



# Ivan Hurst

## Head of Commercial Management Services

MCInstCES

### CURRENT POSITION

Head of Commercial Management Services

### MEMBERSHIPS

MCInstCES Member of Chartered Institution of Civil Engineering Surveyors,

Member Railway Study Association,

Member, Institute of Value Management

Ivan is a Senior Commercial Manager in the Rail / Civil Engineering section of the construction industry with a career spanning 4 decades. Specialties include rail systems and roads and bridges, in approximately equal proportions with respect to time.

During this time Ivan has lead many teams of various sizes. Some of the teams have been multifunctional incorporating, in one instance, estimating, procurement, quantity surveyors, planning, contract and claims, finance and office management.

Specialising in cost and commercial management of projects at pre and post contract stages, both for the Client and the Contractor, has given Ivan a holistic and well balanced view of the commercial & cost management functions found within the construction industry. Ivan has also been involved with Risk, Value, and Cultural Change Management, Business Improvement and Building Information Management.

Ivan has knowledge of a wide range of forms of contract. He has a good understanding of the engineering, construction methods, cost drivers, and resources required to carry out both rail system works and roads and bridges works.

Ivan has provided commercial management on several significant road improvement schemes and new bypasses, including A12, A45 and two North Circular Road jobs. All the schemes included bridges and other structures. Ivan has also completed six jacked bridges under railway lines at Stonebridge Park.

More recently Ivan has provided commercial management on several rail schemes ranging from individual platform extensions and new stations, through station refurbishment and track renewals to significant programmes of work including Crossrail, London Underground upgrades and Network Rail renewals. Ivan has also provided opinions, whole network cost models and strategy advice to London Underground, Gate Assurance to TfL, cost audit to Network Rail, and Management solutions to Metronet.

All the stages of a project have been encountered by Ivan during his career, from pre-feasibility of £3.5bn schemes such as the Great Western Renaissance; construction phase, such as the £16bn Crossrail project, through to numerous road and rail final account negotiations and settlements.

Specific areas of experience include financial planning and cost control, project reporting (up to board level) and contract advisory

services. Advisory services include dispute resolution, audit, chair of enquiries and committees, opinions, and external expert for project / programme reviews. Ivan is also a trained practitioner of Value Management and Risk Management.

Ivan has experience of interfacing with a wide range of people including (in no particular order) Ministers of State, Senior Government and military officials, clients, Presidents and Chairs of professional bodies, CEOs, directors, architects, designers, cost consultants, site managers, site operatives, and contractors.

## Experience

### **BIM**

Ivan started to introduce BIM to Hyder's bids about 18 months ago on our London Bridge station Grip 4 tender. Since then Ivan has been involved at a strategic level with the production of 5D BIM models to enhance tenders, including a fully functioning 5D BIM model for the Grip 5-8 London Bridge Station. This was based on a VICO platform to provide the integration and collaboration of multiple 3D models constructed on various propriety platforms including Bentley, Autodesk, and ArchiCAD. The 5D cost element identified an £8m error in the budget and the clash detection showed a pile going through the Jubilee Line running tunnel. The tender 5D BIM model helped Hyder and Costain win the London Bridge Station Project.

Ivan was also co-writer and advisor on the BIM strategy paper put to Hyder's board.

Ivan is part of an expert users group and the VICO users group. He is an active participant in both.

Following the mobilisation of the London Bridge Station Project, Ivan was the BIM Manager for Hyder, during the formation period, prior to the commencement of design. Ivan presented to various bodies within the project management, and held workshops to demonstrate the change in process and the necessity of collaborative working to achieve the improvements and savings that are available. Part of the difficulty encountered was the varying interpretations of what BIM meant, ranging from a 3D model through to a total information vehicle for use through the whole life of the asset.

### **Cultural Change Management**

Ivan has been an integral part of numerous Change Management Programmes. Ivan was Great Western Zone member of the multi million pound Railtrack RAMP initiative which was about changing the whole way the company operated, developing an asset register and the knowledge based tools for correct decisions.

Ivan also led the Grant Rail Business Improvement Programme and the Railtrack 'improve use of Value Management and Risk Management' initiative on the Great Western Zone. The latter directly led to the first Strategic Value Management 2 day workshop which saved £500m of a £3.5bn Great Western Renaissance Programme. Ivan was also the Business Improvement Manager for Infracore JNP for the Alliance Track Programme. The ATP was a collaboration of a number of contractors and Infracore JNP, then part of LU.

Ivan was part of the commission engaged to 'Re-engineer Metronet' following the PPP arbiter's decision

Ivan is a keen proponent of Soft Systems Methodologies and adopts an holistic approach to the activities he becomes involved with. He is proactive and solution orientated.

# Project Experience

## **TfL**

### **Gateway Assurance**

Ivan led the external expert team engaged by TfL's IPMO to review the London Underground Track Renewal Programme. The programme value was in excess of £600m. Strategy, Technical, Programme and Governance were among the lines of enquiry of the review. The team met and interviewed senior staff within London Underground before producing a report of their findings. The report was discussed at a meeting of the main stakeholders including two members of TfL Independent Investment Programme Advisory Group (IIPAG). IIPAG supported the report's recommendation of carrying out more planned renewals work to mitigate track condition deterioration. The report was adopted by the TfL board.

### **Network Rail**

#### **Manchester Victoria Station, Northampton Station cost plans, and various platform extension estimates.**

Ivan led teams producing cost plans and estimates for proposed developments at Manchester Victoria and Northampton Stations, and various platform extensions across the network.

### **Crossrail – Crossrail**

#### **Power and Rail Systems Estimator for Programme Controls Advisor**

Crossrail is the new high frequency, convenient and accessible railway for London and the South East. From 2017 Crossrail will travel from Maidenhead and Heathrow in the west to Shenfield and Abbey Wood in the east via new twin tunnels under central London. It will link Heathrow Airport, the West End, the City of London and Canary Wharf. Ivan was Power and Rail Systems Estimator for Programme Controls. The role also included estimating support for CPMs and for Change Control. The role included a significant amount of interface management including internal departments, Crossrail Central, Network Rail, DLR and National Grid. Ivan led a small team with the RIB Software evaluation and configuration project which resulted in the submission of a Recommendation and Business Case to the Crossrail Board.

### **'The Shard of Glass' – London Bridge Quarter**

#### **Railway Expert Cost Advisor**

The Shard of Glass or London Bridge Tower is part of the London Bridge Quarter redevelopment. The iconic tower will be Europe's tallest mixed-use building. It is being built in conjunction with Network Rail as part of the OSD and redevelopment of London Bridge Station. Ivan acted as advisor to the client in respect of the railway works involved in the redevelopment of the London Bridge Station. The client had already appointed the architect and cost consultant but wanted additional, expert railway specific, advice regarding the estimate for railway works. This involved working closely with the architect, cost consultant, developer, Network Rail and client in a delicate situation requiring tact and diplomacy. The architect for 'The Shard of Glass' is the world renowned Italian architect Renzo Piano. His team are understandably very protective of his concept.

### **Metronet Rail Restructure – Transport for London / London Underground**

#### **Senior Cost Manager**

Ivan was part of a multidiscipline team assisting Metronet Rail in establishing the 'way forward' company structure whilst in PPP Administration prior to the transfer to Transport for London. Following interviews with senior Metronet Management and analysis of the then current systems, Ivan created an Asset based management system centred around interventions and multilayered CBS/WBS/OBS providing a vertically integrated, scalable solution that incorporated cross references to London Underground's Estimating Breakdown Structure.

### **King's Cross Station Redevelopment Programme – Network Rail**

#### **Senior Cost Manager**

Ivan was part of the procurement team for King's Cross Station Redevelopment Programme and led the team responsible for the Train Shed roof replacement, Platform alterations and footbridge demolition. The Train Shed roof replacement is a complicated operation involving moving gantries and crash deck whilst keeping the station open. Following return of tenders the team evaluated the returns and assessed the completeness and the underlying risks associated with them. Ivan negotiated with the Tenderers' through to eventual contract award.

### **Southern Track Renewals – Network Rail**

#### **Senior Cost Manager**

Setting up and leading a Network Rail audit of an IMT Track Renewals contractor for Southern and East Anglia to validate target cost contract final accounts.

### **Track Renewals Strategic Review Phase 4 - London Underground**

### **Senior Cost Manager**

Ivan was part of a multidiscipline, multi-consultancy team reviewing, and advising London Underground, on how to best carry out track renewals across the network, in the long term, over the next 30 years, across all lines. The review leader reported directly to the London Underground Managing Director. Ivan developed a complex cost model based on resources utilised to carry out works using differing methods. The cost model included options for NPV calculations, various funding streams and different write down periods for plant, equipment, and trains. Outputs varied according to method and possession / access times available. The cost model was also linked to the P3 programmes for each line.

### **Station Modernisation and Refurbishment Programme Competent Contractor 'Should Cost' Estimate for PPP Review Period 1 - London Underground**

#### **Senior Cost Manager**

Ivan provided specialist advice and assistance within the team, to design, develop and utilise a complex Cost Prediction Model to provide support to London Underground in respect of their preparation for the PPP Arbitrator review of two Station Modernisation and Refurbishment Programmes, PPP Review Period 1. Modernisation and Refurbishment costs for sample stations were estimated in detail and the results used to predict the cost of the remaining stations using complex deterministic and probabilistic algorithms based on the station parameters, across the whole network. Ivan also lead the estimating team and co-ordinated the approach to ensure consistency and integration with the Cost Prediction Model.

### **Barking Station Redevelopment – London Underground**

#### **Senior Cost Manager**

Developing a feasibility level cost plan for a specified rights potential station development involving a number of options. This also included developing additional, enhanced value alternative options.

### **West Ham Reversing Facility – London Underground**

#### **Senior Cost Manager**

Developing a feasibility level cost plan for a potential development creating a turn back facility required by Crossrail works.

### **East Anglia Track Renewals – Network Rail**

#### **Senior Cost Manager**

Commercial management of Network Rail's Track Renewals for the East Anglia Integrated Management Team. The role included general commercial duties together with improving processes and data management, cost reporting, Job Target Cost and Final Account negotiation and agreement. Ivan also lead the initiative to improve the working relationships of the parties and provide the required integration.

### **JNP Track Renewals – InfracoreJNP and latterly Tube Lines**

#### **Commercial Manager and as the Business Improvement and Risk Manager**

Ivan was part of an integrated management team in the client's offices, as head of departments responsible for commercial, risk, office administration, accountancy, project & cost control and estimating functions on the recently won, seven year project for track renewal and reconditioning in both open and tube sections under the Tube Lines PPP contract. Ivan had previously worked within the Alliance Track Programme (InfracoreJNP) as both ETR Commercial Manager and as the Business Improvement and Risk Manager.

### **Great Western Track Renewals     Railtrack Plc, Major Projects Division, latterly Project Delivery, Great Western**

#### **Project Controller, renamed to Project Commercial Manager (Track Renewals)**

#### **Also, Commercial Services Manager, Business Implementation Manager, and Risk and Change Management Improvement**

Ivan was employed as Project Controller for the track renewals programme in Great Western Zone, responsible to the Senior Project Manager as professional head within the teams for the commercial, contractual, claims and planning aspects of the programme with the assistance of a team of Commercial Assistants and Planning Engineers. Risk management and value management responsibilities. Ivan recognised various deficiencies in the application and understanding of some of the control processes and set targets for progressive movement towards full compliance. He also set out to standardise the various processes across the teams.

The portfolio value grew to an annual turnover of c. £50m and the teams and Ivan were responsible for past, current and (then) future works with a cumulative value in excess of £120m.

Ivan's role also included Estimating manager, Zone Value Management Coordinator, Risk Manager and professional head for the Project Commercial Managers and Planning Engineers. Ivan instigated changes to the local procedures and streamlined the ITT process. He reduced the reporting required for Estimates in conjunction with the national Estimating manager. As Zone Value Management Coordinator

he advised upon and shaped the strategic VM study for GWR. A two-day event with c. 50 senior attendees from across the industry to help set the foundations for this c. £3,500m project. A first of its kind for Railtrack. Ivan also approved ITT, authority to Contract, sat on the Zone Claims Panel and attended a number of national committees whilst deputising for the Contract & Supply Manager.

Ivan was asked to be the Zone's representative on the Railtrack Asset Management Programme (RAMP) team, based at Kings Cross. The title of Business Implementation Manager was given for what became a multiple role. Representing the Zone and its interests. Expressing the Business needs, in conjunction with the other BIMs, to the programme development teams. Promoting the programme and MIMS, being the sole conduit for communication and change management for RAMP on the Zone. RAMP was an ambitious programme with a core vision of changing the way Railtrack and its Contractors carry out their respective businesses and how they interact. The time scales were very tight and the budget reflected the enormity of the task. The 'Advanced Value Management' training included elements of facilitation, presentation and change management, all of which proved useful.

Ivan was asked to take on the challenge of improving Risk Management and RMS usage, Contingency Management and Change Control within both Project Delivery and Business Development, which had a combined annual investment of £150m. To be successful and long lasting this required cultural change using Soft Systems Methodology. He was also involved in reviewing and advising on claims, and negotiating and drafting an Alliance agreement valued at c. £50m.