

AUDIT REVIEW The new trunk road contracts An examination of the competition for the maintenance and management of the trunk road network

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PREPARED BY AUDIT SCOTLAND

The new trunk roads contract

A report to the Scottish Parliament by the Auditor General for Scotland

Auditor General for Scotland

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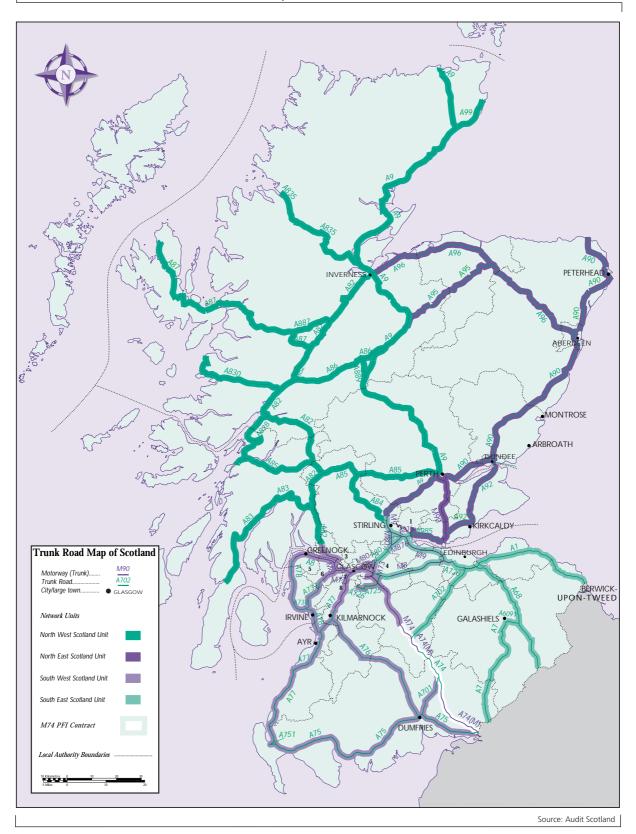
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| Exhibit 1: The new trunk road network units from April 2001



Executive summary and conclusions

Introduction

- In February 2001, following competition, the Scottish Executive
 Development Department (the Department) with the approval of Ministers,
 signed new contracts for the management and maintenance of the 3,300
 kilometres of trunk road network in Scotland (Exhibit 1 opposite and
 Exhibit 2 over).
- 2. The new contracts began in April 2001 for five years with the option to extend to seven years. There are four contract areas and two private companies each won the contracts for two areas:
 - Amey Highways Limited for the South East and South West areas
 - Bear Scotland Limited for the North East and North West.

The Department will spend in total some £70 million a year on the new contracts, depending on the volume of work which the Department actually commissions.

- 3. This report is the result of my examination of the competition to let the contracts. I undertook the examination in response to the suggestion of the Minster for Transport earlier this year and in light of concerns raised in Parliament about the competition. The aim was to assess the quality of the Department's procurement processes (Part 1), and whether the resulting contracts are capable of securing their objectives and delivering value for money (Part 2).
- 4. Audit Scotland interviewed key staff and reviewed relevant papers within the Department and drew on published guidance on good practice in construction procurement. They consulted the Highways Agency (who are experienced in procuring similar work in England) and all 12 bidders who participated in the competitions in Scotland. I also received evidence from the Convention of Scottish Local Authorities. Annex A describes the detailed examination process.

Annex A

Part 1: Contractual strategy and processes The new contracts developed from earlier changes introduced in 1996

5. The Scottish trunk road network provides a system of national strategic routes designed to cater for through traffic and was first designated in 1936. Local councils have generally carried out management and maintenance of the network, under broadly based agency agreements with the Secretary of State. In 1996 regional councils were abolished and new arrangements for managing and delivering the work were needed. The Department divided the network into eight business areas and, after competition, introduced new contracts for most of the work as the basis for more effective control.

Paragraphs 1.1 to 1.3

The new trunk road contracts

In three "premium units" all work was undertaken under individual five-year operating company contracts with the Department. In five "all purpose units" only network management, professional and design services were subject to contract and local authorities retained responsibility for all frontline maintenance work in these areas under new agency agreements with the Secretary of State (latterly Scottish Ministers).



A83 Ardrishaig flooding



A90 Longhaven surface dressing



A90 Friarton Bridge surface patching

Unit management

Operating companies have overall responsibility for implementing Scottish Ministers' requirements (as set out in the contract for each unit) for trunk roads maintenance works delivery, management of the network and a wide range of related administrative activity.

In broad terms they must:

- 1. programme and co-ordinate all activities on the trunk road network within their Unit
- 2. provide professional services within their Unit
- 3. provide a customer response service
- ensure all works are delivered to the appropriate standard; monitor works standards within their Unit to meet changing needs; and advise on possible improvements
- 5. operate monitoring and reporting procedures to demonstrate performance against the required standards including a comprehensive quality management system
- ensure compliance with all relevant legislation, including health and safety requirements
- 7. liaise with other operating companies, local authorities, statutory undertakers, emergency services etc
- 8. collect, update and maintain trunk road inventory and survey etc data.

Financial control and accountability

A vital dimension of managing each unit is assessing needs and priorities and matching these with annual budget allocations. Operating companies must prepare on an annual basis detailed bids for funds, justified with full supporting technical evidence and documentation. Within funds allocated by the Scottish Executive, the operating companies must exercise financial and budgetary control and operate reporting systems in accordance with their approved quality management system and the contract.

Routine maintenance

The activities required on cyclic and routine maintenance works are generally of a low technical nature. The types of activities to be carried out include:

- repair of potholes and patching to maintain safe passage for vehicles and pedestrians
- 2. landscape maintenance and general grass cutting, including maintenance of sight lines
- 3. gully emptying and maintenance of drains to prevent flooding
- 4. maintenance of road markings, signs and electrical equipment to assist road safety and control traffic flow, cleaning of signs
- 5. repair and maintenance of safety fences
- 6. removal of obstructions and spillage.

Structural maintenance

In contrast to the primarily short-term objectives of routine maintenance, structural maintenance of the carriageway is designed to replace major life-expired elements of the road and to ensure that the design life is achieved or extended. The timely replacement of wearing courses or application of overlays can prevent the need for expensive reconstruction of the whole road. The operating company must develop and implement structural maintenance rolling programmes to enable such works to be properly programmed to support budgetary planning. They must prepare detailed annual programmes, based upon visual and manual pavement assessments and a range of survey data and analysis.

Emergencies

By their very nature, emergencies can generate a wide range of reactions which cannot be predetermined. Operating companies must provide emergency cover 24 hours a day, 365 days a year. Typical activities necessary to keep the road safe and open to traffic include:

- 1. assistance to emergency services dealing with major accidents and incidents and the erection and maintenance of all necessary diversion signing on and off the unit, including the affected road and/or traffic management of such affected road
- 2. treatment of spillages and clearing of lost loads of any nature
- 3. repair of impact or vandal damage to structures and other street furniture
- 4. rectification of major failure of equipment
- 5. removal and disposal of animal carcasses and other obstructions.



A835 Winter conditions



A96 Blackburn grass cutting



PAG field engineer

Winter maintenance

Winter maintenance should ensure that the trunk road network remains open and safe throughout the winter season or when winter conditions exist. Safety is paramount and there is an increasing expectation by the road user that roads will be ice-free at all times. The Scottish Executive has laid down winter maintenance standards for the trunk road network

Operating companies must:

- 1. provide depots and specialist winter maintenance vehicles, plant and equipment, including spreading vehicles, snow ploughs, snow blowers, loading equipment etc
- provide staff trained and certified to operate the fleets, and ensure that preventative measures are undertaken cost-effectively and responsively to changes in weather conditions
- 3. procure supplies of de-icing material, primarily rock salt, and sites for stockpiling in environmentally acceptable conditions; ensure that accurate records are kept of salt use and that the rates of spread are always appropriate to the circumstances
- 4. obtain specialist weather forecasting services and hardware and software for use in interpreting the information available
- 5. target resources by maximum use of weather forecasting services, thermal maps, ice detection/prediction systems etc
- establish a reliable communication system and, where appropriate, links with emergency services, adjacent units, local authorities and other operators of adjoining roads
- 7. continue and develop the culture of customer care
- 8. follow detailed written procedures to ensure compliance with the contract.

Traffic management and management of roadworks

Delays due to roadworks are frustrating for drivers, wasteful of resources and costly in terms of both time and money. All operating companies must adopt a pro-active traffic management role in ensuring that delays during roadworks are kept to a minimum and lane availability is for the benefit of road users.

Maintenance of bridges and structures

The trunk road network contains over 5,000 bridges and other structures, including major waterway crossings, railway bridges, pedestrian and agricultural underpasses, gantries, retaining walls and culverts carrying streams. Included in the network are Ballachulish, Connel, Dornoch, Erskine, Kessock and Kincardine Bridges. Many different types of structure are represented, from early masonry arch bridges, often of considerable heritage value, to modern concrete or steel structures of innovative design. Operating companies must undertake an inspection regime which includes general, principal and special inspections to ensure that every structure is visited and all visible elements of a structure are scrutinised at least in accordance with the specified requirements. Following inspections, operating companies must ensure that, where necessary, appropriate remedial action is taken. Similarly, routine maintenance works, and prompt repair of impact or other damage, are necessary to ensure continued structural integrity.

Maintenance of electrical and communication installations

Some 15% of the trunk road network has lighting, primarily located on the urban stretches and at roundabouts, but also in rural surroundings as an accident reduction measure. Over 14,000 lighting units are installed. Where lighting is provided it must be maintained to a standard such that overall illumination levels do not fall below the safe minimum. Inspection and maintenance regimes are required. A specialist contractor maintains communications and traffic monitoring systems on motorways and other trunk roads and for this the operating company responsibility is generally limited to minor works, the cleaning of signals and liaison with the specialist contractor.

Performance Audit Group

The Performance Audit Group monitor and report upon the activities and performance of operating companies. Monitoring includes: national overview and business comparisons between Units; and auditing of the performance of individual operating companies in terms of works and technical delivery, financial control and conduct. Operating companies must provide detailed technical and financial reports to the Scottish Executive and the Performance Audit Group and must keep accurate and up-to-date records concerning trunk road management and maintenance activities and decisions. Regular and random inspections at offices, depots and works locations form a part of the monitoring regime and operating companies must make records available for inspection and co-operate fully in such activities.

Source: Audit Scotland

6. Although the objective had been partly to attract increased private sector management skills into the work, consortia of the new unitary local councils won all these competitions in 1996 and won most of the work after some of the contracts expired and were re-tendered for a further two years in 1999. In a separate development in 1997 the private sector became responsible for the maintenance of most of the M74/A74 (M) in Scotland under a PFI contract.

Paragraphs 1.4 to 1.6

Paragraphs 1.7 to 1.9

Within a strong contract strategy timing was tight

7. In December 1999, following public consultation, Ministers approved the strategy that was to result in the new contracts which are the subject of this report. New contracts were to be let from April 2001, when all the existing contracts expired, after a further round of competition to select the new providers.

8. The approved contract strategy incorporated several evident strengths. The Department would reduce the number of contract areas from eight to four, thus providing opportunity for economies of scale and reduced management effort. They would extend the "operating company" contract form (previously only applying to about half of the network) to all areas, which would promote an integrated approach to network management and other important benefits. Exposing the work to competition, as was necessary under European Union procurement regulations, should promote value for money. Finally, the new contracts represented a good opportunity to consolidate the extra emphasis since 1996 on good and consistent levels of service in roads maintenance activity.

Paragraphs 1.10 to 1.12, 1.15 and 1.16

9. An important consideration was that by December 1999, when the contract strategy was approved, there was no option but to run the four competitions simultaneously (given the Department's aim to have all four new contracts operational by April 2001, to replace the existing eight contracts that expired then). This meant that, even though the Department devoted significant resources to managing the procurement process, there was significant pressure on the Department and in some areas there was not enough time to complete as much preparation as it would have liked. This may have contributed to some shortcomings in implementation discussed below.

Paragraphs 13, 17, Exhibit 7

Tender lists were shorter than planned

10. The competition for the new contracts began in December 1999 and January 2000, when the Department placed adverts seeking applications from all who wished to be considered for inclusion on the tender lists. There was good interest in the competition, and twelve organisations applied and were accepted as well qualified for tendering in April 2000. Four bidders were consortia formed between the local authorities for each area, with the addition in each case of private sector partners or sub-contractors. The remaining eight bidders were from the private sector exclusively.

Paragraphs 1.20, 1.21

11. The responses received meant the Department could invite four bidders for each contract, with some bidders being permitted to bid for more than one contract. This ensured a sufficient degree of competitive tension (even though the aim had been to have six bidders for each contract). However, the outcome of the competition was that two bidders won two contracts each, which did not fully satisfy the Department's original preference to have a different operator for each unit.

Paragraph 1.22

The Department's tender processes were mostly well designed though with some shortcomings in implementation

12. Following pre-qualification of bidders in March and April 2000 the tender period started on 30 May. Initially tenderers were allowed almost four months until 27 September to submit their bids, though the Department subsequently extended the closing date by almost five weeks to 30 October 2000. All 12 bidders submitted bids by the closing date, which the Department subsequently found were compliant with the tender requirements.

Paragraphs 1.24 to 1.26

13. Regarding the conduct of the tender processes there were underlying strengths in the procedures the Department implemented, reflecting their substantial previous experience and knowledge of road construction and maintenance procurement. The procedures were mostly well designed, to ensure fair and transparent competition in a single round of tendering and to achieve other features of good practice. Within the Department a range of staff with relevant professional experience contributed to the evaluation of tenders, and senior staff exercised their responsibility to monitor and oversee the process. There was in general a methodical and systematic approach to the evaluation, with considerable care taken to ensure confidentiality and impartiality in the assessment of tenders.

Paragraphs 1.14, 1.18

14. Notwithstanding these strengths there were at the same time shortcomings in the Department's tender processes for the competition, as discussed below and elsewhere in this summary. In my opinion, though, none of these flaws is sufficient to cause doubt whether the Department made the correct contract award decisions, although they – indeed the Scottish Executive as a whole – should consider the lessons carefully to avoid similar problems in future competitions.

Paragraph 1.26

- 15. As regards the period for the preparation and submission of tenders there was sufficient time for bidders to submit properly considered bids. However:
 - the information provided to bidders for tendering purposes was unsatisfactory in various respects and in the view of many bidders did not promote fully accurate and reliable pricing. In particular, information describing the extent and condition of the existing trunk road network and records of recent maintenance activity etc were incomplete in important areas and/or difficult for bidders to access. The Department's preparation in this area appears to have suffered because of the tight timescale to complete the procurement process overall, combined with a legacy of weak record keeping from the previous contracts.

Paragraphs 1.27 to 1.35

• the tendering process was intensive and therefore relatively costly for bidders, some of whom raised the concern with Audit Scotland that the tender requirements were more onerous than they needed to be. For example, the Department required bidders to submit a schedule of individual prices for some 40,000 generic items of work, to maximise the activity subject to predetermined prices set in competition. But the actual requirement for most items was so unpredictable that in their subsequent tender assessment the Department included a notional estimated quantity of just one for each of approximately 31,000 (79%) of the individual schedule items.

Paragraphs 1.36 to 1.41

The Department assessed tenders with regard to both quality and price

16. After the submission of tenders by the due date (30 October 2000) it was the responsibility of the Department to assess tenders and, provided the results were acceptable, to make the contract award. Shortly before Christmas 2000, the Department completed the necessary analysis and advised Ministers accordingly, who sought additional information on some aspects. In January 2001 four of the bidders asked the Court of Session in two separate cases to stop any action by the Department to award new contracts, on the basis that these bidders claimed the tender procedures were flawed and would not produce a fair outcome. Although the Court subsequently rejected these claims² the Department nevertheless completed further analysis to test whether the proposed contract awards remained reasonable in the light of evidence from the Court cases. Eventually on completion of this further analysis, and with the approval of Ministers, the Department signed the new contracts with the winning bidders in early February 2001.

Paragraphs 1.42 to 1.45, 1.81 and 1.82; Annex C

17. Concerning the assessment of each tender and the contract award an important area of judgement for the Department was the question of the balance between quality and price. The Department did not set a quality: price mechanism as the basis for making the contract award. Though some authorities recommend this as good practice I accept that an overwhelming case cannot be made in favour of that approach for the new maintenance contracts. Instead the Department's approach was to set a pass: fail threshold on quality, with tender processes planned so that all those meeting the quality threshold passed to a second phase to be assessed on price. This had the advantage of ensuring that the Department gave the necessary consideration to quality aspects, while accommodating their view that applying a price: quality mechanism could lead to awarding the contract to a bidder who had offered quality in excess of the contract requirements but did not offer the lowest price for the work.

Paragraphs 1.46 to 1.56

18 This aspect of the Department's design of the competition was therefore, in my opinion, reasonable. But in practice the Department implemented their chosen approach in a way that meant they were clarifying quality aspects of the bidders' proposals with knowledge of the initial results of the financial assessment of bids, while in principle the two elements should be kept separate until each is completed. Also the sheer scale, diversity and technical nature of the work meant there could be no simple definition of what was the quality standard against which bids were assessed. While there was abundant documentation of the technical requirements etc there was a need also for discussion and clarification with the Department and there is a question about whether the definition of the quality standard was as clear as it needed to be. Some bidders now consider that the quality threshold was insufficiently clearly defined; others consider that while there was uncertainty in this area particularly at the outset none remained by the close of the tender period. The Department need to draw lessons in this area, so that in future competitions the risk of subjectivity is minimised.

Paragraphs 1.57 to 1.63

In a further development in May 2001, two of the local authority consortia (Clyde Solway Consortium and South East Unit Partnership) lodged a complaint with the European Commission, concerning the competitions for the South West and South East area contracts. Clyde Solway also issued a claim in the Court of Session to recover their tendering costs incurred in the South west area competition, alleging failures in the tender process to comply with legal requirements in relation to EU public procurement. The Department does not accept these claims, which remained unresolved at the time of preparing this report (see paragraph 1.82).

There is no evidence to suggest that any bidder offered lower prices overall than those of the selected bidders

19. Although there are lump sum elements in the contracts most of the work will be priced on the basis of a tendered schedule of (40,000) rates. For roads maintenance work quantities are inherently uncertain and the financial assessment of tenderers was a complex area because it depended significantly on estimated contract quantities. The shortage of information about activity under the existing contracts meant that reliable and accurate estimates of quantities were particularly difficult to make for most of the contract items. In fact, even though estimated work quantities will influence the prices that bidders can offer, the basis of the competition was that no definitive estimate could be made and that bidders had to price considering this uncertainty.

Paragraphs 1.64 to 1.67

20. Nevertheless, to allow each bidder's proposed prices to be costed and to help identify which offered the most favourable proposals, the Department needed to take a view on quantities. Recognising the uncertainty, and to provide a fair and rational basis for the assessment, the Department was careful to apply a systematic approach to making the necessary estimates. This was important because the quantities chosen for the evaluation would fundamentally affect the assessment of which bid was the most economic overall. They developed a model to estimate expected quantities. There was sensitivity analysis to take account of the impact of any variation in overall quantities (within the range of approximately 75% to 125% around the central estimate). The Department took great care to protect the confidentiality of this data in the tender period, in the interests of fair competition.

Paragraphs 1.68 to 1.70

21. On this basis the Department's analysis in November 2000 showed significant differences in the estimated costs associated with each bid and a clear winner in each area. Over the estimated five-year contract period for all four contracts the combined difference between the lowest and second lowest (ie next most competitive) bids was £121 million. This amounts to 36% of the estimated value of the combined lowest bids, £337 million. The difference between the estimated lowest and highest bids varied between 33% and 126% of the value of the lowest estimated bid in each area.

Paragraph 1.71; Exhibits 17, 18

22. The Department cannot say with certainty what may explain the wide spread of estimated costs in each case, which may reflect any number of factors. However, before accepting any bid, the Department sought and accepted as reasonable explanations and assurances provided by the lowest bidders which rejected the possibility that any part of their bid prices might be abnormally low, ie unsustainable. The Department has included these assurances in the contracts with each of the winning bidders.

Paragraphs 1.72 to 1.74

23. While in general the Department acted systematically, impartially and fairly in their financial assessment of bids it is not clear that the results of the modelling are completely reliable. The model was based on hypothetical estimates of future work and unfortunately, notwithstanding the Department's careful approach generally, in one area (road signs) they based their evaluation on quantities that proved to be significantly different to the information made available to bidders. Moreover the outcome of their modelling was not subject to independent checking and review. While the Department obtained independent advice in July 2000 to check the underlying mathematical accuracy and operation of the model, there was no independent assessment of the outcome in terms of the reasonableness of the

estimated quantities, which were finalised in October 2000. For reasons of transparency the Department then published the estimated quantities immediately after the tender submission date of 30 October. Within two weeks of publication of the quantities but before any contract award decision had been made two local authority consortia bidders questioned the reasonableness of certain quantities and consequently the fairness of the evaluation process and results.

Paragraphs 1.75, 1.76 and 1.80

24. In January 2001, in the light of these and further points raised in proceedings by all four local authority consortia, the Department arranged further financial tests by their consultant advisers (Halcrow/PwC). These were to both re-perform the operation of the complex model (to confirm its arithmetical reliability and integrity etc) and to assess the impact of alternative quantities that the local authorities offered as being more realistic. These tests confirmed the model was basically accurate – while the tests revealed there were mathematical errors, the errors were relatively small ie within one to three percent of the original estimated bid price in each case. Most importantly of all, the results showed that the Department's assessment of bid prices based on the model was not sensitive even to the very large variations in assumed quantities examined, confirming that in each contract it was reasonable to proceed with the chosen bidder.

Paragraphs 1.77 to 1.79; Exhibit 19

Part 2: Contract outcomes and value for money The new contracts are designed to promote increased value for money

25. The new contracts for the maintenance and management of trunk road network incorporate features that should promote value for money compared with the existing contracts.

Paragraph 2.1

More competitive pricing. Under the previous maintenance arrangements only about half of all work by value was subject directly to market testing. In contrast, under the new contracts perhaps 95% of the work by value will be priced on the basis of either tendered lump sum rates fixed in real terms for the duration of the contract or tendered unit rate prices also fixed in real terms.

Paragraphs 2.2 to 2.4

■ Lump sum pricing. Providing the work is adequately specified and there is effective monitoring of service delivery, in general lump sum pricing provides a strong incentive for efficiency and economy and provides cost certainty for the client. The estimated expenditure on work that will be priced on a lump sum basis in the new contracts will be some £17 million a year, approximately twice as much by value compared to previous arrangements.

Paragraphs 2.5, 2.6

More extensive use of schedule rates for pricing. Compared to the previous arrangements, the Department has significantly increased the coverage and detail of the schedule of rates that is used for pricing such work in the new contracts, and all rates have been competitively tendered.

Paragraphs 2.7, 2.8

Reduced/ more effective administration. Increasing the proportion of work that is paid for at a predetermined price (lump sum or scheduled rate) should reduce the administrative burden associated with the contracts. Although there have been delays in introduction, there are comprehensive new cost and management systems to further improve efficiency.

Paragraph 2.9

More detailed works specifications. In preparing the new contracts the Department took the opportunity to review the entire specification for the maintenance and management activities. In general, the works specifications incorporated in the new contracts are wider in scope but also more detailed, clearer and more prescriptive than previous versions. The new contracts introduce improvements in the level of service in some areas.

Paragraph 2.10

■ The opportunity for innovation and sharing cost savings after the first year. The Department ruled out any proposals for innovation involving immediate change in the level of service, to simplify the competition process. However the contracts encourage the operating companies to innovate by permitting them to propose after the first year changes to the way trunk road maintenance is undertaken, with any savings to be shared equally with the Department.

Paragraphs 2.12, 2.13

Better analysis of discrete schemes. Value for money is as much about ensuring that the right work is done as getting the best price. The new contracts include a systematic procedure for analysing the nature of failures of the road fabric and assessing the effectiveness of the nature (and timing) of proposed remedial work.

Paragraph 2.11

Cost savings from the new contracts are forecast

26. In assessing bids, the Department calculated that the four contracts would save some £15 million a year compared to the historic cost of maintenance since 1996 under the previous arrangements. However the Department's assessment of the potential savings could not be a precise exercise. Under the previous contract arrangements information on prices and quantities was subject to considerable uncertainty and the costing base available to the Department was narrow. The precise level of saving is dependent on the mix of work carried out which cannot be determined at this stage.

Paragraphs 2.14 to 2.18; Exhibit 22

27. While the total saving is subject to uncertainty one area where there is greater certainty is the likely level of savings arising from items of work to be recompensed using lump sum prices. Savings from work such as winter and routine maintenance and emergency responses can be predicted with more certainty because the Department will pay a fixed amount for this work in return for a level of service guaranteed by the operating company contracts. It is therefore possible to be more confident that the Department should achieve at least a £5 million saving in this area assuming that the operators provide the services in accordance with the contract requirements.

Paragraph 2.19; Exhibit 24

Improved service and value for money is dependent on operator performance, which the Department is monitoring closely

- 28. In summary the new contracts are designed to promote increased value for money, though at this early stage of their lives it is not possible to make definitive statements as to the extent to which improved service and value for money will actually be achieved. Nevertheless it is clear that there are well developed mechanisms for monitoring performance and delivery to achieve the forecast benefits.
- 29. In general, the contracts clearly state the operating companies' obligations. Systems of self-regulation and quality assurance are set down in the contracts. And there are contract incentives and sanctions for non-delivery of performance.

Paragraphs 2.23 to 2.26

30. In addition to these contractual mechanisms there is an established Performance Audit Group, which has a key role in ensuring performance is delivered. The Group is assisting the Department as client by monitoring as necessary all aspects of the financial and technical performance of the operating companies. The Department appointed consultants fulfilling this role (in relation to the previous arrangements) in 1996 and the Group currently employ 29 staff full-time on this work (increased from 27 under previous arrangements) at a cost to the Department of £1.5 million annually.

Paragraphs 2.27 to 2.32; Annex E

Reflecting the reduced mobilisation period, there has been a slow start to maintenance operations under the new contracts

31. The delay in signing the contract until February 2001 meant that the pre-mobilisation period – the time when the appointed contractors set up their operations – was curtailed to just two months. Although the Department managed the resulting risks of under performance against the contracts neither contractor achieved all the initial performance requirements. In particular neither Amey nor Bear had ready the necessary computerised management information system as promptly as required ie by 1 April 2001. Not providing these systems by the due date of 1 April was a serious failure, and the Department has consequently withheld monies from the operating companies.

Paragraphs 2.23 to 2.36

32. Since 1 April 2001 the Department's monitoring has shown that in other respects both Amey and Bear have encountered difficulty in fully meeting operational requirements. The handover to completely new service providers would inevitably affect the delivery of maintenance work at the outset and the truncated mobilisation period constrained the ability of the companies to prepare and pre-plan construction and maintenance activity. The companies also lack resources for full operations in some areas. Consequently most maintenance activity has got off to a slow start. However all essential (including safety critical) operations have been delivered effectively and generally the performance of the operating companies does not appear to have resulted in any reduction in the standard of service to road users.

Paragraphs 2.37 to 2.39; Exhibit 26

33. Overall, while there have been problems with the initial standards of service offered, particularly to the Department, these are now being rectified. No guarantees are possible because the contracts are at an early stage of their life and whether the contractors can provide the necessary consistent quality of service can only be judged as the contracts roll forward. But the Department is confident that improvements are being made and there are grounds to expect the delivery of better value for money compared to previous arrangements.

Paragraph 2.40

TUPE³ transfers occurred but are less than forecast

34. A sensitive issue raised by the new maintenance contracts was how any contract award would affect the staff of the Department's existing maintenance providers – most of whom were local authority employees.

Paragraph 2.41

The Transfer of Undertaking (Protection of Employment) Regulations 1981 (TUPE)

35. Broadly speaking, TUPE protects employees' terms and conditions excluding occupational pension arrangements when the business in which they work is transferred from one employer to another. The Department chose not to state in the tender documentation that TUPE would apply to staff transferred to a new operator. Tenderers were simply required to take into account in their bids the potential obligations and to give a commitment in their bids that they would conform with the relevant provisions in the event their bids were accepted and TUPE applied.

Paragraphs 2.42 to 2.45

36. The application of TUPE is a matter of law based on the individual circumstances of a particular transfer. Based on legal advice and precedent the Department considered it was wrong to state in the contracts whether or not the requirements of TUPE applied in these cases. Similarly it considered that Cabinet Office guidance on protection when staff are transferred between employers or different parts of the public sector did not apply strictly to the tendering of the trunk road maintenance contracts.

Paragraph 2.44

37. Since the new contracts were awarded in February 2001, 218 staff have transferred from the previous service providers to the new operating companies. All transferred staff have been offered terms and conditions similar to those under their previous employer, with the exception of pension arrangements. It is interesting to note that the number of staff affected is significantly less than thought possible at earlier stages.

Paragraphs 2.46, 2.47

The Department required no pension protection for staff affected by TUPE transfers

38. The Department did not provide for pension protection in the contract, although they could have done so. Because the Department considered that Cabinet Office guidance did not apply strictly to the tendering of the trunk road maintenance contracts it left the matter of staff pensions as one for the existing and any incoming service providers to determine. Consequently there have been no arrangements to protect occupational pensions of the staff transferring and the new operating companies have adopted a range of approaches to pensions.

Paragraphs 2.48 to 2.50

The apparent wider impact of the new contracts on local authorities has been limited

39. A further sensitive issue arising from the award of the new trunk road contracts is the impact on the staffing and operations of local authorities' direct labour organisations, which have now lost the trunk roads maintenance work, and possible wider employment consequences.

Paragraph 2.51

40. In addition to the 218 staff transfers from the previous providers to the new operating companies, both companies have entered into various partnering and sub-contracting agreements with some of the previous providers to help deliver the trunk road work. In addition the new providers have recruited directly or brought in staff from other parts of their organisation to meet their commitments under the new contracts. These developments may have mitigated the potential job losses and other adverse developments in some areas, which may otherwise have arisen from a reduction in local authority work.

Paragraph 2.52

41. Nevertheless information from a survey of councils in August 2001 indicates that in response to the lost contract work, in addition to staff transfers to the new operators, nearly all had implemented redundancies or had redeployed staff. In total across all 32 councils responding to the survey 85 staff were

reported as having been made redundant and 159 staff have been redeployed internally within the councils. In addition 25 councils reported in aggregate lost turnover and/or fee income of some £45 million a year consequent from the loss of contracts. Councils reported they have adapted to these changes variously by: working in partnership with the new operating companies; offsetting improvements in revenue from higher levels of funding for local road infrastructure maintenance; and review and restructuring exercises to increase economy, efficiency and effectiveness and promote best value.

Paragraphs 2.53

Conclusions

- 42. Overall the Department implemented these large and important contract competitions fairly, properly and with due regard to value for money. There is no basis to suggest that any bidder offered lower prices overall than those of the selected bidders. The new contracts should provide greater economy and a stronger basis to achieve value for money in a significant expenditure programme.
- 43. For the most part the Department adopted good procurement practice. But partly because of the time factor, there were a number of flaws in the implementation of the competitions and the subsequent evaluation. On particular points of law the Courts have ruled in the Department's favour. But many bidders were dissatisfied with important aspects of the process and the poor information. The Department accept there are lessons that can be drawn from the experience in this case. My conclusions on the lessons that can be drawn from the experience in this case are set out in the Table at the end of this summary. My recommendations cover some areas where the Department has already acknowledged it will change future practice because of experience in this case.
- 44. Improved service and value for money is dependent on operator performance. At this early stage in the lives of the new contracts it is not possible to make definitive statements as to the extent to which improved service and value for money will actually be achieved. There have been difficulties with important aspects of the initial performance of the new operating companies. But the Department is managing the situation carefully and in its opinion, despite the companies' initial operating difficulties, the contract award decisions remain sustainable.
- 45. There are well-developed mechanisms for monitoring performance and delivery, and it will be necessary for the Department to continue to monitor closely the performance of both contractors. In the interests of transparency it would be appropriate for the Department to report publicly on performance progress under the new contracts after, say, the first year of operations. As well as providing necessary assurance in the light of experience that the contracts are achieving what is required, this would offer an early opportunity to consider any necessary changes over the remaining contract lives.

Procurement lessons from the new trunk road contracts tender process

Experience in this case

Time pressure. While the Department adopted a sound basic strategy and devoted significant resources to managing the procurement process, in some areas there was not enough time to complete as much preparation as it would have liked. The shortage of time also meant the competitions had to be run simultaneously, which may have had the effect of reducing the number of bidders that participated in the process.

Insufficient information for bidders. The Department was unable to provide accurate information about the network in all respects, which meant there was more uncertainty for bidders than was desirable. While the Department set aside six months to prepare the necessary contract documentation this period proved insufficient because of weaknesses in the underlying data.

A complex process for assessing the cost of each bid which depended on assumptions and data that the Department could not completely validate. For most of the work the bidders were required to submit unit prices for a schedule of 40,000 items of work. For various reasons no definitive estimate of the quantity associated with each work item could be made. This introduced significant uncertainty into the process, though the evidence is that even large changes in assumed quantities do not affect the outcome of the competition.

Recommendations for departments and public bodies

Departments and public bodies may from time to time place multiple contracts for similar service requirements. As in the new trunk road contracts, there should be careful assessment of the optimum size and scope of each contract, to avoid unnecessary and uneconomic fragmentation of the work or, on the other hand, monolithic contracts which might not be in the interests of maintaining choice and diversity amongst suppliers.

Where multiple contracts are necessary clients should phase contract start dates so as to permit a larger number of bidders to be considered for pre-qualification for each contract.

In preparing contracts departments and public bodies should exercise foresight and careful planning to ensure all necessary contract documentation of the required quality is available at the start of the tender period. They should guard against over optimism in determining the necessary length of the consultation and pre-tender preparation period, when such documentation must be prepared. They should conduct critical path analysis with due allowance for preparing documentation and contract information.

For complex cases they should prepare a separate information and documentation strategy to ensure these issues are given the necessary priority. They may consider commissioning consultancy assistance to focus and ensure sufficient resources are directed to this work.

Careful advance planning of the assessment process is more important now than ever. Experience shows there are challenges in designing effective assessment methods and an increasing expectation amongst suppliers of high standards and objectivity. As in the new trunk road contracts there may be legal challenges from tenderers dissatisfied in this area.

In setting assessment methods departments and public bodies should be alert to the need for transparency and, wherever possible, simplicity. Clients must also preserve tender confidentiality at all stages.

In cases where complex assessment methods are necessary there must be strong arrangements to validate and quality assure the design, conduct and outcome of the evaluation and assessment processes.

Experience in this case

The need for greater transparency of the quality and price assessments. Good practice is that the clients should assess the quality of bidders' proposals independently of the assessment of their prices, to reinforce objectivity. For the new trunk road contracts the Department implemented their assessment in such a way that they did not achieve the necessary separation. There was also a question about whether the definition of the quality standard was sufficiently clear.

Recommendations for departments and public bodies

Ideally, clients should be certain of all non-tender data and assumptions for assessment purposes before the tender period commences. They should provide independent checks on the underlying evaluation methods and logic and on the integrity of key assumptions and data (with emphasis on any assumptions and data that cannot be objectively verified). Subsequent checks should include analytical review of key outcomes from the assessment against independent benchmarks to test reasonableness.

Assessing "quality" involves a range of considerations and an element of subjectivity. Quality may relate to both the assessed management capacity of a supplier (the calibre and experience of the management team and their proposed business processes) and the proposed level of front-end service (how quickly a maintenance service provider responds to maintenance emergencies affecting users).

There may be trade offs between price and quality and both aspects require careful consideration. There is now specific advice from the Scottish Executive on price: quality assessment methods and public bodies should use this advice to inform the design of their own assessment framework. Though a price: quality formula may not always prove to be the best assessment and selection option it should always be evaluated.

In any event for any contract competition departments and public bodies should be certain about what they mean by quality and how important it is for the award decision, in particular compared to the prices that bidders offer. Clients must communicate the quality requirements clearly to bidders at the start of the competition. Where the service required is innovative or involves a change in level clients should consult potential suppliers before any contract competition about the quality requirement and fair assessment methods.

Departments and public bodies should be certain they can defend the weighting given to quality for assessment purposes and that such assessments can be audited and verified. There should be clear decision points for quality assessments, which should be completed independently from price assessments to reinforce objectivity and equal competition.

Part 1: Procurement strategy and processes

The Department's approach to trunk road maintenance and its procurement strategy

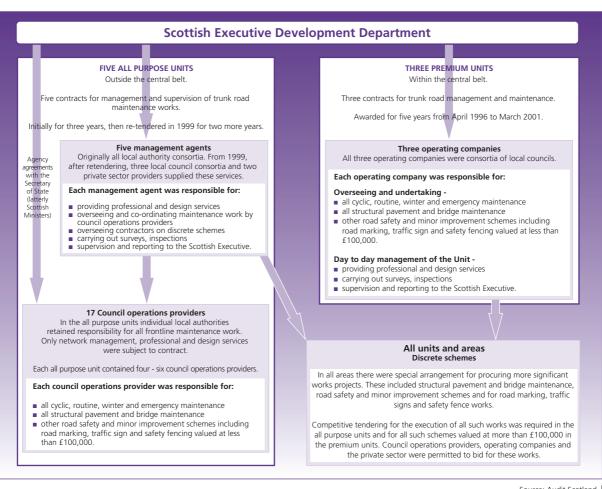
1.1 The Scottish trunk road network provides a system of national strategic routes designed to cater for through traffic and was first designated in 1936. The network is the direct responsibility of Scottish Ministers and now extends to some 3,300 kilometres of trunk roads and motorways.

The new contracts developed from revised arrangements first introduced in 1996

- 1.2 Local authorities have responsibility for operating and maintaining the 50,000 kilometres local road network in Scotland. For many years prior to local government reorganisation in 1996, local authorities (latterly the nine former regional councils) had generally carried out management and maintenance of the trunk road network in addition to their responsibility for local roads. They did this work under broadly based agency agreements with the Secretary of State.
- 1.3 In April 1996 the Scottish Office introduced a major change in the arrangements for the delivery of trunk road maintenance. This was in conjunction with local government reorganisation, which meant the previous agency arrangements with the nine former regional councils could not continue, while also reflecting the Government's then policy objective to seek to attract increased private sector management and financial skills into operating the trunk road network. The Scottish Office after consultation divided the trunk road network into eight unit areas and in each area awarded individual contracts for trunk road maintenance and management after an open competition. Consortia of the new unitary local councils won all of the competitions for this work in 1996.
- 1.4 In 1997 the responsibility for the maintenance of the southern 90 kilometres of the M74/A74(M) in Scotland passed to the private sector under a PFI Design, Build, Finance and Operate contract.
- 1.5 In 1999 five of the eight contracts (to provide management and professional services to oversee the work of local councils) were re-tendered and private sector enterprises won two, though local councils continued to provide frontline maintenance work in these areas through continuing agency agreements with the Secretary of State/Scottish Ministers.

1.6 Exhibit 3 summarises the responsibilities for the trunk road network prior to the latest contracts ie those commencing operations in April 2001. Note that under the previous contracts management agents and operating companies were responsible for planning, preparing and tendering in open competition discrete structural maintenance and other schemes. The Department required competitive tendering to be undertaken for all such schemes outside of the Scottish central belt and for schemes valued at more than £100,000 within the central belt. Under the new contracts the Department requires operating companies to undertake the planning of discrete trunk road maintenance schemes costing more than £150,000 and to then subject these schemes to competitive tendering to determine who should carry out the maintenance work. Operating companies, local authorities and private sector companies will be permitted to bid for this work which the Department estimate will be in the region of £30 million a year.

Exhibit 3: Trunk road network unit responsibilities 1996-2001



Source: Audit Scotland

The Department developed its procurement strategy after a process of consultation

- 1.7 In April 1999 the Scottish Office published *'The Road Ahead'*, a consultation paper seeking views on the effectiveness of the arrangements for management and maintenance of the trunk road network and options for the future. The Scottish Office considered the existing contracts had achieved substantial value for money improvements over the previous arrangements and they believed further efficiency should be possible. The consultation paper offered several options for future arrangements and a proposed timetable to have new contracts operational by 1 April 2001.
- 1.8 In June 1999 the Scottish Executive established a steering group of senior officials to take forward development of the new arrangements, including a review of the responses to '*The Road Ahead*' consultation (due that month) and subsequent internal review work. The steering group confirmed the following overall objectives for the new contracts (Exhibit 4).

Exhibit 4: Objectives of the new trunk road management and maintenance arrangements

The objectives of the new trunk road management and maintenance arrangements are laid out in 'The Road Ahead' consultation document. To these three objectives, the contract steering group in July 1999 added a fourth objective on flexibility of the contract form to allow for the possible impact of other future transport initiatives then being considered.

The objectives are:

- To enable a customer oriented approach to be further developed in the way roads are managed and maintained in line with the Citizens Charter
- To achieve the maximum efficiency in the use of substantial sums of money expended on the maintenance of the network
- To encourage innovation and skilful management to maximise trunk road capacity and gain best use of the network
- To be a contractual arrangement which provides the flexibility to allow for the possible impact of future initiatives.

Source: Scottish Executive Development Department

- 1.9 In December 1999 Ministers approved the recommended procurement strategy to achieve these objectives, in summary:
 - to develop an improved "operating company" contract as the basis for future management and maintenance of the entire trunk network from April 2001
 - to reduce the number of maintenance contract units across Scotland from eight to four, with each having a potential business value of between £15 million and £25 million a year
 - to adopt a contract period in each case of five years, plus the option of extension(s) up to a maximum of two years.

The procurement strategy was founded on an improved operating company contract

1.10 The Department's steering group considered a range of possible approaches to delivering trunk road management and maintenance services (industry participants from both public and private sector roads maintenance suppliers were involved in the assessment of the approaches and the decision making process through earlier separate workshops). The group concluded

an improved operating company contract was the most effective contract form and recommended this strategy as best meeting the Department's long-term needs and objectives. This form of contract combines in the same entity those with professional responsibility for overseeing the network and designing and managing necessary maintenance work with those responsible for undertaking the frontline work. The key features of the improved operating company contract are shown at Exhibit 5.

Exhibit 5: Operating company contracts

The features of the Department's new operating company contracts include:

- An integrated management approach, with a single operating company responsible in each area for professional supervision and management of the service and maintenance works delivery
- Clearer outcome specifications and use of performance indicators to provide a clear picture of the standards expected of the operator and of performance delivered
- A clear charging structure with prices for specified items of work being previously determined in a schedule of prices and rates containing some 40,000 work items, reducing dependence on demonstrable cost payment mechanisms
- Risk transfer through the operating company being paid lump sums for certain work activities
- Greater incentive for efficiency improvement through agreed sharing of savings made. Enhanced real-time monitoring of operating company performance against programmed and emergency repairs and maintenance. Sanctions including financial sanctions for non-delivery of performance.
- Greater financial control and management through a state of the art and bespoke computerised contract control and management system.

An alternative arrangement, which the Highways Agency adopt in some areas in England, is to appoint separately a frontline maintenance contractor and a managing agent or consultant with professional responsibility for overseeing the network, initiating the work and supervising the maintenance contractor. While this provides a strong separation of duties between those responsible for frontline work and those supervising it, the disadvantage (compared to combining these functions within a single operating company) is that it can mean less efficient working practice and teamwork leading to reductions in overall effectiveness.

Source: Audit Scotland

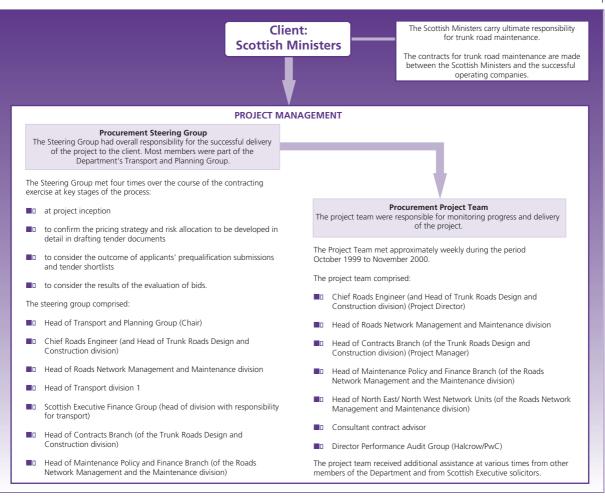
- 1.11 After considering options, the Department's steering group also concluded that dividing the work across Scotland into four contract areas compared to the previous eight would provide opportunities for economies of scale and reduced management effort, both for the operating company and the Department. Most of those responding to 'The Road Ahead' consultation paper in 1999 supported four contract areas and considered that the operating company model was amongst the best contract options.
- 1.12 The Department's approach in taking forward the unified service provider model across all its maintenance units was one that had not hitherto been attempted elsewhere in the UK. Most of the Highways Agency's management and maintenance contracts for trunk roads areas in England are let on the basis of separate contracts for consultants and contractors. However the Highways Agency introduced on a pilot basis a new contract similar to the operating company type of contract in one area in England in September 2001.
- 1.13 The Department aimed to have all four new contracts operational by 1 April 2001 (to replace the existing eight contracts that expired then) and the expected 15 months duration of the tender processes meant the

competitions had to be run simultaneously. The Department had a fixed end date for expiry of the existing eight contracts and it would have been difficult to shorten significantly the duration of the tender processes. Consequently, there was no real scope to run the new contract competitions one after the other. Running four competitions in parallel covering all Scotland increased the technical, managerial and administrative challenge of the procurement process for the Department.

The Department devoted significant resources to managing the procurement process

1.14 In planning the competition the Department brought to bear a systematic and methodical approach. The Department's Chief Road Engineer was responsible for leading the procurement project, supported by professional resources in two divisions within the Department. Accountability and monitoring were the responsibility of the project steering group, set up in June 1999, which was under the direction of the senior civil servant in charge of the Transport and Planning Group within the Department. The civil servants responsible had significant experience in the area of roads construction and managing roads maintenance activity. Exhibit 6 summarises the Department's project team organisation and reporting arrangements.

Exhibit 6: The Department's project team organisation



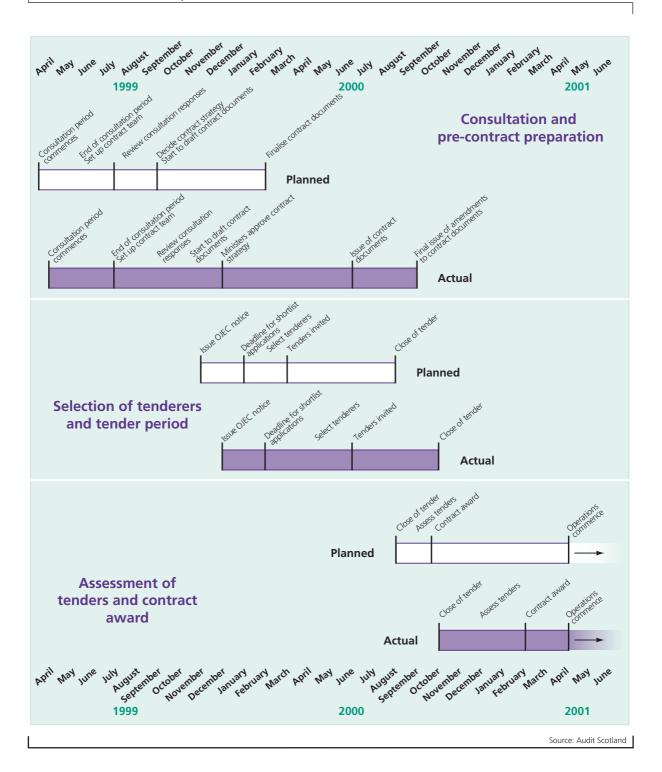
Source: Audit Scotland

The Department's strategy was subject to European procurement rules

- 1.15 In responding to 'The Road Ahead' consultation paper some local councils advocated placing at least some of the trunk road work with them under agency agreements. They considered this would promote synergy and an efficient use of resources, taking account of their existing local roads responsibilities. The Department considered and eliminated this option, on the grounds that:
 - in keeping both with general Government policy on procurement⁴ and specific European Union procurement rules⁵ the Department saw no option but to offer the trunk road work to an open competition
 - the broadly based agency arrangements provided no particular incentive to improve service or economy and did not fit particularly well with the objectives for this major procurement exercise (Exhibit 4).
- 1.16 Regarding possible efficiency benefits the Department considered that it was possible that local authorities would benefit from economies of scale for undertaking both local and trunk road maintenance. However any such economies should be brought out by a competition and were not in themselves grounds to curtail any competition. In particular, in the event that a local authority provider did not succeed in competition and this affected the viability of local road maintenance, the Department could do nothing under the European procurement rules to mitigate the impact for the local authority.
- 1.17 The Department recognised from the outset the importance of timetabling. 'The Road Ahead' consultation paper in April 1999 had indicated the key stages to put new contracts in place by April 2001. However by December 1999, when the procurement strategy was confirmed, there was little slack left within the remaining procurement period.
 - All contracts in the eight existing units were due to expire in April 2001. The Department's solicitors advised the Department that it may be possible to extend the existing arrangements for a short while providing that the aggregate value of each contract remained below the £3.6 million threshold above which European procurement rules require full competitive tendering procedures.
 - The Department considered this meant that for practical purposes there was a fixed end date of April 2001 for the implementation of the new contracts. While there was in the meantime some scope to juggle the timing of some tendering activities any significant delay in tendering could threaten the successful delivery of service at the outset of the new contracts.
 - In the event elements of the procurement processes took longer or occurred later than first planned, although the Department secured their goal to have the new arrangements operational on 1 April 2001 (Exhibit 7).

Chapter 31 of Government Accounting states: "Goods, works or services should be acquired by competition unless there are compelling reasons to the contrary. Subject to the department's legal obligations the form of competition should be appropriate to the value and complexity of the product or service to be acquired."

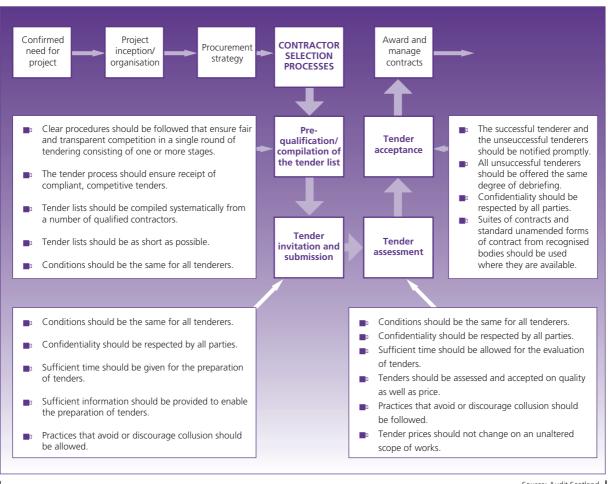
Implemented in UK law by the Public Works Contract Regulations 1991 and The Public Services Contract Regulations 1993.



The procurement processes

1.18 Exhibit 8 summarises the key principles of good practice to be adopted when appointing contractors and which are widely accepted throughout the construction industry.

Exhibit 8: Good practice in the appointment of contractors



Source: Audit Scotland

Pre-qualification

Pre-qualification is the process of assessing potential tenderers for their general skills and competencies, to establish their suitability to undertake given types of construction work. It is intended to ensure that all contractors who are invited to tender are capable of performing to the required standard, are of sufficient standing and have established skills, integrity, responsibility and competence. Potential tenderers may be qualified on the basis of their own skills and on their ability to select and effectively manage suitably qualified sub-contractors.

Tender lists were shorter than planned

Tender lists should be as short as possible consistent with the objective of receiving sufficient compliant tenders and achieving effective competition. Where, as in this case, the tender requirements are large and complex the case for keeping tender lists short is that not doing so may impose unreasonably high costs on the tenderers and tend to undermine effective competition and value for money in the long run. The Construction Industry Board has indicated that ideally tender lists should be three or four with a maximum of six tenderers (depending on complexity) and other procurement guidance suggests a range of between three and six bidders. HM Treasury advises that for complex projects with very high tender costs (eg PFI contracts) there should be no more than three or four tenders. However a European Court case in September 2000 concluded that under

European procurement directives a contracting authority must seek a minimum of five candidates to be invited to tender under the "restricted" procurement procedure.

- 1.21 For the new trunk road maintenance contracts advertisements inviting applications to pre-qualify, including a notice in the Official Journal of the European Community (OJEC), were issued in December 1999 and January 2000. The Department made a rigorous analysis of the resulting pre-qualification applicants against clearly identified and relevant criteria. The Department pre-qualified all those who had applied, all of whom comfortably satisfied the criteria. However they did not achieve their objective to have if available up to six tenderers for each contract nor their original preference to have a different operator for each unit.
 - Twelve organisations applied to pre-qualify for the four contract competitions and all in fact pre-qualified.
 - The pre-qualified tenderers included both public and private sector organisations. The existing local authority service providers formed four separate consortia, which each joined with private sector partners or sub-contractors and sought to bid for one contract area. In addition eight exclusively private sector firms or consortia each sought to bid for between one and four contract areas (Exhibit 9).
 - The Department permitted on capacity grounds most bidders to tender for one contract only and the others to bid for no more than two contracts, which limited the risks of a single bidder winning too great a share of the work.

Under European procurement rules departments may chose to run competitions under specified "open", "restricted" or (in more limited circumstances) "negotiated" procedures. Guidance from the UK Office of Government Commerce in July 2001 states that under the restricted procedure, Departments "should ensure that the minimum number of candidates they intend to invite to tender is not fewer than five The number actually available to be invited to tender will, of course, depend on how many candidates meet the contracting authority's minimum standards. The intention should be to invite five or more. If fewer than five are available the underlying requirement is to invite a sufficient number to ensure genuine competition."

Exhibit 9: Tenderers for the new trunk road maintenance contracts

Name of bidder	Comprising	Bidders' unit preferences	Units allowed to bid for	
Local authority consortia with private sector partners or sub-contractors				
Caledonian Roads	The Highland, Argyll & Bute, Perth & Kinross, Stirling local councils <i>plus</i> Morrison Construction, Scott Wilson Scotland as sub-contractors	NW	NW	
Clyde Solway Consortium	The South Lanarkshire, Dumfries & Galloway, East Ayrshire, East Renfrewshire, Glasgow City, Inverclyde, North Ayrshire, North Lanarkshire, Renfrewshire, South Ayrshire, West Dunbartonshire local councils <i>plus</i> Scott Wilson Scotland Ltd and Tarmac HBM Ltd as sub-contractors	SW	SW	
Lowland Roads	The City of Edinburgh, Dumfries & Galloway, East Lothian, Falkirk, Midlothian, North Lanarkshire, Scottish Borders, South Lanarkshire, Stirling and West Lothian local councils <i>plus</i> Balfour Beatty, Mott MacDonald as sub-contractors	SE	SE	
Neulink	The Aberdeen City, Aberdeenshire, Angus, City of Dundee, Fife, The Highland, The Moray, Perth & Kinross, Stirling local councils plus Tayside Contracts plus Mouchel Consulting as partner	NE	NE	
Exclusively private sector f	irms or consortia			
Accord plc	Accord plc, Opus International Consultants	NE, NW, SE, SW	NW	
ACTim	WS Atkins, Carillion Construction, Thorburn Colquhoun	NE, SE	NE, SE	
Amey Highways Ltd	Amey Highways Ltd, WA Fairhurst	NE, SE, SW	SE, SW	
BEAR Babtie Group	Babtie, Ennstone Thistle, Ringway Group	NE, NW, SE	NE, NW	
Linkroads	Balfour Beatty, Mott MacDonald	NE, NW, SE, SW	NW, SW	
NE Roads	Colas Highway Services, Scott Wilson Kirkpatrick & Co	NE, SE	NE	
Nuttall/Parkman	Edmund Nuttall, Parkman Ltd	SE, SW	SW	
Total Road Care	Morrison Construction, Mouchel Consulting	SE	SE	
			Source: The Departm	

1.22 The outcome of the competition for each of the four contract areas was four compliant tenders, sufficient to have ensured competitive tension throughout the process, but two bidders won two contracts each. The Department had hoped to avoid this outcome in the interests of nurturing a sustainable and competitive market amongst road operations providers within Scotland. However even had the Department chosen to run the four competitions at separate times – as noted previously above their aim was to introduce new contracts in all four areas by April 2001 and separate competitions were not possible in the remaining time – there is no guarantee this would have produced a different outcome.

1.23 Nevertheless, the Department recognises there were difficulties arising from the parallel running of the four contract competitions and the tight timetable. A lesson to consider for future contracts is the additional flexibility and extra benefits from phasing tender periods and contract start dates. This could permit a larger number of bidders to be considered for prequalification for each contract in the interests of maintaining choice and diversity amongst suppliers (whilst still meeting good practice guidance and procurement regulations regarding how many bidders ought to be considered). It would also help to reduce the administrative burden of running competitions simultaneously.

Tender invitation and submission

1.24 Following pre-qualification of bidders, good practice aims to obtain compliant tenders in a single round of competitive bidding. Procedures should keep costs for all concerned to the minimum, secure competition and ensure a level playing field. Effective two-way communication is vital – concerning both the client's circumstances and requirements and the bidders' proposals in response – while confidentiality in key areas must also be maintained.

Most bidders felt the time given to prepare bids was sufficient

- 1.25 Following pre-qualification of bidders in March and April 2000 the Department issued tender invitation letters on 30 May, the start of the tender period. Initially tenderers were allowed almost four months until 27 September to submit their bids, though the Department subsequently extended the closing date by almost five weeks to 30 October.
- 1.26 All the bidders accepted the Department's offer to extend the closing date to enable changes in the contract documentation to be assimilated and incorporated in bids. And in the event, all 12 bidders submitted bids by the closing date, which the Department subsequently found were compliant with the tender requirements. In Audit Scotland's subsequent survey (Annex B) bidders were generally content with the time available to them to prepare and submit bids and that the initial four month period represented the standard for the industry in contracts of this size and complexity. However many bidders considered the large volume of changes to contract documentation that proved necessary (see below) did not provide evidence that the Executive's commitment to the timetable matched their own.

The lack of slack in the timetable influenced the quality of information made available to bidders

- 1.27 Regarding good practice during the tender period an important requirement is to avoid unnecessary uncertainty and provide sufficient information to bidders to permit them to offer fully considered proposals which comply with the client's requirements. Clients should also obtain sufficient but not excessive information from bidders, balancing the need for effective appraisal against the risks of insufficient evidence or excessive tender costs for bidders.
- 1.28 Exhibit 10 summarises the main information and documentation that the Department made available.

Exhibit 10: Information provided for the tender stage of the competition

- Instructions for Tendering including the Form of the Tender. Including the Conditions of Contract; the Specification and the Requirements for level of service; details of the 40,000 works items for which prices were sought; and instructions on the submission of outline proposals and quality management proposals.
- **Details of past and planned future activity.** Including expenditure by work code in the period 1996 to 1999, statistics on work carried out eg, number of potholes filled in the last five years, and the current future maintenance bid.
- Database information. Including inventory information and schedules on trunk roads, bridges and lighting installations, inspection programmes and schemes under construction.
- Manuals and other guidance. Including database users manuals, other manuals on conducting inspections and guidance on abnormal load movements, land acquisitions and landscaping.
- Miscellaneous. Including examples of other Department works contracts, particulars of employees of the existing units and records to be transferred to any new operating company.

Source: Audit Scotland

1.29 Although the amount of information provided for tendering was substantial, the Department acknowledged that it was not as accurate or as complete as it would have liked. In particular, the Department had considerable concerns that the quality of some of the network information maintained by some of the existing operators under the previous contracts was not fully satisfactory. The Department had employed a consultant in early 2000 specifically to collect together contract data from existing unit managers, which revealed the problem. However by this time, once the problem was known, the Department considered the remaining short time available before the tender period was due to commence (end of May 2000) was insufficient to check and improve the quality of information. The Department did not guarantee the accuracy of the information made available and required bidders to exercise a high degree of diligence in this area in the preparation of their bids⁷.

Bidders have reported significant concerns about the information available during the tender processes

- 1.30 Audit Scotland's survey (Annex B) shows most bidders from both public and private sectors have significant concerns about the scope and quality of information available during the tender period. In part, it now seems, these problems with the availability of information appear to have been a legacy of the previous roads maintenance arrangements. In some areas the Department, along with the existing operators, management agents and local authorities, seem to have been unable to achieve fully satisfactory record keeping regarding the roads network.
- 1.31 Almost every bidder considered that network expenditure, condition and inventory data (Exhibit 11) that the Department provided was inadequate in key aspects. Some bidders doubted that some information provided was fully reliable or commented that it was inaccurate or became available too late.

The Department does not warrant as being accurate information issued for any of its tender competitions including Design and Build and Design, Build, Finance and Operate types of contract. This follows advice from solicitors that the Department could be at risk from contractual claims if they misrepresented the situation by inadvertently issuing inaccurate information.

Exhibit 11: The trunk road network inventory

The trunk road network inventory is information about every asset and physical feature forming the network, which is particularly required for its maintenance and management.

As well as the characteristics of the road itself and information such as its current condition and previous investment, managers need information about features such as the presence of safety fencing, drainage gullies, lighting and electrical installations, signage. They also need to know about boundaries with local roads (eg at interchanges) and with the surrounding environment (eg verges) which are the responsibility of the trunk road authority.

Managers need similar information about the 5,000 highway bridges and other structures like railway bridges, underpasses and culverts that are part of the network.

Source: Audit Scotland

Two bidders commented that detailed information had to be obtained from the existing operators, which created difficulties. One bidder (a local authority consortium) commented that they considered there were longstanding problems with reliability of inventory data under existing management contracts but that the Department had not given priority to funding improvements through investment in survey activity etc. Some bidders reported previous expenditure data was confusing or misleading. One private sector bidder commented that:

"Documents were clear regarding the Department's requirements although pricing and performance specification on a unit inventory that was not validated/contractual was high risk and considered unfair and unreasonable."

1.32 On winter maintenance, which was to be priced as a lump sum item within the contract transferring a high degree of risk to the operator, another private sector bidder commented:

"The quality of information given was extremely poor and unreliable."

- 1.33 Regarding contract documentation, the Department would normally wish to issue a full set of documents at the start of the tender period. Again, though, to meet the timetable the Department had to go out to tender with gaps in the information. In the Department's view the documentation provided was sufficient to meet the contractual needs of the tender competitions.
- 1.34 In Audit Scotland's survey bidders took the view that the information was below that acceptable for the most effective and economical preparation of a tender. Several bidders highlighted the great size of the tender documentation (1,800 pages) and the fact that there was a complete reissue incorporating and consolidating changes as a consequence of internal document review and tender queries three and a half months after the start of the tender period. One bidder commented that it seemed that tender documents were rushed out and consequently there were numerous tender amendments resulting in a full reissue and extensions to the tender period. Some bidders complained that the quality of contract drafting was poor and that responses to some of the 400 or so tender queries were incomplete or uninformative.

1.35 The Department has recognised the need for better information in future competitions. In the new contracts the operators are required to develop and operate an electronic Contract Control and Management System. This will enable a full inventory of ordered works to be maintained and will provide a correspondingly more reliable basis for estimating future work quantities.

Bidders questioned whether some of the Department's tender requirements were fair and realistic

1.36 The Department's specification of the maintenance and management work forming part of the contract included the requirement to price some 5,000 separate works activities developed, through banding and providing for different road types, to a maximum of 40,000 specific individual items of work. This compares to some 1,200 basic items, expanded by banding to a total of some 3,500 items in the equivalent predecessor contracts (Exhibit 12).

Exhibit 12: The Department's schedules of rates

The Department's schedule of rates for each contract contains up to approximately 40,000 items based on 5,000 separate works activities.

A few of these items (less than 100 in total but representing about one quarter of the total contract value) were lump sum items. That is, they were single items for the provision of a given element of the routine, cyclic or winter maintenance service work to be completed for a fixed price, in accordance with specified service and frequency standards also detailed in the contract. An example of a lump sum item of work for the South East unit is "cleaning out (all) gullies, catchpits, soakaways and oil interceptors" for all 467 kilometres of motorway and other trunk roads in that area.

Mostly, though, the schedules comprised a much longer list of much more narrowly defined work items, that the client may or may not require to be done, for which in every case a unit rate price was to be provided. Within each schedule of rates there are approximately 5,000 separate work activity items, for example replacing a specified quality of road material. For each of these items bidders had to complete a matrix of up to nine prices. Separate individual prices were required according to the type of road where the work was to be done (motorway, dual carriageway or single carriageway) and the forecast volume of work required in three quantity bands (for example, the price per m³ for: replacing less than 10 m³ of roadway material; 10 m³ to 50 m³; and more than 50 m³).

There are no motorways in North West, which consequently reduced the number of unit rate prices required for that unit from some 40,000 to some 27,000.

Source: Audit Scotland

- 1.37 By substantially increasing the size and scope of the schedule of rates the Department aimed to maximise the scope of works subject to predetermined prices set in competition and to minimise the need to negotiate with contractors bespoke prices once the contracts had been awarded. This reflected the Department's experience on previous contracts where the narrower scope (or in some cases the absence of a schedule of rates) had resulted in negotiated prices, which were not set under competition and have not always provided best value for money.
- 1.38 In Audit Scotland's survey bidders questioned the effectiveness of this strategy for securing value for money. Several bidders complained that around 40,000 rates was an excessive requirement which was unnecessarily onerous, time consuming and wasteful of bidders and the Department's resources. Other bidders, while accepting the Department's underlying strategy, considered that similar results could have been achieved without

needing to set as many individual rates. For example one private sector bidder commented:

"The construction of the tender was flawed in that the bill of quantities was far too large and covered far too many items. In practice only some 2,000 rates will be used on a regular basis. This and the way the quality threshold was handled made the process very extended and as such a very expensive exercise for tenderers."

- 1.39 In fact the requirement for most of these work items was so unpredictable that for the purposes of their subsequent tender assessment the Department made only a notional estimate of quantities required. For 79%, or approximately 31,000 of the 40,000 individual schedule items, the Department subsequently assumed a quantity of one each for the purposes of estimating the comparative cost of each tender.
- 1.40 Bidders are responsible for their own tender costs which include the cost of staff time in preparing tender submissions etc and any direct expenses such as the costs of consultants whom tenderers may need to appoint to permit them to prepare a satisfactory tender. Four bidders provided Audit Scotland with broad-brush information about their estimated tender costs for these competitions while a fifth bidder had prepared a particular estimate. Four bidders estimated that on a conservative basis their tender costs were in the range £150,000 to £250,000 in the fifth case the cost was £475,000, suggesting a total tender cost for all bidders of perhaps some £3 million. In addition to such costs there is the opportunity cost for bidders of committing available resources to one bid, which may mean the loss of other bidding opportunities in the meantime.
- 1.41 Bidders commented to Audit Scotland that both the pricing of the large number of rates in the contract and the intensive quality threshold process (see below) resulted in higher costs for tenderers than they had anticipated. One bidder suggested a lesson for future contracts would be to consider a tender process incorporating a quality assessment leading to the selection of a preferred contractor with whom the Department would conduct further more intensive quality negotiation as required. In Audit Scotland's view this is a constructive suggestion, which could reduce all parties' costs during the tender. The Department could maintain competitive tension by nominating reserve bidders to be invited to negotiate in the event that quality negotiation with the preferred bidder could not be completed satisfactorily. However this could alter the basis of the competition under European procurement rules from "restricted" to "negotiated" procedure and the acceptability of this would be a consideration.

Tender assessment and contract award

- 1.42 After the process of pre-qualifying bidders in March and April 2000 and tendering between June and October 2000 all bidders returned tenders for the four contracts by the required date of 30 October 2000.
- 1.43 It was then for the Department to make the assessment of tenders, to identify and accept the tender offering best value for money in each contract area and award the contracts.

- 1.44 Originally in 1999 the Department had hoped to make contract awards by August 2000, but as the timetable for the process extended (Exhibit 7 above) this target moved back. At the close of the tender period in October 2000 the Department aimed to make the award at the latest by November or early December 2000, leaving the successful contractors between three and four months to prepare before they became responsible for maintenance and management operations from 1 April 2001.
- 1.45 In the event the assessment processes proved more difficult and took considerably longer than the Department had forecast, and contract awards were delayed until early February 2001. This reflected extra work being undertaken on the assessment and third parties raising court actions, later set aside. Annex C presents a detailed chronology of events between October 2000 (close of tenders) and April 2001 (start of the new contract operations).

The quality assessment Tenders should be assessed carefully and with regard both to quality and price

- 1.46 The key principles of good practice that apply to tender assessment and contract award are: conditions should be the same for all bidders and there should be equality of treatment; there should be procedures that avoid or discourage collusion; confidentiality should be respected by all parties; there should be sufficient time for evaluation of tenders; tenders should be assessed and accepted on quality as well as price; and the award decision should be notified to all concerned promptly, with debriefing available to all unsuccessful tenders.
- 1.47 UK Government policy is that all procurement should be on the basis of value for money and not lowest price alone. HM Treasury guidance on the appointment of consultants and contractors is that robust mechanisms specific to each project should be developed to evaluate the quality and price (whole life cost) components of each bid in a fair, transparent and accountable manner^s.
- 1.48 The HM Treasury guidance on mechanisms advises public bodies to establish specific tender award criteria at the outset of the procurement and to assess tenders on how well they satisfy the award criteria. The guidance states "The relative importance of each award criterion should be established by giving it a percentage weighting so that all the weightings equal 100%". Departments are expected to draw up their own mechanisms for each contract and the guidance provides indicative examples of quality: price ratios that should be established for different types of projects (Exhibit 13).

As discussed later in this part of the report, in May 2001 the Scottish Executive issued fresh procurement guidance specific to Departments and Agencies in Scotland taking account of and developing the Treasury advice so far as the Executive considers it is correct, particularly in the Scottish context.

Exhibit 13: HM Treasury guidance on quality: price award mechanisms

HM Treasury's guidance on the evaluation and award of tenders based on a quality: price ratio requires a step-by-step approach.

- Establish award criteria for the qualitative aspect of the tender. Criteria
 can include, for example, teamworking arrangements, aesthetic and functional
 characteristics such as innovative design, proposals for managing the contract
 including the quality plan and project team organisation and technical suitability.
- Set criteria weighting. The more important criteria should be given a higher weighting, with the sum of all weightings being 100%.
- **3. Establish a scoring system for each criterion.** This aims to indicate how well each tenderer's quality bid meets each of the award criteria.
- 4. Calculate the weighted quality score for each tender. Multiplying the score by the weighting factor for each criterion and summing the total do this. If the total score does not meet a pre-determined quality threshold the bid should not be considered further.
- 5. Apply the price scoring system to the financial value of the tenders. The price scoring system should be determined in advance of the receipt of bids. A variety of mechanisms can be used but the end result is to calculate a score for the price element of each bid. Evaluation of the price element of each bid should take place after evaluation of the quality element.
- 6. Apply the quality: price ratio to both the quality and price scores for each bid. This enables a single value combining both quality and price to be calculated for each tender allowing bid comparisons to be made. The quality: price ratio should be appropriate to the type and stage of the project. Departments are responsible for ensuring the optimum combination of whole life cost and quality but the Treasury provides indicative quality: price ratios for different types of contractor situations:

Type of project Indicative quality: price ratio
Innovative projects 20:80 to 40:60
Complex projects 15:85 to 35:65
Straightforward projects 10:90 to 25:75
Repeat projects 5:95 to 10:90

Source: HM Treasury Procurement Guidance 3: Appointment of Consultants and Contractors 1997

1.49 In addition to these good practice arrangements there are obligations to follow certain specified procedures under European Union procurement regulations. For example, it is a requirement of the regulations that client public authorities publicise award criteria for contracts as part of the tender process. Broadly speaking there is a choice of award criteria between various prescribed options and clients must ensure that awards are made consistent with the criteria that they have chosen and publicised for this purpose as part of the tender process.

The Department applied a quality threshold though not a quality: price mechanism

- 1.50 The Department consider that setting a quality: price ratio for contract awards is important in cases such as consulting contracts where a clear and firm specification of exactly what output is required cannot be defined at the outset.
- 1.51 However, for the trunk road maintenance contracts, the Department considered that they did not need a quality:price ratio because they had set a rigorous output specification which has to be met. Thereby the Department set a minimum threshold for quality, which required a pass:fail assessment, and all those meeting this quality threshold passed to a second phase to be

assessed on price. (Exhibit 14). Their approach was based on the idea that, provided each bidder delivered against this threshold, there was no reason to give additional credit for quality. The Department did not set a quality: price ratio for the contracts because, as they saw it, this could lead to awarding the contract to a bidder who had offered quality in excess of the contract requirements but did not offer the lowest price for the work. Consequently the Department would have to pay a premium for additional quality for which they had no requirement. The Department's approach reflected previous significant experience of procuring maintenance contracts, design and build works contracts and PFI contracts.

Exhibit 14: The Department's approach to assessing quality

As part of the tender documentation the Department issued a written specification indicating the management and operations that had to be carried out and the levels of the output performance required. This indicated the Department's required level of service for the trunk roads, including a consistent level of service for drivers throughout the Scottish trunk road network.

However, the Department wished to make sure that bidders' proposals for providing the necessary service, to be developed and priced as part of the competition, would be sufficient to ensure that there was a reasonable expectation that the specification could be met. The Department considered such due diligence was necessary to avoid any foreseeable failures in contract performance, which could if unchecked give rise to road safety consequences and the costs of administering contractual remedies, including in the worst case contract termination and re-tendering.

Consequently the Department held three pre-tender interviews with each bidder and reviewed emerging proposals. As the basis for these meetings the Department required bidders to set out these emerging proposals formally in writing. At the final stage the Department required bidders to set out their final proposals as part of their final Form of Tender submission. These final proposals were to be as previously indicated, except where the Department had indicated that the pre-tender proposals were unsatisfactory. The quality of service required under the contract remained as specified within the tender documents. Consequently the quality assessment undertaken as part of the tender evaluation sought to assess whether the bidders' proposals could be expected to meet the requirements of the mandatory specification.

Source: Audit Scotland

- 1.52 In Audit Scotland's survey many bidders suggested that the Department should consider setting a quality:price ratio to assess tenders for such contracts. In response to the survey question regarding the Department's performance in "setting well-founded, fair and transparent selection criteria at contract award stage" 11 bidders rated the Department's performance as inadequate in key aspects (albeit the 12th bidder rated the performance as highly effective). Nine bidders commented specifically that they considered there should have been a quality:price framework to assess tenders.
- 1.53 Several bidders compared the Department's approach with that which the Highways Agency has adopted for network maintenance contracts in England. The position there is that for the most recent maintenance contract competitions in four areas the Highways Agency invited tenders for seven contracts due to commence in September 2001 with a potential annual value of over £100 million. In all seven competitions (for three managing agents, three term maintenance contractors and one managing agent contractor) the Agency assessed tenders using an 80% quality and 20% price mechanism (previous contracts have been assessed with a lower weighting for quality). Of the seven contracts tendered six have now been awarded and commenced on the due date, though the Agency did not award one term maintenance

- contract because of value for money and affordability concerns. The Agency is keeping the use of quality:price ratios under review and considers different ratios or different approaches may be necessary in some cases. The Agency agrees with the Executive that there may be cases were setting a minimum threshold for quality combined with a subsequent assessment solely based on price may promote best value for money overall.
- 1.54 In the context of the good practice guidance on quality:price ratios (Exhibit 13 paragraph 6), the Department considers that it is hard to sustain any significant quality weighting relative to price for roads maintenance contracts. Much of the work is routine and of a low technical nature and the guidance indicates a maximum allowance for quality of five to ten per cent for "repeat projects". Additionally, for the new trunk roads contracts the Department considered that there were would be difficulties in making an assessment of the value of any quality above that required to meet the output specification and there would be further difficulties in ensuring that quality undertakings translated into the delivery of better value for money.
- 1.55 In May 2001 ie after the competition for the new trunk road contracts was completed, the Scottish Executive issued fresh construction works policy and procedural guidance for Departments and Executive Agencies in Scotland (Scottish Executive Client Pack). This takes account of the principles previously set out in guidance issued by HM Treasury, in a context appropriate to the Scottish Executive's needs. It confirms the main principles of the earlier guidance, including the requirement to take both quality and price into account in contractor selection and award decisions. The Client Pack confirms that mechanisms (including but not limited to quality:price ratios) should be developed for the selection and award processes of each contract to ensure that the organisation providing best value for money is appointed.
- 1.56 With regard to such mechanisms the Executive's guidance states: "Each mechanism should be tested to confirm that it will achieve the desired result, before it is used for evaluating organisations. Mechanisms and their respective evaluation criteria should be complete and performing adequately before expressions of interest are invited. They should be sufficiently robust to withstand scrutiny from a number of sources... Any mechanism... should help clients come to a reasoned judgement rather than provide a prescriptive mechanistic approach for its own sake".

The Department should have separated entirely the quality and financial components of the evaluation of bids

- 1.57 Good procurement practice provides for a clear separation between the quality marking and the financial evaluation of bids. This is so that the client does not allow the assessment of quality which is a more subjective area to be influenced prematurely by knowledge of the financial aspects of bids.
- 1.58 The Department designed their tender process in a constructive way, to promote the ability of each bidder to meet the quality threshold rather than unnecessarily fail at this hurdle. As noted above (Exhibit 14) the procedures required bidders in advance of the tender return date ie before submitting bid prices to enter into individual consultation with the Department, to help evaluate the acceptability or otherwise of the quality of each tenderer's developing outline quality proposals and permit feedback. The Department held three meetings with each bidder during the tender period for this purpose. Their strategy was that in this way they could review bidders'

- proposals as they developed and give feedback leading to a final submission from each which should be capable of meeting the "quality threshold" indicated in the Department's tender documentation.
- 1.59 For the trunk roads, therefore, the quality consultation process during the tender period was intended to allow the Department to complete most of the quality assessment before priced bids were required. It was also intended to allow bidders to understand what the quality requirement was before they had to submit bid prices, which was important because the level of quality required would affect prices that bidders could offer. Within the Department two teams were responsible for the detailed appraisal of quality and price aspects, with procedures to ensure that the assessment of quality was largely completed without knowledge of bidders' prices.
- In Audit Scotland's survey of bidders there were different views as to the effectiveness of the Department's approach to consulting on quality during the tender period. Generally bidders considered that the Department did not clearly set down at the outset the quality threshold required. Some took the view that defining quality in roads maintenance can never be addressed fully satisfactorily, that the Department had generally sought to handle a difficult area professionally and impartially, and that by the end of the process any uncertainty was within manageable limits. Other bidders were dissatisfied in this regard, as Exhibit 15 illustrates.

Exhibit 15: Different views on the quality consultation and assessment process

One bidder (a local authority consortium) commented:

"A commercial view would be to just pass the quality threshold for each section and therefore produce the lowest tender price but if a bidder was significantly above the quality threshold in key areas this would have the effect of increasing the cost of their tender. In relation to winter maintenance, which was priced as a lump sum, tenderers could be offering very different levels of resource to deliver the winter maintenance service, not only in relation to the number of frontline units but the specification of the equipment and the level of backup equipment. The contract documents did not set out any minimum service levels in terms of routes, frontline equipment or backup equipment. It was not clear at any stage how these differences would be accounted for in the tender assessment."

In contrast a second (private sector) bidder commented:

"We consider that the method of refining the quality submission via regular meetings with the client is a most effective method of arriving at best value because: it clarifies the client's exact requirements; it avoids misunderstanding; it promotes partnering; it reinforces the information in tender documents; it provides a transparent method of adjudication."

Source: Audit Scotland survey of bidders

- 1.61 Two clear difficulties arose from the Department's quality assessment after the tender close date of 30 October 2000.
- 1.62 Firstly, the Department's initial assessment was that it was not clear that each bidder's tendered final quality proposals fully met the required quality threshold. Despite the extensive consultation process on bidders' outline proposals during the tender period, in November 2000 after the tender close date and with the initial results of the financial assessment of bids available within the Department the Department therefore wrote to every bidder to clarify various individual aspects of each submission. Later in November and in December the Department sought further clarification from both eventual winning tenderers, because the initial responses to the

- earlier inquiries were insufficiently clear. Only by mid-December were the Department finally satisfied that all bidders had satisfied the quality threshold.
- 1.63 Secondly, this situation meant that the Department was clarifying aspects of each bidder's quality proposals with the knowledge of the initial results of the financial assessment of bids. This is not the best practice because of the need to maintain objectivity during all stages of the quality assessment, which is more difficult once bidders' prices are known. Some degree of post tender clarification may be a necessary feature of any competition – if tenders are imprecise in some way it is right that the Department may need some additional assurance or clarification by way of additional protection against subsequent claims on the contract. However any significant post tender exchange with individual bidders does make it more difficult to demonstrate that conditions remain the same for all. In Audit Scotland's opinion the Department would have been well advised to have ensured that all of the staff who conducted the post tender quality assessment and clarification did so without the knowledge of the outcome of the financial assessment procedures, in order to demonstrate the integrity of both processes.

The price assessment

The financial evaluation of tenders depended on estimated contract quantities, which are inherently uncertain

- 1.64 In addition to the quality assessment the Department needed to identify for each contract the bidder offering the best, ie the lowest, combination of prices for the necessary work as detailed in the tender documents.
- 1.65 As noted above the Department's schedule of rates for each contract contained up to approximately 40,000 items. Where bidders submit priced schedules of rates a key question is how much work (what quantities) will be associated with each item. This is because there may be scope for economies of scale etc, but more than this certain items will most likely account for a proportionately larger share of the total contract workload. Both from a commercial viewpoint and in the interests of the client securing value for money it makes sense to achieve the keenest prices on the more important (highest volume) items.
- 1.66 If accurate estimates of quantities can be made it may be sensible for clients to disclose these to tenderers, in the interests of securing the best price. But opinion on this matter varies and some organisations that procure roads maintenance work will disclose quantities, while others do not.
- 1.67 The pricing element of the competition for the new trunk road maintenance contracts took place on the basis that the Department did not make available during the tender period any estimate of the quantities required. Under the existing contracts awarded in 1996 across Scotland robust historical quantity data were available only in three of eight areas and consequently the Department could not forecast work quantities accurately for the four new units.

It can be argued, for example, that the disadvantage of disclosing quantities is that there is a theoretical risk that tenderers could distort the tender process by offering artificially low rates for the estimated high quantity items and subsequently, if appointed, seeking to divert work to more profitably priced but hitherto low quantity items. Also, in the Department's experience, where prices are linked to predeclared quantities, changes that materialise in the execution of the contracts can lead to claims for changes to the tendered rates and additional payment.

Nevertheless once tenders had been received the Department needed to take a view on quantities, to provide a fair and rational basis for evaluating the cost of bidders' tender proposals. They developed a model to estimate expected quantities based on extrapolating from data from two of the eight existing contract areas. (Broadly speaking, they extrapolated quantities by dividing historic expenditure levels in all eight previous contract areas by notional average unit prices derived from two of the eight previous areas where there was from previous competitions a broad base of unit rates. The results from the eight former areas were then directly merged into the four new areas. These two areas account for only around one fifth of relevant expenditure and the Department has indicated that the extent of the information available for the exercise was less than ideal.) The combination of uncertainty about historic quantities and the deliberate decision to increase substantially the size of the schedule of rates meant that, as already noted, the Department made only a notional estimate of quantities required for 79%, or approximately 31,000 of the 40,000 individual items of work.

There is no evidence to suggest that any bidder offered lower prices overall than those of the selected bidders

- 1.69 Although the Department was constrained by incomplete information it applied a systematic and professional approach to constructing the quantities model at this stage. Those responsible took care to carefully design and record their methodology. The Department commissioned an independent adviser to review the model in June 2000 and made improvements to meet his resulting recommendations. The independent adviser concluded that, whilst there was a need to simplify and correct some of the mathematical formulae in the spreadsheets to be used, the methodology used to calculate proposed quantities was generally sound and well documented.
- 1.70 Having estimated quantities the central element of the Department's financial evaluation of bids was to extend the model, to multiply the estimated quantities by the unit prices each bidder had tendered, providing an estimate of the overall cost of each bid. A sensitivity analysis was also built-in to take account of the impact of any variation in overall quantities and weighting factors were applied to the adjusted costs of each tender to derive an overall comparative cost of tender (Exhibit 16). This was to take account of potential variations to the maintenance budget throughout the term of the contracts, which would affect how much work could be afforded and therefore ordered.

| Exhibit 16: The Department's evaluation of bid prices

The Department's approach to evaluating bid prices can be best illustrated using a hypothetical worked example for a single contract item, a pothole repair.

Comparative cost of tender

Assuming a tenderer priced a pothole repair at £10 per pothole and the estimated quantity for this item in the Department's base quantities was 500, the "comparative cost of tender" is £5,000 ($500 \times £10$).

Sensitivity analysis

This involved the Department making various assumptions to reflect three possible alternative activity levels, in addition to the base quantity:

```
Analysis 1 (75% * of the base activity level) = 0.75 \times 500 \times £10 = £3,750
Analysis 2 (95% * of the base activity level) = 0.95 \times 500 \times £10 = £4,750
Analysis 3 (125% * of the base activity level) = 1.25 \times 500 \times £10 = £6,250
```

* In some cases, according to the type of work involved, the weightings applied varied slightly from these values.

Weighting

Weighting is necessary to take into account the probability of each of the four activity levels (base case plus three variant cases) occurring within the contract period:

Analysis 1	10%	Analysis 3	25%
Analysis 2	20%	Comparative cost of tender (above)	45%

Overall comparative cost of tender

To derive the "overall comparative cost of tender" the separate values are combined proportionately to the selected weightings:

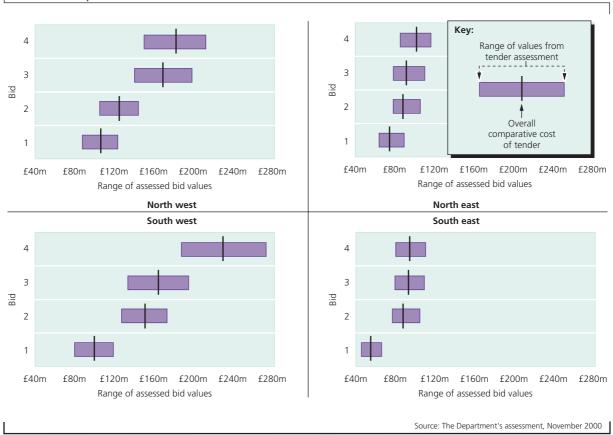
```
£3,750 x 0.10 = £375 The sum of these values is the "overall comparative 64,750 \times 0.20 = 6950 cost of tender" ie £5,138 66,250 \times 0.25 = 61,563 65,000 \times 0.45 = 62,250
```

The Department applied this approach to every single variable quantity item (though in practice for 79% of the 40,000 variable quantity items the base quantity chosen was 1 because no more accurate estimate of quantities was available). For lump sum items there was no sensitivity analysis because the requirement for the priced activity was not variable.

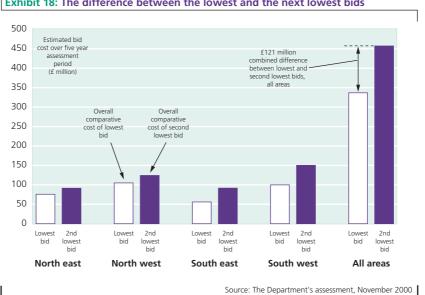
Source: Audit Scotland

1.71 The Department completed their financial assessment of the bids in late November 2000. The analysis showed significant differences in the estimated costs associated with each bid and a clear winner in each area. In the four contract areas two contractors, Amey and Bear, provided the lowest prices overall in two areas each (Exhibit 17). Looking at the estimated values of the lowest bids and the second lowest (ie next most competitive) bids in each area the combined difference for all four contracts was £121 million (36% of the estimated value of the combined lowest bids £337 million) (Exhibit 18). The difference between the estimated lowest and highest bids varied between 33% and 126% of the value of the lowest estimated bid in each area.

| Exhibit 17: Comparative cost of tenders



| Exhibit 18: The difference between the lowest and the next lowest bids



- 1.72 On this assessment the Department's steering group provisionally selected Amey and Bear as the winners of the competition on 24 November 2000. However this was subject to clarification on quality aspects (as noted above). Also, in view of the significant differences between the lowest bids and the second lowest bids, the Department wrote individually to Amey and Bear requesting that they provide explanations to those parts of their bids that the Department considered might constitute "abnormally low" ie unsustainable offers. This correspondence was in addition to the post-tender clarification of quality aspects that took place with all bidders. No final award decision was to be made pending the outcome of these exchanges and the Department did not disclose at this stage any results of the tender analysis nor intimate any possible contract award decision.
- 1.73 Amey and Bear responded later in November that they did not consider their bids to be abnormally low. They stated reasons why their bids could be very competitive included experience gained elsewhere in the UK in undertaking roads maintenance, rates and prices based on supply chain arrangements, management expertise and year-on-year efficiencies, and operational methods reflecting best practice. The Department accepted the explanations provided and concluded there was no reason not to consider these competitively priced bids as sustainable. By mid-December it had also accepted the post tender clarification provided separately by these and other bidders was satisfactory.
- 1.74 While the Department sought and obtained additional assurance that the lowest bids were sustainable they did not otherwise investigate the wide spread of tenderers' estimated costs in each contract area. A wide range of tendered prices may reflect any number of underlying factors and the range in this case was not unprecedented. In the previous trunk road maintenance competitions (for the three premium unit contracts in 1995) and in the PFI competition for the completion and operation of the M74/A74(M) in Scotland the Department experienced a similar wide range of bids. Factors that may give rise to bid variations include: the different circumstances and competitiveness of each bidder; the degree of uncertainty in bidders' minds about the contract works; different perceptions amongst bidders concerning the risks inherent in the contract; and how best to respond to these risk factors.

The Department should have taken extra steps earlier to check the integrity of quantities used in the evaluation model

1.75 Any error in the quantities would have the potential to distort the results of the Department's evaluation exercise. Although quantities used for the evaluation of the cost of bids were not available to bidders prior to the tender submission date (30 October 2000) the Department published them immediately afterwards. Within two weeks after publication of the quantities but before any contract award decision had been made two bidders questioned the reasonableness of the quantities and consequently the fairness of any evaluation based on them. These bidders wrote to the Department giving an indication of areas where they considered the quantities chosen to be wrong or unrealistic.

If there was evidence that any bidder had indeed offered abnormally low bids the Department could fairly eliminate that bidder from any further consideration in the competition.

- 1.76 The Department had adopted a systematic approach overall. But these exchanges revealed that, in one area of work (road signs), output from the evaluation model for all four contract areas was not consistent with information bidders had received, and on which they were required to base bids, nor was it what the Department had intended. The model used significantly higher quantities for road signs than was reasonable. In addition, in January 2001, related to action in the Court of Session seeking judicial review/interdict of the contract award (see below), the four local authority consortia bidders raised further questions concerning the correctness and accuracy of the Department's chosen quantities for assessment purposes. Amongst other matters, the actions in the Court of Session showed that these bidders had concerns about quantities for structural concrete and tarmac road surfaces, in addition to the concern about quantities for road signs.
- 1.77 Consequently, in January 2001 prior to the award of the contracts, the Department arranged tests by its consultant advisers (Halcrow/PwC), to both re-perform the operation of the complex price assessment model (to confirm its arithmetical reliability and integrity etc) and to assess the impact of alternative quantities that the local authority bidders offered as being more realistic.
- 1.78 While there was a significant time pressure just seven days to complete the work and data had to be sought from each of the local authority consortia Halcrow/PWC methodically examined all available data and reported back to the Department by the required deadline. Their tests confirmed the Department's model used for assessing prices was basically accurate. Although Halcrow/PWC identified some mathematical errors in the Department's assessment, these errors were relatively small ie within one to three per cent. Most importantly, though, the results showed that the Department's assessment of bid prices based on the model was not sensitive even to the very large variations in assumed quantities examined, confirming that it was still reasonable to proceed with the preferred bidder for each contract.
- 1.79 Exhibit 19 summarises the results of this further analysis compared to the Department's initial analysis in November 2000. Overall, despite shortcomings in the Department's assessment of prices, there is no evidence to suggest that any bidder offered more competitive prices than those of the bidders whom the Department identified as providing the lowest prices.

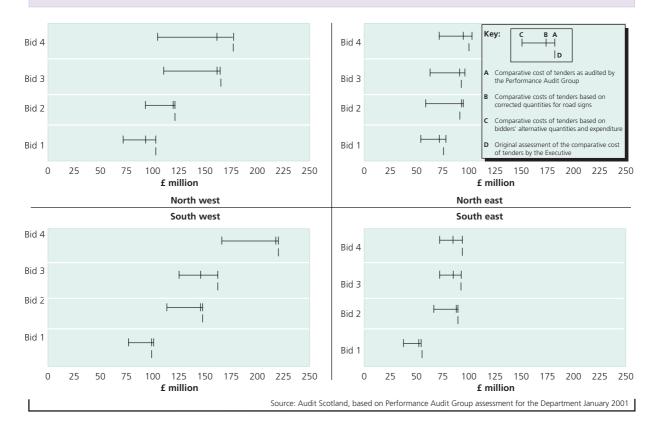
| Exhibit 19: The Department's further assessment of prices in January 2001

This exhibit shows the results of the Department's consultant adviser's tests on the original comparative costs of tenders. The Department asked the Performance Audit Group to:

- re-perform the operation of the price assessment model using the Department's original quantities
- calculate new comparative costs of tender correcting known errors in the quantities for road signs
- calculate new comparative costs of tender using alternative quantities and expenditure as certain bidders submitted.

The Performance Audit Group confirmed the basic accuracy of the Department's original assessment (mathematical errors being confined to 1-3% of the original comparative cost of tender) and found that the alternative quantities affected all comparative costs of tenders to a greater or lesser extent.

Overall, however, the bidder submitting the lowest cost of tender in each Unit in the Department's original calculations remained the lowest bidder after the costs of tender were calculated using alternative quantities. In other words, the Department's assessment of bid prices based on the model was not sensitive even to very large variations in assumed quantities.



1.80 Despite the positive outcome there are lessons to be learned. The Department made its best estimate of historic quantities from the information available. But an early weakness in the Department's quality control was that it focussed on inputs to the model. The Department was concerned to protect the confidentiality of the sensitive quantities information. Partly because of this it did not subject the outputs from the assessment model to independent checking and review of reasonableness before applying the outputs as part of the assessment of tendered prices. It is likely that, had they done so, they would have detected the inconsistency in the information concerning the road signs. It is also possible that an independent review of quantities would have contributed to greater confidence in the output from the Department's assessment model.

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The Court of Session have rejected the claims by some bidders that the Department adopted improper procedures to award the contracts

- 1.81 In January 2001 all four local authority consortia bidders were involved in two separate legal challenges seeking judicial review/interdict of the contract award, on the grounds that the process did not comply with the requirements of The Public Works Contracts Regulations 1991 (implementing European procurement rules). The Court of Session refused both applications (in one case on appeal after an earlier refusal), allowing Ministers to announce the winning bidders and sign the contracts in early February 2001.
- 1.82 In a further development in May 2001, two of the local authority consortia (Clyde Solway Consortium and South East Unit Partnership) lodged a complaint with the European Commission, concerning the competition for the South West and South East area contracts, which alleges that the tender processes conducted by the Scottish Ministers which did not comply with the requirements of Community law. Clyde Solway also issued a writ to commence a claim in the Court of Session to recover their £475,000 tendering costs incurred in the competition, again alleging flaws in the tender processes. The Department does not accept these claims. In July 2001 the Department and Clyde Solway agreed to suspend the legal proceedings pending the outcome of the complaint to the European Commission. The Department answered the Commission's initial inquiries in August, and the case remained unresolved at the time of preparing this report.

Part 2: Contract outcomes and value for money

The new contracts are designed to promote increased value for money

2.1 The new contracts for the maintenance and management of the trunk road network incorporate features that should promote increased value for money compared with the existing contracts.

More competitive pricing

2.2 Under the previous maintenance arrangements that expired in March 2001 only about half of all work by value was subject directly to market testing. Most of the work was undertaken on the basis of "demonstrable costs" (Exhibit 20). This is a less competitive pricing arrangement whereby the Department accepts the need to undertake specified work, but the cost of the work is not known with certainty at the outset. The Department pay for the actual work completed on the basis of the actual costs that the provider certifies have been incurred. In general, while there can be circumstances were such arrangements provide value for money, this type of payment system does not promote an economic or efficient approach by providers, particularly for larger and more expensive projects, and it makes cost control by the client more difficult.

| Exhibit 20: Pricing of maintenance work under the previous contracts

Total trunk roads management and maintenance expenditure 1996/97 to 1999/2000

	All purpose units		Premium units		Total	
	£ m	%	£ m	%	£ m	%
Demonstrable costs	87	86	22	22	109	54
Fixed costs	7	6	19	18	26	12
Measured costs	8	8	62	60	70	34
Total	101	100	104	100	205	100

Demonstrable costs: Maintenance work which by its nature or because it forms part of agency agreements between the Executive and local authority council operations providers in all purpose units is reimbursed on the basis of costs incurred.

Fixed costs: Tendered rates fixed in real terms for the duration of the contract. This includes cyclic maintenance, routine management activities, winter basic facility and standby and emergencies in premium units; and routine management activities in all purpose units.

Measured costs: Maintenance work and professional services priced at tendered unit rates other than that which is charged on the basis of fixed and demonstrable costs.

Note: The Department spent an additional £115 million on trunk road maintenance between 1996/97 and 1999/2000 on "discrete" major maintenance works contracts. All such schemes in all purpose units and schemes valued at more than £100,000 in premium units were separately put out to tender together with associated design and supervision.

Source: Audit Scotland

- 2.3 In contrast, under the new contracts the Department expect that the majority of work estimated to be perhaps 95% by value will be priced on the basis either of tendered lump sum rates fixed in real terms for the duration of the contract or tendered unit rate prices also fixed in real terms. In only exceptional circumstances, where work required is not covered in the schedule of rates and prices or where analogous rates cannot be derived, will the Department use the demonstrable cost payment method.
- 2.4 Following discussions with industry the threshold for tendering for discrete trunk road maintenance schemes has increased from £100,000 in earlier contracts to £150,000 and now applies across the whole trunk road network (Part 1). But an additional value for money incentive under the new contracts is the Department's ability to require the operating companies to bundle discrete items of maintenance work together into packages exceeding the £150,000 threshold and to prepare the scheme for tender. This flexibility may help ensure better value for the Department than the company undertaking the work through a series of separate operations using the unit rates specified in the contracts.

Lump sum pricing

- 2.5 Works subject to lump sum pricing are essential tasks for the management and maintenance of the network including cyclic, routine and winter maintenance, the planning of major structural maintenance activity and day-to-day management of operations. The new contracts specify the methodology for all such operations with measures of levels of service.
- 2.6 Providing the work is adequately specified and there is effective monitoring of service delivery, in general lump sum pricing provides a strong incentive for efficiency and economy and provides cost certainty for the client. The estimated expenditure on work priced on a lump sum basis in the new contracts will be some £17 million a year, approximately twice as much by value compared to previous arrangements.

More extensive use of schedule rates for pricing

- 2.8 Much road maintenance and management activity is inherently difficult or impossible to predict. This includes work such as pot-holing and patching of the road, assistance to the emergency services and repairs to parts of the roads and equipment that have failed prematurely or have been damaged by vehicle accidents.
- 2.9 Compared to the previous arrangements, the Department has significantly increased the coverage and detail of the schedule of rates that is used for pricing such work in the new contracts, and all rates have been competitively tendered. Widening the coverage of the schedule of rates will reduce the need to rely on negotiation to price work that under previous arrangements was not included within the pricing schedule. The Department expect that increased experience and better record keeping will enable them to review the number of items necessary the next time the contracts are tendered.

Reduced/more effective administration

2.10 Increasing the proportion of work that is paid for at a predetermined price (lump sum or scheduled rate) should reduce the administrative burden – both for the Department and the contractors – in dealing with works orders and invoices. The new contracts also require the operating companies to introduce from the outset comprehensive quality assurance and computerised contract control and management systems. Although there

have been initial delays in introducing the systems – see below – they are designed to reduce or improve the efficiency of the administration and management effort over the life of each contract. The systems should allow much greater real-time access to financial, management and operational information.

More detailed works specifications

2.11 In preparing for the new contracts the Department took the opportunity to review the entire specification for the maintenance and management activities. In general, the works specifications incorporated in the new contracts are wider in scope but also more detailed, clearer and more prescriptive than previous versions. In a number of areas the new specifications introduce improvements in the level of service required. For example, the new operating companies must do more to publicise opportunities for road users to contact them as service providers with concerns about network condition etc. There are new requirements that forbid routine maintenance – and consequently avoidable delays to users – during specified peak travel times and periods. Comprehensive financial and contract management procedures are set down which are intended to promote a higher level of service to the Department as client.

Better analysis of discrete schemes

2.12 Value for money is as much about ensuring that the right work is done as getting the best price. The new contracts include a systematic procedure for analysing the nature of failures of the road fabric and assessing the effectiveness of the nature (and timing) of proposed remedial work. It is an important requirement within the new structure that the operating company organisation should be guided in its thinking about its work programme as opposed to concentrating solely on maximising the delivery of work volume.

The contracts provide the opportunity for innovation and sharing cost savings after the first year

- 2.13 A key objective for the Department under the new arrangements is to encourage innovation and skilful management to maximise trunk road capacity and gain best use of the network. The contracts encourage the operating companies to innovate by permitting them to propose changes to the way trunk road maintenance is undertaken which are capable of maintaining or improving the efficiency of the operations whilst producing financial savings. Operating companies may propose such changes after the first year of the contract and are required to include in their proposals revised schedules of rates and prices together with full details of how they are derived so that any savings made are shared equally with the Department.
- 2.14 Although the opportunity for innovation after year one is an important benefit, there was no opportunity for bidders to offer innovative proposals from the outset of the contracts involving any change in the level of service or the work specifications. This may limit the amount of innovation achievable in this respect over the life of the contract. For example, investment in new equipment may be needed to secure innovation but the winning bidders needed to acquire plant and equipment from the outset of the contracts, limiting the opportunity to introduce changes after year one (Exhibit 21). The Department accepted this constraint on innovation because their priority was to concentrate on maximising competitive pricing for a given level of service, and they wished to avoid unduly complicating the competition by introducing the possibility of variant bids based on

unproven alternative works specifications and different levels of service. Changing recognised levels of service at the same time as engaging new service providers could have caused uncertainty about the effectiveness of the changes.

| Exhibit 21: Example of potential innovation in winter maintenance work

One example of innovation that bidders have cited, and where trials have already been conducted, is in the use of saline liquids instead of traditional dry salt spreading for road de-icing.

There are likely level of service and economic advantages from use of saline liquids, including smaller particle sizes leading to less bounce and damage to cars and salt burns to grass verges, better anti-freeze properties, a faster rate of application. However it may now to be too late for the operating companies to introduce this innovation over the life of the current contracts. To do so would require specialist plant which it may not be economic to acquire now the contract operations have commenced and initial investment has been completed.

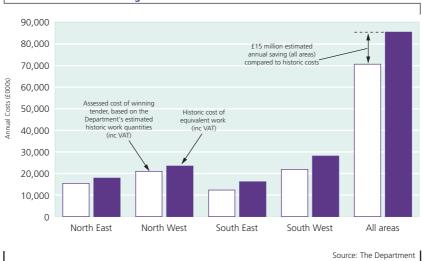
Source: Audit Scotland

Cost savings from the new contracts are forecast

- 2.14 In assessing bids, the Department calculated the potential savings arising from the new contracts compared to the historic cost of maintenance since 1996 under the previous arrangements. For items such as winter and cyclic maintenance, which are to be paid on the basis of lump sums, it was reasonably straightforward to compare the costs of bids with historic costs. However, under the new contracts for the majority of work items, which are to be paid at unit rates, the Department's assessment was more difficult and could not be a precise exercise. This was because under the previous contract arrangements information on prices and quantities was subject to considerable uncertainty and the costing base available to the Department was narrow (Part 1).
- 2.15 In particular, while the total expenditure on the previous contracts is known, estimates of the underlying historic quantities are very uncertain. This means the estimated costs of the winning tender based on estimated historic quantities which the Department used to forecast savings is correspondingly uncertain. Both the overall quantities and particularly the mix of items making up the different items of work are uncertain.

The Department anticipate savings of some £15 million a year under the new contracts

2.16 Despite these problems the Department estimate that each of the four contracts represent savings compared to historic costs. In total they forecast that compared to historic costs savings would amount to some £15 million a year based on historic work volumes (Exhibit 22).



| Exhibit 22: Forecast savings under the trunk road maintenance new contracts

2.17 For expenditure and programme planning over the period 2001-2004 the Department has adjusted their budget forecast to take account of this forecast £15 million saving in maintenance expenditure. Total expenditure on the motorway and trunk road programme including new construction is a matter for the Scottish Ministers. The programme will be around £192 million for 2001-02 (Exhibit 23).

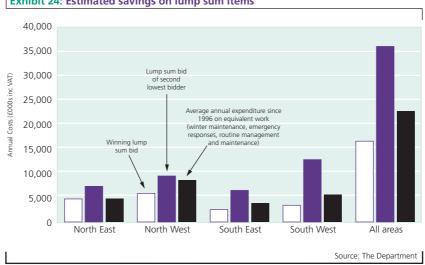
| Exhibit 23: Motorway and trunk road programme budget 2001-02

Resource spending:	Structural maintenance Routine and winter maintenance M74 private finance contract payments	f m 47 56 24	£ m
Sub total	Roads improvements Other current expenditure Less: VAT recoverable	29 9 <u>-11</u>	154
Capital investment:	New construction Land purchase etc Less: VAT recoverable	50 3 <u>-10</u>	
Sub total Estimated receipts:	Erskine Bridge tolls etc		43 -5
TOTAL			<u>192</u>
		Source	: The Departme

The precise level of saving is dependent on the mix of work carried out

2.18 The uncertainty associated with the Department's estimated savings means that there is no simple relationship between unit prices set in the new contracts and potential savings. Prices for individual work items may vary to a greater or lesser extent compared to the same work items in the previous contracts and the level of savings is therefore dependent on the mix of work carried out. Furthermore, it is unlikely that the amount and mix of the work over the life of the new contracts will correspond closely to the historic pattern. Consequently, the true level of savings for the majority of work to be undertaken under the new contracts will not be known until they have been completed.

2.19 One area where there is greater certainty is the likely level of savings arising from items of work to be recompensed using lump sum prices. Savings from work such as winter and routine maintenance and emergency responses can be predicted with more certainty because the Department will pay a fixed amount for this work in return for a level of service guaranteed by the operating company contracts. The combined cost of such items under the four new contracts is some £17 million a year. This is a £6 million saving compared to the £23 million a year historic expenditure on equivalent activity, and in each area the winning bidder's price for this work was significantly lower than all other bidders. Exhibit 24 summarises the savings on lump sum items in each area.



| Exhibit 24: Estimated savings on lump sum items

Improved service and value for money is dependent on operator performance

2.20 At this early stage of the five-year contracts it is not possible to make definitive statements as to the extent to which improved service and value for money will actually be achieved. However the Department has designed and implemented arrangements to manage and monitor contractual performance to achieve the forecast benefits. Even before the new contracts became operational for 1 April 2001, a key role for the Department was to monitor the performance of the operating companies to ensure they deliver in full their contractual obligations, including the quality of service commitments and the improved value for money that the new contracts should permit.

There are reasonable mechanisms for monitoring performance and delivery

2.21 The contracts clearly state the operating companies' obligations in respect of assessing the condition of the network, preparing draft forward programmes of planned maintenance work and more detailed annual plans including financial bids for the forthcoming year and submitting these to the Department. The contracts also clearly outline the Department's role – broadly to assess and approve the proposed programme and issue works orders during the contract to permit planned and unplanned maintenance activity to be carried out.

2.22 An innovative new requirement of the contracts is for each operating company to develop and maintain an electronic Contract Control and Management System (CCMS) capable of undertaking financial and contract management tasks and activities. The Department believes that no other road maintenance contract has specified the requirements for an equivalent system in such detail. As well as the scope for more efficient contract administration CCMS is designed to permit easier access to network and performance data, which in turn will facilitate monitoring by the Department and their agents. For example CCMS will generate real time core information to enable the operating companies to report to the Department performance against the planned maintenance programme including what works they intend to start in the short-term. The operating companies' reports to the Department are also required to address performance against some 30 key performance indicators specified in the contract (Annex D).

Systems of self-regulation and quality assurance are set down in the contracts

2.23 Within the contracts there is a requirement for each operating company to self-regulate, provide quality assurance and to report performance to the Department. Under the contracts the operating companies must develop quality standards and plans in accordance with recognised industry standards. Each company's quality plan must define the roles and functions of key staff. Each company must establish written administrative and operational procedures covering all aspects of trunk road maintenance including control of sub-contracts and documentation, regular reviews of performance against contractual obligations and audits of compliance with the quality plan.

There are contract incentives and sanctions for non-delivery of performance

- 2.24 Unlike previous arrangements, the new contracts permit the Department to issue default notices to operating companies in the event of non-compliance with any aspect of the contract. The issue of a default notice requires the contractor to improve performance and rectify weaknesses within specified periods and to bear the costs of doing so. In the event that remedial work is not undertaken, the Department can step in to remedy the default itself and recover its costs from the operating company plus an additional 12.5%.
- 2.25 In extreme cases resulting in serious failures against contractual obligations the Department may give 12 weeks notice to terminate the contract without compensation. The Department has not encountered any problem of sufficient seriousness to warrant such action at this early stage in the contracts. However they are preparing internal guidance to help clarify the circumstances when contract termination may be warranted and internal procedures for approving any such action.
- 2.26 The Department may also impose sanctions for non-delivery of performance in levying lane occupation charges on the operating company. Such charges may be levied when temporary traffic management schemes such as a lane closure are in place and the operating company either abandons the execution of the site operations for a period exceeding 24 hours, or where the operating company has not progressed with due skill, care and diligence resulting in a delay to the completion of site operations. In such cases the

Department may impose a pre-determined charge of between £1,000 and £10,000 for each calendar day or part thereof depending on the category of trunk road affected.

The Performance Audit Group has a key role in ensuring performance is delivered

- 2.27 The principal function of the Performance Audit Group is to assist the Department as client by monitoring any aspects of the financial and technical performance of the Department's maintenance contractors as necessary, and to advise and report to the Department as required.
- 2.28 This is an important function because for each contract the same entity, the operating company, is responsible for collecting and maintaining all relevant information about the network and identifying and initiating all relevant work. Broadly speaking the role of the group is to provide the eyes and ears of the Department and to check the technical and financial performance of the providers; they ask questions such as have the contractors done what they are being paid for, how well have they done it, and are they delivering value for money?
- 2.29 Originally (in 1995) the Department appointed after competition consultants Halcrow in association with PricewaterhouseCoopers (Halcrow/PwC) to exercise the performance audit group role for the existing contracts. This role will continue for the new contracts¹¹ and Halcrow/PwC currently employ 29 staff full-time on this work (increased from 27 under previous arrangements) at a cost to the Department of some £1.5 million annually.
- 2.30 The system of monthly audit reporting to the Department together with a range of both ad-hoc and programmed major reports, analysing in considerable detail aspects of the providers' performance, will continue for the new contracts. In other ways there are likely to be changes to the way the Performance Audit Group undertakes its role. Four contracts (rather than eight contracts and a range of agency providers as previously), stricter requirements in the contract for more centralised record-keeping and improved maintenance and access to records under CCMS are likely to simplify and improve the efficiency of aspects of the audit process. There should be greater availability of real time information, more user friendly standard reports and a clearer audit trail to follow maintenance work from the Department's initial ordering to its completion and authorisation for payment.
- 2.31 On the other hand there will be additional burdens on Halcrow/PwC in ensuring performance is delivered under the new contracts. For example, payment for core service items such as winter maintenance by way of lump sum means there must be a different emphasis, with more focus on ensuring that quality and technical standards laid down in the contracts are met (Exhibit 25). The new contracts also specify a greater role for Halcrow/PwC in monitoring and reporting on aspects of the technical content and quality of work and in reporting where defects in the network are detected. They require audit reporting and agreeing follow up action with the operating companies against tighter timescales than previously.
- 2.32 Annex E details the role of the Performance Audit Group monitoring the operating companies' performance.

Halcrow/PwC's contract expires in 2002 when the appointment was tendered.

Contract requirements

To provide a level of resources to cope with the winter conditions normally associated with particular areas of the country with the facility to provide additional resources to deal effectively with all winter weather conditions which can be expected to arise from time to time. The operating company shall provide sufficient resources to ensure that all reasonable measures are taken to keep trunk roads open to users at all times. The winter maintenance period shall be 1 October to 15 May each year.

Key obligations of operating companies

Winter maintenance plan

The operating company is required to submit for the Executive's approval an annual winter maintenance plan. The plan is to include, amongst other matters: the operating company's management structures and arrangements; weather forecasting and ice predictions systems; decision making systems detailing the kind of response to be made to particular weather conditions; salting and patrol routes; and details of labour, plant and equipment availability. The operating company's performance during the winter maintenance period is to be discussed with the Executive following which, the operating company will produce a report containing proposals and recommendations for future improvements.

Decision making systems

During the winter maintenance period the operating company shall monitor weather and trunk road conditions continuously. They shall take decisions and issue instructions on the commencement of winter maintenance systems. To assist with the decision making process, the operating companies are required to have access to an expert weather forecasting service, to have computer systems containing current and historic data from ice sensors and thermal maps and to have suitable computer terminals and software for the display of weather radar from the Meteorological Office.

Winter maintenance patrols

From 1 November to 31 March operating companies are required to carry out night winter maintenance patrols on named sections of each Unit whenever the air temperature is forecast to be 4° C or below for the purpose of providing advance warning of where ice may be beginning to form. The frequency of each patrol is normally to be every three hours.

Treatment rates

Salt (or 100% ethylene glycol where salt use is inappropriate) is to be spread when the road surface temperature falls to plus 1° C or when ice forms or snow settles on the road. Where such precautionary treatment is insufficient to prevent ice or snow remaining on the trunk road further treatment including combined salting and ploughing and or/snow blowing is required. Operating companies are required to start winter maintenance operations within one hour of deciding such operations are necessary and to treat each dedicated salting route within two hours. Salt spreading rates and other treatment types are laid down in the contract according to the weather conditions and temperature encountered (see table below).

Contract ice and snow clearance treatment rates					
Road surface conditions		Treatment			
		Salt spreading	Ploughing	Blowing	
		(grams/ m²)			
Ice formed	Below - 5°C & stable	20 to 40	No	No	
Snow cover exceeds 30mm	Below - 5°C & stable	10	Yes	No	
Snow cover exceeds 30mm	Below - 5°C & dropping	10 to 40	Yes	No	
Snow accumulation due to	Below - 5°C & stable	20 to 40	Yes (continuous)	Where	
prolonged falls				applicable	
Hard packed ice/ snow less than	Above - 5°C	20 to 40	No	No	
20mm thick		(successive)			

Resource availability

The contracts stipulate the minimum resources that each operating company is required to have available to meet winter maintenance operations. The information included in the contract includes: the location of depots and minimum salt stockpiles; number, capacity and location of salt spreading vehicles and snowploughs including reserve vehicles; and details of other mechanical snow clearance plant.

An innovative feature of the contracts is a risk sharing formula so that payments to the contractors for winter maintenance are linked in part to an index of the severity of a winter (the Meteorological Office OpenRoad Index - MOORI). In this way the Department shares the risks of greater resources (and hence costs) required due to worse than average winters but conversely also less resources (and hence savings) due to milder winters than average. This mitigates the risk due to lump sum payment for winter maintenance.

Source: Audit Scotland, based on the Department's contract specification

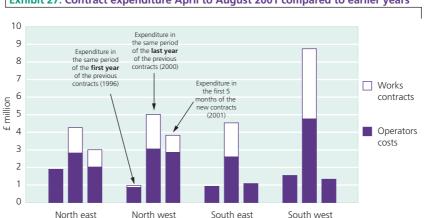
Reflecting the reduced mobilisation period, there has been a slow start to maintenance operations under the new contracts

- 2.33 The delay in signing the contracts until February 2001 (Part 1) meant that the mobilisation period was substantially curtailed. This resulted in the two winning bidders Amey and Bear having only two months to recruit staff, obtain vehicles, plant and equipment and get in place depots, supplies and other essential facilities and otherwise make preparations so that trunk road management and maintenance could continue to be provided from 1 April 2001.
- 2.34 The Department managed the risks of under performance against the contracts caused by the truncated mobilisation period. They had regular meetings with the operating companies to discuss progress during this period and tasked the Performance Audit Group to audit day-by-day the detailed progress made by each contractor. Internally the Department agreed priorities such as road safety measures, winter maintenance arrangements and financial control systems to inform their monitoring of performance in the mobilisation period. They accepted that some targets and requirements in some lower priority areas were unlikely to be met initially.
- 2.35 Because of the pressures during the mobilisation period neither contractor achieved all of the initial performance requirements. In particular the Department was concerned that neither Amey nor Bear had ready the computerised management information system (CCMS) required by 1 April 2001. Bear delivered a fully functional CCMS later in April. Amey encountered more problems in delivering their CCMS and the Department set Amey a deadline to introduce the system by the end of June 2001, subsequently extended to end-July 2001.
- 2.36 The failures to provide the CCMS systems by the due date of 1 April were serious failures permitting the Department if it chose to terminate the contracts. However rather than do so the Department recognised the significant steps made by each contractor in dealing with these innovative systems and took the view that financial sanctions rather than termination were more appropriate. These sanctions were, firstly not paying for the elements of the system that were not delivered and secondly, withholding monies from the operating companies commensurate with the amount of extra effort which the Department and its Performance Audit Group had to expend by virtue of not operating the computerised payment system.
- 2.37 Since 1 April 2001 the Department's monitoring has shown that in other respects both Amey and Bear have encountered difficulty in fully meeting operational requirements. The handover to Amey and Bear as completely new service providers would inevitably affect the delivery of maintenance work at the outset and the truncated mobilisation period constrained the ability of the companies to prepare and pre-plan construction and maintenance activity. The companies also lack resources for full operations in some areas. Consequently most maintenance activity has got off to a slow start, and initially not all routine work has been done to the level or standard required. All essential (including safety critical) operations have been delivered effectively and generally the performance of the operating companies does not appear to have resulted in any reduction in the standard of service to road users (Exhibits 26 and 27).

Exhibit 26: Results of performance monitoring since April 2001

Area of performance	Summary of monitoring results
Financial	Expenditure so far this year is less than last year in all units. Generally maintenance activity has got off to a slow start in North east, South east and South west units. The level of works contract payments has also been low in the North west unit. However differing price structures – the significant economies expected from the new contracts – combined with pressures from starting operations with completely new service providers and operating systems means expenditure early in the lives of the new contracts is likely to be low.
	Compared with the equivalent period of the previous contracts, in 1996, expenditure is approximately the same in the South west and South east units and at a higher level in the North west and North east units. See also Exhibit 27.
	All operating companies submitted programmes in August 2001 that indicate that expenditure for the full year 2001-02 will be broadly in line with budgets in all four units. However the lack of expenditure profiles from the operating companies makes it difficult to monitor progress accurately.
Mobilisation	At commencement of their work the operating companies had established their depots and had teams of plant and labour in position ready to work in accordance with initial plans. In the longer term plant and labour resources have been lower than planned for full operation because both operating companies have experienced some difficulties recruiting in some areas.
	Sub contracts with council direct labour organisations have been agreed in some areas, though liaison in other areas has been difficult.
Safety	In all areas safety critical service is satisfactory.
	Permanent repairs of safety items are being completed satisfactorily but more slowly than the contracts require. Traffic management at roadworks has been satisfactory.
Routine and cyclic	Routine and cyclic maintenance activity is improving progressively but started slowly.
maintenance	Work programmes have been prepared and submitted for some areas. Attention to some aspects such as carriageway patching, permanent safety fence repairs, weed control, gully cleaning, hedge cutting and sign cleaning has been slow and patchy but the operating companies are now managing these satisfactorily. Grass cutting has recently improved to a satisfactory standard.
Winter maintenance	Requirements generally achieved for the close of the 2000-01 season. Plans for 2001-02 are under review for imminent approval.
Structural maintenance	After initial slow progress in three areas maintenance to the road pavement and other structures is under way in all four areas, though much work is planned in poorer winter weather.
Management systems	CCMS is functional in all units but some facilities are not yet available in South east and South west. Other computerised management systems are operational with some problems with data entry and functionality.
	Quality systems have been implemented over a prolonged period. A few outstanding issues remain in all areas though both operating companies are addressing these.
Response to audits	Good co-operation with audits. Both operating companies are tackling weaknesses found at audit but are lagging in closing out these actions within the required period.
Customer contact	Roadside signs and customer contact lines have been set up and service appears satisfactory.
Professional services	Too soon to tell.

Source: Audit Scotland, based on Performance Audit Group reports to the Department



| Exhibit 27: Contract expenditure April to August 2001 compared to earlier years

Notes: 1. Expenditure is the value of work done in April, May, June and July and subsequently paid on invoice 2. £1.58 million of 2001 invoiced totals in the period has been withheld for review 3. 77 per cent of 2001 payments to operators to date represent lump sum payments

Source: The Department

- 2.38 In this critical early period of the new contracts the Department has held meetings with Amey and Bear at a high level to ensure steps were taken within both companies to deal with the areas of difficulty. The Department expects that the contracts will bed down more fully over the autumn and winter of 2001. The Department and the Performance Audit Group consider that in relation to the service to road users, given the difficulties with the short mobilisation period, the operating companies have generally performed well, with the exception of their performance in grass cutting.
- Where contractual requirements have not been met the operating companies have been notified using the default notice procedure (Exhibit 28) and accordingly monies have been withheld where the Department consider it is appropriate to do so.

A default notice identifies a specific area in an operating company's activities where it is not meeting its contractual obligations. When the Department issues a notice it requires the company to set in train a programme for remedial action in the specified area. In the large and diverse trunk toad maintenance contracts, it is to be expected that a contractor from time to time may not fully satisfy its contractual obligations across all areas. Default notices provide a mechanism for identifying and rectifying underperformance as well as a mechanism for introducing financial sanctions. They represent one of a number of ways of tracking the performance of the operating companies.

The table below summarises the notices the Department has issued in each of the four contract areas since the outset of the new contracts, including notices issued in the mobilisation period prior to 1 April 2001.

Unit/ area	Total notices issued (February - August 2001)	Notices still requiring action (August 2001)	Areas of performance concerned
North east	5	1	CCMS; delays in submitting maintenance plans and programmes etc; grass cutting.
North west	10	6	CCMS; delays in submitting maintenance plans and programmes etc; aspects of operations management; grass cutting; aspects of service for planning advice and correspondence.
South east	5	2	CCMS; aspects of roads inventory management and recording; recording progress meetings with the Department; grass cutting.
South west	6	4	CCMS; aspects of roads inventory management and recording; grass cutting; aspects of operations management.
Total	26	13	
			Source: The Department

Overall, while there have been problems with the initial service offered, particularly to the Department, these are now being rectified. The contracts are at an early stage of their life and whether the contractors can provide the necessary consistent quality of service can only be judged as the contracts roll forward. The Department is confident that improvements are being made and expect to see the delivery of better value for money compared to previous arrangements as contractors improve their performance under the initial terms of the contracts and through new working methods that stand to be identified and proposed following the first year of the contracts.

TUPE transfers did occur but are less than forecast

- 2.41 A sensitive issue raised by the new maintenance contracts was how any contract award would affect the staff of the Department's existing maintenance providers most of whom are local authority employees. In particular what would be the impact for these staff if, as in fact did occur, the existing providers did not win the new contracts?
- 2.42 Legislation the Transfer of Undertaking (Protection of Employment) Regulations 1981 (TUPE) – protects employees' terms and conditions excluding occupational pension arrangements when the business in which they work is transferred from one employer to another. In addition Cabinet Office guidance sets out a policy for departments across UK Government to consider carefully what protection they should provide when staff are transferred between employers or different parts of the public sector (Exhibit 29).

Exhibit 29: Extract from Cabinet Office Statement of Practice on Staff Transfers in the Public Sector

"This Statement of Practice sets out a framework to be followed by public sector organisations to implement the Government's policy on the treatment of staff transfers where the public sector is the employer when contracting out or the client in a subsequent re-tendering situation. It applies directly to central government departments and agencies and to the NHS. The Government expects other public sector organisations to follow this Statement of Practice.

The policy in this Statement of Practice is based on the following principles:

- Contracting-out exercises with the private sector and voluntary organisations
 and transfers between different parts of the public sector, will be conducted on
 the basis that staff will transfer and TUPE should apply, unless there are
 genuinely exceptional reasons not to do so;
- This includes second and subsequent round contracts that result in a new contractor and where a function is brought back into a public sector organisation where, in both cases, when the contract was first awarded staff transferred from the public sector;
- In circumstances where TUPE does not apply in strict legal terms to certain types of transfer between different parts of the public sector, the principles of TUPE should be followed (where possible using legislation to effect the transfer) and the staff involved should be treated no less favourably than had the Regulations applied; and
- There should be appropriate arrangements to protect occupational pensions, redundancy and severance terms of staff in all these types of transfer. Attached is (detailed guidance) which sets out the policy on staff pensions announced by the Chief Secretary on 14 June 1999 that must be followed by Central Government Departments and Agencies, and which Ministers expect to be adopted by other public sector employers*
- *Note: The Statement noted that "separate consideration is being given to the protection of pensions in staff transfers from local government", though in fact no guidance has subsequently been issued on this subject.

Source: Cabinet Office Statement of Practice (January 2000)

- 2.43 Local authorities considered that the terms and conditions of service available to staff from private sector bidders might be less advantageous than their own terms. They wished to see that the Department specified in the contract that equivalent terms and conditions of service would apply to any staff transferred to any new operator. In addition to a concern to protect the interests of staff transferring the authorities considered this would provide a level playing field as far as possible when it came to pricing bids. Local authorities sought assurance from Ministers that TUPE would apply.
- 2.44 Based on legal advice the Department's view was that the Cabinet Office guidance applied strictly only to "staff transfers where the public sector is the employer when contracting out or is the client in a subsequent re-tendering situation". On the basis of the advice the guidance did not in the Department's view apply to the tendering of the trunk road maintenance contracts, which was neither a contracting out exercise, nor could it be described as a re-tendering exercise following an earlier transfer of staff from the public sector when the contracts were first awarded. (Local councils had won the contracts for trunk road maintenance in 1996 and consequently no staff had transferred from the public sector at that time.) In other words, the Department considered that it was not necessary to take any special measures to protect the staff of its existing providers even though in most cases those providers were also public sector organisations ie local authorities.

- 2.45 As a result the Department chose not to state in the tender documentation that TUPE would apply to staff transferred to a new operator. Consistent with the Cabinet Office guidance the Department considered that the application of TUPE would always be matter of law based on the individual circumstances of a particular transfer. In view of its legal advice and precedent the Department considered it was therefore wrong to state whether or not the requirements within TUPE applied in this case. Tenderers were instead required to take into account in their bids any potential obligations imposed by TUPE and to give a commitment in their bids that they would conform with the provisions of TUPE in the event their bids were accepted and TUPE applied.
- 2.46 For similar reasons the Department could not provide to bidders any definite forecast of the number of staff employed by existing providers who would potentially (subject to the outcome of tendering) be available for transfer. Because the Department did not employ the staff directly they were not in a position to make accurate forecasts. Moreover there was a risk in providing such estimates that a new operating company could seek compensation if subsequently fewer staff moved over than was originally expected. Instead the Department required the existing providers to furnish information regarding particulars of staff to all bidders regarding how many spent more than 40% of their time on trunk road management and maintenance. It was then for the bidders affected to make their own estimates as to how many staff might or might not actually be available to transfer under the terms of TUPE, and to make their proposals based on their own judgement in this area.
- 2.47 To date 218 staff have transferred from the previous service providers to the new operating companies. Consistent with TUPE, all transferred staff have been offered terms and conditions similar to those under their previous employer, with the exception of pension arrangements. The number of staff transferred is significantly less than the 1,451 staff spending more than 40% of their time on trunk road management and maintenance that the existing providers estimated and set out in information made available to bidders in May and October 2000. It is also less than the winning tenderers' initial estimated requirements of some 500 staff (Exhibit 30).

| Exhibit 30: Potential and actual TUPE transfers

	taff spending more than 40% of their time on trunk road management and maintenance	Winning tenderers' estimated staff transfer requirements	Staff actually transferring from the previous service providers to the new operating companies
North west North east South west South east	324	(Estimate at January 2001) 135 127 140* 110*	(Actual at July 2001) 109 45 49 15
Total	1,451	512	218*
*Note: Net c	f staff brought in thro	ough secondment or under	contract
			Source: The Departmer

The new trunk road contracts

The new trunk road contracts

The Department did not provide for pension protection in the contract

- 2.48 While the interpretation of TUPE is a legal matter, broadly the position is that where TUPE applies it protects salaries and other terms of employment but it does not protect or guarantee transfer of contract terms in relation to membership of occupational pension schemes. However the Cabinet Office guidance is based on the principle that in the public sector there should nevertheless be appropriate arrangements to protect occupational pensions, redundancy and severance terms of staff affected by transfers.
- 2.49 For the same reasons that the Department did not stipulate in the contract that TUPE would apply to staff transfers, it left the matter of staff pensions as one for the existing and any incoming service providers to consider in accordance with the TUPE regulations.
- 2.50 The new operating companies have adopted various approaches to pensions ranging from one aiming to encourage manual workers to take up the new construction industry stakeholder scheme, which came into force in April 2001, to a number of Government Actuary Department and non-Government Actuary Department certified schemes based on either final salary or money purchase. All these schemes require employee contributions similar to the 6% necessary under the local government pension scheme although the final value of the pensions are unlikely to be comparable.

The apparent wider impact of the new contracts on local authorities has been limited

- 2.51 A further sensitive issue arising from the award of the new trunk road contracts is the impact on the staffing and operations of local authorities' direct labour organisations, which have now lost the trunk roads maintenance work, and possible wider employment consequences.
- 2.52 In addition to the 218 staff transfers from the previous providers to the new operating companies, both have entered into various partnering and subcontracting agreements with some of the previous providers to help deliver the trunk road work. In addition the new providers have recruited directly or brought in staff from other parts of their organisation to meet their commitments under the new contracts. These developments may have mitigated the potential job losses and other adverse developments in some areas, which may otherwise have arisen from a reduction in local authority work.
- 2.53 In August 2001 the Society of Chief Officers of Transportation in Scotland surveyed all 32 councils to help gauge the impact of the loss of trunk road and motorway contracts on councils' direct service and direct labour organisations. The survey sought information on changes in income, employment and transport assets and how councils were responding to the loss of work. The Society has shared the results with Audit Scotland and the Scottish Executive. Key findings from the survey included:
 - All 32 councils responding had experienced job losses and transfers or had redeployed staff in response to the lost contract work. In total across 25 councils approximately 500 staff had been affected in some way, including 86 staff reported as having been made redundant and 159 staff having been redeployed internally within the councils. As already noted above a further 218 staff have transferred directly from councils to the new operating companies. Approximately 60 other staff have left employment with the councils for other reasons.

- Concerning the reported 86 redundancies the most affected councils have been Highland (45 redundancies) and three (Angus, Dundee and Perth and Kinross) who are members of the Tayside Contracts consortium, which has reported 22 redundancies. Other councils affected, each reporting between one and six redundancies, were East Ayrshire, East Lothian, Edinburgh, North Lanarkshire, Renfrewshire, South Ayrshire and South Lanarkshire.
- Twenty-five councils reported in aggregate lost turnover and/ or fee income of some £45 million a year consequent from the loss of contracts. Ten councils reported lost income of more than £2 million a year each Argyll and Bute, City of Edinburgh, Highland, North Lanarkshire, Scottish Borders, South Lanarkshire, Stirling and members of the Tayside Contracts consortium (Angus, Dundee City and Perth and Kinross).
- Councils reported various ways in which they have been able to adapt to these changes. In summary these are: working in partnership with the new operating companies; off-setting improvements in revenue from higher levels of funding for local road infrastructure maintenance; and internal reviews and restructuring exercises to increase economy, efficiency and effectiveness and promote best value.

Annex A: Study approach and methods

- 1. In February 2001 the Scottish Executive Development Department (the Department), with the approval of the Scottish Ministers, signed contracts with two private sector companies for the provision of trunk roads management and maintenance services. The four contracts (both private sector operating companies winning two each) were awarded after a process of competitive tender and, in total, are expected to be worth around £70 million a year depending on the volume of work which the Department commissions. A further £30 million a year is expected to be spent on larger, discrete maintenance schemes each costing more than £150,000, though these schemes will not be procured under these contracts.
- 2. In light of serious concerns raised in Parliament concerning the award of the contracts, in February 2001 the Minister for Transport wrote to the Auditor General inviting that he consider undertaking a regularity and value for money study of the contract letting process. The Auditor General confirmed he would do so and indicated the examination would cover three broad issues:
 - what objectives were established by the Scottish Executive for the procurement of future management and maintenance of the Scottish trunk road network, consistent with promoting and achieving value for money
 - whether the Department executed fairly, regularly and in accordance with good procurement practice the competition to award the new contracts, so as to achieve their objectives and secure value for money
 - whether the Scottish Executive has established robust and clear arrangements for managing the contracts once the contract period begins.
- 3. The examination was based upon a review of project records and relevant documents held by the Scottish Executive and structured interviews with those involved in the project, including:
 - the Chief Road Engineer responsible for leading the project and key members of his project team
 - other Scottish Executive officials with responsibility for trunk road network management.
- 4. The examination drew on published guidance on good practice in construction procurement and management, and on the experience of the Highways Agency in procuring similar work in England. All 12 bidders that participated in the competitions were surveyed. The Auditor General also received evidence from the Convention of Scottish Local Authorities (see Appendix to this annex).

5. The Audit Scotland examination team comprised Arwel Roberts (Director), Dick Gill (Senior Manager), Graeme Greenhill and Jim Martin (Managers).

Good practice in construction procurement

- 6. Audit Scotland identified no published sources of good practice tailored specifically to the procurement of major road maintenance and management¹². However two main sources of generic good practice in construction procurement are HM Treasury's Essential Requirements for Construction Procurement (1997) and subsequent papers in that series, and Constructing Success: The Construction Strategy Code of Practice for Clients (1997) developed by the Construction Industry Board.
- 7. These sources reflect the findings of major studies of construction procurement methods within the UK, including the 1994 Latham Report¹³ and the 1998 Egan Report¹⁴. These reports have highlighted inefficiencies in traditional methods of procurement, which have tended to result in adversarial relationships and poor outcomes for all. The best practice for industry and clients is to adopt a more collaborative approach, still founded on a competition process, with appropriate risk sharing. Value for money is obtained for all through a clear understanding of the project requirements and respective responsibilities, tendering assessed on quality as well as price, transparency as to costs and profits and a contract that clearly defines rights, obligations and appropriate incentives.

Highways Agency experience in England

- 8. In evaluating the Department's procedures Audit Scotland made comparisons with recent practice that the Highways Agency in England have adopted. The Highways Agency's responsibilities include maintenance of the trunk road network in England spending some £700 million on this activity in 2000-01.
- 9. In recent years the Highways Agency has identified maintenance of the trunk road network as its top priority and has sought improvements and beneficial change in its maintenance procurement processes accordingly. It therefore provides a useful benchmark to help assess the Department's procurement processes.

Audit Scotland's survey of bidders

10. To inform its assessment of the quality of the competition processes Audit Scotland surveyed all 12 bidders that participated to obtain their views. The survey invited bidders to rate the effectiveness of the Department's processes and to identify examples of strengths and weaknesses in specified areas. Audit Scotland consulted the Department about the design and content of the survey and gave an undertaking to bidders to treat individual responses in confidence. As well as illustrating aspects of the main report, the results of this survey are drawn together in Annex B.

Some literature refers to procedures adopted by public roads authorities in New Zealand and Australia as leading edge. See for example papers by Jason Schirnack and Tony Porter on the website of Opus International Consultants (UK) Ltd, www.opusnz.co.uk.

Constructing the Team: Sir Michael Latham, July 1994

Rethinking Construction: Sir John Egan, 1998.

Appendix to Annex A: COSLA's submission to the Auditor General for Scotland

New contracts for the management and maintenance of the trunk roads network

Context

- 1.1 The Auditor General is undertaking an examination into the competition for the new contracts for the management and maintenance of the trunk roads network. COSLA has been invited to provide comment on this examination and welcomes this opportunity.
- 1.2 The examination seeks to establish whether the Scottish Executive achieved their objectives in awarding the contracts and secured value for money. The examination covers three broad issues.
 - What objectives were established by the Scottish Executive for the procurement of future management and maintenance of the Scottish trunk road network, consistent with promoting and achieving value for money?
 - Whether the Scottish Executive executed fairly, regularly and in accordance with good procurement practice the competition to award the new contracts, so as to achieve their objectives and secure value for money?
 - Whether the Scottish Executive has established robust and clear arrangements for managing the contracts once the contract period begins?
- 1.3 These broad issues are supported by many more detailed questions on aspects of the process.
- 1.4 Audit Scotland is able to examine whether the Scottish Executive has achieved its objectives, but is not able to examine policy issues, and therefore cannot question the nature of these objectives. Audit Scotland is also able to examine whether a department of the Executive has secured value for money for itself, but is not able to examine whether value for money has been achieved for public spending in Scotland.
- 1.5 COSLA is the representative voice of Scottish local government, but is neither a direct provider of public services nor an employer of professional staff with expertise in the delivery of these services. We shall therefore contribute to this examination from the perspective of achieving good governance in Scotland. We regard the achievement of Best Value in public spending as an essential element of good governance.
- 1.6 Local authorities are making their own responses to this examination, specifically on the second broad issue, through the public/private consortia which tendered for the contracts. COSLA's response therefore does not address the second or third of the examination's broad issues. We shall

- address only the first question, ie "what objectives were established by the Scottish Executive for the procurement of future management and maintenance of the Scottish trunk road network, consistent with promoting and achieving value for money?"
- 1.7 However, with regard to the second and third broad issues, COSLA notes that the Auditor General reports to the Scottish Parliament and intends to report on this examination in June, whilst the Parliament's Transport and Environment Committee is also holding an inquiry into the management and maintenance of the trunk roads, to which COSLA is now submitting evidence. COSLA is mindful of the confusion, inconsistencies and uncertainties which continue to surround this competition and its outcomes. COSLA therefore expects that the Auditor General, as well as addressing the specific questions which Audit Scotland has identified, should be able to answer to the Parliament the simple question "what happened?".

Response

"What objectives were established by the Scottish Executive for the procurement of future management and maintenance of the Scottish trunk road network, consistent with promoting and achieving value for money?"

- 2.1 Firstly, before addressing this question as it is phrased, COSLA is concerned that the Auditor General should always distinguish between those objectives which the Executive is empowered to establish, and those objectives which are outwith the competence of the devolved administration and which it is simply obliged to pursue. In this instance the Executive is obliged to pursue those objectives arising out of the reserved matters in The Scotland Act of 'common markets for UK goods and services' (specifically the matter of competition) and 'employment legislation'.
- 2.2 COSLA believes that there may have been a misapprehension of the Executive's powers to establish its own objectives and that this contributed to the Executive's prolonged refusal to accept that TUPE applies to these contracts and its refusal to acknowledge that the staff transferring from local government to the private contractors are entitled to occupational pensions broadly similar to the local government pension scheme. Both matters are covered by the Government's 'Statement of Practice on Staff Transfers in the Public Sector'.
- 2.3 The Executive deems that the Government's Statement of Practice does not apply to these contracts. The Executive says that it is therefore for contractors to consider whether the transferring staff are entitled to occupational pensions. COSLA believes that the Executive is mistaken on both counts. A chronology and summary of the arguments made by the Executive and COSLA are attached as Appendix 1.
- 2.4 As well as considering the merit of these arguments COSLA invites the Auditor General to consider:
 - A: whether the Executive is empowered to make the decision as to whether or not Government policy on employment legislation does or does not apply; and
 - B: whether the Executive is either required or able to leave this decision to contractors.

- 2.5 We turn now to those objectives which the Executive did legitimately establish for itself, ie customer service, value for money and effective management. COSLA does not propose to address the objective of value for money, since Audit Scotland is only able to examine the value which a department of the Executive secures for itself, rather than for public spending in Scotland. Nor does COSLA propose to address the objective of effective management, since this was defined by the Executive solely in terms of the trunk road network, rather than the roads network of which the trunk roads are one part. COSLA is therefore concerned that the Auditor General's powers to examine the wider impacts of the Executive's actions appear to be so constrained.
- 2.6 On the question of whether the Executive achieved its objective of customer service, COSLA was pleased to see that the Executive did not limit its interest solely to the trunk roads. The Executive's stated objective is "to enable a 'customer oriented' approach to be further developed in the way roads are managed and maintained in line with the Citizens Charter."
- 2.7 COSLA believes that the previous arrangements for the management and maintenance of the trunk roads provided a customer oriented approach. Before April 2001 local authorities and the Scottish Executive had worked in partnership to deliver a seamless and single-point-of-contact service to the public. Local authorities directly managed and maintained the local roads (93% of the network road length); and they managed and maintained, or maintained, the trunk roads on behalf of the Executive. They did so both individually and by pooling their resources.
- 2.8 Scotland's roads were managed and maintained as a single network, which is what they are. All comments, requests, complaints and enquiries about roads were handled by the local roads department and by local councillors. The public was unaware of the different Executive and local authority responsibilities and did not need to know. The reality is that most trunk roads in Scotland are largely indistinguishable from local roads and are an integral part of the local roads network. In rural settlements the high street is often a trunk road. The only obvious difference between local roads and trunk roads is the increasingly high proportion of the national roads budget made available by the Executive for the maintenance of the latter.
- 2.9 In COSLA's response to the Executive's consultation 'The Road Ahead' we noted that, since much of the trunk road network comprises single carriageway non-strategic roads, there is a strong argument for de-trunking these roads and giving the responsibility for their management and maintenance to local authorities (either individually or in partnerships), together with adequate funding for the purpose. This is what is being done by the Highways Agency in England. This simplifies responsibilities and administrative procedures and reflects local realities.
- 2.10 The Executive never published the results of the Road Ahead consultation but continued to presume that competition would achieve its objectives. The situation now is that trunk roads management and maintenance is a significantly less customer oriented service, for the following reasons:
 - interlinked parts of the road network, particularly in rural Scotland, are now to be managed and maintained by different organisations

- this separation of responsibilities will reduce the previous economies of scale
- the different organisations will have separate resources of plant, equipment, depots and staff
- unit costs for maintaining the whole road network will probably rise, even if the Executive achieves lower unit costs for the trunk roads
- the costs of managing and maintaining the local roads network in most areas will certainly rise for these reasons, at the expense of other services needed by the public
- the decentralised provision of plant, equipment, depots and staff in rural areas by local authorities, made possible by the resource efficiencies of managing and maintaining all roads as one network, is now threatened. This will undermine the shared objectives of the Executive and local authorities for social inclusion, decentralisation of services and rural development
- co-ordination of maintenance on interlinked parts of the road network will be hampered, particularly when trunk road maintenance or emergencies require diversion of traffic onto local roads
- each organisation will have gritters and snow clearing lorries attempting to travel on, but not being able to treat, each others roads, in order to reach and start work on their own roads
- the public will not know who does what and will no longer be able to take all matters up with their local authority. There is now a loss of public accountability
- the arbitrary and irrational separate designations of apparently similar roads will now determine the responsibility and the funding available for their maintenance.
- 2.11 For all these reasons COSLA believes that the Scottish Executive has failed to achieve its objective of customer service. Instead, the Executive's handling of the competition will create increased costs to the public purse, reduced efficiency and confused accountability to the public.
- 2.12 The Auditor General may wish to consider some of the above points in relation to whether the Scottish Executive achieved its other objectives of value for money and effective management.
- 2.13 COSLA further believes that the objective of customer service could have been achieved, if the Executive had established that its objective is simply to achieve Best Value in the management and maintenance of the trunk roads network. COSLA strongly recommended that the principles of Best Value should guide the whole competition process.
- 2.14 The Government's development and promotion of Best Value had been well established by the time of the Road Ahead consultation in 1999. COSLA was therefore surprised and concerned that the Scottish Office chose instead to retain the objectives set by the previous government in their consultation 'Competing for Better Roads' in 1994. COSLA was and remains concerned that this choice was made through a consultation which avoided political scrutiny by being held during the elections to the Scottish Parliament and to local authorities.

Appendix 1 to COSLA submission

The application of TUPE and the provision of occupational pensions transfer of undertaking (protection of employment) regulations

- 1. In January 2000 the Cabinet Office issued the Government's 'Statement of Practice on Staff Transfers in the Public Sector'. This stated that "contracting out exercises with the private sector and voluntary organisations and transfers between different parts of the public sector, will be conducted on the basis that staff will transfer and TUPE should apply, unless there are genuinely exceptional reasons not to do so". COSLA had advised the Scottish Executive in 1999, in response to the Road Ahead consultation, that TUPE should apply to these contracts.
- 2. On 10 February 2000 the Executive stated that the Statement of Practice "does not apply to all re-tendering of contracts, but only to those where there was a transfer of staff from the public sector when the contracts were first awarded. The policy does not therefore apply in the present situation as road operators have always acted as agents for the Secretary of State/Scottish Ministers in carrying out works and there was no transfer of staff previously from the Secretary of State when the contracts were first awarded. It is for contractors to consider whether or not TUPE applies, ie whether or not there has been a transfer of an undertaking in terms of the TUPE Regulations."
- 3. (It is important to note that, whilst all of the management and some of the maintenance of the trunk roads had been previously tendered and there had indeed been no transfer of staff from the public sector, all of the maintenance of the single carriageway trunk road network had been undertaken by agency agreements with local authorities.)
- 4. On 3 April 2000 COSLA advised the Minister for Transport that this competition is not re-tendering, since the Executive accepted that the road operators, ie local authorities, have always acted as agents for the Secretary of State in carrying out these works, using their own employees. As agents the local authorities had been acting on behalf of the Government, which is distinct from competing to win a contract to provide the service. Therefore this competition is a contracting out exercise with the private sector and should be conducted on the basis that staff will transfer and TUPE should apply. The Statement of Practice makes clear that it covers contracting exercises where employees are in a different public sector organisation from the contracting authority.
- 5. Local authorities were deeply concerned that the Executive's position would leave the public/private consortia complying with Government policy and submitting more expensive bids which accepted the obligations of TUPE, whilst private contractors would choose to follow the Executive's statement that the Government's policy does not apply and would ignore the obligations of TUPE. For three months COSLA urged the Minister to clarify the situation.
- 6. On 13 July the Minister advised COSLA that she had requested advice from the Cabinet Office. On 25 August, in reply to a Parliamentary Question, the Minister stated that: "The Scottish Executive will have regard to the Statement of Practice in any contract to be let by the Scottish Ministers, having regard to the particular circumstances of each contract. For the contracting exercise for the management and maintenance of the trunk road network, the Scottish Executive will require, as a term of the contract, that contractors take into account

- obligations imposed by statutes, including TUPE. The Instructions for Tendering which define how the contracting exercise should be undertaken will seek from tenderers an appropriate undertaking of compliance. Staff transfers consequential to the legislation should take place."
- 7. In her reply to COSLA of the same date, 21 weeks after COSLA's first letter, the Minister further said that "The instructions for tendering will be amended to seek from tenderers an undertaking of compliance and will make it clear that the Scottish Executive will not be prepared to accept tenders which exclude meeting the obligations, liabilities and costs consequential to TUPE."
- 8. COSLA welcomed the Minister's assurance that the Executive will have regard to Government policy, and in particular the assurance that staff transfers consequential to the legislation should take place (which must be taken to be an acceptance that this is a contracting out exercise with the private sector). But COSLA does not believe that there should ever have been any question about this and does not believe that bidders should have had to force a clarification of these fundamental points. The Government's Statement of Practice makes quite clear that these issues should be resolved at the earliest appropriate stage in the contracting exercise and before bidders are invited to tender.

The provision of occupational pensions

- 9. The Government's 'Statement of Practice on Staff Transfers in the Public Sector' makes clear that where TUPE applies to a transfer of staff from the public sector "there should be appropriate arrangements to protect occupational pensions, redundancy and severance terms of staff in all these types of transfer" and that this should be done in line with the Government's 'Statement of Practice on Staff Transfers from Central Government A Fair Deal for Staff Pensions'. (This stipulation is made even though pension rights are not covered by TUPE.)
- 10. The policy is clear that the new employer must provide a pension scheme which is "broadly comparable" to that provided by the public sector employer, and that a professionally qualified actuary must carry out the certification that the new scheme is broadly comparable. The Local Government Pension Scheme is a defined benefit scheme. The Statement of Practice on the assessment of broad comparability of pension rights, issued by the Government Actuary, states that "only defined benefit schemes will be certified as broadly comparable to defined benefit schemes."
- 11. In the negotiations following the award of the contracts to two private contractors it became clear that the Scottish Executive made no provision for the protection of occupational pensions in the contract documentation. These contractors had therefore priced their tenders on the basis that they were under no obligation in this respect.
- 12. On 16 February 2001 COSLA urged the Minister for Transport to comply with the Government's Statements of Practice and now intervene so as to protect the occupational pensions of the local government employees transferring to the private contractors.
- 13. On 21 February 2001 the Minister advised COSLA in a meeting that pensions are not covered by TUPE and that it would not be known whether TUPE applied to these contracts until staff transfers had taken place. COSLA immediately refuted this in writing to the Minister, but no further response was received from the Executive until transfers had taken place.

- 14. On 18 April the Minister replied to COSLA to say that "Your letters suggest that we should have been bound by the Statement of Practice on staff transfers in the public sector ... As this was a second generation contract in which staff had not transferred from Central Government as part of the first contracts, the Statement of Practice was deemed not to apply. As a consequence it is for the new Operating companies to resolve the matter of pensions under the new contracts and I have no power to direct them." The Minister confirmed "that the contracts require contractors to take on board obligations arising under the TUPE Regulations" and that she is "pleased to see that negotiations by both of the new trunk road contractors have been based on the presumption that a Transfer of Undertaking has occurred."
- 15. In summary, the Statement of Practice defines when TUPE should apply and states that, when TUPE applies, the occupational pensions of staff transferring from the public sector should be protected by the contracting authority. There can be no doubt that TUPE applies to the local authority staff who had been working under the agency agreements for the maintenance of the single carriageway trunk roads. However, the Scottish Executive, as the contracting authority, although apparently pleased to see that the contractors have accepted that TUPE applies, nevertheless deems that the Statement of Practice does not apply and that there is therefore no obligation on it to protect occupational pensions.

Annex B: Audit Scotland survey results

Audit Scotland's survey

- 1. To inform its assessment of the quality of the competition processes Audit Scotland surveyed the opinions of all 12 organisations that participated in the four competitions for the new trunk road maintenance contracts. In six defined areas, corresponding to the various stages of the tender process, the survey invited bidders to rate the effectiveness of the Executive's performance and to comment on perceived strengths and weaknesses in the process.
- 2. Audit Scotland consulted the Executive about the design and content of the survey and gave an undertaking to bidders to treat individual responses in confidence. All 12 bidders responded (100% response rate) and 13 responses were received; in one case a bidder had two teams working on separate contract tenders and both teams were invited to respond.
- 3. A summary of the survey responses is below. The original survey form is reproduced at the Appendix to this Annex.

The Executive's project team organisation and set up for managing the competition

- 4. Some survey respondents thought the Executive had performed satisfactorily in all key aspects regarding fielding a project team, in providing a clear chain of command and setting a realistic timetable for selection, award and mobilisation of the contract (eight out of 13 respondents). A similar number of respondents regarded the Executive's performance as inadequate in key aspects. Private sector respondents tended to look more favourably upon the Executive's performance (eight out of nine private sector respondents assessing performance as being satisfactory in all key aspects in these areas).
- 5. On the question of the Executive's commitment to timetable milestones and targets, however, 12 out of the 13 respondents considered the Executive's performance as being inadequate in key aspects.
- 6. Comments from respondents were similarly mixed. Some perceived the Executive's project team as lacking practical knowledge and experience in delivering trunk roads maintenance whilst other offered a more favourable view "a good mix of contractual and practical skills". The Executive's initial timetable for selecting and awarding the contracts was seen to be acceptable. But many respondents considered the large volume of changes to contract documentation that proved necessary was evidence of the Executive's lack of commitment to the timetable.

Investigating the market and promoting teamwork with potential providers

7. Respondents were generally content with the Executive in making early contact with potential suppliers in order to stimulate interest in the competition (ten out of 13 respondents assessing the Executive's performance as being satisfactory or highly effective in this respect).

- 8. A majority of private sector respondents (six out of nine in both cases) considered the Executive performed satisfactorily in setting out potential areas of difficulty prior to tendering and in responding positively and professionally to potential bidders' suggestions but in other areas the Executive performed less well. In particular, a significant majority of respondents (12 out of 13) perceived the Executive as being inadequate in seeking opportunities and incentives for suppliers to innovate and improve service; and in offering mechanisms for discussing and determining service levels and performance monitoring procedures.
- 9. While one respondent commented that the "pre tender process was good, with workshops to consult the industry" comments from other respondents questioned the effectiveness of consultation in relation to the most appropriate form of contract, for example on the balance between lump sums and measured items. Several respondents were dissatisfied that the Executive had not adequately defined the level of service required in the contract and were "disappointed by the limited scope to offer innovative approaches".

Communicating the Executive's overall requirements for the contracts clearly

- 10. A clear majority of respondents (ten out of 13) considered that the Executive had performed satisfactorily or better in providing a clear definition of the overall function and operational requirements of the contract.
- 11. But most respondents (11 out of 13) considered that the Executive's performance in clearly defining the quality of service required under the contract, in setting down carefully thought through requirements and in communicating with bidders on these aspects was inadequate in key aspects.
- 12. One respondent commented that "the overall requirements were well documented" whilst another thought that the Executive "acted with professionalism and propriety". Several respondents, however, repeated earlier comments to the effect that the "Executive were unable to clearly define the quality of service required under the contract". Other comments focussed on the large number of tender queries raised requiring substantial reissuing of the tender documentation and the "elements of conflict throughout the documentation, some areas being prescriptive others being open to interpretation".

Providing information for bidders during the tender stage

- 13. A clear majority (at least eight out of 13 in all categories except in providing information on the specific work content and scope of all standard work activities) of respondents considered that the Executive's performance was inadequate in key aspects in the areas of anticipating bidders' requirements for information, in making available sufficient information to permit bidders to offer competitively priced bids and in providing satisfactorily responses to bidders' information inquiries.
- 14. However, most private sector bidders (eight out of nine) thought the Executive, in answering inquiries, achieved the right balance between protecting bidders' commercial confidentiality and sharing relevant information between bidders.

15. The more positive comments in this section focussed on the protection of bidders' confidentiality. Several bidders, however, commented adversely on the quality and late availability of information eg "late notification of salt usage quantities", "inventory data in the information was incomplete". Several respondents also commented to the effect that the Executive did not clarify potential rights and obligations under TUPE.

The basis for appraising bidders' proposals and ensuring fair and equal treatment at all stages

- 16. Respondents made a clear distinction here between the Executive's performance during the short-listing of bidders stage and the contract award stage. Most bidders considered the Executive performed satisfactorily or better in setting out well founded, fair and transparent selection criteria (eight out of 11 with two "don't know") and in requiring sufficient but not excessive information from bidders (12 out of 13) at the bidder selection stage. But at contract award stage a clear majority considered the Executive's performance as inadequate in key aspects (11 and nine out of 13 at each stage respectively).
- 17. Respondents were evenly split between those who considered that the Executive demonstrated a satisfactorily level of impartiality and fairness during the procurement process and those who considered performance to be inadequate. And most bidders felt they received insufficient de-briefing and feedback from the Executive (five out of six with seven "don't knows").
- 18. Responses under this section were largely reflected in the respondents' comments. Several commented to the effect that the "quality threshold was not clearly defined". Comments were also received on the perceived lack of innovation in the contract and the absence of debriefing by the Executive, "debriefing has been requested, but not given as yet". Other respondents expressed the view that the bill of quantities was too large and covered too many items and that the quantities used in the evaluation model did not reflect historic work volumes.

The match between the procurement process and the Executive's overall objectives

- 19. The only objective where more than two respondents considered the Executive performed satisfactorily or better in matching the procurement process to the objective was that pertaining to Customer Service. In both the Value for Money and Effective Management objectives the majority of respondents considered the Executive's performance as inadequate in key aspects.
- 20. Similarly, most respondents (nine out of 11 with two "don't know") thought the contract structure did not promote partnering and teamwork although more considered it provided a fair and appropriate payment mechanism and promoted flexibility to allow for the possible impact of future initiatives (seven and five out of 13 respectively considering this aspect of the Executive's performance as satisfactory).
- 21. Comments focussed on the form of the contract and the perception that it stifled innovation and partnering "the contract is an affront to partnering and is more akin to a master and serf relationship".

Appendix to Annex B: Audit Scotland survey questionnaire

Please confirm your details here

		Name o	f bidder:		
		SE	SW	NE	NW
	Tick area or areas bid for				
	Please provide details of the person completing this questionnaire, in case we need to contact you:	Name Position Telephor Email	ne		
1.	The Executive's project team organisation and set up for managing the competition process	The Exe perform	cutive's (ti lance was:	ck one box per	row)
		Highly effective	Satisfactory in all key aspects	Inadequate in key aspects	Don't know
1.1	Fielding a project team with sufficient and relevant skills, knowledge and resources				
1.2	Evidence of a clear chain of command promoting effective management and control				
1.3	Setting a realistic timetable for selection, award and mobilisation of the contract – balancing the need for sufficient time against the risk of excessive costs for bidders and delay for the client				
1.4	Commitment to timetable milestones and targets				
1.5	Please give examples of strengths an Executive's project team organisation		s as appropriate	e in the area of	the
2.	Investigating the market and promoting teamwork with	The Executive's (tick one box per row) performance was:			
	potential providers	Highly effective	Satisfactory in all key aspects	Inadequate in key aspects	Don't know
2.1	Making early contacts with potential suppliers to stimulate interest in the competition				

2.2	Providing opportunities for potential bidders to contribute constructively at the outset of the project:				
	Setting out any potential areas of difficulty prior to tendering so that potential bidders could respond intelligently				
	b. Consulting on the balance between lump sum and measured items in the contracts, and otherwise promoting optimal risk allocation between client and supplier				
	c. Seeking worthwhile opportunities/ incentives for suppliers to innovate, improve service and/ or reduce costs for the Executive				
	d. Offering mechanisms for discussing and determining service levels and performance monitoring procedures				
2.3	Generally responding positively and professionally to potential bidders' constructive suggestions				
2.4	Please give examples of strengths a Executive investigating the market			in the area of	the
3	Communicating the Executive's overall requirements for the	The Exe perform	cutive's (tic ance was:	k one box per ı	row)
	contracts clearly	Highly effective	Satisfactory in all key aspects	Inadequate in key aspects	Don't know
3.1	Briefing bidders about the Executive's underpinning requirements for the contract, providing:				
	a. Clear definition/statement of overall functional and operational requirements				
	of the contract b. Clear definition/statement of quality of service required under the contract				
3.2	In general, setting down carefully thought through requirements, fostering confidence and commitment to the process amongst bidders				
3.3	In general, communicating effectively with bidders on these aspects				

3.4	Please give examples of strengths and w communicating the Executive's overall re					
4		oviding information for Iders during the tender stage	The Exec	cutive's (ti ance was:	ck one box per r	ow)
			Highly effective	Satisfactory in all key aspects	Inadequate in key aspects	Don't know
4.1	rec in (ticipating bidders' Juirements for information good time at each stage of the mpetition				
4.2		king available sufficient information nieving sufficient quality of service, i The specific work content and scope of all standard contract work activities			er competitively p	riced bids
	b.	Objective measures of the overall level and standard of service required to be achieved under the contract				
	C.	- 1 - 1 - 1 - 1 - 1				
	d.	Historic workload, activity, levels of service and expenditure statistics				
4.3	res exp	e likely or potential financial ources available for senditure on the contract ivities				
4.4	exi ma	e people employed by the sting suppliers of trunk road inagement and maintenance vices				
4.5		tential rights and obligations der TUPE				
4.6	aff ser (ple var	ner significant variables ecting pricing or quality of vice proposals ease specify what other iables might be important in box below)				
	Oth	ner significant variables:				
4.7	and res	oviding satisfactory, timely d reliable information in ponse to bidder's information juiries				
4.8	In a	answering inquiries achieving e right balance between stecting bidders' commercial offidentiality and sharing evant information between bidders				

4.9	Please give examples of strengths ar Executive providing information to b		ses as approp	riate in the area o	of the
4.10	Please comment on what lessons or should consider as regards providing				
5	The basis for appraising bidders'proposals and ensuring fair andequal treatment at all stages		xecutive's rmance was: Satisfactory in all key aspects	(tick one box pe	Pr row) Don't know
5.1	Setting well-founded, fair and transparent selection criteria: a. At bidder selection (short listing) stage b. At contract award stage				
5.2	Requiring sufficient but not excessive effective appraisal against the risks obidders a. During bidder selection (short listing) stage b. During tendering prior to				
5.3	contract award stage Demonstrating impartiality between and fair treatment of bidders during the procurement process				
5.4	Providing satisfactory debriefing/feedback to potential bidders and bidders where possible				
5.5	Please give examples of strengths ar Executive's appraisal and fair treatme			riate in the area o	of the
5.6	Please comment on what lessons or should consider for future competitibidders:				
6	The match between the procurement process and the Executive's overall objectives		xecutive's 'mance was:	(tick one box pe	er row)
		Highly effective	Satisfactory in all key aspects	Inadequate in key aspects	Don't know

6.1	Applying procurement processes which key objectives for the new arrangement				
	road network, ie: a. Customer Service: To enable a "customer oriented" approach to be further developed in the way roads are managed and maintained in line with the Citizens Charter.				
	b. Value for Money: To achieve the maximum efficiency in the use of the substantial sums of money expended on the maintenance of the network.				
	 Effective Management: To encourage innovation and skilful management to maximise trunk road capacity and gain the best use of the network. 				
6.2	Determining a contract structure which:				
	Promotes partnering, teamwork and worthwhile innovation in the longer term				
	Provides a fair and appropriate payment mechanism				
	c. Promotes flexibility to allow for the possible impact of future initiatives				
6.3	Please give examples of strengths and between the procurement process and				f the match
7	Other issues		Yes	No	
7.1	Are there any other issues or comments that you would like to raise with Audit Scotland regarding your participation in this competition?	[
7.2	Please give details here				
8	Follow up	Very important	Conten an inter	view to	efer not have an terview
8.1	Please indicate how important you feel it is for Audit Scotland to follow up this questionnaire with an interview)	

Thank you for completing the questionnaire.

Please return the completed questionnaire using the reply envelope

Annex C: Chronology

The following provides a chronology of key events from 30 October 2000 (the deadline for submission of bids) to 1 April 2001 when Bear and Amey assumed responsibility for trunk road management and maintenance operations.

Final revised deadline for return of tender documents	30 October 2000
Department issues quantities data to all bidders	31 October 2000
Department writes to all bidders seeking post-tender clarification on quality aspects of bids (Appendix A submissions)	22 November 2000
Project Steering Group meeting No.4 (preferred bidders identified subject to clarifications)	24 November 2000
All bidders respond to Department's post-tender clarification letter of 22 November	24-27 November 2000
Department writes to preferred bidders seeking explanations of various financial aspects of their bids	28 November 2000
Preferred bidders respond to Department's letter of 28 November	1 December 2000
Further letters to some bidders following up post-tender clarification aspects	4 December 2000
Department writes to preferred bidders seeking further explanations of various financial and quality aspects to the bids	5 December 2000
Preferred bidders respond to Department's letter of 5 December	6 December 2000
Submissions to Ministers recommending announcement of winning tenderers and providing additional information	14 December 2000 to 5 January 2001
Clyde Solway Consortium request for judicial review, suspension and interdict is refused at the Outer House, Court of Session	16 January 2001
Neulink, Caledonian Roads and South East Unit Partnership request of judicial review is refused at the Outer House, Court of Session	22 January 2001
Clyde Solway Consortium's appeal against the decision of 16 January is rejected at the Inner House, Court of Session	22 January 2001
Department advises Ministers that the Transport and Environment Committee proposes to mount an inquiry into the contract award process	22 January 2001

Department asks the Performance Audit Group to undertake an audit of the assessment of tenders using the Department's original work quantities and alternative quantities submitted by certain bidders	23 January 2001
The Minister announces to Parliament the winning bidder subject to the outcome of the Performance Audit Group audit	23 January 2001
Department informs bidders of the contract award decisions subject to the independent audit of the tender assessment quantities	23 January 2001
Department meets with Bear and Amey to discuss Programmes of Mobilisation	24 January 2001
Performance Audit Group submits its report to the Department on its audit of the assessment of tenders	1 February 2001
The Minister announces to Parliament the award of the contracts	2 February 2001
Department, on behalf of the Scottish Ministers, sign contracts with Bear and Amey for the management and maintenance of the Trunk Road Network	2 February 2001
Department meets with BEAR and Amey to discuss staff transfers including TUPE	13 and 14 March 2001
Department holds weekly meetings with Bear and Amey to discuss progress of mobilisation. Performance Audit Group provides regular, independent feedback to the Department.	Throughout February and March 2001
Bear and Amey commence trunk road management and maintenance operations	1 April 2001

Annex D: Contract key performance indicators

Work category	Key performance indicator	Measurement	Target (where set)	Frequency of reporting
Routine maintenance	Repair of Category 1 defects	% of Category 1 defects permanently repaired within 28 days	100%	Quarterly
	Safety inspections	% of contractual requirements achieved	100%	Quarterly
	Detailed inspections	% of contractual requirements achieved	100%	Annually
	Lamp outages	% of lamp outages		Quarterly
Winter maintenance	Response times	% of call outs achieved within contractual response time of 1 hour	100%	Monthly (Oct- May)
	Treatment times	% of treatment times of 2 hours achieved for all gritting routes	100%	Monthly (Oct-May)
Emergencies	Response times	% of call outs achieved within contractual response times	100%	Annually
Traffic management	Road occupation	Closures or occupations in terms of lane km hrs	Quarterly	
	Traffic disruption caused by unprogrammed works	unprogrammed works Number of lane km hrs when unprogrammed works are on the network		Quarterly
	Standard of traffic management	Instances of non-compliance resulting in issue of observations resulting from inspections	None	Quarterly
Bridges	Achievement of inspection programme	% of principal and general bridge inspection programme achieved	100%	Quarterly
Quality system	Internal audits of QMS	% of non-conformities identified at internal audits closed out within stated timescale	100%	Quarterly
	PAG audits of QMS	% of non-conformities identified at Performance Audit Group audits closed out within stated timescale	100%	Bi-annually

Programming	Achievement of annual programme	% of capital works programme achieved against that programmed	100%	Quarterly
Works contracts and site operations	Works contracts cost estimates	Estimated costs against tender costs split into three bands: + or – 5%; + or – 10%; and + or – greater than 10%		Bi-annually
	Works contracts outturn costs	Tender costs against outturn costs split into three bands: + or – 5%; + or – 10%; and + or – greater than 10%		Bi-annually
	Site operations costs estimates	Estimated costs against outturn costs		Quarterly
	Operations instructions	% completed by target date	100%	Monthly
	Frequency of materials testing	% of works contracts and site operations where testing has been carried out	100%	Quarterly
	Materials testing	Average % of quality failures per works contract and site operations undertaken		Quarterly
	Observations resulting from inspections issued by PAG	Number	None	Quarterly
Financial	Forecast against actual spend profile	% spend achieved with respect to forecast	100%	Quarterly
	Invoice submission	% of invoices submitted on time	100%	Bi-annually
	Disputed items in invoice	% in value of disputed items per total amount invoiced in period		Bi-annually
Planning applications	Time taken to process planning applications	% of planning applications processed within the required contractual timescale	100%	Monthly
Reporting	Submission of reports, programmes and minutes	% of all reports deliverable under the contract, annual programmes and progress meeting minutes submitted on time	100%	Quarterly
Customer care	Answering of correspondence, enquiries and complaints	% replied to within 7 days	100%	Quarterly
	Draft responses and briefing to SEDD on general and Ministerial correspondence	% replied to within 5 days	100%	Quarterly
	Calls to Customer Contact System number	% of calls answered in person within 2 minutes of first receipt	100%	Quarterly
Default Notices	Default Notices issued	Number	None	Bi-annually

Annex E: Performance Audit Group monitoring of the operating companies

1. The principal function of the Performance Audit Group (PAG) is to assist the Department as client by monitoring any aspects of the financial and technical performance of the Department's maintenance providers as necessary

Audit strategy

- 2. The PAG audit strategy steering group comprises managers from the Department and PAG and reports to the Director of the Department's Network Management and Maintenance Division. The group's brief is to review the priorities for audit under the new contracts and it has established a programme of audits for 2001/02 addressing financial, technical and quality issues. The group meets at regular intervals.
- 3. An audit strategy workshop reviewed the contract activities, identified the areas presenting the most significant risks to the Department and allocated audit resources accordingly. The workshop considered 58 audits should be carried out in each of the four contract areas (Units), giving 232 audits for the year (Exhibit 31).

Exhibit 31: PAG audit coverage in 2001-02

Type of audit	Total number of audits in the year	Number of audits in each unit in the year
Capital maintenance projects	32	8
Cyclic maintenance	16	4
Routine maintenance	40	10
Winter maintenance	12	3
Emergency responses	12	3
Structural maintenance	20	5
Route Manager/ Professional Service	ces 36	9
Damages	8	2
Quality Systems/ EMS	56	14
Grand total	232	58

4. Under the contract, PAG issues each audit report to the Department and the operating company within seven days of the audit. The audits and findings are monitored in PAG's database to ensure all issues raised are resolved. By the end of August 2001 PAG had carried out 70 audits and was on schedule to meet the rest of the programme.

Default notices

5. PAG provides advice to the Department regarding the situations where the issue of default notices may be required. Basic guidelines have been established to ensure a consistent approach in all Units and these are applied to problems identified by PAG or the Department. Recommendations for the issue of default notices are based on failures to provide items required under the contracts, findings from audits, observation of activity on the network and other monitoring activities.

Source: PAG

6. When default notices are issued, PAG records details of the remedial actions, the timescales for completion and all related correspondence. When remedial actions are indicated as being complete, PAG reviews the actions and recommends close out of the default, if appropriate. PAG reports weekly to the Department on the status of default notices in all of the Units.

Observations arising and hazard notices

- 7. PAG's field engineers regularly cover the entire network, recording details of operations and route conditions. The engineers are equipped with internet-linked laptop computers, digital cameras and mobile phones, allowing them to record and transmit data digitally. This equipment enables database interrogation to identify trends and allows issues to be quickly raised and dealt with by the operating companies.
- 8. In addition to programmed audit work, the Observation Resulting from Inspection (ORI) system enables engineers to notify the operating companies and the Department of problems on the network, where encountered. These include:
 - traffic management
 - routine and cyclic maintenance
 - workmanship or significant specification non-compliance
 - major carriageway defects other than hazards
 - significant events eg unexpected traffic delays due to roadworks, including items outwith the immediate control of the operating companies.
- 9. The ORI system also allows the operating companies to respond to PAG on the issues raised, advising of proposed repair dates, or other comments as necessary. Using a dedicated database, PAG continuously monitors the operating companies' performance in responding to ORIs and in taking action on the issues raised. Performance in this is reported to the Department through monthly briefing notes (see below).
- 10. PAG also operates a system of hazard notices, issued and tracked using the same system as ORIs. These inform the operating companies of dangerous situations on the network for immediate action.

Invoicing and claims reporting

11. Monthly statements and invoices submitted by the operating companies are reviewed by PAG. After discussing its findings with the Department, PAG makes recommendations for payment. These may result in amounts being withheld from payment. PAG also reviews and reports to the Department on the submission of claims and rates for new items by the operating companies.

Reporting to the Department

Monthly briefing note

12. Each month the Departemnt meets with each operating company and reviews contract performance and progress. Prior to each meeting PAG provides the Department with a monthly briefing note. The note covers the

current financial, technical and quality issues for that Unit, provides an overview of performance and audit outcomes and advises the Department of the future audit programme. A copy of the monthly briefing note is also passed to the operating company before the meeting, to enable discussion of the issues raised.

Three month report

13. Following a request from the Department, PAG prepared a brief report on the performance of all four Units for the first three months of the contracts. This provided a general overview of performance. The Department has asked PAG to continue with these reports on a regular basis.

Ad-hoc reporting

14. PAG may provide report on specific issues to the Department at any time. An example was a series of reports issued during the mobilisation period and initial period of the operating company contracts, concerning preparations and initial performance of the companies. Under the previous contracts PAG provided a number of specific reports on topics such as winter maintenance and materials testing.

Annual Report

- 15. PAG provides the Department with a comprehensive Annual Report. This analyses the operating companies' technical, operational and financial performance in depth and the results of monitoring, taking into account the Department's three broad objectives for the contracts:
 - Customer Service
 - Value for Money
 - Effective Management.

Reporting by operating companies

- 16. Self–reporting by the operating companies is an integral part of each contract. The operating companies are obliged to provide specific regular reports to the Department, copied to PAG. PAG monitors the submission of these reports and reviews their contents. The reports include:
 - monthly Reports
 - programme of Intent for traffic management
 - key Performance Indicators
 - winter maintenance
 - tender Reports
 - internal Audits.



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