LAA LTD LAVERTON RAAF BASE PRESENTATION
FEBRUARY 29 2008
OPTIMISATION IN SUPPLY NETWORK
Case Study: Supply Network Innovation at Orlando Wines
An experiment: Global tracking of wine shipments

The Topic: Optimisation in Supply Networks
CSIRO's Adaptive Supply Networks (ASN) team works with leading industry partners to develop advanced decision support technologies that are critical in networks that pursue adaptability and efficiency in the management of resources, goods, services and information. The team focuses on the business and human relationship issues in adaptive supply networks and on creating decision-making processes and software tools that can make adaptive supply networks a reality for Australian businesses.

Case Study: Supply Network Innovation at Orlando Wines
The CSIRO ASN team is working with Orlando Wines, a major Australian wine producer, to scope, develop and deploy innovative decision support technologies in OW's supply network. CSIRO researchers are working to understand OW's supply network, identify where value is created and potentially lost within the network, and improve decision-making and decision harmony throughout the network.One of our aims is to revolutionise the way in which winery intake - the movement of grapes, juice and wine into the winemaking processes of winery - is planned and managed, for the benefit of all stakeholders.

An experiment: Global tracking of Wine Shipments
We have begun a project to measure and document the variability of temperature within cartons of wine along international supply chains.
We have put together a network of colleagues around the world, from major wine-producing regions to centers of consumption. Colleagues will insert temperature-recording devices in cartons of wine at points of production (initially in Australia, Chile, and South Africa). The cartons will be shipped, initially, to the US, where we will retrieve the devices, which we have configured to record time and temperature at 2 hour intervals. We will correlate time with location by interpolating scanning data collected along each supply chain and, by this, try to understand causes of variations in temperature. In addition we shall document variations in transit times. We will then share the history of measurements with all supporters of the project.

DR SIMON DUNSTALL
Leader, Adaptive Supply Networks, CSIRO
Dr Simon Dunstall has a background in engineering and mathematics and works on planning and operations management in supply networks. Dr Simon Dunstall leads CSIRO's research in Adaptive Supply Networks (ASN) with CSIRO Mathematical & Information Sciences.

The ASN team partner with industry to design, build and deploy analysis methods, software tools and business processes to manage supply networks.
Dr Dunstall's current commercial focus is major supply-network initiatives in the wine, dairy and steel industries.

Dr Dunstall joined CSIRO immediately after completing his doctorate.
He played a major role in the formation of the ASN initiative in 2003. He has also been a leading researcher in several recent ASN partnerships, working closely with major companies such as Orlando Wines and BlueScope Steel.

Dr Dunstall's recent publications address;conventional machine scheduling research topics,supply-network planning,operations-management techniques.
Dr Dunstall holds a Bachelor of Engineering with Honours in Mechanical and Manufacturing, and Doctor of Philosophy in Engineering Science from the University of Melbourne, Melbourne, Victoria, Australia.