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Information system for adaptation to climate change in Hungary

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A memorandum of understanding has been signed between Iceland, Liechtenstein, Norway and Hungary to establish the 2009–2014 Programme of the European Economic Area Grant entitled Adaptation to Climate Change in Hungary. The Programme has three essential pillars:

1. Establishment of National Adaptation Geographical Information System (NAGiS). To have targeted and sustainable adaptation strategies, detailed and quantitative information on regional climate change and its local impacts is of key importance. NAGiS has been built up to support strategic planning and decision making related to the adaptation in Hungary.

2. Development of information in NAGiS. To define the proper adaptation actions, scientific credibility of the information system has great importance. The most essential input of NAGiS is served by climate data. The objective of the RCMGiS project entitled “New climate scenarios based on radiative forcing change over the Carpathian Basin” is to develop the available future projections. This component provides detailed estimations for future climate change over Hungary with uncertainty assessment based on regional climate model results, quantified information for impact analyses, training for (end-)users to properly utilize climate information.

3. Objective impact assessments. Outcomes of the impact studies based on credible climate information point out the actions needed to mitigate or exploit climate change impacts. Elaboration of an objective approach is indispensable to quantify and compare the exposure, vulnerability and adaptation capacity of any sectors. In this pillar, such a methodology is developed focusing on tourism and critical infrastructures (with emphasis on human health and road networks), and final objective is to extend NAGiS with the resulted indicators.

The presentation aims at introducing three key components of the adaptation programme in Hungary: basics and development of the information system supplying inputs for vulnerability assessments; some exemplary impact studies based on first NAGiS prototype will be shown in detail.