ISA
for greater social responsibility and better competitiveness
There are many reasons why traffic on our roads should be safe and secure. These reasons range from the safe transport of children to and from school to transport purchasers or business managers seeing a competitive advantage in safe and secure goods transports – transports that turn a company into a good example of one that shows social responsibility.
That road safety is an important issue for the whole of society is something we can all agree on. It is equally clear that vehicle speed is of crucial importance for safe and secure journeys and transports. More than 100 lives could be saved each year if everyone kept to the speed limit. A lower average speed also offers other advantages, such as less fuel consumption and a reduction in carbon dioxide emissions.

Which support can I use?

There are effective tools and support available for keeping to the speed limit for whatever reason. One such support system is called ISA, which stands for Intelligent Speed Adaptation. It is a well-proven technology that tells drivers the maximum permitted speed on the road at hand. In various field trials, ISA has been shown to be a much appreciated support in helping drivers to keep from exceeding the legal speed limit. In the future it could be possible to make ISA even more intelligent so that weather conditions, traffic and other variables could be taken into consideration.
How can ISA work in my vehicle?

Present-day ISA systems basically comprise three parts: a GPS receiver, a minicomputer, and a support unit with a display that shows the permitted speed limit along with a warning signal if this is exceeded. The system requires very little space and can be easily fitted into your vehicle.

The ISA system uses GPS technology to register the vehicle speed and compare this with the speed permitted at your current location. The display on the instrument panel continuously shows the permitted speed limit for the road on which you are travelling. This speed data is obtained from a road database that contains information about all Swedish roads, and in certain cases also parts of the European road network. If you exceed the speed limit, some systems will issue a sound signal. In others the accelerator will vibrate or offer resistance.
How can ISA help me?

We are all responsible for our actions in traffic, such as respecting speed limits when driving. But even if we know that we should not drive too fast, it can be difficult to keep within the speed limit. ISA could offer the voluntary support you need to ensure that you do not find yourself in a situation that could lead to a serious accident. Speed is one of the most important factors in deciding the seriousness of a traffic accident. Seventy of 100 pedestrians that are hit by a car travelling at 50 km/h are killed. If the car is travelling at 30 km/h, 90 of 100 survive. Keeping to the speed limit is therefore particularly important in built-up areas, where cars, buses and lorries interact with pedestrians and cyclists.

In the quality assurance of transports for companies and organisations, some ISA systems can be supplemented with various types of logbook to facilitate monitoring that the company’s transport policy and other voluntary commitments are being followed.
The largest ISA trial in the world

ISA is a well-proven support system. Between 1999 and 2002 it was tested by 10 000 voluntary test drivers, both private and professional, in the world’s largest field trial. This took place in Umeå, Borlänge, Lidköping and Lund, and was run in co-operation between municipal authorities and the Swedish Road Administration (SRA).

Results show that ISA is of benefit, that travel times did not become longer, and most of the test drivers appreciated the support offered by the ISA system.

A brief summary of the results:

- The test drivers felt ISA helped them to become better drivers.
- Road safety improved significantly.
- As a result of less repeated braking and stopping, travel times remained unchanged (a slight improvement was even noted) despite lower top speeds.
- A more even driving speed helped reduce petrol consumption and consequently emissions.
- There was a very high level of acceptance for ISA in urban areas.
- Drivers believed that ISA was the best means, along with police surveillance, to solve road safety problems on 50 km/h streets in built-up areas compared to such physical measures as speed humps.

Tomas

Tomas Leijon tested supportive ISA in the Lidköping field trial. Tomas found he became a more environmentally-friendly and safe driver with ISA. “The active accelerator is tremendous.” I have reduced my petrol consumption by 1-2 decilitres per 10 kilometres! Now I keep within the speed limit when passing schools and do not miss any 30 km/h road signs.”

Sandra

Sandra Fäger was part of the group that tested informative ISA (sound and light signal) in Lidköping. Sandra found that ISA offered good support: “ISA helped me to resist the traffic rhythm and ensured I didn’t miss any signs.”

TEST DRIVER sound and light signal

TEST DRIVER active accelerator
What are the SRA and other players doing with ISA?

The socio-economic benefits in the form of fewer road injuries and fatalities and less environmental impact can quickly be shown if a large number of vehicles are equipped with ISA. The Government therefore has a clear role to play in stimulating market growth.

The SRA is to set a good example in these efforts and is to be active in disseminating knowledge and creating demand. In 2004, the SRA carried out the procurement of ISA, whereby the system was installed in its own vehicle fleet for voluntary, supportive and informative assistance. The SRA is also planning to use ISA, among other things, to quality assure its transport procurements.

Many companies and organisations see a benefit in ISA and are planning to install ISA, in part to support efforts to quality assure transports. Pledges and declarations of intent are to be signed and this work will be highlighted as a good example from the transport sector.

Take greater responsibility!

We all take responsibility to ensure that our business journeys and transports are carried out safely and with consideration to the environment. This responsibility saves lives, improves our environment, saves money and sends positive signals to outside parties. These are signals that create goodwill and as a result enhance the value of your corporate brand. ISA can offer support in these efforts and provide the conditions for success.

For your company, the use of ISA as a support in the quality assurance of transports could mean a vital competitive advantage within an increasingly tough market. A market that makes greater demands for safe, secure and environmentally-sound transports.
For further information about how ISA can help you, please visit the SRA website www.vv.se/isa