

CASE STUDY: A SWISS SCI-FI TWIST ON PROJECT FINANCING

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Politicians in Switzerland are discussing a EUR 30bn plan to connect the country's main hubs with an underground logistics network. The private investors involved seem to think it will work, reports Antonio Fabrizio

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A group of private investors has come up with an ambitious plan for transporting goods across Switzerland, using project finance at a scale never seen before in the country.

It is called Cargo Sous Terrain (CST) and, as its French name suggests, involves moving goods underground instead of relying on traditional road and rail transport networks.

At a final cost of more than EUR 30bn, the plan is huge, costly and technically challenging because it involves digging a network of tunnels between 50 meters and 100 meters underground, where automated vehicles can one day move shipments around the clock.

According to Swiss government [estimates](#), the transport of goods is expected to grow by 37% in the country within 30 years. The CST promoters say their project can make transport more reliable and sustainable and reduce traffic by 30%.

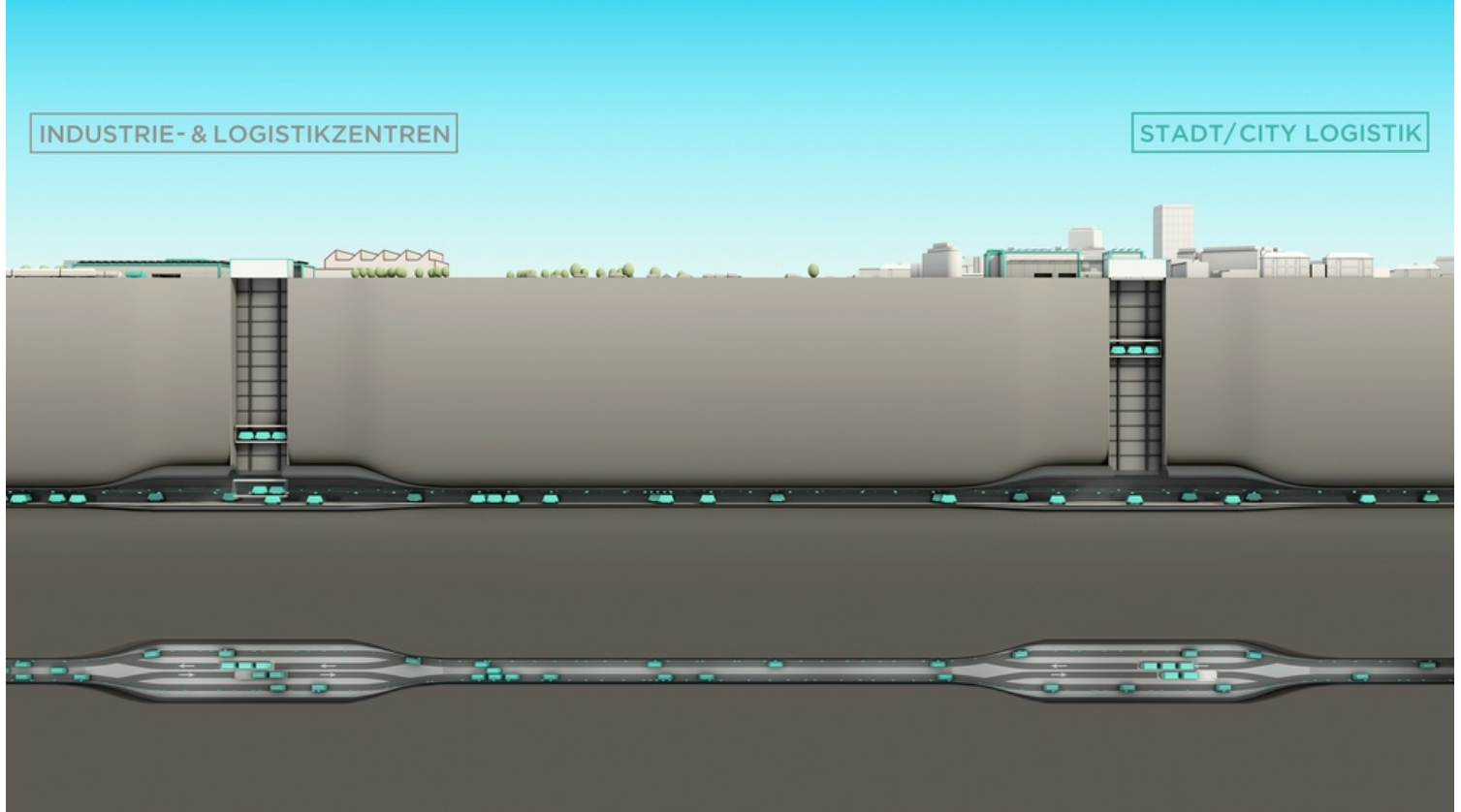
The first stretch of the underground logistics infrastructure scheme has an estimated cost of CHF 3bn (EUR 2.8bn) for building a 70km tunnel linking Switzerland's largest city Zurich to a logistics centre in Härkingen in the northern part of the country, by 2030. The entire 500km network, to be built by 2050 across much of the country including main cities Bern, Basel, Geneva and Lausanne, would cost a staggering CHF 33bn (EUR 31bn), something almost unheard of in the European greenfield infrastructure world.

It may sound like a dream, but the first stage project has now reached a decisive stage, with a draft law submitted to parliament last October and due to be debated this year.

According to Stefan Schraner, senior project manager in the team tasked with developing the financing strategy and structuring of CST, "it is a crucial timing for the project. Following the Federal Council's submission of the draft law, this is now under discussion in the respective parliament commissions." The final approval and entry into force of the law is expected at the beginning of 2022.

The law approval is key to the plan, as it will ensure legal certainty for investors. CST will be crossing many cantons (the member states of the Swiss Confederation) and there are different authorities to be involved, so a law at a federal level will make things easier. Also, while the Underground Freight Transport (UGüTG) law – which will be based on Switzerland's existing railway law – will not be project-specific, CST will be the first to create an underground logistics system, and therefore can set the standards for potential future projects, its promoters argue.

Swiss cheese



Switzerland has a limited experience of privately financed infrastructure, with very few greenfield projects recorded by *Inframation* in the past 10 years and no major PPPs having reached financial close.

“It will be 100% privately financed, there is nothing comparable of this scale in the country,” says Schraner. “Historically, it’s mainly been public sector financing for these big infrastructure projects, even though some of the construction companies involved, being international, are quite familiar with project financing.”

CST is further complicated by the large number of parties involved. At the time of writing, around 80 firms – ranging from investors to lenders, advisors, retailers and logistics groups – have joined the scheme and provided initial funds (around CHF 15m) to cover the feasibility phase, which has now completed.

“This was just the seed capital, because the spirit of the project is collaborative innovation with broad support from the Swiss economy, which is clearly visible in the shareholder base,” says Schraner.

For the next phase, around a dozen investors including Meridiam and Credit Suisse, have committed CHF 100m to fund the planning works for the 2022-2026 period, thus meeting the government’s threshold for private sector interest in the project necessary to start drafting a law.

French infrastructure fund Meridiam, a lead investor in the project, is prepared to wait. It is now the sole major international group in this project, after the exit last year of China’s Dagong Global Investment Holding Group, a technology development and investment consulting firm, due to political concerns.

“We are still very early in this process,” says CEO Thierry Deau. “It is on our radar but the focus now is on the bill and the initial studies, we are not yet at the stage of the financing.”

The latest financial investor to join, at the end of 2020, was Lausanne-based insurance company [Vaudoise Assurances](#), which called the project a “visionary and sustainable initiative” which can relieve traffic and reduce CO2 emissions.

The project’s financial close and start of construction of the first CHF 2.9bn stretch is targeted for 2026, with a debt-to-equity split expected to be between 60:40 and 70:30 equating to a potential equity investment of over EUR 800m equivalent.

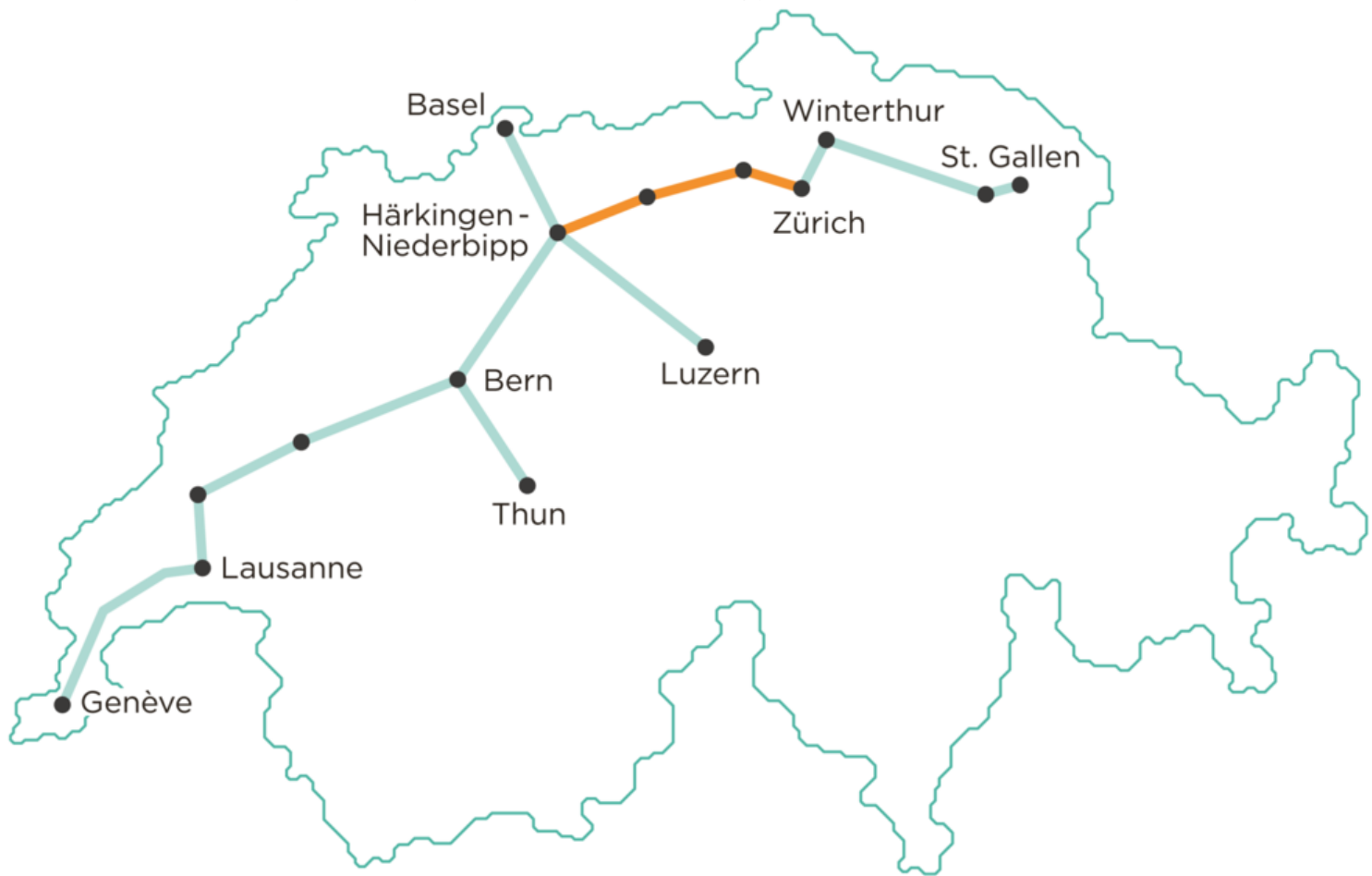
The committee

A finance committee, including company representatives such as Daniel Wiener as head of CST investors relations – behind the project since its inception a decade ago – and Meridiam, represented in the CST board by global business development

director Marco Rosso, have been tasked with structuring the financing of the stretch and raising the funds. The [board](#) also includes Bruno Stiegeler, the CEO of WIR Bank.

Part of their task has already been decided: more than 50% of the project's equity must be held by Swiss investors as part of the requirements set by authorities, and representatives of Swiss financial groups Credit Suisse, Helvetia Insurance, PostFinance, Mobiliar, Vadoise Assurances, WIR Bank, Zurich Cantonal Bank, Basellandschaftliche Kantonalbank and K+D Valueinvest are also part of the finance committee.

But other international players could join the scheme in the coming years.



“There could be other infrastructure funds too,” says Schraner. “At the moment as finance committee, we are looking at ways to raise money, studying how different investors can contribute with different types of financial instruments. It is still work in progress.”

Capital markets and project bonds might be options for debt raising, and while some insurance companies might just invest in rated debt, others could also consider equity support. “Our goal is to attract or get access to as much debt as possible,” he says, adding that while the Swiss capital market is big, it is also limited so the project will be open to international funders.

The project will rely on a user-pays model, with the pricing based on tons per km, and an offtake arrangement should allow debt to be secured on cash flows from 2031 onwards, says Schraner.

“According to our financial model, there will be a fixed price in Swiss Francs. We are still at a soft commitment stage, but we are working to get a specific offtake agreement, and the offering will be much more differentiated,” he says.

This offering may include additional services such as temporary storage within the tunnel, supply chain management and waste disposal, each priced differently.

But this pricing must also be competitive with traditional transportation. “Our reference price will be the best price you can get on the road today as a key account shipper,” he says. A price comparison with traditional transport services could be misleading, however. CST offers these additional services (such as temporary storage, recycling, mentioned above) and is cleaner than existing transport. 100% of the power to operate the system will come from renewable energy sources.

Super marketing

These users won't be too hard to find. Switzerland's largest retailers and supermarket groups Coop and Migros are also among the sponsors of CST.

"These firms need to distribute the goods, and have supported the project from the beginning," Schraner says. "Building an infrastructure of this type is doable because there's someone – in this case, Swiss retailers and distribution companies – saying they want this infrastructure and are prepared to support it. In this sense, it is a demand-driven project."

These retailers and supermarket chains, which normally contract transport to other firms for distribution of their goods, need an alternative to roads and railways to ensure that there is continuity of distribution from their logistics centres to the distribution facilities and selling points, where customers will buy these goods, says Gabriele Guidicelli, the project leader at CST in charge of the technology. "Instead of road trucks transporting large amounts of goods once or twice a day, small quantities should be delivered continuously throughout the day – a micro-distribution approach. This is what the CST vehicles are designed to do."

In this sense, the project is not driven by a technological innovation per se, but by the requirements of the Swiss retailers in CST's shareholder base, says Schraner. Alongside the finance committee, within CST there is also a market group including Coop and Migros, which focuses on the logistics aspects and the needs of retailers.

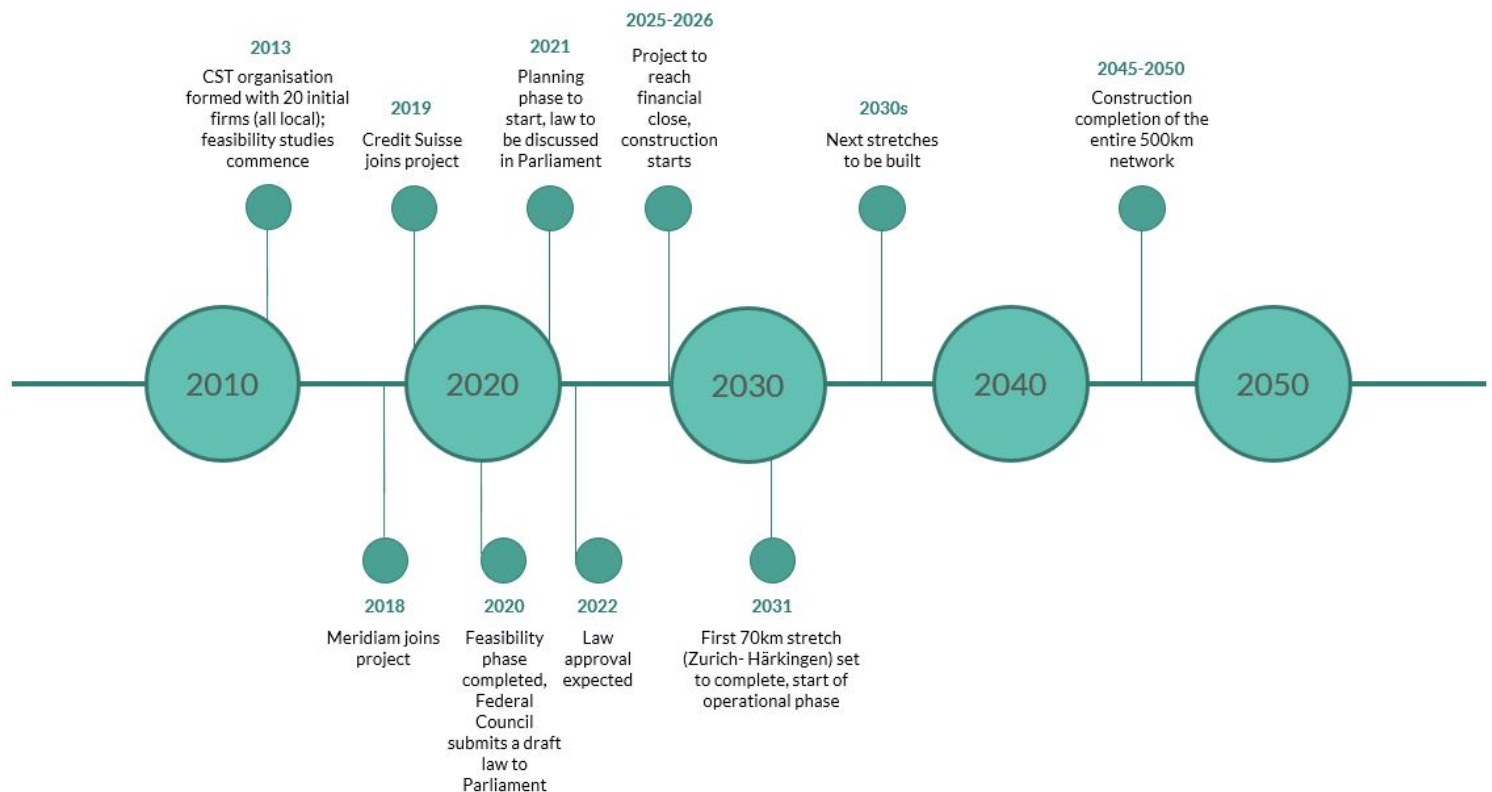
Digging for victory

But these groups have to see the project built first, and the construction is not without challenges.

The first 70km stretch of the project will be the most technically important because it will set the standards for the rest of the network, says Guidicelli.

This will link Zurich to a logistics centre close to the intersection of Switzerland's two main motorways: the A1 linking Geneva in southwestern Switzerland to Lake Costance to the north east; and A2, the main north-south axis, linking Basel to Chiasso. "That's why we are starting there, this is a key area where many logistics firms are based. It will be ready by 2031 and the other stretches will follow in the '40s," says Guidicelli.

Cargo Sous Terrain (CST) Timeline



This first stretch will also require digging between 50m and 100m through an aquifer (an underground layer that contains drinking water). “Digging just through a mountain rock would be simpler,” he adds.

CST is currently developing the procurement strategy to transfer the EPC risk. The aim is a shift to sub-contractors as is typical in project finance, according to a spokesperson: “Different procurement alternatives are being reviewed, all seeking to shift the risk to that party in the best position to bear it”.

While CST employs around 10 people currently, more than 100 people with various roles are involved in the project’s wider development, including from Swiss construction design firms Pini Group and CSD Ingenieurs and the local arm of AFRY, which with its more than 1,000 employees across the country is effectively akin to a Swiss employer, says Guidicelli.

Going underground

And, as if their Swiss ambition wasn’t enough, the project’s promoters believe the model could even be replicated elsewhere in Europe, if successful. The catchment area of CST is equal to a city of up to 10 million inhabitants, which can be served well with an underground transport system of this type, they say.

This may be less suitable for places like London, which have already a well-developed underground network, limiting further tunnel networks, but could suit Berlin or Milan which are also major logistics centres.

Perhaps, more significantly for investors, the project could also nudge Swiss authorities more towards considering project financing for large projects in the future. With the first stage not completed until 2030, they might be waiting some time though.

Deal Profile

Cargo Sous Terrain (CST)

 SWITZERLAND | Transport | Other | Greenfield

Investor Profile

Meridiam Infrastructure SCA FUND

 FRANCE | Unlisted | Closed-ended | Equity fund

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