



CLV Web-Platform

a new tool to support the management of local avalanche hazard

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AIM: IMPROVE THE MANAGEMENT OF LOCAL AVALANCHE RISK

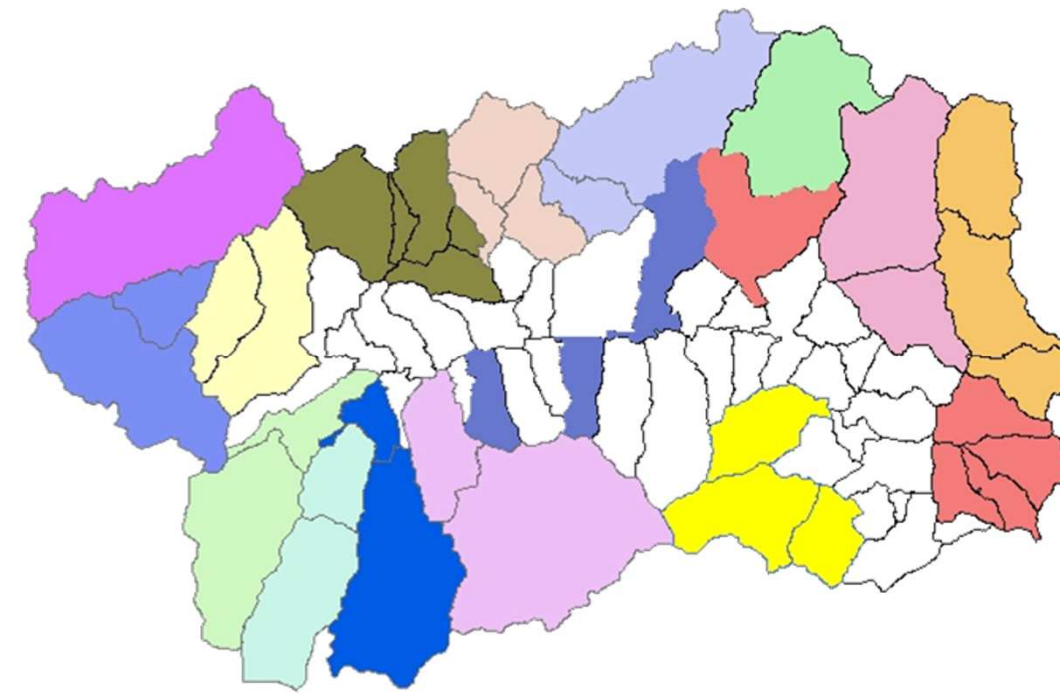
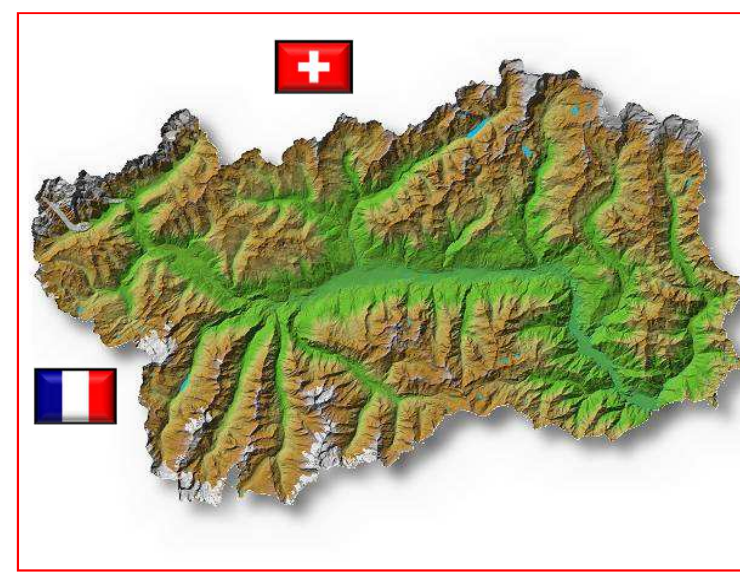
August 2010 : L.R. n.29, “Regulations on Avalanches Local Committees (CLV)”

October 2010: definition of CLVs’ operating methods

Each CLV is composed of:

- one to three mountain guides,
- the operational managers of the ski resorts within the area of relevance,
- the Commander of the forest rangers unit having jurisdiction.

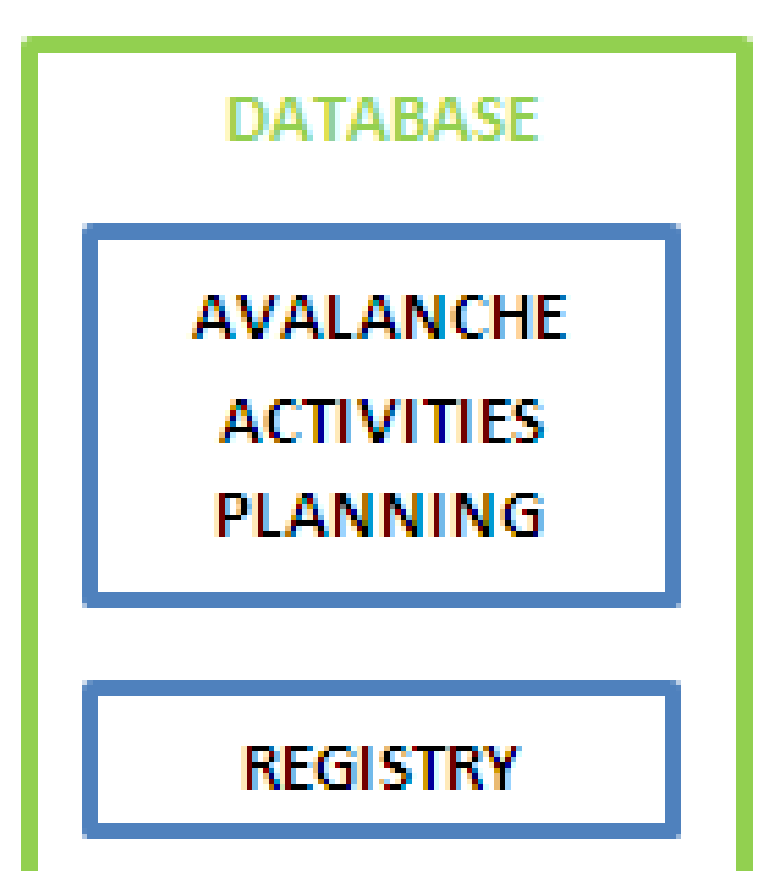
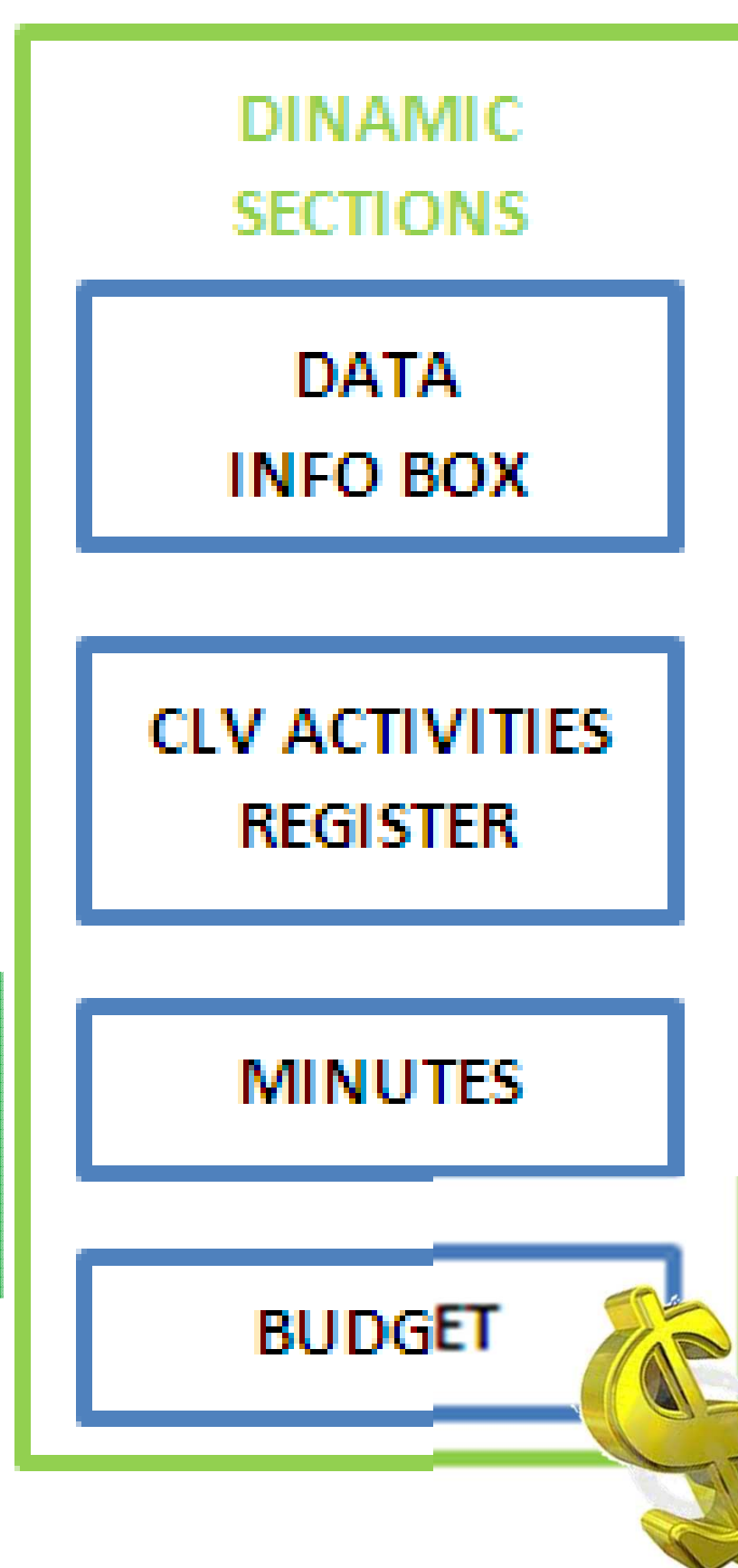
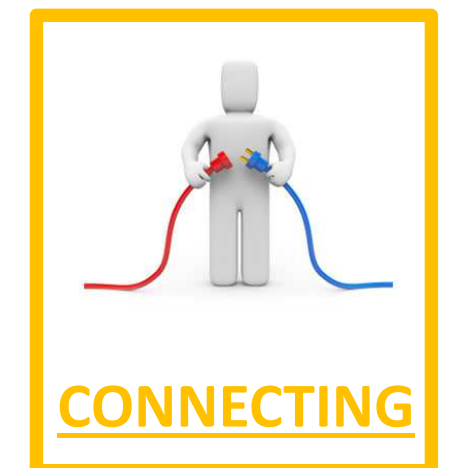
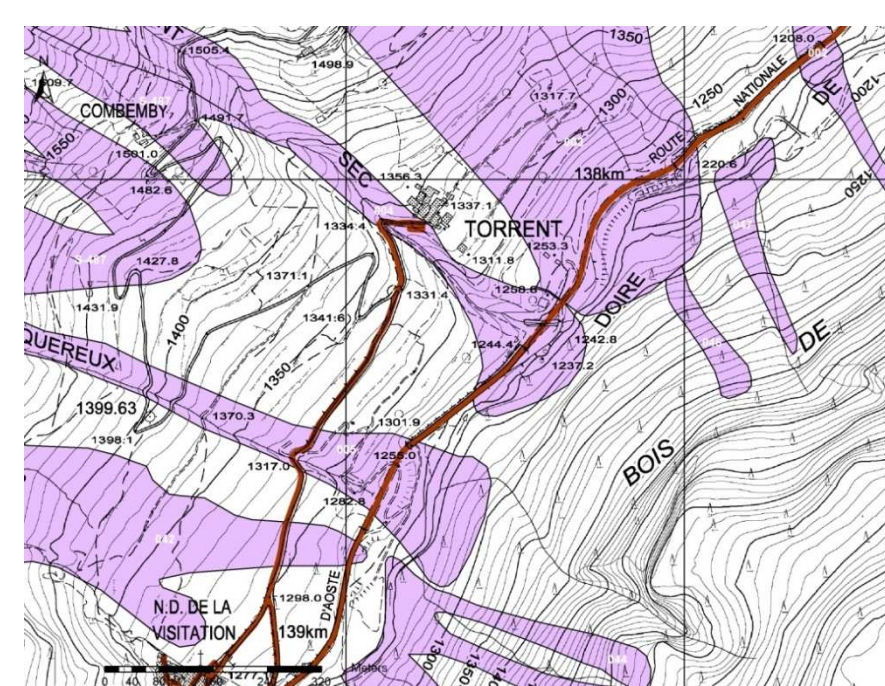
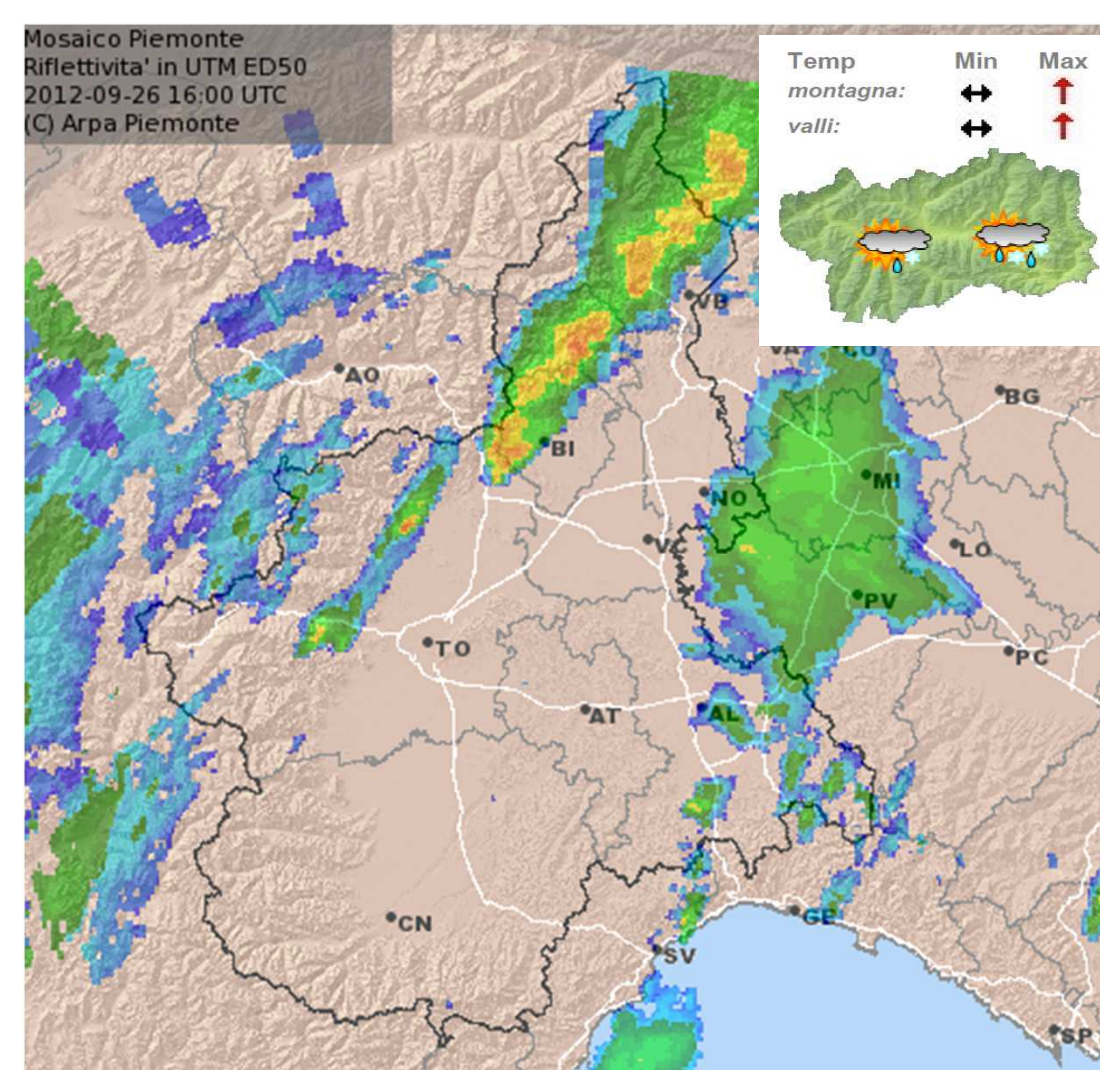
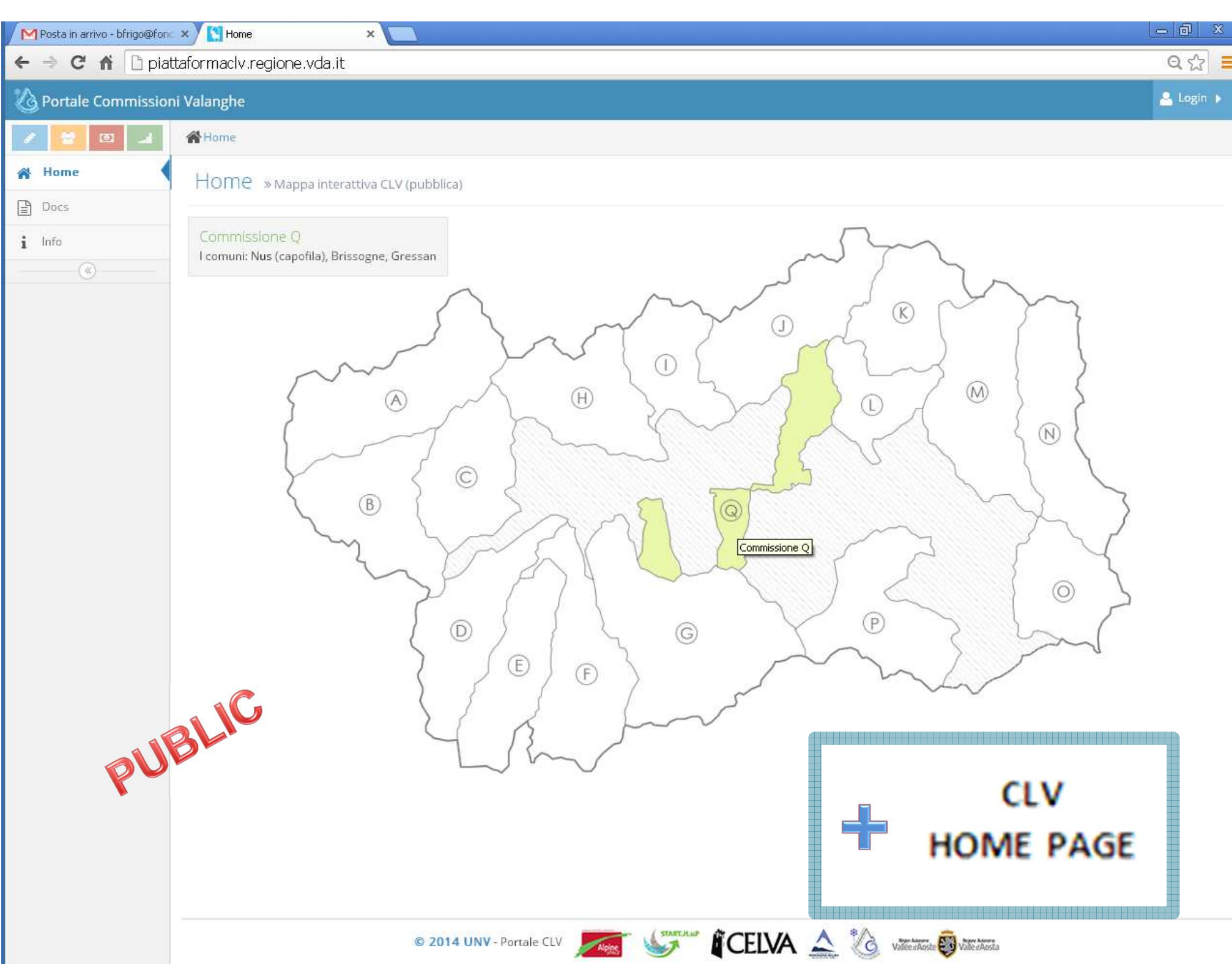
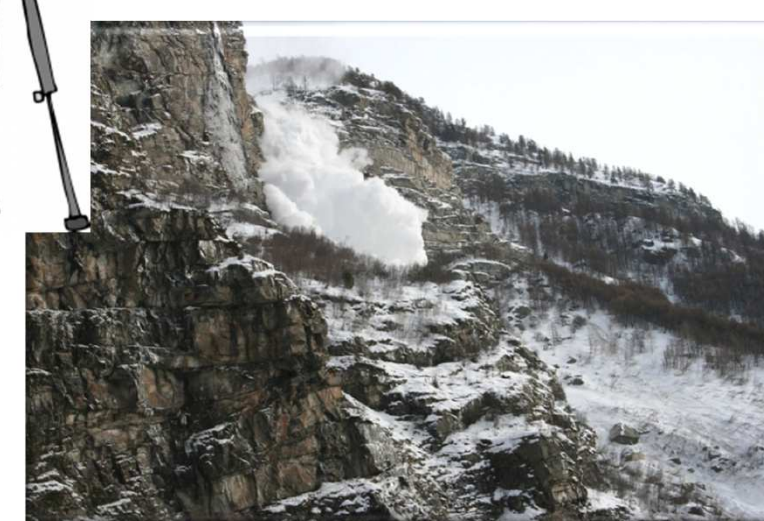
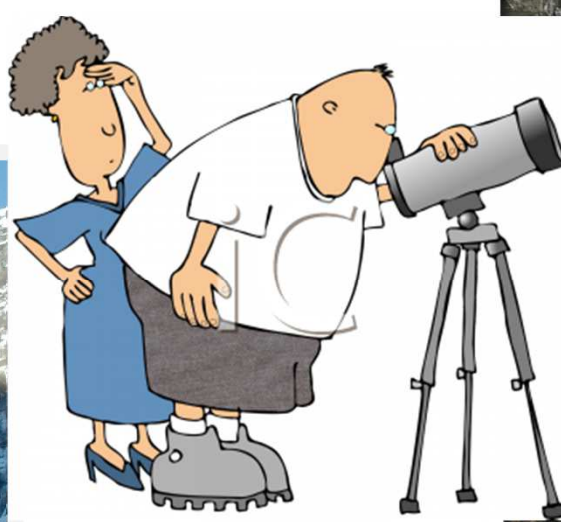
Total cost € 200,000/y for all CLVs



3,260 km²
17 CLV

NEEDS ASSESSMENT

1. an easy and quick consultation of snow and weather local data (e.g.; provided by AWS and Centro Funzionale of Aosta Valley) (e.g., areas over the regional and national borders);
2. reporting and archiving of activities carried out during the forecast of avalanche risk, during the event or once the avalanche occurred, to support the municipal administration in case of avalanche danger;
3. transparency and traceability of activities done as technical support about the Mayor's decisions regarding Civil Protection.



Access and transparency management The website access management has been designed with a control panel for users managing, creating a multi-level structure of access to the site itself. To ensure the necessary transparency and traceability of activities in the platform, each CLV component will have an identification code and every online activity will be recorded on a not-editable file, encrypted and stored onto institutional servers.

Management and maintenance The launch of the platform, scheduled at the end of 2014, will be followed by a first phase of management and maintenance of its tools for two years. This management includes the software update, the log checking, the security updates, and all activities required to make the product more accessible to the CLV components. Another essential product to support the use of CLV platform will be the User's Guide, available in PDF format and on the web site, in the form of on-line help.

Conclusions

Born from the need to simplify and standardize the CLV activities to support the Mayor in relation to monitoring, forecasting and management of the local avalanche danger and risk, a web platform has been designed and constructed to access snow and weather data, reporting and archiving, as well as transparency and traceability of all activities. Now under testing by some CLV components, the website will be operational for all 17 CLV operating in Aosta Valley from winter 2014/15. Based on the Tyrolean experience, the web platform has the ambition to be the basis of an indispensable tool for the CLV, shared and implemented by all the Italian and European AWS.

OFF-LINE MODE Some sections of the platform will also be available remotely in case of a lack of internet connection. For example, each CLV will be able to download a facsimile minute (in pdf format) to be filled. This activity is followed by the person in charge of the updates of the activities carried out on the portal in off-line mode once again on-line, including the upload of any minutes written by hand.

Hardware and Software Design “responsive” approach to the platform design is chosen in order to have a website that would be receptive, responsive and relevant to the dynamic behaviour of the user and used device. On this basis, the pages of the application have been constructed to ensure optimal viewing for different environments where they can be displayed (on desktop pc with different resolutions, tablet, smartphone) giving to the users a better use of the content and minimizing the need for resizing and scrolling.

Future implementations The Website has been designed and built to be as possible thanks to the strongly presence of icons and little text, in order to be able to translate it in other languages – English, French, German, etc. - reducing the effort of translation. Furthermore, the structure of the platform is designed by plugins to easy manage any new implementations, such as, for example, the critical avalanche scenarios obtained by statistical way or the link with the unified regional warning system for meteorological risk, hydrological, hydraulic and avalanche danger for Civil Protection.

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