INDUSTRY CLASSIFICATION (Q) - Railway Engineering

AGE AT INTERVIEW 34

ELECTION OR TRANSFER TO: Member

FIRST DEGREE MA (2:1 Hons.) from Cambridge Univ. in Engineering, 1989.

SUBSEQUENT DEGREES AND OTHER QUALIFICATIONS - None

EXPERIENCE PRIOR TO PRESENT POSITION
Adtranz, 1990-1991 – Technician, Structures & Mechanical Design; 1991-1996 – Structures Engineer.

PRESENT POSITION
Adtranz, 1996-present – Dynamics Engineer.

Tasks include:
- Carrying out computer-based dynamic analysis of new rail vehicles
- Advising on choice of suspension components, specification and testing
- Providing reports for Railtrack scrutiny process

STAFF REPORTING -

PROFESSIONAL	0
TECHNICAL	0
MANUAL	0
OTHER	0

INTERVIEWERS' COMMENTS

A Demonstrate knowledge and understanding of engineering principles

Key elements of competence	Examples of meeting A
maintains a sound theoretical approach to technology applies a creative approach to problem solving introduction/exploitation of emerging technologies promotes innovation and advances in technology	Clearly an expert in bogie design and operation. Structural and dynamic analysis of bogie. Use of VAMPIRE for FE analysis and development of "clear route" models.

B Demonstrate practical application of engineering knowledge and expertise

Key elements of competence	Examples of meeting B
takes initiative to identify potential projects and opportunities participates in or specifies research, design and development plans and implements solutions evaluates solutions identifies what has been learnt from the activity	New design for Hong Kong MTC. Successful dynamic performance of a number of Adtranz bogie designs and suspension applications. Expert in his field.

C Leadership and management

Key elements of competence	Examples of meeting C
experience of effective project planning and implementation	Only in his field of expertise but can demonstrate application.

manages and plans budgets, tasks, people and/or other resources ensures team members have appropriate skills contribution to continuous improvement via quality management	Self management and working within the confines of other project requirements. Has managed trainees, contractors and other dynamicists when required. Has developed improved procedures for technical work.

D Communication and inter-personal skills

Key elements of competence	Examples of meeting D
demonstrates oral communication skills displays written communication skills has the ability to present and discuss ideas and plans ability in team building and negotiating activities	Good professional review report. Good communication skills. Experience of giving presentations and training modules.

E Professional conduct

Key elements of competence	Examples of meeting E
compliance with codes and rules of conduct of the profession	
application and management of safe systems of work	Very thorough use of systems in safety for design.
familiar with relevant legislation especially health, safety, risk and the environment	Good views on developing himself and helping others (especially disadvantaged groups)
displays a commitment to undertake continuing professional development, including a personal Development Action Plan	Good Development Action Plan.
demonstrates involvement with the IMechE, other professional engineering Institutions, schools, colleges or local other community activities	Presented Young Members' paper.

COMPETENCES AWARDED

A	B	C	D	E
4	3	2	3	3
3	4	3	3	3

PANEL RECOMMENDATION
Elect to Member

MEMBERSHIP COMMITTEE DECISION