PROGRAMME

MONDAY 25TH SEPTEMBER 1995

08.30 - 10.30  Registration

09.00 - 10.30  Coffee

10.30  FORMAL OPENING

Address of welcome on behalf of the IRSE by the President Mr E O Goddard BSc, MSc, CEng, FIEE, FIRSE, MCIT, Train Systems Engineer, London Underground Limited, UK.

Opening address by Mr R Horton, Chairman of Railtrack, U K.

10.45  KEYNOTE SESSION

CHAIRMAN - Mr K W Burrage, Westinghouse Signals Limited, U K.

Page 1  Headways - Signalling as the Success Factor.
Mr O Stalder, Swiss Federal Railways.

Page 12  The New Shinkansen Integrated System.
Messrs K Takemura, K Ouchi and Y Yoshikawa, East Japan Railway Company.

Page 18  The Legislative Framework for Railway Signalling and Control.
Mr R C Short, Health & Safety Executive, U K.

Page 29  Britain's Slow Road to Railway Privatisation.
Mr D R Gillan, Railway Industry Association, U K.

12.15  CLOSE OF SESSION AND LUNCH
13.15 SESSION 2 - LEGAL AND SAFETY

CHAIRMAN - Major C B Holden,
H M Railways Inspectorate, U K.

Page 1 Emerging Safety Standards for Railway Control System Software.
Mr S D Errington, Sema Group, U K.

Page 7 The Development and Design of a Safety Critical System; An Australian Perspective.
Mr C R Page, Westinghouse Brake & Signal Company(Australia) Limited.

Page 17 Is 'Proof of Safety', Safety Proved?
Mr S D Turner, London Underground Limited, U K.

Mr J Melmoth, Railtrack, U K.

14.30 CLOSE OF SESSION AND TEA

14.45 SESSION 3 - PERFORMANCE & RELIABILITY

CHAIRMAN - Mr J Waller,
GEC ALSTHOM Signalling Limited, U K.

Mr I K Mindel, Alcatel SEL AG, Germany.
Mr F Schedel, University of Karlsruhe, Germany.

Page 7 ICSS - A New Concept in Integrated Train Control.
Mr P Knowlton; Ventura Projects, Australia.
Mr L Orve, AT Signal System, Sweden.

Page 17 SSI/TBL - Intelligent Integration of Interlocking and Cab Signalling.
Mr R E B Bamard, GEC ALSTHOM Signalling Limited, U K.
Mr C Binard, GEC ALSTHOM ACEC Transport, Belgium.

Page 24 Field Trials Of Condition Monitoring System For Railway Signalling Equipment.
Mr S Fararooy, University of Birmingham, U K.
Mr J Allan, London Underground Limited, and University of Birmingham U K.

15.45 CLOSE OF SESSION AND TEA
16.15

SESSION 4 - EURO INTEGRATION

CHAIRMAN - Dr K U Dobler,
ABB Signal Group.

Page 1 Pilot Applications for the European Train Control System (ETCS).
Dr P Winter

Page 5 The Eurobalise Project.
Dr G Astengo, Ansaldo Transporti, Italy.

Page 9 Development Of The ATC System (Hungarian State Railways).
Mr L Mosoczi, Hungarian State Railways.

17.15

CLOSE OF SESSION

19.00-21.00

CHEESE AND WINE EVENING
COPHTHORNE TARA HOTEL, KENSINGTON.

TUESDAY 26TH SEPTEMBER 1995

09.00

SESSION 5 - DIALOGUE SESSION

Page 1 A Simulation Tool for Formal Design of Audio Frequency Track Circuits.
Mr R J Hill, University of Bath, U K.
Mr M L Berova, Kennedy and Donkin Transportation, U K.

Messrs Wang Xi-shi and Ning Bin.
Northern Jiaotong University, P R China.

Page 17 Hazard Identification for Computer-Based Systems.
Mr P Derbyshire, AEA Technology, U K.

Page 22 Power Points Control on South Yorkshire Supertram.
Mr P M Knowles, Henry Williams Electrical Limited, U K.

Page 28 Leaf Fall Protection Circuits.
Mr N J Evans, London Underground Limited, U K.

Page 36 Automatic Data Preparation on Belgian Railways.
Mr H S Menschaert, NMBS/SNCB, Belgium.

Page 42 The Use of CAD Tools for Designing and Configuring Electronic Interlocking.
Mr F Wacha, Siemens AG, Transportation Systems Group, Germany.
SESSION 5 - DIALOGUE SESSION (cont.)

Page 47 The ZUB Intermittent Automatic Train Control (ATC) System.
Mr N Geduhn, Siemens AG, Transportation Systems Group, Germany.

Page 55 System for Bi-Directional Data Communication Between Train and Ground Using Electronic Tags.
Messrs K Sato, M Kadowaki, J Kasei and F Lasnier, Railway Technical Research Institute, Hokkaido-JR, Mitsubishi Corp, Japan and Amtech Corp, USA.

Page 63 The Glasgow Underground Railway - Resignalling for the Next Century.
Messrs S J Clark and J Sneider, Acer Consultants Ltd and Strathclyde Passenger Transport Executive, U K.

Mr D N Bradley, Railtrack Major Projects Division, U K.

Page 83 The New Automatic Train Control System of NS Incorporates New Features and an Upgrade of the Existing Network.
Mr B Vedelaar, Ingenieurs bureau NS, The Netherlands.

Page Communication Based Signalling System - Moving Block Application at the São Paulo Metro.
Messrs M Demetrescu, G Pedroso and A C Merio, CWM Equipamentos S A, Brazil.

Page 94 Safety and Reliability Modelling of High Speed Railway Signalling Systems.
Messrs P Firpo, S Savio and G Scuitto, Università degli Studi di Genova, Italy.

Page 100 Development of Sophisticated Interlocking System for Advanced Train Control System, CARAT.
Mr N Nishibori, Railway Technical Research Institute
Mr H Nakamura, Nihon University
Mr K Munakata, Daido Signal Co Ltd, Japan.

Page 110 The Reliability Based Train Control and Management (TCAM) System of the Future.
Messrs W R Steinmetz and M J Hamlyn, Railway Technology Strategy Centre, Imperial College and Michael Hamlyn Associates, U K.
SESSION - 5 - DIALOQUE SESSION (cont).

Page 119  Probability and the Railway Signal Engineer.
Mr R C Short, Health and Safety Executive, U K.

Page 131  FIDARE: An Efficient Technique for Safe Computation.
Mr G Brès, GEC ALSTHOM Transport SIF, France.

Page 135  Benefits of Digital Signal Processing in Track to Train Transmission, up to the 100kHz.
Mr H S Heleputte, GEC ALSTHOM ACEC Transport, Belgium.

Page 141  Developing and Proving a Track Circuit to Exacting Standards for Safety and Reliability.
Messrs R J Roberts and M R Reeves, Westinghouse Signals Limited, U K.

Page 147  A Data Interchange for Railway Automation Tools.
Mr B Clements, GEC ALSTHOM Signalling Limited, U K.

Page 157  Computer -Aided Train Dispatching for Modern Operational Control Centres.

Mr T K Ho, Hong Kong University.
Messrs C J Goodman and J P Norton, University of Birmingham.

Mr L Y Lam, MTRC, Hong Kong.

12.00  CLOSE OF SESSION AND LUNCH
13.00  SESSION 6 - DESPATCHING & TRAFFIC MANAGEMENT

CHAIRMAN - Mr W Boddy,
GEC ALSTHOM Signalling Limited.

Page 1  Techniques for the Integration of Railway Control Functions.
Mr A St Johnston, Vaughan Systems Limited, U K.

Page 9  An Integrated Control and Supervisory System for Railway Networks.
Mr N T Rowden, Siemens Integra Verkehrstechnik, Switzerland.

Page 18 Control and Operating Centre "Betriebszentrale" (BZ)
Mr N Gunreben, Alcatel SEL Stuttgart, Germany.

Page 23 Radio Block System.
Mr. I. Frej, National Rail Administration, Sweden.

14.15  CLOSE OF SESSION AND TEA

14.30  SESSION 7 - PROJECT MANAGEMENT AND DESIGN AIDS

CHAIRMAN - Mr C A Porter,
London Underground Limited.

Page 1  ATC Replacement Project on the MTRC Hong Kong.
Mr F Fabbian, MTRC, Hong Kong.

Page 12  The Introduction of Modern Technology to an Existing Railway.
Mr K A Dodsworth, Bechtel International Inc, Greece.
Mr A J Simmons, London Underground Limited, U K.

Page 19  Railway Signalling as a Case Study in Safety through Determinism.
Mr A C Simpson,
Oxford University and Smith Institute, U K.

Page 27  Availability, Reliability and Fail-Safe Design for a Railway Signalling System.
Messrs Ning Bin, Zhao Ming and Wang Xi-shi,
Northern Jiaotong University, P R China.

15.45  CLOSE OF SESSION AND TEA
SESSION 8 - DATA TRANSFER

CHAIRMAN - Mr C Kessell,
British Rail Telecommunications.

Page 1 The Safety Critical Train Databus Project.
Dr G D Carter, Smith System Engineering, U K.

Page 7 Impact of Radio Frequency AVI Systems on Rail Transportation.
Messrs B Bourguet and B Watts, Alcatel Amtech, France.

Page 13 Northern Line 10 Station Development Works Project Communications Systems.
Mr M Thurston, London Underground Limited, U K.

Page 26 The Lineside Digital Pipe; Current Technology and Future Developments in Trackside Digital Transmission Technology
Mr M Ainger, B R Telecommunications Limited, U K.

Page 30 Safe Communication Using Open Networks.
Mr D Zeller, Alcatel SEL AG, Germany.

Page 38 Project Eirene; A New Radio System for the European Railways.
Messrs M Watkins and L J Giles, B R Telecommunications, U K.

CLOSE OF SESSION

BUFFET SUPPER, LONDON TRANSPORT MUSEUM, COVENT GARDEN.
WEDNESDAY 27TH SEPTEMBER 1995

09.00  SESSION 9 - TRAIN DETECTION

CHAIRMAN - Mr B MELLITT,
Railtrack.

Page 1  Integration Of Axle Counters in a Solid State Interlocking.
Mr J R Verschaeve, NMBS/SNCB, Belgium.

Page 18  Axle Counters - Self Correction Methods.
Mr A C Knight, Alcatel SEL, Germany.

Messrs D M Poole,
GEC ALSTHOM Signalling Limited, U K.

Page 27  Assessment of Locomotive and Signal System Electromagnetic Compatibility in Spoornet.
Messrs B M Steyn, H J Fourie and J F W Pretorius.
Spoornet, South Africa.
Mr J D van Wyk, Rand Africaans University, South Africa.

10.15  CLOSE OF SESSION AND COFFEE

10.45  SESSION 10 - INTERLOCKINGS

CHAIRMAN - Mr B Sterner,
Banverket of Sweden.

Page 1  Electronic Block EB L2000 - Block System for High Capacity Lines.
Mr M Steiner, Alcatel SEL, Germany.

Page 5  SIMIS; Failsafe Microcomputer System Application and Features.
Mr G Kopperschmidt,
Siemens Transportation Systems, Germany.

Page 12  SSI - Ten Years of Electronic Interlocking.
Messrs A H Cribbens and D H Newing.
British Rail Research, U K.

Mr A M Godber, British Rail Research, U K.

Page 27  Modular Line Management System - Symel.
Mr F van Deth, SNCF, France

Page 35  WESTRACE A Second Generation Electronic Interlocking.
HA Ryland, Westinghouse Signals UK.

12.00  CLOSE OF SESSION AND LUNCH
13.30

SESSION 11 - AUTOMATIC TRAIN PROTECTION

CHAIRMAN - Mr B D Heard,
British Rail Projects.

Page 1
New Generation of Microcomputer-Based
Operations Control Systems for High Speed Rail and
Guided Transportation as demonstrated by
TRANSRAPID.
Messrs R Knigge, H Eilers and V Freitag, Siemens AG,
Transportation Systems Group, Germany.

Page 5
Train Control Systems with Information and
Intelligence on Board and their Evaluations.
Messrs Y Hirao and Y Hasegawa,
Railway Technical Research Institute, Japan.
Mr H Nakamura, Nihon University, Japan.

Page 15
SACEM For Hong Kong MTRC.
Messrs B Guieu, G Basso and G Poitrasson-Rivière,
GEC ALTHOM Transport SIG, France.

Page 22
Distance and Speed Measurement for Trains.
Messrs P Sauer, B Noé and U Dräger,
Alcatel SEL AG, Germany.

14.45

CLOSE OF SESSION

14.45

CLOSING ADDRESS by Mr K W Burrage.
Westinghouse Signals Limited.