

# The Sustainability of Freight Transport Across the Alps: European Union Policy in Controversies on Transit Traffic

---

*Volkmar Lauber*

## **TRANSPORT AND SUSTAINABILITY IN THE EUROPEAN COMMUNITY: THE PROGRAMMATIC LEVEL**

Sustainable mobility is a declared goal of the European Commission at least since 1992, with the publication of two documents on the subject (European Commission, 1992a; 1992b) that were the first instalments of a continuous flow of publications and proposals on the subject (EEA, 1999, p64). But sustainable transport proved an evasive goal, and today the EC seems further removed from it than it was nearly a decade ago. A 1999 report by the OECD states that transportation is unsustainable on three counts: firstly, because of its excessive use of a non-renewable resource for which no renewable alternatives are developed at a commensurate rate; secondly, because of emissions that exceed the assimilative capacity of the environment; and thirdly, because its impacts 'damage the health of humans and other organisms and affect the integrity of ecosystems' (OECD, 1999, p11).

The European Commission itself shared this view in its progress report of 24 November 1999 (EWWE, 26 November 1999, p2). Between 1985 and 1996, carbon dioxide (CO<sub>2</sub>) emissions increased by 40 per cent in the EC (European Commission, 1999, figure 7.5); there was no improvement in energy efficiency during this time (EEA, 1999, p63). In its 1999 assessment of the environment in the EC, the European Environment Agency (EEA) reviewed environmental policy integration in a variety of sectors. While it found progress in agriculture, energy and industry, damage was still growing in the transport and household

sectors (EEA, 1999, p398). ‘Transport is the fastest growing sector relevant to the environment’ (EEA, 1999, p416). Apart from air transport, which is less important because of its limited volume, this applies with particular force to road freight, which is expected to increase by 50 per cent between 1994 and 2010 (EEA, 1999, p66).

For this reason, the European Commission has proposed a variety of measures to promote a shift of goods transport from road to rail. The question is whether these proposals will be adopted and if they are bold enough to significantly affect the trend of the last decades. During this time, road freight in most EC countries gained market shares from rail transport, which until 1996 declined not only in relative but also in absolute terms – that is, in tonne-kilometres (European Commission, 1999, figures 4.4 and 4.7). So far, the Transport Council has shown little ambition to integrate environmental concerns. A first joint meeting of transport and environment ministers in 1998 produced few results, with the Transport Council having ‘the interests of the road haulage industry uppermost in mind’ (EWWE, 19 June 1998, p15). The increase of ritual calls for stepped-up integration in recent years need not reflect a decisive shift.

## **TRANSPORT AND SUSTAINABILITY: COMMUNITY DECISIONS CONCERNING ALP-CROSSING FREIGHT TRAFFIC**

After a brief glance at the programmatic level, this chapter now examines actual decisions which had to be taken by the EC in the case of Alp-crossing freight traffic. In the alpine region, resistance against heavy goods traffic became particularly intense because of the latter’s concentration on very few routes, its greater environmental impact due to a highly sensitive milieu and because of the general scarcity of inhabitable terrain (narrow valleys). In addition, there is a perception in those regions that this traffic is not home grown. It is transit traffic in the sense that it serves only other areas, not the regions in which it is most concentrated.

The European Community’s policy clearly compounded this problem. While it made little progress in transport policy until the mid 1980s, the subsequent years saw a series of measures opening the field of cross-border road freight for competition and lifting quantitative restrictions. Hardly any progress was made regarding railroads, where resistance against reform was stronger. This improved the competitive position of road freight at a time when, due to Common Market integration, transportation volume was already soaring. Between 1984 and 1989, cross-border road freight in the Community increased by 84.4 per cent, compared to a growth of 50 per cent in domestic freight in the various Member States (Bernhard, 1995, p7). This increase was concentrated in the Alps on the very small number of routes. Both Austria and Switzerland opposed the surge of road traffic in the name of its ecological and social impact. They developed positions on sustainable freight transport that invoked goals and principles also accepted

by the EC (for example, in the context of the Alpine Convention; see subsequent section on p157) but which clashed with EC practices. From this resulted a process of interaction that has more weight than mere policy statements.

The following questions are relevant to this chapter:

- How did the alpine countries and regions define sustainable transport and how did the stand of the EU develop when confronted with these demands?
- Did the EU infuse its own concepts of sustainable transportation with life and try to promote them?
- Did the EU at least agree to sustainable approaches, or did it do its best to inhibit them?

Answers to these questions should emerge in the following ‘country’ sections.

## SWITZERLAND

Switzerland has a long tradition of restricting truck traffic because of its social and environmental costs. Since 1933, there has been a ban on night-time (and Sunday) driving for heavy goods vehicles. When, after World War II, weight and size limits for trucks were increased in most European states, Switzerland did not follow suit. In 1972, it increased maximum permissible weight to only 28 tonnes and did not modify this limit until the 1998 agreement with the EU (Stampfli, 1993, pp189–190). A toll charge for trucks was introduced in 1984. Confronted with the steady increase of motorized traffic, the Swiss population voted for an expensive modernization programme for public transport in 1987 (Hirter et al, 1994, p158). In fact, Swiss railroads are economically among the most successful in Europe. They handle a larger share of freight than any EC Member State. This applies particularly to freight in transit, which is still overwhelmingly going by rail, despite a decline in the share of rail since the opening of the Gotthard motorway in 1980. During that year, the road took only about 7.5 per cent of total freight crossing the Swiss Alps. In 1994, this share had risen to 25 per cent. The increase was particularly pronounced for transiting trucks whose freight volume increased by approximately 850 per cent during this time (Eidgenössisches Verkehrs und Energiewirtschaftsdepartement, 1996, p32). These figures should be kept in mind when considering the reactions that came from Swiss politics and, in particular, from Swiss citizens in the course of the 1990s.

There is another element to this picture. Due to its geography, Switzerland is ideally placed for much of the North–South traffic – road and rail – across the Alps. Due in part to its restrictive policy on trucking, it handled ‘only’ 31 per cent of that traffic in 1994 (Eidgenössisches Verkehrs und Energiewirtschaftsdepartement, 1996, p19). This led to irritation among neighbouring countries when road traffic became a problem with the public in the 1980s. While freighters pointed to the high cost of bypassing Switzerland, governments objected to the additional ‘detour traffic’, which they claimed to be quite significant. Things came to a head with the dramatic increases in freight

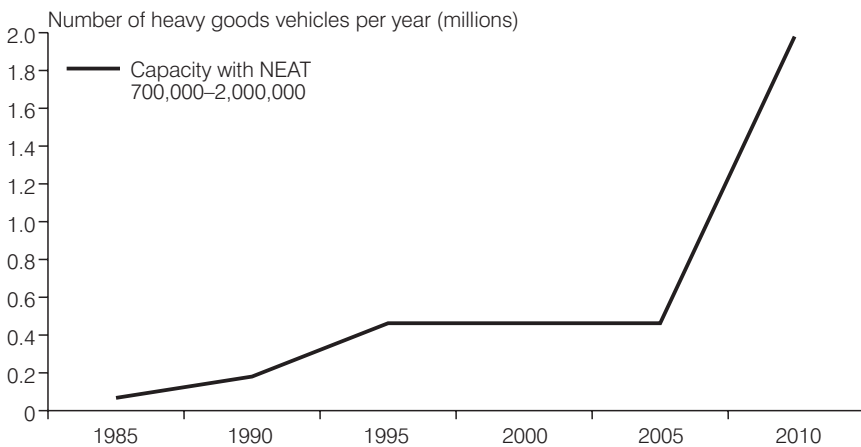
transport in the 1980s and the perspective of the imminent completion of the internal market. The Swiss government wanted the country to join the European Economic Area (EEA). The Community, in turn, viewed a transit treaty with Switzerland as a precondition for such membership. It was during this period that negotiations on transit were conducted, even if, in the end, the Swiss population voted against joining.

## The Transit Agreement of 1992

In the negotiations preceding this treaty, the EC wanted to obtain a significant liberalization of truck transit, in particular a corridor for 40- or even 42-tonne trucks. On the other hand, it had little interest at first in combined traffic (Hummer, 1993b, p5). By contrast, Switzerland wanted to maintain the 28-tonne limit and the clear preference given to freight transport by rail, if necessary by expanding combined traffic – that is, rail shipment of containers or of entire trucks.

The Transit Agreement (valid from January 1993 to January 2005) resulted in the following compromise. Switzerland maintained its 28-tonne limit but committed itself to important railroad investments that would allow increased and accelerated transport of freight containers and whole trucks over the coming 10 to 15 years. This was to be achieved in several steps: at first by upgrading existing tracks, later by building two North–South axes, with long tunnels under the Gotthard and Lötschberg mountains. This project came to be discussed as the NEAT (Neue Eisenbahn–Alpentransversale) (see Figure 8.1).

If no combined traffic facilities were available, a limited number of 40-tonne trucks (100 per day at the most) were, under certain conditions, permitted to transit across Swiss territory with special permits. In fact, this clause acquired



Source: adapted from Stampfli in Hummer (1993, p198)

**Figure 8.1** *Projected Capacity of Swiss Railroads for Combined Traffic across the Alps, 1985–2010*

little importance; during the first two years, only six such permits were issued (Hirter et al, 1994, p151).

The handling of such a large volume of combined traffic by rail requires an appropriate infrastructure (terminals, enlarged tunnels) also outside Switzerland. Since the EC at that time did not yet dispose of the necessary powers (infrastructure came to be included only later on with the TransEuropean Networks), a trilateral agreement providing for significant investments in this area was signed parallel to the transit agreement by Switzerland, Germany and Italy. It was supplemented by an agreement between the different railroad administrations concerned (Hummer, 1993c, pp361–371).

With regard to financing, the enormous railroad investments – which included tunnels of record length (57 kilometres for the Gotthard tunnel) – were guaranteed by the Swiss government. Fees were supposed to repay those investments within 60 years and would be calculated accordingly. This fits in quite well with the already dominant Swiss notion that over the long term each kind of traffic should cover the full costs it occasioned; fees would therefore depend upon real costs and include external costs as well. This was in contrast to the EC, who at that time discussed similar concepts but did little to implement them in the near future (Maibach et al, 1999).

The fact remains that the NEAT railroad project represented a considerable financial risk. About half of an annual budget of the Swiss Federation was to be invested in rail infrastructure without guarantee that this would ever be paid back – for example, in case the EC was able to impose the road passage of heavy trucks after the expiration of the Transit Treaty (or even earlier). It also represented an environmental nuisance by multiplying rail freight traffic many times over. For this reason, Swiss environmental groups, joined paradoxically by the automobile association and the automobile party which feared that the railroad would drain funds from road construction, moved to gather the 50,000 votes necessary to initiate a popular referendum to oppose NEAT. In September 1992, however, a clear majority – 63.6 per cent of the voters – pronounced themselves in favour of NEAT. Two months later, the voters rejected EEA membership.

## **The Alpen Initiative**

The Transit Agreement of 1992 placed no limit on transiting trucks below 28 tonnes, whose numbers grew steadily. Besides, there was reason to assume that the protection it offered against heavy goods vehicles might be transitory (Arnold, 1993, A3–A7). While it could be expected to slow down the further deterioration of the environment near the major transit roads, it was unlikely to bring about a net improvement by actually reducing traffic, one of the central demands of anti-transit movements and one of the goals of the Alpine Convention (signed by Switzerland, the EC and all alpine states in 1991). This convention contains the goal of ‘reducing burdens and risks of inner-alpine and crossing traffic to a measure that can be supported by humans, animals and plants, in particular by an increased shift of traffic, especially freight traffic, to rail’ (Article 2 of the Alpine Convention; Arnold, 1993, C5).

Confronted with this situation, in 1989 a small group of people launched a project that was considerably more radical than the approach taken by the Swiss government. The Alpen Initiative – as it called itself – proposed a referendum on a constitutional amendment requiring quite simply that within ten years from its adoption, all Alp-crossing transit traffic had to be by rail. It also prohibited all capacity increases of Alp-crossing transit roads, except for local bypasses.

The Swiss government – legislative and executive alike – strongly rejected this initiative in 1992 and 1993. Transport Minister Ogi argued that it represented a provocation of the EC, since it discriminated between transit traffic and other (export, import or domestic) Alp-crossing traffic. Indeed, the EC reacted adversely to this initiative once it was adopted. But even earlier, it put pressure on Switzerland to modify the traffic regime of the Transit Treaty (Arnold, 1993, C3; Hirter, 1993, pp152–154). Indeed, the Swiss government seemed inclined to make concessions on the question of weight limits and also prepared important infrastructure investments to handle increased road transit (Arnold, 1993, A7). The Alpen Initiative countered these conciliatory developments and argued that their move represented an ideal supplement to NEAT since it would make the shift from road to rail more effective and thus help to amortize a project that might otherwise turn out to be financially ruinous. It also pointed out that the initiative did not prescribe a positive prohibition of truck transit but could be achieved by economic incentives – that is, a transit fee high enough to effectively discourage trucks from passing through Switzerland.

The initiative was put to a popular vote in February 1994. In the end, 51.9 per cent of the voters – and 16 out of 23 cantons – voted in its favour, an outcome ‘particularly impressive in light of the rarity with which Swiss voters approve popular initiatives’, the Alpen Initiative being ‘only the sixth initiative to win a double majority in the entire post-war era’ (Kobach, 1997, p196). In order to contain irritation on the part of the EC, the Swiss transport minister declared that not only transit traffic but all Alp-crossing traffic (including import, export and domestic traffic) would be required to go by rail. Despite this declaration, the EC at first suspended the planned traffic negotiation with Switzerland in protest, arguing that the Alpen Initiative was incompatible with the Transit Agreement (Hirter, 1995, p149). In fact, the two instruments could barely overlap in time.

By September 1994, the Swiss government announced the principles for implementing the Alpen Initiative. The ban on Alp-crossing truck traffic would be achieved in a non-discriminatory and non-compulsory way by a system of road pricing for all trucks (LSVA or *Leistungsabhängige Schwerverkehrsabgabe*: a fee based on actual road use of all roads, not just motorways, by heavy goods vehicles), supplemented by a fee for alpine roads and tunnels. This would be combined with subsidies to combined traffic (Urstöger, 1997, p129).

## **EC–Swiss Negotiations Subsequent to the Alpen Initiative**

Although the Alpen Initiative was now part of the Swiss constitution (Eidgenössisches Verkehrs und Energiewirtschaftsdepartement, 1996, p23), the

EC tried to have it repealed (Hirter, 1995, p150) and later worked to undercut its provisions. To begin with, there was the problem of 'detour traffic' of trucks via Austria and France. The Austrian and French governments wanted to make sure that Swiss fees would not be so high as to perpetuate bypass traffic through their own territories, especially since the Swiss government proposed to calculate full costs, including external costs for LSVA. Germany and Italy opposed high fees as a discouragement of trade and as an obstacle to the internal market. The EC thus pressed Switzerland for low traffic fees (rather than one oriented on 'true' or full costs) and for abandoning the 28-tonne limit for trucks in favour of a 40-tonne limit by the year 2005 (*Neue Zürcher Zeitung*, 7/8 December 1996, p9).

Switzerland was also confronted with another major problem – that of financing the necessary rail infrastructure for NEAT. Given the state of the federal budget, this project came to look prohibitively expensive, and no one appeared to have a ready solution. Under these circumstances the admission of heavy trucks, as demanded by the EC, offered one significant advantage: it could help pay for the NEAT project.

After several years of negotiations, a first agreement was reached on 23 January 1998 between Transport Commissioner Kinnock and Swiss Transportation Minister Leuenberger. This draft (the Klotten agreement) contained the following elements. Switzerland would give up its 28-tonne limit and admit 40-tonne trucks without quantitative restrictions by 2005. In the same year, Switzerland would introduce a system of road pricing applicable to all trucks (Swiss as well as EC), graduated according to emissions and which, on average, must not surpass 200 euro for one 300 kilometre-crossing from Basel to Chiasso. The 200 euro average LSVA fee was also calculated to include external costs in addition to financing the necessary road infrastructure (*VCÖ Zeitung*, no 7, October/November 1998; *T&E Bulletin*, no 74, December 1998). In the period from 1999–2005, Switzerland would admit increasing quotas of 40-tonne trucks, beginning with 120,000 in 1999 (*Euro Echo*, 2/1998, pp1, 4).

This package was put to the Transport Council on 17 March 1998 for approval. The council, however, rejected it, with the most strenuous opposition to the draft coming from Germany, which vetoed the proposal. German (CDU) Transport Minister Wissmann questioned the Swiss calculations for the LSVA and made it clear that Germany would only approve a substantially lower price tag (*Standard*, 18 March 1999). Italy was reported to ask for a reduction from 200 to about 170 euro (*Salzburger Nachrichten*, 18 April 1999). Several other countries – including Austria and France – were also reported to oppose the deal (*EWWE*, 2 October 1998, p10). Germany's vocal opposition was generally traced to the upcoming Bundestag elections; many observers assumed that no decision could be expected before that date (the end of September).

On 27 September 1998, the Swiss voted in a referendum to accept LSVA, with a majority of 57.2 per cent (*Standard*, 2 October 1998), thus replacing existing taxes on trucks that were substantially lower (during that time, one transit across Switzerland still cost only about 25 euro). Another referendum on the transit issue took place on 29 November 1998 and related to the financing of NEAT and other rail projects, scheduled to cost about 19 billion euro over

the next 20 years. While NEAT had already been accepted in 1992, the assumption then was that it could be financed mostly by government loans. The new financing mode provided that taxes should produce about three-quarters of the necessary amount (*Standard*, 30 November 1998). After several last-minute concessions by Switzerland, the Council of Transport Ministers accepted the agreement with Switzerland unanimously in early December 1998. The concessions meant a delay in the application of the full fee (to be collected only in 2007), and more rapidly increasing quotas of 40-tonne trucks beginning in the year 2000 (*CIPRA Info*, 53/1999, p6; Wicki, 1999, pp89–90).

No one anticipates that this agreement will be able to stabilize Alp-crossing truck traffic. From an estimated 1.1 million in 1998, the number of trucks is expected to rise to 1.5–2 million by the year 2005 (*CIPRA Info*, 53/1999, p6). On the other hand, LSVA is expected to bring in a substantial amount of revenue. By the year 2005, this might be in the range of 0.9–1 billion euro, paid to the ratio of one third by transit trucks, the other two-thirds being furnished by domestic traffic. Two-thirds of these revenues will be devoted to railroad construction and noise protection rather than to road infrastructure maintenance (EWWE, 2 October 1998, p10; *VCÖ Zeitung*, no 7, October/November 1998; *Acid News*, December 1998).

At first, environmental groups were strongly critical of the agreement achieved in December 1998 and announced that they would try to repeal it by referendum (*Europa-Info*, October/November 1999, p11). However, in October 1999, the Swiss parliament voted to commit 1.8 billion euro to make railroad transport of freight more attractive, to aim for a 50 per cent reduction of the Alp-crossing trucks by 2009 and to take additional measures in case that goal should not be reached. After this vote, environmental groups supported the agreement (*T&E Bulletin*, 83 (41), November 1999, pp1, 3), which received its final approval by referendum on 21 May 2000.

## AUSTRIA

A high level of development of both motorways and railroads marks Austrian transport infrastructure. In grand coalition years (during 1947–1966 and during 1987 to early 2000, Austria was governed by a coalition of Social Democrats and Conservatives), the transport ministry that is in charge of the railroads was controlled by Social Democrats. By contrast, the economics ministry – in charge of federal roads and motorways – is traditionally dominated by business interests and was held by the Conservative or People's party. The individual provinces in the Austrian federal system also have considerable influence on road construction.

For freight traffic, rail was, and still is, quite important. In 1997, its share was 250 per cent of EC average while road freight was about half of EC average (European Commission, 1999, figure 4.4). This used to apply even more strongly to North–South transit traffic, with the Alps representing a natural obstacle to heavy trucks on steep and curvy roads. However, the completion of



the motorway across the Brenner in the early 1970s, linking Germany and Italy, soon reversed this pattern. The driving force behind this project on the political level was Tyrol's dominant People's party and its long-time governor who planned additional North–South motorways for the province. For some time the Austrian government actually tried, without success, to secure a financial contribution from the European Community for North–South motorways on the grounds that they served primarily EC needs (Ogrinz, 1993, p143). This position was abandoned only in 1985 when large-scale motorway construction was stopped in the course of the country's budget consolidation.

After the completion of the Brenner motorway in 1972, truck traffic on this route increased steeply, while the growth of rail freight almost came to a halt. Within less than a decade, the public mood shifted: plans for additional motorways across Tyrol had to be shelved in the face of local and regional resistance. The fact that such motorways are still continuing to 'creep up' towards the Austrian border in Italy and Germany led to considerable conflict in the context of the Alpine Convention in the 1990s.

### **First Conflicts over Truck Traffic in Tyrol**

An important turning point for Austrian infrastructure politics came in 1985. The minister of transport declared that the Austrian road system had reached the limits of its growth and that any further capacity increases for freight transport would have to come from the rail system. During 1980 to 1998, Austria had the largest growth of rail freight of any EC Member State in absolute terms (tonne-kilometre) (European Commission, 1999, figure 4.7).

The year 1985 also marked an important turning point for Austrian environmental politics. For the next half-decade at least there was strong environmental activism and considerable government willingness to make concessions to the environmental movement (Lauber, 1997).

In Tyrol, local and regional resistance to truck traffic began to enjoy increasingly strong popular support. By this time, truck transit on the Brenner had grown by more than 400 per cent since 1970, about twice as fast as EC traffic in general (Molitor, 1996, p20). The issue was defined as concerning transit traffic, which had particularly high rates of growth, and was concentrated almost exclusively on an alpine valley with a high population density and vulnerability to noise and fumes. The Conservative governor and his party, backed by a two-thirds majority in the provincial diet, remained largely unresponsive at first. However, local initiatives, usually based on all-party support, spread throughout the province. In 1986, the governor showed first signs of responding to public pressure by submitting – or rather, resubmitting – the idea of a North–South tunnel that would cross Tyrol largely underground. After a provincial election in 1989 in which they lost a quarter of their support, the Tyrolean Conservatives reluctantly joined the other parties in demanding restrictive federal legislation for trucks (Bertsch, 1991, pp170–172).

## **The Transit Agreement of 1991 and the Accession Treaty of 1994**

As in the case of Switzerland, the perspective of a single European market led the Austrian government to proclaim membership in the European Economic Area as a new foreign policy goal; by 1989 it went a step further and deposited a formal request for European Community membership (Kramer, 1996, pp171–177). For the issue of truck traffic, this meant the need to come to terms with the European Community. A transit agreement was negotiated between December 1987 and October 1991. During this time citizen initiatives organized and weighed in with demands to follow the Swiss example on the 28-tonne weight limit, reduce the number of trucks on the Brenner by about 80 per cent, and exclude the building of any additional infrastructure for truck transit. In addition, they proposed to charge full costs, including external costs of traffic, and to ban certain types of transit altogether, such as night-time driving or low-value goods (Sickinger and Huserl, 1993). To some extent, these positions were endorsed by the Tyrolean provincial diet in May 1991.

Broadly speaking, the goals of the Austrian government were similar to those of Switzerland – to put a stop to the further growth of road transit and to shift freight traffic from road to rail. Nevertheless, the Austrian government did not make common cause with Switzerland and, in fact, attacked that country for maintaining the 28-tonne limit which, it claimed, produced ‘detour transit’. This transit was estimated to comprise 40 per cent of the Brenner transit volume. By contrast, the Transport Council of the EC wanted liberalized road traffic, free transit, free choice of the mode of transport and the removal of all technical and administrative obstacles. The council was unimpressed by the European Parliament’s position, formulated in 1986 and particularly in 1988, that the EC should promote combined traffic and participate in Alp-crossing rail infrastructures (Topmann, 1993, pp178–182; Ogrinz, 1993, p145).

In 1989, negotiations began in earnest. The Austrian delegation – which by this time included a representative of the Tyrolean government – argued that in view of the general increase in freight volume, the problems experienced in Austria were just a foretaste of things to come in other regions of Europe as well, even though the Alps were particularly sensitive. It appears that this led to a shift in the attitude of the EC delegation. For the medium and long term, the delegation came to accept the necessity of a shift from road to rail and the reduction of the burden on the local population (Ogrinz, 1993, pp146–147).

Austria’s first concrete proposals in 1990 aimed at reducing the qualitative and quantitative impact of traffic. This included an upper limit for transiting trucks on all transit routes, not just the Brenner (to avoid shifting the problem around). From this upper limit, to be reached in 1993, numbers were to decline by one third to one half. Of this figure, detour traffic shifted back to Switzerland and traffic shifted to rail would be deducted. In addition, truck exhaust would be reduced according to a predetermined schedule. Finally, Austria wanted a durable agreement, partly because the necessary infrastructure investments for the shift from road to rail required long-term amortization (up to 80 years in the

case of tunnels), and partly because it wanted a settlement that would survive Austrian accession to full EC membership.

The EC at first was not prepared to accept a lid on total transit volume, much less to reduce this volume. With regard to reducing truck emissions, it argued that such reductions must flow from EC legislation (Ogrinz, 1993, pp148–151; Pösel, 1991, pp189–193). The EC also insisted that any agreement would have to be limited in time to a maximum of ten years, and made clear that Austrian reluctance to accede to EC demands would represent an insurmountable obstacle to Austrian accession. This point was also urged by several EC Member States which threatened to veto Austrian EEA accession if the Transit Agreement was too restrictive.

A compromise was finally reached in 1991. Its central provision related to the limitation of truck emissions on all transit routes according to a system of eco-points proposed by the Austrian negotiators. A fixed and thereafter declining number of eco-points is issued by Austria to the EC, which distributes them to member countries free of charge. Each eco-point corresponds to a certain volume of nitrogen oxide (NO<sub>x</sub>) emissions considered representative of other pollutants. Within 12 years, NO<sub>x</sub> emissions caused by transiting trucks over 7.5 tonnes must decline by 60 per cent; this means that 20 million eco-points issued in the first year should decline to 8 million by 2003. As transit trucks become cleaner, they need fewer eco-points for each passage, so the system has built-in flexibility. As an additional safeguard, the agreement provided that the number of transit trucks must not exceed 108 per cent of the level of 1991, set later on at 1,264,000 crossings of EC registered trucks (Hummer, 1993c, pp349–150). Should this happen anyhow, then the number of eco-points will be reduced accordingly by a committee composed equally of Austrian and EC representatives (Hummer, 1993c, p356).

With regard to rail, the agreement provided for investments in combined traffic in Austria and in certain EC countries (such as the enlargement of tunnels, the construction of rail terminals in Germany, the Netherlands and Italy and the improvement of tracks). The Austrian railroad pledged to increase the number of trains for combined traffic from 24 in 1991 to about 12–20 times that number by 2010. The completion of the Brenner tunnel, with additional capacities, is envisioned by 2010 (Hummer, 1993c, pp341–156). The agreement also stated that the contracting parties might subsidize combined traffic.

In addition, a special article provided that the parties intend to introduce charges for road traffic ('agreed as far as possible'), which in a first phase will cover only road costs, but in a second phase will also include external costs, in particular environmental costs. These charges will be based on the territoriality principle as far as possible and take into account the special costs of the alpine region (Agreement 1992, Article 14).

When the Transit Agreement entered into force in 1993, there was one big surprise: freighters needed only about 70 per cent of the eco-points issued for that year. This meant that the baseline figures had been 'overestimated' by about 40 per cent or more (*VCO Zeitung*, February 1995, p1; *Standard*, 30 November 1995). It is difficult to imagine that such an error was possible without cooperative behaviour on the part of both EC and Austrian authorities. In any case, this 'error'

postponed the potentially restrictive effects of the agreement for seven years and led to considerable irritation with the anti-transit movement.

For Austria's accession to the European Community, the European Commission insisted that the Transit Agreement was incompatible with the *acquis* and therefore must be renegotiated. Negotiations on this issue were extremely difficult and were concluded only during the last top-level meetings in March 1994. The duration of the Transit Agreement was reduced by one year. The eco-point system and the upper limit on truck crossings were maintained, but were now scheduled to expire by the end of 2000 unless the stated goals were not reached, in which case expiration would come in 2003. The chief effect of the renegotiation was that Austria had to comply with Vignette Directive 93/89/EEC and gradually give up quotas for bilateral traffic with EC countries, reduce its road-usage fees for heavy trucks by about 75 per cent, abolish border stops, and calculate tolls according to the criteria of the Vignette Directive. All this made rail transport even less competitive.

As to rail, Austria and certain EC member countries committed themselves to a series of infrastructure investments, and Austria pledged to develop additional rail capacities beyond the volume already provided for in the Transit Agreement. The projected rail tunnel under the Brenner was listed as one of the top 11 Trans-European Networks, which in Austria raised hopes of financial support by the EC for this project. With the Brenner tunnel included, new rail capacities amounted to about twice the volume to be created by the Swiss NEAT, although generally at a lesser expense (except for the Brenner tunnel).

The Transit Agreement of 1991 contained a clause, which stated that during the second half of its validity, external costs – especially environmental costs – could be charged for road infrastructure use. This clause was now replaced by a declaration appended to the Accession Treaty in which the EC Council asked the Commission to develop a durable ecological framework for the European transport system. This framework would include specific measures for internalizing external costs, developing rail and combined traffic and providing technical standards for vehicles (such as exhaust and noise). Although this provision was only a political commitment and lacked legal value, it was celebrated by the Austrian delegation as a major success (*VCÖ Zeitung*, July 1994, p3). Among the leading political figures, only the Tyrolean governor seemed to hesitate in his support for the transport provisions of the treaty; but he was soon disciplined by his own party, which as a member of a grand coalition government had been directly involved in the negotiations.

## **The Brenner Toll Controversy and the Weakening of Austria's Position**

After accession in 1995, there was a substantial increase of transit road freight, whereas combined traffic on rail went down (*Standard*, 27 November 1995; *VCÖ Zeitung*, 1996, p21). Austria reacted to the new situation by two toll increases on the Brenner motorway. In July 1995, this toll was nearly doubled to about 75 euro, drawing mild protest from the EC. This was followed in February 1996 by a second increase: 'clean' trucks according to the 1996 standards (Euro II class)

paid about 83.5 euro, other trucks 109 euro. Between 10.00 pm and 5.00 am, all trucks paid 167 euro. The toll increase did not apply to local traffic (to trucks that did not travel the whole length of the Brenner motorway). The new increase drew strong protests from European freighters and some governments, as well as an angry condemnation by the European Parliament. Within a few weeks, the Commission made clear that Austria must take back the increase or expect legal proceedings before the European Court of Justice for violation of Directive 93/89/EEC. At the same time, the Commission announced that a proposal to replace this directive was under preparation and might be submitted soon (*Standard*, 6 February 1996). This draft contained a provision for a possible surcharge applying to sensitive areas (*Standard*, 21 February 1996).

It is obvious that the European Commission hesitated to take Austria to court for approximately two years; clearly, some form of consensus with Austria was sought. The Austrian government hoped that the new directive would come in time to make a court decision irrelevant, and to negotiate a favourable solution. This hope was, in part, prompted by the ongoing EC negotiations with Switzerland. If Switzerland was allowed to set tolls in range of 200 euro, transit trucks would arguably shift to Austria or France unless comparable fees could be charged in those countries as well. In fact, the new Brenner toll was less than half the amount discussed for Switzerland. However, Austria failed to present a coherent position over time and thus damaged its own prospects.

In early 1998, Austrian Transport Minister Einem (a Social Democrat) made several proposals to settle the conflict. He suggested that Austria should pay part of the Brenner toll – which he hoped to increase substantially – into a European fund for rail infrastructure, at least until Germany started road pricing on its motorways (*Standard*, 23 January 1998). Later on, he added the proposal that the Brenner toll be ‘stretched’ – in other words, charged not just for the 34 kilometres from Innsbruck to the Italian border but also for the northern section of the Brenner axis leading to the German border at Kufstein, which is about twice as long. But his position was immediately undercut by Tyrolean political leaders who refused this extension of the toll road to the north of Innsbruck, proposing instead to use ‘excess’ tolls on the Brenner route for financing railroad construction (*Standard*, 11 and 13 March 1998). Transport Minister Einem still worked to achieve a compromise with the EC. This included the acceptance, by the Community, of the current average toll level of 84 euro as long as the toll road was extended northwards (‘stretched’); of night-time tolls at about double the day-time rate; and of a safeguard clause in case detour traffic did not shift back to Switzerland as expected as a result of the EC–Swiss agreement (*Standard*, 18 March 1998).

Nevertheless, due to the German veto, the Transport Council of March 1998 rejected the compromises negotiated by the Commission with both Switzerland and Austria. However, Commissioner Kinnock reaffirmed his interest to avoid a lawsuit and to arrive at a negotiated settlement with Austria, keeping in mind the perspective of the new Road Cost Directive that was on the way. Kinnock stated though that he could not wait eternally for Austria’s ‘stretching’ of the Brenner toll road.

From then on, the Austrian People's party consistently undercut an agreement with the EC. Minister of the Economy Farnleitner, who was in charge of roads, agreed to toll-road stretching for 2001 at the earliest. In reaction to this, the European Commission handed in the complaint against Austria on 29 May 1998, accompanied by a statement that proceedings could be frozen if a satisfactory agreement was achieved. The complaint argued that Austria, by its toll increases of 1995 and 1996 (which predominantly affected trucks from other member countries), had violated Article 7b of Directive 93/89/EEC. It also violated Article 7h by collecting higher toll fees than necessary to cover construction, operation and further expansion of the Brenner motorway. Farnleitner reacted with new proposals that were hardly designed to be taken seriously. Indeed, Kinnock rejected them out of hand.

At the Transport Council in December 1998, Switzerland concluded its agreement on transit. A compromise was also reached with Austria that provided for only a slight reduction of the average toll on the Brenner and was made conditional on Austria's collecting 30 to 40 per cent of the Brenner toll on the stretch between Innsbruck and the German border. The event was greeted domestically as 'the biggest success of the Austrian EC presidency' (*Standard*, 2 December 1998).

While the anti-transit movement and the Tyrolean Greens and Social Democrats welcomed this compromise, Minister of the Economy Farnleitner made alternative proposals, including some already rejected by Kinnock (*Salzburger Nachrichten*, 2 and 10 December 1998). This was in line with top-level business organizations and the Tyrolean People's and Freedom parties, who solidly refused toll stretching as a 'disaster'. The Tyrolean governor threatened (and later ordered) administrative delays for the construction of toll booths on the northern stretch unless they were part of a common Austrian system of road pricing discussed for some years. After new provincial elections in 1999, this position was also adopted by the Tyrolean Social Democrats, junior partners of the People's party in the new provincial government (*Standard*, 31 March 1999). The fees of the road pricing system (applicable throughout Austria) were planned to be considerably lower than for the Brenner axis. It became clear that Tyrol wanted high toll fees only for transiting 'foreign' trucks, as if to confirm the European Commission's argument that the Brenner toll was indeed discriminatory.

In yet another respect, the Austrian government undermined measures to limit transit traffic, on which it had insisted for many years. In the context of the International Alpine Convention, Austria had long argued that no major new transit roads must be built across the Alps for ecological reasons. At the very least, new projects must first secure the consent of all states concerned. This had led to conflict with Germany and Italy; but Austria had not yielded and held up all other protocols under the convention since 1993. In June 1998 – upon Tyrolean insistence – the Austrian Ministry of the Economy shifted its position and opposed the consent requirement for new projects for the first time (*Standard*, 6 June 1998). After the alpine tunnel disasters in France (Mont Blanc) and Austria (Tauern) during the first half of 1999, Austrian business, Conservative governors and Minister Farnleitner made use of this opportunity by asking for the doubling of three Alp-crossing motorway tunnels, a proposal

promptly accepted by the government (*Standard*, 1 and 2 June 1999). However, by early 2000, the prohibition of new Alp-crossing motorways or similar roads seemed to be accepted by all signatories of the Alpine Convention (*Standard*, 31 March 2000; CIPRA Österreich, 2000).

When, in February 2000, the governing grand coalition was replaced by one between the People's party and Haider's Freedom party, road and rail policies were for the first time concentrated in the hands of a single infrastructure minister from the Freedom party. Although, in February 2000, the advocate general of the European Court of Justice argued that Austria, by its toll increases of 1995 and 1996, had discriminated against foreign hauliers and overcharged them with tolls unjustified by appropriate infrastructure expenditures, the new minister was not prepared to adjust the Austrian position. Tyrol asked the federal government to impose a total ban on night-time trucking on the motorway in case of a negative decision by the European court. Other than this, there was no new initiative on the part of the Austrian government. Remarkably enough, no steps were taken to seek to exploit whatever opportunities were offered by the new directive on the charging of heavy goods vehicles for the use of certain infrastructures (the new Eurovignette Directive 1999/62/EC) that had entered into force in July 1999, replacing the old Vignette Directive 93/89/EEC. Article 9 of the new directive provides that Member States may set aside a percentage of the tolls or user fees and devote them to environmental protection, or the balanced expansion of the transportation network under consideration. (The old Vignette Directive had not only ignored environmental costs; under its Article 7h, tolls and user charges could only be used for the construction, operation or expansion of the relevant *road* network.)

As a result, in early 2000, major questions regarding the future of transit across Austria were still unsettled. The Transit Agreement as modified in 1994, with its restrictive system of eco-points and its upper limit on the number of truck crossings, was set to expire in 2003. According to decrees signed in February 2000, Austria will introduce road pricing in mid 2002 (*Standard*, 18 February 2000). However, rates will amount to only one fifth of those to be practised in Switzerland: about 0.15 euro per kilometre for heavy trucks. This could mean that in Austria, after the fall of the last quantitative restrictions for trucks and a likely reduction of the Brenner toll, the new rail capacities – which represent enormous investments – may not be fully used, at least as long as motorways are not so congested as to deter all further freight traffic.

This situation could be further aggravated by EC enlargement towards eastern Europe. Anticipating a further increase of transit traffic from such a development, former Transport Minister Einem, at the opening of the enlargement negotiations in late 1999, proposed to extend the eco-point system beyond 2003, hinting that Austrian consent would depend upon a satisfactory solution of this problem. This could include the construction of modern rail terminals in eastern Europe, road pricing and other measures (*Standard*, 3, 6 and 13–14 November 1999). There are no indications that the new infrastructure minister (of the Freedom party) has responded to the problem so far.

## SOUTH TYROL (ALTO ADIGE)/TRENTINO

Another region strongly affected by road freight traffic – and, in particular, transit traffic – due to its mountainous characteristics, is Trentino/Alto Adige, crossed by the *autostrada del Brennero*, the Italian Brenner motorway. Local and regional resistance against the growth of this traffic was similar to resistance in Austria and Switzerland. However, the Italian government was steady in its commitment to maintain the free flow of traffic across the Alps at relatively low cost, since this is its main link with the other countries of the European Community. If any particular region exercised strong influence on national policy, it was Lombardia – given its close integration with southern Germany – rather than South Tyrol–Trentino (Wicki, 1999, pp149–150). Nevertheless, the Italian system permitted surprising regional initiatives in favour of shifting road freight to rail.

The Italian National Railway Company (Ferrovie dello stato, or FS) is not a likely candidate for offering competitive freight transport services. Neglected after World War II, it is still plagued by heavy debts, old and insufficient equipment, long delays, overstaffing and frequent strikes. It will hardly be able to make the very substantial investments in rolling stock, terminals and safety necessary for expanding rail traffic. However, FS was transformed into a stock corporation in 1992, and liberalization began in 1998; this opened the way for competition by non-FS trains (Lüfter, 1998, pp179–182, pp235–244).

The Italian system of motorways, by contrast, was always flexible in its instruments and market orientation. Concessions to build and operate an ‘*autostrada*’ are granted for a certain period (in most cases 30 years). The costs are to be amortized mostly by tolls. Motorways are operated almost exclusively by public bodies. The Italian *autostrada del Brennero* is owned primarily by provinces and regions of the area. The autonomous region of Trentino–South Tyrol owns 30.29 per cent; together with the provinces and cities of Bozen/Bolzano and Trentino, their chambers of commerce and their savings banks, the regional share amounts to nearly 54 per cent (Lüfter, 1998, p215). Since 1992, the *autostrada* presidency is held by Ferdinand Willeit, himself close to the Südtiroler Volkspartei (SVP), the main political party of South Tyrol.

In 1995, Willeit started a new approach to investing the substantial operating profits of the *autostrada*. The Motorway Corporation would, in future, compete with the Italian railroad – on rail, by participating in an international rail freight venture with the task to purchase multisystem locomotives and railroad cars and to invest in rail terminals for the North–South route of Munich–Verona. This material would be placed at the disposal of freighters at competitive prices. The *autostrada* would benefit by a reduced need for repairs and by improving its acceptance with the public (Lüfter, 1998, pp216–219); most importantly, the need to add a third lane in each direction might be avoided. The venture (Brenner Schienentransport AG) was set up in October 1997 and also involved several Italian provinces, the Austrian province of Tyrol and Bavaria. However, the *autostrada del Brennero* played a dominant role and furnished 85 per cent of the starting capital. Nor was Willeit content with this. He hoped to raise enough



funds from tolls not only to finance this rail freight group and to carry out track improvements, but also to help fund the Brenner tunnel as the long-term solution to the transit problem (Lüfter, 1998, pp220–225). This did not really conform to the old Vignette Directive 93/89/EEC, according to which tolls may only charge for construction, operation and expansion of an existing motorway. However, there is no indication that the European Commission is questioning Willeit's approach.

Although South Tyrolean political leaders strongly supported this policy, the Brenner Schienentransport AG is still having trouble getting off the ground. But, in the meantime, the private sector has become active in the same direction. In early 2000, one of Italy's largest freighters, South Tyrolean Eduard Baumgartner, ordered several dozen locomotives and hundreds of railroad cars to expand the freight-carrying capacity of the railroad (*Standard*, 16 February 2000). Because of railroad liberalization, other actors are joining the game and freight trains across the Brenner are becoming more frequent.

## SUMMARY AND CONCLUSION

What does this record tell us about the chances and possibilities of integrating environmental priorities within transport, particularly freight transport? Where are such initiatives likely to originate, and are there certain institutional arrangements that are more favourable to policy integration than others, particularly at the level of the EC? This section reviews the three cases.

Switzerland had traditionally followed a proactive policy of constraining road freight for environmental reasons. It also maintains what is probably the best-functioning railroad system in Europe (offering a viable alternative to long-distance trucking) and, in the 1980s, introduced the principle that traffic should pay for its full costs. While it could preserve its proactive approach in the first transit agreement of 1992, its government came under pressure to yield to the EC policy of facilitating road transport when it decided to apply for EEA membership. The government was prepared for major concessions but was, in turn, confronted with a popular movement that it could not control – the Alpen Initiative and its successful referendum banning all Alp-crossing transit trucks. The Swiss government now used this impulse to build a system that aims at transferring most long-distance truck traffic, including domestic Swiss traffic, to rail. Trucks going by road will have to pay steep fees that will chiefly go to financing railroad construction. The Swiss government's leeway was also increased by the fact that EEA membership had been rejected in another referendum, so there was no question of having to accept the *acquis* in the near future. In this situation, the EC first aimed at overturning the referendum but came to accept the new Swiss approach and concentrated its efforts on reducing LSVA fees. In this, it was fairly successful; as a result, LSVA will not cover the full cost of traffic (Wicki, 1999, pp39–53).

Austria has some features in common with Switzerland. It too has a strong railway system and the highest share of rail freight of any state within the EC. However, it has no long tradition of checking road freight. Partly for budgetary

reasons, partly because of a strong popular movement against transit traffic, it attempted to develop a solution to this problem in the late 1980s that claimed to be more sustainable than EC practices. Confronted with determined EC insistence on the principles of free transport, Austria formulated its eco-points system (to stabilize the number of transiting trucks while reducing pollution), and an ambitious railroad scheme to step up combined traffic. It managed to secure EC acceptance (probably in exchange for a small 'miscalculation' at the expense of the people most directly affected). However, during the accession negotiations, much of these achievements was bargained away under EC pressure. The transit agreement of 1991 was hollowed out and road freight became more competitive. As a result, the expected shift to rail can by no means be taken for granted, especially if current Brenner toll rates have to be reduced (the numerical limitation of transit trucks will expire anyhow in 2003). On the other hand, Austria was never prepared to accept high tolls for all trucks on the Swiss model. It is true that the EC made some environmental concessions to Austria in the Brenner toll controversy and offered new possibilities for integrating environmental concerns through the 1999 Eurovignette Directive. These possibilities have not been taken up so far in Austria, partly due to domestic conflict over the issue, and partly because of organizational rivalry or inertia.

The case of South Tyrol demonstrates that even a region, in a country not much given to environmental concern over transport, can (under strong pressure from its constituent population) find ways to promote sustainable transportation despite EC law. The EC tolerated Willeit's creative practices of investing *autostrada* surpluses in the rail system and inserted a clause in the 1999 Eurovignette Directive that seems to sanction this practice.

What these cases show is that the EC took few, if any, initiatives of its own to integrate transport and environmental policies. It responded to innovations, which the Alpine countries (and sometimes regions) had themselves developed under very strong pressure from their own populations. Until the late 1990s, the EC's chief contribution was to press for easier, faster and unrestricted flow of road traffic. It also insisted on keeping tolls (and taxes) on road freight low (for example, by excluding external and, in particular, environmental costs from their calculation) and blocked cross-financing of rail by road. As a result, it made rail freight still less competitive.

The only major EC environmental initiative on transport was to reduce limits for truck emissions, an end-of-pipe strategy that could not contribute much to sustainability because its effects were immediately overcompensated by rising traffic volume (European Commission, 1999, figures 4.1 and 7.1). At best it was inclined to make temporary or ad hoc exceptions to its general approach to accommodate environmental concerns (limits on trucks crossing Austria until 2003; Brenner toll compromise; provision for special tolls for 'sensitive areas' such as alpine passes included in a draft of the new Eurovignette Directive, although dropped again later on).

The last few years seem to indicate a shift towards greater environmental policy integration in this area. This fits the recent policy of promoting rail freight (although its chief motivation is economic, and this policy may only

partly compensate the shift to road achieved by the one-sided road liberalization policy of the 1980s). It is also reflected in the 1999 Eurovignette Directive, which provides that a certain percentage of toll revenues may be set aside for environmental protection or the balanced expansion of the transportation network concerned. This seems to imply the acceptance of some measure of cross-financing of rail by road traffic, as is practised already in South Tyrol. The chief problem here is that there is no indication of how much cross-financing of rail (and of environmental expenditures) is permissible under this provision.

This invites a more fundamental question. Much of the evidence supports the conclusion that the evolution of transport in the EC is unsustainable because transport is too cheap. It is too cheap because it does not pay for its full cost – including external costs – and this is accepted by the EC for another decade or more. According to economic theory, such a price level is bound to lead to excessive demand, which in turn will induce unprofitable infrastructure investments. Such conclusions regularly emerge from recent expert reports.<sup>1</sup> Underpriced traffic, furthermore, concentrates production in a small number of agglomerations (where it enhances congestion) and often leads to regional decline. Of course, the political problems of making traffic (primarily road freight) pay for its full cost must not be underestimated. But as long as this issue is not addressed, sustainable transport is likely to remain an evasive goal – or more precisely, one that so far was consistently pursued with insufficient instruments.<sup>2</sup>

Is there also a lesson to be drawn in institutional terms regarding environmental policy integration within the transport area or beyond? In the three cases reviewed, environmental concerns were taken into account in transport policy primarily due to public pressure by those directly affected by the negative impacts of trucking who organized strong grassroots movements. Due to the ‘democratic deficit’ of the EC, such voices are not often heard in Brussels, where economic interests are clearly privileged. It is likely, however, that they will be more easily heard in an elected assembly (and, indeed, the European Parliament argued in favour of a shift from road to rail quite early on in the game). It should be added, though, that the regulation of trucking is more likely to invite parliamentary treatment for sustainability than, say, private motoring.

National governments, in general, tend to downgrade environmental concerns; this is forcefully reflected in the dominant approach of the Transport Council as described at the outset of this chapter. Those at the helms of power – at the national as well as EC level – tend to view environmental concerns as something of a luxury in the context of the global economic struggle. The most promising way to modify this view is probably to bring the very real, long-term costs of environmental degradation out in the open. After all, external costs are eventually shouldered by people. To calculate those costs and make them transparent and widely accessible may yet be the best strategy to induce change. This is why the stakes of the current EC discussions on making all modes of transport pay their full costs are really quite high.

## REFERENCES

- 1992 Agreement between the Republic of Austria and the European Economic Community on the Transit of Goods by Road and Rail, BGBl, 280/823, 4558–4568, 29 December
- Arnold, A (1993) *Dokumentation*, Alpen Initiative, Brig
- Bernhard, A (1995) *Österreich im Gemeinsamen (Straßengüterverkehrs-) Markt*, Verwaltungsakademie des Bundes, Arbeitspapier no 02/1995, Vienna
- Bertsch, J (1991) 'Transitwiderstand in Tirol' in H Koch and H Lindenbaum (eds) *Überrolltes Österreich. Zukunft unter dem Transitverkehr*, Verlag für Gesellschaftskritik, Vienna
- CIPRA Österreich (2000) *Die Alpenkonvention*, no 19, 1/2000, Vienna
- 1993 Directive of 25 October 1993 on the Application by the Member States of Taxes on Certain Vehicles Used for the Carriage of Goods by Road and Tolls and Charges for the Use of Certain Infrastructures (Vignette Directive 93/89/EEC)
- 1999 Directive of the European Parliament and of the Council of 17 June 1999 on the Charging of Heavy Goods Vehicles for the Use of Certain Infrastructures (Eurovignette Directive 1999/62/EC)
- Eidgenössisches Verkehrs- und Energiewirtschaftsdepartement (1996) *Wegen durch die Alpen. Alpenquerender Güterverkehr auf Straße und Schiene*, Eidgenössische Drucksachen- und Materialzentrale, Bern
- European Commission (1992a) *Green Paper on the Impact of Transport on the Environment: A Community Strategy for 'Sustainable Mobility'*, COM (92) 46, Brussels
- European Commission (1992b) *The Future Development of the Common Transport Policy: A Global Approach to the Construction of a Community Framework for Sustainable Mobility*, COM (92) 494 final, Brussels
- European Commission (1998) *Communication on Transport and CO<sub>2</sub>: Developing a Community Approach*, COM (1998) 204 final, Brussels
- European Commission (1999) *Transport in Figures*, <http://europa.eu.int/en/comm/dg07/tif/contents.htm#Goods> Transport
- European Environmental Agency (EEA) (1999) *Environment in the European Union at the Turn of the Century*, EEA, Copenhagen
- EEA (2000) *Term 2000: Transport and Environment Reporting Mechanism Report*, EEA, Copenhagen
- Goodwin, F (2000) *Transport, Infrastructure and the Economy*. T&E report 00/6, Brussels
- Hirter, H et al (1994) *Année Politique Suisse 1993*, Institut de Science Politique à l'Université de Berne, Bern
- Hirter, H et al (1995) *Année Politique Suisse 1994*, Institut de Science Politique à l'Université de Berne, Bern
- Hummer, W (1993a) *Alpenquerender Transitverkehr aus regionaler und überregionaler Sicht*, Böhlau, Vienna
- Hummer, W (1993b) 'Verkehrspolitische Bedingtheiten des alpenquerenden Transitverkehrs' in W Hummer (ed) (1993a) *Alpenquerender Transitverkehr aus regionaler und überregionaler Sicht*, Böhlau, Vienna, pp3–12
- Hummer, W (1993c) 'Der österreichische und der schweizerische Transitvertrag in vergleichender Sicht' in W Hummer (ed), (1993a) *Alpenquerender Transitverkehr aus regionaler und überregionaler Sicht*, Böhlau, Vienna, pp339–376
- Kobach, K W (1997) 'Spurn Thy Neighbour: Direct Democracy and Swiss Isolationism', *West European Politics*, vol 20, no 3, pp185–211

- Kramer, H (1996) 'Foreign Policy' in V Lauber (ed) *Contemporary Austrian Politics*, Westview, Boulder CO, pp151–200
- Lauber, V (1997) 'Austria: a Latecomer which Became a Pioneer' in M Skou Andersen and D Liefferink (eds) *European Environmental Policy: The Pioneers*, Manchester University Press, Manchester and New York, pp81–118
- Lüfter, U (1998) *Die Verkehrspolitik der Europäischen Union, Italiens und Südtirols im Hinblick auf den alpenquerenden Gütertransit insbesondere am Brenner*, MA thesis, University of Salzburg, Salzburg
- Maibach, M, Ott, W and Schreyer, C (1999) *Faire und effiziente Preise im Verkehr*, Rüegger, Zürich
- Organisation for Economic Co-operation and Development (OECD) (1999) *Environmentally Sustainable Transport*, Final Report on Phase II of the OECD EST Project, Paris
- Ogrinz, T (1993) 'Entwicklung und gegenwärtiger Stand der Transitverhandlungen Österreichs mit der Europäischen Gemeinschaft' in W Hummer (1993a), *Alpenquerender Transitverkehr aus regionaler und überregionaler Sicht*, Böhlau, Vienna, pp143–152
- Pösel, E (1991) 'EG-Beitritt' in H Koch and H Lindenbaum (eds) *Überrolltes Österreich: Zukunft unter dem Transitverkehr*, Verlag für Gesellschaftskritik, Vienna, pp179–202
- Sickinger, H and Hussl, R (1993) *Transit-Saga: Bürgerwiderstand am Auspuff Europas*, Thaur, Innsbruck
- Stampfli, K (1993) 'Schweizer Transitprobleme: Ein zielgerichteter Aufbruch – Das Projekt Alpen transit und der kombinierte Verkehr für das Europa von morgen' in W Hummer (ed) (1993a) *Alpenquerender Transitverkehr aus regionaler und überregionaler Sicht*, Böhlau, Vienna, pp187–198
- Topmann, G (1993) 'Die Position des Europäischen Parlaments zum alpenquerenden Transitverkehr' in W Hummer (ed) (1993a), *Alpenquerender Transitverkehr aus regionaler und überregionaler Sicht*, Böhlau, Vienna, pp175–182
- Trechsel, A H, and Sciarini, P (1998) 'Direct Democracy in Switzerland: Do Elites Matter?', *European Journal of Political Research*, vol 33, no 1, pp99–124
- Urstöger, C (1997) *Die Verkehrspolitik Österreichs, der Schweiz und der Europäischen Union und deren Auswirkung auf die Entwicklung des alpenquerenden Güterverkehrs seit 1985*, MA thesis, University of Salzburg, Salzburg
- Wicki, C (1999) *Nachhaltige Alpenverkehrspolitik*, Rüegger, Zürich

## Newsletters and Newspapers

*Acid News*, Gothenburg, Sweden

Commissione Internazionale per la Protezione delle Alpi (CIPRA) Info

*Environment Watch Europe* (EWE), formerly *Environment Watch Western Europe* (EWWE),

Agra Europe, Brussels

*Euro Echo*, Vienna

*Europa-Info*, Vienna

*European Voice*, Brussels

*Neue Zürcher Zeitung*, Zurich

*Salzburger Nachrichten*, Salzburg

*Standard*, Vienna

*Transport and Environment (T&E) Bulletin*, Brussels

*Verkehrsclub Österreich (VCÖ) Zeitung*, Vienna

## NOTES

- 1 See, for example, the British SACTRA report discussed in *T&E Bulletin*, vol 81 (39) August/September 1999, p1; see also the report by Oxford Economic Research Associates and the report by the US Federal Highway Administration in *T&E Bulletin*, vol 76 (36), May 1999, p4. These arguments are applied to EU circumstances in Goodwin (2000).
- 2 The issue is discussed in the Commission at least since the early 1990s (*T&E Bulletin*, vol 55, January 1997, p3), but always as a measure for a fairly distant future. In a 1998 White Paper the Commission proposed to deal with this problem during the first half of the coming decade (*Acid News*, 3 October 1998, p3). Commission initiatives in this direction were already modest, action by the council even less satisfactory. Recent progress is not very encouraging (see the sceptical TERM report by the European Environmental Agency (EEA, 2000) and its discussion in *EWE*, 12 May 2000, p5).