Behaviour Based Safety (BBS): Commitment to Health and Safety of Drivers
ECTA signs European Road Safety Charter

On November 25th 2005, Mr. Luc Haesaerts, President of ECTA, officially signed in name of ECTA the European Road Safety Charter in presence of Mr. Stefan Tostmann, Head of Unit Road Safety at DG TREN of the European Commission.

ECTA commits to research, support and promote actively its commitment within its sphere of responsibility and activities so as to speed up progress in road safety.

In detail, ECTA will endeavour
• to promote within ECTA membership the implementation of the ECTA-EPCA-Cefic Guidelines on Best Practices, especially those focused on road safety and specifically on driver training based on BBS (Behaviour Based Safety) principles;
• to research within ECTA membership the specific requirements for chemical transports on ESP (Electronic Stability Programme) systems on new vehicles and the best available technologies to increase vehicle visibility.

Stefan Tostmann, Head of Unit Road Safety of the European Commission DG-TREN heartily welcomed ECTA’s decision to sign the European Road Safety Charter, given the “central role of road safety in the European Commission’s road policy.” The EU-commission has set the goal in 2001 to reduce road fatalities by 50% by 2010, which would save 25 000 lives.

The current 2005 figures show improvement but extra efforts are necessary to reach the goal of saving 25 000 lives. Mr. Tostmann resumed the message brought to EU citizens by the European Road Safety Charter: “Everybody can contribute something to achieve this goal. It is a self-binding commitment, not a Commission pressure tool. We truly welcome ECTA’s commitment, as it sets realistic goals, measurable objectives and a time-table.”

“Today’s signing of the Charter by ECTA is a very special event for us”, said Mr. Tostmann, “because ECTA represents the chemical transport industry and we need such big organisations to sign up, as they offer much greater visibility. All member companies of ECTA are invited to join and sign their own commitment to the Road Safety Charter.”

“Signing the European Road Safety Charter is a milestone for us!” stated Luc Haesaerts, chairman of ECTA and CEO of Haesaerts Intermodal. “ECTA is proud of bringing together the efforts of the chemical transport sector to road safety and in raising the awareness of our industries’ investments towards safe driving with our stakeholders.”
What is BBS?

BBS is a programme that aims to increase safety during road freight transport by positively influencing the behaviour of the drivers through observation, coaching and communication during individual training on the road.

**Two ECTA-EPCA-Cefic Guidelines** on BBS

- for Safe Driving of Road Freight Vehicles
- for the Safe Loading and Unloading of Road Freight Vehicles

In order to come to a more standardized and consistent approach on driver’s training across both industries, a Cefic-ECTA Working Group with representatives from chemical and transport companies made a review of existing methods of driver’s training and formulated best practices for the training of its drivers, henceforth called “BBS”. The BBS programme targets all European chemical companies fully integrated by the individual transport companies.

**How to implement BBS training for drivers?**

The transport organization handles BBS and its implementation process as an important part of its continuous improvement programme. To implement BBS includes the following steps:

- Company management develops a BBS implementation plan and a training programme based on the principles described in the ECTA-EPCA-Cefic Guidelines. This is followed by company wide communication of the BBS principles.
- BBS trainers are recruited (internally or externally e.g. from a training institute) and obtain a training for BBS trainers.
- BBS trainers provide individual training to drivers on the road.
- BBS trainers produce an assessment report for each trained driver, which is kept on file and/or may be incorporated into the carrier’s record storage system (database).
- Drivers obtain a copy of their assessment report and may consult the record filing system for their individual records (as required by law in some countries).
- Company keeps records of key performance indicators (KPIs) such as incident/accident statistics, fuel consumption, maintenance costs, insurance premiums and fines.
- Analysis of the evolution of the KPIs by the management will provide a useful tool in deciding on further steps toward continuous improvement of the BBS programme.
- Checking of implementation of BBS during tri-annual SQAS assessment of the carrier.

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ECTA CONFERENCE ON BBS
25 NOVEMBER 2005-KORTRIJK BELGIUM

BBS Training Methods for Drivers
Luc Haesaerts

Training the Trainers on „Safe and Fuel Efficient Driving“ (SAFED)
Roger Worth

Perceptions by Drivers - Motivational Aspects of BBS
Jacco Van Holten

Selection Process of Trainers in BBS
Klaus Wessing

Integration of BBS into Human Resources Management
Pierre-Alain Saclier

What a chemical Company expects from its Service Providers
Luc Renier

Improvements of Risk Profile by accurate Incident and Damage Registration
Ole Zeeman

Closing the Session
Cathy Demeestere

ECTA sponsors Safety Event at Trailer 2005

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Luc Haesaerts, President of ECTA, opened the conference on BBS by relating his own experience over the past few years. “I have noticed progress in the ambiance between the industry and the carriers when we talk about safety. Together we realise that the human factor is the key to more safety.” According to Mr. Haesaerts, CEO of Haesaerts Intermodal, safety-related behaviour changes can and have to be realised by everyone active in chemical transport services, from top-managers to administrative personnel, planning managers... and especially the drivers. “BBS (Behaviour Based Safety) has to be made accessible to all levels of your companies to create a company-wide awareness. When coping with safety issues, everyone in a company is on the same level. Therefore, keep it simple and clear.” He recommended showing positive examples and the advantages BBS brings to the company. “But also, find the pattern in the company’s data and pinpoint the main areas where progress has to be made. Broaden the circle and talk to your insurance, to your colleagues, to your customers - every individual is concerned.” To those worrying about extra costs related to more safety, Mr. Haesaerts simply pointed out: “It is the smallest possible premium you can pay!”

In his own company, BBS-training for drivers has already been implemented and the BBS training is delivered in the interactive one-to-one (driver-trainer) format, using the driver’s vehicle to make him feel comfortable. After half a day of observation on board, the instructor shares his observations with the driver during an informal lunch talk. Mr. Haesaerts finally recommended giving further positive feedback to the driver, for instance by sending a letter to his home, where his family can share his “pride of being addressed as a responsible and important part of his company”.

On the company’s management level, keeping records and data management are essential parts of the BBS framework. Periodic evaluation on the company level as well as on the individual level per driver, is an absolute “must”. “But never in an admonishing tone, no “raised finger”, – just let the driver know that what he does naturally right, can be improved”, he recommended. Last, but not least, transport companies should pro-actively include their customers in communication on BBS. Customers should be made aware of the valuable role played by BBS-conscious drivers and learn about the benefits and indirect savings achieved through improved safety.

When asked how the industry reacted to BBS implementation, Mr Haesaerts set the link to SQAS: “When our industry started implementing SQAS in the 90s, continuous improvement in safety management was mostly driven by demands from our customers. Since the creation of ECTA, the chemical transport industry has moved ahead and provided great strides forward by the formulation of Best Practices Guidelines in joint working groups with Cefic and EPCA. Nowadays, we take a proactive attitude through the unified intervention of ECTA and are managing safety fully as one of our industry’s objectives. The BBS programmes offer new opportunities in this field and industry managers should sign up and value BBS as a progress in quality and safety.”
Training the Trainers on „Safe and Fuel Efficient Driving“ (SAFED)

Roger Worth | Head of Logistics Research, Department for Transport, United Kingdom

Roger Worth reported on the SAFED project of the UK Department for Transport on training trainers for one-to-one training of drivers of lorries in general transport. The programme was set up to help the UK economy to stay competitive in times of rising fuel costs and to respond to society’s increasing demand of a sustainable distribution policy including safety and environmental issues. “But we also have to put commercial value on safety in order to promote freight best practise”, Mr. Worth outlined. After reviewing existing programmes, organising stakeholder workshops and setting up a draft guide, the UK Department for Transport published a Best Practice guide on SAFED training. 50,000 copies have been distributed and the guide was made available on the department’s website.

The training principles are simple and based on interactive learning in a one-to-one training scheme; one, or in some cases two, drivers are trained by one instructor during one full day, first in a theoretical interaction with video support followed by hands-on training during the driving of the truck. “We also used telematics to quantify the benefits and to teach companies how useful telematics can be, since only 10% of the UK lorries are equipped with such devices.” The final objective of the programme is for it to be self-sustaining in the long term. Public funding is only used to start the process by proving the programme’s usefulness, convincing the industry and training instructors and drivers. During the first year, 3,375 drivers were trained, mostly on their own vehicles.

Benefits were measured and are used to convince the companies to invest in SAFED-training. By learning how to change gears more effectively, each driver saves an average of £1,640 of fuel annually, reducing carbon emissions by 1,580 kg. Overall, the programme is expected to help reduce carbon emissions by 10 million kg in year 1, through more fuel efficient driving behaviour generated by this training method. Nevertheless, selling the programme to transport companies remains difficult, according to Mr. Worth, as they want to see evidence of the long-term benefits. Instructors therefore are also trained on selling the programme by using marketing tools such as case studies. The programme is to be extended to the training driver’s of vans. An alternative training format that has been trialled in the UK is a TDSL (truck driver training simulator), adding training for dangerous situations (liquid loads, difficult road conditions, tyre-blow, roll-over, etc.).

In closing, Mr. Worth underlined the importance of the one-to-one training format for general transport and informed the audience that such training is expected to be incorporated in the UK curriculum for the CPC (certificate of professional competence) for drivers, in accordance to the EU directive 2003/59/EC.

More details on SAFED: www.safed.org.uk

During the debate following the exposés, Mr. Worth suggested that ECTA could play an even more pro-active role in promoting BBS to their members: “Benchmarking across the industry by organizing progress reporting centrally to your organisation could be a tool to inform your individual members on where they stand in regards to BBS.”
Den Hartogh employs 450 drivers all over the EU and an additional 100 sub-contractors. Most of them are offered in-house training at the “Den Hartogh Training Institute”, including training on BBS combined with defensive driving. “If you want your driver to behave like a professional, you have to treat him as a professional,” Mr. Van Holten pointed out. Their risk reports and improvement suggestions have to be taken into account and responded to with prompt and appropriate action. In order to achieve improvement with BBS training, “it is extremely important that the management is serious about it,” said Van Holten. “Otherwise you only waste time and money.” The message has to be delivered by someone the drivers respect and look up to, such as the technical director, to convince them that BBS is not “just another training course” or “a commercial gimmick”. “We first have to open their minds”, Mr. Van Holten insisted. BBS at Den Hartogh is part of the general training for all company members, including top-management, planning department, accountants etc. But a one-off-training course is not enough to keep the employees from falling back into automatic behaviour. “You have to repeat the message continuously, communicate, listen, and give appropriate feedback.” Analysing the tachygraph data together with the driver and looking at his fuel consumption also is a helpful tool to make drivers proud of their performance. The in-house magazine “Inside” also helps exchanging points of view, formulating suggestions and giving feedback.

Den Hartogh’s Training Institute uses a questionnaire handed to the drivers after the training for evaluation: by asking feedback about the training, it is a continuous process to adjust the training and get the highest results out of it. His company elected to use well educated instructors, who are not drivers themselves and centralised all training in one site. Mr. Van Holten underlined the very positive impact the presence of a customer representative has when they are participating in a BBS training day. He also suggested inviting a customer or a supply chain manager on a one-day-drive to experience the real situation and the driver’s skills, and to let them communicate. Another good tip concerned the way to collect so called “near miss incidents” by asking a driver to expand on the “most dangerous situation” experienced during the week. This interaction opens their mind to recognise dangerous situations in the future.

When asked how Den Hartogh promotes BBS among the non-driving personnel, Mr. Van Holten explained: “Although the drivers represent the biggest risk group with respect to the safe transport of chemicals, in our company we feel that everyone is concerned by BBS. The other working places and environments also benefit from a safety conscious behaviour. Walking down a staircase, for instance, without using the handrail is a risk as well.” He concluded that in his experience “one should not put drivers ‘in a box’ as far as safety is concerned. The message on BBS is much stronger when including, let’s say, the financial director.” At Den Hartogh, for instance, also every car driver is trained on BBS principles.
Selection Process of Trainers in BBS

Klaus Wessing  |  COO at Talke Group, Germany

When reading the ECTA-EPCA-Cefic guidelines on what qualifications are required for BBS instructors, Klaus Wessing, Chief executive at Talke, had the feeling he was looking for “the son of Superman and Mother Theresa who has graduated in technical engineering and became a truck driver after his diplomatic course”.

Although driver-trainers are the key to BBS, drivers who meet all criteria to be trainers are very difficult to find.” In his company, he discovered that only 2% of his company’s drivers were initially able to be selected to become trainers, as most of other the drivers lacked the requested interpersonal skills. Talke Group encountered some implementation difficulties in coping with limited human resources and training skills of driver-trainers as well as a certain unwillingness of their subcontractor’s drivers to be trained by “Talke” drivers. The solution was to be found outside the company, explained Mr. Wessing: “You cannot outsource BBS, but you can outsource the driver’s training!” In cooperation with its selected training institute, the Professional Driving School Wilke, the Talke Group relaunched its BBS process by incorporating new technologies in the process. Wilke’s professional trainers offered exactly the profile Talke needed: experienced driving and technical skills, best safety records, social competence and experience in adult education. In order to set up a standardized reporting system, Talke and Wilke developed an integrated data-base on all relevant BBS aspects. The trainer receives complete information on the driver before starting. During the ride, he collects observational data on a MDA (Mobile Digital Assistant) following a standardized protocol: checking the preparation of the transport, the ride itself as well as the loading and unloading operations. Each driver receives his detailed BBS report and a BBS certificate. The integrated data collection approach helps the company to detect trends amongst the fleet and to update the training curriculum.

Mr. Wessing pointed out the example of tyre pressure: “When asking the driver, he confirms that he is checking regularly - but in fact, not frequently enough. And incorrect tyre pressure has a serious impact on fuel consumption.” Likewise, other fields of improvement are identified: “Often the drivers themselves come up with very good ideas on how to improve technical equipment.” Especially the planning unit should be in constant dialogue with the drivers to adapt processing and technical equipment.

Nevertheless, one should be aware that the “savings” part is very limited when the transport company has already invested earlier in proper training courses. “Most of what we call BBS training is observation with direct feedback to the driver.” And measurable side effects like less fuel consumption (which was already part of former eco driving trainings) shouldn’t replace the goal itself, Mr. Wessing warned: “In BBS, we focus on safety. Savings are a bonus, not the goal.”

Wessing was asked how he uses observational tools. “Today we interlink safety, consumption, ecological and other features, which had been treated separately beforehand. But we are very careful with our feedback. Drivers should not perceive the analysis as a performance rating tool, otherwise they start worrying about losing their job!”

Commenting on the relatively low rate of reporting from drivers on difficulties encountered at some unloading facilities, Mr. Wessing pointed out that this requires a real change of mindset: “We also need to teach our drivers to report on ‘near misses’.” because “the attitude ‘the customer is the king’ still prevails.” The reporting to the customer of such events can only be motivational for a driver if he notices that steps are made to improve the reported situation. Mr. Wessing welcomed more interactivity with customers through BBS loading and unloading.
“The driver is our ambassador!” outlined Mr. Pierre-Alain Saclier, commercial director at the French Norbert Dentressangle Group. His company highlights the importance of building up a responsible and confident relationship with their fleet drivers. “They are key players in safety.” This is not only true for his customers, such as production and supply chain managers, but also with the general public, Mr. Saclier believes. “The driver’s behaviour on the road determines the company’s image.” It has a direct impact on customers, public opinion and governmental or police action. “A positive image, for example, should help to reduce being stopped for police controls”, Mr. Saclier reported.

BBS has become a central part of the Human Resources management at Norbert Dentressangle, starting with the process of selection and recruitment where HR managers keep an eye on safety behaviour and awareness during driving tests and interviews. After their initial training including BBS, a continuous training on the job called “Plan Bonne Conduite” is followed up by individual audits done by the same instructor. The BBS training scheme is integrated into the official drivers’ permit called FCOS. Finally, each driver goes through a FCOS renewal every five years. The risk pyramid of the Groupe Norbert Dentressangle representing the different layers of action and incidents in the transport business shows clearly that motivation and behaviour are the basic key factors to safety. To reduce risks, drivers have to be trained on developing a proactive and responsible attitude. Promotion of drivers throughout the company at Norbert Dentressangle is very important. Management skills, attitudes and competences are developed and rewarded: from “formateur” driver he can move on to “moniteur” driver and “safety advisor”. The overall experience shows positive impact, Mr Saclier explained, “because our drivers appreciate being trained and they feel great support by the career development path that is possible in our company.”

As the audience wanted to hear more on the “Bonne Conduite” concept, Mr. Saclier explained that the design is meant to widen the BBS attitude to all of the company and to share benefits, through a monthly award system. Asked whether the incentive doesn’t distort the initial motivation, shifting from safety to rewards, Mr Saclier made it clear, that “the most important motivational element is social recognition within the company.” Offering real career opportunities to the drivers creates an overall company culture of “responsible management”.

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Integration of BBS into Human Resources Management

Pierre-Alain Saclier  I  Commercial Director at Norbert Dentressangle Group, France
Mr. Luc Renier offered some insight in the transport safety records of a big chemical company. “We started improving on equipment, procedures and processes in the late 80’s and continued with SQAS to drive down the number of incidents/accidents.” But the spectacular drop in incidents from 1994 to 1998 was followed by a period of new increase. “Obviously, having reached the goal of 90% reduction in incidents, we had reached some new barrier to overcome”, Mr. Renier reported. An analysis showed that the vast majority (62-100%) of incidents were behaviour-related. “Our next programme at Dow therefore was targeted at the human factor”, Mr. Renier explained, “We worked out an initiative called ‘BBS programme’ with representatives of the chemical industry and of the chemical land transport, generating a more standardized and consistent approach on driver’s training across both industries in the ECTA-EPCA-Cefic Guidelines on BBS.”

“But BBS - i.e. increased safety by positively influencing the behaviour through observation, coaching and communication, in the field of driving and loading/unloading - is not a one-time-programme! It’s a continuous effort and a combined feedback process.” It all starts on the top-management level: “I would like to emphasize that managers have to show the right ethics to be successful on behaviour issues and look for the right resources – even outside the company if necessary.” Performance indicators such as accident records, fuel consumption, maintenance, fines and damages may be used as tools, “but don’t get it wrong: they are not the goal”, he insisted.

Observation, measurements and record filing, root cause analysis and identifying structural trends – all these elements can trigger improvement and preventive actions. Mr. Renier pointed also at loading/unloading activities, where “incidents are less spectacular, but more frequent.”

“Every party has its own details to add”, he said, encouraging transport companies and their drivers to look into BBS loading and unloading procedures and to suggest improvements. “The transport companies are picking up on BBS loading/unloading, and in first instance target new, inexperienced drivers for a loading/unloading training. To organise such BBS loading/unloading training with a particular customer can be an excellent cooperative effort. Our industry needs the feedback from transport companies to improve safety on loading/unloading platforms”, Mr. Renier added, recommending to managers of transport companies to more often go and see the chemical companies on their premises, ideally in presence of a BBS instructor or their own drivers.

At last, he said, “don’t be afraid of the SQAS questions on BBS. Scores are very helpful for identifying areas of improvement, but they are not used to rate a carrier.”

Dr. Kubek, ECTA Board Member and director at LKW Walter International, confronted Mr. Renier with complaints he received from drivers who “did not always feel well treated at loading and unloading facilities and were left waiting without proper information.” Mr. Renier admitted that efforts still have to be done to create the right policy and culture at some premises, “in our common interest”. The brochure of “a Driver’s Day” published by ECTA provides valued suggestion in how interaction with drivers at premises can be improved.
With each incident, according to Ole Zeeman, representing AON eSolutions, companies should find answers to the 5 Ws (what, where, when, who, why) and complete their analysis by looking into consequences including calculations of the direct and indirect costs of the incident. “Many companies do not realise the real, overall impact of an incident”, he warned. “But what are the consequences for a company when a whole area, let’s say, like an airport, has to be closed down for a couple of hours by an incident as consequence of your activities? Can you expect business interruption claims from indirectly affected third parties?”

What lessons can be learned from such incidents? In first instance, most risk managers worry about insurance coverage and conformity with local legislation. Next, some of them also look into measuring and reducing the company’s total cost of risk (but this is in practice mainly limited to insurance related costs). Their objectives, Mr. Zeeman reported, are mainly determined by their stakeholders’ goals as well as by the market position and image of the company. When it comes to discussing risk costs, most risk managers think only about insurance costs instead of the total cost of all risks.

According to a recent Australian survey by AON on breakdowns of insurable cost of risk in the transport, trade and logistics business, 60% of insurable risk costs are risk transfer costs (premiums), 30% are risk retention costs and 10% are management costs. “But this is only the amount representing the visible part of the iceberg, while the invisible part of risk cost is many times larger (from 5 to 50 times) and in general not covered by insurance”, Mr. Zeeman explained. Those “invisible” risk costs disappear in general out of view in day-to-day costs of operations and includes, for the greater part, relatively minor product and material damage, site and building damage, equipment damage, production delays, overtime working labour etc. But the total sum of these invisible risk cost can be shocking! Only measurements and in-depth analysis of all factors (i.e. insurance costs, costs of deductibles, handling costs, protection and prevention investment, maintenance, tools and operation systems, quality controls, etc.) can deliver the right knowledge and information to support management in their decisions regarding investments into prevention programmes (such as BBS) and more operational efficiency in order to reduce the TOTAL cost of risk. Managers who are dedicated to achieve these safety goals and who can prove that their companies are able to improve these features, are in a much better position during negotiations with local authorities, insurance companies, etc.. Besides savings (based on Australian survey) on insurance premiums, reducing the number and severity of incidents by prevention will help them to save on their internal risk management costs. Also savings on handling costs are possible by improving the company’s overall efficiency. This adds up to a total annual saving potential on risk cost of 5-10%.

To “return risk into reward”, Mr. Zeeman advises companies to set up appropriate programmes and to develop registration, analysis and reporting tools to obtain better knowledge on their risk profile before selecting and implementing the prevention programmes and/or training such as delivered through BBS programmes (for more information, turn to www.aon.com or www.aonriskconsole.com). If most companies succeed in identifying risk in the areas of operations, including technical and human factors, with regard to their customer requirements and backup facilities, it does not always guarantee automatically safe situations. Our experience is that many companies fail to develop adequate calamity and continuity plans, Mr. Zeeman warned. “For example what happens if you lose your IT- system... or your site/location? How many hours of business breakdown can your company afford? Will your company survive this?”

Improvements of Risk Profile by accurate Incident and Damage Registration

Ole Zeeman | AON Group, Global insurance Brokers, The Netherlands

“When it comes to discussing risk costs, most risk managers think only about insurance costs instead of the total cost of all risks.”
In a cooperative effort, 18 member companies of ECTA joined forces to ensure that visitors at Trailer 2005, the main exhibition for trailer equipment, are made aware of their commitment to safety of drivers. For this purpose, two simulators were transferred for the first time out of Germany and placed at the central exhibition Rambla for the public. A rollover simulator and a seat belt simulator from BGF and DVR were active all day and the many visitors who tried the simulators were very impressed by the skills a driver must possess to drive safely and without incident. The promotion of better understanding and respect for the drivers’ job is one of the key projects of ECTA, and this ECTA Safety Event underlined this to the stakeholders of the chemical transport industry.

ECTA sponsors Safety Event at Trailer 2005

The sponsoring companies issued the statement that they, as well as the other ECTA member companies, support BBS. From this group alone, there will be 11,540 drivers trained under BBS principles in the upcoming three years! This figure clearly illustrates the size of this industry and the impact of the dedication of its companies to road safety.

ECTA thanks the following companies for their support
“WHY BECOME A MEMBER?”

ECTA Membership:
- Contributes to the recognition of the chemical transport industry and its business needs.
- Gives access to first hand information on what is happening and evolving in the transport and logistics of chemical goods in Europe.
- Allows participating in the pro-active development and application of “Best Practices” in the transport and logistics of chemical goods in Europe.
- Creates a unique networking opportunity in the sector.

For more information, please contact the ECTA offices by using the contact form at our website www.ecta.be or tel. +32 2 741 86 81

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“ECTA is signatory association to the EU Road Safety Charter”