

**Strategic Review of Charges 2010-14**  
**Stakeholder Information Workshops 2009:**

**No 5: The Supply/Demand Balance**

**Stirling, 09<sup>th</sup> April 2009**

**Attended by**

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Thomas Kane	Department of Sociology and Geography, University of Strathclyde
Mike Ramsey	Black and Veatch
Gerard O'Loan	NHS National Procurement
Jack Law	Waterwatch Scotland
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**Opening remarks**

The fifth workshop of 2009 concerning the Strategic Review of Charges 2010-14 was opened to stakeholders with the Supply and Demand Balance as its primary area of focus. Although this workshop was to inform the participants the effects that supply and demand has on the capital investment programme, attendees were invited to raise any other pertinent issues that may be of concern.

The workshop began with a brief description of the Price Review process. It emphasised that its purpose is to generate an investment programme that will meet the Objectives set by Scottish Ministers at a price which represents best value to customers. The outcome of the process is a regulatory contract agreed to by Scottish Water to ensure the delivery of these Objectives.

Stakeholders were informed that Scottish Water has a duty to ensure that it has adequate provision of water and wastewater services to meet the demands of customers whilst maintaining water quality standards and protecting the environment. It was noted that this duty drives, directly and indirectly, a wide range of projects throughout the capital investment programme.

**Overview of issues discussed**

It was noted that generally demand/supply 'deficits' (where demand is greater than supply) drives investment. Interventions occur either on the demand-side (to reduce demand) or the

supply-side (increasing supply) to restore an equilibrium. It was explained that understanding the scale of this deficit, now and in the future, is made more difficult because of the following challenges:

- Establishing the correct level of domestic and non-domestic growth;
- Understanding the degree of population migration within, into/from Scotland;
- Identifying the right level of leakage and infiltration (and delivering this);
- Practical, operational limits on asset and network capacity;
- Restrictions on resource availability; and
- Understanding the additional impact, for example, of Climate change

These topics formed the basis of the workshop debate. The following captures the key points of discussion.

#### *Quantifying the Supply/Demand balance*

The discussion opened with one attendee querying how customer demand is decided and how such demand is quantified. It was explained that the introduction of competition has required Scottish Water to meter the consumption of non-household customers which helps it quantify this aspect of demand. Currently there is no requirement for Scottish Water to meter domestic customers, though metering can be requested. It was explained that companies in England and Wales have generally higher levels of domestic metering, reflecting different metering policies and lower availability of water and that any decision to extend domestic metering in Scotland would be a matter for Ministers. Scottish Water advised that this would have implications regarding the billing system but the view of some participants was that metering could beneficially control consumption and hence reduce demand.

#### *Approach to reduce supply/demand deficits*

The process for establishing a supply/demand deficit was queried. The environmental regulator, SEPA, confirmed that they issue Scottish Water with guidance based on industry best practice to determine the Supply Demand Balance; this is conducted for each discrete, water resource zone to identify if it is in surplus or deficit and by how much. Scottish water also explained that it has implemented a network of District Metered Areas (DMAs) which allows it to better understand supply and demand within its network.

A point was raised regarding the approach that Scottish Water will take to resolve supply/demand deficits given that delivery of its present capital programme is behind target (indicating concern regarding the ability of Scottish Water to deliver its capital investment programme and whether this would influence its methodology to resolving the supply/demand balance in deficit zones). It was noted that delivery of investment is closely monitored by the multi-stakeholder 'Outputs Monitoring Group' and reported on annually by the Commission.

It was noted that of the 230 Water Resource Zones in Scotland 40% were calculated to be in deficit; capital investment is planned in 15 zones (essential programme) and that these had been promoted for investment because other means (operational, leakage reduction etc.) would be unlikely to restore the supply/demand balance or manage the [deficit] risk

satisfactorily. It was also explained that each water resource zone has its own unique characteristics and that Scottish Water and SEPA were working closely to determine the optimal solutions for each. Notwithstanding, it was also explained that the Commission would establish that the right solution is adopted and at the lowest reasonable overall cost to customers.

#### *Growth and demand in rural areas*

There was the view that the current position of the economy has resulted in great uncertainty in growth predictions. Stakeholders were of the opinion that previous growth levels were underestimated and that the current 'down-turn' may help to balance previously high growth rates. SEPA clarified that they have an interest in the level of growth within the water industry as they aim to ensure that development to support growth is environmentally sustainable.

A question was asked regarding how the Commission and Scottish Water approach growth in rural areas given provision of services is disproportionately high. It was noted that Ministers require that all customers are treated equally with a common, minimum level of service; the Commission and Scottish Water would seek to achieve this at the lowest overall reasonable cost. It was explained that some first time provision projects have proven challenging and costly but that fundamentally all Ministerial Objectives would be achieved.

#### *Leakage and infiltration*

The economic level of leakage (ELL) concept was explained to participants and how reducing leakage is treated as a 'demand-side' option. It was asked if ELL varied from area to area and how it was determined. Scottish Water confirmed that it has a dedicated leakage team and through the assistance of a specialist consultant now better understands the difference in leakage zone by zone. It was explained that there was much more to do but Scottish Water has made good progress with leakage reduction. The point was also made that reducing leakage in the system may lead to adverse effects to the quality and colour of water supplied, which could trigger other investment, such as, at water treatment works. Both the Commission and SEPA advised that it would continue to look to leakage reduction opportunities before supporting investment in supply side solutions.

The desire to better understand infiltration was also expressed. One attendee tabled concerns regarding infiltration particularly within the coastal communities (saline intrusion) and the detrimental effect this can have on waste water treatment compliance. It was generally understood that quantifying, identifying and removing infiltration is harder than leakage but that the opportunities for doing so would continue to be explored. The point was also raised that less infiltration could result in more sewer blockages but could reduce the amount of additional water forwarded and separated at wastewater treatment facilities.

#### *Water efficiency and climate change*

Scottish Water was asked what it does to raise awareness in water efficiency. Scottish Water, it was noted, regarded water efficiency as a long term commitment; a view supported by SEPA. It highlighted its efforts to reduce water-use through, for example, the issuing of

cistern devices. It was noted that Scottish Water sees leakage reduction as an immediate priority and recognises the merit in persuading customers to use less water.

The discussions concluded with how Scottish Water's energy usage was assessed questioning if there would be any plans to reduce its carbon footprint. Scottish Water cited what it is doing to recover energy from waste, for example. It was also noted that the recently appointed Innovation and Technology Directorate aims to better understand the carbon cost of supplying water. It is believed that with this information customers could be shown how reducing, individual water consumption can lessen personal carbon footprints.

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