

**O**f the numerous safety issues surrounding any upstream project, road safety is of paramount importance. Roads to well sites are busy with traffic carrying equipment and staff, mingling with the growing number of vehicles used by local communities. As risks to road safety become greater, oil and gas companies must aim to eliminate all road traffic accidents, injuries and fatalities, according to Mike Watson, group road transport manager for Shell International Exploration and Production.

“Safety of our staff and our community is high on our list of priorities, and within that road safety is a key focus, along with asset integrity, contractor health and safety management and leadership,” he says.

To some, the perfect road safety record may seem beyond reach, but it is the ethos driving Shell’s Goal Zero Must Win initiative. This road safety programme is equally important in areas where infrastructure is less developed, and in any

location where the company operates.

“For staff, the focus is on the behavioural part,” explains Watson. “We get them to look at their own responsibilities in making a safer workplace. That means up-front planning, employee and contractor competency,

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leadership and supervision. For communities, especially if there is a less advanced infrastructure and lower awareness of road safety issues, we look closely at working with local authorities and local people on issues such as safety belt use, finding safe routes to schools and wearing headgear on motorbikes.”

For Luud Riedstra, global discipline lead for Logistics at Shell E&P, it is about individuals contributing to safety instead

of expecting the company to do everything. “The company, its staff and the local community work together around a common goal,” he says.

In some ways, the message about road safety is easy to convey. Everyone knows the devastating impact that road traffic

accidents can have on individuals and communities. From a commercial perspective, Shell is also concerned about damage to materials and equipment, as well as its reputation, but the human element is of prime importance.

“That is why we are big on behavioural aspects, focusing on simple requirements for employees and contractors,” says Watson. “We also focus on increasing the competency of drivers, as we do

Transport and logistics planning is key to the success of any upstream operation, and safety remains a vital component. Improving road safety for staff and local communities requires significant effort and investment, and can pay dividends not only for individuals, but also for the efficiency of business operations. **Mike Watson** and **Luud Riedstra**, Shell, tell Jim Banks.



throughout defensive driving training courses, and on other procedures involving vehicles, like loading or unloading.”

The aim of Goal Zero Must Win, which was launched two years ago, is to have zero fatalities, zero injuries and zero serious incidents.

“Given that there is an increase in vehicle usage globally, this initiative is very important, especially as it means there are a lot of new drivers and often little infrastructure to facilitate road transport,” Watson adds.

### Raising the bar

The progress of Goal Zero Must Win is already evident. In 2009, Shell saw only one road transport fatality in its upstream activities.

“That is one too many, although it is 50% down over the last two years,” notes Watson. “The number of incidents has fallen by over 30% across the company.”

Part of the strategy to reduce risk exposure is to evaluate if a journey is necessary or can be eliminated. If a journey is needed, the next question is whether road transport is the best option, or whether aircraft, ships or trains could be used instead. If a road journey is to be made, the emphasis is then on journey management, which has led Shell to use in-vehicle monitoring systems (IVMS).

“The result is better compliance with our requirements, and also better driver recognition,” says Watson. “We can see who is doing the best job and we can use that data for training purposes. We focus on the contractors providing services to our well sites, ensuring they are better versed in road safety and that there are better checks on their activities. There has been a substantial reduction in road traffic incidents, but we are not happy yet. There is a long way to go.”

Better data on road traffic incidents – and near misses – gives Shell a clearer picture of driver behaviour and overall road safety.

“We can monitor the use of seatbelts, speeding, the use of mobile phones while driving, and where we can mitigate risk,” he adds. “For example, we can use buses so that people are not using their own vehicles to get to the well sites. We lower

risk by reducing the amount of traffic in many communities.”

The greatest risk is in countries with lower or middle incomes, such as the Middle East, China, Latin America and Africa, and areas where the population is growing, which means there are more drivers on the road. For example, in China road traffic could double in the next ten years, according to Watson.

### Cost and commitment

No matter how successful a programme like Goal Zero Must Win is, one company – or even one industry – cannot act alone. “We must be proactive, not responsive, in improving road safety,” says Riedstra. “The industry must act with other institutions.”

Shell is actively involved in external partnerships, including the Global Road Safety Partnership (GRSP), initiated by the World Bank Group. Active in ten

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countries, GRSP involves over 200 organisations, each committed to addressing problems associated with road accidents, deaths and injuries.

“We have to rally the private sector and government organisations together,” says Watson. “In Russia, we are involved in the Sakhalin Island project, which is an upstream operation as well as a pipeline. About four years ago this was a major road safety challenge for Shell, but there has been major improvement.”

Around the Sakhalin project, measures to improve the use of safety belts have been notably successful. Seatbelt use has risen from around 5% to 80%. Hazard identification on the road has also improved significantly, with signage and speed bumps in place, and Shell has helped identify safe routes to school for children.

With such programmes, the issue of cost cannot be ignored; however, Watson and Riedstra emphasise that cost must be viewed in broad terms, with due consideration given to the value of human life and to the positive impact on business operations from better safety.

“These programmes do have a cost, but we see that the cost of good performance on safety leads to more cost-effective systems, such as IVMS, which monitors parameters such as harsh acceleration or braking among other things,” says Watson. “The system has a cost, but now we are seeing the benefits in terms of, for example, fuel efficiency, so there is a quick return. We see similar benefits on all projects.”

One project that could further improve both safety and efficiency is the Global Logistics Management System (GLMS) that Shell is rolling out across the world.

“Good safety performance leads to a cost-efficient organisation,” says Riedstra. “The GLMS is still being implemented across many regions, but it has already delivered benefits, especially in terms of tracking people and vehicle movements within a country. It helps us with better transport planning, and it is very powerful

in the area of personal transport.”

The future holds further investment, which will no doubt generate more efficiencies and improve the safety of transport and logistics.

“We’ve got smarter over the years, and we will continue to combine IVMS, journey management programmes, defensive driver training and the management of contractors and subcontractors,” says Watson. “We have to keep our eye on the ball when it comes to road safety. We have to keep awareness up and ensure that our staff, contractors and local communities are all involved.”

Riedstra agrees, urging that safety should be among the first consideration when a new project is developed, rather than an afterthought.

“It is our job to ensure that road safety and logistics are at the front end of any strategy for a new project,” he says. “Up-front planning and involvement are really important to minimise expense, travel requirements and the need for land transport. In regard to safety, the journey has just begun.” ■