Political Action Sheet No. 1

General upgrade of rail infrastructure connecting Combined Transport nodes with the main corridors and a special focus on relevant feeder lines

General recommendation

According to the EU white paper 2011 ('Roadmap to a Single European Transport Area'), 30% of road freight over 300 km should be shifted to rail or waterborne by 2030 and more than 50% by 2050. Therefore, the linear infrastructures must be developed, including the main corridors and feeder lines (i.e., those parts of the line that connect Combined Transport nodes with the main corridors).[1] A focus should be put on closing the remaining gaps in the network of EU Rail Freight Corridors' substitution routes.
The feeder lines with their respective CT terminals must be upgraded concerning:

A continuous electrification
B at least 4m loading gauge (P400)
C handling of 740 m train length
D rail parking areas for overtaking

Another focus should lie on peripheral railway infrastructure relevant for freight transport. This infrastructure often lacks equipment such as modern electronic interlocking systems, electrified tracks or the European Train Control System (ETCS). Furthermore, a lack of passing tracks persists. The reactivation and building of new railway sidings is crucial. A wide-ranging infrastructure harmonization (including tunnels, railway tracks, and terminals) on the general level but also on most promising feeder lines guarantees smooth operation and is thus able to make this mode of transport more attractive. International cooperation for sustainable infrastructure projects (particularly financing) must be provided.

Stakeholders addressed

Members of the EU Alpine states with their ministries of transport/infrastructure, infrastructure managers, operators and private railway and terminal operators.

Barriers/Challenges

Financing and convincing decision-makers and investors regarding rail infrastructure perseveres. Feeder lines are (usually) not part of the Trans-Euopean Transport Network (TEN-T). Risk of undermining desired effects without upgrading peripheral railway infrastructure (which is a prerequisite for competitive railway freight transport).

Short-term goals

- ➔ To increase the awareness of decision-makers for the need of consistent railway management operational plans from a single source (especially in the case of network incidents) with a focus on increasing the capacity for rail freight.
- ➔ To identify the most promising feeder lines of the rail freight corridors.

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Mid-term goals

- ➔ To implement concrete regional infrastructure projects for feeder lines that are accepted by all involved stakeholders and have a secure financing.
- ➔ To increase the maximum train lengths and weights.
- ➔ To implement rail parking areas (e.g. in a second railway) to allow parking of or overtaking with freight trains.

Long-term goals

- ➔ To renew existing infrastructures (e.g. electrification of railway lines, removal of bottlenecks).
- ➔ To construct and upgrade feeder lines.

Short-term actions

- ➔ Use synergies with EUSALP Action Group 4 (to promote intermodality and interoperability in passenger and freight transport).
- ➔ Research the most promising feeder lines and missing links of backup routes.
- ➔ Start creating international railway management plans with a focus on infrastructure, increasing capacities, contingency plans with predefined backup routings, improved traffic management and a clear responsibility of infrastructure managers.

Mid-term actions

- ➔ Develop concrete regional infrastructure projects for feeder lines, including rail-passing and parking areas.
- ➔ Prepare for the infrastructural realization.

Long-term actions

- ➔ Enforce infrastructural measures by renewing existing infrastructure.
- ➔ Connect the feeder line projects with the main railway corridors and projects.

Good practice example(s)

Germany: A 'Memorandum of Understanding' (MoU) was signed in June 2017 by the infrastructure managers of the Rhine-Alpine Corridor, including an additional agreement between the Swiss Federal Railways (SBB) and the German Railway (DB Netz), which signed an agreement on the Rhine-Alpine Corridor regarding capacity increase, timetables, construction site coordination, operations and crisis management.[2]
Italy: An agreement between the Port Network Authority of the Eastern Adriatic Sea (Trieste), the Austrian Railway (ÖBB INFRA) and Italian National Rail Infrastructure Group-Department in Trieste (RFI S.p.A.) was signed on June 10, 2019, which will significantly increase the railway capacity of the Port of Trieste.[3]

1 Main corridors are already under construction or planned and are not part of this action sheet
2 www.corridor-rhine-alpine.eu/
3 https://portoftrieste300.com/wp-content/uploads/2019/03/201901_THE-PORT-OF-TRIESTE-SIGNS-TWO-MEMORANDUMS-OF-UNDERSTANDING-FOR-DEVELOPING-RAIL-LINKS-TO-EAST-CENTRAL-EUROPE.pdf

Improvements and expansion of terminal infrastructure with new terminals, cooperation and networking

General recommendation

Successful cooperation and networking between terminals in the Alpine Space and beyond are crucial. This can be done by making intermodal terminals and transshipment nodes more efficient and sustainable for intermodal transport units (ITUs). Many existing freight terminals are not adapted to the current requirements or the new EU standards for Combined Transport (CT), such as rail modules with a length of 740 metres, a PC80/P400 railway gauge or an axial weight of 22,5 tons. They also need a high degree of flexibility in their operations (management of railway delays and guaranteed punctual departure of trains) and shall constantly be improved and adapted to their respective needs (e.g. providing more storage spaces for transport units and provide infrastructural equipment for loading and unloading of trains).
Additionally, new terminals must be constructed under sustainability criteria to achieve the modal shift from road to rail. This also implies an expansion or creation of shunting yards in front of terminals with easy access to the railway.

Stakeholders addressed

There are 100 intermodal terminals in the Alpine Space (AT/18, CH/11, DE/37, FR/9, IT/21 SLO/4), all Alpine states and their concerned ministries, infrastructure managers, transport operators, Rail Net Europe (RNE), stakeholders from the TEN-T Corridor as well as the political bodies of the EU.

Barriers / Challenges

There is a lack of common Alpine-wide or European-wide operational standards even at TEN-T Corridor level. Spatially constricted areas in the Alpine Space hinder the development, expansion and creation of new terminals. Furthermore, the lack of exchanges between operators due to trade secrets is a challenge as well as the lack of a common control room for terminals and terminal lines, especially at corridor level.

Short-term goals

To improve the management of terminals with short-term innovations in logistical processes by: **1.** Making better use of ICT-solutions (information and communication technology) and automatization to improve the efficiency **2.** transshipment and reduce waiting times (e.g. e-paperwork, automatic registration by photo gate). **3.** Using platform solutions and freight matching (e.g. wagon-sharing and empty container handling). **4.** To create a holistic plan for terminal development. It should include a map of existing terminals, a market analysis to verify infrastructural gaps, and research into new traffic potentials.

Mid-term goals

- ➔ To reduce storage times in storage areas (particularly for trailers).
- ➔ To have ready-to-implement plans for new terminals that are accepted by all stakeholders (entrepreneurial and political-decision makers, civil society).
- ➔ To implement successful cooperation of terminals using network synergies of regional nodes (e.g. establishment of integrated information platforms).

Political Action Sheet No.2

Long-term goals

- ➔ To constitute an efficient network of terminals in the Alpine Space and beyond.
- ➔ To facilitate administration of terminals that operates effectively according to current state-of-the-art procedures.
- ➔ To construct new terminals under sustainability aspects that are accepted by all stakeholders.

Short-term actions

- ➔ Use synergies with EUSALP Action Group 4 as well as the TEN-T Corridors project list and other corridor action plans.
- ➔ Develop a blueprint for short-term innovations of logistical processes (better use of information and communication technologies, automatization, freight matching).
- ➔ Develop a blueprint for terminal development in the Alpine Space (and beyond) including new terminals.
- ➔ Realize an Alpine Space terminal master plan.

Mid-term actions

- ➔ Develop innovative solutions to reduce storage times, such as the bonus-malus systems[1].
- ➔ Assemble a cooperation agreement among terminal managers (e.g. establishing integrated information platforms).
- ➔ Establish a partnership agreement between port authorities and inland terminal operators for the empowerment of coordinated spatial and infrastructure planning at regional, national and transnational levels (e.g. for participation in capital stock).
- ➔ Carry out feasibility assessments (such as cost-benefit analyses, etc.) on new terminals.

Long-term actions

- ➔ Create an efficient terminal network by constantly reviewing measures that were implemented in short- and mid-term actions.
- ➔ Execute plans for the construction of new terminals including the shunting areas.

Good Practice Example(s)

Germany: The TriCon Container Terminal in Nurnberg uses the LogOn customer portal which is the central interface between operators, rail infrastructure companies, logistic service providers and freight forwarders. This portal gives the latest and updated information about trains and charging units[2].
Italy: The wagon-sharing concept was included in Case[1] of the AlpInnoCT Project in Verona QE[3].;
The project 'Verona 750' aims at improving the Verona Quadrante Europa with a 740m module in the terminal[4].
Austria: The port of Vienna has introduced a video gate for faster clearance of trucks[5];
The 'Terminal 4.0' project aims at increasing automated processes and communication between cargo[6].

1 An example of that is the wagon sharing concept in Case 1 of AlpInnoCT project
2 www.tricon-terminal.de/
3 www.quadranteeuropa.it/en/news-qe/384-premio-logistico-dell-anno-2018.html
4 www.ship2shore.it/en/logistics/new-investments-to-upgrade-infrastructures-at-interporto-verona_63973.htm
5 www.hafen-wien.com/de/home/aktuell/news/142/Hafen-Wien-Tochter-WienCont-staerkt-sich-in-der-LKW-Abfertigung
6 https://projekte.ffg.at/projekt/1828239

Higher prioritization of rail freight transport

General recommendation

The prioritization of rail freight transport outside passenger peak hours and on transnational levels can lead to increased capacity with limited impacts on passenger transport (e.g. through the construction of bypasses such as railway lines for overtaking).

Stakeholders addressed

European Union, Alpine States and their respective ministries, railway operators and infrastructure managers.

Barriers / Challenges

Due to the limited amount of disposable, attractive slots on trans-Alpine rail freight corridors, there is a natural conflict between passenger and rail freight in reserving slots. Although international freight trains are entitled to prioritized slots on the main corridors, this is not satisfactory in practice. Furthermore, a common definition of the term peak hours in all Alpine countries (or in all European countries) must be agreed, taking into account of the differences between urban and rural areas.

Short-term goals

- ➔ To develop a common understanding of capacity limits of rail freight and passenger traffic between all stakeholders.
- ➔ To determine a common definition of peak hours, accepted by all stakeholders.

Mid-term goals

- ➔ To prioritize rail freight transport at the main corridors in certain non-peak times compared to passenger transport.

Long-term goals

- ➔ To implement the smooth operation of freight and passenger rail that satisfies all stakeholders' needs.

Short-term actions

- ➔ Bring together all relevant stakeholders such as railway operators, infrastructure managers and national ministries to reach agreement on the possibilities and limits of rail infrastructure.
- ➔ Virtually test capacity limits along the main corridors.
- ➔ Determine a common definition of peak hours, together with all stakeholders.

Political Action Sheet No. 3

Mid-term actions

- ➔ Lobby for prioritized time slots for rail freight transport at European and Alpine level.
- ➔ Fix prioritized time slots for rail freight outside passenger transport peak hours.
- ➔ Harmonize interval timetables of European Railway operators for freight transport.
- ➔ Monitor and evaluate the operational process of freight and passenger rail.

Long-term actions

- ➔ Make adjustments to timetables based on continuous monitoring and evaluation.

Good practice example(s)

EU: Regulation (EU) No. 913/2010 concerning a European rail network for competitive freight requires Member States to establish international market-oriented Rail Freight Corridors (RFCs)[1].

1 https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:276:0022:0032:EN:PDF

Political Action Sheet No.4

Financial support for Combined Transport

General recommendation

Existing support mechanisms for Combined Transport (CT) currently differ throughout the Alpine Space[1]. A review of the *Community guidelines on State aid for railway undertakings (2008/C 184/07)* would promote a more flexible framework for a modal shift through the Alpine Space. The new approach should include:

- **A** Short- and mid-term proposals that identify adjustments in the EU framework and lobbying at EU level to enable their implementation (e.g. full potential of external costs, notification procedures).
- **B** References to accompanying measures that enable a coherent policy mix (e.g. regarding enforcement of technological and working standards of road freight transport).
- **C** Provide financial support at national and EU level to improve the competitiveness of CT. To ensure ideal development in the Alpine Space, subsidies should be granted to integrated solutions that include innovation of transport infrastructures (such as rail and terminal infrastructures), vehicles, technological systems, equipment and CT operations and services.

Stakeholders addressed

European Union, Alpine States and their respective ministries, regional authorities, CT Initiatives, EUSALP AG4, iMONITRAF! Network, Working Group Transport of the Alpine Convention.

Barriers / Challenges

Alpine countries and regions prioritize CT differently because there is no common understanding of the role of accompanied and unaccompanied CT. Several Alpine countries currently do not use the full potential of the EU framework. As a result, there is still considerable potential to promote technological innovations of CT and enhance research and development, which needs to be organized in a more coherent and integrated way.
The absence of transparent, easily accessible incentives and the inadequacy or even absence of subsidies in some countries and/or regions discourages rail freight transport, which is already weakened by the lack of internalization of external costs for road freight traffic.

Political Action Sheet No.4

Short-term goals

- ➔ To develop a new approach regarding CT support mechanisms for the Alpine Space.
- ➔ To build a common understanding of the necessary support elements of CT (e.g. terminal infrastructures, operation/services, technological innovation, research and development projects).
- ➔ To support the discussion of the necessary accompanying measures that are crucial to support an effective modal shift (e.g. enforcement of technological and working standards for road freight) that has now started among the stakeholders involved.

Mid-term goals

To harmonize and develop CT support mechanisms through a joint approach by all Alpine countries. It should include:

- ➔ A proposal for actions based in part on the current Community guidelines for State aid for railway undertakings (e.g. agreeing on a common approach to calculate financial support for CT infrastructures and services, considering financial support for technological innovations, research and development).
- ➔ A proposal for future action, including adjustments of the relevant EU framework from an Alpine perspective (e.g. regarding the amount of State aid for operation/services/investments based on external cost calculations and regarding the notification procedures).
- ➔ A proposal for the necessary accompanying measures taking account of specific national circumstances.

Long-term goals

- ➔ To bring in proposals for adjusting the EU framework to the attention of decision-makers at EU level through a common lobbying approach.

Short-term actions

- ➔ Find a consensus on support mechanisms that should be included in CT (infrastructure, operation/services, implementation of new technologies, support for research and development).
- ➔ Agree on necessary accompanying measures to support effective pull-measures (e.g. stricter enforcement mechanisms for road transport)..

Mid-term actions

Lobby for a common proposal for the review of the EU framework and for flexibility needs in the Alpine Space.

Long-term actions

- ➔ Continuously review the effectiveness of CT support mechanisms.
- ➔ Identify needs for further adjustment needs of the EU framework.
- ➔ Identify streamlining needs with other EU policies (e.g. road pricing/ Eurovignette).
- ➔ Review of technological innovations to fully use the potential of new technologies within CT operations in the Alpine Space.

Good practice example(s)

Germany:

- The Federal Transport Infrastructure Plan supports the construction of the national rail infrastructure with €114 billion until 2030. It includes important railway and terminal projects that influence trans-Alpine CT[2]. The German subsidy guideline supports CT and intermodal transport systems by financing up to 80% of the eligible investment for the construction and extension of private transshipment facilities for CT[3].
- In Bavaria there are funding opportunities for pilot and demonstration projects that promote innovative logistics concepts for new propulsion technologies and rail freight transport. In addition, subsidies amounting to € 0.54 million/year are available to municipalities and administrative bodies for the construction of inland ports.

Austria:

The Austrian Ministry for Transport, Innovation and Technology (BMVIT) grants a yearly investment for the financial support of CT of some € 80 million. The financial support for the operation of unaccompanied CT, the implementation of innovative technologies and for CT equipment, as well as the financial support of transshipment facilities for CT (road/rail/ship) are part of the support.[4]

Switzerland:

The Swiss Ministry of Transport supported CT with CHF 140 million in 2018 (equal to about €128.7 million) with terminal investments, a rolling highway and CT operations throughout Switzerland.[5]

Political Action Sheet No.4

Italy:

National Law No. 208/2015 gives financial support to intermodal services to compensate for the higher external road transport costs to and from Italian transport nodes (through the so-called *Ferro Bonus*[6] amounting to max. € 2.5 per train-km. This is according to EU law applicable provided the financial support does not exceed 30% of rail costs. A budget of € 20 million was available for the period 2016–2019.

- A support system for CT in the Autonomous Province of Trento[6] and the Autonomous Province of Bolzano[7] was established with each making available € 9 million for the period 2016–2019.
- Regional Laws no. 1/2003 and 7/2004 have been introduced by the Autonomous Region of Friuli-Venezia Giulia. They provide financial support for intermodal transport services to/from regional transport nodes (unit of measurement: € 33/load unit) and the development of intermodal nodes for infrastructure and investments in technical equipment (in 2017 about € 2 million were financed).

1 www.alpine-space.eu/projects/alpinnoct/outputs/alpinnoct_dt1.1.1.pdf
2 www.bmvi.de/SharedDocs/EN/Documents/G/ftip-2030.pdf?__blob=publicationFile
3 www.bmvi.de/SharedDocs/EN/Documents/G/guidelines-combined-transport.pdf?__blob=publicationFile
4 www.bmvit.gv.at/verkehr/eisenbahn/foerderung/sgv2018/index.html
5 https://europa.eu/rapid/press-release_IP-16-4461_en.htm
6 http://ec.europa.eu/competition/state_aid/cases/266882/266882_1931637_96_2.pdf
7 https://europa.eu/rapid/press-release_IP-17-5145_en.htm

Fostering harmonization of data and data exchange

General recommendation

There is an urgent need to harmonize existing standards for data exchange for Combined Transport (CT) in the European Union and beyond, which requires an approach from the numerous stakeholders who currently remain unable to collaborate across borders in an efficient and coherent manner. It is abundantly clear that there is a need for networking platforms as well as smart technologies to accelerate rail freight transport. This can be done by defining a new state-of-the-art of data exchange among all stakeholders, providing funds for the development of new technologies and investing in their cross-border harmonization.

Stakeholders addressed

European Union, Alpine States and their respective ministries, railway companies, wagon operators, infrastructure operators, universities (as research, advisory, consultant and educational institutions) as well as other research institutes.

Barriers / Challenges

Data exchange between countries (both EU and non-EU) is not yet harmonized. The different technical standards along the transport chain hinder free data exchange between stakeholders (terminals, forwarders, etc.). Most documentation, especially in rail freight traffic, is still paper-based. The willingness to share data between different stakeholders is relatively low. At present, no Alpine-wide platform exists that allows stakeholders from science and industry to openly share information and knowledge.

Short-term goals

- ➔ To implement harmonized standards for data exchange and communication flows in Alpine rail freight transport.
- ➔ To provide public funds to establish and harmonize standards.
- ➔ To launch several meetings to be able to network with all relevant stakeholders.

Mid-term goals

- ➔ To test IT solutions for data exchange and communication flows along the transport chain.
- ➔ To develop one common tool for data exchange (interface) that is accepted by all stakeholders.
- ➔ To grant easy access to the tools for small-and-medium-sized enterprises (SMEs) [1].

Political Action Sheet No. 5

Long-term goals

- ➔ To implement standards for IT solutions and communication flows along the transport chain, based on interfaces that are already in use or have the potential to succeed across the Alpine Space.
- ➔ To install a one-market platform with a sound basis and the ability to adapt to individual needs.
- ➔ To further work on technical solutions for smoother handling of CT-processes.

Short-term actions

- ➔ Define and collect standards for data exchange with IT solutions based on the evaluation of existing ones.
- ➔ Public authorities to offer funds for the development of logistic processes (harmonized standards, digitalization, etc.) for CT.
- ➔ Develop solutions to standardize CT processes like transshipment technologies.
- ➔ Set up a conference for networking and exchanging information (e.g. in the framework of EUSALP).

Mid-term actions

- ➔ Choose IT solutions and communication flows that have proved most effective.
- ➔ Test and collect experiences as well as data in an environment of trust, including evaluation to produce a pilot tool for data exchange.
- ➔ Bear in mind the difficulties faced by SMEs in accessing data exchange and IT-solutions.

Long-term actions

- ➔ Financially support the implementation of IT standards.
- ➔ Establish a one-market platform with representatives from industry through political support.
- ➔ Deploy technical solutions to e.g. minimize or even eliminate shunting.

Good practice example(s)

EU:

- ➔ The 'Neptune' web platform by Geodis[2] exists at EU level.
- ➔ The collected recommendations in the EU Railway Agency's report '*Facilitation of Combined Transport*' (FCT) (2018)[3] also provides a good basis.
- ➔ AlpInnoCT Research Database on 'Analysis of Initiatives and Studies'[4]

Italy:

- ➔ Verona QE is implementing the project 'Datex II Node' within the CEF Project Ursa Major Neo: it aims at a better exchange of information between rail and road transport in the freight village and is being implemented together with two motorways (A4 and A22)[5].

1 Specific goals for SMEs can be found in the Technical Action Sheet "Fostering access to Combined Transport for small and medium-sized transport companies"
2 https://geodis.com/fr/en/activity/overland-transport/transport-flow-management/digitized-services
3 www.era.europa.eu/sites/default/files/events-news/docs/fct_overall_final_report_en.pdf
4 www.alpine-space.eu/projects/alpinnoct/outputs/output_ot2.1_21052019.pdf
5 https://datex2.eu/implementations/nodes_directory

Support communication to raise awareness of Combined Transport and empower local capability for Combined Transport problem-solving

General recommendation

A so-called 'communication hub' must be established at an Alpine-wide level to increase awareness and foster communication of the potentials of Combined Transport (CT) for decision-makers in politics, industry and civil society. Furthermore, multi-stakeholder partnerships must be established at regional level to analyse specific technical, operational and organizational problems and commit to potential solutions through a bottom-up approach. These partnerships should also provide an overview of funding possibilities at regional, national and trans-national level.

Stakeholders addressed

Universities, public and private research institutions, industry representatives, practitioners in CT, local and regional public administration, political representatives and NGOs at local level.

Barriers / Challenges

There is a lack of awareness and finance for communication and awareness raising on the advantages of CT solutions at regional, national and transnational level. There is currently no institution or individual – a caretaker – to foster communication and raise awareness of CT, who can establish a communication hub, operate such a communication hub and gain the acceptance of all stakeholders.

Short-term goals

- ➔ To install a pilot communication hub at an Alpine-wide level with basic instruments such as a web portal, common strategies etc. (to serve as an umbrella organization for the multi-stakeholder partnerships).
- ➔ To carry out an analysis of existing funding opportunities, shortages and opportunities at regional, national and trans-national level.

Mid-term goals

- ➔ To initiate campaigns on Social Media and other communication channels that show the advantages of Combined Transport to all involved stakeholders and the general public.
- ➔ To establish an official multi-stakeholder partnership at regional level, consisting of transport operators, local public authorities and representatives of civil society.
- ➔ To integrate the CT framework into the educational curriculum at a general level (e.g. in schools and in logistic programmes at universities).

Political Action Sheet No. 6

Long-term goals

- ➔ To establish a harmonized study programme for CT at universities in the Alpine Space.

Short-term actions

- ➔ Identify relevant stakeholders that can establish a pilot communication hub (e.g. in the framework of EUSALP).
- ➔ Establishment of a pilot communication hub at an Alpine-wide level.
- ➔ Introduce basic communication campaigns (on- and offline).
- ➔ Provide an overview of funding possibilities based on existing documents (e.g. the outcome of the AlpInnoCT project).

Mid-term actions

- ➔ Initiate campaigns that demonstrate the advantages of Combined Transport.
- ➔ Foster the establishment of multi-stakeholder partnerships based on existing structures and networks.
- ➔ Identify universities and schools for a CT study program and establish a scientific network.

Long-term actions

- ➔ Develop a curriculum for a new study programme.
- ➔ Implement the new study programme for CT.

Good practice example(s)

Austria:

- ➔ University of Applied Sciences in Steyr: focus on CT in university programme[1] with the aim of developing of awareness of sustainable transport systems.

Italy:

The Verona Quadrante Europa focuses on two courses on logistics:

- ➔ The first course is dedicated to students who have completed secondary school with practical aims. The focus lies on intermodality operators.
- ➔ The second course is called 'Logimaster' and aims at graduated students[2].

1 www.logistikum.at/en/areas-of-expertise/transport-logistics-mobility-en/sustainable-transport-systems-en/overview-sustainable-transport-systems-en.html
2 www.logimaster.it