



BRITISH TUNNELLING SOCIETY

Thursday 19th June 2008 at 6.00pm

at

The Institution of Civil Engineers

One Great George Street, Westminster, London SW1P 3AA

Fire Engineered Solutions for Road Tunnels

Presented by: Tim Healey (Capita Symonds)

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Serious fires in alpine highway tunnels in the late 1990's and early years of this century have led to much research activity, a European Road Tunnel Safety Directive and a radical change in the consideration by Engineers and Operators of safety for tunnel users in the event of a fire.

Ventilation has traditionally been seen as the primary means of control of heat and smoke from a tunnel fire. However, recognition is now given to the benefit of active fire fighting systems for tunnel fire safety, with tunnels in France, Spain, the Netherlands, Austria and the Tyne Tunnel in the UK including this in the fire safety design. This is however seen as an "add-on" rather than integrated in to the tunnel design.

The provision of active fire fighting systems calls for Fire Engineered Solutions that balance the provision of Structural Fire Protection and Ventilation for a suppression controlled fire. This debate has implications for all involved in the design, construction or operation of tunnels.

Other innovative techniques for controlling fire have also been considered along with active traffic management systems to prevent traffic entering a tunnel once an incident has occurred.

The presentation will discuss how this new approach to fire engineering influences the civil engineering design and risk analysis for both new tunnels and refurbishment schemes. It will address the effect of fire and how active systems offer the opportunity to improve safety for tunnel users, protect the tunnel structure and equipment, whilst enhancing the safety of responding emergency services.

Tea and biscuits will be available at 5:30pm

In case of any query please contact; The Secretary, BTS Tel: 020 7665 2233

or e-mail: bts@ice.org.uk

or visit: <http://www.britishtunnelling.org>