

## Annex A2

Country	Mode	1994	1999	2004
France	Total	44.6	49.0	48.7
	Rail	8.6	9.4	6.8
	Road	36.0	39.6	41.9
Switzerland	Total	24.1	26.8	34.9
	Rail	17.9	18.4	22.4
	Road	6.2	8.4	12.5
Austria	Total	63.7	85.9	108.1
	Rail	24.0	27.8	33.4
	Road	39.7	58.1	74.7
Total	Total	132.4	161.7	191.7
	Rail	50.5	55.6	62.6
	Road	81.9	106.1	129.1

Annex A2-1: Modal split of freight transport of selected Alpine countries in Mio tonnes per year (Source: CAFT 2004 Survey).

Country	Alpine Crossing	Mode	Year		
			1994	1999	2004
France	Ventimiglia	Rail	1.0	1.0	0.5
		Road	9.4	12.9	18.1
	Montgenèvre	Road		1.6	0.4
	Fréjus	Road	12.2	22.8	16.8
	Mt. Cenis	Rail	7.6	8.4	6.3
	Mt. Blanc	Road	14.3	2.9	5.2
Switzerland	Gran San Bernardo	Road	0.4	0.4	0.6
		Rail	4.7	3.5	6.8
	Simplon	Road	0.1	0.2	0.7
		Rail	13.2	14.9	15.6
	San Gottardo	Road	5.1	7.0	9.9
		Road	0.6	0.8	1.3
Austria	Reschen	Road	0.8	1.2	2.0
		Rail	8.3	8.2	10.2
	Brennero	Road	17.6	25.2	31.5
		Rail	5.3	5.6	8.0
	Tauern	Road	4.7	8.2	12.2
		Rail	4.0	4.6	5.4
	Schoberpass	Road	6.9	11.2	14.6
		Rail	6.1	9.3	9.6
	Semmering	Road	3.7	4.0	5.6
		Rail	0.4	0.1	0.2
Wechsel	Road	6.0	8.2	8.8	

Annex A2-2: Road and rail transport volumes on Alpine crossings in Mio tonnes (Source: CAFT 2004 Survey).

Country	Alpine crossing	Road (Mio t)	Rail (Mio t)	Modal split road/rail (in %)	Total (Mio t)
France	Ventimiglia	11.6		100/0	11.6
	Modane		1.1	0/100	1.1
	Fréjus	4		100/0	4
	Mt. Blanc	1.8		100/0	1.8
Switzerland	Simplon	0.3	6.2	5/95	6.5
	Gran San Bernardo	0.3		100/0	0.3
	San Bernardino	0.8		100/0	0.8
	San Gottardo	6.2	13.5	31/69	19.7
Austria	Brennero	27.9	9.4	75/25	37.3
	Tauern	7.2		100/0	7.2

Annex A2-3: Road and rail crossing transit traffic in 2004 in Mio tonnes (Source: Alpinfo 2004).

Alpine crossing	Country	Share of Alpine-crossing traffic
Ventimiglia	France-Italy	13%
Fréjus / Mt. Cenis	France-Italy	11%
Mt. Blanc	France-Italy	3%
Gran San Bernardo	Italy-Switzerland	1%
Simplon	Italy-Switzerland	1%
Gotthard	Italy-Switzerland	9%
San Bernardino	Switzerland	1%
Reschen	Austria-Italy	1%
Brennero	Austria-Italy	19%
Tauern	Austria	13%
Schoberpass	Austria	12%
Semmering	Austria	5%
Wechsel	Germany	9%
<b>Total</b>		<b>98%</b>

Annex A2-4: Share of Alpine crossings in total cross-Alpine freight traffic on roads in 2004 (Sources: CAFT 2004 Survey).

Route	Daily flow of HDV	Freight rate (in %)	Freight rate increase (in %) 1995 – 2005
E52 München-Bad Reichenhall	7,000–9,000	15–18	25–27
E45 Brenner road axis Innsbruck-Bolzano	11,000	28–32	35
E70 Chambéry-Lyon	5,500	16	28
E43 Lainate-Como-Chiasso	12,500	18	22
E55 Pesnica-Maribor	5,000	12	35

Annex A2-5: Freight traffic flows on main Alpine motorways.

NUTS-2 region	Vehicle movements with origin in NUTS-2 region (Number of vehicle movements 2004)	Vehicle movements with destination in NUTS-2 region (Number of vehicle movements 2004)
Steiermark	854,000	926,000
Lombardia	851,000	925,000
Veneto	450,000	396,000
Piemonte	433,000	417,000
Niederösterreich	379,000	350,000
Oberösterreich	269,000	249,000
Kärnten	236,000	221,000
Provence-Alpes-Côte d'Azur	220,000	188,000
Wien	211,000	192,000
Rhône-Alpes	204,000	210,000
Tirol	204,000	190,000
Oberbayern	190,000	175,000
Slovenia	187,000	177,000
Salzburg	164,000	165,000
Province of Bolzano/Bozen	151,000	161,000
Other NUTS-2 regions that at least partly overlap with AC area	930,593	923,076
NUTS-2 regions that do not overlap with AC area	4,264,392	4,311,930

Annex A2-6: Alpine NUTS-2 regions as origin and destination of traffic.

NUTS-2 regions generating traffic	NUTS-2 destinations of traffic	Vehicle movements in 2004
Steiermark	Niederösterreich	199,000
	Steiermark	132,000
	Oberösterreich	115,000
	Salzburg	35,000
	Other Alpine Regions	88,000
	Non-Alpine Regions	285,000
	<b>TOTAL</b>	<b>854,000</b>
Lombardia	Rhone-Alpes	52,000
	Provence-Alpes-Côte d'Azur	36,000
	Oberbayern	27,000
	Zürich	14,000
	Other Alpine Regions	97,000
	Non-Alpine Regions	625,000
	<b>TOTAL</b>	<b>851,000</b>
Veneto	Oberbayern	22,000
	Rhone-Alpes	17,000
	Provence-Alpes-Côte d'Azur	11,000
	Tirol	10,000
	Other Alpine Regions	54,000
	Non-Alpine Regions	336,000
	<b>TOTAL</b>	<b>450,000</b>
Piemonte	Rhone-Alpes	61,000
	Provence-Alpes-Côte d'Azur	28,000
	Region Lemanique	8,000
	Espace Mittelland	6,000
	Other Alpine Regions	27,000
	Non-Alpine Regions	303,000
	<b>TOTAL</b>	<b>433,000</b>
Niederösterreich	Steiermark	201,000
	Kärnten	37,000
	Burgenland	31,000
	Niederösterreich	24,000
	Other Alpine Regions	57,000
	Non-Alpine Regions	29,000
	<b>TOTAL</b>	<b>379,000</b>

Annex A2-7: NUTS-2 regions with highest volumes of generated traffic (CAFT 2004).

Origin intermodal platform	Country of origin	Destination	Destination country
Aarau	CH	Graz – Wien	AT
Basel	CH	Graz – Linz	AT
Brescia	IT	München	DE
Busto Arsizio	IT	Frankfurt	DE
Chiasso	CH	Singen	DE
Genova	IT	Zürich	CH
Graz	AT	Basel Koper	CH SLO
Hall in Tirol	AT	Verona	IT
Koper	SLO	Graz – Linz – Salzburg – Wien	AT
La Spezia	IT	Zürich	CH
Linz	AT	Zürich – Basel Koper – Ljubljana	CH SLO
Ljubljana	SLO	München Wien	DE AT
Milano Certosa	IT	Singen	DE
Munich-Riem	DE	Verona	IT
Salzburg	AT	Ljubljana – Koper	SLO
Singen	DE	Milano	IT
Trento	IT	Nürnberg	DE
Verona	IT	München Nürnberg	DE
Villach	AT	Koper – Ljubljana Trieste – Verona	SLO IT
Wien	AT	Koper – Ljubljana Verona	SLO IT
Zürich	CH	Genova La Spezia	IT

Annex A2-8: Rail transport O/D-pairs with highest volumes (Source: ISTAT Railflows 2004)

Origin	Destination	Number of vehicle movements
Lombardia	Germany	1,840,000
Lombardia	France	770,000
Emilia Romagna	Germany	637,000
Lombardia	Switzerland	604,000
Friuli V,G	Austria	470,000
Piemonte	Germany	305,000
Friuli V,G	Switzerland	290,000
Lombardia	Austria	278,000
Piemonte	France	204,000
Friuli V,G	Germany	120,000
Trentino A,A	Austria	104,000

Annex A2-9: Number of vehicle movements between Italian NUTS-2 regions and Alpine countries in 2004.

**Case study: Freight traffic crossing the Slovenian-Italian border**

In 2004, the total freight traffic regarding main Slovenian border-crossings towards the Alpine Convention area amounted to about 36.5 Mio tonnes per year.

	Rail (Mio t)	Road (Mio t)	Road (number of trucks)	TOTAL (Mio t)	Share of road
N.Gorica / Gorizia *	0.1	9.1	580,000	9.2	99%
Fernetiči / Ferneti *	1.2	8.6	550,000	9.8	88%
Šentilj / Spielfeld*	4.7	5.6	358,000	10.3	54%
Karavanke / Karawanken	3.5	3.7	237,000	7.2	51%
TOTAL	9.5	27.0	1,725,000	36.5	72%

Annex A2-10: Freight traffic on Slovenian Alpine border crossings. (\* Not within the Alpine Convention Area.)

On the border between Italy and Slovenia the number of trucks has been increasing rapidly over the last few years. From 2000 to 2004 it rose from around 700,000 to over 1.1 Mio which constitutes an increase of 59.7%. In the period from 1995 to 2003 the share was higher for the Nova Gorica/Gorizia border-crossing.

The increasing traffic through the border-crossings of Fernetiči/Ferneti and Nova Gorica/Gorizia derives from two main factors:

- it is the road connection from Italy to growing markets in Central and Eastern Europe,
- it is an alternative to the Tarvisio corridor.

After the EU enlargement to 25 Member States in 2004, an extremely sharp increase of freight traffic was observed along the route of Corridor V across Slovenia. Some of this increase is already noticeable in the data for the Fernetiči/Ferneti and Nova Gorica/Gorizia border-crossings for the year 2004.

Regarding the modal split, it is interesting that the share of rail transport is much lower on the border between Slovenia and Italy than between Slovenia and Austria. While the share of rail traffic going to Italy is only around 7%, towards Austria it is around 47%. One of the reasons for such a difference derives from the different structure of freight; a considerable share of freight going to Austria is dry bulk cargo.

With respect to the mountain passes in Slovenia it is also interesting to consider the data for the Postojna pass, being just outside of the Alpine Convention area, defining the eastern sub-Alpine passage similarly to Ventimiglia on the western side. The total volume of traffic in 2004 was over 30 Mio tonnes, 9.8 million of which was on rail (32%) and around 21 million on road (68%).

Source: Ministry of Transport of the Republic of Slovenia

## Annex B3

Country	Content	Level	National data source, method	Years	Provider and original data owner
AT	Cultivated area, forests, settlement and traffic infrastructure, area of permanent settlement	LAU-2	Regional information des BEV, aggregated from cadastral data	2001, 2006	AC Umweltbundesamt, (based on BEV data)
CH	Cultivated area, forests, settlement and traffic infrastructure, area of permanent settlement	LAU-2	Area statistics: Every 4 years, 17 land use categories, survey among municipalities	1979-85, 1992-97	AC BFS
DE	Cultivated area, forests, settlement and traffic infrastructure, area of permanent settlement	LAU-2	Area statistics: Every 4 years, 17 land use categories, survey among all municipalities	2000, 2004	AC LfstAD
LI	Cultivated area, forests, settlement and traffic infrastructure, area of permanent settlement	Country-level	Area statistics, aerial photo with one sample point / ha	1996, 2002	AC Amt für Wald, Natur und Landschaft, Vaduz
FR	Forests, settlement and traffic infrastructure	LAU-2	CLC	1990, 2000	AC IFEN
FR	Cultivated area	NUTS-3	annual statistics	1993, 2003	AC Ministère Agriculture (SCEES)
IT	Cultivated area, forests; no settlement data	NUTS-3	method unknown, forest nomenclature only in Italian, Forest (Pioppeti and Boschi)	1990, 2000	AC APAT, ISTAT
SL	Cultivated area, forests, settlement and traffic infrastructure, area of permanent settlement	NUTS-3	Interpretation of Satellite Data (LANDSAT) and auxiliary data	Cultivated area only 2001 1997, 2001	AC Statistical Office of the Republic of Slovenia

Annex B3-1: Data sources and basic method by nation.

Metadata have not been provided sufficiently in all cases.

**Calculation of land-use transformation matrices**

Because land use is a phenomenon based on location, in any case of change we can always talk about transformations of land use. Any site of analysis can change its land use from type 1 to type 2. The changes in a larger defined area can be displayed within a cross table, which shows in rows the area of the different land-use classes at time 1, compared to the columns with the area of the different land-use classes at time 2. The cells of the table indicate the amount of area with land-use change from land use “x” at time 1 to “y” at time 2 or “a” at time 1 to “y” at time 2, respectively, within the given area.

		Time 2			Sum time 1
		Forest	Agriculture	Settlement	
Time 1	Forest	35	10	5	50
	Agriculture	5	15	10	30
	Settlement		5	15	20
Sum time 2		40	30	30	

In this imaginary example one can see how many areas of new settlement have come from forest (5 units), and how many have come from agriculture (10 units). In this example one can also see that 5 units of agriculture changed to forest, whereas 10 units of forest are under agricultural use at time 2. Another 5 units went from settlement to agriculture, which is quite unrealistic, but good enough for this example.

For the actual case the statistical changes are collected for the smallest available land units (LAU-2), and these are treated as the sample points. Thus the land-use transformation is depicted for each of these units, and then the transformation values are aggregated to a higher level. This procedure sharpens the image of land-use change, because on every aggregation level it is still possible to report the share of transformation from each land-use class to each other class. For sake of generalisation of inherent errors, this method requires at least one aggregation level between the sample level and the flow analysis. For example, if the base data have a resolution of LAU-2, then the flows should not be depicted finer than NUTS-2 level.

For each municipality (LAU-2 Level) the status of two time steps is collected. This is still the statistical representation, but in high resolution compared to the result level (NUTS-2). Using certain assumptions and rules, the flows of land use can be inferred from those data:

One single “winner type” compensates all losses of the others; differences are adjusted so that the lower sum is the valid one, the higher sum is accounted to an “unknown” class.

One single “loser type” provides the gains of all others; again differences are adjusted so that the lower sum is

the valid one, the higher sum is accounted to an “unknown” class.

If the sum of the total area differs remarkably between the years, a substantial change in the method of land-use assessment is assumed. In this case either the methodological differences can be resolved or the case has to be excluded from analysis.

If no transfer between land-use classes is detectable, i.e. all three classes gain or all of them lose area, the changes are assumed to be due to the changes in an unknown additional class. No change of land use is reported in this case for the three “known” classes.

These rules result in corrected tables of land-use class area, which are equal in total for both years. On this basis the main land-use flows are calculated per LAU2-unit, and aggregated per region, so that one matrix-table displays the land-use transformation for one region (maybe also for the whole nation).

## Annex D7

### European Expert Conference “Environmentally Friendly Travelling in Europe” – Final Document

The European Expert Conference, “Environmentally Friendly Travelling in Europe – Challenges and Innovations Facing Environment, Transport and Tourism”, took place on 30 and 31 January 2006 in Vienna, mounted by the Federal Ministry of Agriculture, Forestry, Environment and Water Management, the Federal Ministry for Transport, Innovation and Technology and the Federal Ministry of Economics and Labour within the framework of the Austrian EU-Presidency and the Austrian Presidency of the Alpine Convention.

The conference focused on good practice examples of soft mobility measures in the fields of environment, transport and tourism, including the EU projects, ALPS MOBILITY II – Alpine Pearls, Alpine Awareness, mobilAlp, and Environmentally Sustainable Transport and Tourism in Sensitive Areas –Lake Neusiedl/Fertő-tó Region. As demonstrated by the award-winning projects in the European Contest held in conjunction with the conference a number of local and regional entrepreneurial initiatives are already under way in Europe; the range extends from trans-sectoral traffic calming measures, the improvement of travel to and mobility in the holiday region by public transport, to the use of innovative transport technologies, awareness raising and mobility management. The recommendations derived from the above-mentioned projects, the contest and the results of the conference need to be seen against the backdrop of the following political objectives in Europe:

- The March 2000 EU Lisbon Strategy of the European Council, targeting employment, economic reform and social cohesion;
- the “European Sustainable Development Strategy” (EU-SDS), June 2001;
- the “Kyoto-Protocol”, which came into force in February 2005;
- the Transport White Paper “European Transport Policy for 2010: Time to decide” of the European Commission, September 2001;
- the Communication of the European Commission, “Basic orientations for the sustainability of European tourism”, November 2003;
- the 6<sup>th</sup> Environment Action Programme of the European Union
- the technology platforms ERRAC (European Rail Research Advisory Council) and ERTRAC (European Road Transport Research Advisory Council) set up at the initiative of the European Commission, 2001 and 2002;
- the Alpine Convention and its protocols.

### Recommendations issued by the European Expert Conference

The principles of sustainable mobility and sustainable tourism need to be integrated into as many tourism products as possible, taking account of all the three pillars of sustainability, i.e. economy, ecology and social aspects. In the implementation of the following proposals, close cooperation between stakeholders in the sectors of environment, transport, tourism and regional policy at destinations is a precondition for attaining improved products and problem solutions.

#### Recommendations to the transport sector:

- Guarantee the provision and funding of public transport in the regions for both the local population and for tourists,
- guarantee easy accessibility of tourism destinations by public transport (railway, bus and ship) in all seasons,
- upgrade and extend cross-border passenger transport through direct connections (railway – also considering the options offered by the liberalisation foreseen in the Third Railway Package – and bus) to scheduled transport, including attractive special package offers combining public transport with cycling,
- create consumer-friendly products and integrated tariff-systems, including all means of public transport, to give better access to the entire environmentally friendly transport system,
- create consumer-friendly logistic chains for smoother intermodal travel to and from destinations (including provisions for luggage transport),
- eliminate consumer-unfriendly institutional and technical barriers to cross-border rail and bus passenger transport,
- promote increased use of new transport technologies, such as efficient alternative propulsion, eco-friendly fuels and vehicle technologies, and
- use new information and communication technologies in public transport for optimum customer information, with a view to stimulating demand.

#### Recommendations to the tourism industry:

- Enhance integration and consider environmentally friendly mobility solutions when designing tourism products,
- integrate environmentally friendly mobility into existing product labels – ecolabels,
- develop attractive offerings and enhance implementation of measures with a view to extending the length of stay – thus counter-acting current trends and increasing year-round-tourism as far as possible,
- promote initiatives that raise awareness of sustainable tourism and sustainable mobility, and
- consider soft mobility as a USP (Unique Selling Proposition) in the marketing of tourism products.

**Recommendations to destinations:**

- Develop strategies for regional sustainable development (e.g. Local Agenda 21) and sustainable tourism as well as measures for their implementation,
- develop an easy-to-apply system for monitoring the status quo and the ongoing process of sustainable development,
- conduct research designed to improve socio-economic market surveys with a view to developing target-group-specific tourism products,
- integrate ecological requirements and criteria of sustainable tourism as well as the promotion of environmentally friendly transport modes in the regions and in the origin/destination transport chain into the tourism and travel concepts, policies and marketing strategies of all destinations,
- develop and promote cooperation between destinations specially dedicated to sustainable development with a focus on soft mobility and sustainable lifestyle values, such as the Alpine Pearls initiative,
- manage mobility for destinations (e.g. traffic-calming and car-free zones, local demand-oriented public transport systems as well as human-powered mobility),
- establish an origin/destination service chain and create special products, taking into account car-free travel to and car-free stays at resorts,
- sensitise visitors and create incentives for the increased use of public transport,
- create strategic partnerships between tourism industry and transport enterprises, tourism destinations and places of origin, with a view to jointly launching attractive, environmentally friendly products, which give tourists a door-to-door mobility guarantee, and
- take account of soft-mobility issues in tourism marketing and in the marketing of destinations (quality of travel experience, event-character or advantages of soft mobility ect).

**Recommendations to policy-makers and the administration:**

- Take into account the principle of fair pricing in transport and internalise external costs as a contribution to fair competition between the different transport modes (road, rail, aviation),
- set up a framework for enhancing the harmonisation and integration (e.g. technical standards, cross-border licences, user-friendly equipment and guiding systems, ...) of European public transport, in particular for railway systems, with a view to improving cross-border railway connections,
- promote efforts with the objective of a Europe-wide, co-ordinated staggering of holiday periods,
- gain reliable data on travel behaviour through appropriate amendment of tourism statistics,
- consider environmentally friendly mobility in the forthcoming "Agenda 21 for European Tourism",

- support environmentally friendly mobility management in tourism and leisure, to promote the use of environmentally sound vehicle technologies and fuels, particularly fuels derived from renewable energies (e.g. bio fuels and biogas) and further tighten the emission standards for vehicles powered by combustion engines (e.g. EURO 5, 6),
- create an appropriate instrument which enables the limitation of greenhouse gas emissions from air transport within the EU and between EU and third countries, taking into account the conclusions of the Environment Council of 02/12/2005; further enforce, at the international level the integration of climate-damaging emissions of international aviation into the Kyoto-Protocol,
- promote innovative, application-oriented projects for the implementation of environmentally friendly transport concepts for leisure and tourism as well as targeted cooperation between the environment, transport and tourism sectors under the programmes of the Structural Funds (Interreg, Urban, Leader, Equal) and under national development programmes,
- increase investment into research and development of innovative transport technologies under the 7th European Union Framework Programme for Research and Development, as well as into national research programmes, in order to pave the way for innovations and to realise an integrated, more environmentally friendly and more intelligent Europe-wide transport system,
- develop and promote an award and a labelling system for destinations that is oriented towards sustainable development, including soft mobility and lifestyle values, such as the Alpine Pearls initiative, and examine the options of Europe-wide application,
- promote existing labels for the successful placement of destinations on the tourism market and integrate criteria of sustainable tourism into the day-to-day business of successfully positioned destinations. Support the regular monitoring of destination branding and labelling and create the required databases, and
- integrate sustainable tourism and soft mobility issues into all forms of tourism-related education and life-long learning initiatives.

**Recommendations to destinations facing special challenges**

- Many European countries, in particular the new member states and candidate countries as well as the South-East European and Balkan countries, still have untouched and ecologically sensitive areas which could provide a good starting point for the development of sustainable tourism.
- Effective solutions in ecologically sensitive areas require cross-sectoral approaches.
- In destinations facing special challenges the external costs of environmental impacts should be considered in pricing (e.g. surcharges), in order to allow cross-funding of sustainable mobility in these areas.

- National and European funding instruments, such as the Structural Funds, should focus on the requirements of destinations facing special challenges and include soft mobility measures as well as support cross-border and transnational activities.
- The special challenges posed by the sensitivity of these areas should be communicated to tourists and to the local population in order to raise acceptance of specific protective measures.

#### **Mountains:**

- Due to the fact that environmental impacts are enhanced by the special topography, the climate conditions and the restricted living space, specific measures are required, particularly in transport. As measures at the destination alone may not be sufficient to reduce the environmental impact of transport, sustainable transport has to be promoted also in the source countries.
- Instruments such as the Alpine Convention and the Carpathian Convention have already highlighted the specific needs and proposed measures for sustainable development. The pertinent implementation procedures could serve as a model at international and global level. However, each mountain region must work out its own type of political contract based on the prevailing conditions and making a special allowance for an integrated approach to transport/tourism.
- Signing and ratification of the Transport Protocol of the Alpine Convention and subsequent increased efforts to ensure its implementation by the European Community and its Member States.

#### **Wetlands:**

- Since rivers and lakes divide as well as connect countries, a cross-country approach is called for.
- As the shores of rivers and lakes are usually flat areas, they have good potential for cycling; therefore package tours combining cycling with public transport (bus, rail, ship) should be promoted.
- Rivers and lakes need also to be considered as waterways. Therefore environmentally sustainable solutions for inland shipping and leisure and sport boating should be implemented, including the use of cleaner fuels and the renewal of the boat fleets as well as traffic restrictions in sensitive sections of lakes and rivers.

#### **Urban areas:**

- Leisure and tourism transport should be considered in the EU thematic strategy on urban environment and in its implementation.
- The EU thematic strategy on urban environment and its implementation should take into account the interaction between urban areas and their hinterland, focusing on leisure traffic flows of residents to recreation areas and the requirements for an environmentally sustainable origin/destination transport chain. Cooperation between urban areas and the recreation areas.

- of their residents should be promoted in order to enforce sustainable leisure mobility.

#### **Coastal areas:**

- Induce a modal shift to coastal shipping, especially in areas with land use constraints and conflicts.
- Promote and increase the use of cleaner fuels for vessels as well as alternative propulsion and renewal of fleets.
- Adapt land use planning in coastal areas in order to protect these zones and prevent new heavy infrastructure.

The participants in the European Expert Conference, "Environmentally Friendly Travelling in Europe – Challenges and Innovations Facing Environment, Transport and Tourism".

Vienna, January 2006

## Annex: List of the indicators

Data for the following Indicators were requested from the Contracting Parties of the Alpine Convention. Not all data were available and not all data have been used.

B1-1	Population	B8-1.2	Number of tourist beds per inhabitant winter season
B1-3 Var	Age structure classes	B8-1.3	Number of tourist beds per inhabitant annual average
B1-4	Natural growth rate of the population	B8-2	Proportion of guest beds in second homes
B1-5	Balance of migration (immigration minus emigration)	B8-2 Var	Bed-places in second homes
B1-6	Persons with a university degree (or/and doctorate degree, bachelor's degree, master's degree)	B8-3	Seasonal overnight stays in the hotel and para-hotel sectors per inhabitant
B2-1	Gross domestic product	B8-3.1	Number of tourist nights per inhabitant summer season
B2-5	Unemployment rate	B8-3.2	Number of tourist nights per inhabitant winter season
B3-3	Age of Employees in Agriculture	B8-3.3	Number of tourist nights per inhabitant annual data
B3-4	Number of full time farms owned by natural persons	B8-4	Seasonal arrivals in the hotel and para-hotel sectors per inhabitant
B3-4.1	Number of farms subdivided in classes according to the cultivated area	B8-4.1	Number of tourist arrivals per inhabitant summer season
B3-4.2	Number of farms subdivided to types (full-time, part-time)	B8-4.2	Number of tourist arrivals per inhabitant winter season
B3-5	Cultivated land	B8-4.3	Tourist arrivals annual data
B3-5	Cultivated land above 1.500m	B8-5	Number of all ski lifts (diversified by type)
B3-10	Farms with agrotourism	B8-6	Transport performance of all ski lifts
B4-1	Forest area	B8-9	Capacity of overnight stays of accommodation divided by category
B6-1	Settlement and traffic area	Air quality measuring stations:	
B7-3	Network load due to cars and trucks at automatic traffic meters (AVZ) in the Alpine region	C1-10	NO <sub>2</sub> immission
B7-4	Passengers conveyed by train	C1-10Var	NO <sub>x</sub> immission
B7-5	Passengers conveyed by regional bus	C1-15	Ozone peak exposure
B7-6	Number of municipalities with regular or on-demand services	C1-16	Time of ozone exposure
B7-8	Number of commuters in a municipality	C1-17	PM10 concentration
B7-8.1	Number of commuters inflowing a municipality	Air quality monitoring sites PM10:	
B7-8.2	Number of commuters outflowing a municipality	C1-18	PM10 concentration exceedance
B7-9	Modal split – case studies	C8-2	Percentage of priority biotopes
B7-9.1	Modal split – case studies LAU-2 municipalities	C9-1	Emissions of road traffic noise
B7-9.2	Modal split – case studies NUTS-2 regions	C9-1.1	Noise emission by railways
B8-1	Number of guest beds in hotel and para-hotel sectors per inhabitant	C9-1.2	Noise emission by airports
B8-1.1	Number of tourist beds per inhabitant summer season	C9-2	Noise immissions based on LUCAS field data
		C9-3	Expenditure on noise abatement measures along main thoroughfares
		A questionnaire about the <i>status quo</i> (February 2006) regarding the Directive on Environmental Noise 2002/49/EC and expenses for measures of noise protection at high ranked roads, railways and airports.	