



The revolutionary new wheel design © Goldenpass

New railway technology solves 100-year-old problem

by Tatiana Tissot
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A new Swiss prototype wheel design allows trains to adapt to different sized rails. The technology finally solves a century-old problem between Montreux and Interlaken, where two different types of railway track force travellers to change trains in Zweisimmen. However, with a direct schedule expected to be in operation by 2015, Hans-Jürg Spirgi from the Goldenpass company hopes the innovation will increase tourism.

Experts have been testing the new railway technology over the past ten days so that travellers in the future will no longer need to change trains when going from the Léman Riviera to the Bernese Oberland.

The bothersome connection was necessary because of different track sizes from Montreux to Zweisimmen, and from Zweisimmen to Interlaken.

However, the same train will now be able to travel the entire length of the track **thanks to a mechanism that can alter the distance between wheels.**

History and topography account for the current state of affairs.

"Mountain trains require thinner railway-lines, which allow tighter curves," explained Hans-Jürg Spirgi from the Goldenpass railway company.

The higher altitude tracks operate with rails at one metre apart; more conventional vehicles require a 1.4 metre span.

"We had always focused on rails, trying to change the distance between them or adding a third one however, all these projects were abandoned because they were too expensive," Spirgi told Swisster.

"So we thought: 'If we cannot change the rails, let's change the wheels'," he added.

And at an initial cost of 3 million francs, the project, which began in 2009, appears to have come up with the answer.

"This is a problem that has existed for a hundred years, and it is finally going to be solved," pointed out Spirgi.

Engineers have also built in another feature allowing trains to adjust for different platform heights.

Although further testing is required, the Goldenpass company hopes the innovation will increase tourism to the region because "with a direct train, the offer will be more attractive," said Spirgi, referring to added convenience for passengers travelling through some of Switzerland's most spectacular scenery.

The first direct trains from Montreux to Interlaken are expected to depart in 2015, though developers still have to find an additional 80 million francs.

Finances are still under study, though Spirgi expects the cities and cantons involved to contribute.

Twenty existing wagons are to be equipped with the wheel system with plans to build 25 new vehicles.

Goldenpass has yet to decide on a construction company, but will be sending out a tender in 2012.

The group is also planning to introduce more comfort on board the panoramic ride including improved gastronomy.

One anomaly: the journey from Montreux to Interlaken via Zweisimmen currently takes 3 hours and five minutes.

According to Goldenpass estimates, the new schedule will be four minutes longer?

"It's only an approximation. The time it takes for the system to adapt to the different rails is about the same as it took passengers to walk to the new train," explained Spirgi.

Other railway lines that encounter similar problems, such as in the Jura or Vaud, may also adopt the new technology, though Spirgi told Swisster that elsewhere the international market is "very small".

