

A short chapter on adaptation actions on the local level is available in the report mentioned under Indicator 10a.

11. Evaluation

11a. A periodic review of the national adaptation strategy and action plans is planned

Yes / No

The schedule of the periodic review of the NAS is determined by the Resolution No 148/2014 of the Government of the Slovak Republic and includes information on the progress made with implementation (deadline: 31 May 2016), and the NAS update in view of new scientific knowledge on climate change (deadline: 30 April 2018, postponed to 31 October 2018). This information is available in the draft revised NAS, but not on the main adaptation page of the MZP website.

The results of the review are briefly described in the draft version of the updated NAS.⁸⁴

The evaluation of the updated version of the NAS is planned to be carried out in 2023.

11b. Stakeholders are involved in the assessment, evaluation and review of national adaptation policy

Yes / No

Current mechanisms will stay in place. During the process of updating the NAS, the working group on adaptation was revitalised and new representatives were invited and involved (around 40 members). This working group is involved in all issues related to adaptation. Under the SEA, general public and NGOs were invited to provide their opinions and remarks on the draft revised NAS, as previously mentioned.

⁸⁴ At the time of the final update (June 2018) of this Country Fiche, in the process of interdepartmental consultation..

SUMMARY TABLE

Adaptation Preparedness Scoreboard				
No.	Indicator	Met?		
Step A: Preparing the ground for adaptation				
1	Coordination structure			
1a	A central administration body officially in charge of adaptation policy making	<u>Yes</u> / No		
1b	Horizontal (i.e. sectoral) coordination mechanisms exist within the governance system, with division of responsibilities	Yes / In progress / No		
1c	Vertical (i.e. across levels of administration) coordination mechanisms exist within the governance system, enabling lower levels of administration to influence policy making.	Yes / In progress / No		
2	Stakeholders' involvement in policy development			
2a	A dedicated process is in place to facilitate stakeholders' involvement in the preparation of adaptation policies	<u>Yes</u> / No		
2b	Transboundary cooperation is planned to address common challenges with relevant countries	Yes / No		
Step E	3: Assessing risks and vulnerabilities to climate change			
3	Current and projected climate change			
3a	Observation systems are in place to monitor climate change, extreme climate events and their impacts	Yes / <u>In</u> <u>progress</u> / No		
3b	Scenarios and projections are used to assess the economic, social and environmental impacts of climate change, taking into account geographical specificities and best available science (e.g. in response to revised IPCC assessments)	Yes / In progress / No		
3c	Sound climate risks/vulnerability assessments for priority vulnerable sectors are undertaken to support adaptation decision making.	Yes / In progress / No		
3d	Climate risks/vulnerability assessments take transboundary risks into account, when relevant	Yes / <u>In</u> <u>progress</u> / No		
4	Knowledge gaps			
4a	Work is being carried out to identify, prioritise and address the knowledge gaps	Yes / In progress / <u>No</u>		

Adapta	tion Preparedness Scoreboard	
No.	Indicator	Met?
5	Knowledge transfer	
5a	Adaptation relevant data and information is available to all stakeholders, including policy makers (e.g. through a dedicated website or other comparable means).	Yes / <u>In</u> <u>progress</u> / No
5b	Capacity building activities take place; education and training materials on climate change adaptation concepts and practices are available and disseminated	Yes / In progress / <u>No</u>
Step C:	Identifying adaptation options	
6	Identification of adaptation options	
ба	Adaptation options address the sectoral risks identified in 3c, the geographical specificities identified in 3b and follow best practices in similar contexts	Yes / No
6b	The selection of priority adaptation options is based on robust methods (e.g. multi-criteria analyses, stakeholders' consultation, etc.) and consistent with existing decision-making frameworks	<u>Yes</u> / No
6с	Mechanisms are in place to coordinate disaster risk management and climate change adaptation and to ensure coherence between the two policies	Yes / <u>In</u> progress /No
7	Funding resources identified and allocated	
7	Funding is available to increase climate resilience in vulnerable sectors and for cross-cutting adaptation action	Yes / <u>In</u> <u>progress</u> /No
Step D:	Implementing adaptation action	
8	Mainstreaming adaptation in planning processes	
8a	Consideration of climate change adaptation has been included in the national frameworks for environmental impact assessments	<u>Yes</u> / No
8b	Prevention/preparedness strategies in place under national disaster risk management plans take into account climate change impacts and projections	Yes / <u>No</u>
8c	Key land use, spatial planning, urban planning and maritime spatial planning policies take into account the impacts of climate change	Yes / <u>No</u>
8d	National policy instruments promote adaptation at sectoral level, in line with national priorities and in areas	Yes / In progress / No

Adap	otation Preparedness Scoreboard	
No.	Indicator	Met?
	where adaptation is mainstreamed in EU policies	
8e	Adaptation is mainstreamed in insurance or alternative policy instruments, where relevant, to provide incentives for investments in risk prevention	Yes / <u>No</u>
9	Implementing adaptation	
9a	Adaptation policies and measures are implemented, e.g. as defined in action plans or sectoral policy documents	Yes / <u>In</u> <u>progress</u> / No
9b	Cooperation mechanisms in place to foster and support adaptation at relevant scales (e.g. local, subnational)	<u>Yes</u> / No
9c	Procedures or guidelines are available to assess the potential impact of climate change on major projects or programmes, and facilitate the choice of alternative options, e.g. green infrastructure	<u>Yes</u> / No
9d	There are processes for stakeholders' involvement in the implementation of adaptation policies and measures.	<u>Yes</u> / No
Step	E: Monitoring and evaluation of adaptation activities	
10	Monitoring and reporting	
10a	NAS/NAP implementation is monitored and the results of the monitoring are disseminated	Yes / No
10b	The integration of climate change adaptation in sectoral policies is monitored and the results of the monitoring are disseminated	<u>Yes</u> / No
10c	Regional-, sub-national or local action is monitored and the results of the monitoring are disseminated	<u>Yes</u> / No
11	Evaluation	
11a	A periodic review of the national adaptation strategy and action plans is planned	<u>Yes</u> / No
11b	Stakeholders are involved in the assessment, evaluation and review of national adaptation policy	<u>Yes</u> / No