

# **DECLARATION OF ZURICH**

## **TENDER SPECIFICATIONS ATTACHED TO THE INVITATION TO TENDER**

Final version of 15 March 2010

**Invitation to tender**

**Concerning**

**"Alignment of the heavy traffic management instruments  
ACE, ETS and TOLL+ on a comparable scientific,  
technical and operational level taking into account the  
introduction of different thresholds in order to analyze  
transport flow impacts on alpine routes"**

**And**

**Basic traffic study**

**Upon different thresholds**

**And their impact on transport flows on alpine routes**

**(ALBATRAS)**

I.	SPECIFICATIONS OF THE CONTENT	3
I.1.	Introduction	3
I.1.1.	Declaration of Zurich concerning the improvement of road safety, in particular in the tunnels in the Alpine zone	3
I.1.2.	Existing transport policy framework and objectives	4
I.1.3.	Relevant definitions, studies and data	6
I.2.	<i>Purpose of the contract</i>	6
I.2.1.	Work package 1: Align ACE, ETS and Toll+ on a comparable scientific, technical and operational level	7
I.2.2.	Work package 2: Elaboration and definition of thresholds	9
I.2.3.	Work package 3: Traffic Study: Forecast of possible impacts on transport on alpine routes	10
I.3.	<i>Reports and documents to produce - Timetable to observe</i>	12
I.3.1.	Interim report	12
I.3.2.	Final report	12
I.3.3.	Report format and publication	13
I.4.	<i>Duration of the tasks</i>	13
I.5.	<i>Place of performance</i>	13
I.6.	<i>Estimate of the amount of work involved</i>	13
II.	REQUIREMENTS SPECIFICATION	14
II.1.	<i>Administrative and Formal Requirements</i>	14
II.1.1.	Mandator	14
II.1.2.	General Conditions	15
II.1.3.	Awarding procedure	15
II.1.4.	Documents to submit	15
II.1.5.	Deadlines and Schedule	16
II.1.6.	Subcontracting	17
II.1.7.	Bidding consortium	17
II.1.8.	Language of the Offers and the Project	17
II.1.9.	Negotiations	17
II.1.10.	Duration of the Commitment of the Offer	17
II.1.11.	Currency and Conditions of Payment	17
III.	AWARD OF THE CONTRACT	18
III.1.	<i>Schedule</i>	18
III.2.	<i>Exclusion criteria</i>	18
III.3.	<i>Qualification criteria for tenderers</i>	18
III.4.	<i>Award Criteria</i>	19
IV.	ANNEXES	21

## I. SPECIFICATIONS OF THE CONTENT

### I.1. Introduction

#### *I.1.1. Declaration of Zurich concerning the improvement of road safety, in particular in the tunnels in the Alpine zone*

On 30 November 2001, in the presence of representatives of the European Commission and on the initiative of Switzerland, the Ministers of Transport of Germany, Austria, France, Italy and Switzerland adopted the "Declaration of Zurich concerning the improvement of road safety, in particular in tunnels in the Alpine zone", in the light of serious accidents in the Alpine tunnels. Since then, four meetings of Ministers have taken place in order to consider the progress of the work and to adjust priorities, i.e. in Regensburg on 11 May 2004, in Sedrun on 14 November 2005, in Lyon on 20 October 2006, when Slovenia joined the group as a member, and in Vienna on 7 May 2009.

Having taken road safety issues as its starting point, the implementation of the declaration has proceeded to the stage of identifying measures that may be coordinated between the concluding Alpine countries for influencing road traffic and encouraging a shift to alternative modes of transport, with four main areas of work. One of these areas is

- **The management and regulation of transalpine road freight transport.**

Under the Austrian Presidency between October 2006 and May 2009, a study entitled "Best Research on Traffic Management systems for Transalpine Road Freight" had been elaborated by a consortium of transport experts and researchers, which presented a final report at the end of 2008. Nevertheless, this final report did not cover all the fundamental questions which have to be answered, and thus represents only a first step of a comprehensive approach.

On the occasion of their fourth Conference on 7 May 2009 in Vienna, Ministers agreed to further deepen the analysis of the relevant traffic management instruments. It is now required to examine the different concepts in greater detail and to thoroughly analyse the actual practicability of the instruments. Furthermore, the respective impacts to be expected at a possible implementation have to be forecasted in detail. The results should offer a solid basis for decisions to be taken at the next Conference of Ministers, which will take place in autumn 2011.

In order to meet these requirements, the Zurich process, under the Swiss presidency, received the mandate to further follow up previous studies. At the meeting of the Steering Committee "Transport Safety and Mobility in the Alpine Region" in the framework of the Common Declaration of Zurich (hereinafter referred to as "Steering Committee") on 22 September 2009 the following decisions have been taken:

- The results of the analysis conducted so far show that "Alpine Crossing Exchange", "Emission Trading System" and "Toll+" are the instruments of traffic management systems which seem appropriate for transalpine road freight transport.
- These three Instruments shall be further analysed in greater detail, whereas it is especially important to bring them upon a comparable, scientific, technical and operational level. Building on that, a well-founded comparative analysis has to be

conducted. Different thresholds and their impacts on transport on alpine routes shall be evaluated.

In order to achieve these objectives the following study has to be carried out:

**"Alignment of the heavy traffic management instruments ACE, ETS and TOLL+ on a comparable scientific, technical and operational level taking into account the introduction of different thresholds in order to analyze transport flow impacts on alpine routes"**

The results of this study are therefore expected to serve as a major basis for elaborating political options for the Ministerial Conference in October 2011.

### *1.1.2. Existing transport policy framework and objectives*

**EU transport policy** has for a long time concentrated on providing mobility for the economy, businesses and people in an efficient and sustainable way. Creating an internal European transport market has been a target, focusing also on sustainable development and solving the environmental problems related to increasing transport demand. Rising levels of congestion, pollution and CO<sub>2</sub> emissions and improvement of safety, notably in road transport, have been the main issues addressed in recent years.

Future EU transport policy needs therefore to provide the mobility for economic growth and social welfare while, in parallel, tackling the negative effects that the growing volume of traffic causes. The same objective was also addressed by the European Commission in its 2001 Transport White Paper, and in this context the term "sustainable mobility" was coined.

In June 2006, the European Commission adopted a mid-term review of the European Commission's 2001 Transport White Paper (Keep Europe moving - Sustainable mobility for our continent) as an orientation for the future EU transport policy. In its review, the European Commission stated that the main goals of the White Papers of 1992 und 2001 are still valid.

Next to actions foreseen in the 2001 White Paper, such as boosting rail and maritime connections for long distance freight transport, additional instruments will be needed to achieve these objectives. They include a freight logistics action plan; intelligent transport systems to make mobility greener and more efficient; a debate on how to change mobility of people in urban areas; an action plan to boost inland waterways; and an ambitious programme for green power in trucks and cars.

This mid-term review could therefore serve as a possible guideline for policies in the Alpine countries without prejudicing national legislation. For example, in point 6.3 of the mid-term review reference is made to smart charging:

"[I]n addition, where an increase in infrastructure capacity is not possible charging can help to optimise traffic. Fees may be modulated to take environmental impact or congestion risks into account, in particular in environmentally sensitive and urban areas. In such areas, other forms of capacity allocation could be used such as market exchanges of transit rights."

Furthermore, possible guidelines for policies in the Alpine countries must be in conformity with the EU legal framework, such as Treaty principles (such as non-discrimination, free movement of goods, proportionality), Directives/Regulations (e.g. Road charging Directive, Tunnel safety Directive, project and strategic impact

assessment, noise, air and so on,) and judgements of the European Court of Justice, combining different approaches and priorities at the European level.

#### *Existing transport policy framework and objectives at the national level*

The Alpine countries (Germany, France, Italy, Slovenia, Liechtenstein, Austria and Switzerland) and the European Union signed the Alpine Convention on the protection of the Alps on 7 November 1991 and have reacted to the specific situation in the Alpine countries by adopting a wide variety of programmes and measures:

In **Austria**, a general transport plan and a national strategy for sustainable development as well as a strategy aiming at attaining the Kyoto objectives have been adopted. These three programmes are divided into measures allowing the objectives of the transport protocol to be reached.

In **France**, a national strategy for sustainable development has been reshaped by a large public debate launched in 2007 and called "Grenelle de l'Environnement". This national strategy for sustainable development includes a programme of very practical actions in the field of transport (intended to separate economic growth from the environmental effects of transport), a health and environment plan (intended, in particular, to reduce diesel particle emissions), a noise pollution action plan (intended, in particular, to achieve sound proofing of homes), and a climate plan. In the field of transport many initiatives have been taken in order to underpin sustainable transport policy: a railway freight plan has been adopted in 2009, a new charging scheme for HGV on trunk roads has been voted by Parliament in 2009 and will be implemented in 2011 and a national plan for transport infrastructures - including a sustainable development section - is underway.

**Germany** completed its national strategy for sustainable development and adopted the Federal Transport Infrastructure Plan in 2003. This Federal Transport Infrastructure Plan aims, among other, at ensuring sustainable mobility compatible with the imperatives of the environment, and at reducing the negative effects on the environment. All projects, i.e. also those relevant to transalpine traffic, are, before their inclusion in the Federal Transport Infrastructure Plan, subject to a uniform evaluation according to the criteria relating to cost-benefit analyses, environmental protection and nature conservation and regional planning (including urban development).

In **Italy**, the national strategies are organized as a general transport and logistics plan (PGTL), which was adopted in 2001 and which favours transalpine and intra-alpine mobility. The PGTL is accompanied by transport plans at various local levels, preferably linked to local mobility. It aims at limiting the exponential growth of road traffic and its concentration to major routes. In March 2006 the Italian government's CIPE (Interministerial Committee for Economic Planning) also adopted a logistics plan prepared in January by "Consulta Generale dell' Autotrasporto e della Logistica".

In **Slovenia**, the Resolution on the Transport Policy of the Republic of Slovenia (Intermodality, Time for Synergy), which was adopted by the National Assembly at the beginning of 2006, defines - in terms of the starting points, vision, objectives and measures - the basic trends of a transport policy for the future. The main indicators of this transport policy originate in mobility, accessibility, the environment, safety, economic development, and optimal exploitation of resources, intermodality/interoperability and a balance among transport systems.

In **Switzerland**, transport policy in the Alpine region focuses on a shift of freight from road to rail. The Swiss people have consented to this policy in several referendums. By building two new transalpine railway routes and by introducing a heavy-vehicle fee (HVF), Switzerland has taken important steps to move freight transport to rail in the past few years. In order to improve road safety after the fire in the St. Gotthard road tunnel, Switzerland has also developed the "Tropfenzählersystem" (drip count system) and launched several studies on future traffic management systems (reservation systems, Alpine Crossing Exchange).

### *1.1.3. Relevant definitions, studies and data*

#### **Geographical definitions of the Alpine Region**

- Alpine region "B+": The region between Ventimiglia and the Tauern-axis ("Alpine Arc B+").
- Alpine region "C": The whole Alpine Region covered by Alpine Arc C between Ventimiglia and Wechsel

(Definitions as used by the CAFT and ALPINFO databases;  
see <http://www.zurich-process.org/en/statistics/faq/>  
or <http://www.bav.admin.ch/themen/verkehrspolitik/00501/01414/index.html>)

***As a basis for elaborating the study it is recommended to take into account the studies and reference data listed in Annex 1.***

Additional studies or data relevant for carrying out the tasks of this contract shall be investigated by the contractor and taken into consideration.

All available information has to be considered in a way that ensures that the tasks of the contract can be fulfilled in the most efficient way. The way the data are treated and the specific input for the work extracted from the different sources have to be documented in order to enable a reproduction of the data input according to scientific rules.

### ***1.2. Purpose of the contract***

In the study "**Best Research on Traffic management systems for Transalpine Road Freight**" performed by the TNO consortium in 2008, three appropriate instruments of traffic management systems for transalpine road freight transport have been identified:

- ACE: Alpine Crossing Exchange
- ETS: Emission Trading System
- Toll+: Differentiated toll systems

However, these instruments have been studied at different levels of detail and thus are not comparable yet. Therefore, ACE, ETS and Toll+ have to be elaborated in greater detail, concretised and aligned on a common scientific, technical and operational level. Building on that, the instruments have to be thoroughly analysed at different defined thresholds regarding their practicability and applicability in the Alpine countries.

The therefore necessary in-depth study is subject to the present invitation to tender. Furthermore, this study involves the definition of thresholds and the analysis of the respective impacts on transport on alpine routes in different scenarios. The results have to be suitable as a fundamental basis for the subsequent examination of legal and economic impacts.

According to these objectives, on the basis of CAFT-Database and by differentiating into other relevant categories of total permissible weight ( $\geq 3,5$  tons < 7,5 tons;  $\geq 7,5$  tons < 12 tons;  $\geq 12$  tons) and on the basis of transport demand forecasts, the following three step approach is envisaged:

1st step: Alignment and harmonisation of the knowledge of the three instruments at a comparable scientific, technical and operational level.

2nd step: Definition of different thresholds related to the specific instruments:

- Respective to a restrictive number of trucks allowed (ACE)/amount of emissions tolerated (ETS) and comparatively high toll rates (Toll+)
- Respective to a large number of trucks allowed (ACE)/amount of emissions tolerated (ETS) and comparatively low toll rates (Toll+)

3rd step: Traffic analysis – Test all three instruments using the defined thresholds in different scenarios:

- What effects are observed upon transport flows on the alpine routes, especially regarding effects on detour traffic, modal split and emissions? (Software simulation)

Any proposals made by the tenderer have to be explained and linked with a reasoned methodology.

Based on this definition of tasks to be performed by the contractor, the work of the project shall be designed along the following work packages:

*1.2.1. Work package 1: Align ACE, ETS and Toll+ on a comparable scientific, technical and operational level*

As already mentioned above, there are basically three instruments which seem to be appropriate to regulate transalpine road freight transport. However, these instruments still considerably differ in the level of detail worked out so far.

The instrument "Alpine Crossing Exchange" (ACE) has already been elaborated and thoroughly analysed regarding its practicability as well as its applicability, however focusing only on Switzerland. The instruments ETS and Toll+ are rough ideas missing substantial specification rather than detailed concepts.

Therefore, as a main goal of this work package it is especially important to harmonise ACE, ETS and Toll+ at a common scientific, technical and operational level. Building on that, well-founded evaluations as well as a comparative analysis have to be carried out.

Basically, the work package can be divided into two steps:

- Adapt and extend the concept ACE from the focus on Switzerland to a possible implementation in the Alpine Region "B+"
- Specify, deepen and concretise the concepts ETS and Toll+.
- Align and harmonise these three instruments on a comparable scientific, technical and operational level , according to the following key points, where applicable:
  - Definition of the instrument
  - Validity of crossing rights/permits
  - Spatial scope of the instrument
  - Definition and coordination of quantitative targets
  - Definition and treatment of local and short distance transport
  - Monitoring and enforcement of the instrument
  - Allocation of crossing rights/permits and definition/ range of toll rates
  - Tradability of crossing rights/permits
  - Layout and operational specifications of the crossing right/permit system

After a brief presentation and description of each instrument and its specifications, for each of the mentioned instruments all relevant topics and questions with regard to a possible implementation have to be dealt with in detail and pointed out in a comparative analysis. In particular, at least the following topics and questions have to be worked on:

- Elaborate a detailed scheme on how the respective instrument can be implemented in practice, considering the following aspects:
  - Organisational
  - Operational
  - Administrative
  - Technical
  - Financial/Economical
- As far as ETS is concerned the tenderer has to indicate which emissions are envisaged, e.g. using CO<sub>2</sub> as decisive greenhouse gas, setting limits, i.e. on the basis of national emission strategies related to the Kyoto and Copenhagen targets. Other relevant factors of pollution (including noise, if appropriate) may be proposed by the tenderer.
- What tasks in the system have to be fulfilled by which actors (e.g. national governments, private operators)?
- Detailed description of the proposed technical system, especially considering:
  - Required hard- and software, interfaces and data flows
  - Requirements for infrastructure (e.g. vehicles, technical processes)
  - Matters of installation and operation of the technical system
- Technical interoperability with existing systems
- Questions of practicability, such as general feasibility, usability and acceptance by users
- Modalities for non-discriminatory allocation of crossing rights/permits

- How can an efficient control system be established?
- What sanctions can be applied and what possibilities for the enforcement can be considered?
- How can possible exceptional rules for local and short distance transport be exactly designed in order to avoid a disproportionately high burden? How can local and short distance transport be defined (e.g. the method used in the Swiss study on the instrument ACE)?
- Elaboration and analysis of accompanying measures, such as the public dissemination of information on the respective instruments
- What accompanying additional offers in transalpine rail transportation should be considered?
- What tasks regarding monitoring of the instrument and statistical reports are necessary?
- For each instrument, give a well-founded estimation for the overall costs to be expected in case of an implementation in the Alpine region "B+", differentiated by:
  - Costs of investment
  - Annual costs of operation and administration
- The evaluation of the instruments has as well to take into account possible problems and hindrances of implementation.

In summary, the findings of the comparative analysis of the three instruments (especially the main characteristics as well as the advantages and limits) shall be described comprehensively, also taking into account if the instruments can be combined in order to achieve "better results".

#### *1.2.2. Work package 2: Elaboration and definition of thresholds*

The aim of this work package is to define different thresholds that can be applied with the respective traffic management instruments. In this context a well-founded, comprehensible approach has to be chosen and the contractor should assume values based on justifiable professional considerations.

The contractor shall take into account economic and traffic forecasts available at national and European level. The contractor will have to make a critical analysis of these documents and elaborate a synthesis in the interim report.

It has to be considered, that ACE and ETS are so called "limiting instruments", and i.e. the thresholds to be defined represent ceilings that cannot be exceeded. In contrast, Toll+ is a "not limiting instrument", whereas the traffic demand shall be managed by the toll rates. In this sense, the contractor has to specify different toll rates, according to the detailed concept elaborated in work package 1.

Within the study the maximum capacity of road and rail infrastructure for each alpine crossing has to be taken into account and the following two variants of thresholds have to be defined by the contractor.

- "Restrictive" variant:
  - Define a restrictive number of trucks allowed regarding ACE
  - Define a restrictive amount of emissions tolerated regarding ETS
  - Define a scheme of comparatively high toll rates regarding Toll+ for each alpine crossing

Any goals of modal shift from road to rail combined with new rail infrastructure and/or emission targets already specified in national legislation of member states (e.g. Switzerland) shall be taken into account. The number of trucks allowed has to take into account the capacity of existing and planned infrastructure distinguishing between road and rail infrastructure.

- "Tolerant" variant:
  - Define a more tolerant number of trucks allowed regarding ACE
  - Define a more tolerant amount of emissions allowed regarding ETS
  - Define a scheme of comparatively low toll rates regarding Toll+ for each alpine crossing

The contractor will have to assess what - for each system - could be seen as a practical distribution among the major alpine crossings. The contractor will examine the different possible options: by route, by corridor, by country, etc. In this respect, the contractor will take into account each country's existing traffic levels, projects, policies in close contact with the representatives of the 6 countries of the Advisory Board (technical working group reporting to the Steering Committee) of the Follow-up Zurich process as well as the European Commission.

The contractor has to elaborate a clearly defined approach, so that, if necessary, thresholds can be adjusted without having to launch a new study.

Systems, thresholds and any other elements defined within the scope of this study are virtual operands and do not represent any agreed political manifestation of the will of the Alpine countries.

### *1.2.3. Work package 3: Traffic Study: Forecast of possible impacts on transport on alpine routes*

This work package focuses on the analysis and the forecast of the impacts on transport on alpine routes to be expected in case of the implementation of traffic management systems.

The method and tools provided shall be appropriate for this study. In particular:

- it shall be necessarily multimodal
- it shall be able to cope with traffic data, economic forecasts as well as their consequences on transports in a pertinent way

The tenderer has to explain if – and under which conditions - the provided method and tools can be used by the Steering Committee for further works.

According to the thresholds specified in work package 2, each instrument has to be tested:

- applying the “restrictive” variant
- applying the “tolerant” variant

Whereas the implementation of the mentioned traffic management instruments refers to the Alpine region “B+”, the impacts on transport have to be analysed for the whole Alpine region “C”.

Two time frames should be envisaged:

- **2020: With rail infrastructure including the then finished Gotthard Base Tunnel (GBT)**
- **2030: With rail infrastructure including the then finished Brenner Base Tunnel (BBT) and the Lyon-Turin Tunnel (LTT)**

According to the specified variants (“restrictive” and “tolerant” thresholds) and to the scenario timeframes mentioned above, the following scenarios have to be calculated:

Implementation of traffic management instrument(s)	Application of thresholds	Time frame
None	-	2020
		2030
ACE	Restrictive variant	2020
		2030
	Tolerant variant	2020
		2030
ETS	Restrictive variant	2020
		2030
	Tolerant variant	2020
		2030
Toll+	Restrictive variant	2020
		2030
	Tolerant variant	2020
		2030

The contractor has to choose an appropriate, well-founded and alpine specific methodology (e.g. traffic model, simulation programme and calculation algorithms) to calculate the scenarios and the impacts on transport on alpine routes. Regarding the analysis of possible modal shift towards alternative modes of transport, it is especially important to consider the available railway service capacities.

The following questions have to be answered:

- What effects on transport on the alpine routes in the region covered by Alpine region “C” are observed in the different scenarios (considering the alpine crossings as well as other relevant cross sections of the transalpine corridors and possible detour routes)?
- Do the results differ, correlate or are there no connections observed?
- What are the observed impacts regarding route choice? Is there diverted traffic respectively traffic relocations to be expected?
- Which routes are affected?
- What are the observed impacts regarding mode choice? (Especially modal shift towards rail?)

- Are the observed effects smoothened or strengthened when a combination of instruments is implemented?
- What are the conclusions of these simulations?
- What is the estimated cost for the road transport sector?
- What are supplementary costs of transport for a set of representative routes, compared to the reference situation?
- What are the estimated specific costs and revenues generated by the systems?

### ***1.3. Reports and documents to produce - Timetable to observe***

Execution of the tasks begins after the date on which the Contract enters into force.

For deadlines and working steps see chapter II. 1.5.

The signature of the contract represents official kick-off and the contractor starts working upon the study in close collaboration with the Advisory Board.

- 1<sup>st</sup> meeting, discussing the methodology chosen by the contractor, at the latest 3 weeks following the signature of the contract.
- 2<sup>nd</sup> meeting, discussing the results of the interim report, at the latest 15 weeks following the signature of the contract.
- 3<sup>rd</sup> meeting discussing the results of the draft final report, at the latest 28 weeks following the signature of the contract.

Furthermore, the contractor has to be at the disposal of the Steering Committee for the discussion of any methodical or technical questions that may occur.

#### ***1.3.1. Interim report***

The **interim report** showing progress of the work shall be submitted to the Advisory Board at the latest 12 weeks after the date of signature of the contract. The interim report has to contain in particular a synthesis on the principals of the specifications of the three instruments (see chapter I.2.1.), the methodology chosen for the definition of thresholds and already available results of this part of the study (see chapter I.2.2.) and a critical synthesis about the forecasts (see chapter I.2.3.).

The interim report to be agreed with the Steering Committee shall be written in English.

- The Advisory Board will ask for additional information within 4 weeks after reception.
- Within 3 weeks after receiving the observations of the Advisory Board on the draft interim report, the contractor will have to submit additional information or a revised report.
- Within 2 weeks after reception of additional information or a revised interim report, the Steering Committee will approve or reject the revised draft interim report.

#### ***1.3.2. Final report***

The contractor will submit a draft final report to the Advisory Board at the latest 25 weeks after the signature of the contract.

- The Advisory Board will ask for additional information within 3 weeks after reception.
- The contractor will have to submit additional information or a revised final report by 31 December 2010 at the latest.
- The Steering Committee will approve or reject the final report by end of January 2011.

#### *1.3.3. Report format and publication*

Seven copies of the reports in English shall be supplied in paper form and one copy in electronic form on a data storage medium, either in MS Word or in HTML format and in PDF format. The results and data used and calculated shall be delivered in a mutually agreed electronic form.

The Steering Committee may publish the results of the study. For this purpose, the tenderer must ensure that there are no restrictions based on confidentiality and/or intellectual property rights. Should he intend to use data, which cannot be published, within the scope of the study, this must be explicitly mentioned in the offer.

The Steering Committee envisages using the results, methods and tools from this study. Please specify how you envisage the handover and further use after fulfilment of the mandate.

#### *1.4. Duration of the tasks*

The revised final report has to be submitted by 31 December 2010. The Steering Committee will approve or reject the final report by end of January 2011 at the latest, resulting in the end of the contract.

#### *1.5. Place of performance*

The main tasks will be performed on the contractor's premises. However, meetings between the contractor and the Steering Committee / Advisory Board may be held on premises in Zurich/Vienna or, upon agreement among the parties, in another place. As mentioned in paragraph 1.2.2., the contractor will perform contractual tasks working together with the representatives of the 6 countries of the Advisory Board of the Follow-up Zurich process as well as the European Commission.

#### *1.6. Estimate of the amount of work involved*

The expected maximum value of the contract has been estimated at EUR 155,000 (exclusive of value-added tax).

## II. REQUIREMENTS SPECIFICATION

### II.1. Administrative and Formal Requirements

#### II.1.1. Mandator

The mandator is the Steering Committee (awarding authority), represented by the secretary:

The Federal Department of the Environment, Transport, Energy and Communications of the Swiss Confederation (DETEC).

Contact Address:

DO NOT OPEN, PLEASE

Follow-up Zurich Process: Invitation to tender

Federal Department of the Environment, Transport, Energy and Communication  
(DETEC)  
Federal Office of Transport (FOT)  
3003 Berne  
Switzerland

Section International Affairs

Mr. Matthias Rinderknecht  
Secretary of the Steering Committee  
Phone 0041 31 322 58 24  
Fax 0041 31 322 58 11  
mailto: matthias.rinderknecht@bav.admin.ch

Ms. Catherine Huguenin  
Advisor  
Phone 0041 31 322 83 64  
Fax 0041 31 322 58 11  
mailto: catherine.huguenin@bav.admin.ch

Further requests can be submitted to the contact address.

**The offer has to be submitted to the above address by 16 April 2010. The date of the post mark is decisive.**

The offers have to be submitted electronically on a data storage medium (either in MS Word or in HTML format and in PDF format) as well as in seven copies in hardcopy form. Submitting offers by e-mail is not allowed.

According to the directives of the general secretariat of the DETEC, two people not implicated in elaborating the tender specifications and selecting the successful tenderer will open the envelopes and document the following in writing:

- Names of people present at the opening procedure

- Names of all tenderers
- Per tenderer, the date of each offer submitted
- Total price of each offer submitted

### *II.1.2. General Conditions*

The award procedure is, if not especially regulated according to the Federal Law on Public Procurement from 16 December 1994 (BöB, SR 172.056.1) and the Act on Public Procurement from 11 December 1995 (VöB, SR 172.056.11).

The contract is awarded through an invitation to tender procedure according to article 35 VöB.

The submitted information and documents of the tenderers will be treated confidentially and used exclusively for the awarding procedure. The offer documents will not be returned to the contenders after the selection of the executing company, exempt submitted work samples. The tenderer legitimates the mandator to verify all declarations made in the offer documents.

The tenderer has to comply with the core conventions of the International Labour Organisation (ILO) (see Annex 2).

The General Conditions of the Swiss Confederation apply for all points not treated separately in BöB and this document (see Annex 3).

Contracts are concluded in writing.

### *II.1.3. Awarding procedure*

The principles of the awarding procedure are as follows:

- Transparent conduct of the procedure
- Strengthen competition
- Encourage economic spending of public finances
- Equal treatment of all tenderers is guaranteed
- Tenderers are invited to submit their offers
- The tenders are evaluated by predefined criteria
- The tender accepted is the offer best in class according to the evaluation of the awarding criteria

### *II.1.4. Documents to submit*

The offer has to consist of the following contents in order to allow the mandator to evaluate it according to the criteria in chapter 2.2:

#### Part 1

Presentation in writing of the tenderer: Description of the company, CV of the deployed employees with detailed information about their language skills. Information about a deputy: Declaration in writing and name of the deputy.

#### Part 2

Submit reference studies and work samples, which are comparable with the topic and tasks required in this mandate. The offer has to contain an executive summary of each reference study, with the year of elaboration, a description of the content and the mandator at that time with contact address and phone number.

**Part 3****Analysis of the mandate.**

This part will also contain explanations about the methodology chosen by the tenderer and why they are appropriate for the study. Moreover, the tenderer has to explain if – and under which conditions – the provided method and tools can be used by the mandator for further works.

**Part 4**

Information about availability in hours per week and % of working hours per employee deployed as well as details about the reaction time and the implementation of modifications according to the project duration. The tenderer has to submit a detailed time schedule with resource planning.

**Part 5**

Price in € including a cap of costs including all expenditures for the total mandate as well as declaration of the remuneration per hour per employee deployed as well as his function within the project according to accredited recommendations. A discount has to be specified.

**Part 6**

Confirmation about compliance with the core conventions of the International Labour Organisation (ILO) (see Annex 2)

Declaration in writing that states compliance with the General Conditions of the Swiss Confederation (see Annex 3).

*II.1.5. Deadlines and Schedule*

All offers have to be filed in writing, complete and in due time to the mandator. Offers with substantial errors in form will be excluded from the further procedure.

The timeframe for the tender procedure, the signing of the contract and the submission of the reports requested is envisaged as follows (see also chapter I.3.):

<b>Working step</b>	<b>Indicative Timeframe</b>
Invitation to tender	15 March 2010
Submission of questions by the tenderers	by 26 March 2010
Answering of questions to all tenderers	by 2 April 2010
Submission of offers by the tenderers	by 16 April 2010
Award of the mandate	by end of May 2010
Submission of draft interim report	by 23 August 2010
Submission of additional information/new interim report	by 11 October 2010
Submission of draft final report	by 22 November 2010
<b>Submission of revised final report</b>	<b>by 31 December 2010</b>
<b>Acceptance or rejection by the awarding authority, end of contract</b>	<b>by end of January 2011</b>

Dates for meetings have to be complied with according to the time schedule foreseen in chapter I.3.

#### *II.1.6. Subcontracting*

Should mandates be subcontracted, tenderers demand from the subcontractors a written confirmation that they are bound to the general conditions of this invitation procedure.

#### *II.1.7. Bidding consortium*

A bidding consortium is allowed.

#### *II.1.8. Language of the Offers and the Project*

Offers must be written in English. The project is conducted in English.

#### *II.1.9. Negotiations*

In case of impossibility of establishing the economically most advantageous offer, the right to conduct negotiations according to article 20 BöB by the Steering Committee is reserved.

#### *II.1.10. Duration of the Commitment of the Offer*

The commitment of the offer is to be maintained for six months after submission.

#### *II.1.11. Currency and Conditions of Payment*

The currency is Euro (€).

Payment is made from the mandator to the contractor usually by 30 days after reception of the bill.

On principle, there are no payments in advance.

Payments will be made in two portions. A first payment will be operated after fulfilling the requirements for the interim report, the second payment after fulfilling all requirements for the final report as a closing act. Otherwise, an agreement upon partial payments against proven and accepted progress of work is possible.

### III. AWARD OF THE CONTRACT

#### III.1. Schedule

- The Advisory Board evaluates the filed offers regarding the timely deposit and completeness.
- The Advisory Board evaluates the tenderers regarding their qualifications concerning the completion of the task (qualification criteria). Only offers of those tenderers having fulfilled all qualification criteria will be evaluated in the next step.
- Evaluation of the offers: All offers are graded according to the fulfilment of the award criteria.
- The offer with the highest grade obtains the mandate.

#### III.2. Exclusion criteria

Reasons leading to exclusion from the contest:

- Incomplete or altered offer documents/information
- Inaccurate or incomplete disclosure
- Effective hindrance of the contest
- Submitted documentation after the deadline

#### III.3. Qualification criteria for tenderers

The following criteria are cumulatively to be fulfilled by the tenderers. All criteria have to be answered by "yes" in order to possibly obtain award of the contract.

1. Excerpt from the commercial register or equivalent – not older than three months
2. Enforced payment collection register records or equivalent (not older than three months)
3. University diplomas and further evidence concerning the professional capacity of the employees of the company and its managers, especially regarding the people which are envisaged to be responsible for fulfilling the mandate to be awarded
4. Declaration about the responsibility to comply with working conditions according to the core agreements of the ILO (see Annex 2)
5. List of the most important services during the preceding five years of this invitation to tender procedure
6. References, at which the mandator can verify the proper provision of those services and especially obtain the following information: Value of the service, time and place of the provision of service, statement (of the mandator at that time), if the service met state-of-the-art technology and if it was provided properly.
7. Evidence about an accredited quality management system
8. Balance sheets or excerpts of balance sheets of the company for the preceding three years of this invitation to tender procedure
9. Bank guarantee
10. Last report of the auditing agency for legal entities
11. Provide evidence that there is no debt enforcement against the company especially concerning taxes or social charges.

### III.4. Award Criteria

In this section, only the offers are evaluated from those tenderers having successfully fulfilled all qualification criteria in the previous chapter.

Any offer receives for each award criterion a specific grade. This grade will be multiplied by the corresponding weight per criterion. The sum of all weighted grades equals the final grade. The offer with the highest final grade obtains the mandate.

No.	Award Criteria	Grade	Weighting
1	<b>Efficiency and Adequacy of Methodology</b>		30%
2	<b>Practicability and Quality</b>		20 %
3	<b>Professional competence and experience of the Study Team</b>		15%
4	<b>Client Orientation</b>		15%
5	<b>Total Price</b>		20%
<b>Total number of points</b>			<b>100%</b>

#### 1 Efficiency and Adequacy of Methodology

Is the offer able to effectively meet the terms of reference?

Are the proposed outputs meeting all required criteria specified in the tender documents?

It will be evaluated whether the proposed methodology is efficient, suitable, coherent and sufficiently detailed for meeting the requirements in this tender regarding:

- Aligning ETS and Toll+ and ACE regarding scientific and operational elements
- Extending ACE from the Swiss concept to the whole Alpine arch "B+"
- Specifications applied to ETS, extended ACE and Toll+
- Define emissions or other relevant factors of pollutions considered in ETS
- Define restrictive and large thresholds for ACE
- Define restrictive and large emission goals for ETS
- Define comparatively high and comparatively low toll rates (Toll+)
- Propose plausible methods and tools for transalpine transport to study the effect of implementing instruments in alpine region B+ having effects on traffic flows in the alpine region C

#### 2 Practicability and Quality:

- Is the offer submitted clear, accurate, plausible and transparent?
- Are the objectives in the tender specifications fully covered by the proposed methods and instruments for analysis?
- Are the proposed approaches plausible, comprehensible and are they suitable to develop further the aims and purposes of the Follow-up Zurich Process?

**3 Professional experience of the Study Team**

- Does the study team have experience in the use of the methods and tools proposed to achieve the requirements of the tender?

**4 Client Orientation (see chapter II.1.5)**

- Does the proposed time schedule for resource planning correspond to the requirements in the tender specifications and grant sufficient flexibility to answer specific requests of the mandator? It will be evaluated whether the quality assurance measures proposed in the tender meet the terms of reference and can ensure the adherence of the tight schedule (i.e. provision of interim reports, availability for meetings, willingness to respond to requirements of the Advisory Board etc.)
- Does the offer provide any possibility for the mandator to use the method and tools foreseen to be applied in the study for further works?

**5 Total Price (see chapter II.1.4):**

- The offer with the lowest price receives the highest grade.
- Grades for offers exceeding the lowest price will be distributed in a linear way.

The tender will be evaluated according to the tender specifications with the following method:

Degree of performance	Grade	The requirements of the project are	Evaluation
Fulfilled	2	...covered entirely	Maximum score
Scarcely fulfilled	1	...barely covered.	Half score.
Not fulfilled.	0	...not covered.	No score.

Half grades (i.e. 0.5 and 1.5) may be applied as well.

## IV. ANNEXES

### 1. Existing studies and reference data

- The final report of the study "Best Research on Traffic Management systems for Transalpine Road Freight" (TNO consortium, 2008)
- The study analysing the practicability of the traffic management instrument "Alpine Crossing Exchange (ACE)" in Switzerland (2007)
- The reference data base describing transport demand of Alpine crossing freight transport is the CAFT-Database (CD-ROM will be provided). CAFT data form the basic quantity structure for assessing transport impacts (e.g. amount of traffic carried, modal shifts) and the impacts directly related to transport quantities (e.g. environmental impact). They reflect the spatial interaction of road and rail traffic flows for every Alpine crossing in 1999 and 2004.
- ALPINFO  
(<http://www.bav.admin.ch/themen/verkehrspolitik/00501/01414/index.html>), describing the development of Alpine crossing transport,
- The "Report on the State of the Alps 2006", coordinated by the permanent secretary of the Alpine Convention, giving among other a comprehensive picture on the situation of the environment and its affection by transport.
- Information provided by the final report, called "Traffic management systems for transalpine road freight" from 12 September 2006 in the framework of the implementation of Zurich Declaration..
- Information provided by the EU-Swiss transport observatory:  
ALPIFRET, *Observatoire des trafics marchandises transalpins* 2008.  
<http://www.bav.admin.ch/verlagerung/01529/index.html?lang=de&download=M3wBPgDB/8ull6Du36WenojQ1NTTjaXZnqWfVpzLhmfhnappmmc7Zi6rZnqCkkIN3qnl9bKbXrZ6lhuDZz8mMps2gpKfo&.pdf>  
ALPIFRET, *Observatoire des trafics marchandises transalpins*, 2007.  
<http://www.bav.admin.ch/verlagerung/01529/index.html?lang=de&download=M3wBPgDB/8ull6Du36WenojQ1NTTjaXZnqWfVpzLhmfhnappmmc7Zi6rZnqCkkIN3qnl+bKbXrZ6lhuDZz8mMps2gpKfo&.pdf>
- Already available and adequate results of the MONITRAF-Project in the framework of INTERREG III/B/Alpine Space programme (<http://www.monitraf.org>) could be used as an input.
- An assessment of future exhaust emissions arising from the projected volumes of transport should be made by the Contractor. Emission factors should be taken from the Emission Factors Manual which is based on the results of the EU project ARTEMIS taking into account the development of the structure of the vehicle fleet (<http://www.trl.co.uk/ARTEMIS>).
- Metron, 2009, Verlagerungswirkung des Gotthard-Basistunnels im Güterverkehr. Schlussbericht.

- Monitraf, 2008, Synthesebericht. Monitraf Aktivitäten und Ergebnisse.
- CE DELFT, 2008, Handbook on estimation of external costs in the transport sector. Produced within the study Internalisation Measures and Policies for All External Costs of Transport (IMPACT) (Commissioned by: European Commission DG TREN, 2008)
- Ecoplan, Rapp Trans, 2004, The Alpine Crossing Exchange. Abschätzung der Machbarkeit einer Alpentransitbörse für den Schwerverkehr
- Ecoplan / NEA, 2009, Auswirkungen verschiedener Varianten der Alpentransitbörse. Entwurf Schlussbericht.
- Ecoplan / NEA, 2010, Alpentransitbörse: Plausibilisierung der Ergebnisse und Annahmen. Input für den Workshop vom 18.01.2010.
- Technische Universität Graz, 2006, Emissionsgesteuerter Verkehr über die Alpen – EmiV. Schwerpunkt Güterverkehr. Anlagerechtliche Innovationen und Emissionsrechthandel zur Steuerung des Verkehrs in ökologisch sensiblen Räumen. Endbericht des theoretisch wissenschaftlichen Teils.
- D-Studie über „Aktualisierung der Wegekostenrechnung für die Bundesfernstraßen in Deutschland „ 2007 (IWW und Protrans)  
[http://www.bmvbs.de/Anlage/original\\_1061021/Wegekostengutachten-2007.pdf](http://www.bmvbs.de/Anlage/original_1061021/Wegekostengutachten-2007.pdf)
- D-Studie über „Anforderungen an eine umweltorientierte Schwerverkehrsabgabe für den Straßengüterverkehr“ aus dem Jahr 2001
- European Environment Agency, 2008, Application of the Emission Trading Directive in by EU Member States.
- INFRAS, 2000, Variabilisation and Differentiation Strategies in Road Taxation. Theoretical and Empirical Analysis. Final Report.
- INERIS, 2008, Analyse des coûts et effets d'instruments politiques visant le secteur du transport. Etude dans le cadre de la révision du programme national de réduction des émissions de polluants atmosphériques.
- Liaison Lyon-Turin/Collegamento Torino – Lione, soumission N° 46/consegna N° 46, prévisions de trafic fret/previsione di traffico merci (Indice E/26.11.2007)
- Examinations of the Toll Systems in Germany, Studies of the EC regarding external costs
- Analysis of external transport costs, Ljubljana 2004
- Analysis of the ITS introduction/implementation in the Republic of Slovenia
- Technical, operational and logistical parameters, influencing emissions of heavy duty vehicles, JRC, Ispra, IT (real-world emissions measurements of HDV along the extended Trans-European transport Corridor V (Maribor-Barcelona)

- Action plan on introduction of electronic toll system in the Republic of Slovenia, Ljubljana 2009

## **2. Core Conventions of the ILO**

The following list includes the core conventions of the International Labour Organisation (ILO) according to article 7 paragraph 2 VöB:

1. Forced Labour Convention, number 29, from 28 July 1930
2. Freedom of Association and Protection of the Right to Organise Convention, number 87, from 9 July 1948
3. Right to Organise and Collective Bargaining Convention, number 89, from 1 July 1949
4. Equal Remuneration Convention, number 100, 29 June 1951
5. Abolition of Forced Labour Convention, number 105, from 25 June 1957
6. Discrimination (Employment and Occupation) Convention, number 111 from 25 June 1958
7. Minimum Age Convention, number 138, from 26 June 1973
8. Worst Forms of Child Labour Convention, number 182, from 17 June 1999

### **3. General Terms and Conditions for Service Contracts**

<http://www.bbl.admin.ch/bkb/00389/00398/00406/index.html?lang=de>

#### **1. Scope of application**

1.1 These general terms and conditions govern the conclusion, content and performance of service contracts (with the exception of construction services).

1.2 When the bidder submits the offer, he/she is deemed to have accepted these general terms and conditions.

1.3 Changes or amendments must be confirmed in writing by the procurement office.

#### **2 Offers**

2.1 The offer including any demonstrations is free of charge to the procurement office unless stated otherwise in the tender.

2.2 The bidder submits the offer based on the tender. He/she is free to submit additional alternatives.

2.3 The offer remains binding for three months after it is submitted.

#### **3. Pricing**

3.1 The bidder performs his/her obligations for a fixed price or in accordance with costs with an upper price (cost ceiling). In the latter case the bidder discloses the types of costs and the corresponding rates in his offer.

3.2 The price covers all work performed by the bidder which is necessary for the proper performance of the contract. In particular, the price covers any and all additional expenses such as petty cash and secretarial services, all social insurance payments and other compensation payments for illness, disability or death as well as all taxes or other public fees. Inflation shall be taken into account only if the parties specifically agree to it in writing.

3.3 The payments shall be made in accordance with the payment schedule. It depends upon the work progress and the actual expenses. When due, the bidder submits the corresponding invoice. The procurement office makes the payments within 30 days after receipt of the invoice.

#### **4. Performance**

4.1 The bidder is obligated to fulfil the contract expertly and with care.

4.2 Changes or amendments to the contract must be made in writing.

4.3 The bidder shall regularly inform the procurement office about the work progress and shall inform it immediately in writing about circumstances which may hinder the proper performance of the contract. The procurement office is entitled to inspect and control all aspects of the contract at any time.

4.4 Generally, the bidder shall perform his/her obligations personally and is not authorized to obligate the procurement office to third parties.

4.5 For the performance of the obligations, the bidder shall carefully select well trained employees. In particular, he/she shall take into account the procurement office's interest in continuity. Upon request by the procurement office the bidder shall replace employees who do not have the necessary know-how or otherwise hinder the proper performance of the contract in a timely manner.

#### **5. Intellectual property rights**

5.1 All intellectual property rights which arise from the performance of the contract (rendering services) are the property of the procurement office.

5.2 The bidder is obligated to immediately reject any claims from third parties with respect to the infringement of intellectual property rights, and to bear all resulting costs incurred by the procurement office, including payment of damages.

5.3 The procurement office is obligated to immediately inform the bidder about such claims and to provide all documents necessary for rejecting such claims, unless prevented by reasons of confidentiality.

## **6. Confidentiality**

6.1 The contractual parties shall keep confidential all information which is not generally known or in the public domain. Confidentiality has to be maintained even before signing the contract and the confidentiality requirement remains valid after the fulfilment of the contractual relationship. Legal disclosure obligations remain reserved.

6.2 If the bidder wants to advertise the contractual relationship or make it public otherwise, prior written approval of the procurement office is required.

## **7. Delinquency**

7.1 The bidder is immediately considered delinquent if he/she does not comply with the deadlines agreed upon by the parties, and in all other cases upon receiving a reminder setting another deadline or extension.

7.2 If the bidder does not perform by the end of the extended deadline, the procurement office may terminate the contract in writing. The services performed until termination must be compensated.

**7.3 If a bidder is delinquent, a penalty in the amount of 1 ‰ of the purchase price per day of delay is assessed, but not more than 10 % of the total purchase price. The payment of the penalty does not exempt the bidder from performing the contractual obligations.** In cases of force majeure, no penalty shall be imposed.

## **8. Guarantee**

8.1 The bidder is liable for faithful and careful performance and guarantees that his/her performance will conform to the contractual conditions and specifications as well as that it will correspond to the current state of the art.

8.2 The bidder is liable for damages that his/her employees cause in the course of performing the contractual obligations.

## **9. Termination**

9.1 The contract may be revoked or terminated in writing by either party at any time. The work performed until the termination of the contract shall be compensated.

9.2 Claims for damages due to untimely termination of the contract remain reserved. Claims for compensation for lost profits are excluded.

## **10. Assignment**

The supplier's claims arising from the contract may not be assigned without the procurement office's prior written consent.

## **11. Principles**

11.1 For the work performed in Switzerland, the supplier shall comply with the labour protection laws and working conditions for the supplier's employees applicable at the place of performance. The supplier guarantees equal treatment of men and women, particularly with respect to equal pay for equal work. Union contracts and standard employment contracts serve as the basis for the working conditions. If such contracts do not exist, the local and standard working conditions at the place of performance apply.

The supplier is obligated to legally bind all subcontractors to abide by the above principles.

11.2 Suppliers who do not adhere to the principles stated in Clause 11.1 shall be liable for a penalty amounting to 10% of the value of the contractual amount but not less than CH 3'000 and not more than CHF 100'000.

**12 Applicable law and place of jurisdiction**

12.1 These general terms and conditions apply. Conditions not covered herein are governed by the Swiss Code of Obligations.

**12.2 Place of jurisdiction is Bern, unless otherwise specified by contractual agreement.**

**Swiss Federal Procurement Commission 01.03.2001**