

### 1. Purpose & Background

The purpose of this document is to outline the policy for when and how Anglian Water Wholesale responds to changes in the Maximum Daily Demand (MDD) profile for sites on the Profile Tariffs.

Water demand from individual customers places incremental demands upon both our water production assets at water treatment works and the network of water pipes in any given geographical area. Both our ability to produce water and to deliver this water at point of use is constantly under review to ensure water is available under all reasonable circumstances in the long term. In some cases, this drives investment to increase both production and network capacity where possible.

In other cases where demand is within a water scarce zone, a capacity increase may not be available in the short term. The maximum daily demand (MDD) and peak flow policy is designed to help manage demands especially from larger end-users both to ensure the sustainability of water supplies in the locality but also to reduce the risk of individual demand points affecting other customers and creating nuisance within the local network system. The policy sets both MDD and peak flow capacity based on specific hydraulic assessment of the demand point arising from end-user water needs to manage these risks.

### 2. Scope

The Anglian Water Charges Scheme<sup>1</sup> states that where a site uses either,

- 0.1 megalitres or more per day  
or
- 10 megalitres or more per annum

the supply will be charged on one of Anglian Water's Profile Tariffs. The Profile Tariffs contain an MDD element. The MDD is a charged based on a site's peak cubic meter requirement (m<sup>3</sup>). The MDD is calculated through an on-site logger.

In addition, Anglian Water reserves the right to limit instantaneous peak demand (l/s) where demand is likely to impact on the efficient use of our network or on the wider customer base. Where demand creates a nuisance or impacts on minimum service requirements for the wider customer base, AWS may take immediate steps to mitigate.

This document outlines the steps required to identify where a site has exceeded or wishes to make a change to its current MDD and outlines the process of how a site MDD is changed. The document is made up of three parts:

- Part 1: Wholesaler identified MDD increase
- Part 2: Retailer MDD increase
- Part 3: Retailer request to lower MDD

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<sup>1</sup> Anglian Water Charges Scheme <https://wholesale.anglianwater.co.uk/charges-and-billing/current-charges/>

### 3. Wholesaler Identified MDD Increase

The Wholesale Service Centre will flag any MDD exceedances from the previous month using the MDD exceedance tool, created by Income and Tariffs, described in **Appendix 1**.

*An exceedance is a day in which the daily peak demand is greater than 1m<sup>3</sup> of the current Maximum Daily Demand.*

The Wholesale Service Centre (WSC) will pursue exceedances which meet the following criteria:

- Supply points on the Profile Tariff which exceed greater than 1m<sup>3</sup> of the current MDD

Or

- Supply points on the Profile Plus, Profile Interruptible and the Profile Industrial Non-Potable Tariffs which exceed greater than 5m<sup>3</sup> of the current MDD

#### *Non-Aligned*

Where the logger data does not align with a meter read the site must be noted and checked the following month. If there are two consecutive months where the data does not align, a logger survey must be raised with the logger maintenance contractor. This is so any issues with either the logger or meter can be quickly resolved.

#### *Aligned*

Where a logger reading and meter reading align, the site will be checked to see if the exceedance was due to any wholesale network issues such as a Water Quality incident or Supply Interruption. If there has been a network issue, the exceedance will be noted and the MDD will not be increased. Sites will not be charged for exceedances caused by wholesale operations.

### **Communication with the Retailer**

For any exceedances that align and are not caused by wholesale issues, the Wholesale Service Centre (WSC) will contact the site's Retailer informing them that the MDD will be increased unless there is a valid reason why the MDD should not be increased. Only the following reasons will prevent an increase in MDD:

- Emergencies, Health & Safety, Fire testing & Animal Welfare with proof. *Proof would be e.g. a fire fighting report or evidence of test which clearly shows the extra peak consumption is over and above any increase in operational process, similarly in the case of Animal welfare, H&S where additional water to overcome contamination or comply with Animal Welfare regulations proof in the form of H&S/Production/Veterinary and/or Operational records would be acceptable.*
- The meter is not accurately recording.

*Upon payment of the appropriate fee in advance (dependent on meter size), the Retailer can request the Wholesaler to test the relevant premise charging meter at any time. Upon testing, should the meter be faulty, the cost of the meter test will be borne by the Wholesaler and any fees paid will be returned to the Retailer. Should the meter be in working order, the cost for the meter test will be borne by the Retailer.*

- Leakage

*If a retailer can provide evidence that an exceedance was caused by a leak or burst within the on-site network, the MDD increase will be waived if the leak/burst is fixed within 30 working days of the date of first exceedance. A request to extend the 30 days will only be granted if the retailer can provide evidence that the customer is actively trying to fix the leak and needs more time to do so.*

*For both leakage and bursts, if AWS believe that a site is misusing water by not sufficiently maintaining its network to an acceptable standard, it may exercise its statutory powers in accordance with section 73 and section 74 of the Water industry Act 1991 to ensure water is used responsibly.*

If the Retailer cannot provide a valid reason for the exceedance within 10 working days, the site MDD will be increased to the highest peak within the report period. The MDD will be increased from the first date of the subsequent billing period and will not be lowered for at least 12 months. MDD will only be considered for a reduction on the back billing policy within a 12 month period following the exceedance

For any site exceeding its current MDD throughout the Anglian Water region, a capacity assessment will need to be completed by Asset Intelligence. Asset Intelligence will have 11 working days to provide a response which will be issued through the Growth and Equivalence Management System (GEMS). If asset reinforcements are required or the site benefits from a strategic scheme for process water, Asset Intelligence will provide details of any costs. For the avoidance of doubt for domestic flows these are covered under zonal charging where applicable. Site Specific Costs would be assessed where a connection requires upsizing.

Reinforcements are measures taken to plan, model and invest in additional water production or water pipes to meet the new requirements of end-user demand. By their nature, these measures are not short-term mitigations and therefore can take many months/years to install. Under our various policies, proportionate costs for reinforcements can be recovered from end-users.

The WSC will confirm the outcome of the assessment. Where a capacity assessment has been undertaken, the WSC will advise the Retailer of both the MDD in m<sup>3</sup> per day and the instantaneous Peak Flow in litres per second (l/s) providing the water resource is available within the network. Should the Retailer require a change to either they should contact their designated Wholesale Technical Account Manager to discuss further.

## Responsibilities

Income and Tariffs	
1.	Create MDD exceedance tool.
2.	Provide support as required.

Wholesale Service Centre	
1.	Use MDD Exceedance tool to report on the previous month's MDD exceedances.
2.	Check that exceedances fall into the criteria to pursue and check there has been no Wholesale reasons for exceedance.
3.	Notify Retailer that there has been an MDD exceedance.
4.	If site meets relevant criteria then send details of exceedance to Asset Intelligence
5.	Notify Retailer of MDD and if applicable l/s value and amend MDD as appropriate.
6.	If required, request a logger survey.
7.	If required, request meter accuracy test.
8.	Keep a reference of any exceedances.

Asset Intelligence	
1.	Receive details of MDD Exceedance.
2.	Confirm if network has capacity for increase and state instantaneous peak in litres/second
3.	If required, provide costs to reinforce network.

Retailer	
1.	Receive MDD exceedance notification and consider validity of exceedance.
2.	If required, provide evidence of leak or burst.
3.	Send response to Wholesaler and inform supply point of MDD increase.
4.	Upon payment of appropriate deposit, request a meter accuracy survey.

## 4. Retailer MDD Increase

### Permanent MDD Increase

Should a Retailer request to increase a site MDD, they are required to submit a MDD request through the WSC. The WSC will send the request to the Asset Intelligence Team, who within 11 working days should inform the Retailer whether offsite reinforcements are required to accommodate the increase in consumption they will also check to ensure the water is available within the AWS network.

If no reinforcements are required and water resource is available, the MDD will be increased from the next billing period.

If reinforcements are required, then the MDD increase is to be refused until the reinforcements are in place. In addition if water resource is not available the request will also be refused.

If water resource is not consistently available to support the increase the request will be refused.

## **Temporary MDD Increase**

A Retailer can request a temporary MDD for a site where it is aware that a larger than normal peak demand is required. A temporary increase will only be applied if the request meets all the following:

- The MDD exceedance is for an extraordinary event with proof. E.g. Commissioning of new infrastructure or replacement storage tank where water is required to run to waste.
- The Retailer notifies AWS at least 11 working days prior to the MDD exceedance.
- The exceedance only occurs at the time and peak flow rate that Anglian Water allows the site to exceed e.g. *on the 12-13 July between 8pm and 6am at no greater than 5 litres/sec flow rate and*
- There is sufficient capacity in the water network and water production assets to allow for the increase.

If the MDD exceedance does not meet each of these conditions should the site subsequently exceed its MDD as a result, then the MDD will be increased to the resulting peak MDD for the next 12 months.

## **4.1 Responsibilities**

<b>Retailer</b>	
1.	Request MDD increase.
2.	Pay for offsite reinforcements (if any re. permanent increase).

<b>Wholesale Service Centre</b>	
1.	Receive MDD increase request.
2.	Pass request to Growth and Planning for a network assessment if a site meets the relevant criteria.
3.	Accept or reject the MDD increase and confirm instantaneous peak value where accepted.
4.	Invoice Retailer for Offsite reinforcements.
5.	Increase MDD.

<b>Asset Intelligence</b>	
1.	Receive MDD increase.
2.	Confirm if network has capacity for increase and state instantaneous peak in l/s

## **5. Retailer Request to lower MDD**

With evidence, a Retailer can request to lower a site MDD once in a 12 month period. However, if a site exceeds the MDD within the following 12 months then the MDD will be back dated to the date it was granted, unless, 12 months of lower water usage has been demonstrated. The Retailer will not be able to lower the site MDD again for 12 months from the date of the subsequent exceedance.

For example:

*Retailer A, has asked the Wholesale Service Centre (WSC) to lower the MDD of Hot Foods from 50 to 40m<sup>3</sup>. Retailer A has provided evidence that Hot Foods have not exceeded 40m<sup>3</sup> in the last 7 months. The WSC agree to lower the MDD to 40m<sup>3</sup> on the 1<sup>st</sup> January 2020. On 31<sup>st</sup> March 2020 Hot Foods site exceeds its new MDD by 5m<sup>3</sup> to 45m<sup>3</sup>. The WSC confirm the exceedance is valid and increase the MDD to 45. The MDD is back dated to 1<sup>st</sup> January and Retailer A cannot request a lower MDD for Hot Foods for the 12 months following the MDD exceedance. Therefore, the next time Retailer A (or another Retailer if Hot Foods switches Retailer during this period) can request a lower MDD is 30<sup>th</sup> March 2021. Should the MDD exceed again the same process applied. If the exceedance is within 12 months from the request to lower the MDD the site will be back billed from the date the MDD is lowered.*

Back-billing will be through the Market Operator following the R1 to RF reconciliation process as outlined in the Market Codes. The Market Operator will ensure that all accounts are settled within the timescales defined by the Market.

Where a material lowering of MDD is requested, the WSC will request a capacity assessment to confirm the new instantaneous peak. In general, this will be consistent with the level of reduction in MDD value. For example, for a 50% reduction in MDD value, it will be expected that there will be a material reduction in instantaneous peak also. The exact reduction in instantaneous peak will be derived from the individual capacity assessment.

## 5.1 Responsibilities

Retailer	
1.	Send request to lower MDD to Wholesale Service Centre.
Wholesale Services Centre	
1.	Receive request from Retailer to Lower MDD.
2.	Analyse evidence received from Retailer and issue network capacity assessment where it meets the criteria. Provide confirmation if approved along with the instantaneous Peak figures.
3.	Monitor MDD for 12 months and if MDD is exceeded increase MDD and back bill Retailer from the date the MDD was lower.
4.	Refuse further lower MDD requests until 12 months has passed from the most recent exceedance.

## 6. Applying Amended Charges

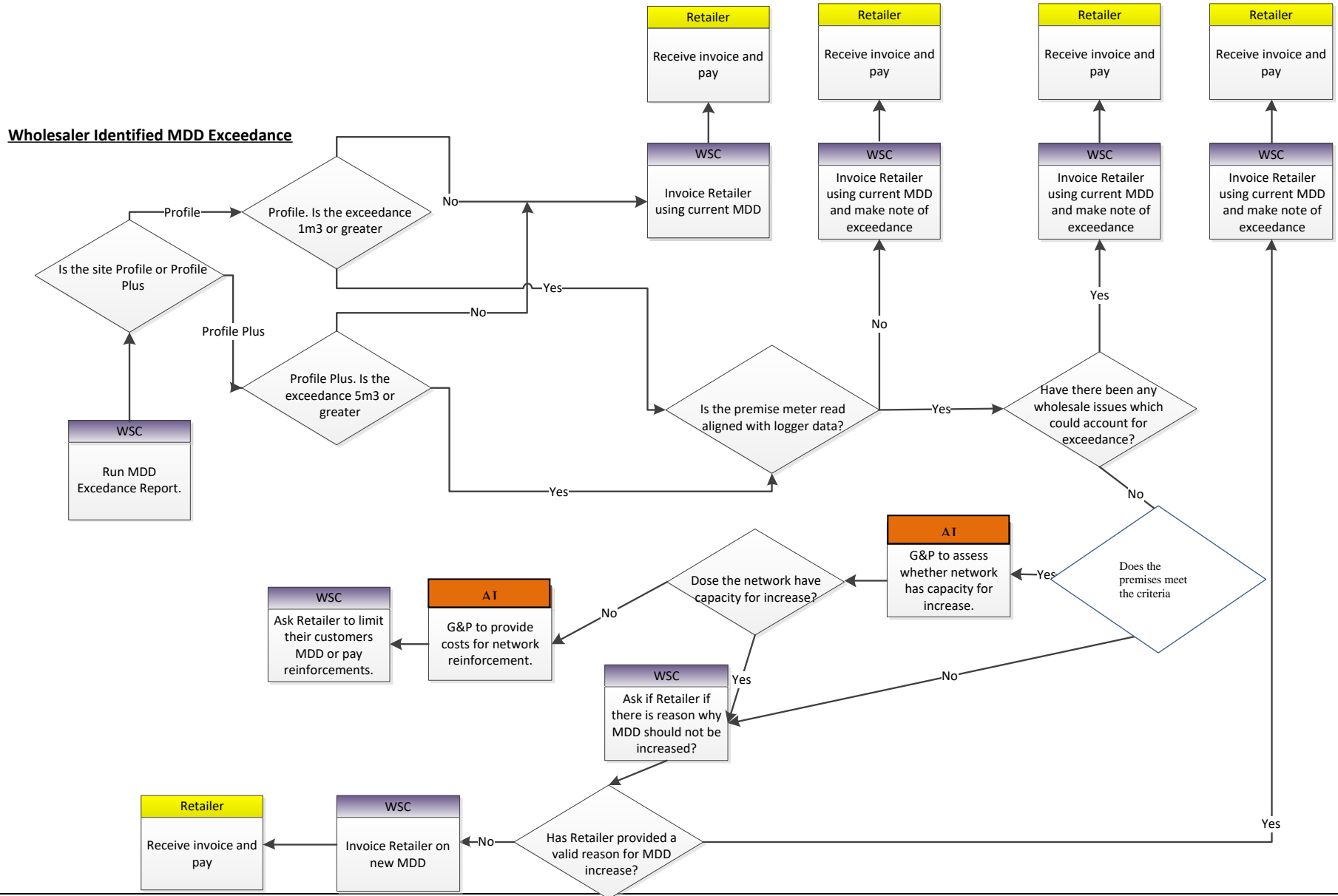
Once a revised MDD value has been agreed by the Wholesale Service Centre it will be applied for the start of subsequent billing period (Including the recovery of back dated charges).

### 7. Appendix

Charges Scheme	<a href="https://wholesale.anglianwater.co.uk/charges-and-billing/current-charges/">https://wholesale.anglianwater.co.uk/charges-and-billing/current-charges/</a>
Anglian Water Access code	<a href="https://wholesale.anglianwater.co.uk/siteassets/resources/useful-documents/network-access-code-2019.pdf">https://wholesale.anglianwater.co.uk/siteassets/resources/useful-documents/network-access-code-2019.pdf</a>

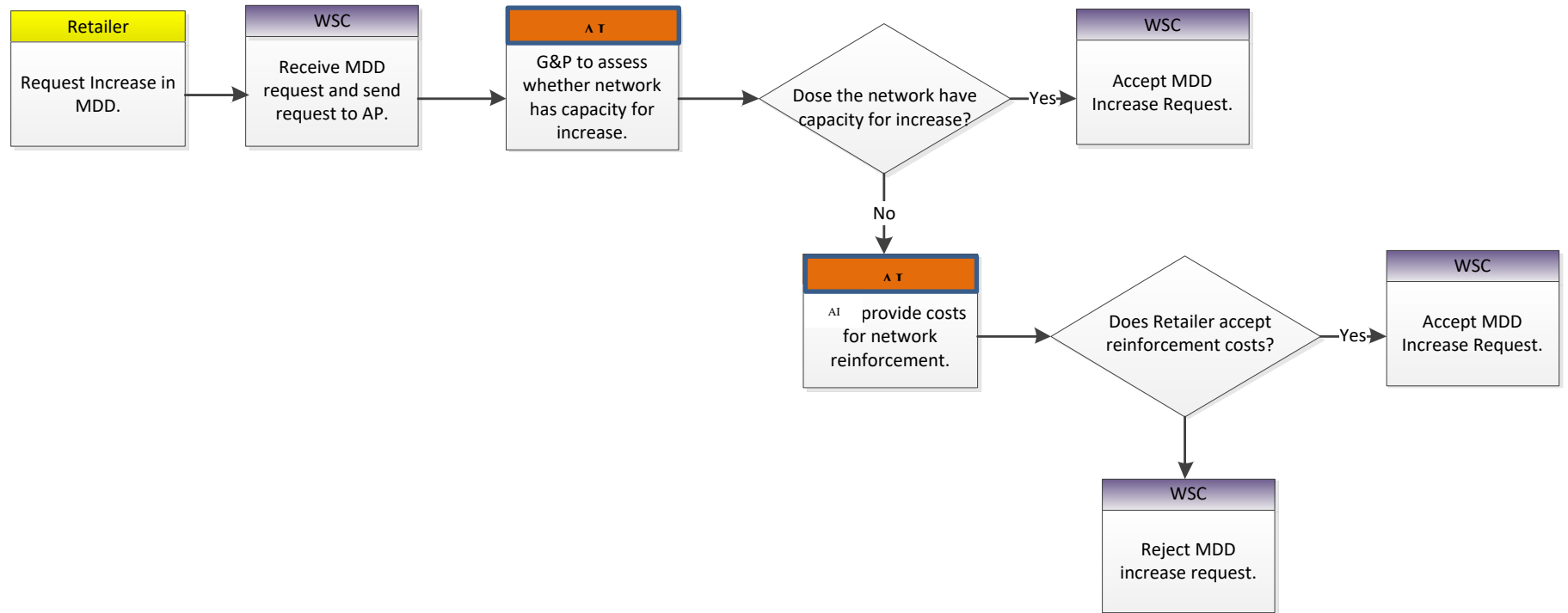


## 8. Flowchart

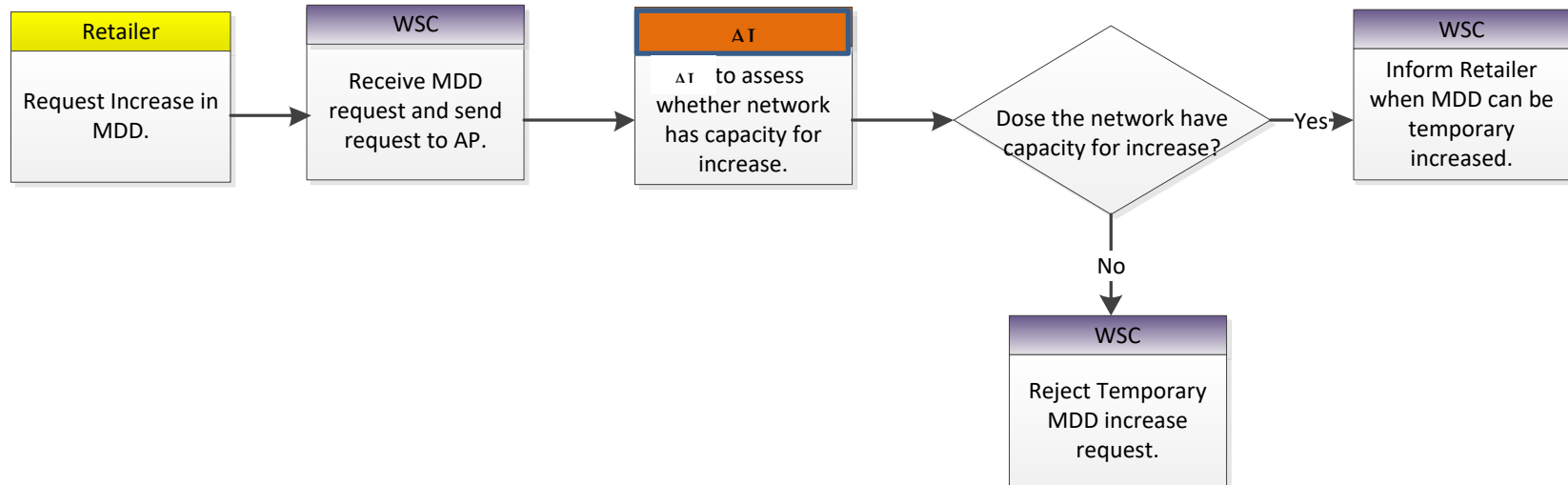




## Retailer Requested MDD Exceedance



## Retailer Requested Temporary MDD Exceedance



### APPENDIX 1

#### 1. Timescale

WSC personnel will run the report on the 5<sup>th</sup> of the Month.

#### 2. Execution

The report will show the usage for the day of highest exceedance in the preceding month, the agreed MDD level for each supply point on the report, and a suggested new MDD level following increase. This will be collated and sorted internally with historic monthly reports run, enabling us to clearly see the historical context to the exceedance i.e. have there been other exceedances in the last 12 months or at the same time in the previous year.

#### 3. Content

The report file will set out the tabulated data (pivot table) sorted in order of financial impact of each exceedance within the month. The table will allow the user to double-click on any cell in order to drill down into the data and negate the need for unnecessary data mining, and therefore reduce time to review. There will be space to give a narrative requesting an allowance, a proposal that the exceedance level becomes the new MDD or a supported request for MDD to be set at a different level in accordance with the policy.

An estimated lead time of 1 working day is anticipated to process the data.

#### 4. Designated water scarce zones

Designated zones will be identified as water scarce based on reported pressure complaints and other operational issues which create nuisance for water users within the zone and are as a result of user behaviour rather than lack of capacity.

Designated zones will be reviewed on an annual basis and provided by Asset Intelligence prior to the start of the next financial year. Where significant risk or nuisance emerges outside the normal review period a zone may be designated as scarce and become subject to additional capacity assessments.

Designated zones will be refreshed on an annual basis and updated prior the next financial year

As a matter of course Asset Intelligence will review from an operational perspective.

Figure 1 MDD Capacity Enquiry Template



General details		
Report reference number:		
Date of Enquiry:		
Enquiry Type: Water/Used Water/Both		
Retailer Name:		
Retailer Contact name:		
Retailer Contact number:		
Water SPID		
Sewerage SPID		
Trade Effluent DPID		
Site Name:		
Site address:		
Site Type:		
Site contact(s):		
Contact details (phone and email):		
Site existing water & used water information		
Mains Water Consumption:	Average m <sup>3</sup> /day	peak l/s
Borehole Water Consumption	Average m <sup>3</sup> /day	peak l/s
Other Water Consumption (specify source)	Average m <sup>3</sup> /day	peak l/s
Annual Water Consumption		
Mains Water Connection location (Grid ref)		
Water Storage volume	m <sup>3</sup>	
Used Water Discharge:	Average m <sup>3</sup> /day	peak l/s
Sewer connection location (Grid ref)		
Trade Effluent Consent reference (if applicable)		
Trade Effluent connection location (Grid ref)		
Trade Effluent treatment plant description	E.g. Screening/PH correction	
Disposal/Discharge route?		
Trade Effluent Composition	Provide sample data where possible	
Hours of Production	E.g. 20 hours/day x 6 days/week	
Details of Growth Enquiry		
Total Water Demand (including existing mains requirement)	litres/second	
Total Water Demand (including existing mains requirement)	m <sup>3</sup> /year	
Total Water Demand (including existing mains requirement)	litres/hour	
Total Water Demand (including existing mains requirement)	litres/day	
Total Trade Effluent volume (incl existing if appropriate)	m <sup>3</sup> /year	
Total Trade Effluent volume (incl existing if appropriate)	litres/second	
Hours of Production		
Enquiry Description including timescale for growth		
Description of current operation and details of proposed new operation. Please provide supporting documents		
AWS Growth Enquiry progress		
Water Pipeline capacity/connection	Date	Engineer
Water Resource capacity		
Used Water Sewer capacity/connection		
Used Water WRC capacity		
AWS comments		

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