



TRAINING STANDARDS COUNCIL

INSPECTION REPORT MAY 2000

British Gas Services

SUMMARY

British Gas Services provides training for its new staff in maintenance or installation engineering. The training, assessment and resources are outstanding. The company clearly supports equal opportunities but does not adequately promote work-based training opportunities to under-represented groups. Trainee support is well structured with a wide range of support services. The training is well managed in both on- and off-the-job locations. All training staff have clearly defined roles. The management strategy for the assessment of key skills is not yet fully developed. Quality assurance of the programme is satisfactory with effective monitoring of the apprentices progress. There are insufficient formal procedures for the sharing of good practice and the overall development of the national training scheme.

GRADES

OCCUPATIONAL AREAS	GRADE
Construction	1

GENERIC AREAS	GRADE
Equal opportunities	3
Trainee support	2
Management of training	2
Quality assurance	3

KEY STRENGTHS

- ◆ well-planned training and assessment
- ◆ systematic monitoring progress
- ◆ high retention and achievement rates
- ◆ good equal opportunities practice in apprentice selection
- ◆ comprehensive induction process
- ◆ training strategy well-supported by staff

KEY WEAKNESSES

- ◆ inadequate key skills strategy
- ◆ insufficient staff training in equal opportunities
- ◆ insufficient sharing of good practice
- ◆ inadequate programme review

INTRODUCTION

1. British Gas Services is a wholly owned subsidiary of Centrica plc, having a national headquarters in Staines, six area service centres and a national training centre in Leeds. The company employs approximately 8,000 people, of whom 5,000 are service engineers. The primary role of the company is to install and maintain gas central heating systems. During 1998, approximately 120,000 central-heating installations were completed. In the course of a year the service engineers complete approximately seven million jobs on customer sites.

2. The National Training Centre (NTC) in Leeds was established in September 1996. The NTC is the only off-the-job training centre currently owned by British Gas Services. It exists primarily to train service engineers. Prior to the establishment of the Gas Industry National Training Organisation (GINTO) in 1998, the British Gas Services at NTC held lead body status. In addition to supporting training for apprentices NTC offers technical training and assessment programmes to external organisations. The NTC houses the largest nationally accredited certification scheme (ACS) assessment centre in the United Kingdom.

3. British Gas Services contracts for government funding are managed by the National Training Partnership in Sheffield. Funding is accessed through 40 training and enterprise councils (TECs) in England and Wales and one enterprise company in Scotland. The Learning & Business Link in Kent was nominated as the lead TEC for the inspection process.

4. In October 1997, there was a total of 50 trainees being in the first group to undertake the modern apprenticeship programme with British Gas Services. The majority of apprentices completed the programme in two years. The second intake, in October 1998, was 115 apprentices on a programme with a planned completion within 15 months. A group of 141 apprentices who began in October 1999 are also expected to complete within 15 months. At the time of the inspection there were 159 apprentices in training towards qualifications in gas services maintenance or gas services installation, 25 of whom were based in Scotland and were not involved in this inspection.

5. The apprenticeship programme consists of blocks of on- and off-the-job training. The on-the-job training is under the supervision of a local field manager in England, Wales or Scotland. Off-the-job training is delivered at NTC, Leeds or at one of three colleges of further education, two in the south of England and one in Scotland.

INSPECTION FINDINGS

6. British Gas Services produced its first self-assessment report on apprenticeship training in January 2000. The report was developed by the training services manager at NTC following consultation with NTC staff and a sample of site personnel involved in the training programmes. There was no direct consultation with sub-contractor staff. An NTC staff member, with direct responsibility for college liaison, formed the judgements made of the subcontracted provision at colleges. Many of the proposed strengths were considered to be normal practice, and the strengths identified in the occupational and generic sections of the report were descriptive rather than judgemental. Inspectors found several weaknesses in the generic areas that were not identified in the report.

7. Four inspectors spent a total of 16 days with British Gas Services during May 2000. Inspectors interviewed 26 trainees, and made four site visits. They met with five field engineers, four field managers, three workplace assessors, three workplace verifiers and six NTC training officers. Three staff at the subcontracted colleges were interviewed. Eleven interviews were conducted with other British Gas Services staff. Fifteen trainees' files and 16 portfolios were examined. Other documents reviewed included contracts, external verifier reports, health and safety and equal opportunities policies, quality assurance processes, minutes of meetings, promotional arrangements, management and quality assurance evidence. Inspectors observed and graded five training sessions.

Grades awarded to instruction sessions

	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5	TOTAL
Construction		4	1			5

OCCUPATIONAL AREAS

Construction

Grade 1

8. At the time of the inspection, British Gas Services was training a total of 134 apprentices. Eighteen trainees from the 1998 intake and one trainee from the 1997 intake have completed formal training, but are still working towards full qualification. The remaining 115 trainees, all from the 1999 intake, have completed approximately 65 per cent of their formal training programme. There are 76 trainees on gas service and maintenance and 39 trainees on gas installation; all are on NVQ level 3 programmes. All the trainees are modern apprentices and employees of British Gas Services. Off-the-job training and assessment is carried out at the NTC or at one of two subcontracted further education colleges in southern England. Sixty trainees attend the NTC with 55 attending subcontracted provision. Off-the-job attendance is on a block-release basis over a period of 28 weeks. All apprentices undertake blocks of work experience with qualified field engineers on British Gas servicing and installation contract work. Health and

safety aspects are of great importance in this vocational area which is why 75 per cent of NVQ assessment is carried out off the job to ensure as high a level of competency as possible. Twenty-five per cent of the NVQ assessment is carried out in the workplace by qualified British Gas Services' staff. The workplace assessment is structured into a series of seven assignments at the latter stage of the apprenticeship programme. The self-assessment report listed a range of strengths and weaknesses, some strengths were considered to be normal practice, others were confirmed by inspectors and additional strengths were identified. The grade awarded by the inspection team was higher than that given in the self-assessment report.

STRENGTHS

- ◆ high retention and achievement rates
- ◆ high-quality training resources
- ◆ well-planned training and assessment
- ◆ systematic monitoring of progress
- ◆ good on-the-job training
- ◆ additional qualifications achieved

WEAKNESSES

- ◆ no significant weaknesses identified

GOOD PRACTICE

Off-the-job module assessment checklists issued to trainees and used during assessments are referenced to the performance criteria and range statements being assessed. The tasks are clearly identified as workplace activities.

9. Apprentices value their training and retention and achievement rates are high. The achievement rate for the modern apprenticeship by those who started in 1997-98 was 88 per cent. In 1998-99, early leavers accounted for 5 per cent of the intake; achievement is currently 79 per cent for modern apprenticeship, with the possibility of 95 per cent if, as anticipated, those still in training achieve their NVQ. The retention rate for the 1999-2000 entry is currently greater than 99 per cent.

10. Trainees have access to a comprehensive range of high-quality domestic gas equipment in the training centres. This equipment is arranged in realistic domestic settings to provide for effective assessment. In some subcontracted college provision the range of equipment is not as extensive and facilities in workshops are less spacious than those at the NTC. Programme training is supported by good-quality teaching and learning materials. Trainees are provided with gas technology manuals, operational procedure manuals and a British Gas Services' quarterly magazine containing a range of technical and training information that supports their learning. In addition, they are given hard copies of the technical information used by field engineers.

11. The training programmes are well planned and taught with good systems for recording trainees' progress. Trainees' progress reports are given to field managers who use them to link on-the-job training with the elements covered in the training

centres. Learning support materials and assessment packs help trainees to produce portfolios of assessment evidence of a good standard. Apprentices are given effective guidance by their trainers in these tasks. Apprentices have good working relationships with their trainers who are occupationally well qualified and experienced. All trainers have assessor qualifications and regular industrial updating opportunities. Trainers at the NTC have coaching and training qualifications but lack formal teaching qualifications. Trainees are assessed regularly during off-the-job block-release training periods, culminating in end-of-module assessments to test their understanding, knowledge and competence.

12. On-the-job assessments are well planned and are performed by highly experienced and qualified field engineers. Apprentices are well supported by their field managers in preparation for the on-the-job assessments. Apprentices can influence their progress in training on-the-job through negotiation with their field managers who arrange job rotation opportunities to cover the NVQ range. Field managers are supportive of apprentices' needs and recognise the importance of providing a range of training opportunities at work. Trainees have a high regard for the quality and range of both the on- and off-the-job training available to them and are able to produce work of a high standard. They are well motivated and recognise the relevance of the on- and off-the-job training to the tasks to be undertaken at work. Apprentices develop a logbook of on-the-job evidence which they link to their NVQ performance criteria. They are well supported in these tasks by their engineering trainers. Apprentices are encouraged to discuss their training experiences and are given opportunities to work without direct supervision where this is appropriate.

GOOD PRACTICE

At the National Training Centre and in the workplace the trainer and assessor roles are interchangeable. This broadens experience for all concerned. This process also prepares the trainees for the ACS assessment by 'external' assessors.

13. Engineers in the workplace recognise that trainees gain up-to-date knowledge and information during their off-the-job training, which is used to good effect in the workplace. Trainees are treated as effective members of field-service teams. Field engineers and managers welcome the expertise that trainees bring to the team as they quickly develop their skills.

14. Trainees receive additional training within the framework of their NVQ and a post programme intensive gas-safety unit to prepare them for the gas industry Accredited Certification Scheme (ACS) tests. All trainees also complete a two-day certificated programme on unvented hot water systems.

GENERIC AREAS**Equal opportunities****Grade 3**

15. British Gas Services has an equal opportunities policy. Advertising and marketing materials include statements promoting the company as an equal opportunities employer. Equal opportunities data are collated and analysed. The company's policies and procedures relative to equality of opportunity are discussed with trainees during their induction programme. The self-assessment report contained strengths that inspectors confirmed, however, the report failed to

identify the weaknesses found by inspectors. The grade awarded by inspectors was the same as the grade given in the self-assessment report.

STRENGTHS

- ◆ good understanding of equal opportunities by trainees
- ◆ trainees enjoy full employment rights
- ◆ good practice in trainees' selection

WEAKNESSES

- ◆ insufficient training in equal opportunities
- ◆ inadequate promotion of opportunities to under-represented groups

16. British Gas Services has an equal opportunities policy and statement that is complemented by a harassment policy and a detailed grievance procedure. These policies and procedures are well understood and supported by staff and trainees. Equality of opportunity and related issues are discussed and reinforced during the various induction programmes. Trainees are clear about their rights and responsibilities and view themselves as representatives of the company. They are very much aware that their job contains a high degree of contact with the public and that equal opportunities practices apply both in-house and to external customers. Complaints are well recorded and dealt with promptly. Senior managers take responsibility for ensuring that issues are resolved.

17. Trainees have the same access to company benefits as fully qualified engineers. Trainees are able to join the company's pension and profit sharing schemes from the beginning of their training. Subject to having a full driving licence they are issued with a company van.

18. The trainees' recruitment process is unbiased. Once an application is received it is allocated a number and selection is conducted with anonymity. Guidelines are issued to those responsible for the selection process so that this can be conducted with impartiality and consistency. Interviews are conducted by two members of staff who use a series of prescribed questions. All applicants are asked the same questions during the interview.

19. Many of the staff at British Gas Services have been with the company for a long time and have received very little structured training on equal opportunities issues. There is a programme of awareness raising for field managers, but this has yet to be extended to field engineers and key training staff at the National Training Centre.

20. British Gas Services promotes equal opportunities by the production and distribution of recruitment literature that clearly displays positive images of

ethnicity and gender. This material also contains the company's statement that it is an equal opportunities employer. However, marketing materials are only available in English.

21. Although the company collates data on equal opportunities this information is not used to plan programmes and set targets. Recruitment is strictly on the basis of ability, which is determined by both tests and interview. At present only 2 per cent of the modern apprentices are members of minority ethnic groups. At the time of inspection there were no women on the training programme. The recruitment figures for 1999 were disappointing on this aspect. Of the 5,198 applications for a modern apprenticeship only 97 were from women, 211 from members of minority ethnic groups and five from people with disabilities. A total of 81 candidates from the under-represented groups were invited to undertake the entry assessment process. Twenty-two of these were women, 58 were from minority ethnic groups and one person with a disability.

Trainee support

Grade 2

22. The British Gas Services human resources department in Staines manages the recruitment and selection procedures. Details of the modern apprenticeship programme are circulated to careers offices and colleges, the promotional material is also available on the company's Internet website. The company also advertises vacancies in the local and regional press. Applicants who meet the company's minimum entry requirements are invited to take a series of tests. Those candidates who successfully complete this stage progress to interview with a local field manager. Successful applicants undertake a one-week induction at the National Training Centre followed by a further week at their local area service centre. Trainees attending one of the further education colleges have a further induction session. Progress reviews are conducted with trainees while at the National Training Centre or college on a quarterly basis. Trainees also undertake a formal six-monthly review with their field manager. The self-assessment report claimed 14 strengths and two weaknesses. Many of the strength statements were descriptive rather than judgemental. Inspectors confirmed some aspects of the proposed strengths and one of the identified weaknesses. Inspectors found another weakness and awarded the same grade as that given in the self-assessment report.

STRENGTHS

- ◆ comprehensive recruitment and selection procedure
- ◆ thorough induction process
- ◆ wide range of support services

WEAKNESSES

- ◆ inadequate accreditation of prior learning
- ◆ no career guidance for early leavers

23. Applicants to the programme are short listed against set criteria relative to their age, location and qualifications. Those who meet with company entry requirements are invited to undertake a range of aptitude tests. Successful applicants are subsequently invited to interview where they are required to demonstrate other skills, such as communications. Applicants are also subject to an occupational health examination.

24. British Gas Services has a well-planned and thorough programme of induction for trainees. Trainees are able readily to recall their induction in detail. All trainees attend a one-week induction programme at the NTC. This covers an introduction to the company, rules and regulations, disciplinary and grievance procedures, equal opportunities and health and safety. During this week trainees are also informed, in detail, about the structure and requirements of their NVQ programme. Guest speakers such as service-centre managers and representatives from payroll also contribute to the induction programme. Trainees are issued with an induction manual. A further week is spent at the area service centre to enable trainees to gain knowledge of company operations. During this time they also meet with colleagues from their designated work district. Trainees are issued with a schedule of their training programme that details attendance at the NTC or college and their district placements.

25. Trainees have access to a wide range of support services. They are issued with a contact list that details office and mobile telephone numbers of training staff and emergency services, accommodation and travel arrangements are well organised by NTC staff. NTC support staff take immediate action should any trainee report problems with their accommodation or travel arrangements. Trainees need to possess a full driving licence in order to fulfil the requirements of their job. British Gas Services provides driving lessons and financial support for two practical driving tests for those trainees who do not possess a full licence. Frequent monitoring of trainees' performance identifies any element of concern which is swiftly noted and addressed. Those who fail to meet with required standards at assessment are given additional support that may consist of additional study work, further practice prior to another assessment, additional reference material or extended support time off the job.

26. Although the selection-testing process takes into account previous achievements, formal accreditation of trainees' prior learning is not systematically applied. One member of staff is currently working towards the accreditation of prior learning award to enable formal accreditation to take place. The lack of accreditation of prior learning leads to repetition of some tasks.

27. There is no effective career guidance available to those trainees who are unable to complete their programme. Trainees who wish to leave are positively encouraged to remain on the programme and solutions to their problems are suggested. However, advice and guidance are not provided to find the individual a suitable alternative career path.

Management of training

Grade 2

28. The responsibility for the management of training is held by the training centre manager at the National Training Centre in Leeds. This manager reports directly to the manager of human resources and development in the British Gas Services headquarters in Staines. The aim of the training programme is to produce the next generation of qualified installation and service engineers. The NTC has 12 full-time members of staff. There are seven training officers with the responsibility to develop and deliver training packages. The NTC training officers train and assess apprentices off the job with the support of a technical assistant. A technical training officer, based in the South of England, oversees the apprentice training programmes at the subcontracted colleges. The training services manager and the training services officer provide a central administration and support service at NTC. Line management responsibility for each apprentice is held by a field manager in their local area. The self-assessment report identified eight strengths and one weakness. Inspectors confirmed three of the proposed strengths but considered several others as normal practice or invalid. Inspectors found two weaknesses and agreed with the grade proposed in the self-assessment report.

STRENGTHS

- ◆ comprehensively planned training
- ◆ training strategy well supported by staff
- ◆ good co-ordination of on- and off-the-job training

WEAKNESSES

- ◆ inadequate key skills strategy
- ◆ insufficient opportunities for staff debate at NTC

29. British Gas Services has clear and well-publicised objectives for the training programme. The objectives are understood and supported by the staff involved in the training programmes. Involvement of the NTC manager on various GINTO groups provides information on the development of the training programmes. The targets in terms of the number of apprentices to be recruited are clearly defined within the human resources department. The training programmes are well planned and documented. All training staff, including subcontractor's and field staff are well aware of the planned programme and their role in achieving the required outcomes. The effective working relationships between NTC and subcontractor staff extend beyond a contractual agreement to that of a training partnership. The subcontractors use NTC designed materials for delivery and assessment of the training programme. British Gas Services field staff in the workplace who have assessor and verifier roles attend group briefing sessions at NTC prior to the start of 'live' assessments in the workplace. There is a team approach to the delivery of

the training programme.

30. Field managers are kept well informed of the progress of their apprentices during both on- and off-the-job training blocks. Off-the-job assessments and the review process identify the specific training needs of each apprentice. The field managers use this information to plan the on-the-job training activity for the apprentices. The on-the-job training is well co-ordinated with the planned programme of off-the-job training.

31. The strategy for the development and assessment of key skills in an integrated manner with the NVQ programme is not fully developed. For the 1998 intake there was some use of NVQ evidence in identification of key skills competence but the majority of work on key skills was done off the job at NTC in the last few weeks of the programme. Following an evaluation which mapped key skills against the NVQ elements there is an increased recognition of the need for the development and assessment of key skills for the 1999 intake of apprentices. Current apprentices are well aware of the key skills requirements in their programme, but field managers, field engineers and some college staff have insufficient involvement with key skills development and assessment. The current plan is to do further off-the-job project work at NTC on information technology and numeracy towards the end of the programme.

32. Meetings occur on an irregular basis on Friday afternoons at the request of management or the training officers, but there is a need for scheduled meetings. There is strong leadership with information and guidance given through written memoranda. Training officers are not involved in open discussions on issues affecting their daily work or the overall training strategy.

Quality assurance

Grade 3

33. Quality assurance measures for the NTC's apprenticeship programmes are contained within the ISO 9001 system of British Gas Services. The measures are subject to six-monthly assessments by the British Standards Institution. The quality assurance management system for the NTC was initially developed in May 1999. The system has been subject to four amendments. The training services manager at NTC is responsible for the implementation and maintenance of the quality management system. As an accredited centre for the awards in gas services installation and maintenance, the NTC meets the requirements of the awarding body. Each of the subcontracted colleges holds accredited centre status for the awards. Internal verification of the off-the-job assessment process is performed within each of the three centres by the relevant department and supervisor. Qualified and experienced British Gas Services field staff perform internal verification of workplace assessment. Moderation meetings are arranged between the verifiers of the off- and on-the-job assessment. NTC is also subject to periodic audits by the National Training Partnership. A member of the training centre staff monitors the provision of the college subcontractors as part of the liaison role. The self-assessment report identified eight strengths and three weaknesses which were

addressed in a resulting action plan. Several of the strengths were considered as normal practice. One proposed weakness related to a strength found by inspectors. The other weaknesses and strengths were confirmed during the inspection. The grade awarded was the same as that given in the self-assessment report.

STRENGTHS

- ◆ some effective training monitoring
- ◆ good action planning to make improvements

WEAKNESSES

- ◆ poor sharing of good practice
- ◆ inadequate quality assurance of subcontractor performance
- ◆ no programme review

34. The quality assurance manual contains 31 procedures relevant to the delivery of training in the national centre. The work of some members of staff at NTC has been monitored through audits on the relevant procedures. Appropriately qualified NTC staff perform the audits, which clearly identify areas of non-compliance and request corrective actions. The audits have resulted in a number of modifications to the written procedures. However, the audits focus on compliance with procedures and in some areas they are currently inadequate in monitoring the quality of the process or its outcomes. In particular there are no arrangements for direct observation of the trainees' review process or the systematic evaluation of the action plans resulting from reviews. At NTC there are no formal arrangements for the direct observation of training delivery.

35. Trainee attendance and attitude during off-the-job training sessions is monitored by the use of 'weekly profiles' compiled by the relevant training officer, or college staff member, and signed by the apprentices. The staff follow up areas of concern. The performance results for individual apprentices at the end of module assessments, typically five-weekly intervals, are submitted to the NTC manager for examination. Copies of the end-of-module assessment results are sent to the apprentices' field managers. Appropriate action is taken with individual apprentices in need of further support and guidance. The centre manager investigates any areas of low overall performance at NTC.

36. On a weekly basis the apprentices at NTC are invited to provide an evaluation of the training provision. The written feedback is analysed by the apprentices' training officers. The training officers develop an action plan in relation to any unsatisfactory areas identified in the evaluations. The action plans have resulted in improvements in the provision. Management staff in the training centre monitor these action plans.

37. The result of the apprentices' training programme is a high achievement rate

in qualified service engineers. Monitoring of the 'trainee' engineers in the field has identified a more than satisfactory level of performance on 'live' equipment. Their rate of 'defects' identified in workplace assessments has been found to be lower than the average for established engineering staff.

38. The procedures to ensure that good and poor practice in training, assessment and verification are clearly identified to all of the relevant staff are inadequate. Sharing of good practice is poor within NTC and between the NTC staff and the staff delivering the same off-the-job programmes at the subcontracted colleges.

39. There is some inconsistency in internal verification practices between the various off-the-job centres and the on-the-job activity. In one college there is a lack of systematic planning for the verification process and the results of meetings with assessors are not recorded. In one district there is a lack of direct observation of workplace assessors by the internal verifier. In some cases there is insufficient written feedback to assessors.

40. The full range of monitoring activity undertaken with the off-the-job provision at NTC is not provided at the subcontracting colleges. The performance data for end of module assessments at the colleges does not provide the same extent of information to the training management. Until mid-May 2000, college trainees had not been involved in completing evaluation questionnaires. Trainees' evaluation of their college programmes had been limited to informal discussions with the British Gas Services training officer during reviews. The level of resources available to the college-based apprentices is inferior to the high quality of resources at NTC.

41. There is no overall review of programme content, delivery and assessment across the centres offering similar programmes. Opportunities for identifying a continuous improvement strategy across the whole scheme are missed.