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The IRU Agenda for Sustainable Development – the Road Transport Industry Takes the Lead

At the 1992 Rio Earth Summit, member governments of the United Nations adopted *Agenda 21*, the comprehensive blueprint for achieving sustainable development world-wide. As called for in the *Agenda's* chapters 27 and 30 on strengthening the role of nongovernmental partners, business and industry, the road transport industry developed the *IRU Charter for Sustainable Development*, which was unanimously adopted by all IRU Members from 64 countries at its World Congress in Budapest in 1996.

The proactive *IRU Charter* is a commitment by the entire road transport industry to drive towards the target of achieving sustainable development. The IRU and its members recognise their responsibilities and have taken the lead in the transport sector. To date, in fact, of all modes of transport, only the road transport industry has committed itself to this common goal.

Only one year after IRU Members committed themselves to working together towards sustainable development, the Charter was followed by the *IRU Initiative Driving Towards Sustainable Development*, in which the principles and prerequisites for achieving the common goal were set out in detail. The *Initiative* recalls that fair and cost-effective "at source" measures are essential in order to achieve sustainable development, and that policies must be based on economic, social and environmental realities.

In fact, the road transport industry has proved that "at source" measures have already led to a significant improvement in the industry's environmental performance:

- gaseous emissions by new heavy commercial vehicles have been reduced by up to 80% within only half a decade;
- the average fuel consumption for a 40-tonne truck has decreased by more than one third since 1970;
- twenty-four modern trucks built today do not make more noise than one truck built before 1970;
- in the past decade alone, the number of people killed or injured in accidents involving trucks has been reduced by 20% despite a 40% increase in the number of kilometres travelled.

These examples also clearly indicate that the road transport industry began to reduce its impact on the environment a long time before *Agenda 21* was adopted.

It was Maurice Strong, the Secretary General of the UN Earth Summit, Chairman of the Earth Council and Special Adviser to the UN Secretary General, who said at the IRU World Congress in 1996 that, for him, the signing of the *IRU Charter for Sustainable Development* was "one of the most important and encouraging

The IRU Charter: a commitment by the whole industry

The post-Rio period: from commitment to implementation



events of the post-Rio period", and that the IRU and its national associations should "bring it back home to [their] members and make it operational."

Ever since the adoption of its *Charter*, the IRU has pressed for establishing the principles of sustainable development where they have the greatest impact – in the hands of transport operators. Following the UN *Agenda 21* and the *IRU Charter* and *Initiative*, some IRU Member Associations have already successfully implemented national action programmes for achieving sustainable development. The pioneers are IRU Members from Denmark, Germany, the Netherlands, Norway, Sweden, the United Kingdom and the United States.

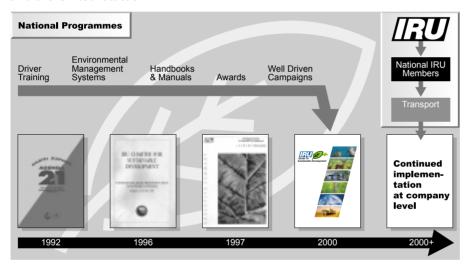


Figure 1: The IRU Agenda for Sustainable Development and initiatives at national level.

This IRU Guide to Sustainable Development is thus a logicial next step in the IRU agenda in this field. The purpose of the Guide is to learn from existing national initiatives and to encourage further national programmes. The Guide aims at promoting best industry practices and implementing at transport operator level policies that favour sustainable development.

In fact, the *IRU Guide* will act as a flexible model and practical support for all national IRU Member Associations. Using a modular approach, they will be able to choose from the *Guide* Modules and measures that will contribute to the achievement of sustainable development. Each Module shows a specific approach by which a national association can help to implement sustainable development principles at transport operator level.

The IRU Guide: practical support for implementation

The objective of the *Guide* is to encourage as many transport operators as possible to implement sustainable development practices.

The modules can be tailored and allow the greatest flexibility to take into account the needs of transport operators at national level and within their respective transport markets. The *Guide* will help to implement measures that will significantly improve environmental performance, safety, fuel efficiency and, at the same time, the profitability of transport operators.

Sustainable development and the appropriate measures and programmes are not available at zero cost. For transport operators, taking up the challenge of sustainable development means reducing their environmental impact while continuing to satisfy market demand and to maintain their economic survival. For those who contribute to achieving it, sustainable development must thus also mean sustainable profitability. Contributions from the road transport industry towards sustainable development can be achieved most effectively and rapidly if both the environment and the individual road transport operator are put in a win-win situation.

In fact, measures to achieve sustainable development, for example those proposed in the IRU Modules, can also improve the profitability of road transport operators. Lower fuel consumption means not only reduced CO_2 emissions but also lower fuel costs; improved safety means lower insurance costs as well as fewer accidents. In addition, the IRU has called upon governments from all countries to help to accelerate the practical implementation of all the commitments and best practices accepted and developed by the IRU and its members, by providing relevant incentive schemes.

The IRU and all its members are ready to work together, with their governmental and commercial partners, to pave the way towards sustainable development.

Chapter II of this *Guide* gives an overview of the national programmes that have already been successfully implemented by several IRU Member Associations. The compilation serves as a basis for the development of the IRU modular approach presented in Chapter III of the *Guide*. In Chapter IV, the *Guide* emphasises the importance of working together with road transport's governmental and commercial partners. Much of what can be achieved in sustainable development is not the sole responsibility of the road transport industry and requires the support and co-operation of these partners.

Sustainable profitability for transport operators

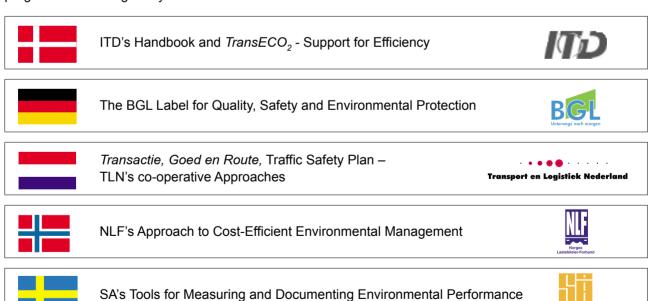


II. National Action Programmes by IRU Members

In striving for sustainable development, the road transport industry is not starting from zero. The programmes already implemented by IRU Members at national level emphasise the industry's resolution in its activities and the achievements made. Each of the following six sections will describe those programmes implemented in one specific country. They emphasise the measures and best industry practices that significantly improve:

- environmental performance;
- transport safety;
- (fuel) efficiency;
- awareness; and
- profitability.

In these programmes, various issues are focused on as a result of national circumstances and priorities. It will become obvious how manifold the road transport industry's activities for the promotion of sustainable development are. As regards structure, systematic approach and sophistication, these programmes vary. But they have one goal in common – they are all aimed at contributing towards sustainable development while improving profitability for road transport operators. The following table national action programmes existing today.



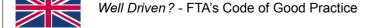




Figure 2: National action programmes by IRU Members.

These examples clearly demonstrate that the commitment by the IRU and its Members is not an empty phrase. On the contrary, it is becoming a daily reality. With its *Guide to Sustainable Development*, the IRU will further develop and promote this implementation process, in co-operation with its commercial partners and with the support of governments.



Denmark: ITD Handbook and TransECO₂

In Denmark, 5,900 road haulage companies operate nationally and internationally. ITD – *International Transport Danmark* (until 1998 FDE, the Association of Danish International Road Hauliers) – is the trade association that represents 500 Danish international road freight transport companies.

In the Northern European countries, increasing focus is being placed on the entire supply chain. External distribution is thus included in corporate environmental policies and reporting. Transport operators are facing a trend towards increasing requirements for the movement of products through the supply chain to be as environmentally sound as possible.

The ITD strategy – a common approach for the industry

ITD makes it a high priority to provide its members with information, advice and tools in order to give them the best possible support in handling the increasing demands concerning environment and safety.

ITD's understanding of sustainable development is based on the acknowledgement that:

- efficiency and cost improvement measures often have a positive effect on environment and transport safety; and
- vice versa, environmental and safety improvement measures often lead to cost savings and higher efficiency.

Specific information and easily applicable methods and tools are seen as the key to sustainable management in the road transport industry and to partnership efforts among hauliers and shippers. They help to guarantee cost-effectiveness, resource efficiency and a reduction in environmental impact to a minimum.

To provide relevant information on "best available knowledge and statistics", ITD in 1995 published the report *Facts and Trends*. At that time, an industry strategy was offered to promote an efficient and environmentally friendly freight transport business. That strategy, accepted by members and stakeholders, forms the basis for subsequent efforts.

Environment and Safety – a comprehensive handbook for transport operators

Based on specific enquiries from member companies, ITD and the transport buyer organisation DSC – the Danish Shipper's Council – developed a set of documentation tools and published them in a handbook entitled *Environment and Safety – Handbook for Road Transport*.



Efficiency in line with environment and safety



The handbook comprises:

- a set of check lists that help transport buyers as well as operators to build environmental and safety aspects into their strategies and operational measures;
- a set of emission tables that enable transport companies to record their environmental performance according to various parameters (e.g. type of vehicle and engine);
- a model account which serves as a guideline for transport companies preparing green accounts. The basis for environmental accounting is the surveying and recording of the company's most significant environmental parameters.

*TransECO*₂ – how to realise environmental and economic benefits

ITD, DSC and the Institute for Transport Studies started the $TransECO_2$ project in 1998 to promote implementation in their member companies. Initiated and financed by the Danish Ministry of Transport, it includes projects to demonstrate environmental and economic benefits through environmental management. Hauliers and transport buyers jointly implement methods to reduce CO_2 emissions and other "external" effects of freight transport, mainly through existing tools described in the Environment and $Safety\ Handbook$.

So far, 17 companies have participated in this project. The cooperative character of the individual projects reflects the involvement of the transport industry in the supply chain and illustrates the understanding that networked solutions will best meet the requirements of both the economy and the environment. Although the companies have focused on different subjects, improvement in their environmental performance is a common characteristic for them all.

The measures include, for example, life-cycle assessment, improvement of driving skills, employment of new vehicle technologies, combined transport strategies and the use of improved information exchange. All measures have in common that they result in improved efficiency, safety and cost savings.

ITD strives for sustainable development

Best practice examples from the *TransECO*₂ demonstration projects, including both transport buyers and transport suppliers are communicated through an experience catalogue as a useful basis for other companies working with similar projects.

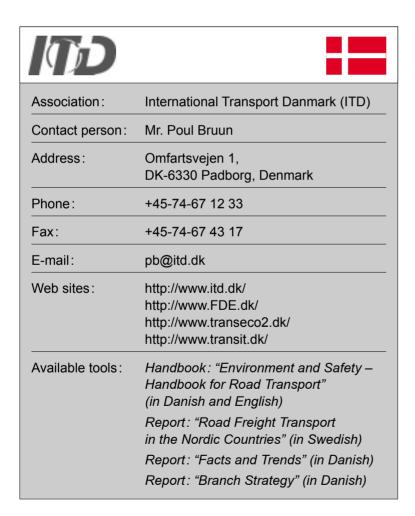
A set of help tools to choose from





New projects have already been initiated together with and financed by the Ministry of Environment and Energy. One of these aims at promoting best industry practices by developing a benchmarking system. The goal in another is to develop and implement a modular concept for environmental management in small and medium-sized road transport companies. A handbook and an implementation concept are in preparation and contain guidelines for environmental management for road hauliers according to the principles of ISO 14001 and EMAS, the European Environmental Management and Auditing Scheme.

Follow-up projects for continuous improvement



Germany: The BGL label for quality, safety and environmental protection

Some 15,000 German road freight transport and logistics companies are organised in 21 member organisations of the *Bundesverband Güterkraftverkehr*, *Logistik und Entsorgung* (BGL) e.V.

By acquiring the BGL Label for Quality, Safety and Environmental Protection, which was introduced in 1996, road transport operators commit themselves to operate according to the underlying principle of the label, "safe – careful – reliable".

The BGL label combines quality aspects, as found in quality management systems, with safety aspects and environmental protection. It thus supports road transport operators in contributing to the global goal of sustainable development. The BGL label aims at increasing companies' profitability while improving operators' environmental and safety performance.

How to obtain the BGL label

The BGL outlines the requirements that companies must fulfil in order to obtain the BGL label. They are tailor-made for road transport operators and are subdivided into 13 categories, each reflecting typical activities in a road transport company such as vehicle operation, warehousing, shipments, fleet management and vehicle maintenance.

With respect to safety and environmental protection, the BGL label requires:

- the appointment of a manager responsible for environmental affairs;
- the introduction of a catalogue of measures to protect the environment; and
- the publication of an annual environmental report.

In addition to these basic principles, the BGL label requires:

- maintaining suitable means of load security (based on existing national guidelines and laws);
- using optimum safety standards for trucks, trailers and bodies;
- at least 50% of the total vehicle fleet to be low-emission vehicles, i.e., for the time being, complying with the stringent EURO II standard;
- periodic driver training for energy saving and the reduction of emissions;
- monthly monitoring of fuel consumption; and
- non-polluting handling of waste water.



"Safe – careful – reliable" the BGL label improves profitability and environmental protection

A tailor-made solution for the road transport industry





Support for operators

The BGL label is based on the quality management concepts in the ISO 9000 series of standards and on the environmental management concepts in ISO 14001. However, the BGL label is tailor-made to suit the needs of the road transport industry. It can stand alone or become a supplement to an existing management system based on ISO standards.

The BGL label is a tool that enables road transport companies to prove that their services reach a high quality level and contribute to achieving sustainable development. It is issued with a certificate that the road transport company will receive following an external audit by an independent certification body. Annual reaudits ensure the effectiveness, maintenance and further development of the certified management system that enabled the operator to obtain the BGL label.

From the very beginning, companies' experiences influenced the development of the structure and the requirements of the BGL label. An initial pilot phase involved seven BGL members in the development and design of the guidelines, and gave the BGL a permanent feedback on how the label would work in practice. Today, BGL provides its members with a comprehensive handbook containing:

- comments and instructions for implementation (Part I);
- the BGL standards (Part II); and
- sample documentation (Part III).

A label for all road transport operators

The BGL label is an effective and efficient solution for a company of any size. Even small and medium-sized operators can implement effective measures with the BGL system. Many of the measures can be implemented at low cost. They enable companies to:

- control the fuel consumption of their vehicle fleet;
- optimise their fleet management;
- reduce energy (electricity and heating) consumption; and
- introduce new waste management systems.

The potential for cost reductions resulting from the implementation of these basic measures is significant. And BGL supports its members in implementing the measures.

The BGL label – sustainable development and certified high quality



Further improvements to follow

As the road transport industry faces new challenges, BGL has established a permanent working group to develop and further improve the BGL label. The flexible structure of the label allows for further adjustments to cater for legislative changes or specific requirements for companies operating in certain market sectors.





The Netherlands: The TLN approach – Transactie, Goed en Route, Traffic Safety Plan

The Dutch transport industry, stimulated by the unique position of the port of Rotterdam, is a driving force in the economy. In the Netherlands, around 7,300 transport companies with approximately 65,000 trucks are organised under the banner of Transport en Logistiek Nederland (TLN).

The Dutch government recognises the importance of transport and has an open attitude to public-private partnerships, especially if the concepts are in line with the ministerial goals on safety and environmental performance.

Strategy in practice

TLN is recognised as a major player in the transport market by politicians, the authorities and the media. As a central node of this network of influence, TLN developed a strategy of co-operation with other players. Based on a ranking of important subjects, TLN regularly produces ideas and initiates pilot projects that meet the needs of the sector. TLN tries to establish co-operation with other parties in order to further the ideas and projects on a larger scale.

A national action plan

In order to answer growing public and governmental concern regarding the environmental aspects of road transport, TLN developed a strategic view on desirable environmental policy. In cooperation with the transport association KNV (the Royal Dutch Employers' Association in the road transport industry) and a Dutch environmental consultancy, the Integration Project Transport and the Environment was started in 1995. As a first step, a strategic view was developed on how to reduce CO_2 and NO_X emissions with measures that could be implemented by member companies.

The strategy is laid down in a report that follows the definition of emission targets formulated in the national programme of measures for the environment (NMP2). The report contains a list of measures required to reach the emission reduction goals: 75% for NO $_{\rm X}$ and 10% for CO $_{\rm 2}$ by the year 2010 compared with 1986. The report serves as a framework for a series of consecutive sub-projects. For instance, TLN started pilot projects on LPG as an alternative to diesel and on efficiency improvements in urban distribution.

The Transactie Programme

The *Transactie* programme, a joint, down-to-earth approach by the Dutch Ministry of Transport, the Environment and Economic Affairs and the Dutch transport associations (TLN, KNV, EVO), aims at increased efficiency in the sector as a whole. Since 1995,

Transport en Logistiek Nederland

Public-private partnerships

A strategic view on desirable environmental policy

Support for operators leads to improved efficiency

about 200 transport companies have been provided with individual support. The goal is to reduce emissions by improving the environmental efficiency of transport by:

- reducing the kilometres driven; and
- stimulating practical and technical improvements related to the vehicles (e.g. load capacity, return loads).

Logistics consultants, in co-operation with the company (haulier or shipper), analyse the logistical structure, identify potential areas for improvement and establish a list of measures to improve organisational efficiency. As a result, the average kilometres driven can be reduced by 10-15%.

A further new programme, begun at the end of 1999, will run until 2004. The Dutch government contributed 20 million Euro towards this programme in which a new aspect will be the use of other modes such as rail, inland waterway and short sea shipping in intermodal transport solutions.

Goed en Route - focus on behaviour and dialogue

TLN has established a pilot project, *Goed en Route (Good on the road)*, as a campaign that requires member companies to sign a letter of intent expressing their positive management attitude. Basically, participating companies recognise the importance of transport safety, correct driver behaviour and an open dialogue with the public. *Goed en Route* provides motorists with a free phone number displayed on trucks to give them the possibility of voicing compliments or complaints about trucks and their drivers. All phone calls are collected at a call centre and then assigned to the respective transport companies. This enables member companies to monitor truck drivers' behaviour and, if necessary, to train them in defensive, safer and fuel-efficient driving.

The pilot phase involving 10 transport companies with 1'000 vehicles is continuing until summer 2000.

Regional Traffic Safety Plan for transport companies

In 1998, in co-operation with 14 transport companies, TLN started a pilot project to improve traffic safety while reducing accident costs. TLN developed a toolkit containing a transport safety manual and an accident registration system. Additional support was given in collective interdisciplinary meetings, in which experiences could be exchanged and specific measures assigned to the companies.



The TLN toolkit



Based on the fact that every accident costs an average of about 1,800 Euro, a recommended reduction by 30% promises a very profitable improvement for transport companies. During the pilot phase, several participants realised reductions in the number of incidents of up to 45%. The decrease in accidents will also have a positive result in respect of the road transport industry's image.

Transport en Logistiek Nederland Transport en Logistiek Nederland (TLN) Association: Contact persons: Mr. Rob Aarse, Mr. drs. Paul W. Poppink Address: Plein van de Verenigde Naties 15, NL-2700 KS Zoetermeer. The Netherlands Phone: +31-79-363 61 11 Fax: +31-79-363 62 33 E-mail: raarse@tln.nl ppoppink@tln.nl Web site: http://www.tln.nl/ Available tools: Brochure: "Good on the road a new standard for responsible freight transport" (in Dutch) Project Report: "On the way to cleaner transport" (in Dutch) Project Report: "On the way to cleaner transport" (executive summary, in German) Working Paper: Programme "Transactie" (in Dutch) Working Paper: Programme "Traffic Safety Plan Transport Companies" (in Dutch)

Significant benefits

Norway: The NLF approach – cost-effective environmental management

In Norway, approximately 12,600 companies are operating in road freight transport. Of these, 78% are owned and operated by one person only. *Norges Lastebileier-Forbund* (NLF) is the dominating trade organisation in Norway, representing 4,500 transport companies of various sizes. A majority of member companies are small, with the owner very often also being the driver, but some of the largest haulage companies in Norway also are members of NLF.

The NLF strategy

In order to aim at sustainable development in day-to-day operations, transport companies need advice in the form of tools and a strategy provided by experts with economic and scientific knowledge.

In the Norwegian economy, more and more attention is being paid to the environmental consequences of transport. Authorities as well as an increasing number of transport buyers are demanding documentation on quality and environmental management. NLF has included environmental concerns in its strategies for 15 years, and for the past three years has focused on environmental issues. The basic strategy is to:

- supply member companies with all necessary information, expertise and management tools; and
- work together actively with the authorities and other partners to be able to provide updated information and advice.

A code of conduct

NLF has introduced its own code of conduct – Kvalitet og $milj \varpi$ $p \mathring{a} \ vei$ – as a tailor-made service for small and medium-sized transport companies. It is a result of present and likely future regulatory and commercial requirements. Together with legislative requirements and ISO standards, it makes up a trio of relevant systems:

- HMS a set of regulations related to systematic health, environmental and safety activities; under Norwegian law this is compulsory for all companies.
- 2. Kvalitet og miljø på vei the NLF code of conduct for quality and environmental activities in transport companies.
- Certification according to ISO 9002 and ISO 14001, the International Standards for quality and environmental management.

The NLF code-of-conduct system enables transport companies to introduce measures to improve the efficiency of corporate work flows without the cost involved in ISO certification. With the help of the NLF system, member companies are able to achieve cost



New market demands due to environmental focus

Adaptability the keyword



reductions while reducing their environmental impact and increasing their competitiveness. Its modular structure makes the system flexible to accommodate different companies' ambitions, guarantees adaptability to different types and sizes of company, and simplifies implementation.

NLF support

NLF offers the support of consultants at reasonable prices to assist with implementation. At the onset, a thorough examination of the company and its activities is necessary. This is carried out in co-operation between the company manager and the consultant. The NLF system provides recommendations for all relevant aspects.

If necessary, NLF can provide assistance in determining the company's goals. This is valuable support for the companies in identifying their own level of motivation as well as pointing out the right direction for future work. Additionally, NLF's services include a tailor-made system manual and a driver's manual for each truck.

Benefits for transport companies

Between 10 and 20 companies have implemented the NLF code of conduct. The system is still fairly new but an increasing number of companies are seeking help in implementing it.

All those who have worked with the NLF system appreciate its simplicity. NLF encourages those who have implemented the system to use it in their marketing efforts.

NLF focuses on the quality and environmental system as a positive factor in competition. It also helps the companies to prepare for future regulations. The transparency achieved through documentation enables companies easily to detect unproductive or counter-productive processes, and thus to save money by remedying them.

The NLF system does not include a certificate. A full implementation, however, does place a company close to ISO certification and, if necessary, the company can add missing elements to fulfil the requirements of an ISO certificate.

Environmental issues will increasingly become part of Norwegian hauliers' everyday life. There is an enormous challenge in meeting efficiency and environmental concerns at the same time as the increasing demand for cost-effective goods transport. NLF enables its members to meet this challenge.

Environmental issues become beneficial

A bridge to ISO standards

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Available tools:	upon request



Sweden: SA tools for measuring and documenting environmental performance

The Svenska Åkeriförbundet (SA) is a national Association with 11,000 member companies that own a total of approximately 30,000 vehicles. The size of associated companies varies from owner-operators to companies with more than 100 vehicles. About half of the members, mainly the smaller companies, are organised in truck co-operatives.

Since the mid-1990s the environmental aspects of road transport have been an important field in the work of SA and its members. SA has therefore developed a number of tools and has also formed a group which, on a consultancy basis, can help members to implement a quality or environmental management system. SA performs third-party auditing and issues certificates in accordance with ISO 9002 and ISO 14001.



Measuring environmental performance

SA suggests a standard or a code of practice for the presentation of key ratios concerning the environmental impact of road transport. This is now a European pre-standard for a road transport declaration of fuel and energy consumption and of exhaust emissions.

For this purpose, SA has created the Environmental Data Base and Environmental Data Calculation (EDB/EDC) tool. With the help of EDB/EDC, transport companies are able to calculate exhaust emissions for an individual transport operation or for the company's total emissions during a specific period. Thus, it becomes easier for transport operators and their customers to assess transport operations as well as vehicles and companies. The results can be used in the internal audits and green accounts of transport operators.

The database (EDB) comprises the fleet's engine types, fuel types and types of exhaust emission control systems. It contains data on heavy vehicles produced by the main manufacturers. One set of data contains figures about exhaust emissions according to national and EU regulations (Euro I, II, III, etc) and to the quality of fuel.

EDB and EDC, which are based on Microsoft Excel® tables, support the user in calculating exhaust emissions. Depending on the transport distance and the amount of cargo, the transport company gets clear figures on exhaust emissions.

Information about the substances emitted and the energy consumption per litre of fuel, per kilometre or per tonne-kilometre can be obtained.

Calculating and documenting environmental impact



Database and calculation tool for exhaust emissions

In addition, the Environmental Product Declaration (EPD) helps the user to edit the calculated data in order to compile a comprehensive declaration of the environmental impact related to the product or the vehicle. The EPD is mainly used on the Swedish market.

The EDB/EDC tool is used for environmental work in approximately 250 Swedish companies. It is also used in Denmark, Norway and Finland.

The ABC for a better environment

SA has published a handbook called *An Environmental ABC for the Road Haulage Company* in which the objective is to answer questions that arise when dealing with environmental issues. This handbook comprises:

- general information on, e.g., the environmental impact of road traffic, environmental management systems and the demands of transport buyers;
- practical advice for everyday activities;
- facts such as important legislation, terminology and examples of tools.

Furthermore, SA offers a *Manual on Quality, Environment and Traffic Safety*. This supports companies in developing environmental management systems based on ISO 14001 and can be used for management, controlling, accounting and auditing.

SA has also taken part in projects led by the Transport Research Institute (TFK) to develop two other handbooks, the *Environmental Handbook for Transport Purchasing* and *Securing of Cargo*. The purpose of the first project was to draft reasonable and realistic demands, from an environmental point of view, that might be put on transport companies by purchasers of goods transport. It covers all means of transport and shows how environmental and safety aspects can be taken into consideration, in particular from the transport purchaser's viewpoint. *Securing of Cargo* is a comprehensive handbook for all types of load carriers and cargo, including intermodal transport, providing practical advice and instructions for loading and unloading cargo.

All the various tools and aids are subject to continuous development and recurrent revisions to ensure that they are in line with the latest legal requirements, research and development. SA is in permanent dialogue with manufacturers of engines, vehicles and construction machines to document and further develop the emission data in EDB/EDC.

Furthermore, translation of the various tools into languages other than English and Swedish is planned in co-operation with other national organisations.

Environmental product declaration

Continuous upgrading



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Available tools:	Computer program: "Environmental Data Base/Environmental Data Calculation" (EDB/EDC) (in Swedish and English) Handbook: "Environmental ABC for Haulage Companies" (in Swedish)
	Manual: "Manual on Quality, Environ- ment and Traffic Safety" (in Swedish)
	Computer program: "Environmental Product Declaration for Vehicles 97" (EPD) (in Swedish and English)
	Report: "Road Freight Transport in the Nordic Countries" (in Swedish)
	Handbook: "Environmental Handbook for Transport Purchasing – goods trans- portation" TFK report 1998 (in Swedish and English), available via tfk@tfk.se
	Handbook: "Securing of Cargo" TFK report 1998 (in Swedish and English), available via tfk@tfk.se

United Kingdom: Well Driven? – The FTA code of good practice

The Freight Transport Association (FTA) is a national Association with 12,000 member companies who operate in excess of 200,000 goods vehicles in the United Kingdom. FTA supports all aspects of vehicle and fleet operation, provides training, telephone information and advice, publications, networking and information exchange for its members.



FTA considers sponsoring and active support for environmental best practice a most important task within its member services. "Environment" is understood not only as our natural environment but also as the surroundings of the main players – the drivers – and, above all, other road users. FTA therefore especially focuses on the responsibility for transport safety and behaviour among the different road users as partners.

A CAMPAIGN FOR TRANSPORT SAFETY

The campaign *Well Driven?* was thus set up in 1996 as a joint industry initiative (FTA, Road Haulage Association, Confederation of British Industry). The campaign aims at improving transport safety, reducing accidents (and their cost), better driving behaviour and a better understanding among road users.

Well driven? is a system of participation using *The Good Lorry Code* as its core element. *The Good Lorry Code* is a list of requirements of which the most important are "to ensure that legal, safety and environmental obligations are met", "to train drivers beyond the legal minimum" and "to respect other road users and pedestrians". By signing the code, the participating transport operators and their drivers demonstrate that they take responsibility for transport safety and partnership with motorists.

Large stickers showing a toll-free phone number are applied to the rear of the trucks of participating companies. This allows other road users to voice compliments or complaints about the respective lorry driver to a call centre at any time, and in addition to the company management. The company is obliged to give a written response to the caller within three weeks.

FTA takes on the administration, co-ordination and supervision of the scheme. The quality and punctuality of the response letters are continuously monitored. The companies involved regularly receive statistic evaluations of the calls so that steering measures – e.g. driver training – or corrective actions can be initiated. The average number of calls, taking seasonal changes into account, is two per year per vehicle.

The Good Lorry Code – commitment to transport safety and partnership with motorists





Motivated, skilled and supervised drivers are less often involved in accidents. Thus *Well driven?* can lead to a reduction in accident costs, and the image gain is important both for the business and for the company. *Well driven?* provides special insurance arrangements granting financial advantages – e.g. free annual membership and discounted vehicle insurance premiums.

Since October 1998 *Well Driven?* has included vans – *The Good Van Code* describes requirements and procedures similar to *The Good Lorry Code*. The *Van Drivers' Handbook* comprises the main driving rules such as legal requirements, defensive driving, safe use of the vehicle, driving licences, driving offences, speed limits, stopping, parking, loading and unloading.

Some 208 transport operators with 14,250 vehicles are currently covered by the scheme. While in the first phase the costs were borne by FTA, RHA and member funds, the scheme is now self-funding through subscription fees.

The experience with the *Well driven?* campaign so far has also shown that the understanding among the general public of the normal driving behaviour of truck drivers is often non-existent. For this reason FTA distributes brochures providing information about the peculiarities of truck driving. Under the slogan "Stretch yourself – give a lorry a break", explanations are given on driving in roundabout traffic, turning left, speed limits, visibility and correct behaviour on slip roads. This so-called *Stretch* campaign is a further step towards a safe and co-operative use of the road.

The Environmental Best Practice Guide

Beyond this, FTA promotes corporate environmental protection by member companies. The *Environmental Best Practice Guide* serves this purpose. It sets out a selection of techniques and ideas for reducing the environmental impact of freight transport from some of the UK's largest consignors and transport companies. The deliberate intention is that the best practices identified be copied, modified and improved upon by others involved in similar activities. The examples mentioned refer to different fields of action, such as driver skills and practices, environmental management systems, fuels and oils, routeing and scheduling. Implementation costs as well as environmental and operating benefits are specified.

Learning from experience

Since the first issue in 1997, numerous companies have initiated new environmental protection measures. These will be collected in a second issue of the Environmental Best Practice Guide, probably to be published in 2000.

Stretch yourself... advice and information for motorists

Examples of environmental best practice – recommended, worth imitating

With projects like the *Stretch* campaign, which is to be intensified in the near future, FTA responds to the experience and findings from ongoing initiatives, thus consolidating its role as sponsor, consultant and auditor in business projects serving sustainable development in the road transport industry.

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Available tools:	Handbook: "Environmental Best Practice Guide" (in English)
	Manual: "The Good Lorry Code, Subscribers' Manual" (in English)
	Handbook: "Van Drivers' Handbook" (in English)
	Brochure: "The Good Lorry Code" (in English)



III. The IRU Modular Approach to Sustainable Development

Based on what has already been proved as being effective in some countries or in other sectors of the economy, the IRU modular approach will act as a flexible reference for national Member Associations and encourage them to create and implement their national programme, tailor-made to the needs of their operators and their national transport market. The Modules are thus addressed to the national road transport Associations and, through them, to the road transport operators.

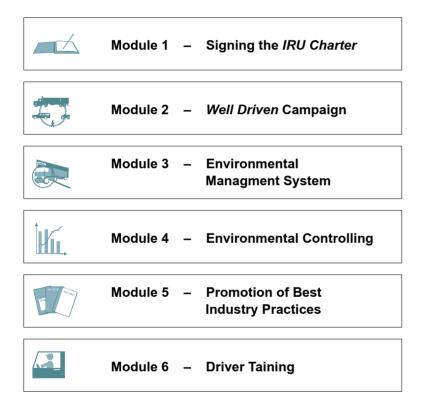


Figure 3: The IRU Modules for sustainable development

In short, the following chapters comprise:

- a Module that foresees, as a starting point, the signing of the IRU Charter for Sustainable Development by individual transport operators and which aims at raising awareness and commitment among the national Association membership;
- a Module for so-called Well Driven campaigns, in which the operators that subscribe to the campaign commit themselves to improving road safety according to a certain code of practice elaborated by the national road transport Association;

- a Module for the implementation and, if requested, certification of an Environmental Management System, which is the most comprehensive and complex way to establish sustainable development practices at company level;
- a Module for the development and application of certain controlling tools, such as green accounting, that measure and benchmark environmental improvements;
- a Module for the promotion of best industry practices, which looks at industry awards for excellent performances and industry reports for the promotion of best practices; and
- a Module that trains bus, coach and truck drivers aimed at improving road safety, fuel efficiency and load security (see Figure 3).

Each Module deals with the following questions:

- What is the purpose of the Module described?
- What is the content of the Module?
- How should national associations implement the programme?
- What are the benefits for transport companies?

Despite the wider understanding of the term sustainable development, the six Modules focus on the following objectives:

- to create **awareness** among transport companies of the objectives and benefits of sustainable development;
- to improve transport safety and reliability;
- to improve **resource efficiency**, especially for fuels;
- to reduce atmospheric emissions (primarily CO₂, CO, HC, SO₂, NO_x and particulates);
- to **reduce noise emissions**, especially at the company location and in inner cities.

The common prerequisite for all modules is that the approaches be in line with the profitability of road transport companies. National road transport associations will feel encouraged to follow the forerunners and to implement their own national programmes in co-operation with their member companies.



Module 1: Signing the IRU Charter

The *IRU Charter for Sustainable Development* was unanimously adopted by all national IRU Member Associations in 1996. The *Charter* marks the first step on the *IRU Agenda for Sustainable Development* and is a commitment by the entire road transport industry.

This commitment has been and must be followed by the implementation of measures at transport operator level, supported by programmes initiated by Member Associations. A first step (for those who have not yet launched a national programme) or a complementary step (for those who have already undertaken concrete measures) is the signing of the *IRU Charter* by road transport operators. As regards the *Charter*, signature is the logical step in a procedure initiated by the IRU, the worldwide spokesman for the industry, brought to life by its Member Associations and finally handed over to road transport operators.

SIGN ON FOR A BETTER FUTURE

"Working together for a better future" is the slogan of the IRU, of its national Member Associations and of their memberships. The signing of the *IRU Charter for Sustainable Development* can become an impressive kick-off event or reinforce parallel activities. It increases awareness and commitment among transport operators, a must for any successful national programme. The signing should be accompanied by measures to inform transport operators about the opportunities and benefits resulting from a sustainable development policy, both for the environment and for their own companies. This is why it is recommended to communicate the following principles to the national membership:

- Sustainable development can only be achieved through appropriate measures and programmes at the level of transport operators in everyday operations.
- Measures to achieve sustainable development can also improve the profitability of road transport operators. In fact, there is a strong positive correlation between sustainable development for the environment and sustainable profitability for the operator.
- Contributing to efforts to achieve sustainable development improves the reputation and image, and thus the future prospects, of the entire road transport industry.

PREPARING FOR A SUCCESSFUL SIGNING OF THE CHARTER

Expectations, awareness and the degree of commitment as regards sustainable development may vary among members. While some transport operators are ready for immediate and concrete action today, others may still hesitate for a variety of

Communication – an essential step in starting national programmes reasons. It is therefore necessary for IRU Member Associations to prepare the ground for a successful signing of the *IRU Charter* by their membership.

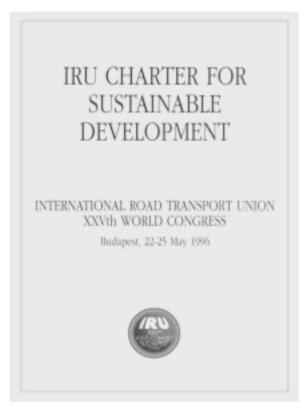


Figure 4: The IRU Charter for Sustainable Development

The willingness of operators to sign up individually for an industry commitment will not come overnight. Sending a circular letter asking the membership to sign the *IRU Charter for Sustainable Development would* probably fail. There is, however, a wide range of activities which national Member Associations can undertake to ensure that signature of the *Charter* becomes a major and successful event, both for the association and its membership.

National Member Associations can organise workshops or seminars for their membership in which they inform transport operators about the IRU Agenda for Sustainable Development, the programmes that have been started by associations in neighbouring countries and the activities that could become part of their own national programme in the future. Getting the support and commitment of your transport operators – a major issue



- These initial seminars and workshops also help Member Associations to find out the priorities and ideas of their membership as regards sustainable development. Some transport operators are more progressive in the way they think and act than might be expected.
- Written information is important in this respect. Member Associations can use existing material from the IRU (*Charter, Initiative, Guide, Road Safety Management Manual*) or from other IRU Member organisations and translate them, fully or in part, into their own language. There is no need to reinvent the wheel and this is one of many ways to keep costs low.
- National Member Associations can proclaim a "Year of Sustainable Development" on behalf of and for their industry, or display the cover of the IRU Charter on their letterhead, which may also be a good idea for the transport operator once he has signed the Charter.
- National Member Associations must raise awareness among their membership of the various benefits that sustainable development policies can bring to their respective companies.

Finally, the national Member Association should invite all its members to a ceremony at which they sign the *IRU Charter for Sustainable Development*. Ideally, this can happen during its general assembly and with the participation of major governmental and commercial partners. Those who cannot attend the assembly may be offered the possibility of signing the *Charter* either beforehand or afterwards.

The signing of the *IRU Charter* can be used both by the Member Association and by individual operators for public relations purposes, in negotiations with governmental and commercial partners and as a starting point for further efforts.

Ask for support from governmental and commercial partners

Module 1 – Signing the IRU Charter

Benefits for road transport operators:

A kick-off for improving profitability: With the signing of the IRU Charter, road transport operators initiate activities and programmes that, in the final analysis, help to improve their own profitability.

Catch up with competitors: Road transport operators from other countries may already benefit from a national programme initiated by their industry organisation. In signing the IRU Charter, the road transport operator launches a similar process in his own country that will, in the end, enable him to catch up with competitors from other countries.

Road transport – a leading industry: In most countries, signing the IRU Charter will mean that the road transport industry is taking the lead in driving towards sustainable development in the transport sector.

Hand-in-hand with partners: Signing the IRU Charter also puts road transport operators and their national industry association in a strong position to negotiate incentive schemes with their governmental and commercial partners for further steps towards sustainable development.



Module 2: Well Driven Campaign

Safety is an important aspect of sustainable development. Thus, for the road transport industry, driving towards sustainable development also means improving road safety – i.e. reducing the number of accidents involving trucks, buses and coaches. *Well Driven* campaigns can substantially contribute to achieving this part of the sustainable development objective. In addition, *Well Driven* campaigns help to improve partnership between all road users, whether private motorists, two-wheelers, pedestrians, truck, bus or coach drivers. In this respect, *Well Driven* campaigns under the leadership of a national Member Association can create a fair and open dialogue between the road transport industry and other road user groups.

Well Driven campaigns help to improve vehicle safety standards and driver behaviour. Road safety also has a major influence on the public image of the road transport industry. A clear commitment to the highest safety standards is therefore also vital to improving the image of road transport.

With respect to the goods carried by truck, safety is again an important issue in the relationship between transport operators and shippers. Little damage and high reliability are excellent arguments in improving customer relations.

IMPLEMENTING A WELL DRIVEN CAMPAIGN

The heart of a *Well Driven* campaign initiated by a national Member Association is a code of conduct to which transport operators participating in the campaign must subscribe. By subscribing to the code they commit themselves to complying with all relevant safety and environmental rules stated in the code.

The heart of Well Driven: the code of conduct

The code of conduct defines the obligations linked to participation in the *Well Driven* campaign. In order to ensure that the objectives of the campaign are reached, the following key points for transport operators should be included in the code:

- to plan operations to ensure that legal obligations concerning safety and environment are met;
- to train drivers beyond the legal minimum (see Module 6: Driver Training);
- to monitor drivers' compliance with the code;
- to respect other road users and pedestrians;
- to respond in writing to complaints. In contrast to certification systems, Well Driven does not require third-party auditing. This gives every single participating company a particular responsibility in ensuring compliance with the code.

Well Driven – driving towards better road safety!

Test the best - pilot companies and test period

Once the code of conduct has been defined, and before the *Well Driven* campaign can start effectively, the campaign needs a test period with pilot companies. Ideally, these pilot companies are forerunners in the industry with a good reputation among transport operators. This will help the *Well Driven* campaign, after a successful test period, to obtain high acceptance throughout the entire industry.

The test period will help to gather preliminary experience with the functioning of the *Well Driven* campaign and leave an opportunity for last-minute adjustments before the campaign goes public. It is recommended from practical experience that the test period should last from six to 12 months.

In parallel with the test period, the national Member Association may intensify its marketing efforts to promote the campaign both in the industry and among the general public.

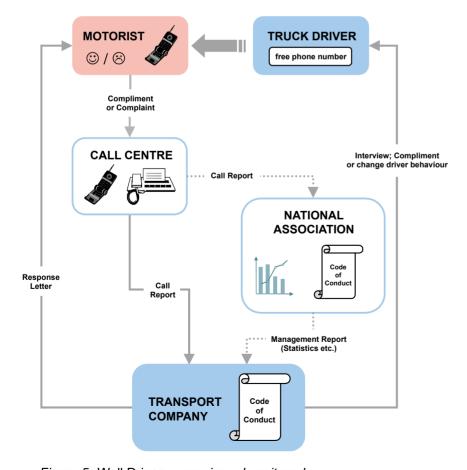


Figure 5: Well Driven campaign - how it works.



Proper treatment of feedback from road users

The national Member Association administers and monitors the *Well Driven* campaign. This requires the establishment of a call centre at the Association to receive and record all incoming telephone calls that contain positive or negative reports about vehicles on the road.

The call centre also forwards all incoming calls to the management of the appropriate subscriber to the campaign. It offers statistical evaluation of all phone calls for an easier and quicker analysis at both Association and operator level. Benchmarks help in the comparison of results between different subscribers or over a certain period of time.

Full compliance required

The administering body must ensure that subscribers fully comply with the campaign's standards and rules. Negative responses from road users are passed on to the subscribers and must be investigated by the company management. The administering body ensures that the management of the operator gives a timely response to complaints, explains possible misbehaviour and looks for opportunities to improve driving behaviour in the future.

It is most important for the effectiveness and credibility of the campaign that there is proper feedback from operators to the road user groups and that appropriate action is taken to further improve road safety. A *Well Driven* campaign is more than a public relations exercise. It is a programme for improving road safety.

The role of the driver

The driver of a commercial vehicle plays an important role in a *Well Driven* campaign. First, it is essential that the driver supports the philosophy of the campaign and fully identifies with its objectives. Secondly, it is important that the driver receives training not only on how to improve his driving performance with respect to road safety but also regarding fuel efficiency (see Module 6: Driver Training).

ABOUT THE COST OF A WELL DRIVEN CAMPAIGN

For the national Member Association, the implementation of a *Well Driven* campaign may result in substantial extra costs. Subscription fees can help to keep the additional financial burden low. In the long term, such fees may even help to cover all the extra costs arising from the campaign. Fees can be charged as a lump sum per vehicle registered in the campaign. However, national Member Associations must be prepared to provide launch funding for the campaign.

Feedback - vital for success

WHAT IS IN IT FOR THE NATIONAL ASSOCIATION?

Member Associations can use *Well Driven* campaigns for public relations purposes and to upgrade their own image as well as that of their members. Once the campaign is established and "well driven", those operators who have subscribed to it can be promoted as outstanding performers in the industry. Ideally, all members of a national Association will subscribe to the campaign and can subsequently be promoted as market leaders compared to those operators who are not members of the Association and not involved in the campaign.

Referring to the benefits of the *Well Driven* campaign and the outstanding performance of its subscribers, the national Member Association can negotiate contracts or agreements with governmental and commercial partners to grant campaign subscribers financial and non-financial benefits (insurance arrangements, user advantages, etc).

Module 2 - Well Driven Campaign

Benefits for road transport operators:

Lower insurance costs: Fewer road accidents contribute to sustainable development while simultaneously reducing insurance premiums for the road transport operator.

Availability of vehicle fleets: Vehicles involved in accidents are unavailable to perform customer services. In a best-case scenario they can be replaced at short notice, but at extra cost. Fewer accidents thus result in a higher availability of the total vehicle fleet while reducing replacement costs such as vehicle rental, etc. The worst case is to lose a customer because of delayed delivery resulting from an accident.

Importance of drivers: A Well Driven campaign communicates to the driver that he is a valued part of the company. His behaviour is important for the success of the company and the reputation of the entire industry. The result is a highly motivated driver eager to improve his performance and who identifies closely with the company's goals.

Improving customer relations: Subscribing to a Well Driven campaign can become a token of excellence for the road transport company if the benefits of the campaign are properly communicated. This can support customer acquisition and be used in marketing and public relations. It is a clear added value for the subscribing operator.

A mark of excellence for associations, transport operators and drivers



Module 3: Environmental Management System

The most comprehensive way of implementing the principles of sustainable development at company level is the establishment of an Environmental Management System (EMS).

The introduction and implementation of an EMS is the systematic approach to introducing sustainable development policies at all levels and in all processes of the company. In general, implementation of an EMS is voluntary for a transport company.

Introducing an EMS also enables transport operators to appreciate the many advantages of such a systematic approach in financial terms (cost savings, productivity gains, market potential, fewer accidents).

WHAT ARE THE ESSENTIAL ELEMENTS OF AN EMS?

An EMS is part of the overall management system of a transport company. It comprises organisational structures, planning processes, responsibilities and resources – all directed towards achieving sustainable development. With the implementation of an EMS, the transport company defines and firmly establishes its environmental goals in compliance with the overall company goals.

To implement an EMS successfully it is essential to:

- make an audit of the company's present performance and previous achievements as regards sustainable development;
- define or refine the company's sustainable development policies (and goals);
- develop a sustainable development programme;
- define management responsibilities in the company as regards environmental management and goals;
- define processes that lead to sustainable management;
- educate and train the management and staff;
- communicate the company's sustainable development programme internally and externally;
- conduct internal audits; and
- acquire certification for the EMS (optional).

An EMS can be implemented independently or as part of (and at the same time as) other management systems, e.g. Quality Management Systems (QMS). The EMS must be fully compatible with existing and subsequent management systems.

Once established, the EMS becomes the transport company's guideline for sustainable development in everyday operations and decisions.

Sustainable development at all company levels through EMS

Compatibility is a must

HOW CAN ASSOCIATIONS SUPPORT THE IMPLEMENTATION OF AN EMS?

National Member Associations can support transport operators in many ways in the introduction of an EMS. For example, they can:

- assess whether existing EMS structures and criteria from other sectors are relevant to the road transport industry:
- if necessary, develop a tailor-made EMS for the road transport industry:
- develop guidelines and procedures for the successful implementation of the EMS;
- act as consultants for their members or acquire competent consultants to advise their members (including management training, documentation, etc);
- campaign for the implementation of EMS in their industry;
- campaign for user advantages and incentives for those members who have or introduce an EMS;
- optionally, establish a tailor-made EMS certificate for their members.

Professional help with the implementation of Environmental Management Systems is being offered by *Viaroute*, an IRU service company that trains managers from the road transport industry, particularly from IRU Member Associations, in the field of quality and environmental management.

ISO STANDARDS OR STANDARDS TAILORED FOR ROAD TRANSPORT

EMS for implementation within road transport companies can be based on ISO standards (ISO 14001) or on criteria and standards tailored for the road transport industry. However, even tailor-made EMS standards do not have to reinvent the wheel. They can refer to ISO standards and develop additional standards for transport operators or criteria specifically related to sustainable development.

Industry-tailored EMS should not compete but be fully compatible with existing ISO standards (ISO 9000 ff. for QMS or ISO 14001 for EMS). In fact, industry-tailored standards carry extra benefits for transport companies implementing an EMS. With any kind of EMS, whether the transport company aims for certification or not remains optional. Certification is not a must for an operational EMS.

If the national Association opts for an EMS containing standards specifically tailored for its membership and/or sustainable development, the following (measurable) criteria can be incorporated in addition to the essential elements listed above:

Tailor-made standards are an extra benefit for the operator



- success in continuously improving the use of natural resources (e.g. separation and recycling of waste, treatment of waste water, use of rain water, on-site measures for noise reduction, etc);
- maintaining regular checks on the maximum permitted driving hours:
- defining a minimum percentage of low-emission trucks in a company's vehicle fleet (e.g. a percentage of Euro I, II or III trucks);
- defining a minimum percentage of low-noise trucks in the total fleet (e.g. a percentage of trucks emitting less than 80 dB according to European standards);
- regular driver training on fuel-efficient and safe driving as well as on load security;
- thorough documentation of the company's sustainable development achievements.

All standards defined in a tailor-made EMS go beyond the minimum legal requirements, as evidence of an extra effort made by the transport operator and the industry towards sustainable development.

The criteria that companies must meet lead towards sustainable development and, at the same time, towards improved profitability for the operator. Ideally, all measures necessary to fulfil the criteria have a cost-benefit ratio for the transport operator of >1, including long-term and strategic benefits. This is a crucial success factor for acceptance of an EMS and should serve as a guideline when defining the criteria for the system.

In addition to the criteria defined as part of the EMS, minimum conditions for entry into its EMS programme may also be defined by the national association. These minimum conditions might for example require:

- being a member of the respective Association and holding the relevant permits and licences (e.g. ADR certificates for drivers transporting dangerous goods);
- having held the transport licence for a minimum period (e.g. three years);
- proof of proper insurance of liabilities and cargo load;
- a minimum duration for operation of the company (e.g. two vears);
- the willingness to participate in an EMS database provided and maintained by the national road transport Association;
- the provision of a statement confirming that there are no judicial inquiries against the company concerning environmental or social irregularities or offences (optionally to be approved by public authorities).

Standards beyond legal requirements

These entry "barriers" can help initially to guarantee a certain minimum quality level in transport companies applying for introduction of the EMS, thus serving as a further token of excellence for the companies that participate in the national EMS programme.

A PHASED APPROACH FOR NATIONAL ASSOCIATIONS

National Associations can initiate and support the implementation of EMS at transport company level. In doing so, it is recommended that they follow a phased approach as follows (see Figure 6).

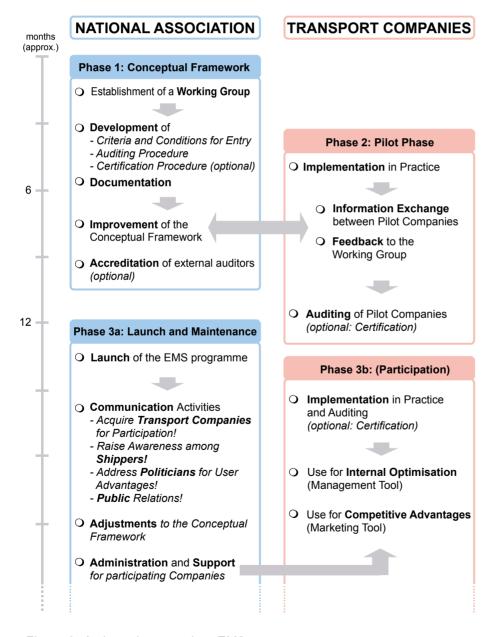


Figure 6: A phased approach to EMS programmes



Phase 1: Conceptual framework

It is recommended that a working group be established at Association level. The group shall comprise representatives from the association, from pilot (transport) companies and shippers to ensure that the criteria for the EMS are accepted and all parties involved can benefit from them. An attempt should be made here to enlist those companies known as pioneers in the industry. Optionally, professional consultants whose daily business is the implementation and certification of EMS and/or QMS at company level can also be integrated into the work of the group.

The main purpose of this initial phase is to define the criteria for the tailor-made EMS and the conditions for entry into the Association's EMS programme. The process of defining and adopting the conceptual framework for the national programme may take up to six months. Following the decision-making process, the national programme must be well documented (manuals, logo and certificate design, etc).

Before the national EMS programme can be launched and promoted among transport operators, the auditing and certification procedure must be defined, and external auditors must be accredited, if certification or external auditing is foreseen in the EMS programme.

In this case, close co-operation with certification bodies is recommended and helpful at this stage. The national Association agrees on a framework contract with certification bodies. This includes the terms of certification, including the cost to operators who apply for it.

For those transport companies who wish to acquire a certificate at the end of the implementation process, an external audit will be required. This is an important prerequisite for the credibility of any certificate or label following the implementation of an EMS. It is recommended that an independent and neutral body be entrusted with this task.

Phase 2: pilot phase

In Phase 2, the Association enlists pioneers in the industry willing to test its EMS programme in a pilot phase by preparing for the implementation of an EMS in their company. Pilot companies must implement the measures according to Phase 1, designed to lead to successful auditing (and certification) of an EMS.

The practical experience gained in this phase will help to test and improve the initial conceptual framework for the EMS programme. The national Association shall moderate an exchange of information among the participating companies to be integrated in the working group. Phase 1: the cornerstone for acceptance and success

Phase 2: learning from the forerunners To ensure the best possible and most effective feedback from Phase 2, pilot implementation and auditing should ideally take place in a wide range of companies from various sectors of the road transport market.

Representatives from pilot companies should also be involved in definition of the EMS programme (Phase 1). This will enable them simultaneously to participate in definition in the working group and to carry out practical implementation in the company. Development of the conceptual framework will thus benefit from a continuous feedback from the practical level. In this case, Phases 1 and 2 will overlap and the whole process can probably be completed within a year.

Phase 3: launch and maintenance of the EMS programme

Subsequent to the pilot phase, the national Association will officially launch its EMS programme. The launch of the programme and the subsequent months are instrumental to its success and should be accompanied by intensive internal and external communication. The target groups for communication activities are:

- transport operators;
- shippers and shippers' associations;
- politicians; and
- the public.

It is vital in this phase to enlist as many transport companies as possible to participate in the programme. With a steadily growing number of companies that have successfully implemented the EMS, the Association's programme will gain recognition and appreciation not only among its membership but also among shippers and the public.

A longer-term objective could be to gain advantages for transport operators certified under the Association's EMS programme by releasing them from certain governmental supervisions and controls if these are covered by the EMS programme.

Regular meetings of the working group should take place for the purpose of adjusting and updating the EMS programme. Adjustments may become necessary as a result of:

- changing market demands (road transport operators are facing challenges arising from new logistical concepts);
- changing legal requirements (e.g. new emission-level limits, harmonisation of European environmental legislation);
- revision of existing standards or introduction of new standards in the field (e.g. the ISO 14000 family);
- changing market and legal demands for special branches of the industry (e.g. animal and food transport).

The working group shall also act as a committee looking for solutions in possible disputes between a transport company and an independent audit/certification body.

Phase 3: communication is a critical success factor



Another critical success factor for the EMS programme is recognition of the benefits by operators and promotion of these benefits to potential applicants. One of the major benefits for companies that have implemented an EMS (and have been successfully audited and certified) is the value of the certificate as a marketing tool in competition with other transport companies. For this reason, it is important that the communication efforts by the national association also address shippers – the customers of their membership. The main purpose of this exercise is to raise awareness among shippers of the competitive advantages and extra benefits that EMS-compliant companies have to offer.

Communication of the benefits of EMS for transport companies and shippers may be achieved by presentations in the media, at congresses or press conferences. It is vital to involve multipliers such as politicians or independent bodies (related associations, consultants, etc) in the communication chain. The pilot companies should also be involved extensively in these PR activities.

Module 3 - Environmental Management System

Benefits for road transport operators:

Transparency improves efficiency: EMS help to increase transparency at all organisational levels and in all work processes. Thus, management responsibilities, relations and processes are reconsidered and possibly subsequently improved. This complex procedure helps to identify the potential for increasing efficiency in the transport company.

Integration of company goals: Complexity can also be an advantage for the transport company, particularly when, thanks to the many links of the EMS with other management systems, sustainable development goals are implicitly made interoperable and integrated with other company goals through a continuous cost-benefit analysis.

Competitive advantages: The successful implementation of an EMS can be used as a marketing tool vis-à-vis existing and prospective customers. It helps the company to distinguish itself from competitors by offering extra benefits to customers.

Guidance: Associations pave the way for the implementation of EMS through the development of a tailor-made conceptual framework. Expert support and exchange of experience can be realised at low cost. Participating transport companies can learn from each market leader and improve their relative market position.

Competitive advantages through EMS

Module 4: Environmental Controlling

For the transport operator wishing to drive towards sustainable development, it is important to be able to measure the effects of given activities or programmes on its environmental and economic performance. As regards the latter, information and data are most often provided by the company's controlling system. However, for specific data on the environmental effects, ordinary financial controlling tools often fail to provide the necessary information. Environmental controlling helps to:

- compare alternative measures/programmes for the same achievement (i.e. to find which is the most efficient and effective one); and
- decide on priorities if resources are limited for the simultaneous implementation of measures/programmes.

Controlling tools to assess the sustainable development performance of a transport operator should also be able to increase transparency for decision-makers (e.g. through detailed input-output analyses), enabling them to compare their own company's achievements with those of other companies (benchmarking).

Finally, controlling tools of this kind can help to pave the way towards implementation of other measures or programmes to achieve sustainable development. For example, results from environmental controlling can be used in reports on best industry practices (see Module 5: Promotion of best industry practices) or for environmental reports by the individual company. Both contribute substantially to improving the image of the company and of the entire industry. Last but not least, environmental controlling can help to fulfil legal requirements, as some countries require documentation on certain environment-related data.

National road transport associations can help to develop, establish and promote controlling (tools) for sustainable development in their member companies.

GREEN ACCOUNTING

Green accounting refers to those items not yet measured and evaluated in ordinary controlling systems or measured only in financial terms. In particular, it aims at measuring the use of resources and the environmental impact of certain operations, activities, programmes, etc. Green accounting is understood as an extra tool for management and should be integrated into the existing financial controlling system.

Inputs and outputs to be measured in green accounts can be:

- the total energy consumption of fuel, heating oil, gas, electricity, etc;
- the total consumption of water;

Effectiveness and efficient implementation



- the quantity of atmospheric emissions;
- the quantity, quality and type of waste and waste water;
- noise levels;
- the use of space on site (total, built, sealed, grass-covered);
- the number of vehicles (trucks, vans, cars) and other resources, e.g. fork-lift trucks, picking trolleys, tyres;
- the use of raw materials like lubricants, coolants, etc.;
- the number of accidents (to be classified by type and seriousness).

They can be presented in a green account sheet as follows.

Year		Year 1	Year 2	Year 3
Transport Performance Driving hours Mileage Transport volume	[h] [km] [tkm]			
Energy Fuel (diesel) Fuel (petrol) Heating oil Gas Electricity	[litres] [litres] [litres] [m³] [kWh]			
Water Water consumption Waste water	[m³] [m³]			
Vehicles Trucks, total according to EURO I according to EURO II according to EURO III with exhaust gas treatment low-noise acc. to EU	[#] [#] [#] [#]	 	 	
directive 92/97 Cars, total according to EURO I according to EURO II according to EURO III	[#] [#] [#]			
Space Site, total built sealed grass-covered	[m ²] [m ²] [m ²]			
Raw materials Coolants Lubricants Waste Foils Residual	[litres] [litres] [t] [m³]			
Used oil Lead batteries	[litres] [kg]			

Figure 7: Green account sheet

Transport companies can derive indicators from the initial results obtained with green accounting. Some fundamental (eco-)indicators can be:

- the average fuel consumption for the total vehicle fleet and for each driver in litres per 100 kilometres;
- the average fuel efficiency for the fleet and for each driver measured in kilometres per litre of fuel;
- the share of low-emission and low-noise vehicles in the total vehicle fleet;
- CO₂ emissions per 1,000 tonne-kilometres;
- the recycling ratio (recycled waste volume/total waste volume);
- the number of accidents and accident costs per vehicle, per driver, per 1,000 kilometres, per 1,000 tonne-kilometres, per 1,000 tonnes, etc.

With such indicators, the individual road transport operator can make comparisons between his company and other operators (from the same country or abroad, if the same indicators are available), and can establish a database to benchmark his own transport company. In doing so, the operator can view his advantages and disadvantages compared with other transport companies and identify the potential for further improvements.

THE ROLE OF ASSOCIATIONS IN PAVING THE WAY FOR THEIR MEMBERS

Road transport Associations can develop and promote controlling tools for their members and can also support their implementation at operator level. In particular, SME are often not in a position to develop their own controlling tools because of a lack of human and financial resources.

The *IRU Road Safety Handbook*, for example, offers an accident recording scheme that is available to all IRU Members and helps to quantify and assess road accidents.

Supporting measures by national associations can include:

- the identification, assessment and adjustment (if necessary) of existing controlling tools in individual transport companies, in other sectors of the economy, at international level, etc;
- the establishment of working groups for the exchange of information about and experience in the use of certain controlling tools; or
- the development and implementation of industry tailored (and computer-based) controlling tools; e.g. tools for environmental performance evaluation (cf. supplement below);
- the organisation of workshops and seminars to promote the idea of controlling for sustainable development;
- seminars for management training.

From indicators to benchmarks

IRU and Member Associations can offer support in many ways



Environmental controlling is a new and as yet largely unknown tool for most transport companies. Its strategic importance must be explained to the companies. It is a good idea, therefore, to introduce the topic at Association events such as annual assemblies.

Supplement: Environmental Performance Evaluation

National road transport Associations could develop a standardised, branch-specific environmental performance evaluation system and make it available to their members as an internal controlling tool. The core of the system would be a set of eco-indicators that characterise the company's sustainable development performance. The ISO 14031 *Environmental Performance Evaluation (EPE)* may serve as a guideline when developing the system. This International Standard, which was published only in November 1999, outlines the EPE process (planning, evaluating, reviewing and improving) and in particular the selection of indicators. It distinguishes environmental condition indicators, management performance indicators and operational performance indicators.

The ability to identify the company's performance is a vital prerequisite for the indicators. However, the expenditure related to obtaining and using the required data in practice must be kept within bounds – a sound selection of indicators should be ensured! In the case of output-related indicators, a clear and comparable definition must be found. For these reasons, the indicators should be developed in a working group comprising transport operators who contribute their practical experience.

Standardised and therefore comparable indicators make comparisons possible between companies, thus forming the basis for benchmarking among transport operators. If benchmarking is foreseen, the national Association may act as a clearing house that:

- collects the corporate environmental data from transport operators;
- makes the data anonymous and processes it to evaluate the branch:
- makes the resulting data available to those companies who participate in the benchmarking system.

Environmental performance evaluation and benchmarking are innovative tools for trend-setting management. The Association should develop a guide for implementation explaining the environmental performance measurement system itself, the implementation procedure and the (optional) benchmarking strategy.

Module 4 - Environmental Controlling

Benefits for road transport operators:

Transparency and information: Environmental controlling tools increase the level of information in transport companies, and thus improve and facilitate decision-making, by quantifying the inputs and outputs of operations, measures and programmes to achieve sustainable development.

Priority setting: By allowing better comparisons of the effectiveness and efficiency of alternative measures and programmes, environmental controlling enables the transport operator better to set his priorities.

Benchmarking: Quantitative data about environmental achievements allow for benchmarking with competitors nationally and internationally. The ideal platform for benchmarking is the road transport Association.



Module 5: Promotion of Best Industry Practices

"Working together for a better future" is the slogan of the IRU and its national Member Associations. Working together for a better future also means learning from each other. In promoting best industry practices there exist many opportunities for working together and learning from each other for the benefit of the industry and sustainable development. The experience of pioneers or of those setting the marks of excellence in the industry ("the safest", "the cleanest", etc.) can be of particular importance and benefit in this respect.

Module 5 will describe two of the many opportunities to promote best industry practices initiated and moderated by national Member Associations:

- reports on best industry practices; and
- awards for best industry practices.

Both activities can contribute substantially to the promotion of best industry practices and encourage road transport operators to follow industry leaders.

REPORTS ON BEST INDUSTRY PRACTICES

Just as individual (mostly large) companies publish environmental reports, the national road transport association can create and publish an industry-wide report on best industry practices. Such reports – published annually or biannually – shall comprise examples of measures and programmes at transport company level that lead towards sustainable development.

Individual examples shall each provide information about:

- the name, type, size and location of the transport company;
- the individual measures taken;
- the programmes implemented to contribute to sustainable development;
- the results of the various measures and programmes, i.e. the measurable contribution to achieving sustainable development; and
- the costs and benefits for the operator that resulted from implementation of the measures/programmes.

Reports on best industry practices can be used in many ways. Most importantly, through these reports and their practical case studies, road transport operators can learn from other road transport operators. Projects and measures implemented by one or a few companies can serve as pilot projects for all the others.

Working together for a better future also means learning from each other!

Politically, reports on best industry practices:

- can be used by Associations to prove that their national programmes and campaigns (Well Driven, Environmental Management Systems, etc. see Modules in this Guide) are being successfully implemented by a growing number of road transport operators;
- help to quantify each operator's contribution towards the common goal of sustainable development, and possibly that of a group of operators (i.e. they create a set of indicators for achieving sustainable development);
- are an important tool for national Associations in negotiating incentive schemes with governmental and commercial partners.

In an initial step, the national Association has to collate data by means of a standardised questionnaire that asks for the abovementioned information.

The drafting of the report can be accompanied by a working group that assesses the incoming questionnaires for use in the report. For quality reasons, all examples listed in the report should fulfil certain minimum standards (to be defined by the Association, respectively by the working group).

The drafting of the report may also be undertaken in co-operation with industry or governmental partners. Particularly when it comes to the 'multiplication' of identified best practices throughout the road transport industry, the national Association could look for partnership and support if the goals to be achieved are common to all partners involved. The co-ordination of such support programmes, including public funding, could take place in so-called 'road transport industry pilot groups' moderated by the governmental partners of the industry.

After publication of the report, national Member Associations can establish a member service that offers more detailed information and practical implementation support for certain best industry practices.

AWARDS FOR BEST INDUSTRY PRACTICES

In addition to rewards to industry leaders or marks of excellence granted as part of government incentive schemes, awards for outstanding performance towards achieving sustainable development can be established by the Associations. For example:

- A safety award can be granted to the transport company with the best safety performance of its total fleet or driver team, or be presented to individual drivers who have an outstanding safety record.
- An award for environmental excellence may be granted to a company that has proved excellence and innovative spirit in the implementation of sustainable development practices.

Action alliances support effective multiplication of best industry practices



Who can apply?

Applicants may be a company or a single individual or group of individuals representing a company who have, for example, developed and implemented a successful environmental initiative or demonstrated excellence and professionalism in trucking safety. Applicants must be owners or legal employees of a transport company that is a member of the national Association. The Association may provide companies with a phone number for further information.

What kind of performance will be rewarded?

The national Associations may reward projects, programmes or achievements which

- have led to an exceptionally low accident rate and/or the best safety programmes;
- result in a reduction of the accident rate compared with the preceding year (e.g. in the form of an "improvement award");
- go beyond legal compliance and have been implemented in the past calendar year or are currently ongoing (e.g. reduced generation of used air- and fuel-filters through the installation of onboard used-oil blending devices, reduced air pollution through the promotion of an employee car pool programme reducing employee trips).

Submission package

The Association has to determine a deadline for entries and a format in which they will be accepted. This may comprise a set application form, project summaries with a given structure and of limited length, and supporting materials (photographs, posters, videos, etc) that refer to all relevant award criteria. The Association may provide this as a submission package that also contains information about the award's goal, criteria for the selection of finalists and further details of the evaluation process, the jury, the notification of finalists, the award ceremony, etc.

Internal Association events, written information (e.g. brochures, mail-outs) and internal marketing such as advertisements in the trade press should be used to promote the award among members.

Optionally, commercial and governmental partners can help to sponsor the award, thus alleviating some of the Association's costs.

Finalists and winners

The jury selects finalists who best meet the award criteria. The national Association notifies these finalists in writing. The winner can be announced in a final award ceremony. All finalists are expected to attend this ceremony.

The award can be used both by the national Association and the winner for public relations and marketing purposes. Effectively promoted, the award ceremony can attract more road transport operators into implementing sustainable development policies. The winner can use the award as a marketing tool (award logo on letterhead, company brochures, vehicles, etc.)

Finally, the Association may promote employees or companies who have been rewarded; e.g. via Internet, brochures and other Association publications.

Module 5 - Promotion of Best Industry Practices

Benefits for road transport operators:

Learning from leaders: From reports on best industry practices, all member companies can learn and practise "follow the leader" policies. Reports on best industry practices are a "Who's Who" of sustainable development practices in the road transport industry.

Tool in negotiations with industry partners: Reports on best industry practices prove that the road transport industry has taken the lead and is effectively implementing company policies that contribute to sustainable development. The report is thus an excellent tool for industry associations in negotiating incentive schemes with governmental and commercial partners.

Marketing: Awards serve as an excellent and cost-effective tool for marketing and public relations.

Awards are excellent and cost-effective marketing tools



Module 6: Driver Training

Fuel, accidents and insurance represent substantial costs for each individual road transport operator. Fuel efficiency, road safety and load security are therefore important aspects in achieving both sustainable development and sustainable profitability.

SAFETY - THE DRIVER'S CONCERN

In this respect, truck, bus and coach drivers play an essential role. Generally speaking, well trained and highly motivated drivers are less often involved in road accidents and use less fuel. In other words, they drive in a more economical and environmentally friendly way.

In addition, well-trained drivers are more reliable and customeroriented. Drivers are in direct contact with customers and other road users (see Module 2: *Well Driven* Campaign). A driver who is well-trained will know his responsibility *vis-à-vis* these two important groups.

Acquiring a driving licence and obeying other legal regulations (i.e. driving hours and rest times) are basic needs. However, drivers better meet the higher standards and more sophisticated requirements of successful market player through additional and specific driver training, and can become real added value for transport companies. It should also be highlighted that skilful and responsible drivers are increasingly becoming a scarce resource for transport companies. Driver training, in this respect, may also help to improve the reputation of the company and thus facilitate driver recruitment.

Driver training should in particular focus on:

- road safety;
- fuel efficiency; and
- load securing.

National Member Associations can promote driver training among their membership in many ways. The most comprehensive method is to develop a national programme in which all road transport operators can participate.

The IRU has, for example, developed a training package for drivers of large goods vehicles, buses and coaches, which aims at improving defensive driving and driver awareness. The project, which was partly funded by the European Union and has been designed to assist training providers and company managers, consists of four elements:

Drivers – the key to better road safety, load securing and lower fuel costs

- a driver awareness seminar:
- driving assessments;
- selection and training of driving assessors and instructors;
- periodic assessment of drivers and provision of any necessary development and training.

Further information about driver training at company level is also given in the *IRU Road Safety Management Manual* (see Chapter III of this Guide, IRU Support Tool) in which measures, a step-by-step plan for the implementation process and an accident recording system are presented in detail.

WHICH SKILLS CAN BE TRAINED?

Improving fuel efficiency

Drivers have a direct effect on fuel consumption and consequently on the level of emissions, particularly CO₂. Nitrogen oxide emissions, for example, can also be reduced substantially in fluid traffic as compared with stop-and-go traffic.

Through appropriate training, even experienced drivers can save up to 25% of fuel – a real gain for the environment and an extra profit margin for the road transport operator. In addition, drivers who are capable of maintaining a constant speed, brake as little as possible and drive proactively reduce wear on vehicle brake systems – another direct advantage to the transport operator.

While sensors, for instance, can determine whether the engine is running optimally or whether it requires maintenance, it is not only the installation but also the proper use of these systems that can prevent unnecessary polluting emissions, fuel consumption and wear.

Increasing road safety

As regards road safety, drivers can learn in special driving courses how to improve the handling of their vehicle and how to react in extreme situations.

As today's trucks, buses and coaches are high-tech vehicles, such training also deals with all kinds of special features of the vehicle, and in particular with the proper handling and best use of electronic equipment, e.g.:

- Roll control system:
 - An electronically controlled chassis damping system automatically adjusts to the load, driving conditions and road surface. Safety, comfort and load protection go hand in hand.
- Automatic slip control system: The system prevents rear wheel slip and swerving under acceleration. It responds by braking the slipping wheel and reducing the engine torque.

Driver training pays off – both for the operator and the environment



- Electronic brake system:
 - Enables electronic monitoring and control of all brake functions. The system communicates braking signals faster than any mechanical system and results in extremely short response times.
- Mobile communication:
 - Appropriate use of mobile phones. They should only be used when not driving!
- Routeing and scheduling devices: Effective routeing and scheduling through on-board electronic devices.

Improving load security

Incorrect loading is not only a frequent cause of road accidents but also results in heavy and costly damage to the goods carried. Training on how to improve load securing and keep these costs low pays off both in the short and in the long term for the transport operator.

Measures to improve load securing are appropriate for all kinds of product group but are, of course, most important for dangerous, fragile and/or high-value goods. These measures refer to the use of blocking devices, the equipment for stabilising and levelling cargo, lashings and means to facilitate load securing such as band holders.

In fact, driver training should not only be considered when new drivers are employed but should take place for all drivers on a regular basis (frequency to be defined in programmes developed by national Member Associations). Special measures can be taken where there is an extraordinarily large number of accidents or when new technological features are introduced (e.g. with a new vehicle generation).

HOW CAN ASSOCIATIONS SUPPORT MEMBERS?

Campaigning for driver training

There are many opportunities for national Member Associations to provide support to their transport operators. An initial step can be the launch of a campaign in which the Association promotes the importance of driver training in the achievement of sustainable development and in improving the operator's profitability (see above: *IRU Training Package for Defensive Driving and Driver Awareness*). It may be helpful in this respect to let pioneers report to colleagues about their success with effective driver training programmes.

A first step: improving awareness of driver training In addition, National Associations:

- can conduct a national/international survey and evaluation of existing driver training programmes offered by vehicle manufacturers, professional training schools or other national/international organisations;
- may offer their operators criteria for selecting the right driver training programme for their specific needs and purposes;
- may negotiate for their membership specific contract conditions for training courses offered by third parties (this can be of particular interest to small and medium-sized operators, since associations may have greater purchasing leverage);
- may develop and run (with support from partners) their own tailor-made national driver training programme for members only;
- may offer a driver's handbook containing information about legal requirements concerning driving hours and rest times, the safe use of the vehicle, tips for defensive and fuel-efficient driving, etc.

A few years ago the IRU, for example, established contractual relations with a professional training institute to carry out driver training in countries of Central and Eastern Europe. The special offer was appreciated by IRU Member Associations from eight countries and, in the subsequent courses, more than 1,000 drivers were trained by the professional institute.

Drivers train drivers and promote driver training

In an additional campaign, national Associations can build a "road team" led by a small group of professional truck, bus and coach drivers with superior driving skills, remarkable safety records and the passion to spread the message that driver training is of high importance for improving road safety, reducing fuel consumption and improving load securing.

Selected members of the road team can also speak on behalf of the national Association to the media, the public or other target groups (e.g. school classes and teachers). These drivers can answer questions about the industry's commitment to improving road safety, provide safe-driving tips to fellow drivers and learner drivers, or offer other road user groups advice on safely sharing the road with a truck, bus or coach (see also Module 2: *Well Driven* Campaign).

Monitoring successful driver training

The success of effective driver training should be monitored both at operator and association level.

For the Associations, statistics and driver or company records can become an important tool for effective, down-to-earth public relations work. Individual figures can prove how effective and proBuild a national road team



fitable driver training is for the environment as well as the transport operator's profit-and-loss account.

The national Association should also encourage its members to monitor and record the fuel consumption of individual drivers. Results from driver training, for example a table showing fuel consumption of the vehicle fleet and the individual drivers, could be on display at company headquarters.

These results can be the basis for drivers to assess whether they have been driving efficiently or not. For the company's management, it provides the basis for analysing the success of driver training programmes. Based on the monitoring results, further training, workshops, information and promotion can be decided on. Monitoring results can also serve as a guideline for financial or non-financial driver incentive schemes. For an effective assessment of the success of training, results must be recorded before and after training measures have been taken.

By supporting driver training, national Associations can contribute substantially to the common goal of reducing the use of natural resources, increasing road safety and achieving sustainable development.

Module 6 – Driver Training

Benefits for road transport operators:

Qualified and motivated staff: Skilled and motivated drivers are safer and more fuel-efficient. They can be a real added value in customer relations and a cost-effective marketing tool.

Savings: Reduced fuel costs, accident (repair) costs and insurance premiums (less damage to vehicles and loads).

Reliability: Fewer road accidents and less damage to goods increase the availability of the vehicle fleet and reliability vis-à-vis customers. High reliability and a high quality of service help to acquire new customers.

IRU Support Tool – The IRU Road Safety Management Manual

It has been emphasised several times in the foregoing modules that road safety is an important aspect of sustainable development. Road safety consequently plays a major role in many of the modules, particularly in Module 2 (*Well Driven* Campaign), Module 3 (Environmental Management System), Module 4 (Environmental Controlling) and Module 6 (Driver Training).

As a function of its outstanding importance to sustainable development, road safety has always been a key priority in IRU activities. Thanks to previous initiatives, the IRU is able to offer a great deal of support to its Members in terms of measures and programmes aimed at improving road safety.

The *IRU Road Safety* Management Manual, for example, can become an important support tool in the implementation of any of the aforementioned modules by national Member Associations and/or transport operators.

The concept

The IRU Road Safety Management Manual constitutes a tool at the disposal of road transport undertakings, cataloguing the measures they may take to improve their road safety record, providing a modular approach to the progressive introduction of such measures and offering them an instrument to diagnose their weak points and the progress made in remedying them.

The *IRU Road Safety Management Manual* was produced in 1998 with the financial support of the European Commission. Its origin is the contribution that road transport undertakings themselves can make to improving road safety in the context of sustainable development in their industry. As such, it is firmly anchored in the commitment of the IRU and its Member Associations to the *IRU Charter for Sustainable Development*.

The Manual takes into account existing national programmes, notably those operated by the BGL (Germany) and TLN/KNV (the Netherlands). It has separate goods and passenger transport versions, and is available in all of the national EU languages, as well as in some others (notably Hungarian and Romanian).

The Manual is available to all IRU Member Associations free of charge. While certain associations have already issued it to all their members in full, others have adapted their pre-existing systems and some have published extracts in various forms.

IRU Member Associations can also obtain assistance through a consultant in promoting the use of the Manual by transport companies, in providing advice to these companies on the basis of its content and in issuing a promotional leaflet to their membership.

Road safety – a key priority in IRU activities



The Contents

The manual is made up of four parts:

Part A describes the structure and methods used, namely:

- Introduction, purpose and organisation of the Manual;
- Cost of accidents and the general principles concerning their reduction:
- The importance of company organisation and the relationship between ISO standards and the IRU system.

Part B constitutes the catalogue of measures to improve road safety:

- Issues affecting company management:
 - Road safety motivation, internal communication;
 - Planning;
 - Dealing with accidents; contingency plans;
 - Fines, traffic offences;
 - Hiring transport (sub-contracting);
 - Insurance issues.
- Issues affecting staff:
 - Driver recruitment;
 - Driver training (Module 6: Driver training, and the IRU Training Package for Defensive Driving and Driver Awareness);
 - Compilation of a driver manual;
 - Driver performance rating;
 - Driver proficiency rating.
- Issues affecting equipment:
 - Fleet management;
 - Use of vehicles.

Part C describes how a company can set up a road safety programme step-by-step:

- Orientation;
- Definition of approach;
- Problem definition and analysis;
- Adoption of measures;
- Monitoring, progress and new measures.

Part D consists of a model accident registration form and indicates how the company may use it:

- Why record accidents;
- How to record;
- What to record;
- Accident data analysis;
- Management information.

The Manual provides numerous check-lists, facilitating its practical use by transport companies.

Road safety management from A to Z

Although the Manual is comprehensive in approach, the structure of Part B is modular, which enables companies to use particular parts of it more easily and to concentrate on particular activities. Similarly, it enables IRU Member Associations to emphasise, during promotional campaigns, specific elements of particular importance in a given national context.

Although the *IRU Road Safety Management Manual* is designed to enable users to establish their own safety programme independently and without any external support, it can only fulfil its role if Member Associations motivate individual transport companies to use it, as they themselves are aware of its potential positive impact on road safety and the image of the industry they represent.

Modules for safety programmes



IV Conclusions

The *IRU Agenda for Sustainable Development* underlines the IRU's motto: "Working together for a better future". In all its efforts to achieve sustainable development, the IRU, as the international industry representative, works hand in hand with its national road transport Associations in a top-down/bottom-up procedure. This is the most efficient and effective way of bringing the political goal of sustainable development to the transport operators, and of learning from each others' experiences at all levels.

THE CRITICAL SUCCESS FACTOR – WORKING TOGETHER FOR A BETTER FUTURE

Many of the national action programmes and company practices over the past few years have been initiated and promoted by the *IRU Charter* and the Initiative *Driving towards Sustainable Development*. At the same time, many measures and approaches established at national level have been taken up by the *IRU Guide to Sustainable Development* and will now give practical support for the implementation of sustainable development practices in transport companies in all IRU Member countries. However, "Working together for a better future" also refers to the commercial and governmental partners of the road transport industry.

There are in fact a number of critical factors for successful and effective implementation of sustainable development policies.

- A successful implementation needs the engagement of the national IRU Member Associations to promote tools for sustainable development. With the signing of the IRU Charter, all IRU Member Associations have committed themselves to do this.
- Since some of the key factors for achieving sustainable development are beyond the influence of the road transport industry, the same commitment is needed from the IRU's partners to assume their respective responsibilities.
- Innovations are needed to be able to continue to take "at source" measures. These innovations include vehicles that are even cleaner, safer and quieter than legally required and, for example, new, environmentally friendly logistical concepts initiated or shared by shippers.
- Turning to government decision-makers, the road transport industry calls for incentive schemes that accelerate the penetration and the use of innovations, best industry practices and the latest available technology.
- Governments need to invest more in road infrastructure. The IRU considers this a must on the route towards sustainable development, even though some people consider it as contradictory. Without these investments it will be impossible to improve traffic flows, and many of the efforts undertaken by

The IRU Charter – a starting point for national action programmes

Commitment by IRU partners is essential

transport operators and their clients will not achieve their maximum effect

The IRU for its part has made the implementation of sustainable development policies in the hands of transport operators, and the monitoring of this process, one of its key priorities for the years 2000+.

To achieve sustainable development, however, road transport's commercial and governmental partners must take responsibility for their fair share. The road transport industry cannot accept responsibility for trends and developments that impact heavily on its environmental performance but which are beyond its influence – such as the congestion and pollution that, despite ever increasing economic demands, result from inadequate infrastructure planning, management and investments.

HOW SHIPPERS AND THE COMMERCIAL PARTNERS OF ROAD TRANSPORT OPERATORS CAN HELP

Support for best industry practices

All participants in the logistics chain – shippers, transport companies and customers alike – influence its efficiency. The transport process itself is determined by the source, destination and delivery date of the goods transported as well as by the goods themselves (number/quantity, weight, dimensions, packaging, etc). Most of these elements depend on the road transport clients' requests. For their part, transport operators structure transport processes by applying their logistical know-how to meet these requirements in a cost-effective way, with minimum environmental impact and the lowest possible use of resources.

In order to promote sustainable development policies in the road transport industry, shippers should support the programmes outlined in the six IRU Modules and those participating companies within their sphere of influence.

Consequently, a shipper should award contracts to companies that adhere to the objectives of sustainable development and have implemented sustainable management policies. The advantages for the shipper are clear: a transport company that has cost-effective, reliable transport processes and does not harm the environment – thanks to its use of intelligent cargo optimisation, bundled transport and other measures – offers a shipper measurable benefits such as a high level of quality and a good price-performance ratio.

How else can shippers contribute? In the simplest case, when a shipper selects the services of a transport company, the shipper gives that company the opportunity to highlight its sustainable development activities. More effectively, environmental controlling tools such as green accounts (see Module 4) and other IRU modules could be taken into consideration or even become a knock-out criterion in the selection of a transport operator. Today, some shippers already use questionnaires to gather environmentally relevant data from transport operators and

Benefits for both sides



logistic service providers. Consequently, participation in a *Well Driven* campaign (see Module 2) or the implementation of an Environmental Management System, for example, can play a stronger role in the award of a contract.

Shippers could also take part in pilot projects and eventually sponsor awards that lead to the development and promotion of outstanding processes, measures and techniques representing best industry practices (see Module 5).

Other commercial partners of road transport operators – for example fuel suppliers, commercial vehicle manufacturers, service providers and the supply industry – could also help to promote and campaign for best industry practices. Each year, they spend hundreds of millions of Euros advertising their products, while very little money is allocated to promoting the services being performed with their products. By re-allocating only a small percentage, perhaps 5-10%, of their advertising budgets to the promotion of actual transport services, they could contribute much more effectively and economically to achieving sustainable development and to improving the image of the entire road transport industry. In fact, such a proactive, industry-wide approach would, overall, save them money otherwise needed to take defensive action avoiding or reducing the impact of policy decisions that adversely influence their business environment.

Co-operation for sustainable logistic networks

Co-operation begins during the selection of logistic service providers. The most intensive and, perhaps, effective form of co-operation is the joint planning of logistic networks and processes. Decreasing manufacturing depths and stock, the outsourcing of logistic processes and the opening up of global buying/selling markets result in complex logistical frameworks. If cost-effective and environmentally friendly solutions are to be found, then goods have to be transported in a tightly knit network, the creation of which requires intensive co-operation at the planning stage.

The bundling of transport, tour and route planning are areas that can be optimised, but only with an organisation that is as economical as it is environmentally friendly. By better utilising cargo capacity and simplifying goods handling, unit loads, loading devices and packaging could be improved and, if necessary, standardised.

Having the right organisation is the decisive factor, not for companies or other organisational units but for the logistical processes at inter-company level. Management systems and methods are, to a large extent, still being developed within companies. By developing management systems and methods between companies, if necessary by the creation of joint ventures, shippers are given the chance to make a contribution to sustainable development in the road transport industry.

Shippers and transport companies: increased efficiency through cooperation

Management "between" companies

HOW POLITICIANS CAN HELP

Incentive schemes for best industry practices

Binding regulations, laws and standards can certainly contribute to the achievement of sustainable development. As of today, new emission standards for even cleaner vehicles have been defined for Western Europe in several steps up to the year 2009 (Euro III, IV and V). As far as possible, legislation should be determined well in advance to allow better investment planning, be globally harmonised to avoid distortions and, more importantly, be applied in a non-discriminatory way.

As regards sustainable development, much can also be achieved through the implementation of voluntary codes of conduct that highlight best industry practices in the field of environmental management. Such codes are effective, practical tools for communicating the principles and objectives of the United Nations' *Agenda 21* to transport operators, who are then able to adopt favoured and effective practices and to improve their economic and environmental performance. This is the concern of this *IRU Guide to Sustainable Development*.

Incentive schemes established by governments would help to accelerate both the penetration and the use of innovations, best industry practices and latest available technology. Transport operators who use innovations, and who make corresponding efforts and investments in new equipment and strategies, should be rewarded accordingly.

Vehicle tax differentiation oriented to emission standards, for example, is a measure that could give incentives for the rapid introduction of new vehicle generations into fleets and the fast renewal of vehicle fleets in use. Governments could also grant other user advantages to those transport companies that fulfil certain environmental standards or have, for example, successfully implemented an Environmental Management System (see Module 3) and received a certificate.

Fuel tax differentiation is also an appropriate means to give incentives for the rapid introduction and diffusion of environmentally friendlier fuels. New fuel qualities for "professional diesel", with lower excise duties and with less impact on the environment, have the advantage that they help the entire vehicle fleet to reduce emissions immediately. There is no waiting time for fleet renewal.

Better co-ordination of programmes

The IRU aims to bring the relevant actors to the table to share its views on what is needed to achieve sustainable development. It will seek to build a common view with all of its commercial and governmental partners, as is called for in *Agenda 21*, to build

Tax differentiation and user advantages to encourage sustainable transport practices



effective "action alliances" to meet the challenges of sustainable development. Today, the IRU Agenda for Sustainable Development is in good company with the initiatives of other international partners, governmental and non-governmental, such as the UNECE Programme of Joint Action on Transport and the Environment, the WHO Charter on Transport, Environment and Health, and the ICC Business Charter on Sustainable Development, to mention just a few. Also the EU Commission has created a strategy for the integration of environment and sustainable development into its transport policy.

However, efficient and effective co-ordination of the efforts made by various parties is often missing, hampering faster progress towards the achievement of sustainable development. Productive co-ordination is needed at interfaces between:

- governmental programmes at national and international levels (also between different sectors);
- governmental and industry programmes at national and international levels;
- industry programmes of the same industry sector at national and international levels;
- industry programmes of different industry sectors.

The purpose of improved co-ordination is to:

- avoid duplication of work;
- learn from each others' experiences;
- support each others' activities; and
- select the most appropriate programme and partner for various objectives.

Invest in road infrastructure

An appropriate policy that improves transport infrastructure and removes bottlenecks will result in the reduction of polluting emissions, an increase in road safety and higher fuel efficiency without penalising either the road transport industry or general economic development.

The sustainable mobility of persons and goods to which governments have committed themselves has not yet been translated into the infrastructure use and investments necessary to achieve it. The governments that endorsed the Rio Summit Declaration have a duty to undertake the necessary actions in order to realise the principles and global objectives of *Agenda 21*.

Free traffic flow, as opposed to stop-and-go traffic, dramatically reduces emissions and fuel consumption and also improves road safety. The average fuel consumption of a 40-tonne truck, for example, varies markedly with its possibilities for unobstructed traffic flow. Only two stops per kilometre in congested traffic leads to an increase of fuel consumption by a factor of three!

Lack of co-operation hampers faster progress

Two complementary actions must be pursued in order to achieve a better, sustainable traffic flow:

- improve the use of existing infrastructure; and
- invest in new infrastructure.

Revenues generated by road transport must be dedicated to the modernisation and maintenance of the road infrastructure, and cross-subsidies between modes must be avoided.

Failure to improve road infrastructure will not only hamper economic development and reduce the mobility of persons and goods. It will also place unnecessary burdens on the environment, thus countering the underlying principles of sustainable development.

Promote combined transport

Co-operation between different modes of transport can be seen as a chance to meet the increasing demand for transport by mobilising additional capacity. Measures for improving the efficiency of combined transport can be considered as an extra contribution to the achievement of sustainable development.

Today, however, according to the UN/ECE White Paper on Europe's railways, only shipments over a distance of more than 500 km can be carried out by combined transport in an economical and environmentally friendly way. Accordingly, 81% of all shipments by combined transport fall into this category. The potential for transfers from road to rail in this market segment, however, is extremely low: only 3-4% of Europe's total goods transport by road travels distances of more than 500 km. The IRU therefore also promotes the use of combined transport between 300 and 500 km, where the potential for its use is much higher.

Combined transport's strength is international traffic (only 27% of combined transport is national traffic). More than 70% of all consignments in combined transport use swap bodies or containers (trend increasing). If combined transport is to have a better future, therefore, attention must be focused on:

- increasing the efficiency of rail transport, particularly where there is a high market potential;
- promoting the use of swap bodies and containers in combined transport; and
- harmonising cost-effective horizontal loading/unloading techniques.

Horizontal loading/unloading techniques allow more flexible and cost-effective combined transport, with shuttle trains that stop every 200 km and that can load/unload up to 50 containers within 20 minutes ("corridor approach"). Huge terminals and vertical loading/unloading techniques, on the other hand, cause high handling costs for combined transport.

More road infrastructure investments are vital for sustainable development

Combined transport: an option, not a panacea



Top priority must be given to the improvement of the productivity and the cost-effectiveness of rail transport to allow combined transport to become more attractive and more sustainable. Today, rail transport in the US, for example, is no less than 18 times more productive than in the EU. Only fully liberalised national railways in Europe (such as in Sweden) show productivity clearly above the EU average. The high US freight railway productivity is reflected in low freight transport tariffs and a relatively strong market position. In the US, rail's market share is 40.9%; in the EU it is 14.4%. In fact, rail tariffs in the EU are almost four times those in the US. If the EU's high average rail freight tariffs were to drop to the Swedish level alone, EU shippers would save 5 billion Euro per year.

The key to higher productivity and cost-effectiveness is the liberalisation of railways. In the EU15 countries, Directive 91/440 foresees the separation of rail infrastructure management and train operations, and open access to the use of rail tracks in Europe. In other words, Directive 91/440 foresees the implementation of market mechanisms in the last domain in European transport where regulation rather than market forces still dominates. So far, unfortunately, only little progress has been made.

The IRU considers the improvement of rail and combined-transport services to be a useful option in meeting the future needs of goods transport in Europe – provided that its services are costeffective, reliable, timely, customer-oriented and flexible, and that access to rail infrastructure is ensured in a non-discriminatory way. Cost-effective rail transport and combined transport can help to reduce road congestion even if they will not solve the problem (more than 80 % of total road mileage is accounted for by private cars).

Road transport is not rail or combined transport's enemy. On the contrary, more than 1,000 road transport operators and forwarders are shareholders in the various national operators of combined transport that are organised in the UIRR. In many countries, road transport operators were the founders of the national combined-transport operating company. The IRU is a direct partner of UIRR and UIC, with whom the IRU has adopted many joint policy declarations for the development of combined transport in Europe.

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Rail liberalisation – the key to efficient combined and rail transport

Road and rail – partners in transport



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