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# Implementation of Driving and Journey Management System in Central Sumatra Operation, Indonesia

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### Abstract

According to WHO road crashes are the second leading cause of death globally among young people aged five to 29 and the third leading cause of death among people aged 30 to 44 years. Road crashes kill 1.2 million people every year and injure or disable as many as 50 million more. Without immediate action to improve road safety, it is estimated that road traffic deaths will increase by 80% in low and middle income countries.<sup>1)</sup>

Badan Pusat Statistik, the Indonesian Central Statistics Agency reported a significant increase of traffic accidents in Indonesia from 2003 to 2005. In 2005 an average of 31 people were killed on the road across Indonesia. The Indonesian Police Department as quoted by the Antara News Agency reported an average fatality of 45 people per day in 2006.<sup>2,3)</sup>

The increasing trend of road accidents and fatalities takes place in all the regions across Indonesia. The Riau News reported that in the province of Riau where Schlumberger Central Sumatra operates, the average road accident fatality was one person per day in 2007.<sup>4)</sup>

Various studies by different organizations were made in order to analyze the cause of this trend. In general the root causes were categorized into human factor, traffic, road conditions, vehicle and environment. Most studies concluded that human factors contribute to more than 90% of road accidents. According to Badan Pusat Statistik, the Indonesian Central Statistics Agency the total number of motor vehicles went up by 24% from 30.8 millions in 2004 to 38.2 millions in 2005. However, the total length of the roads went up only by 4.8% from 373,000 km to 391,000 km.<sup>2)</sup> Schlumberger recognizes that driving is the activity that presents the greatest exposure to a fatality in its operation. A higher efficiency is required for the driving environment in coming years. Our management also recognized the above condition as a challenge and an opportunity for improvement by implementing a step

change in Driving and Journey Management System. In our efforts faced with a huge challenge for crash-free driving, the desirability for centralized and real-time journey management (JM) becomes ever more evident. This was noted in the review of a water trailer rollover incident in our Duri operations in Jan 2007.

The step change in Journey and Driving Management System is a manifestation of Schlumberger's HSE Management System in driving. The step change implementation comprises of best practices from various implementations world wide that were adapted to local condition and some new initiatives developed locally in order to address People, Processes, Equipment and Technology. The implementation covers Driver recruitment, driver training and certification, competency matrix, vehicle and driver management, road risk analysis and risk control, Local Journey Management Plan, integrated dispatching process, use of integrated Journey and Driver Management software application, use of In Vehicle Monitoring and Tracking System with remote and active monitoring and tracking are among the elements that were addressed in the implementation. The step change implementation was carried out through the establishment of a Driving Center of Excellence. This paper focuses on the Journey and Driving Management System implemented at the Central Sumatra Operation.

### Introduction

The Central Sumatra Operation is known as one of Schlumberger's most difficult land operating locations in the world. To support its operation it requires more than 200 vehicles of various sizes and more than 400 drivers. With the ramping up of our operational activities the average annual total mileage increased from 4.4 million Km in 2006 to around 5 million Km in 2007, and it is expected to reach over 6 million Km in 2008 (Fig 1). The operation is centralized in two separate operating