GeoWatch

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Foreword

As already mentioned in the previous GeoWatch 38, we had a number of strategic alliance meetings in Asia. It makes me proud to be in a position to announce the first successful outcome of those meetings. The GeoStream-43, or as we name it the GST-43, will revolutionise the Rapid Response market due to its state-of-the-art technology as well as its extremely optimised price/performance ratio.

This product has been developed in close cooperation with San Lien Technology Corp., Ltd, Taiwan and will definitely not be the last story of success out of this close engineering and business strategic alliance.

Christoph Kuendig, CEO

New !! GeoSIG Streamer GST-43 for Dense Networks

GeoSIG presents the next step in the evolution of the Seismic Switch SSW-43, which was published in GeoWatch 38. The newly developed GeoStream-43 (GST-43) is based on its predecessor and now includes the feature of streaming the acceleration data captured during an event to the central station. The data received will be read by our own software GeoDAS.

With a network of GST-43's we are able to offer a rapid response system with highly accurate data leading to a visual image of an earthquake zone. Based on this data, an emergency plan can be created which will help to coordinate the emergency aid in the most affected areas.

Our New Marketing and Sales Assistant, Andreas Beutler

Andreas Beutler joined our team as a Marketing and Sales Assistant at the beginning of this year. He adapted very well and quickly into the GeoSIG team. He is working on several marketing and sales tasks including preparation of proposals for customer inquiries, for special projects as well as organising international activities, dealing with several regions around the world, interacting with our representatives and so on.

Mr Beutler completed his commercial apprenticeship with success and has subsequently been working as an accountancy assistant for 1.5 years. He likes to travel and has visited a lot of European destinations as well as India (for one year) and Australia (for six months). He is also a member of the local football club, FC Othmarsingen, where he is acting as a goalkeeper.

We warmly welcome Andreas to the GeoSIG team and wish success in his future career with us.

GeoSIG Rapid Response Network Streamer Recorded Recent Earthquake

GeoSIG is deploying an Earthquake Monitoring and Rapid Response Network in the Lenzburg District in the Kanton Aargau, Switzerland as shown with the projected topology in Figure 1.

This GeoSIG sponsored network is designed to have 20 stations monitoring ground motions in real-time and has the ability of streaming (continuously sending out) the acquired data over the already existing robust Internet backbone. The data is then collected at a central computer in the GeoSIG Headquarters for analysis and archiving.

The network is designed to serve for generating notifications and/or shake maps which would serve as a rapid response tool to portray the extent and variation of ground shaking throughout the affected region immediately following significant earthquakes.

Since part of the network is already in place, naturally a recent moderate size earthquake with a magnitude of 4.5 at the France-Germany border region at Tuesday, May 05, 2009 at 01:39:24 UTC has been recorded by this initial system.

Based on this and the other data available from United States Geological Survey (USGS) and Schweizerischer Erdbebendienst (SED, Swiss Seismological Service) online earthquake reports and resources, a demonstrative shakemap is generated. Details of the event as well as the demonstrative results are shown in Figure 1.

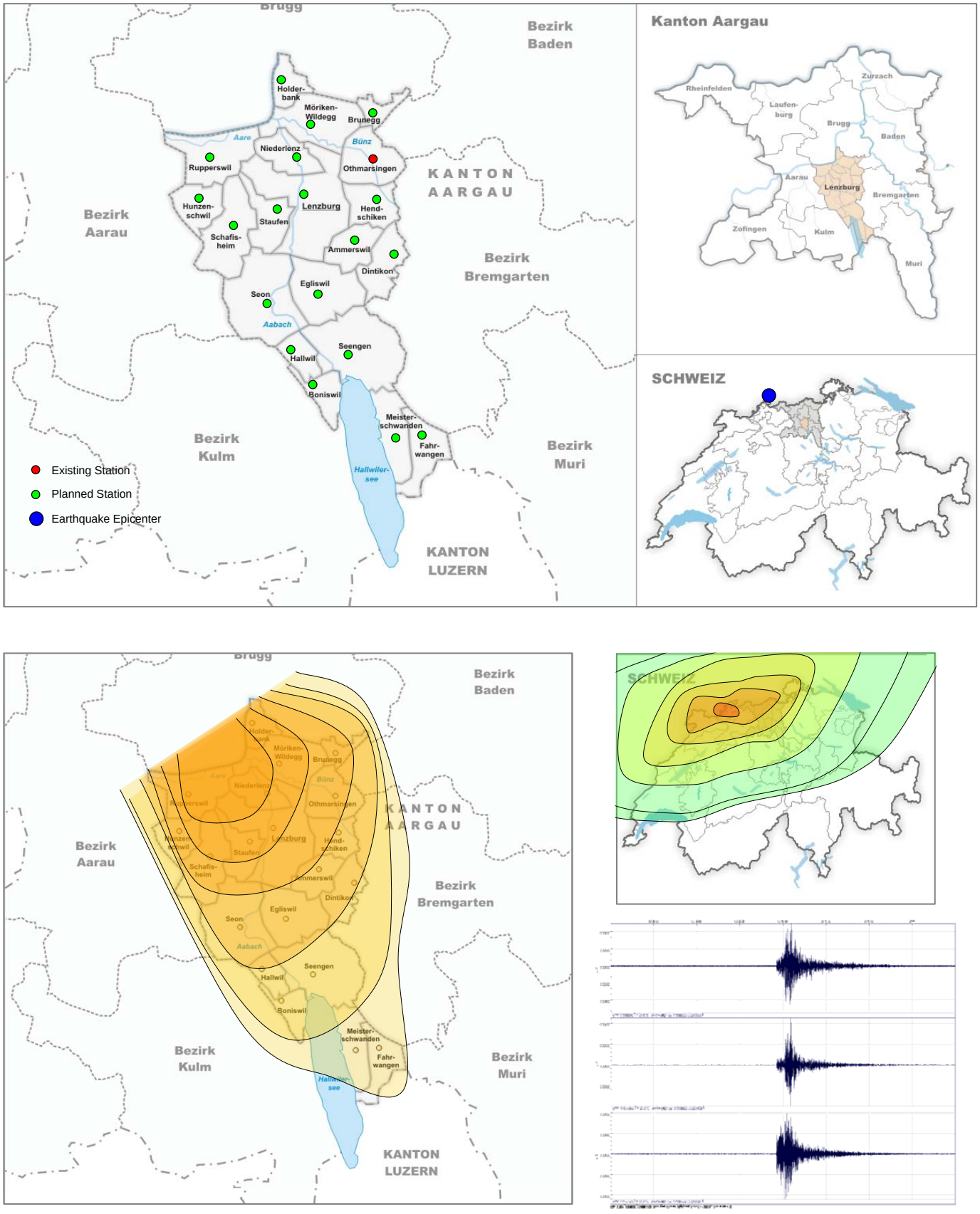

Figure 1. Location of the Earthquake Epicenter, GST-43 locations, Sample Recording and Demonstrative Shake Map

GeoSIG Attends the DETAILS Workshop, Lucca, Italy

GeoSIG will take part in the upcoming Workshop DETAILS (DEsign for opTimal performance of high-speed rAILway bridges by enhanced monitoring systems) from 9th to 11th December this year in the University of Pisa, Italy.

The results presented in this workshop will be a key issue for the future design and monitoring of bridges.

The aim of the Workshop is to present the final results of the research project funded by the European Commission, Research Fund for Coal & Steel "Details: DEsign for opTimal performance of high-speed rAILway bridges by enhanced monitoring systems". The general aim of the research is the optimization of performance of the actual design solutions for steel-concrete composite railway bridges by means of an accurate study of still open problems such as the actual dynamic response of the bridge, the actual contribution of the ballast and other non-structural elements, the choice of the proper modelling strategies, the recognition and simulation of the train-bridge interaction effects and the estimate of the actual fatigue loading spectra.

To these purposes procedures integrating the design with the control and maintenance requirements have been developed and proposed in order to minimise costs referred to the whole bridge life guaranteeing at the same time the adequate safety level during exercise. The results of the research programme are completed by a set of Lectures concerning the most important topics such as monitoring, fatigue and train-bridge interaction effects.

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