# MCCP 0mm Chargeable Meter Size – Annex 1 Combination Meters

#### 1. Background – Meter Sizing

The size of mechanical water meter to be installed at a premises is determined in order to provide sufficient capacity to meet peak demand and to record consumption as accurately as possible at all flow rates.

Any meter size will have an ideal operating range of flow rates at which the accuracy of recorded consumption is greatest. Beyond the top and bottom of this range, the accuracy of recorded consumption will deteriorate. Revenue meters are sized according to BS5728 which defines the performance that must be achieved by the meter,

It is therefore important that the range of flow-rates through a meter is within the ideal operating range of that meter in order to conform with BS5728.

## 2. Premises with fire fighting equipment

Some premises have typically low flow rates but need to retain the capacity for high flow rates in some circumstances. This is usually due to the presence of fire fighting equipment at premises which requires significantly higher capacity than other installed appliances. In this situation, the meter installed must be large enough to enable the operation of fire fighting equipment in the event of a fire (e.g. a fire hydrant requires an 80mm meter) but must still be capable of recording normal usage at the premises which may be lower by a sufficiently large margin that a much smaller meter would usually be fitted to accurately record it. Fire Tariff Agreements are often in place at such premises.

Installing an 80mm meter at these premises would provide sufficient capacity but would fail to accurately register and record normal low flow rates.

Note that any premises connected to the Scottish Water network since 1 April 2003 should have had a separate dedicated supply installed to serve fire fighting equipment.

## 3. Combination meters

A combination meter contains two meter dials of different bore (typically one 20mm and one 80mm) fitted in parallel, either as an integrated meter or, in older installations, as two separate meters connected to a single supply.



The 20mm dial records consumption at low flow rates with water being diverted via the 80mm dial in the event of high flows.

#### 4. Charging Arrangements

As both meter dials serve a single supply, the combination meter should be treated as a single meter for charging purposes. The chargeable meter size of the larger dial should\_be used to derive charges (this will be 80mm by default for an 80/20mm combination meter

except where a Fire Tariff Agreement has been granted applying a smaller chargeable meter size). All consumption recorded on both meter dials should be treated as going through this meter for charging purposes.