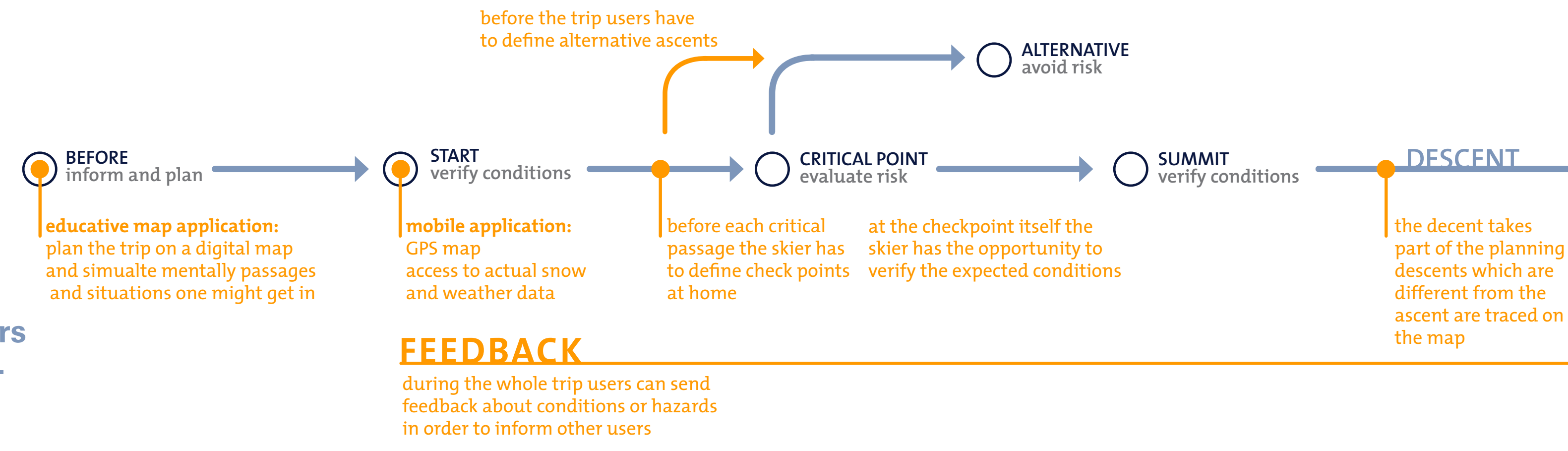


With the aim to enlarge the number of services for mountain guides and backcountry skiers the WSL Institute for Snow and Avalanche Research SLF in Davos together with IUAV University of Venice Information Design research invested in a research project in order to design a new WebGIS-application which will offer a variety of map-based functions focusing the planning of a skitrip before actually executing it.

Both the web-platform and the mobile service want to improve the planning of a trip into the hibernial backcountry as well as accompany the skier while actually being in the field. In Order to better prepare the skiers decision making process the planning on a digital map works like a mental simulation of what will or may happen while skiing. On the trip itself skiers have continuously the possibility to check conditions and compare the real situation with what they have planned at home.



PLAN AT HOME

The Web GIS application allows skiers to plan their trip at home, before executing it in the backcountry. In 7 steps the user can draw the tour on a digital map, include weather and snow forecast, as well as define a timetable and the most difficult passages of his trip checking exposition, hillslope and altitude.

1. General information (date, time, difficulty, ...)
2. Drawing the tour on a digital map
3. Spot the key passages (hillslope and exposition)
4. Check the weather forecast
5. Check the snow and avalanche forecast
6. Snow- and hazard patterns
7. Final checklist



Different steps of the online planning tool



Startup screen



Saved tours



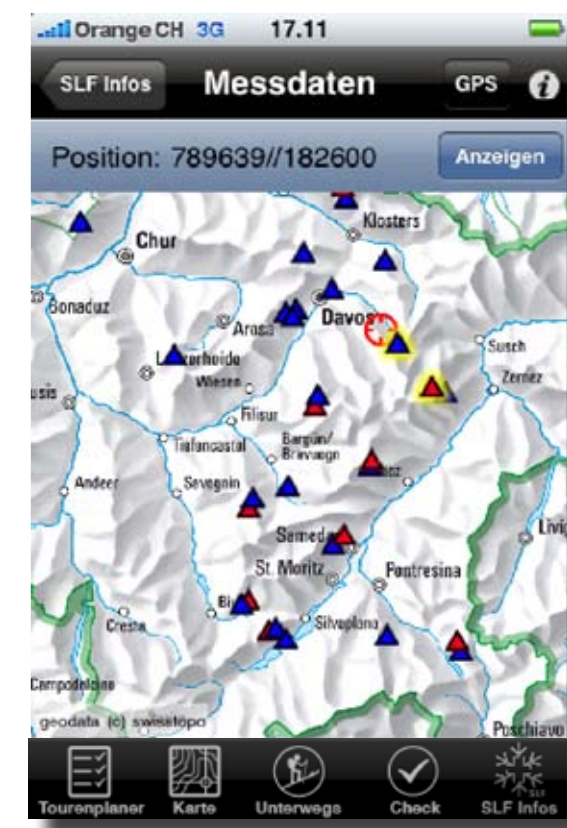
GPS - map



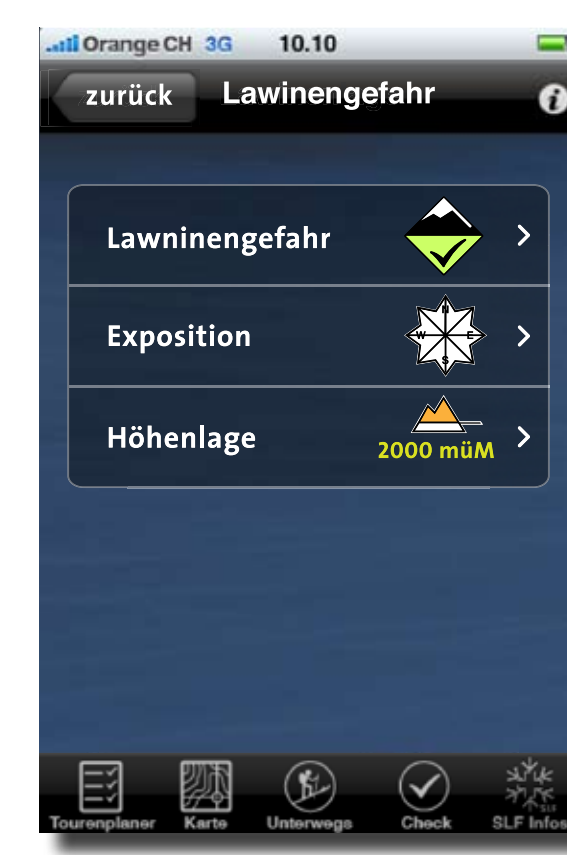
The Unterwegs-screen gives the opportunity to send immediate and georefered feedback back to the platform.



Check the conditions



Access to the swiss measurements station network allows skiers to integrate actual data straight into the decision making process in the field



Avalanche conditions



Weather conditions



Patterns

The mobile counterpart completes the service and enables skiers to access their saved tours onto their smartphone.

A GPS-driven map tool allows to locate and track the planned trip. Difficult passages and checkpoints are visualized. Actual conditions can be verified thanks to real time access to the swiss network of measurement stations in the field.

In order to document the own trip and also to make first hand information accessible to other users feedback can be sent straight from the field. Therefore a choice of predefined observations and patterns is always accessible in the "Unterwegs-screen" (on the track). Further information can be transmitted using the message-tool including images and text. All information is feeded to the central server and visualized on the digital map.

The final version of snowsense will be presented on march 20th/27th 2011 during a special event in Davos.

more information:

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DECIDE IN THE FIELD



By clicking the icons on the map all saved information about the key passages and checkpoints is shown