The Committee will meet at 2.30 pm in the Council Chamber, Aberdeen Town House, Broad Street, Aberdeen, to consider the following agenda items:

1. **Water Inquiry (in private):** The Committee will consider possible lines of questioning for witnesses on its inquiry into water and the water industry.

   *Not before 2.45 pm*

2. **Integrated Transport Issues In Aberdeen Area:** The Committee will take evidence on integrated transport issues in Aberdeen and the surrounding area from—

   Amanda Harvey, Ed Gillespie, and Councillor Audrey Findlay, North East Scotland Economic Development Partnership

   Councillor Len Ironside, Councillor John Porter, Councillor Ian Yuill and Councillor Kevin Stewart, Aberdeen City Council

3. **Item In Private:** The Committee will decide whether to take item 6 in private.

4. **Subordinate Legislation:** The Committee will consider the following negative instrument—


5. **Water Inquiry:** The Committee will take evidence as part of its inquiry into water and the water industry from—

   Jim Milne and David Reid, Dundee Anti-Poverty Forum

   Sandy Snell, Marybank, Scatwell and Strathconan Community Council
Ron Hughes and Seumas Macinnes, Braeside and Mannofield Community Council

Katharine Bryan, Doug Sutherland and Ron McAulay, North of Scotland Water Authority

Professor Alan Alexander, Ernest Chambers, and Charlie Cornish, West of Scotland Water Authority

6. **Water Inquiry:** The Committee will review evidence taken at the meeting.

Shelagh McKinlay
Clerk to the Transport and Environment Committee
Room 2.02, Committee Chambers
0131 348 (8)5208
e-mail Shelagh.McKinlay@scottish.parliament.uk

The following papers are relevant for this meeting:

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<th>Submission from the Freight Transport Association</th>
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<th>Joint submission from the Scottish Water Authorities on Developing the Public Sector Model</th>
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<th>Submission from North of Scotland Water Authority on Public Private Partnership initiative</th>
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<th>Submission from West of Scotland Water Authority, including evidence on Public Private Partnership initiative</th>
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Please note that the Scotland Act 1998 (Agency Arrangements) (Specification) (No.2) Order 2000 (SI 2000/3250), plus a Committee covering note on the instrument, are also relevant to the meeting – these were circulated for the last meeting of the Committee.
FTA did in fact highlight early concerns in respect of the effect of increased congestion on the movement of essential goods vehicles if Grandholm was closed. Attached are copies of letters to Aberdeen City Council asking that the essential nature of goods vehicles was recognised by giving priority to goods vehicles on the relevant corridor.

We would be grateful if this information could be made available to the Committee prior to the meeting and that the needs of industry in respect of prioritising the movement of goods vehicles are highlighted.

Thank you for your assistance in this matter.

Regards

Joan Williams
Regional Policy Advisor
Freight Transport Association
Dear Miss Beveridge

Twin Track Public Transport Initiative: Bridge of Don Area

Thank you for your letter of 2 June and the information contained therein. We understand that the proposed bus priority measures would be located in a mainly residential area and that road widening will be undertaken to accommodate each proposed bus lane therefore it is anticipated that the measures would have little impact on the movement of goods vehicles.

We are however concerned and surprised by the second paragraph of page two of your letter that 'implies' Council policy in so far as 24-hour bus lanes are considered appropriate where there is no requirement for on-street parking or loading/unloading to adjacent premises. FTA's representations to the Committee and the Council on best use of road space with regard to the proposed 24-hour bus lane on Wellington Road were supported on both occasions. While provision for loading/unloading is essential, goods vehicles also need to be able to move within and through Aberdeen as efficiently as possible.

We must again express concern that the intended closure of Grandholm Bridge will have a significant impact on the movement of goods vehicles. We note the intention of the Twin Track proposals is to reduce traffic impact and delays in the longer term. While it is hoped that the initiative will assist in reducing traffic growth we believe this will not, unfortunately, provide the solution to problems that will be created by the closure of the bridge, particularly in the short to medium term. We urge the Council to consider introducing measures that will ensure that essential goods vehicles are given some priority on the relevant corridor.

It is of increasing concern that traffic management measures in Aberdeen have mainly focused on giving priority to the movement of people only. It is imperative that the Council fully recognises the detrimental impact of such measures on the efficient movement of goods that is vital to sustain a vibrant economy. Notwithstanding the current study being carried out on the Wellington Road corridor, we urge the Council to give urgent attention to policies relating to freight.

Yours sincerely

Joan Williams
Regional Policy Advisor
Dear Miss Beveridge

Twin Track Public Transport Initiative - Phase 2 - Proposed Bus Lanes: Bridge of Don Area

We refer to our letter of 9 May that requested information in respect of the above noted proposals and would like to add the following comments.

The effect of a permanent closure of Grandholm Bridge gives cause for concern. The effect of displaced car traffic on Scotstown Road North Donside Road and Ellon Road/King Street would significantly impact on Goods vehicle traffic emanating from points to the north of the junction of North Donside Road/Ellon Road thus causing serious delays for these vehicles accessing Aberdeen.

We note that the report to the Committee provides assurance that should bus lanes be implemented this would negate any delays to public transport caused by the closure of Grandbolm Bridge. However it must be stressed that the resulting congestion caused by the closure would severely impede the flow of essential goods vehicle traffic. We believe that No Car Lanes on this route would be in line with Council policy to provide priority to lorries as well as buses in areas of industrial activity.

We would be grateful if you could advise us of who owns Grandholm Bridge and the reasons why a permanent closure is anticipated.

Yours sincerely

Joan Williams
Regional Policy Advisor
Dear Ms McKinlay


Thank you for your letter of 31 January requesting further information about the above instrument.

Sulphur Content of Liquid Fuels

The decision to manage the sampling regime required by Council Directive 99/32/EC on a UK basis has been taken on grounds of cost and with a view to minimising the burden on industry. The Executive believes that the benefits of proceeding in conjunction with England & Wales and Northern Ireland are likely to be considerable, not least in terms of the avoidance of unnecessary duplication in the work of the three Environment agencies, as well as being less onerous on industry. In order for the sampling to take place on such a basis, it is necessary to transfer the function of carrying out the sampling and powers of entry in respect of the carrying out of such sampling from the Scottish Ministers to the UK Government.

However, the instrument does not affect Scottish Ministers’ overall responsibility for the exercise of the functions. Scottish Ministers are therefore still responsible for ensuring that the Directive is implemented fully in Scotland. We are currently liaising with DETR on the preparation of a suitable agency agreement to ensure that procedures are put in place that are capable of delivering the Executive’s full requirements for sampling liquid fuels. If at some point it was believed that the arrangements were not working then the situation regarding the agreement between the DETR and the Executive would be reviewed.

Air Quality Monitoring

Economies of scale and resourcing issues were also the main factors in the decision to allow the Scottish air quality monitoring sites to be managed by DETR on behalf of Scottish Ministers.

There are 105 automatic & some 1500 non-automatic monitoring sites throughout the UK with 12 automatic sites and some 200 non-automatic sites in Scotland. The number of monitoring site is due to expand considerably in Scotland over the next few years as further EC Directives on air quality are implemented. Contractors are employed to manage the networks. For each different network
functions are split between a Central Management and Co-ordination Unit and an independent Quality Assurance Control Unit. The annual expenditure on monitoring air quality in the UK is around £4.8million.

Most of the monitoring activities carried out are mandatory under EC Directives and/or UNECE Protocols. Many of the more recent EC Directives specify quite explicitly the number of monitors each member state should have, and the quality of the data which they should provide. Therefore the monitoring that the Scottish Executive is required to undertake is essentially the same as the other administrations. It follows therefore that managing the Scottish sites separately from the other UK sites would result in duplication of effort and increased public expenditure. We would have the situation of two groups of staff administering similar contracts, dealing with queries and ensuring that quality control and standards were harmonised across the UK.

As mentioned above the instrument does not affect Scottish Ministers’ overall responsibility for the exercise of the functions specified within it and ownership of the monitoring sites in Scotland still remains with Scottish Ministers. We are currently liaising with DETR on the preparation of a suitable agency agreement to ensure that procedures put in place are capable of delivering the Executive’s full policy and statutory requirements for air quality monitoring within Scotland. This instrument does not preclude the Scottish Executive from setting up new air quality monitoring sites and networks in Scotland if it believes these are necessary.

If you need any further information please let me know.

Yours sincerely

Claire Dodd
Air Quality Team
TRANSPORT AND ENVIRONMENT COMMITTEE

INQUIRY INTO THE SCOTTISH WATER INDUSTRY

DEVELOPING THE PUBLIC SECTOR MODEL

JOINT PAPER BY THE SCOTTISH WATER AUTHORITIES

29 January 2001
Developing the Public Sector Model

Executive Summary

- The water services business environment is changing rapidly, leading to the provision of new business models in England and Wales and new offerings to customers e.g. onsite services, bundled services – gas, electricity, water, telecoms, insurance.

- Our challenge is to meet our investment and efficiency targets whilst improving the service to customers. This requires the development of new packages of services which enable us to retain our customers.

- The current public ownership model provides many advantages but does need modification to enable us to compete.

- In recent months working with the Scottish Executive we have made good progress in developing the model. For example we are now able to make good use of our power to form joint ventures, including attracting the injection of small amounts of equity.

- There needs to be a recognition that in a competitive environment, part of our task should be to develop our products and services and to optimise and manage the balance of risk and reward rather than just minimising risk. This does not imply a diversion of focus from our core task of safeguarding water supply and waste water services.

- We believe that the forthcoming Water Services Bill in the Scottish Parliament provides an opportunity to put in place, but always subject to Ministerial direction or guidance, additional scope in particular a widening of enabling powers and the ability to raise appropriate financial resources for new business development.

- In addition, we believe the style of stewardship needs to reflect greater emphasis on controlling outputs and less control of inputs by our owner, having first established clear targets and goals appropriate to the objective of meeting the needs of all customers.
1. **Introduction**

On 12\textsuperscript{th} December 2000, the three Scottish Water Authorities presented their collective submission to the Transport and Environment Committee. Having set a context of rapid change affecting our sector, the presentation highlighted the need to establish a redefined public sector model which has a better chance of stability and viability. The Committee invited the Authorities to amplify on how our business model should develop, within the public sector. This brief joint paper responds specifically to that invitation. We do not, here, reiterate, the overall messages set out in our December submission.

2. **Context**

2.1 Why does our model need to develop? In a stable business environment, we could meet efficiency, quality and service expectations by consistent strong management entirely within the model as it stands. But the shape of our marketplace is changing. Corporate customer loyalty will increasingly be earned by offering individually tailored solutions sometimes on a company-wide basis. Competition will bring with it the likelihood of domestic and small business water services forming part of wider packages of bundled services offered by strongly-branded retailers that already offer a range of home services e.g. gas, electricity, telecoms, insurance.

Most observers believe that investment, efficiency plus development of new and competitive packages of services will all be key to future business viability and success in the water sector. To rise to the unique challenge facing us will require a scale and pace of change probably unprecedented in the public sector. The Post Office faces a similar challenge in some of its markets and aspires to compete by changes to its model. A small number of the larger municipal airports have also proved they can compete given sensible freedoms.

2.2 We have been working with the Scottish Executive to develop the implications of these shifts. Important new flexibilities have been developed by the Scottish Executive for example broadening the Ministerial Guidance under which our commercial activity takes place, streamlining the approval process for new commercial activity. The Scottish Executive has positively encouraged the promotion of joint ventures with commercial partners where this strengthens the chance of success. It has also worked with us to develop new policies for our employees, consistent with the ‘Modernising Government’ report.

2.3 This paper reflects the water authorities’ views arising from the ongoing dialogue between themselves and with the Scottish Executive.
3. **Character**

3.1 Our character has developed in response to the short history of the WAs, partly determined by the political environment, partly by the style of stewardship both of the owner and the Boards and management.

Government plays a number of roles notably, in our case, as public policy-maker, regulator (directly and via SEPA and WIC) and as owner. The first two of these need to apply to the whole of the Scottish water industry – both to incumbents and to any entrants. The last, the role of owner, is specific to the Scottish Water Authorities.

3.2 Last year HM Treasury set out some discussion points and ways in which Government can ‘become a better shareholder’ for publicly-owned businesses. This formed part of a wider document on partnership strategy.

The key message is about the Government taking a more strategic approach. “The Government is looking to step back from day to day management of public enterprises and instead focus on the drivers of long-term value”. They recommend this in the belief that regulation and the democratic process ensures accountability. Our new Quality and Standards process, as it matures, is designed, by being output-based, to illustrate this approach.

3.3 We believe that our style of stewardship needs to develop broadly in the spirit suggested above. In particular, within the necessary framework of our public sector status, the Water Authorities would like to see:

- Strong goals and objectives from our owner with regard to our core and commercial activities and outcomes.
- More room to manoeuvre to achieve these outcomes.
- A shared understanding that our task is to optimise and manage the balancing of business risk and reward, rather than to the conventional public sector presumption of minimising risk (even where risk can be managed).
- More broadly, a shared understanding that – in a competitive business environment – some ventures may fail to meet their objectives. Success cannot be built on a no risk platform.
- A shared understanding that employee rewards need to reflect performance – reflecting the principles set out in “Modernising Government”.
- A shared understanding that there is a need to invest now, in new products/services, in order to generate future reward.

4. **Scope**

4.1 When the WAs were set up their role was relatively straightforward, to improve the quality of the services we provide, cost effectively. This has not changed and remains a major challenge. However, our competitors are responding to
deregulated markets by mergers, separation of vertically integrated services, development of new products and offerings. Whilst the WAs cannot follow the same routes, they can and should have the ability to respond to market pressures for example, by developing new products, by collaboration with one another and forming joint ventures. This requires the powers of the WAs to be extended. But also a recognition by all that they need to respond in this way.

4.2 We believe that the opportunity should be taken, in the framing of the Water Bill, to provide WAs with wider enabling powers. The exercise of these powers should be made subject to Ministerial guidance (which may itself be developed in response to changing conditions), consistent with our public sector status. In the spirit of the comments in section 3 above, the opportunity should also be taken to shift the emphasis of owner (i.e. Government) disciplines from inputs (detailed approvals of financial, staffing and other management matters) to commercial outcomes (performance and results).

4.3 In summary:-

- We need flexibility and wide enabling powers – exercised within Ministerial guidance; shareholder disciplines should shift from inputs to commercial outcomes
- Our scope – in terms of market and product mix – may need to develop substantially if we are to be sustainable businesses over the long-term.

5. **Resources**

5.1 A distinction needs to be drawn between the resources needed to serve our water service business and the resources required for effective business (product and market) development so that we can take advantage of the opportunities presented and defend against the threats.

5.2 **Investment in Water Services**

Our regulated, incumbent business requires record levels of investment to continue in the coming years to meet both regulatory needs and efficiency targets (‘Spend to Save’). Whilst some uplift in borrowing consent (as implied by the mix of capital and expenditure and profit targets under RAB) would be beneficial, taking the three authorities as a whole we would not argue for a major expansion in borrowing to support investment in the incumbent business. Equally, however, we would caution heavily against a lowering of current borrowing levels.
5.3 Business Development

5.3.1 Investment funding for Business Development: The broad options

In principle, the main options can be summarised as follows:-

(i) Additional Investment for business development

Within our current framework, all our costs are met – immediately or over time – by our customers. All capital-raising is by borrowing. This naturally places a severe constraint on investment for business development. An increment of around 5-10% in our overall investment may be possible to ‘squeeze in’ within our current model (with additional borrowing consents).

The Additional Investment option (around 5-10% increment on incumbent business investment) provides significant opportunity to develop new products and services. This is particularly so in the corporate sector where external project finance can be leveraged i.e. a small amount of equity can attract larger sums from banks against the earnings of the project. The risks attached to this option are that we place ourselves as junior stakeholders in new partnerships with little muscle, and that – overall – we do too little too late to survive long-term against our competitors.

(ii) Larger scale investment

To create long-term value for our owner on a scale comparable to our competitors would require larger scale investment. Many of our plc competitors are investing to achieve – over the long-term – a position where the contribution from new business exceeds that of the incumbent business (which, they accept, will decline).

In practical terms, larger scale investment would be difficult for the Executive to contemplate at present. At this stage, our first business development priority is to earn a successful track record before reaching for more ambitious targets. But in the event that we could demonstrate success in the short-term that clearly demonstrates our ability to provide added value services to customers and in doing so retain or even grow our customer base then it would make commercial sense for the Executive to extend the investment in terms of scale and scope.

We recommend a phased approach to investment in business development, commensurate with our ability to demonstrate commercial success in retaining customers and producing relevant returns to our owners and local customers.
6. **Conclusions**

We recommend that, in dialogue with the Scottish Executive, the Committee considers the development of our public sector model in a manner appropriate to our long-term viability in a changing, competitive marketplace. In particular that

- The style of stewardship of the SWAs develops along the lines set out in para 3.3.
- We are capable of developing our scope – in terms of market and product mix – so that we remain sustainable businesses over the long-term.
- We are provided with flexibility and wide enabling powers – exercised within Ministerial guidance; owner disciplines should shift from inputs to commercial outcomes.
- The ‘incremental investment’ option, for new business development, is provided for within the developing model.
North of Scotland Water Authority

Submission to Transport and Environment Committee – 5 February 2001

Unique Challenge

- We have the largest area, longest coastline yet fewest customers of any water and sewerage provider in the UK. We have more treatment plants and pipework than the other two Scottish water authorities combined.

- Much of our infrastructure is disintegrating and needs to be upgraded urgently.

- Around 65% of the sewage in our area is discharged into the sea with no proper treatment at the moment.

- More than one in ten of our customers are served by small supplies and currently receive an inadequate supply of poor quality drinking water.

Investment

- We have embarked upon a massive programme of investment to improve our infrastructure and provide a better service to all our customers, irrespective of where they live.

- Over a six year period (2000 - 2006) we are investing more than £500 million to clean up beaches and rivers in the North of Scotland. In many places we are providing sewage treatment for the first time but are also upgrading many of our existing plants to meet modern day standards.

- To meet the immediate requirements of the Urban Wastewater Treatment Directive alone, work is complete or underway on 14 different sewage treatment plants round our coasts. In total these plants are worth £426 million. £387 million of this is financed through Public Private Partnership and £39 million through traditional financing methods.

- Again in the same six year period we are spending more than £400 million on providing a safe and reliable supply of drinking water to all our customers by replacing ageing mains and building new water treatment works.

- Last year we completed 15 schemes to improve sewage treatment and 30 schemes to improve water quality. We also laid or replaced 25 km of sewer and 140 km of water main.

- This year we will complete 20 sewage treatment projects and 40 water quality projects. We also plan to lay 30 km of sewer and 140 km of water main.
Charges

- Our charges inevitably have to rise to fund this massive programme of investment.

- Our position is the most difficult of the three Scottish water authorities. We have the smallest customer base and all our services are entirely funded by our charges which is why we have the highest charges in Scotland.

Competition

- We need a level playing field and appropriate regulation so that we as a public body can compete with private companies. The current public ownership model needs to be modified to allow us more flexibility to compete effectively.

- We are already facing competition as there is nothing at the moment to stop many of our customers switching to a competitor. Some of our business customers are already using alternative supplies such as boreholes.

- We need to be flexible in the way we operate to allow us to retain our existing customers.

- We have to be sensible in our approach to new business opportunities. We need flexibility so we can pursue new ventures but only where there is a market opportunity and we have a clear competitive advantage which is sustainable in the long term.

New Look Public Sector Model

- Our aim is to provide a sustainable and dynamic public sector water and sewerage industry.

- We have been involved in a detailed project with our sister authorities to identify opportunities for collaboration to make efficiencies.

- We are determined to meet the tough new efficiency targets set by the Water Industry Commissioner. Although our efficiency targets are less than those of the other two water authorities, it will still be a considerable challenge to meet them over the next 5 years.

- We have to become more efficient, not just to meet these targets but also to survive in a competitive environment. Since we were set up in 1996 we have reduced our base operating costs by 25%. At the same time we have significantly improved customer service.

- Our biggest challenge is to meet our investment and efficiency targets while delivering our investment programme and improving the service to our customers.
Specific Areas of Interest

Fluoridation

- The costs of fluoridation would be met by the Health Boards.
- There has been no comprehensive analysis of the costs involved but an initial assessment put the cost of fluoridating the water in 28 of NoSWA’s larger treatment works at around £4m initial capital cost for the equipment, plus £300,000 annual running costs.
- More than 80% of our water supplies serve fewer than 5,000 people. It is unlikely that it would be cost effective to introduce fluoridation in these smaller treatment works.

Future Investment Plans/Priorities

- The Scottish Executive has just issued the Water Quality and Standards consultation paper. Our plans and priorities will to some extent depend on the outcome of this consultation.
- Meanwhile we continue to work towards meeting the various statutory deadlines.
- Work is underway to meet the 2001 deadlines of the Urban Wastewater Treatment Directive. Beyond this a substantial number of projects are planned to meet the 2006 deadlines for smaller settlements.
- We also need to meet the requirements of the Shellfish Directive and the Bathing Waters Directive which may involve tertiary treatment in some places.
- On the water quality side, most of our investment to meet the revised Drinking Water Quality Directive deadlines must be in place by 2003 with the remainder required by 2006.
- At the same time as meeting all our legislative requirements we must also continue to upgrade our water mains and sewers. Our investment programme must increase substantially over the next 5 years to improve our existing underground infrastructure.
- We also need to continue to make investments in new technology which will allow us to safely reduce manning levels at our plants and increase efficiencies.

Efficiencies

- Over the last few years we have significantly improved our capital efficiencies through benchmarking against our UK counterparts and adopting best practice.
- A range of initiatives has been introduced to reduce costs including greater standardisation of design, value engineering workshops and more innovative partnering arrangements with contractors.
We have completed work on a collaborative project with the other two Scottish water authorities which has identified opportunities for savings on areas such as asset management, purchasing and some support services.

Our third largest expense is our electricity bill and an energy efficiency programme is in place which will reduce costs.

It is vital to change the culture of our organisation to encourage and reward efficiency and creative solutions to reduce costs.

**Balance of costs/investment between rural and urban areas**

- The nature of the legislation we must comply with is such that we have to make the same improvements to water supplies that serve three households as to those serving large towns and cities.

- By 2003 we will have invested £107 million on improving water quality and £124 million on sewage treatment in rural communities.

- Because of the number of small water treatment works we operate, legislation such as the Cryptosporidium Directive which involves a significant sampling regime, has a disproportionately greater impact on us.

- Our most recent analysis suggested that water charges in Shetland last year would have been 4 times greater than their actual level if they paid the full cost of delivering their own services.

- Recent analysis showed that it costs nearly twice as much to deliver water and sewerage services to the Highlands and Islands than to Grampian and Tayside.

**Public Private Partnership**

- We have already published business plans for 2 of our PPP schemes. These have been made available to the Committee. A third plan for Moray will be published when the contract is finally signed.

- A net present value analysis of the Highland scheme was undertaken which showed that the public sector cost would have been £66.2 million. The PPP cost was £65.6 million.

- All PPP schemes must be tested against the public sector comparator. At Montrose it became clear that PPP would not be a value for money solution so we chose the traditional funding route.

- There is no doubt that small projects are less suitable for PPP. The cost of the bidding process itself discourages companies from bidding for smaller, less financially attractive contracts.

- The only project we are considering for PPP in the future relates to sludge treatment. Beyond that we have no plans for undertaking any further projects through PPP although we would never rule it out as an option.
ABERDEEN PPP PROJECT

BUSINESS CASE

1. Concessionaire:

   Aberdeen Environmental Services
   A Joint Venture of Balfour Beatty plc, Kelda Group and Tyco Tech Ltd.

2. Date of Concession Award

   04 May 2000

3. Period of Concession

   30 Years from the date of Concession Award.

4. Purpose of Project

   The project is a key element of the Authority’s environmental improvement programme to provide cleaner beaches, bathing waters and rivers. Customer research has confirmed widespread support for this initiative. Equally importantly, the project is part of a wider programme of capital investment in environmental improvements to meet the Authority’s obligations under the Urban Waste Water Treatment (Scotland) Regulations 1994.
5. **Choice of Procurement Route**

From its inception the Authority was required to deliver a large Capital Investment Programme associated with its statutory and other obligations. In line with Government policy, it was expected that delivery of the Programme would be achieved by a combination of public procurement and the Private Finance Initiative (now re-titled Public Private Partnership) subject always to the chosen procurement method providing value for money. Within the overall Programme, those projects associated with the UWWTR compliance programme appeared to offer the best opportunity to maximise the financial benefit to the Authority of innovation by the PFI procurement route within the tight timescales set down for UWWTR compliance. Accordingly, it was decided to seek competitive bids for this project on that basis subject to benchmarking the outcome against the alternative public solution.

6. **Description of Works**

The works will serve the main communities along the North East coast of Scotland, namely Aberdeen, Peterhead, Fraserburgh and Stonehaven, together with some smaller settlements. It comprises six main elements:

(a) A wastewater treatment plant constructed around the existing preliminary treatment works at Nigg in Aberdeen. This will provide secondary treatment for the majority of the City of Aberdeen, together with its surrounding settlements. In addition, from 2005 onwards it will also treat the foul wastewater emanating from Stonehaven. The treated wastewater will be discharged to the North Sea by way of an existing long sea outfall.

(b) The refurbishment and upgrading of the existing Persley wastewater treatment plant, which provides treatment for the remainder of the City of Aberdeen and discharges to the River Don.

(c) A wastewater treatment plant at Peterhead on the site of the Authority’s existing preliminary treatment works at Burnhaven. This will provide secondary treatment for the communities of Peterhead and Boddam, with the treated effluent being discharged to the North Sea via the existing long sea outfall.

(d) A wastewater treatment plant located on a greenfield site at Phingask in Fraserburgh, providing secondary treatment and disinfection for all foul flows from Fraserburgh and the settlements of Rosehearty and Sandhaven. The treated wastewater will be discharged to the North Sea through a new long sea outfall, with stormwater being discharged (following storage) from an existing outfall.
(e) A sludge treatment centre also located at Nigg within the site of the wastewater treatment plant. This will process all the sludges produced by each of the above plants and certain other wastewater sludges imported by the Authority to provide a high quality pasteurised sludge cake for recycling, principally to agricultural land. The Concessionaire also has the option to import similar trade wastes for processing at this facility.

(f) A preliminary treatment plant and pumping station at Carron in Stonehaven, which will remove screenings and grit and pump foul flows (utilising two new and one existing pumping station) to Nigg in Aberdeen for full treatment. The existing long sea outfall at Carron will be utilised to discharge screened stormwater to the North Sea.

All discharges will meet the stringent environmental protection standards set by the Scottish Environment Protection Agency.

7. Key Aspects of Concession

(i) Risk allocation – in accordance with the rules governing public private partnership projects the concession incorporates a substantial transfer of risk to the Concessionaire most notably the demand risk, construction risk, operation risk and SEPA prosecution risk.

(ii) Variable payment mechanism – the Authority will make payment to the Concessionaire according to the measured volume of wastewater treated. A separate payment will be made according to the quality and quantity of sludge processed. There are no fixed payments or standing charges.

(iii) Revenue share mechanism – in the event of the quantity of wastewater treated being substantially in excess of that predicted and giving rise to much higher equity return to the Concessionaire than anticipated a revenue share mechanism will be triggered enabling the Authority to benefit from a share of the higher revenue income.

(iv) Partial indexation of tariff – to incentivise the Concessionaire to operate efficiently and to reflect the fixed cost nature of his external debt obligations the annual tariff adjustment will be only partially index-linked.

(v) Poor performance – the concession includes the right of the Authority to withhold payment in clearly defined circumstances of poor performance and, ultimately, the Authority has the right to step in and remedy defects or ultimately terminate the concession.

(vi) Surplus land – the concession does not permit the Concessionaire to sell surplus land.
(vii) End of Concession – at the end of the 30-year concession period the assets revert to the North of Scotland Water Authority or its successor without payment to the Concessionaire.

8. Summary of Procurement Process

The procurement process was conducted in compliance with the Public Works Contracts Regulations 1991.


(ii) June 1998 – Following consideration of initial submissions and interviews four consortia were invited to tender for the project.

(iii) March 1999 – Following evaluation of the returned tenders according to the selection criteria established at the outset, two tenderers were invited to submit best and final offers (BAFO).

(iv) June 1999 – The BAFO submissions submitted in April 1999 were evaluated against the same criteria as before and a preferred tenderer was selected.

9. Criteria for the Assessment of Bids

(a) Technical and environmental acceptability.

(b) Deliverability and sustainability of proposals.

(c) Value for money.

(d) Commercial and legal acceptability including risk transfer.

10. Public Sector Cost Comparator

The main elements of the PPP solution match with that which had been envisaged by way of public procurement. However, the way in which the Concessionaire has dealt with demand risk, construction and design risk and operational management has led to a significant saving in whole life costs.
11. **Comparison of Costs**

To assess which of the PPP or public sector solutions offered best value for money a net present value analysis of each was undertaken. The analysis demonstrated that of the two project costs, in NPV terms, the PPP solution was significantly more favourable as follows:-

(i)  PPP solution - £125 million NPV
(ii) Public sector solution - £154 million NPV

12. **Corporate Plan**

The Authority’s corporate plan takes full account of the ongoing future costs arising from this and other PPP projects. The extent of these costs, annually, will be recorded in the Authority’s Annual Report and Accounts.

13. **Project Contact Person**

Any queries relating to this business case statement should be addressed to Mr Jim Cockburn, Managing Director – Water Services, North of Scotland Water Authority, Cairngorm House, Beechwood Park North, Inverness IV2 3ED.

14. **General Enquiries on PPP**

Any general enquiries on PPP should be addressed to Fiona McLellan, Private Finance Unit 3-C23 Victoria Quay, Edinburgh EH6 6QQ (Telephone 0131 244 7500; Fax 0131 244 4799).
TAY PPP PROJECT

BUSINESS CASE

2. Concessionaire:
   Catchment Tay Limited

3. Date of Concession Award
   16 December 1999

4. Period of Concession
   30 Years from the date of Concession Award.

6. Purpose of Project
   The project is a key element of the Authority’s environmental improvement programme to provide cleaner beaches, bathing waters and rivers. Customer research has confirmed widespread support for this initiative. Equally importantly, the project is part of a wider programme of capital investment in environmental improvements to meet the Authority’s obligations under the Urban Waste Water Treatment (Scotland) Regulations 1994.
7. Choice of Procurement Route

From its inception the Authority was required to deliver a large Capital Investment Programme associated with its statutory and other obligations. In line with Government policy, it was expected that delivery of the Programme would be achieved by a combination of public procurement and the Private Finance Initiative (now re-titled Public Private Partnership) subject always to the chosen procurement method providing value for money. Within the overall Programme, those projects associated with the UWWTR compliance programme appeared to offer the best opportunity to maximise the financial benefit to the Authority of innovation by the PFI procurement route within the tight timescales set down for UWWTR compliance. Accordingly, it was decided to seek competitive bids for this project on that basis subject to benchmarking the outcome against the alternative public solution.

6. Description of Works

The works will serve the main communities along the north shore of the Tay Estuary and lower Angus coast, namely Dundee including Invergowrie and Broughty Ferry, Monifieth, Carnoustie and Arbroath, together with some smaller settlements. It comprises three main elements.

(a) A wastewater treatment plant located at Hatton between Carnoustie and Arbroath providing secondary treatment for all of the foul sewage emanating from the aforementioned communities. The treated wastewater will be discharged into the North Sea by way of a long sea outfall and will meet the stringent environmental protection standards set by the Scottish Environment Protection Agency.

(b) A collection and transmission pipeline system with associated pumping stations and stormwater storage tanks which will intercept all existing discharges of foul wastewater into the Tay Estuary and North Sea between Dundee and Arbroath and convey the flows to the wastewater treatment plant at Hatton. Stormwater will be discharged at limited locations along the Tay Estuary, also to SEPA environmental protection standards.

(c) A sludge treatment centre also located at Hatton within the site of the wastewater treatment plant to process the sludges produced from the wastewater treatment plant and certain other similar sludges imported by the Authority to provide a high quality thermally dried product for recycling to agricultural land.

7. Key Aspects of Concession

(viii) Risk allocation – in accordance with the rules governing public private partnership projects the concession incorporates a substantial transfer of risk to the Concessionaire most notably the demand risk, construction risk, operation risk and SEPA prosecution risk.
(ix) Variable payment mechanism – the Authority will make payment to the Concessionaire only according to the measured volume of wastewater treated. The level of payment may be adjusted marginally to recognise significant variation in the quality of the wastewater and separate payment will be made according to the quantity of sludge processed. There are no fixed payments or standing charges.

(x) Revenue share mechanism – in the event of the quantity of wastewater treated being substantially in excess of that predicted and giving rise to much higher revenue return to the Concessionaire than anticipated a revenue share mechanism will be triggered enabling the Authority to benefit from a share of the higher revenue income.

(xi) Partial indexation of tariff – to incentivise the Concessionaire to operate efficiently the annual tariff adjustment will be only partially index-linked.

(xii) Poor performance – the concession includes the right of the Authority to withhold payment in clearly defined circumstances of poor performance and, ultimately, the Authority has the right to step in and remedy defects or ultimately terminate the concession.

(xiii) Surplus land – the concession does not permit the Concessionaire to sell surplus land.

(xiv) End of Concession – at the end of the 30-year concession period the assets revert to the North of Scotland Water Authority or its successor without payment to the Concessionaire.

9. **Summary of Procurement Process**

The procurement process was conducted in compliance with the Public Works Contracts Regulations 1991.


(vi) July 1997 – Following consideration of initial submissions and interviews four consortia were invited to tender for the project.

(vii) April 1998 – Following evaluation of the returned tenders according to the selection criteria established at the outset, two tenderers were invited to submit best and final offers (BAFO).

(viii) July 1998 – The BAFO submissions submitted in May 1998 were evaluated against the same criteria as before and a preferred tenderer was selected.
9. Criteria for the Assessment of Bids

(e) Technical and environmental acceptability.

(f) Deliverability and sustainability of proposals.

(g) Value for money.

(h) Commercial and legal acceptability including risk transfer.

11. Public Sector Cost Comparator

It had been envisaged that to meet the UWWTR obligations by way of public procurement a series of five wastewater treatment plants would have had to be provided at strategic locations – three in Dundee and one each at Carnoustie and Arbroath. The proposed environmental solution was perceived as being less environmentally advantageous on account of there being five significant discharges into the Tay Estuary and North Sea compared with the one discharge from the chosen solution.

11. Comparison of Costs

To assess which of the PPP or public sector solutions offered best value for money a net present value analysis of each was undertaken. The analysis demonstrated that of the two project costs, in NPV terms, the PPP solution was slightly more favourable as follows:-

(iii) PPP solution - £144 million NPV
(iv) Public sector solution - £153 million NPV

13. Corporate Plan

The Authority’s corporate plan takes full account of the ongoing future costs arising from this and other PPP projects. The extent of these costs, annually, will be recorded in the Authority’s Annual Report and Accounts.

13. Project Contact Person

Any queries relating to this business case statement should be addressed to Mr Jim Cockburn, Managing Director – Water Services, North of Scotland Water Authority, Cairngorm House, Beechwood Park North, Inverness IV2 3ED.
15. General Enquiries on PPP

Any general enquiries on PPP should be addressed to Fiona McLellan, Private Finance Unit 3-C23 Victoria Quay, Edinburgh EH6 6QQ (Telephone 0131 244 7500; Fax 0131 244 4799).
The North of Scotland Water Authority has awarded concessions, under the Public Private Partnership initiative, to Aberdeen Environmental Services for the Aberdeen Wastewater Project; and to Catchment Tay Ltd for the Tay Wastewater Project. Full Business Cases (FBCs) for these awards have been submitted for public reference from Monday 3rd July as follows:

- FBC for the Aberdeen Wastewater Project – Aberdeen Central Library; Peterhead Library; Fraserburgh Library.
- FBC for the Tay Wastewater Project – Dundee City Library; Forfar Library.
I refer to your requests for information to be considered by members of the Transport and the Environment Committee at their meeting on 5 February 2001.

I would advise that West of Scotland Water does not wish to submit any information in addition to the Authority’s original submission, the presentation made by Professor Alan Alexander to the meeting on 12 December 2000 and the paper entitled:-

“Developing the Public Sector Model”

submitted on behalf of the Authorities.

I enclose the following appendices providing information on issues subsequently raised by members:-

1. Financial implications of fluoridation.
2. Future investment plans/priorities.
3. Views on where economies and efficiencies are likely to be found.
4. Balance of costs/investment between rural and urban areas.
5. PFI/PPP investment programme.

As discussed earlier today in relation to the information provided on the Dalmuir project a confidentiality agreement has been signed. The project consortium are happy to share detailed information on the project with members of the Committee. However they would prefer that this information was not subsequently published in the proceedings of the meeting.

I trust this information is sufficient for your purposes. I shall be pleased to provide any further information you may request and to clarify any outstanding matters to members at the meeting on Monday.

Yours sincerely

Ernie Chambers
Chief Executive
1.1 The Water (Fluoridation) Act 1985 allows Health Boards to ask the appropriate water authority to add fluoride to water supplies within their area. Under this legislation, a Health Board would be responsible for meeting all costs incurred by the water authority in the design and procurement of fluoridation plants, their operation and maintenance and subsequent monitoring and reporting of results.

1.2 Consequently, the fluoridation of water supplies will have no financial implications for an Authority’s investment programme and operating costs and hence no impact on future water charges.

1.3 Estimates prepared during the autumn of 1999 identified that the likely investment and operating costs for the provision of fluoridation plants in all water treatment works operated by West of Scotland Water having a capacity in excess of one megalitre per day would be:

<table>
<thead>
<tr>
<th>Treatment Works Capacity</th>
<th>No</th>
<th>Average Cost (£000)</th>
<th>Total Cost (£000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Capital</td>
<td>Annual Operating</td>
</tr>
<tr>
<td>&gt; 50 Ml/day</td>
<td>5</td>
<td>400</td>
<td>110</td>
</tr>
<tr>
<td>5-50 Ml/day</td>
<td>30</td>
<td>250</td>
<td>55</td>
</tr>
<tr>
<td>1-5 Ml/day</td>
<td>15</td>
<td>200</td>
<td>19@1 Ml/day 23@5 Ml/day</td>
</tr>
<tr>
<td>Milngavie</td>
<td>1</td>
<td>1250</td>
<td>300</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td>13,750</td>
<td>2,825</td>
</tr>
</tbody>
</table>

1.4 These estimates would have to be revised once a detailed specification and operating contract had been agreed between West of Scotland Water and the Health Boards in the Authority’s area.

1.5 Under the provisions of the Water (Fluoridation) Act 1985 the final decision as to whether fluoride is to be added to public water supplies rests with water authorities. It is West of Scotland Water’s strong opinion that responsibility for that decision should rest with either the Scottish Executive or the appropriate Health Board. West of Scotland Water’s responsibilities should relate to technical considerations as to whether fluoridation is a practicable option.
2.1 West of Scotland Water’s future investment plans and priorities can best be detailed by utilising the draft programme developed under the Quality and Standards 2 process. Under the Central option, it is envisaged that investment of some £922 million will be required between 01 April 2002 and 31 March 2006. This figure is subject to further revision and review in consultation with the Scottish Executive and the Scottish Environment Protection Agencies.

2.2 The attached schedule summarises the levels of investment currently considered necessary to meet statutory requirements and customer needs and expectations in relation to future standards of service.

2.3 In relation to the water supply service :-

- Infrastructure maintenance relates to the expenditure to be incurred on the maintenance and renewal of existing reservoirs, water mains and service pipe networks used to provide water supplies.

- Non infrastructure maintenance relates to the expenditure to be incurred on the maintenance and renewal of existing above ground buildings and plant used to provide existing water supplies.

- Quality enhancements relate to the provision, extension and renewal of water treatment facilities to ensure that all water leaving treatment works complies with statutory standards.

- Growth in water demand includes expenditure incurred installing mains to new housing developments, providing first time services to properties presently relying on private supplies and installation of meters in non-domestic properties.

2.4 In relation to the wastewater service :-

- Infrastructure maintenance includes expenditure to be incurred developing, laying and renovating the sewerage network to maintain existing services.

- Non infrastructure maintenance refers to expenditure to be incurred on the maintenance and renewal of buildings and plant used to provide the existing wastewater service.

- Quality enhancements associated with the wastewater infrastructure relate to the development, improvement and replacement of the sewerage network to reduce and minimise the environmental impact of the sewerage network on the aquatic environment.

- Quality enhancements associated with the non infrastructure assets include provision of enhanced and new wastewater treatment facilities to meet the requirements of European Union and United Kingdom environmental legislation.
Growth in wastewater service includes expenditure to be incurred providing the sewerage network to new housing developments and the extension of the sewerage network to domestic properties presently relying on private septic tanks.
<table>
<thead>
<tr>
<th>Service</th>
<th>Infrastructure maintenance</th>
<th>Non infrastructure maintenance</th>
<th>Quality enhancement: non infrastructure assets</th>
<th>Growth in demand</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Service</strong></td>
<td>£105m</td>
<td>£163m</td>
<td>£108m</td>
<td>£33m</td>
<td>£409m</td>
</tr>
<tr>
<td><strong>Wastewater Service</strong></td>
<td>£148m</td>
<td>£91m</td>
<td>£188m</td>
<td>£70m</td>
<td>£515m</td>
</tr>
</tbody>
</table>
Appendix 3

WEST OF SCOTLAND WATER
SUBMISSION TO TRANSPORT AND THE ENVIRONMENT COMMITTEE
ON
VIEWS ON WHERE ECONOMIES AND EFFICIENCIES ARE LIKELY TO BE FOUND

3.1 Introduction

By 2005/6, the Authority will have delivered an operating cost efficiency saving of £66M per annum and achieved significant improvements in water quality, productivity, wastewater compliance and customer service performance. The significance of the efficiency programme should not be understated particularly in view of the need to respond positively to the commercial challenges of competition over the next five years.

3.2 Efficiency Opportunities

In order to deliver cash releasing efficiency savings on a planned basis over the next five years, resources and efforts will have to be committed to a number of efficiency reviews, including:

- Non-capital Procurement – benefits and costs of transferring procurement to a purchasing consortium or an external partner will have to be considered; substantial savings will be delivered over a three year period.

- Energy Consumption – a comprehensive review of energy consumption, contractual relationships and pricing arrangements is underway.

- Transport – development and integration of a transport management strategy, involving vehicle procurement policy, vehicle maintenance, vehicle utilisation and fuel costs will generate efficiency savings.

- Property and Land – identification and disposal of property and land will create non-recurring income opportunities and reduce property maintenance costs.

- Sludge/Waste Management – establishment of effective partnership arrangements will support internal efficiency initiatives and provide income generation opportunities.

- Information Technology – collaboration in the procurement and maintenance of IT systems on a Scotland-wide basis will reduce the costs of IT capital and service costs.

- Productivity and Flexibility – development of flexible working practices and delivery of productivity improvements will lead to a reduction in staff numbers and/or a reduction in contractor/consultancy costs.

- Asset Management – implementation of best practice asset management will lead to a reconfiguration in the asset base and support a reduction in operating costs.

- Billing and Collections – implementation of a modern billing system and innovative collection procedures will reduce the cost of collections and reduce debt.
3.3 Key Issues

The establishment of partnership arrangements and joint ventures with the other water authorities and the private sector will be necessary to ensure delivery of efficiency targets and meet the challenges of competition. Opportunities highlighted by the NEW Collaboration project will have to be progressed in tandem with the exploitation of public/private partnerships.

In order to provide the required platforms, the Authority will have to invest in staff training, organisational arrangements (systems, processes and procedures) and IT systems.
4.1 Since its formation on 1 April 1996, West of Scotland Water has recognised its responsibilities for the provision of water supply and waste water services to customers both in rural and urban areas. As a consequence, it has committed considerable resources to the development of comparable services to rural and urban areas. As the authority is responsible for the provision of services to 12 island communities and the extensive rural areas in parts of Ayrshire and Lanarkshire, Dumfries and Galloway and Argyll and Bute, this has been an onerous challenge.

4.2 Reflecting both the disparate nature of the sources utilised to provide services to communities in rural areas and the historical under investment in these services, this has required the commitment of significantly greater operating and investment resources on a pro-rata basis on the provision and improvement of services to customers in rural areas as compared to those in urban areas.

4.3 Historically, water supply services in rural areas have been developed on the basis of individual supplies serving individual communities. Consequently, the Authority inherited a large number of small sources serving relatively small communities. The smallest individual source at Claddich serves only six houses. Although the former Strathclyde Regional Council had made some inroads into the modernisation and replacement of water supply sources in Argyll and Bute and Dumfries and Galloway Regional Council into the provision of waste water treatment facilities, West of Scotland Water inherited a very considerable backlog in the extent of investment required to provide services of the requisite quality within statutory timescales. The extent of progress made can be demonstrated by the investment detailed in tables 1 and 2 below.

4.4 Whereas the domestic population served in the area of Dumfries and Galloway Council represents some 6.3% of the total population served by West of Scotland Water, the investment completed on an annual basis from 1 April 1996 until 31 March 2000 and to be completed up to 31 March 2002 can be summarised as being:

**Table 1: Capital Investment in Dumfries and Galloway**

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<tr>
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<tbody>
<tr>
<td>D&amp;G</td>
<td>4,970</td>
<td>5,232</td>
<td>5,515</td>
<td>6,764</td>
<td>8,574</td>
<td>15,250</td>
</tr>
<tr>
<td>WoSW</td>
<td>58,570</td>
<td>62,898</td>
<td>84,370</td>
<td>95,350</td>
<td>108,700</td>
<td>127,290</td>
</tr>
</tbody>
</table>

D&G as percentage of WoSW 8.5% 8.3% 6.5% 7.1% 7.9% 12%
Water Supply

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</thead>
<tbody>
<tr>
<td>D&amp;G</td>
<td>5,680</td>
<td>5,072</td>
<td>11,011</td>
<td>9,990</td>
<td>18,149</td>
<td>15,390</td>
</tr>
<tr>
<td>WoSW</td>
<td>53,940</td>
<td>65,202</td>
<td>61,970</td>
<td>70,150</td>
<td>78,710</td>
<td>69,510</td>
</tr>
<tr>
<td>D&amp;G as percentage of WoSW</td>
<td>10.5%</td>
<td>7.8%</td>
<td>17.8%</td>
<td>14.3%</td>
<td>23.1%</td>
<td>22%</td>
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</table>

Total Wastewater and Water Supply

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>D&amp;G</td>
<td>10,650</td>
<td>10,304</td>
<td>16,526</td>
<td>16,754</td>
<td>26,723</td>
<td>30,640</td>
</tr>
<tr>
<td>WoSW</td>
<td>112,510</td>
<td>128,100</td>
<td>146,340</td>
<td>165,500</td>
<td>187,410</td>
<td>196,800</td>
</tr>
<tr>
<td>D&amp;G as percentage of WoSW</td>
<td>9.5%</td>
<td>8.0%</td>
<td>11.3%</td>
<td>10.1%</td>
<td>14.3%</td>
<td>15.6%</td>
</tr>
</tbody>
</table>

Over the period from April 1996 to March 2001, West of Scotland Water will have invested approximately £740M in new and improved assets; 11% of this investment has been in Dumfries and Galloway. This is equivalent to £1,350 for every domestic property in this area.

4.5 Similarly, whereas the population served in Argyll & Bute is some 3.8% of the total population served by the Authority, the investment completed to date and programmed up to 31 March 2002 can be summarised as being:

Table 2: Capital Investment in Argyll & Bute

|--------|---------|---------|---------|-----------|---------|---------|
| Wastewater all figures in £’000s
| A&B    | 2,361   | 6,434   | 11,659  | 21,488    | 33,252  | 45,888  |
| WoSW   | 58,570  | 62,898  | 84,370  | 95,350    | 108,700 | 127,290 |
| A&B as percentage of WoSW | 4% | 10% | 14% | 23% | 31% | 36% |

Water Supply

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;B</td>
<td>13,768</td>
<td>12,986</td>
<td>16,678</td>
<td>18,312</td>
<td>23,192</td>
<td>9,491</td>
</tr>
<tr>
<td>WoSW</td>
<td>53,940</td>
<td>65,202</td>
<td>61,970</td>
<td>70,150</td>
<td>78,710</td>
<td>69,510</td>
</tr>
<tr>
<td>A&amp;B as percentage of WoSW</td>
<td>25%</td>
<td>20%</td>
<td>27%</td>
<td>26%</td>
<td>29%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Total Wastewater and Water Supply

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;B</td>
<td>16,129</td>
<td>19,420</td>
<td>28,337</td>
<td>39,800</td>
<td>56,444</td>
<td>55,379</td>
</tr>
<tr>
<td>WoSW</td>
<td>112,510</td>
<td>128,100</td>
<td>146,340</td>
<td>165,500</td>
<td>187,410</td>
<td>196,800</td>
</tr>
<tr>
<td>A&amp;B as percentage of WoSW</td>
<td>14%</td>
<td>15%</td>
<td>19%</td>
<td>24%</td>
<td>30%</td>
<td>28%</td>
</tr>
</tbody>
</table>
Over the period April 1996 to March 2001, WoSW will have invested approximately £740M in new and improved assets; 22% of this investment has been in Argyll and Bute. This is equivalent to £4345 for every domestic property.
4.6 Costs incurred operating services in rural areas are significantly higher than those incurred serving customers in urban areas. In part, this reflects the comparably large number of sources which have to be operated, the large geographical distances which result in considerable additional travel and transport costs and the relatively small numbers of properties serviced. The extent of this increase in costs can be demonstrated by the budgeted costs for the provision of network water treatment and wastewater treatment in Dumfries & Galloway and Argyll and Bute in the current financial year as detailed in table 3 below.

Table 3 : Operating Costs in Current Financial Year in Rural Areas

<table>
<thead>
<tr>
<th>Function</th>
<th>Networks</th>
<th>Water</th>
<th>Wastewater</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total operating expenditure</td>
<td>25,384</td>
<td>9,739</td>
<td>12,413</td>
</tr>
<tr>
<td>Expenditure in Dumfries &amp; Galloway</td>
<td>2,780</td>
<td>1,727</td>
<td>1,946</td>
</tr>
<tr>
<td>%age of total</td>
<td>11.0%</td>
<td>17.7%</td>
<td>15.7%</td>
</tr>
<tr>
<td>Expenditure in Argyll (excluding Cowal &amp; Bute)</td>
<td>N/A</td>
<td>1,498</td>
<td>469</td>
</tr>
<tr>
<td>%age of total</td>
<td></td>
<td>15.4%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

4.7 A number of policy decisions have been taken to give preference to the provision of comparable services to customers in rural areas. Examples of preference relate to:-

- At its formation on 1 April 1996, the Authority provided an “0345” local charge call service for calls made outwith hours to the Authority’s emergency out of hours service centre. This has subsequently been replaced by an 0808 freephone customer helpline. This arrangement ensures that customers in rural areas have incurred identical costs contacting the authority to those incurred by customers in the great Glasgow area.

- The Authority recognised that until 31 March 1996 the Councils responsible for the provision of the waste water service had provided a free sceptic tank emptying service to all its customers. This arrangement reflected the situation whereby all costs incurred providing the sewerage service were recovered through the overall Council Tax system. This resulted in the situation whereby owners of properties relying on private sceptic tank services were required to contribute in an identical manner to the owners of properties which were connected to the public sewerage network.

The statutory framework under which the Authority was formed required the introduction of a separate Council Sewerage Charge. This charge was to be levied only on properties connected to the public sewerage network. To help offset the introduction of a significant additional charge, Government grant support was provided to phase in the impact of the domestic Council Sewerage Charge over a three year period. Although no grant support was offered to properties relying on sceptic tanks, West of Scotland Water phased in the costs of emptying private septic tanks over a similar three year period to that applied to the transition arrangements for the new Council Sewerage Charge.
Throughout the area served by West of Scotland Water, there are only some 19,000 domestic properties not connected to the public water supply network. This situation reflects the remoteness of these properties and the lack of finance available to extend the public water supplies. To meet its statutory obligations to provide supplies to properties where it is economic to do so, West of Scotland Water will contribute up to £1,000 per property to the costs incurred installing the water supply system serving new housing developments and a similar amount for the provision of the sewerage network. As this level of expenditure will not support the extension of water supply networks to properties not currently connected due to their general remoteness, West of Scotland Water has committed some £1.5 million per year in recent years towards the extension of the public water supply network to properties which would otherwise be outwith the economic cost limit. Consideration is being given under the Quality and Standards process to introduce to a similar commitment to extend the sewerage service to properties in rural areas presently relying on sceptic tanks.

The Authority’s Customers Code of Practice offers customers in rural areas identical service standards to those enjoyed by customers in urban areas.

4.8 Thus it can be seen that the authority is committed to the provision of comparable services to customers in rural and urban areas. This has had and will continue to require significantly higher costs in rural as compared to urban areas.
5.1 West of Scotland Water has contractually closed all three of the PFI Projects currently incorporated in this Investment Programme. The first project to close was Dalmuir Wastewater Treatment Service, which will provide facilities for a population of 600,000 in the North West Glasgow, Clydebank and the Kelvin Valley areas. This project was signed in June 1999 and flow will be diverted in to the new plant by April 2001.

5.2 The second scheme is the Daldowie Sludge Treatment Service which reached financial close in December 1999. This project will receive sludges from waste water facilities in the Greater Glasgow area, amounting to some 75% of the total West of Scotland production of this material. The sludges will be dewatered and thermally dried at Daldowie to produce granules which will then be recycled to Longannet Power Station as a coal substitute for co-burning in the station’s furnaces. This project is currently under construction and should be in service in April 2002.

5.3 The final PFI project provides a waste water and sludge treatment service at the three separate works of Meadowhead (serving Irvine, Ayr, Prestwick, Irvine Valley, Kilmarnock etc, with a total population of some 300,000 persons), Stevenston (serving Stevenston, West Kilbride, Ardrossan, Saltcoats, Garnock Valley, Kilwinning, Dalry, Beith etc with a total equivalent population of 85,000 persons) and Inverclyde (serving Greenock, Gourock, Port Glasgow, Skelmorlie, Kip Valley etc with a population equivalent of 82,000 persons). This project was formally closed in October 2000 albeit that construction work had started previously under an advanced works contract arrangement. The three waste water treatment facilities are due to be commissioned by December 2001.

5.4 In responding to the Committee’s request for specific information, I would request all parties who have access to this data to treat it as commercially sensitive. I have selected the Dalmuir Service as being the project which is most advanced and typical of a large waste water treatment works on a single site. The project is interesting in that the PFI Company has, chosen to adopt compact ‘small footprint’ processes utilising deep aeration tanks and lamella assisted settlement in both the primary settlement and secondary clarifiers because of the tight site layout.

5.5 The PFI Company for this service is Scotia Water UK Ltd who are a consortium comprising Taylor Woodrow Construction, Barr Construction, Stereau Ltd (process engineering contractor), Saur UK Ltd (Operator), Halcrow Crouch Consultants (general engineering consultants) and Paribas (bankers).
5.6 A comparison of the PFI proposals for this project with an estimate of a typical traditional Design and Build procurement contract is provided in Table 1 below.

Table 1 Summary of comparative costs

<table>
<thead>
<tr>
<th>Parameter</th>
<th>PFI Procedure Dalmuir WwT Service</th>
<th>Public Sector Design &amp; Build Procurement Procedure Dalmuir WwTW</th>
<th>Public Sector as proportion of PFI service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Populated served by facility</td>
<td>600,000</td>
<td>700,000</td>
<td></td>
</tr>
<tr>
<td>Construction period</td>
<td>2 years</td>
<td>2 1/2 years</td>
<td></td>
</tr>
<tr>
<td>Period to conclude project contract</td>
<td>27 months</td>
<td>15 months</td>
<td></td>
</tr>
<tr>
<td>Operating period</td>
<td>23 years</td>
<td>23 + years</td>
<td></td>
</tr>
<tr>
<td>Design life</td>
<td>23 + 5 years</td>
<td>40 + years</td>
<td></td>
</tr>
<tr>
<td>Capital cost of facility (CAPEX)</td>
<td></td>
<td></td>
<td>122%</td>
</tr>
<tr>
<td>CAPEX replacement over 23 year operating period</td>
<td></td>
<td></td>
<td>208%</td>
</tr>
<tr>
<td>Whole life CAPEX cost (23 year)</td>
<td></td>
<td></td>
<td>129%</td>
</tr>
<tr>
<td>Whole life operating cost (OPEX) over 23 year operating period</td>
<td></td>
<td></td>
<td>98%</td>
</tr>
<tr>
<td>Whole like service fees</td>
<td></td>
<td></td>
<td>125%</td>
</tr>
<tr>
<td>Net Present Value (NPV) OPEX costs</td>
<td></td>
<td></td>
<td>98%</td>
</tr>
<tr>
<td>Net Present Value (NPV) service fees</td>
<td></td>
<td></td>
<td>142%</td>
</tr>
<tr>
<td>PFI Company bid costs</td>
<td>£2.9 m</td>
<td>£0.9 m</td>
<td></td>
</tr>
<tr>
<td>WOSWA Advisers fees</td>
<td>£0.69 m</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>WOSWA staff costs</td>
<td>£0.45 m</td>
<td>£0.25 m</td>
<td></td>
</tr>
</tbody>
</table>

- The Public Sector Works would have provided for 100,000 more population. The PFI Company is taking the risk of designing on a smaller capacity. If PFI Company is wrong then PFI Company will have to provide additional capacity at its expense provided the population difference is domestic in nature.

- The Design Life of the PFI Facility is shown as 23 + 5 years because the PFI Company is obliged to provide a plant which will be capable of operating for 5 years beyond the end of their service period.

- The Capital Cost (CAPEX) includes development, design and PFI Company Bid Costs.
  - Capex Replacement Costs are the costs of planned replacement of major items of process plant and equipment during the 23 year operating period (excluding inflation).
  - Net Present Value is the present value of the anticipated annual costs discounted at 6% over the 23 operating period (excluding inflation).

5.7 With regard to the Committee’s request for information on other methods of innovative funding, the comments made to the Committee on 12 December related to project partnering rather than innovative funding on partnering.

5.8 ‘Partnering’ may not fall directly into the area of innovative funding but it does provide an innovative method of procurement which drives cost out of the process. This process has developed from the long standing recognition in the construction industry that there is scope for improving the processes involved in planning projects and thereafter constructing and commissioning them.
5.9 It is recognised that whilst savings can be achieved by using the partnering process on individual projects, the greatest opportunity for maximising savings will come from applying the partnering techniques to a whole raft of projects procured through a strategic partnership. It has been estimated that savings in the order of 30% can be driven from project costs through a properly managed strategic partnering process.

5.10 On the issue of small scale projects being less suitable for PFI/PPP there are a number of factors to be considered. Firstly, there is no doubt that the bid costs associated with the development of a PFI project are significantly higher than would be the case in a traditional Public Sector procurement approach. These costs are associated with the evaluation and apportionment of the risks perceived in the project and from WOSWA’s experience have little to do with the scale of the proposed project. It is our experience that PFI Projects will not reach financial close until the funders of the project and their legal, financial and technical experts are comfortable that their exposure to the risks inherent in the project are limited and manageable. Small projects are just as likely as larger schemes to have some difficult risk issues. These may be associated with the reliability of historic data, difficulties in estimated future flows and/or loads, trade effluents, infiltration effects etc. It is therefore likely that the bid costs of smaller projects for both the PFI Company and the employing Authority will be disproportionately higher than larger schemes. Smaller projects with reduced CAPEX and OPEX costs will probably offer much less scope than larger schemes for significant innovative PFI savings which might offset the higher bid costs.

5.11 It is of course possible to group smaller schemes together to make them more attractive for the PFI/PPP approach. However, our experience, particularly from the Meadowhead, Stevenston and Inverclyde PFI project with its three discrete sites is that each site tends to have some specific risk issues which when combined with the common risk issues on all the sites escalates to provide a much more complex risk matrix for the combined project than would be the case for a single large site based project. For example in the case above, one site has pumped-only flows arriving at the site with no trade effluent issues. However infiltration effects from the older sewerage system and the changes which might occur in this over the years of the operating period were difficult to resolve. Another site had very considerable trade effluent issues which challenged the very parameters stipulated in the Urban Waste Water Treatment Regulations. New analytical procedures and protocols had to be established to investigate and measure the appropriate parameters.