

The freight-only underground
transport system
"Cargo Sous Terrain (CST)" project



Overview of the initiative

Impacts of the freight-only underground transport system "Cargo Sous Terrain (CST)" project (Contributions to Switzerland)

The freight-only underground transport system "Cargo sous terrain" (hereinafter, CST) project aims to build an underground logistics system based on existing technologies to reduce the burden on current transport routes and to strengthen urban and regional economies equally.



Transportation and infrastructure	Climate and sustainability	Innovation and international positioning	Spatial planning	Logistics efficiency
<ul style="list-style-type: none"> Reduced road congestion Fewer truck trips within urban areas Contribution to modal shift 	<ul style="list-style-type: none"> Road load and CO₂ reduction Reduction in truck trips in metropolitan areas Contribution to modal shift 	<ul style="list-style-type: none"> Strengthening employment and know-how in Swiss industry and high-tech sectors An internationally pioneering role in logistics and control technologies 	<ul style="list-style-type: none"> Contribution to efficient land use through underground development 	<ul style="list-style-type: none"> 24/7 operation High temporal reliability due to lack of congestion Support for urban logistics as part of a multimodal integrated system

Status of studies on transport modes

- Initially, a system with three lanes in which vehicles could freely travel (two running lanes and one buffering lane) was selected; the vehicles would draw power from an in-tunnel power supply while moving and operate autonomously (see left figure).
- Simulations show that a direct and continuous transfer of goods from the surface into the tunnel is challenging in practice. One key reason is the mismatch between surface logistics operations and the tunnel transport system. Tunnel vehicles were designed to carry two pallets, but pallets at the surface are typically available in irregular and demand-driven flows. As a result, vehicles could not always be fully loaded before entering the tunnel. Partially loaded vehicles therefore had to be temporarily buffered in the tunnel, which reduced system throughput and led to low vehicle utilization.
- As of March 2026, taking into account technical track record, transport efficiency, ease of maintenance, reduction of environmental risks (impact on ground temperature) and fire risk, and space savings (smaller tunnel cross-section), a cable-hauled system has been judged optimal.

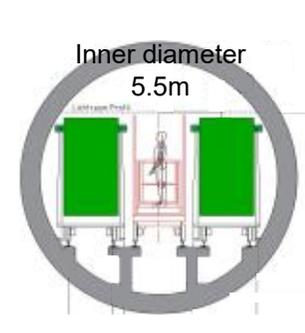


Figure: Initial transport concept

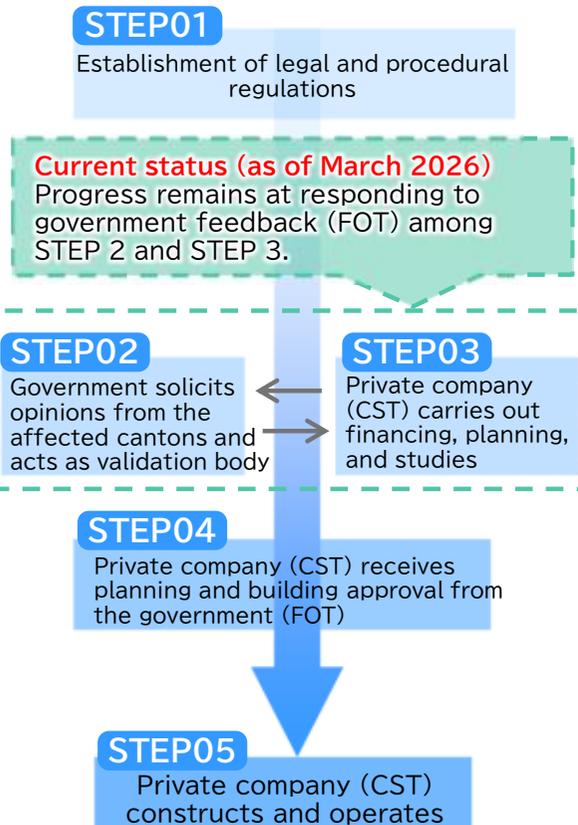
Figure: Transport concept as of March 2026

Project progress status

○ Status of activities

- In Switzerland, political (public-private cooperation and role allocation) and legal guarantees (legislation on PPPs) necessary to finance infrastructure of this scale purely with private capital are not in place. Under current legislation (federal law on underground freight transport), private sponsorship is required, however, the law does not provide sufficient security for private investors. Therefore, as a project step, progress has been limited to responding to comments from the relevant government bodies (FOT) among steps “STEP02” and “STEP03” shown in the figure at left.
- The project is currently focusing on dialogue with the federal government and cantons to establish a reliable PPP business model. Once approvals from the federal government and the cantons are obtained, the project will proceed toward construction.

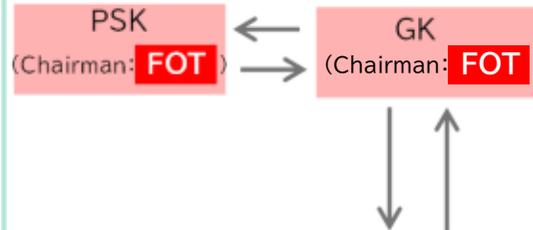
■ Process Underground Transport of Goods (UGüTG) Act to construction and operation, and **current status**



■ Consultative body

Level at Step 02 and 03

Government verification of regulatory alignment and financial feasibility

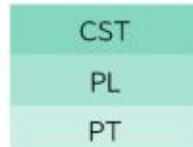


Regular coordination among federal and cantonal agencies to clarify roles, responsibilities, and communication structures

CST社 (Cargo sous terrain社)
· Project planning

STEP03

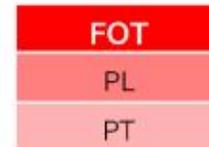
Private company (CST) carries out financing, planning, and studies



FOT
· Definition of planning boundaries and proposed routes

STEP02

Government solicits opinions from the affected cantons and acts as validation body



PL: Project Leader; PT: Project Team

Glossary / Definitions

PSK (Political-Strategic Coordination Committee): Chairs the consultative body and is responsible for politically overseeing the project's strategic direction, ensuring planning stability through consensus-building, and making recommendations to higher-level political authorities.

GK (Technical Coordination Committee): A master plan that organizes the overall concept of the underground transport network and plays a comprehensive role covering routes, technical systems, phased development, and coordination with other modes of transport.

FOT (Federal Office of Transportation): The federal agency responsible for Switzerland's transport administration, tasked with authorization, supervision, and regulatory design for railways, cableways, and underground transport systems (such as CST).

Cantons targeted for Phase 1

· Determination of hub locations and route alignment in each canton



Canton of Bern	Canton of Solothurn	Canton of Aargau	Canton of Zurich
PL	PL	PL	PL
PT	PT	PT	PT