



# Case: Finnish Road Administration

## Communication in cases of traffic incident

### FINNISH ROAD ADMINISTRATION IN SHORT

The Finnish Road Administration is responsible for the administration, maintenance and construction of roads, and traffic control. The FRA carries out practical road maintenance on a tendered basis through subcontractors and planning consultants.

Since the road network is a central part of the traffic system, the FRA cooperates extensively with stakeholders, customers and other partners. The FRA is responsible for road maintenance and maintains and develops highways as part of the traffic system.

### SOLUTION'S CUSTOMER BENEFITS

- Cost-efficiency
- New services for general use as specified by public authorities
- Advanced models of cooperation between various interest groups
- Up-to-date, accurate information available
- Efficient, swift and reliable responses to traffic incidents

### Efficient communications provide help in traffic accidents

In case of a traffic accident, the Finnish Road Administration's Traffic Management Centre receives an automatic message about the incident, usually via the information system of an Emergency Response Centre. This information can also be obtained directly from road users or the Finnish Road Administration's own monitoring system.

The Traffic Management Centre evaluates the situation and initiates the required incident management procedures. The Traffic Management Centre relays the information and response request to the contractor in charge of the maintenance of the road in question. The Traffic Management Centre informs communication service providers and the media of accidents using its own service channels, including the internet. Therefore, traffic reports can be made on, for instance, the radio. In the future, accident data may also be displayed on GPS devices in vehicles and as RSD notices for road users.

In areas with heavy traffic, the Traffic Management Centre is able to control traffic by means of variable speed limits and signs as well as using traffic lights, in accordance with the requirements of the particular incident. The Traffic Management Centre constantly receives and distributes information regarding the progress and conclusion of an incident during accident rescue operations and site clearing.

## Advanced operation models and processes

The causes of traffic incidents include accidents, road blockages and construction work. When incidents occur, it is crucial to inform all the necessary authorities about them. In cases of incident, the Finnish Road Administration initiates traffic control measures, starts corrective procedures in order to clear the incident, and informs road users about the matter.

Up-to-date, accurate information is used to avoid and alleviate the congestion caused by the incident, and to avert any further danger and accidents that often result from traffic incidents.

Efficient management of traffic incidents requires predetermined operating procedures and efficient communications between the various parties.

Digia and the Finnish Road Administration have enjoyed a good working relationship for more than a decade. Digia has provided its consulting expertise with regard to the development of various FRA services and projects, including the operating models and processes for cooperation with other authorities and parties involved with incident management.

## Digia's messaging service provides synergy benefits

Digia designed and implemented the SONJA messaging service for the FRA on the basis of its operational needs. This service controls, for instance, the distribution of the incident messages received by the FRA as well as the forwarding of incident and procedure data to the various cooperation partners.

The Sonic Software SonicMQ messaging server product forms the core of SONJA. Various tailored services have become more versatile following integration with SONJA: accordingly, the general usability of the new services and the resulting synergy benefits were the primary goals. With SONJA, the FRA can quickly address new communications needs and react to the rapidly changing environment.

More than a dozen integrations have been performed using SONJA. These include both internal and external integrations. The generation of new integrations is cost-efficient, since the services that have already been created in SONJA can be utilised in these new integrations. Integrations across organisational boundaries have been implemented in partnership with the Emergency Response Centre Administration, the Finnish Police and road construction contractors. YLE is one of the recipients of the information distributed by SONJA.

"In order to be able to function properly, the Traffic Management Centre requires reliable and quick communications during traffic incidents. The FRA has focused on getting the information from the site to the end users as quickly as possible," says Petri Rönneikkö, head of the FRA's Traffic Management Centre.

"The integration of traffic incidents provides a fine example of how messaging can be used to seamlessly support processes that cross organisational boundaries. The implemented integration did not require a great deal of work, since we could utilise the services previously created in SONJA. The time savings during traffic incident communications, achieved using this solution, are significant; we are also able to detect any possible errors and react to them extremely quickly," says Antti Vienamo, Project Manager at Digia.

## TECHNOLOGY USED IN THE SOLUTION

- Oracle 10g
- IAS
- Sonic Software MQ Messaging Service Server
- Sonic Software ESB
- Digia OpenMethod

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