

## New engineering tool is a dream

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Hawker de Havilland, a wholly owned subsidiary of Boeing, is the first licensed user of a unique engineering tool, the Intelligent Risk Exchange (IREXTM) system.

Today, engineering projects, such as those in the aerospace industry, are often conducted globally with key tasks performed by project partners in different locations. The web-based IREXTM system enables team members working in different locations to communicate concurrently with each other.

Having successfully trialed the IREXTM system on the team involved in producing components for its new-generation aircraft, the Boeing 787 Dreamliner, Hawker de Havilland plans to use the tool in future project development.

Developed through the Cooperative Research Centre for Intelligent Manufacturing Systems (CRC-IMST) led by University of New South Wales researcher A/Professor Berman Kayis, the IREXTM system enables the risks associated with the project management of large-scale projects to be assessed--from design and development to construction and delivery.

"It is the first engineering project-management tool on the market that is tightly integrated with a lessons learned database," said A/Professor Kayis, acknowledging the important contribution of team member Dr Mingwei Zhou of CSIRO. "It is an intelligent system and incorporates user feedback, consistently improving its useful capacity."



The system incorporates international standards and has a common framework enabling it to be used across countries.

"We are in the process of changing our internal procedures enabling the use of the tool for project development," said Dr Rispler, Research Team Leader at Hawker de Havilland. "The tool allows us to analyse six different phases in a project, from the initial concept through to preliminary and detailed design phases, manufacturing, certification and life cycle support. It enables us to assess different types of risks such as technical, schedule and financial, amongst others."

Although currently only applicable to the aerospace industry, the system is generic and can be adapted for use across a variety of industries such as the naval industry, the automotive industry, and defence industry.

Source: University of New South Wales

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