

SAP Customer Success Story

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Mark Giesbrecht, Business Process Specialist – Risk Management, CN



AT A GLANCE

Company Name

CN, Canada
www.cn.ca

Industry

Railway Services

Key Challenges

- Minimize rail incidents/accidents
- Replace 11 legacy reporting systems with one central system
- Ensure reliable outcomes in a safety-critical environment

Implementation Partner

- TechniData AG (development)
- BearingPoint (implementation)

Solution and Services

- mySAP™ Product Lifecycle Management (SAP PLM)
- SAP® Environment, Health and Safety (SAP EH&S)
- mySAP™ ERP

Existing Environment

SAP® R/3® (now available as mySAP™ ERP)

Implementation Highlights

- Big-bang go-live on schedule
- Customizable functionality for a mission-critical environment

Key Benefits

- Incident/Accident log now fully integrated with all SAP systems
- Complete transparency for every aspect of EH&S events
- Incident and accident numbers decreasing



CN

IMPLEMENTATION OF THE SAP® ENVIRONMENT, HEALTH AND SAFETY (SAP EH&S) APPLICATION DRIVES COST-SAVING SAFETY IMPROVEMENTS

CN is one of North America’s largest railway operators, with over 21,400 U.S. and Canadian employees, 17,500 route-miles of track, and 2003 revenues of C\$5.9 billion (approximately US\$4.34 billion). The company operates a fleet of 1,500 locomotives and 61,500 rail cars in 8 Canadian provinces and 14 American states.

A 17,500-ROUTE-MILE RESPONSIBILITY

“Dealing with accidents within the rail industry is a complicated and involved process,” says Mark Giesbrecht, business process specialist – risk management, CN. “There’s the incident notification component, an injury and medical component, a train component, a hazmat [hazardous materials] component, a police component, third-party claims, Workers’ Compensation, and more. We had 11 different legacy systems handling all these components, none of which could communicate with the others. We decided that situation had to be remedied.”

It was this urgent situation that acted as the key driver behind CN’s implementation of the SAP® Environment, Health and Safety (SAP EH&S) application of mySAP™ Product Lifecycle Management (mySAP PLM) solution.

CN embarked on a three-phase SAP enterprise implementation, culminating in a Phase 3 go-live that included the environment, health, and safety capabilities of mySAP PLM.



SAP FIRST CHOICE AT CN

It required only a cursory investigation to make it clear there was nothing else on the market that would meet CN's needs in this area. Although the United States Federal Railroad Administration (FRA) offers a free desktop application called AIRG, this is exclusively a regulatory reporting tool. In Giesbrecht's opinion, "It has significant limitations; it's not an enterprise platform and has very few integration opportunities." As well, AIRG supports only the accident and injury components, leaving everything else of interest to the railroad unreported. In CN's judgment, it was woefully inadequate for the company's purposes. Other alternatives came up equally short.

ADDING FUNCTIONALITY

The implementation of SAP EH&S was not without its challenges. The Incident/Accident log of SAP EH&S had never been implemented in North America before, and only once before anywhere in the world. There was new ground to break for all concerned but the transparency and integration advantages made it worthwhile.

CN enlisted the help of SAP development partner TechniData AG to add a wide spectrum of functionality to the application. "TechniData added important functionality and they gave us an array of user exits so we could plug in our own programs," says Giesbrecht. "There's a variety of these user exits, but they all amount to the same thing: they allow customers to customize their SAP solutions to suit their needs."

In addition to the development activity, there was a large amount of conversion from all the legacy systems into the unified SAP EH&S system, plus a major change management component, the result of CN's decision to do a big-bang go-live. "So the usual suspects were all there," Giesbrecht wryly observes. "The team had never seen the application before; the implementation consultants,

BearingPoint (formerly KPMG Consulting), had never implemented it before; and nobody was familiar with the functionality. We were all learning as we went but we still made our dates."

SAP DELIVERS

To assist with the customization, SAP sent a member of its development team over to spend some time with CN's implementation team. The team explained their requirements, the implementation of each requirement was costed, and CN selected those it felt were most urgent. "Then we gave SAP a schedule," recalls Giesbrecht. "Some customers are flexible about go-live, but CN is not one of them. SAP delivered everything we needed in time to make our go-live."

THE INTEGRATED INCIDENT

"We're fully integrated now," says Giesbrecht. An incident is first called into the Rail Traffic Control Centre, which runs 24/7.

They key it into the SAP system, and once the dust settles and the facts are in, the on-site supervisor who managed the incident response goes back into the system and updates the information.

Each subsequent report builds on that initial information. If there are claims, the claims manager adds them to the log. If there are injuries, those are keyed in as well. If there was hazardous material associated with the incident, the

hazmat people add their information to the same log. Ultimately, a complete picture of the incident, all of its facets and ramifications, is developed. Any authorized individual in the company with an interest in that incident can access the log and obtain a comprehensive picture of it.

This is a vast improvement over the old system, where a comprehensive picture was almost impossible to develop, given the disconnected nature of the various reporting systems associated with it.

"The most noticeable result is that everyone is now working on a common platform, providing the integration and transparency we need."

Mark Giesbrecht, Business Process Specialist – Risk Management, CN

REGULATORY REPORTING MADE EASY

SAP provides a feature in the SAP EH&S application called WWI, the Windows Word Interface. “One of the most important business drivers behind the implementation of SAP EH&S was the ability to generate regulatory forms from data keyed in once,” recalls Giesbrecht. “All told, we generated nearly 20 forms. Why so many? Well, we report to eight different Workers’ Compensation Boards in the Canadian provinces where we operate. There’s a Human Resources Development Canada form, plus other Canadian requirements. In the U.S. there are three rail accident forms, two injury forms, and a hazmat form.”

But WWI makes it all easy. Each regulator wants certain sets of data reported in a specific way while CN wants to record it in the format it needs to meet its own requirements. WWI allows CN to code each field in each form to report the data from the Incident/Accident log in the regulator’s preferred format. “We rearrange the data to give it to the regulators in their accustomed form,” says Giesbrecht, “because they won’t accept it otherwise. It’s not as if you can change their mind.”

TRANSPARENCY DRIVES THE NUMBERS DOWN

What has SAP EH&S done for CN? “The most noticeable result,” says Giesbrecht, “is that everyone is now working on a common platform providing the transparency we need. For example, we have created a simple report that allows supervisors to enter a date range and a territory and quickly review all the injuries and accidents in their area of responsibility any time they want it. That used to take considerable time and effort.”

The actual dollar value of the integration and transparency benefits is difficult to quantify, but is significant. Since SAP EH&S was implemented at CN, its industry-leading safety figures have continued to improve.

How does something as ephemeral as data lead to the saving of lives, limbs, and property? Giesbrecht explains: “The more information you have about accidents and injuries, the better you can see and understand their causes and focus on the appropriate remedies. That brings incident numbers down and their costs down. SAP EH&S helps us to do that.”

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CN no longer has to clean and compile safety data to determine the leading cause of accidents and injuries. The data is now readily available allowing CN to fashion a timely response, implement it quickly, and reduce the numbers of injuries and accidents. The costs come down accordingly – thus providing a very telling case for the implementation of SAP EH&S in any remotely similar industrial environment.

THE FUTURE IS ENTERPRISE

CN’s next move is an upgrade to SAP R/3® Enterprise in Fall 2005. “I’m looking forward to it,” says Giesbrecht, “because it uses the SAP NetWeaver™ platform. I think introducing a Web front end will improve data entry.” In the meantime, CN has a few new railway acquisitions to integrate, most notably with the implementation of SAP R/3, mySAP PLM, and its SAP EH&S application. They, too, have incidents that need to be prevented.

