Ridracoli Dam: Surveillance and Safety Evaluation reported on Internet Page for Hydraulic, Static and Seismic Aspects

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SYNOPSIS. During a period of several seismic events that took place in January 2003 in the valley downstream of the Ridracoli dam, inhabitants and local Authorities requested information about the safety conditions of this important structure. To satisfy such expectation, the Manager of the Romagna Acque, owner of the dam, launched a project aimed at providing such information. Communication through the Internet web was decided and an Internet page was prepared, reporting the safety conditions of the dam, with respect to hydrologic, hydraulic, static and seismic aspects and the resulting surveillance activities.

Methodologies and operative techniques are today mature and available for an effective evaluation and surveillance of dam safety, and for presentation to the resident population living downstream of the dam. Data collected at the Ridracoli dam site by several monitoring systems are in fact automatically processed and interpreted in order to evaluate the different aspects affecting the safety of the dam and the protection of the downstream valley.

The experience gained using automatic monitoring and a knowledge based support system is used to obtain on-line evaluation, explanation and interpretation of dam's behaviour, identifying surveillance activities to manage anomalous trends or to minimize critical situations due to flooding.

All information are summarized and presented on the Internet page. In addition, for the people living in the downstream area, the presentation is available on a video, located at the board of each City Hall.