

Commercialising a geological survey — a geological survey in transition

From Earthwise

[Jump to navigation](#) [Jump to search](#)

From: Allen, P M. 2003. [A geological survey in transition](#). British Geological Survey Occasional Publication No. 1. Keyworth:British Geological Survey.

Chapter 10 Commercialising a geological survey

The conversion of the BGS from a wholly Government-funded Geological Survey to one which is either accused of being commercial or complimented for it, required changes in structure and culture as well as in the organisation's approach to some ethical issues. Many structural changes have been made, but in any organisation in which the percentage staff turnover is measured in single figures, and the majority of staff remains with it for nearly the whole of their careers, cultural change is bound to be slow. Some issues, such as the Survey's interaction with the private sector and how to maintain its impartiality to advise Government still remain open to debate.

The process of commercialisation can probably be traced back to before the Rothschild transfer. From the late 1960s, the work programme was clearly divided into two parts: in one were those programmes that were wholly funded by the Science Budget and in the other those, such as sand and gravel assessment and overseas work, which could clearly be viewed as meeting specific departmental policy goals and were funded by departments. There was no argument that these should be funded in any other way. Thus, the Survey accepted this broadening of its work profile and, in doing so, staff began to learn how to deal with the specific demands of customers.

The way in which the Rothschild transfer was implemented threw this simple situation into confusion by creating 'core commissions' — projects which would normally be done by the Geological Survey as part of its Core Programme and funded by the Science Budget but which had become funded by Government departments. Further confusion was created when, during the consultation phase of the Rothschild transfer, the concept of co-funding was introduced, by which the BGS made a financial contribution from its Science Budget to an externally funded commission. As long as it was a core commission to which Science Budget was being added there was no problem with implementing the concept.

The next step in the commercialisation process came as a result of the decline in the level of income from commissioned research that began in 1981. Not only did the consortium that funded the Onshore Geological Mapping Programme collapse that year, but several other large commissioned projects had their funding cut. Evidence that this was going to happen came in 1980 during discussions with departments over forward planning for the year 1981/82. The Directorate reacted by calling a freeze on recruitment and filling vacancies by compulsory transfers. In August the next year, the Director was informed that within the Department of the Environment, in an attempt to reduce the R&D budget, ministerial approval was now required for contracts and contract variations as low in value as £10 000.

A much bigger drop in commissioned income came to the attention of the Directorate in October 1981, when the Director was informed that for the financial year 1982/83 the commissioned research budget was expected to be lower than in the current year by £1.6 million. Added to the reduction in the level of the Science Budget allocation to the BGS from the NERC, the total

reduction he had to plan for was £1.75 million. The NERC had agreed to partial compensation by allocating an extra £800 000 to the Science Budget, mostly for staff costs, for that year, specifying that it was to fund the Regional Geological Surveys. The balance had to be covered by other means.

The full package of actions needed to address the cuts that was agreed by the BGS Directorate was to remain familiar to all successive Directorates for eighteen years. It included reducing staff levels and reductions in all areas of expenditure, including capital. Reductions in staff were to be achieved by a mixture of a partial freeze on recruitment, natural wastage and voluntary premature retirement (VPR), which was introduced to the BGS by the NERC for the first time that year. Fourteen staff were lost by this means. The Directorate also expressed determination to win commissioned research income from new sources. At the end of the crucial Directorate meeting in October 1981, it was agreed that £150 000 of the £950 000 planning deficit should be found from new commissioned research receipts. Although the Survey had been positive in its quest for new commissioned research since it was re-formed in 1965, this was the first time that it had to seek it out of necessity and set a target for it. To do this required a totally different mindset within the Survey as well as outside.

There is probably never a good time for an organisation to make the internal and cultural adjustments that were necessary to deal with this sort of change, but the early 1980s were probably the worst that could be chosen. There were too many conflicting pressures under which the organisation operated throughout the whole of that decade. In particular there were mixed messages coming out of Government itself. The new, market-centred economic policy, introduced after the election of the Tories in 1979, was penetrating different Government departments at different rates. The Department of the Environment was among the quickest to respond to them, the Department of Education and Science one of the slowest. Both departments were important to the BGS.

A mechanism used by Government to introduce uniform standards across all departments to compensate for this uneven response, was the Rayner Review in 1982. This had a major impact on the management of Government R&D and, as a consequence, on the way in which research was commissioned from organisations such as the Survey. Initially looking at support services in R&D within Government, Rayner's recommendations did not apply to the research councils, but to departmental research. He recommended that a task for top management in departments was to ensure that their research projects were relevant to their priorities, that technical and financial progress were being monitored, that costs were being held to the essential minimum, and that results represented good value for money and were being applied. At the very time that the Survey had established a need to pursue new opportunities for commissioned research, new policy guidelines within Government made it more difficult to achieve results from that quarter. Moreover, Rayner completely killed off the idea that departments should think of funding strategic science that was not entirely in their own, sectional interests. For the Survey, this meant that the only possible source of funds for its core activities, which by definition were multi-departmental in their application, was the Science Budget, and that was on the decline.

The Department of the Environment's reaction to Rayner was almost immediate in its impact. Prior to 1981 links between the survey and all the departments were strong and it was usual for contracts with them to be negotiated on a single-tender basis. The Survey was the preferred contractor, effectively, for all the geoscientific research that the departments would wish to commission. In 1981, stimulated by the Department of the Environment, the consortium that funded the Geological Mapping Programme collapsed. This had a major, quite destructive impact on the Survey, but there was one significant benefit. The DOE had decided, in establishing its own geoscientific research priorities, that it would begin a programme of what was then called environmental geology mapping. The objective of this programme was to devise a set of geoscientific maps which would help urban

planners in their decision making. Initially, a partnership arrangement was established between the BGS and the DOE in which the BGS co-funded these projects by covering the cost of the geological mapping required to carry out the contract, while the DOE covered the cost of developing the applied geology maps. The funding split was commonly 50:50. Partly as a response to Rayner, however, the DOE decided to introduce competitive tendering for its research programme soon afterwards and there were some areas of geoscientific research of interest to DOE within which the primacy of BGS was not accepted. These started to be put out to competitive tender, and soon universities and private-sector companies were competing against the BGS for geoscientific contracts (e.g. for sand and gravel assessment) and winning them. Competitive tendering for applied geological mapping came soon afterwards. At a meeting to discuss contract funding between the Chief Scientist of the DOE and the BGS/NERC in August 1981, he admitted that he thought the only area where BGS could be regarded as having unique experience at that time was in radioactive waste disposal. He did not include geological mapping, which surprised BGS managers.

With work becoming harder to get from Government, the private sector was an obvious alternative source of funding, but work done by the BGS for the private sector in 1980 was, in general, limited to enquiries and it did not figure largely in the consciousness of the organisation. At that time, the half-day rule applied, which meant that an enquiry that took less than half a day to deal with would be done free of charge. If an enquiry took half a day or more charges were levied. Many enquiries came from civil engineering and geotechnical firms and consultancies, which were firmly in the private sector. The BGS was unique in the NERC in having this kind of business.

The importance of repayment work of any kind for private-sector bodies was barely recognised either by the Department of Education and Science or the NERC in 1980. In December that year a letter to all institute directors from NERC HQ informed them that, after protracted communications with the DES and Treasury, all delegated powers to accept contracts for what was called 'commercial enterprises' had been removed from both NERC HQ and the institutes. The definition of 'commercial enterprises' was not clear, but it seemed to cover all dealings with the private sector and a wide range of quasi-government bodies such as the Central Electricity Generating Board, the National Coal Board, British Nuclear Fuels, Water Authorities and the Local Authorities. For the BGS, this meant that a half-day repayment project dealing with an enquiry from a local authority should be referred through NERC HQ to the DES/Treasury for approval to proceed. In fact, the notice from the DES/Treasury was never issued in the BGS, but during an audit in 1982 it came to light that the BGS was in breach of protocol as though it had been and steps had to be taken to clarify the position. What emerged was that the BGS would have delegated authority for minor repayment projects up to £2000 in value and that the quasi-government bodies were not to be classified under the heading 'commercial enterprises'. Above £2000, approval would have to be sought from the NERC for any contract up to £50 000 that fell into the class 'commercial enterprises'. Above that amount, the approval of DES was required. Delegated authority remained with NERC for contracts with the UN and the EU provided that the research was to be conducted in the UK. There were no problems about research for Government departments.

This confusion reflects more on the lack of understanding in the DES and the NERC of the business potential of the BGS than it presented a barrier to developing the business — though gaining approval for non-governmental contracts, following these guidelines, could become so slow as to be counterproductive. What had more impact was that in the guidelines that were drafted by NERC HQ at the end of 1982 for implementation in the BGS regarding repayment projects, there were constraints on the conditions and type of business that the BGS could pursue as a 'commercial enterprise'. Among the conditions for accepting a project, three were:

- The work should significantly widen the scientific horizon of staff engaged in it. Extensive work of a routine nature should not normally be encouraged.

- The work must avoid, as far as possible, direct competition with interested UK private sector advisory and R&D organisations.
- It must not weaken in any sustained way the capacity of the BGS to carry out its basic scientific programmes.

Though not exactly a deterrent, these conditions were hardly an encouragement to expand business, but Malcolm Brown reported in the annual report for 1982 and 1983 that even then NERC Council was encouraging him to make good the fall in commissioned income from Government departments with earnings from other sources. By 1985 the NERC had included in its first Corporate Plan its aim to increase its commissioned earnings from 25% of its budget to 30%, though it did not target the private sector in this aim.

The matter of the BGS competing against the private sector for contractual work was to come up a number of times in the years to follow. It was addressed by the 1982-84 Visiting Group, which considered that the BGS should not do it. In 1987, Butler said, 'BGS should not compete with private consultants through unfair use of its privileged position as recipients of data, nor for commissions for which it is not especially suited'. While this was being debated, the private sector, which was gradually being enlarged by the privatisation of one-time government and quasi-government bodies, was competing vigorously against the BGS for contracts such as those for applied geological mapping. If there is any category of work with respect to which the BGS had both a demonstrable track record of achievement and a privileged position because of its data holdings, this was it. Whatever high-minded ideals the DES, Treasury, NERC and various advisors might have had for the BGS about this issue, the private sector was not adhering to them.

With regard to acquiring commissions from the private sector, Butler said, 'We see advantages in extending it (the Responsive Programme) into the private sector, although the Survey must not thereby endanger its ability to give well-informed independent and impartial advice to Government on geological matters'. This is an ethical matter that is still current, and opinion in the BGS was as divided then as now. The Environmental Protection Unit, established in 1979, was set up to carry out research in radioactive waste disposal and landfill pollution, but when UK Nirex Ltd was created to deal with radioactive waste disposal there was no unanimity within the BGS senior management about the efficacy of the BGS being involved with them. In the autumn of 1984 the Department of the Environment, the department to which Nirex was responsible, agreed to retain the BGS as consultants in this field. At the same time, however, the Survey was being invited to act as subcontractor by companies responding to invitations to tender for research from Nirex. A meeting was held between John Moore, Chief Geochemist, and DOE officials to discuss it. The DOE view was that they were happy for the BGS to be involved with Nirex regarding data handling, but were cautious about the BGS being involved with data interpretation. Their concern, the same as expressed later by Butler, was that the impartiality of the BGS could be endangered by its commercial involvement with Nirex. Professor John Knill, while he was Chairman of NERC, held a similar view. Within the BGS, there were also some managers who, for several years, would not take part in any contract work for Nirex. It was not until the early 1990s that the ethical considerations diminished sufficiently in importance relative to other pressures, largely under the impact of the Price Waterhouse study, for barriers to involvement with Nirex to fall down in all parts of the BGS. Nonetheless, the ethical question has still not been answered; neither has it gone away.

There were two significant actions taken by the BGS in the early 1980s that broke with tradition and at the same time displayed a determination to tackle the funding issue positively. Both impinged directly on the public-service culture that prevailed throughout the BGS. The first was to abandon the half-day rule and charge for all enquiries; the other was to appoint a member of staff with responsibility for marketing.

The idea of charging for all enquiries was first raised informally with the Director by Denys Smith, the head of the Northern England Unit, based in Newcastle, early in 1982. It was debated by the Directorate in March that year and rejected. In October it was back on the agenda, but the 1982-84 Visiting Group also picked it up and it became one of their recommendations that the BGS should investigate the feasibility of doing it. The job of organising it was given to Brian Kelk, head of the Information and Central Services Directorate, and it was introduced in November 1984. Despite quid pro quo arrangements for companies that regularly provided the BGS with site investigation data, and waivers of various kinds introduced to minimise the burden on certain classes of enquirers, the change was not welcomed and grumbles were heard about the new arrangements even ten years after their introduction. It did not help the argument for charging that in the first year that full charges were introduced, the number of enquiries plummeted and only slowly grew over a period of years to regain the 1983 level.

In Malcolm Brown's reorganisation of the Survey he devised an Information and Central Services Directorate, within which he placed two staff under the banner Marketing Development and External Affairs. This arrangement came into existence in 1984. Prior to his taking charge of this small unit, Chris Neary, a PSO, had been in charge of the the Survey's Marketing Panel. Setting up the new unit was a bold move by Malcolm Brown. The NERC had already taken an initiative in this direction by appointing a marketing advisor and there were NERC agents in Washington, to watch over the World Bank and other organisations, and in Brussels. For the BGS to go its own way, however, was a different matter and it was done only after consultation with the NERC through 1983. The marketing group grew to four by 1988, when Barrie Page, an SPSO was in charge. It changed its name to Business Development in 1989, and in 1991 it was upgraded to the status of a division with the head being an Assistant Director (Band 2).

The establishment of a group to look after marketing and external affairs was a significant structural change that also impinged on the organisation's culture, but the Survey achieved little as a result of it in the 1980s. Detailed breakdowns of income for the early part of the period are not easy to come by, but the gross figures are illustrative. In 1978/79 the income from the Department of Trade and Industry, the Department of the Environment, the Department of Energy and the Overseas Development Administration constituted 95% of the total commissioned income. The amount of work done for the private sector was very small, though even in 1980 there were several small non-governmental projects being undertaken overseas for organisations such as Hill Samuel Development Ltd and Alexander Gibb and Partners. The percentage of income from the big four departments had declined to 81% in 1988/89 and income from the private sector had risen to 11% of the total commissioned income. Almost all the work that the BGS did overseas remained funded by the Overseas Development Administration. A summary table prepared in 1992 for income, normalised at 1992/93 prices, for the period 1977/78 to 1992/93 showed that income from the four big departments dropped from £30.7 million in 1978/79 to £17.5 million in 1988/89. This fall was in no way compensated by increased earning from other sectors. A small part of it was balanced by the initial penetration of the private sector and an increase in income from the European Union from £0.23 million to £0.84 million, which was a result of a change in BGS strategy. The main part of it was matched by reductions in staff costs, capital spend and other expenditure.

It was clear by the end of the 1980s that if the decline in income from Government departments were to continue and the BGS remain solvent and avoid further staff losses and erosion of its scientific skill base, the effort being put into marketing and selling was going to have to be increased in volume and quality. There were also going to have to be some major changes in the BGS culture. In fact, this was at the heart of the recommendations of the Charging Review in 1989 (Chapter 6, pages 60-61).

The Charging Review report, which was always meant only to advise the minister, was never

released to staff in BGS, but it was seen and commented upon by the BGS Directorate. Some of the more important recommendations and conclusions in it were:

1. Pricing policy should allow the BGS to charge all customers at the level the market will bear, including Government departments.
2. Priority should be given to digitising NGIS (National Geosciences Information Service) records to increase their saleability.
3. Priority should be given to increasing the generation of income through NGIS by developing value-added products and giving advice.
4. Charges should include an element to cover maintenance and curation of databases.
5. The BGS should seek joint funding (co-funding) for core projects.
6. Increased income should be sought from newly privatised utilities, nondepartmental public sector, private sector and overseas, especially from private sector, non-government aid agencies and banks.
7. A full market survey and detailed market analysis should be carried out.
8. The Marketing Group should have sufficient funding, expertise and seniority to function effectively in the BGS.
9. A coherent marketing strategy should be developed for the BGS.
10. The Marketing Group should raise internal awareness of business development tools.
11. The BGS should set targets for support of the Core Programme from funds obtained from commercial activity.
12. Clearly defined management responsibility should be established for commercial pricing and policy.
13. An internal market between elements of the BGS should be established.

Revolutionary though this package was, even the Charging Review commented that, in carrying out a market analysis, account should be taken of the impartiality requirements of Government departments and the question of unfair competition with the private sector. Indeed, some time later, when the zeal for privatisation was at its highest, the Department of Trade and Industry issued guidelines on competition that required Government organisations and agencies not to carry out any work that could be done in the private sector. Pressures on Government bodies, including Government-enforced cost-recovery targets and reductions in the direct grants, meant that this part of the guidelines was widely ignored.

Individually, each one of the Charging Review's recommendations was to make an impact on the way the BGS operated. Some were easier to adopt than others. The exhortation to seek joint funding of core projects was to prove particularly troublesome. By definition, the Core Programme comprised strategic research that served multiple beneficiaries and should exclude the possibility of offering opportunities for co-funding, except where, for example, priority in the order in which a certain part of the programme was being carried out was bought. There was the risk that customers and competitors alike might view co-funding as a Science Budget subsidy for a commercial contract, and there was the difficult matter of how to deal with copyright and commercial confidentiality attached to the findings of co-funded research. All of these, and other attendant issues, were debated within the BGS Directorate throughout the 1990s and accord was never achieved. Even defining what should be classed as co-funding and what should not, proved contentious. As a result, success in attracting co-funding was patchy and never reached the levels that fitted the expectations of the Charging Review team.

Effectively, the Charging Review report provided a green light for the BGS to go ahead and develop its business as well as it could. The problem was that it had already tried and had not succeeded. The Business Development Group was concentrating on overseas marketing and had paid little attention to the UK market. A review of practice had been initiated in July 1989, before the

completion of the Charging Review report, but that exercise was not finished by the time the report was released to the Directorate. In November the Directorate agreed 'that a rigorous independent marketing appraisal should be carried out by external professional marketing consultants as a matter of urgency ...' and Barrie Page was given the task of preparing a draft specification. The Programme Board endorsed this approach. By February 1990 the specification was complete, a contract management group had been named and tender action was imminent.

These were the last days of Geoff Larminie's directorship. Peter Cook was due to replace him in early March and his belief was that the BGS needed more than a market survey. The specification for the consultancy was broadened to include business development planning and on 29 March the short-listed companies were interviewed. Price Waterhouse was successful. The impact of Price Waterhouse is dealt with more fully in Chapter 12.

In terms of pure commercialism, the BGS changed out of all recognition in the period after the Charging Review. By 1998/99 income from the big three departments (the Department of Energy having been incorporated into the Department of Trade and Industry) was only 29% of the total commissioned income compared with 95% twenty years earlier. Income from the private sector had grown to 43% of the total from nearly nothing in 1978/79. Overseas, only half the work undertaken by the BGS was funded by the Department for International Development (which replaced the Overseas Development Administration in 1997); the rest came from development banks, other aid agencies and directly from foreign governments themselves.

Despite these dramatic changes, in 1998/99 over 70% of the BGS total income, including Science Budget and commissioned research, came from Government sources, making the Survey, still, primarily an agent of Government. A large part of that 70% was won through competitive tender and half of the income to the BGS is earned as a result of essentially commercial enterprise and activity. This is of crucial importance. Because all BGS staff are involved to a greater or lesser extent in commissioned and commercial work as well as the Core Programme, the culture of the whole organisation has been modified and can be said to have been commercialised.

Retrieved from

http://earthwise.bgs.ac.uk/index.php?title=Commercialising_a_geological_survey_-_a_geological_survey_in_transition&oldid=42724

Category:

- [History of the British Geological Survey](#)

Navigation menu

Personal tools

- Not logged in
- [Talk](#)
- [Contributions](#)
- [Log in](#)
- [Request account](#)

Namespaces

- [Page](#)

- [Discussion](#)

□

Variants

Views

- [Read](#)
- [Edit](#)
- [View history](#)
- [PDF Export](#)

□

More

Search

Navigation

- [Main page](#)
- [Recent changes](#)
- [Random page](#)
- [Help about MediaWiki](#)

Tools

- [What links here](#)
- [Related changes](#)
- [Special pages](#)
- [Permanent link](#)
- [Page information](#)
- [Cite this page](#)
- [Browse properties](#)

• This page was last modified on 23 September 2019, at 20:31.

- [Privacy policy](#)
- [About Earthwise](#)
- [Disclaimers](#)

•



•

