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Ali is currently the Director of R&D and Innovation at Vega Systems. He was the Director of Safety & Security and the Head of Advanced Technology Group at Atkins until recently. He is an expert in the systems assurance and safety, security and sustainability assessment/management methodologies and has a background in design and development of advanced control systems for critical industrial applications.

Ali has established an International reputation in the field of system safety assurance and has published many papers and lectured throughout the world from Europe to the Far-Middle East and North America. He developed the Seven-Stage risk assessment framework which became the code of practice underpinning the UK Railway Industry's Yellow Book now accepted as the Railway's guide to System Safety Management. Ali project managed the safety analysis and assessment of European Rail Traffic Management System's ETCS for the EU Commission under the ESROG project. A large scale quantitative risk model was developed to support the forecasting of European Train Control System's safety and environmental performance. This was a fast-track, pan European and large scale project which was accomplished according to the plan in six months and delivered in March 2000. As a result the EU Commission invited him to support the Harmonisation of ERTMS Rules (HEROE) project which was in difficulty. Ali proposed an advanced framework for qualitative and quantitative assessment of operational rules and became project manager for HEROE Quantitative Rule Assessment and assurance which was accomplished to an agreed deadline in December 2000. Within Atkins Ali project managed the development of an advanced and systematic Safety & Risk Management System for EU Commission under SAMRail project, in support of the pan European Railway Safety Directive. This framework is now adopted under EU funded SafeRelNet pan European Research Network of Excellence for industry.

Ali led a research team at Railtrack and is the architect of two large industry level safety, environmental and commercial risk forecasting models whilst he was the Risk Analysis and Assessment Manager at Railtrack during 1994-2001. One of these relates to the entire UK railway's infrastructure and Operations and the other was developed specifically for the £6B WCML Modernisation Programme where it was the first CENELEC TR-50451 compliant approach to systematically setting Safety Requirements.

Ali has a track record of developing a suite of strategic problem resolution and analysis techniques including the innovation and development of Weighted Factors Analysis (WeFA). He has developed training courses on risk, safety, security and implementation of CENELEC standards delivered in Germany, Holland, Italy, France, Belgium, Middle East, China, Taiwan and Japan. He has published many papers on the assurance and assessment technologies with wide ranging scope from programmable systems, competence assurance to design and assessment of operational rules. He has a track record in design, development of advanced technology and an extensive record of success in challenging R&D programmes.

He contributed significant original material to CENELEC WGA10 Report TR-50451 on Allocation of Safety Integrity. He currently represents UK on WG8 as team-leader for writing guidance on assessment and modelling for CENELEC's EN50126 standard and WGA2-3 as team leader/author for Cross-acceptance guidance (TR50506-1) for EN50129. Ali is appointed by CENELEC as convenor of WGA11 for review of EN50128 Software Safety Standard and a Steering Group member in WG14, the recently formed group tasked with a fundamental restructuring of key CENELEC safety standards. He is a Visiting Professor at London City University's Centre for Systems and Control in the School of Engineering & Mathematics and Beijing Jiaotong University. He was appointed as a Fellow of Royal Society of Arts (FRSA) during late 2004 and is a member of the Security Institute.

He has previously been Chairman of Railtrack's System Review Panel responsible for national product and system approvals, Head of Systems and Safety department and a member of the Yellow Book Steering Group and managed research, development, design and commissioning of computer control systems for safety critical industrial process plants and public utilities sector.