

Swiss federal Transport Outlook 2050 and SwissMetro-NG project

SwissMetro-NG project increasingly seems to be the only option for Switzerland.

It can satisfy intercity demand without impacting our landscapes, cities, health and environment negatively.

The Autobahn, Railway and Aviation shows more and more their shortcomings.

This when the room for incremental improvement allowed by the large billion-francs projects of the existing Swiss railroad network (Rail 2000, Alptransit - Gotthard and others), inaugurated in the XIX century by Alfred Escher, is progressively thinning, and the high-Engineering projects finalizing.

The (rail) way in Switzerland still seems to be long, although even politically there seems to be an increasing awareness on the need to make the technological leap.

The current situation of economic and energy crisis in the states of Europe further highlights the difficulty of the European Union in succeeding in imposing common standards in strategic sectors of the continent.

This will probably not facilitate in the short- to medium-term future the prospect of an international political understanding on the standards of ultra-fast lines based on magnetic levitation technology, perhaps -in Switzerland- combined with the advantage of circulation in vacuum tunnels, with improved pressurized transport „spacecraft“ wagons.

It is therefore conceivable that, despite the ideal international political coordination, the development of these first projects will initially be - as happened with the Swiss railways in the 19th century - based on national private initiative, catalyzed by the promulgation of the Swiss federal railway law, which -at that time- had given the essential legal framework to it.

In the meantime, the original reservations of the Swiss Government could be considered resolved. Diverse groups have contributed politically and technically. The capacity problem could be resolved with a new Switch which allows a drive through operation and vehicles with 1'200 seats developed by the Swiss Transportation Research Institute (STR-Institute). The SwissMetro-NG and Metroswiss associations are slowly getting also political support, with others.

The Swiss parliament has adopted resolution 17.3262 (*“Federal Cross of Mobility and vision of the railway network”*) in favour of SwissMetro-NG and 19.4443 (*“Plan of measures to increase the share of public transport in total traffic”*) to promote Public Transportation.

In addition, the climate crisis and the Paris agreement on Climate Change (UN-FCCC) demands CO₂-Neutral transportation systems.

Swissmetro and SwissMetro-NG can help to fulfil those commitments, despite the probable momentary European CO₂ spikes, induced by the war and related European energy crisis. As known, crisis generates always technological boosting as a side effect.

The Federal Council, SBB, BAV and IVT-ETH seems still fixated on the traditional iron-railway technology, in opposition to Swissmetro. They do not forecast any feasibility within 30 Years.

In the report “Transport Outlook 2050 - Final Report” – April 8, 2022 the federal Council simply stated:

“Transport systems such as Swissmetro New Generation, Cargo Sous Terrain (CST) or drones as a relevant means of transport are not considered in Transport Outlook 2050”.

<https://www.are.admin.ch/are/en/home/media/publications/transport/verkehrsperspektiven-2050.html>

Nor do the Federal Council in his Outlook envisage connections to any such networks coming from European countries, where they are being researched and developed, even in the form of underground or surface "protection zones" aimed at proving the Swiss main cities at least with a connection to European main cities, when such a network will develop.

By approving in December 2021, the “Federal Law on Underground Freight Transport”, the possibility of transporting goods through the underground, coordinating project planning and subjecting it in some respects to the Federal Railways Act, and thus supporting the interesting "Cargo Sous Terrain" project, the federal parliament has not, however, extended this possibility to the interactional ultra-fast speed transport of people underground. That *pour cause*.

It has thus ruled out, for the time being, any development of hyper fast passenger transport underground, like SwissMetro-NG. Even for any underground segments coming from abroad.

Switzerland therefore still does not seem to consider nor to be prepared for the "quantum leap" brought about by the adoption of such new transport technology.

Paradoxically, Switzerland, thanks to his environmental physical and legal limitations, could even surpass, with the addition of the rarefied atmosphere in the tunnels induced technologies, the actual speed 600 km/h achieved by China's high-speed maglev transportation system, as presented by China last week at the 2022 International Trade Fair for Transport Technology (Innotrans), in Berlin, Germany.

http://english.www.gov.cn/news/videos/202209/22/content_WS632bc9d3c6d0a757729e056d.html

So, the activating energy of this innovative project, for Switzerland, still remains in the hands of Swiss federal politics.

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Niccolò Salvioni, Lawyer, Republic and Canton of Ticino, Swiss Confederation, member of the Association community of interests (Interessengemeinschaft) SwissMetro- NG