

Relevant projects

Type	Project	Intended result	Interaction
Meth- odol- ogy	DIS-ALP Disaster-Information-System for the Alpine Regions EU-INTERREG IIIB Cadses Project http://www.dis-alp.org	DIS-ALP aims at improving the documentation process of natural hazards by sharing knowledge to achieve interdisciplinary results. Objectives: Methodological homogenization of event documentation and standardization of terminology; Development of specifications for the data-transfer into a web-platform Results: Uniform definitions of terms and processes; Standardized flow of event documentation; Priority ranking and definition of least documentation quality of features	Developing a Thesaurus respectively an Ontology of Risk terms; Obtaining interdisciplinary results concerning natural hazards processes
	DAMOCLES Debris-fall assessment in mountain catchments for local end-users EU-5 th Framework Programme http://damocles.irpi.cnr.it	DAMOCLES will develop and apply advanced modelling technologies to assess hazards posed by rapid slope failures in mountain areas and will disseminate these technologies to local end-users for application in land use planning.	Research-based hazard assess model development with the direct involvement of local planning and civil protection authorities as data suppliers, advisors, and recipients of the project results.
	FLOODsite Integrated Flood Risk Analysis and Management EU-6 th Framework Programme http://www.floodsite.net	Flooding is the most widely distributed of all natural hazards across Europe, causing distress and damage wherever it happens. To achieve the goal of integrated flood risk management, FLOODsite brings together managers, researchers and practitioners from a range of government, commercial and research organisations, all devoted to various, but complementary, aspects of flood risk management.	Managers, researchers and practitioners have the objective of integrated flood risk management.
	ORCHESTRA Open Architecture and Spatial Data Infrastructure for Risk Management EU-6 th Framework Programme www.ogceurope.org/projects/orchestra	Recent events have underscored the need to be able to consolidate information from disparate systems to support citizen protection and security, disaster management, criminal justice, and other missions, crossing pan-European agency boundaries and extending into National, State and local government areas. One of the most urgent and important challenges currently facing governments is to get these systems to interoperate and share information. ORCHESTRA is responding to this challenge	The overall goal of ORCHESTRA is to design and implement an open service oriented software architecture that will improve the interoperability among actors involved in Multi-Risk Management.
	GALAHAD Advanced Remote Monitoring Techniques for Gla-	The GALAHAD project aims at developing innovative and fundamental functionalities of remote monitoring techniques, namely Ground Based SAR Interferometry, derived from satellite applications, and Terrestrial Laser Scan-	GALAHAD addresses to landslides, avalanches and glaciers -related hazard mitigation, through the development

	<p>ciers, Avalanches and Landslides Hazard Mitigation</p> <p>EU-6th Framework Programme</p> <p>www.galahad.it</p>	<p>ning, enabling the improvement of reliability, precision and operative usefulness of the measurements and of the forecasting capacity of the interpretation tools.</p>	<p>of advanced monitoring techniques and the improvement of forecasting methods and tools.</p>
	<p>ETALP</p> <p>Erosion and Transport in Alpine Systems</p> <p>Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management</p>	<p>Main objective of the project is the collection and evaluation of erosion and transport procedures in catchment areas.</p>	<p>Focal point is the collection and understandable evaluation of natural hazards in erosion areas on the basis of interdisciplinary expert knowledge concerning a sustainable development.</p>
	<p>Simulation Model ELBA for Avalanches</p> <p>Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management</p>	<p>The concept of Voellmy is one of the most widely applied models in avalanche run out calculation. Based on hydraulic theory the shear forces are consisting of two components, one is a dry Coulomb-type sliding friction and the second a parameter defining the velocity dependent dynamic drag. In the practical application those two parameters are taken as constant or varied only for major reaches of the avalanche track.</p>	<p>Calibration of ELBA on the basis of documented avalanches; Optimizing the flow of work; Simulation program for an efficient operational application</p>
	<p>Avalanche Information System Salzkammergut</p> <p>Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management</p>	<p>The aim of the project is to analyse the information available from the Forest Technical Service (FTD) for torrent and avalanche control on the basis of an avalanche data base, i.e. avalanche cataster, project data, hazard map etc. as well as to put it in relation to the weather data in order to enable temporary hazard assessment.</p> <p>Results: New methods for temporary avalanche risk; Data achieve</p>	<p>The Salzkammergut is one of MONITOR's Test-beds</p> <p>Objectives: Combining the avalanche information from the FTD and the weather data for a better temporary risk determination</p>
	<p>Methodology of New and Objective Snow Avalanche Hazard Assessment Evaluation (Study)</p>	<p>This study should help to create new serious methods for a modern avalanche risk assessment in South Tyrol. More than 80 avalanches will be analysed in the Schnalstal (NW of South Tyrol) for this project. The main part is to validate the actual avalanche models for this special inner-alpine region.</p> <p>Result: Hazard zone, which includes information about uncertainty and validity of different models in this region</p>	<p>Quality increase of the danger evaluation process</p>
	<p>Hydr2ac</p> <p>Development and Application of a Hydrological Simulation Model for Alpine Catchment Areas</p>	<p>The determination of potential of risks in alpine catchment areas by computer simulations allows a flexible modelling of dangerous areas. The advantage is the possibility of taking different natural parameters into consideration and therefore allowing diverse simulations of sediment transport in a very efficient way.</p> <p>Objectives: Development and application of a</p>	<p>Flexible modelling of dangerous risk-areas</p>

	Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management	sediment transport simulation model supported by modern software technologies; Testing of SETRAC in selected catchment areas	
	<p>SETRAC</p> <p>Evaluation of sediment routing models in steep torrent channels using the SETRAC simulation model</p> <p>Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management</p>	<p>In steep streams with gradients exceeding about 5% there are only very few measurements of sediment transport. During flood events, large sediment loads can be moved through the torrent channel network and result in substantial damage in settlement areas. Post-event geomorphologic documentation of the main sediment transfer processes are the basis to evaluate sediment routing models in such channels.</p> <p>Results: Simulation model for sediment transport in steep torrents, to be useful also for practical applications</p>	<p>Evaluation and improvement of simulation models for sediment transport in steep torrent channels; Improvement of basis for hazard assessment of sediment transporting flood events</p>
	<p>GUSTAV</p> <p>Mobile Katastrophen-dokumentation und online Katastrophen-management</p>	<p>Based on thorough analysis of requirements of different command levels (like Armed Forces, Police, Red Cross, Fire brigades) and administration (ministries, catastrophe management of federal states) detailed requirement profiles will be generated, including definition of necessary (geo-)information and services. This represents the basis for the development of the GUSTAV II disaster related (information) services and tools necessary for efficient operations of mobile teams.</p>	<p>Analyses of conditions and requirements of disaster management for natural disasters (floods, debris flow, avalanches, and rock fall).</p>
	<p>GUSTAV II</p> <p>www.gustav-info.at</p>	<p>Within GUSTAV II the experiences gained in GUSTAV (in the field of mobile documentation) will be used and enhanced as one information source. Based on these methods and on the additional integrated remote sensing as well as sensor web services.</p>	<p>GUSTAV II aims at a demonstrator for disaster management information services, which allows comprehensive testing and later optimisation through field trials.</p>
	<p>Warning System for Debris Flows - Wartschenbach</p> <p>Source: Schmidt R. – Warnsysteme in Wildbacheinzugsgebieten; Dornbirn 2002; S. 80-112</p> <p>Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management</p>	<p>At the “Wartschenbach” in Eastern Tyrol the construction of a pilot system for early warning of mudflows took place in collaboration with the local Torrent and Avalanche Control Service and the Ministry for Agriculture, Forestry, Environment and Water Management</p> <p>An operative measurement chain was installed (in operation since 2000); an alerting was not implemented because based on several catastrophes extensive technical measures have already taken place in this area.</p>	<p>Construction of a pilot system for early warning of mudflows in collaboration with the local Torrent and Avalanche Control Service and the Ministry for Agriculture, Forestry, Environment and Water Management</p>
The-matic	<p>SUMAD</p> <p>Sustainable use and management of alluvial plains in diked river areas</p>	<p>The rivers which are the central subject of this project are mainly diked in order to ensure sufficient flood protection. The alluvial plains between the dikes grow constantly due to sedimentation which leads to the problem that the flow profile originally calculated is decreasing. This development is additionally enhanced through the natural succession of the allu-</p>	<p>The risk, that dikes are not able to prevent future flood disasters increases. Therefore clearing activities by responsible authorities become more and more in contradiction to nature protection</p>

	<p>EU-INTERREG IIIB Cadses Project</p> <p>www.schabl.at/sumad.htm</p>	<p>vial plains. The whole process multiplies the risk, that the present dikes are not able to prevent future flood disasters. The authorities responsible are the water management agencies. As preventive measures, they have so far cleared alluvial plains and increased the water flow rate in riparian woods.</p>	<p>goals and existing regulations (NATURA 2000 and the respective national protection regulations). The need for integrated strategies is increasing.</p>
	<p>RIMADIMA</p> <p>Risk Management, Disaster Management and prevention of natural hazards in mountainous and/or forested regions</p> <p>EU-INTERREG IIIB Cadses Project</p> <p>http://web.rimadima.org</p>	<p>Annually natural disasters bring tremendous harms to population and nature and leave long-term consequences for the economy and infrastructure of the affected regions. As a consequence the principal target of this project will be the development of preventive measures, emergency plans and plans to combat imminent dangers. The participating regions to this project suffer, as many as others of the CADSES area, of natural disasters such as Meteorological (storms, floods, forest fires, droughts) or Gravitatoric causes (landslide, avalanches, rock slide, mudflow, rock falls). RIMADIMA aims to set up a common concept of a „Decision Support System” as tool for an improved decision making process, for planning departments and "Crisis Management Centers". This will give possibilities of interaction between planning and crises intervention.</p>	<p>Improvement of existing structures, in particular departments involved in crisis management;</p> <p>Integration of spatial planning instruments in risk management with a tool for decision support and therewith enable a framework of cross-sectoral acting;</p> <p>Recommendations for decision makers.</p>
	<p>Red Code</p> <p>Regional Disaster Common Defence</p> <p>EU-INTERREG IIIB Cadses Project</p>	<p>Red Code aims to set up methodologies and trans-national actions to achieve the basis for a trans-national protocol of agreements in order to manage, monitor and prevent calamities and to create best practices and common procedures to be shared by all potential actors involved in the promotion of risks and management of disasters at European level. Through the trans-national strategy and the common tools elaborated with the contributions of all the actors involved, the project improves the capacity of reaction in case of disasters and gives the possibility to cooperate also facing with events that require common interventions.</p>	<p>It is necessary to create/ to share common guidelines and tools within EU-Member States to face with prevention and management of natural and man made disasters.</p> <p>Plans of actions to prevent and manage risks need to be commonly drawn up and applied on a trans-national basis.</p>
	<p>S.I.S.M.A.</p> <p>Integrated System for prevention of risks and protection of historical architectural pattern</p> <p>EU-INTERREG IIIB Cadses Project</p>	<p>A context of particular vulnerability due to seismic activity in the territories of CADSES area (Italy, Greece, the Balkan Countries, Slovene Republic, Slovak Republic), together with a rich architectural and cultural heritage, including several historical centres where relevant activities for the quality of urban systems are carried out, are the reasons why the Project "S.I.S.M.A. - Integrated System for prevention of risks and protection of historical architectural pattern" is submitted.</p> <p>The purpose is to start a scientific comparison on approaches and methodologies developed and now in course of application, apt to go against and prevent the destructive action of</p>	<p>The objective is to protect and safeguard human life and cultural heritage will be reached through the development of methodologies tending to integrated actions of prevention.</p>

		natural events, from the viewpoint of promoting and developing preventative coordinate actions outlined at a trans-national level.	
	<p>ENHYGMA</p> <p>ENvironmental, HYdrologic and Ground MAnagement: innovative solutions for the CADSES areas</p> <p>EU-INTERREG IIIB Cadses Project</p>	<p>The main objective is the definition of a versatile, effective and low-cost problem-solving methodology for integrated water management in flood risk areas; this will be achieved through the collaboration of various institutions of the CADSES region. The methodology will serve as a basis for the development of a pilot project and its application in the Tisza-Marosszogi Association area (Hungary), with the purpose of creating a Digital Terrain Model (DTM), as well as Flood Risk Area Maps through bi-dimensional hydraulic modelling. Through making available such strategic tools, the project will provide a critical contribution to the optimization of environmental planning.</p>	<p>The focus lays on land surveys, laser scanning and remote sensing for 3D modelling functional to hydrological risk assessment methodologies development.</p>
	<p>FLOODMED</p> <p>Monitoring, forecasting and best practices for FLOOD Mitigation and prevEntion in the CADSES region</p> <p>EU-INTERREG IIIB Cadses Project</p> <p>http://floodmed.chi.civil.ntua.gr/project.html</p>	<p>FLOODMED will bring together scientists and public servants in developing a scalable system of operational tools to support integrated water and sustainable flood risk management. The efficacy of different best management practices, structural and non-structural, will be examined in relation to flood prevention and low impact development. Upon project completion, local authorities will have at their disposal, and will be trained to use, a state of the art, viable, integrated system for flood estimation and mitigation, which will constitute a solid basis for decision making in the area of spatial planning.</p>	<p>Trans-national methodologies and models will be developed and implemented for flood estimation and forecasting, for both gauged and ungauged sites, leading up to the proposal of flood mitigation measures and real-time warning systems.</p>
	<p>HYDROCARE</p> <p>Hydrological cycle of the CADSES regions</p> <p>EU-INTERREG IIIB Cadses Project</p> <p>www.hydrocare-cadses.net/project.htm</p>	<p>The project HYDROCARE develops an integrated system capable of assessing the impact of hydro-meteorological events on the water resources in the CADSES region. Managing tools will be illustrated also in practical terms by performing some case studies. Other main points of the project will be the reconstruction of the large and basin-scale hydrological cycle in the CADSES area, to be obtained by suitably merging observations (both local and remote) and models, and the development of a high level ICT network within a trans-national frame for collecting and exchanging hydro-meteorological data and providing relevant information to end-users such as professionals, farmers, entrepreneurs, public administrations and agencies.</p>	<p>Emphasis will be put on the development of effective trans-national tools for a rational exploitation of the water resources, with the purpose of preserving and enhancing economical and environmental welfare.</p>
	<p>RISK AWARE</p> <p>RISK-Advanced Weather forecasting</p>	<p>The projects main activities will focus on the: - definition of methodologies, models and data set; - definition of common guidelines for risk prevention and management; - design and</p>	<p>Meteorological hazards, especially flooding, cause the loss of lives and the destruction building</p>

	<p>system to Advice on Risk Events and management</p> <p>EU-INTERREG IIB CadSES Project</p> <p>www.smr.arpa.emr.it/riskaware/</p>	<p>development of data communication system and archiving system; - implementation of the operational prototypes over selected target areas; - deployment of facility to end-user. The goal of RISK AWARE is to enlarge the spectrum and quality of meteorological information up to the short range (0-24 hours) in order to support users in hydrology, geology, civil protection and related areas whose actions are dependent on timely information about severe meteorological events evolving on short time scale and local hydro geological conditions.</p>	<p>and infrastructure which demands for improving forecasts/timely warnings in order to protect lives and properties. General objectives are the prevention of geo-hydrological disasters at regional, national and trans-national level forced by meteorological situation, design, implementation of programmes for geo-hydrological hazards assessment and risk management.</p>
	<p>RainDROP</p> <p>Development of stormwater Operational Practices Guideline</p> <p>EU-INTERREG IIB CadSES Project</p> <p>www.raindrop.cz</p>	<p>Rainwater (also called stormwater) runoff from urban areas can be a major reason for flooding and surface water pollution. Within the rainDROP project, storm water management (SWM) will be developed, tested and disseminated in four work packages:</p> <ol style="list-style-type: none"> 1. Integration of storm water management into urban drainage master planning will be carried out for the five partner cities in the Czech Republic, Germany, Greece and Slovakia. 2. Different best management practices (BMPs, e.g. porous pavements, infiltration swales, trough-trench-systems, cisterns, retention ponds) will be demonstrated in pilot projects for new development areas as well as for existing urban settlements. 3. Current SWM policies in the whole CADSES region will be investigated and compared. 4. Finally a SWM guideline for planning and implementation will be produced. RainDROP will improve the awareness for storm water related problems and seeks to reduce the negative impacts on water balance and water quality in the CADSES region 	<p>RainDROP develops tests and disseminates storm water management.</p>
	<p>STRiM</p> <p>Remotely Accessed Decision Support System for Trans-national Environmental Risk Management</p> <p>EU-INTERREG IIB CadSES Project</p> <p>www.strim.eu</p>	<p>After studying the existing national systems and the scientific state of the art in risk management, the project will define a complete service on risk management at the trans-national level, comprising (a) a user-friendly automated Risk assessment model linked to GIS environment for implementing best practice and (b) a complete set of documents and software available to the users in order to examine and justify alternative scenarios. Four trans-national pilot actions in water/drought, flood, ecosystems, and forest management will be carried out. Stakeholders in Risk manage-</p>	<p>The main objective is to establish a remotely and commonly accessed system for decision support of risk management at the trans-national level.</p>

		ment will be trained in the system by researcher-partners in an international seminar and in every partner-country in local seminars. Continuous support and consultancy will be available through the system for the post-project period.	
	<p>NAB</p> <p>Natural Space Analysis for Alpine Mountain Areas</p> <p>EU-INTERREG III B Alpine Space Project</p> <p>www.nab-project.org</p>	<p>Objectives: - Data evaluated on a trans-disciplinary basis and the use of new tools will provide a valuable foundation for the prevention of natural hazards; - Enhanced trans-disciplinary collaboration for the reduction of natural hazards in the Alpine space; - Optimisation of natural hazard evaluation processes in catchments and derivation of scenarios and protection measures; - Standardised site modelling procedure for protection forests, and development of management plans for alpine protection forests (site map, including site description and silvi-cultural manual); - Blue-print for natural space management (including management plans & action plans) for enhanced analysis and prevention; - Establishment of a Web-based information system for the authorities involved and a communication strategy for heightened hazard awareness</p>	<p>Protection against natural hazards for population and infrastructure is achieved by sharing information and methods, by developing and implementing common measures (risk analysis, consolidation of protection forests, prediction and monitoring of natural hazard processes, strategy development and action plans for risk reduction).</p>
	<p>Catchrisk</p> <p>Migration of hydro-geological risk in alpine catchments</p> <p>EU-INTERREG III B Alpine Space Project</p> <p>www.alpinespace.org/catchrisk.html</p>	<p>The first objective of this project is to create a shared approach for the definition of hydro-geological risk scenarios in Alpine catchments and on alluvial fans. To achieve this all aspects of hydro-geological hazards affecting a catchment will be analysed, in particular: flooding and mass transport phenomena; droughts and aquifer depletion; and landslides, such as rock falls, soil slips, and debris flows. This will lead to the evaluation of hazard and risk both in the catchment and on the alluvial fans.</p> <p>Expected impacts include a contribution to changing the attitude of local administrators to risk and land management into a more comprehensive process, and establishing a network between partners, also by setting a common terminology.</p>	<p>The final objective is to provide guidelines addressed to professionals and administrators to support decisions for improving water management, land use and protection measures planning, and risk management.</p>
	<p>ClimChAlp</p> <p>Climate change, impacts and adaptation strategies in the Alpine Space</p> <p>EU-INTERREG III B Alpine Space Project</p> <p>www.chlimchalp.org</p>	<p>The project aims to be a concrete input for a future Alpine Space Program based on alpine climate changes and its potential effects.</p>	<p>By a general assessment of climate models, historical climate changes and their impact will be ascertained future scenarios and their effects on natural hazards, spatial development and key economic sectors.</p>
	<p>ALTER-Net</p>	<p>The project aims to help deliver on the 2010</p>	<p>Establishment of a last-</p>

	<p>A long term Biodiversity, Ecosystem and Awareness Research Network</p> <p>6th Framework Programme</p> <p>www.alter-net.inf</p>	<p>target (which is to halt the loss of biodiversity by 2010) by promoting a better integrated and stronger European biodiversity research capacity.</p> <p>Objectives: Integration of national centres of excellence in biodiversity research and social science; Integration of environmental and socio-economic approaches; Development of a network of multi-functional long-term ecosystem research platforms; Development of a partnership between research scientists, science communicators and science-based visitor centres; Development of a science-policy link to improve information exchange related to biodiversity assessment; Development of a framework for a distributed data, information and knowledge management system...</p>	<p>ing infrastructure for integrated ecosystem research, combining ecological and socio-economic approaches, and with greater emphasis on communication with relevant audiences.</p>
	<p>ERA-Net Crue</p> <p>Coordination of the research financed in the European Union on flood management</p> <p>6th Framework Programme</p> <p>www.crue-eranet.net</p>	<p>Climate change is increasing the risk of such catastrophes. National governments have responded with research into flood risk management and mitigation, but there has been little coordination of their programmes.</p>	<p>The CRUE network has been set up to consolidate existing European flood research programmes, promote best practice and identify gaps and opportunities for collaboration on future programme content.</p>
	<p>MITRA</p> <p>Monitoring and Intervention for the Transportation of dangerous goods</p> <p>6th Framework Programme</p>	<p>The objective of MITRA is to prototype a new operational system based on regional responsibilities for the monitoring of dangerous goods transportation in Europe. This concept, derived from the Air Traffic Control domain allows intervention teams to react immediately in case of an accident, with a maximum of safety.</p>	<p>Providing the Civil Security centres with a real-time knowledge of the position and contents of dangerous vehicles circulating in their responsibility area, warning and alert displays in case of dangerous situations, and crisis management information</p>
	<p>OASIS</p> <p>Open Advanced System for dISaster and emergency management</p> <p>6th Framework Programme</p> <p>www.oasis-fp6.org</p>	<p>The objective of OASIS is to define and develop an Information Technology framework based on an open and flexible architecture and using standards, existing or proposed by OASIS that will be the basis of a European Disaster and Emergency Management system.</p> <p>The Disaster and Emergency Management system aims to support the response operations in the case of large scale as well as local emergencies. OASIS will provide within this framework an initial set of applications which will cover the main needs that are identified by the end-users.</p>	<p>OASIS is intended to facilitate the cooperation between the information systems used by civil protection organisations, in a local, regional, national or international environment.</p>
	<p>EGERIS</p>	<p>Working with several Civil Protection organisations, it appears that, for the moment, they</p>	<p>Overall improvement of efficiency of Civil Protec-</p>

<p>European Generic Emergency Response Information System</p> <p>6th Framework Programme</p> <p>www.egeris.org</p>	<p>have not benefited as much as other professionals from the new Information and Communication Technologies (ICT). Most of them are poorly equipped and they are now eager for making up in order to improve their overall efficiency. It is identified as a major priority. Another required key factor is interoperability, to able different emergency actors, possibly belonging to different regional or national European authorities to work jointly in case of large scale disaster.</p> <p>Objectives: Crews on-the-field equipped with portable devices (hand held terminals e.g. PDA with a GPS receiver); Mobile command centres installed in vehicles, close to the "hot spots" and co-ordinating several crews on-the-field; equipped with onboard devices like laptop computers and GPS receivers; Function Specific Control Room, hosting the local management and interfaces with Auxiliary functions (Technical & Scientific Support, Health Assistance, Damage Assessment, etc.), including reporting to upper level of co-ordination...</p>	<p>tion organisations</p>
<p>MOUNTAIN-RISKS</p> <p>Mountain Risks: From prediction to management and governance</p> <p>6th EU-Framework Programme</p> <p>Marie Curie Actions</p> <p>www.unicaen.fr/mountainrisks</p>	<p>The proposed network intends to develop an advanced understanding of how mountain hydro-geomorphological processes behave and to apply this understanding to living with the hazards in the long-term. The Network will provide a high-level of training-through-research for European young researchers in: (1) Mountain hydro-geomorphologic hazard analysis; (2) Consequences of hazard and quantitative risk assessment; (3) Risk management; (4) Risk governance. State-of-the-art experimental, methodological and computational advances, as well as risk management strategies will also be used to ensure Europe's proficiency in this area.</p>	<p>The Network will provide a high-level of training-through-research for researchers</p>
<p>Conservation strategies for woodland and river in the Gesaeuse</p> <p>Naturschutzstrategien für Wald und Wildfluss im Gesäuse</p> <p>EU-LIFE Project</p> <p>www.nationalpark.co.at</p>	<p>The project aims to improve target habitats along the Enns- and Johnsbach river, as well as specific habitats of target species. Also, montane and riverine forests and alpine pastures require conservation action. Because the Styrian Forestry Administration is involved as the landowners in the project, reclamation and regeneration of forest areas is possible.</p> <p>Their participation in the project is of great strategic value from a conservation standpoint because through them a better understanding of NATURA 2000 can be established.</p>	<p>The main public mission is to control waterflow and prevent floods in populated areas.</p>
<p>SURE</p> <p>Successful Rehabilitation Accompanying</p>	<p>Pilot projects will reveal best practise methods of rehabilitation and restoration. Experience gained from earlier projects combined with the knowledge of the participating partners will</p>	<p>Aim of the project is to put basic strategies into practise that guarantee ecological and sustain-</p>

	<p>Infrastructural Interventions</p> <p>EU-INTERREG IIIB CadSES Project</p> <p>www.sureproject.net</p>	<p>help to avoid earlier mistakes. Research realised at the pilot area will focus on indicators that allow to measure the expected increase of ecological value through ecological sound rehabilitation measurements. With the help of constant monitoring of economic and ecological parameters, the data gained from the pilot projects will convince local decision makers to put the improved know how into practice.</p>	<p>able restoration or rehabilitation under extreme site conditions which improves danger of erosion and also contributes, in a broader sense, to a decrease of the probability of occurrence of natural disasters like mudflows etc</p>
	<p>Susceptibility of Alpine Grass Covers to Erosion</p>	<p>Preventive protection from erosion is much cheaper than subsequent reconstruction of damages.</p> <p>Objectives: Early recognition of erosion</p> <p>Result: Clues to beginning erosion are: - Occurrence of moss; - Canopy density; - Superficial water emergence; - Differences in the clay and silt content</p>	<p>In this research project the susceptibility of alpine lawn to erosion is assessed by means of observing of the vegetation and the soil.</p>
	<p>Evaluation of Values for the Dynamics of Rock Fall</p> <p>Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management</p>	<p>In mountainous regions it becomes more and more important to find out what infrastructures are threatened by rock fall or in which regions more buildings can be erected without too much risk.</p> <p>Objectives: Determination of areas with low risk to erect buildings; Simulation models</p>	<p>Analyses which infrastructures are threatened by rock fall.</p>
	<p>Floodrisk I</p> <p>FloodRisk – Analysis of the floods of August 2002</p> <p>Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management</p>	<p>In summer 2002, heavy floods affected many regions of Austria, with severe consequences for settlements and industrial areas. This calls for pressing ahead with the implementation of integrated flood management, including measures for immediate protection and relief efforts as well as ecologically oriented flood prevention.</p>	<p>The aim of the project FloodRisk is to compile relevant data, to work out questions for the purpose of further detailed analyses as well as proposals for better disaster management in the future.</p>
	<p>Floodrisk II</p> <p>Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management</p>	<p>Floodrisk II is the continuation of the project Floodrisk I. One of the objectives is the documentation and analysis of the extreme floods in August 2005.</p>	<p>Development of an overall concept for the protection against floods</p>
	<p>SAN – Biogenic Safety Standards against Natural Hazards at Railway Lines</p> <p>(Biogene Sicherheitsstandards für naturgefahrensensible Bahnstrecken)</p>	<p>The project develops standards and consumer requirement specifications for improvement of safety of natural dangers along Austrian Railways under consideration of the interoperability of European railway lines. In the course of this forestry and engineering-geological results methods are analysed concerning their protection effect and delimited against technical measures. These standards have to be certifiable and understandable.</p>	<p>Improvement of safety of natural dangers along Austrian Railways</p> <p>(The Austrian Railways are Project Partner in the EU-Project MONITOR.)</p>
	<p>HANNIBAL</p>	<p>Natural hazards like landslides, avalanches or mudflows act as a steady and serious threat.</p>	<p>Development of a "Decision Support System" (</p>



	<p>Sicherheit von Alpen-transversalen-Einsatz der Erdbeobachtung in Verbindung mit GIS</p>	<p>Thus the prior objective of "Hannibal" was to develop a "Decision Support System (DSS)" which builds up on methods of GIS-technologies and supports the management of natural hazards.</p>	<p>GIS-technologies) which supports natural hazard management.</p>
	<p>TERRAFIRMA II. Pan-European Ground Motion Hazard information service</p> <p>European Space Agency's (ESA) Global Monitoring for Environment and Security (GMES) Service Element Programme www.terrafirma.eu.com</p>	<p>Terrafirma provides a ground motion hazard information service, distributed throughout Europe via national geological surveys and institutions.</p>	<p>The objective of the developed hazard information service is to help saving lives, to improve safety and to reduce economic loss.</p>
	<p>Strengthening capacity for forest fire prevention TCP/BUL/2902 (A)</p> <p>FAO Technical Cooperation Programme (TCP)</p>	<p>The overall objective of the assistance is to develop effective protection mechanisms for the forests and trees outside forests through:</p> <ul style="list-style-type: none"> a) Strengthening capabilities of interdepartmental government institutions as well as multiple level stakeholders in dealing with forest fire prevention and management; b) Developing a legislative framework for an integrated forest fire management programme in Bulgaria; c) Increasing public participation and interest in fire prevention. 	<p>Development of effective ways for protection of forests by increasing public participation and interest in fire prevention.</p>
Plan-ning	<p>EGAR Catchment Areas in Alpine Regions</p> <p>EU-INTERREG IIB Alpine Space Project</p>	<p>The objective of the project was to present and compare utilisation needs and natural hazards based on the example of two Alpine valleys – Zillertal/Tyrol and Oberammergau/Bavaria. Resulting overlaps bear impressive witness of the current and potential conflicts.</p>	<p>The data should provide a basis for various land-use planning activities:</p> <p>Hazard zone planning; Area zoning; Better assessment of natural hazards; Identification of interactions; Transparent prioritisation; Development of methods to register and evaluate the natural space at the regional planning level</p>
	<p>ILUP Integrated Land Use Planning & River Basin Management</p> <p>EU-INTERREG IIB CadSES Project</p>	<p>The risk potential in river basins has increased strongly due to the enormous use pressure. In view of the demographic concentration in river basins and potential climate changes, safety in valleys is only possible if protective water management and other disciplines cooperate. In selected river basins, exemplary new methods are being tested, strategies developed and pilot projects implemented. Due to space limi-</p>	<p>Environment protection; Resource management and risk prevention; Promoting integrated water management and prevention of floods</p>

	<p>http://www.ilup.org</p>	<p>tations, infrastructure planning, land use and the protection of resources require an integrated approach, and multifunctional strategies must be developed. A solution for problems of foothill and hill countries regarding integrated management of water resources, risk and landscape management can be solved sustainable only in an interdisciplinary way. ILUP pursues the basic concept of a holistic, network-oriented landscape assessment from the problem solving approach to the implementation measures.</p>	
	<p>ELLA ELBE - LABE Preventive flood management measures by trans-national spatial planning EU-INTERREG IIIB CadSES Project www.ella-interreg.org</p>	<p>Flood prevention and common management approaches have to be improved in particular regarding long term spatial planning.</p> <p>The promotion of integrated water management and implementation in regional planning: Trans-national development and regional implementation of a common spatial planning strategy...</p> <p>The prevention of floods: Risk analysis and mapping, basic realisation steps for retention measures, impact analysis; Retaining measures for rainwater in the fields of regional planning, agriculture, forestry etc; Solutions for downstream - upstream burden balancing to speed up the realisation of measures; Risk maps, agreement on retention measures, land use options (e.g. agriculture, forestry); Production of trans-national strategic planning maps for the entire river basin; Exemplary improved regional plans, regional strategies etc. following the trans-national needs...</p>	<p>Evaluation and improvement of spatial planning settings, instruments and policies; Improvements of several regional and local land use plans in flood prone areas.</p>
	<p>IPAM Integrative Protected Area Management EU-INTERREG IIIB CadSES Project www.ipam.info</p>	<p>The protection of areas and sites is one of the most important instruments of modern, anticipating strategies in nature conservation and planning for sustainable spatial development. Therefore, an enormous increase of number and acreage as well as the number of categories of sites has been registered. The management of these sites has become a challenge for conservation and other sectors, mainly regional planning, since protected area management is related to three dimensions, i.e. the spatial, socio-cultural and economic dimension. Within the enlargement process of the EU, different administrative and planning systems should anticipatorily be harmonised in a smooth process.</p>	<p>The planning and managing of protected areas hit very different legal, administrative and technical realities. Besides, the interfaces between regional, national and trans-national requirements and solutions must be stringently developed.</p>
	<p>NETWET 2 Networking Perspectives of Trans-national</p>	<p>NetWet 2 focuses on various important problems in the field of water (<i>salinity of groundwater aquifers, ecological balance of sensitive aquatic ecosystems, drinking water, environmental impact of organic agricultural practices on waters, protection of flood risk areas, protection of drought areas in rela-</i></p>	<p>NetWet 2 focuses on various important problems in the field of water and aims at the promotion of bottom-up partici-</p>

	<p>Co-operation and Participatory Planning for Integrated Water Resources Management through the promotion of new forms of Spatial Governance</p> <p>EU-INTERREG IIB CadSES Project</p> <p>www.medregio.org/netwet2/gen_gb.htm</p>	<p>tion to flood development, protection of areas with high environmental hydraulic risk, economic value of humid areas water) and aims at the promotion of bottom-up participatory spatial planning and new forms of spatial governance at trans-national level for the integrated management of water resources. The project's principal objective is the development of trans-national co-operation for water management through: 1. the promotion of water management integrated methods and 2. the development of new conditions of bottom-up participatory spatial planning and new forms of spatial governance at trans-national level.</p>	<p>patory spatial planning and new forms of spatial governance at trans-national level for the integrated management of water resources.</p>
	<p>Habitatp</p> <p>Alpine Habitat Diversity</p> <p>EU-INTERREG IIB Alpine Space Project</p> <p>www.habitatp.de</p>	<p>The HABITALP Project deals with the diversity of alpine habitats and its goal is to monitor long term environmental changes in these habitats. This is performed with the help of CIR (Colour Infra Red) aerial photographs.</p> <p>Important is the survey of NATURA 2000 sites, which can be identified by using aerial photography, as they represent an important part of the EU Habitat directive implementation.</p>	<p>Monitoring of long term environmental changes; A strong priority lies in the long term survey of the NATURA 2000 sites</p>
	<p>ARMONIA</p> <p>Applied multi Risk Mapping of Natural Hazards for Impact Assessment</p> <p>6th Framework Programme</p> <p>www.armoniaproject.net</p>	<p>The overall aim of the research project ARMONIA (Applied multi Risk Mapping of Natural Hazards for Impact Assessment) is to provide the European Commission with a new harmonised methodology for producing integrated risk maps to achieve more effective spatial planning procedures in areas prone to natural disasters in Europe.</p> <p>Objectives: Design of a harmonised decision-making tool structure for applying hazard and risk mitigation in spatial planning; Contribution to the implementation of natural hazard awareness into the improvement of Environmental Assessment policy...</p>	<p>Integration / Optimisation of methodologies for risk assessment for different types of potentially disastrous events; Harmonisation of different risk mapping processes for standardising data collection/analysis, monitoring, outputs and terminology for end users (multi-hazard risk assessment);</p>
	<p>Eau et forêt</p> <p>Forests for Water</p> <p>EU-LIFE Project</p>	<p>The LIFE project entitled "Forests for Water" (Eau et Forêt) is a trans-national project involving Sweden, Great Britain and France, whose main objective is to promote the inclusion of forests in the application of the Water Framework Directive.</p>	<p>Water Framework Directive</p>
	<p>CADZIE</p> <p>Catastrophic Avalanches Danger Zoning in Europe</p>	<p>The aim of this project is to improve catastrophic snow avalanche zoning by developing new methods where numerical models will complement the classical methods based on expert and historical analysis. The second aim of this project is to improve the knowledge of the interaction between avalanche flow and defence structures.</p> <p>Objectives: To improve catastrophic snow</p>	<p>Improvement of catastrophic snow avalanche zoning</p>

		<p>avalanche zoning by developing new methods; To determine the macroscopic law of the interaction between avalanche flows and defence structures</p>	
	<p>Capacity building for sustainable land management in Bulgaria United Nations Development Programme</p>	<p>The project supports the enforcement of the United Nations Convention to Combat Desertification, ratified by law by the National Assembly on 12 January 2001, promulgated in the State Gazette issue 51 on 21 January 2001 and operating since 23 May 2001.</p> <p>The project will contribute to the implementation of the programmatic target 1- Operational Programme 15 of the Global Environment Facility for sustainable land management</p>	<p>Contribution to the implementation of the programmatic target by promoting and measuring success in capacity building ultimately helping to improve sustainability of land management of at least 3 million hectares.</p>

Relevant INSTITUTIONS

EUROPE

European Union: europa.eu.int

European Commission: http://ec.europa.eu/index_en.htm

European Parliament: <http://www.europarl.europa.eu/>

AUSTRIA

Official Homepage Austria: www.austria.gv.at

Parliament: www.parlinkom.gv.at

⇒ Federal Ministries

Austrian Federal Chancellery: www.bka.gv.at

Federal Ministry of Agriculture, Forestry, Environment and Water Management: www.lebensministerium.at

Federal Ministry of Finance: www.bmf.gv.at

Federal Ministry for Education, Science and Culture: www.bmbwk.gv.at

Federal Ministry of Transport, Innovation and Technology: www.bmvit.gv.at

Federal Ministry of Economics and Labour: www.bmwa.gv.at

Federal Ministry of Social Safety and Generations: www.bmsg.gv.at

Federal Ministry of Defence: www.bmlv.gv.at

Federal Ministry for Foreign Affairs: www.bmaa.gv.at

Federal Ministry for Inner Affairs: www.bmi.gv.at

Federal Ministry for Health and Women: www.bmgf.gv.at

Federal Ministry of Justice: www.bmj.gv.at

⇒ States (Departments of Provincial Government)

Styria: www.steiermark.at; <http://www.raumplanung.steiermark.at/>; www.gis.steiermark.at

Regional Management Liezen: <http://www.rml.at/>

Regional Management Oststeiermark: <http://www.regionalmanagement.at/>

Regional Management Obersteiermark Ost: <http://www.obersteiermark.at/>

Regional Management Obersteiermark West: www.murtal.at/euregionalmanagement/

Land Steiermark, Abteilung Arbeit & Wirtschaft: www.stmk.gv.at/arbeit_wirtschaft.stm

Steirische Wirtschaftsförderungsgesellschaft: <http://www.sfg.at/>

EU-Regionalbüro Voitsberg: <http://www.eurm.or.at/>

Protection against catastrophes: <http://www.katastrophenschutz.steiermark.at/>

Vienna: www.wien.gv.at; www.wien.gv.at/wiengrafik

WWFF – Wiener Wirtschaftsförderungsfonds: <http://www.wwff.gv.at/>

Wien Wirtschaft: <http://www.wien.gv.at/index/wirtschaft.htm>

Wien Stadtentwicklung & Verkehr: <http://www.wien.gv.at/index/stadtentwicklung.htm>

Lower Austria: www.noel.gv.at; www.noel.gv.at/noegis

NÖ Abteilung für Wirtschaft: <http://www.noel.gv.at/Wirtschaft/Wirtschaft.htm>

NÖ Abteilung für Raumordnung: <http://www.noel.gv.at/Planungen/Raumordnung.htm>

Eco Plus – Niederösterreichs Regionale Entwicklungsagentur: <http://www.ecoplus.at/>

Carinthia: www.ktn.gv.at; www.kagis.ktn.gv.at

KWF – Kärntner Wirtschaftsförderungsfonds: <http://www.kwf.at/>

Land Kärnten: <http://www.ktn.gv.at>

LEADER-Managem. Region Großglockner-Mölltal: www.region.grossglockner.or.at/

Upper Austria: www.ooe.gv.at; doris.ooe.gv.at

Salzburg: www.salzburg.gv.at; www.salzburg.gv.at/sagis/

Burgenland: www.bgld.gv.at; gis.bgld.gv.at

Tyrol: www.tirol.gv.at; www.tirol.gv.at/tiris/

Vorarlberg: www.vorarlberg.at; www.vorarlberg.at/vogis

⇒ **Forest Engineering Service in Torrent and Avalanche Control (WLV):** www.die-wildbach.at

The Torrent and Avalanche Control Service is an agency of the Federal Ministry of Agriculture and Forestry, Environment and Water Management. It takes over the tasks of analyzing and assessing hazards as well as of planning and implementing preventive control measures and ensures thus a sustainable effect. The agency fulfils with its offices 7 sections, 27 district offices, 3 technical staff units; the tasks defined by the Austrian Forest Acti 1975.

Vienna, Lower Austria & Burgenland; Head: DI Roland Bauer; e-mail: sektion.wnb@die-wildbach.at

Upper Austria; Head: DI Wolfgang Gasperl; e-mail: sektion.oberoesterreich@die-wildbach.at

Salzburg; Head: DI Leonhard Krimpelstätter; e-mail: sektion.salzburg@die-wildbach.at

Styria; Head: DI Gerhard Baumann; e-mail: sektion.steiermark@die-wildbach.at

Carinthia; Head: DI Josef Brunner; e-mail: sektion.karnten@die-wildbach.at

Tyrol; Head: DI Siegfried Sauermoser; e-mail: sektion.tirol@die-wildbach.at

Vorarlberg; Head: DI Andreas Reiterer; e-mail: sektion.vorarlberg@die-wildbach.at

280 staff members in technology and administration as well as about 960 workers employed on the basis of a collective contract rendered the following services in 2003: 13,186 expert opinions, 202 hazard zone maps, 498 projects, 704 completed and 549 current construction plots as well as 1156 care measures in torrential catchments.

⇒ **Regional-management and Euregios**

Links: <http://www.rm-austria.at/>, <http://www.leader-austria.at/regions>

⇒ **Other**

Association of Cities and Towns: www.staedtebund.at

Links: staedtebund.wien.at/staedte/index.html

www.lawine.at

Association of Communities: www.gemeindebund.at/