

Appendix A

The AMA process

AMA is not a bottom-up assessment of each investment component but is based on audit theory. We believe that exposure and observation of the key process attributes such as inputs, processes and outputs informs the robustness of the overall asset planning and investment activity under scrutiny and its outputs.

Having examined our specific priorities for price setting, and the advantages of employing the audit based principles set out above, we decided to apply a modified version of the AMPAP approach to generate a set of components and supporting criteria on which to base our assessments.

We believe AMA forms an appropriate basis to assess companies' business plans, both their asset management capability and the application of the Capital Maintenance Planning Common Framework (CMPCF), which if followed and robustly implemented should form the basis for a successful business plan submission.

The application of the AMA process requires two distinct steps: assessment and scoring and applying the score to derive expenditure assumptions for baseline setting.

Assessment and scoring

The AMA assessment process involves reading and assimilating all relevant data and commentary provided by the company for capital maintenance. The information for this activity is taken from part B3 of the business plan submissions. Reporter's reports are also reviewed to gain a detailed independent view of the plan. Where matters are unclear or discrepancies exist between a company and its reporter's submissions, then we will seek clarification before forming judgements.

Our AMA scoring criteria comprises nine high-level areas containing a total of 28 sub-components. Table A1 sets out the details.

The main change from the published AMPAP process is that we have increased emphasis on the overall balance of the expenditure proposals. We also condensed the AMPAP 'People' component into the 'Management' area. The 'Balance' component is intended to address how different areas of risk have been brought together by the company and reconciled to the satisfaction of the company's Directors and other stakeholders.

High-level area	Number of components
Stakeholder engagement	3
Leadership, policy and strategy	3
Management	1
Processes	4
Systems	2
Data	3
Analysis	8
Reporting	1
Balance	3

Table A1 – AMA high-level criteria

We have scored each component against an aspirational statement, which has defined the upper limit of expectations for a frontier company in the 2009 price review. Table A2 details these statements for each high-level area.

High-level area	Aspiration statement to guide AMA scoring
Stakeholder engagement	The company has implemented an asset planning approach that delivers a business plan that addresses the conflicting interests of its stakeholders and statutory objectives, and that seeks to deliver the best value for customers now and in the long term. This is achieved through economic assessments and optimisation of investment needs, including robust valuation of benefits to the company, customers and the environment as appropriate. Where conflicts are not clearly resolved through economic tests, the company's position and justification for its chosen plan are clear.
Leadership, policy and strategy	The company's board has demonstrated its commitment to achieving the best value for customers and the environment by implementing a proactive asset management strategy and policy, including processes for ensuring continual management engagement with board policy and objectives.
Management	Roles and responsibilities of people are clearly identified, evidenced by organisational charts clearly mapped to the company's asset management processes. People management processes are aligned with asset planning objectives.
Processes	The company is operating asset planning processes that are holistic and well integrated, 'business as usual', such that all relevant inputs (information, data), analysis, time frames, objectives, constraints and outcomes are logically linked and clearly managed. The process is in continual use for business and asset planning and is capable of providing the regulatory business plans without the constraints of the five-yearly regulatory cycle.
Systems	The company has installed integrated process, data, information and analysis systems to support the continual operation and improvement of

	asset planning. The systems are operated to deliver asset planning day-to-day 'business as usual' systems. Where systems are provided by the company's suppliers or partners, these are transparent to the company. The systems allow data to be captured at a suitable level of granularity.
Data	The company seeks a basis for all its asset planning in the analysis of data from, or directly related to, its own operations. It employs robust data quality management and testing for the reliability and completeness of data sets relevant to the use for which the data has been applied (statistical significance). The company is aware and has taken account of the overall explanatory power of its data. Where its own data is weak (and it should know this), or where it might have relied on expert opinion, it should seek more reliable data from external sources. Where it relies wholly or in part on expert opinion in place of observed data, it is sceptical and employs vigorous sensitivity and validation checks. The data is captured at a suitable level of granularity and confidence grade.
Analysis	The company is undertaking analysis for asset planning, at a component and granularity level commensurate with the complexity of the assets and performance in question. The analysis is holistic and well integrated, such that optimisation between the possible objectives, constraints and outcomes can be realistically achieved. The analysis includes verification, sensitivity and validation checks that take account of data quality, where judgements are made in lieu of robust data or conclusions based on data, and the competence of the analytical method (for example degree of proven best practice). The company is using the analysis methods for asset planning as 'business as usual' analysis tools and is capable of making continual updates to the planned outcomes. The analysis methods are capable of supporting the regulatory business without the constraints of the five-yearly regulatory cycle.
Reporting	The corporate feedback and strategic review processes operate to maintain links between Board objectives and management actions relating to asset planning, implementing the plan and the outcomes delivered in terms of costs, activities and impact on service objectives.
Balance	The company has achieved a balanced asset management plan that meets planning objectives (as derived from stakeholder needs, affordability, statutory constraints and company aims) and has taken account of phasing and deliverability. It has taken a balanced view of risks across the whole plan and between the company and the customers.

Table A2 – Aspirational statement for each high-level area

We have scored, by sub-service, each draft business plan at component level in the range 0 to 5. For each component a collection of criteria were stated to illustrate the component – largely taken from AMPAP. All but two of the high-level areas were scored at sub-service level. 'Data' and 'Analysis' were scored at asset group level, allowing the score for components for these high-level areas to be weighted by the corresponding amount of investment proposed. The investment weighting for these high-level areas takes account of exceptional

items removed and separately assessed, as explained in each company's CIS report

	Score					
	0	1	2	3	4	5
Expectations	Well below expectation	Below expectation	Meets expectations only on few items; marginal on others	Predominantly meets expectation	Fully meets expectation	Well above expectation
Illustration	Historic investment in doubt; future unreliable	Status quo needs challenge	Likely to be able to proceed with status quo (historic investment)	Likely to be able to demonstrate some future increased investment – doubt about quantum of changes	Plan likely to be sound up to capped level	Plan is soundly based and is trusted

Table A3 – Scoring criteria for each component and asset group level

Exceptional items have been identified where:

- investment is not typical and a step change from recent historic expenditure is needed (for example maintenance of long life assets resulting in 'lumpy' investment);
- the investment delivers a benefit that other regulatory indicators would not detect;
- the business case for the output and expenditure should be assessed independently of our AMA; or
- in all cases there is a need to define an appropriate output in order to protect customers.

The items we have identified as exceptional vary in nature across the industry. We have taken a consistent approach to similar items (for example renewables, replacement revenue meters) wherever possible. In some cases we may not have been able to differentiate potential exceptional items from other activity with sufficient clarity, and so have not followed this process for the draft baseline.

Applying the AMA score

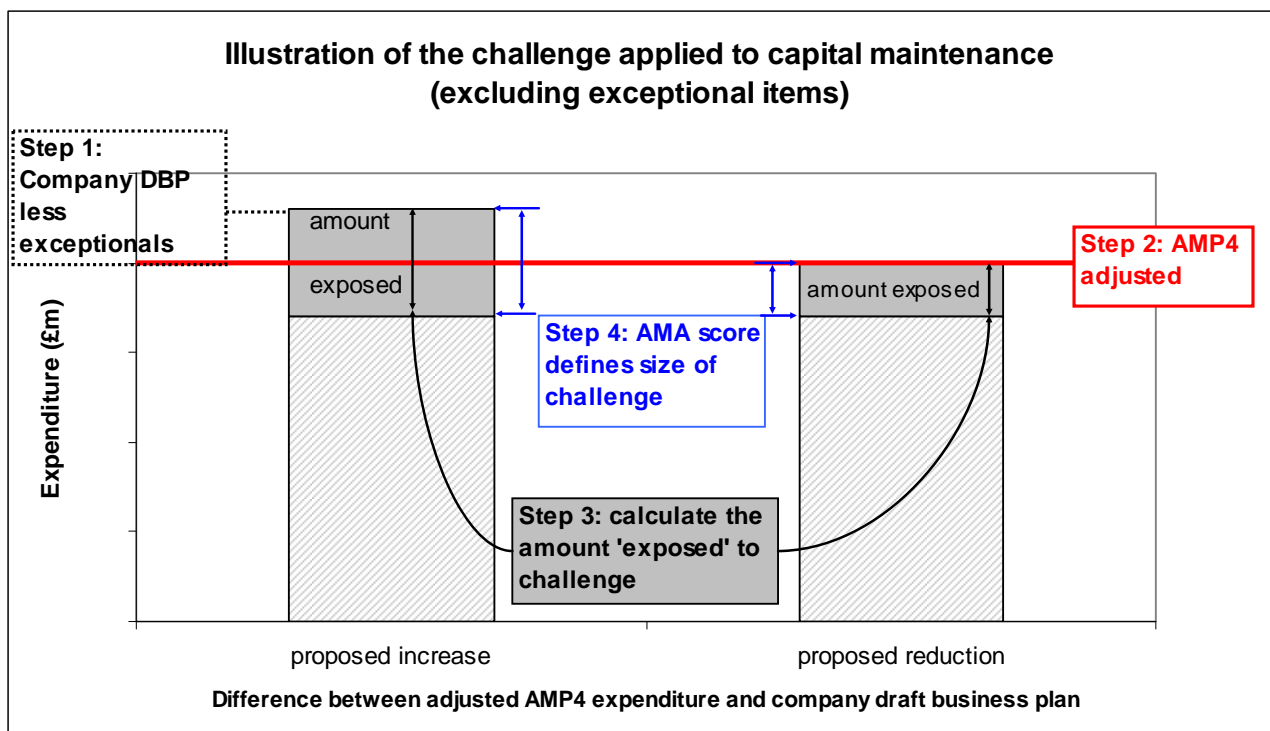
In the CIS draft baseline report provided to each company we explained how we applied the AMA score and assessed exceptional items to derive our capital maintenance expenditure assumptions. This explanation, in generic form, is repeated below for completeness.

The AMA assessment, in the form of a score, informs our view of the overall strength of a company’s proposals for each sub-service separately, and the justification offered for the activity and expenditure needed to deliver the serviceability outputs that we expect.

The application of the AMA is preceded by adjusting the expenditure proposed:

1. Adjustments to ensure that all expenditure is allocated to the correct purpose (expenditure) category. We provided each company with details of such adjustments.
2. We deducted the expenditure associated with exceptional items.
3. The remainder of the expenditure was assessed and challenged using the AMA score.

The diagram below is an illustration of how we used our AMA score to challenge the draft business plans. The process was applied for each sub-service separately.



The steps illustrated in the diagram show how we used our Asset Management Assessment (AMA) to establish our view of the baseline for capital maintenance. In most cases increases in expenditure over AMP4 adjusted expenditure levels (see following explanation) were proposed by the company – the bar on the left labelled ‘proposed increase’ illustrates our approach where this was the case. The bar on the right (labelled ‘proposed reduction’) illustrates the approach we took where a company proposed expenditure less than that in AMP4.

Step 1 represents the company’s expenditure forecast in each sub-service, after transfers have been made and after we have removed the expenditure associated with exceptional items – as explained above.

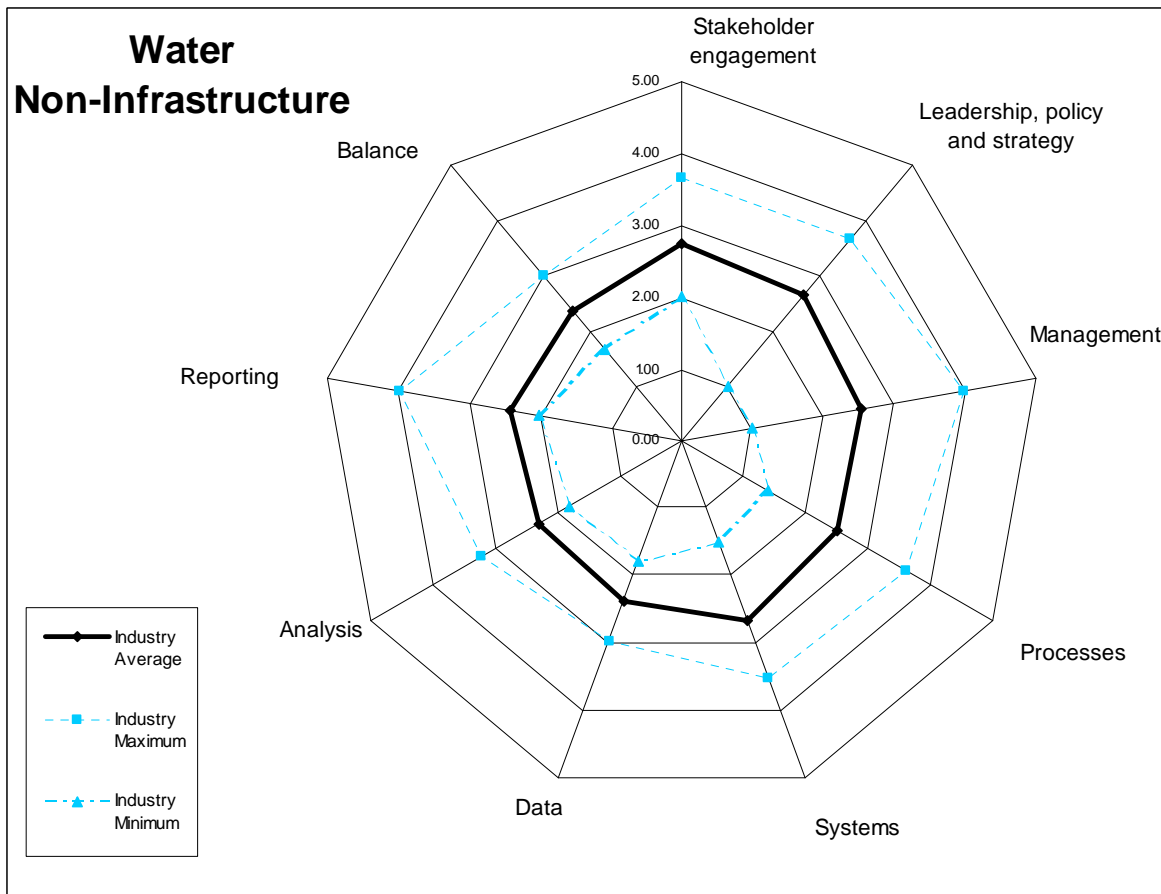
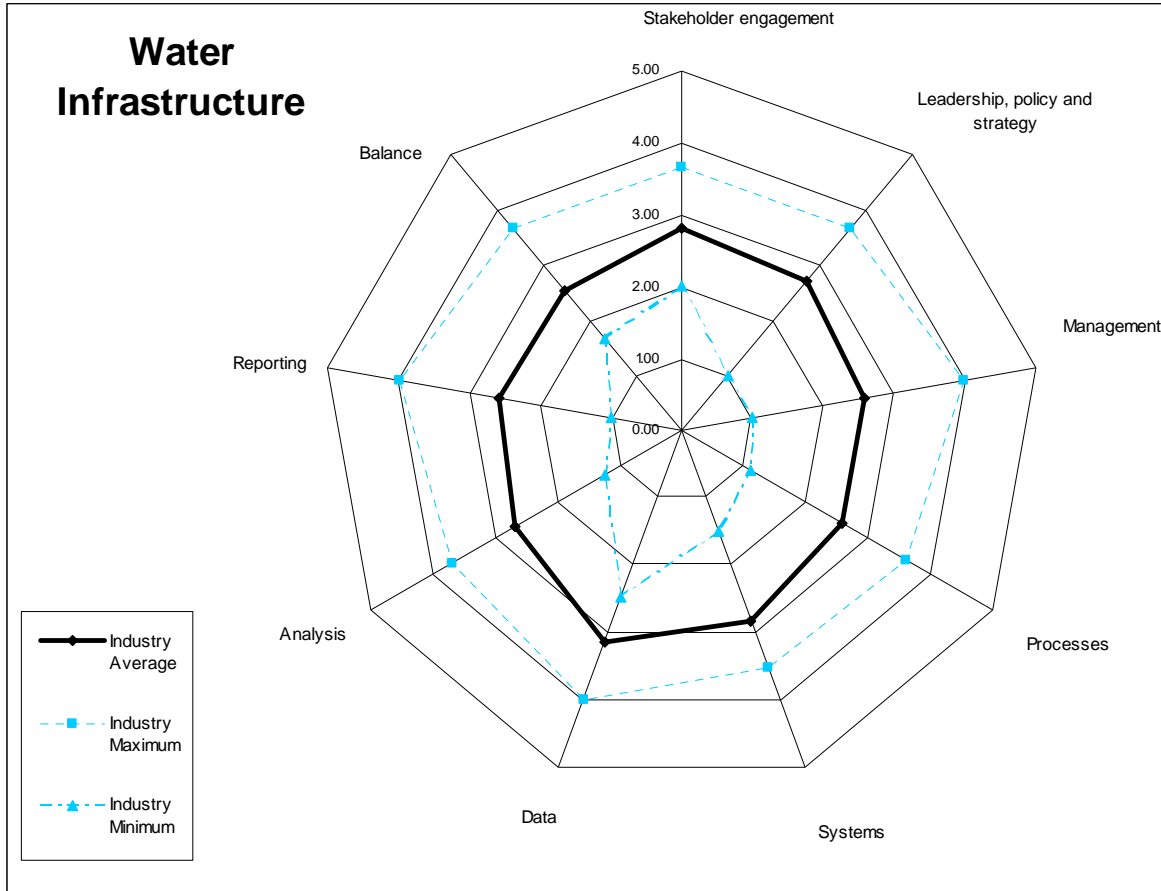
Step 2 represents the company’s actual expenditure from 2005-06 to 2007-08 as reported in the June return plus the company’s forecast expenditure for 2008-09 to 2009-10. We adjusted this to remove the investment during 2005-10 that is related to some defined outputs for capital maintenance we set for 2005-10 at PR04. The resulting expenditure is the ‘AMP4 adjusted’ as shown in the illustration.

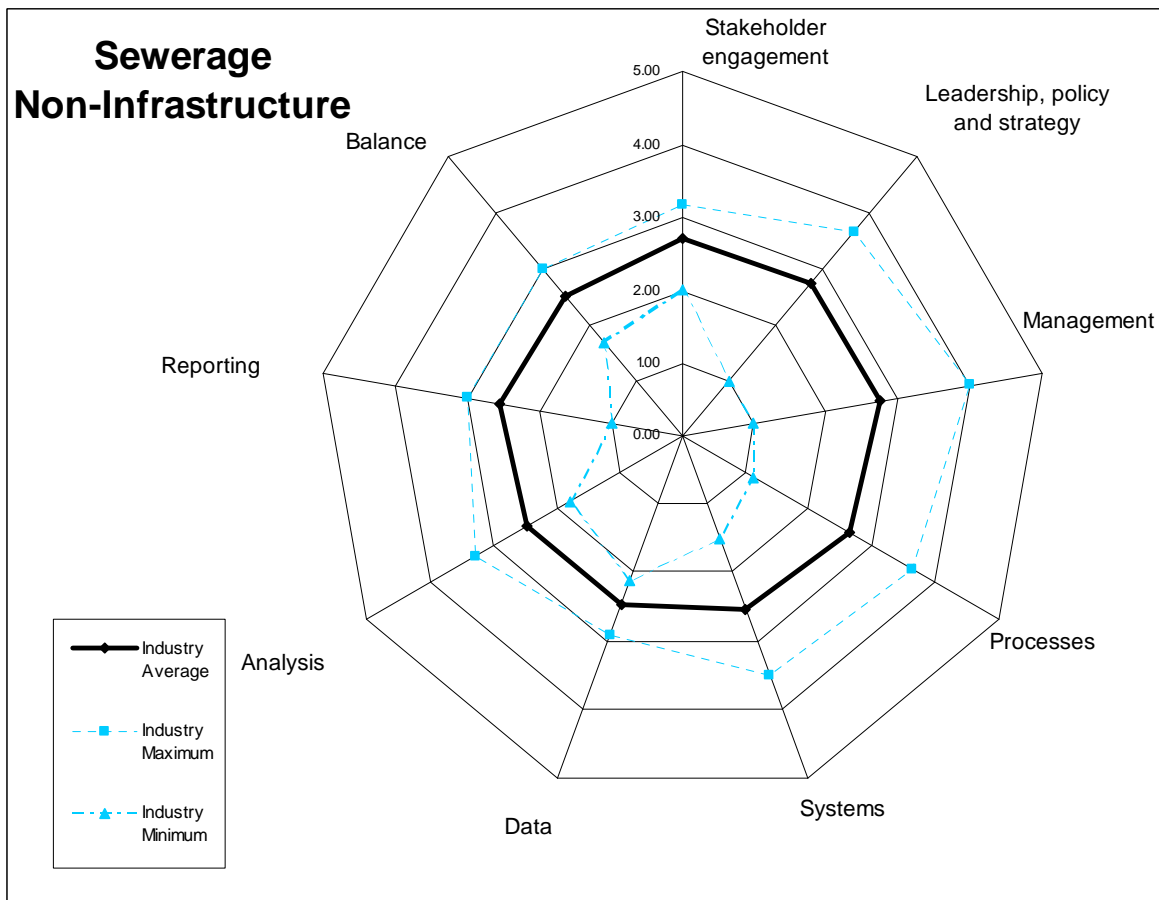
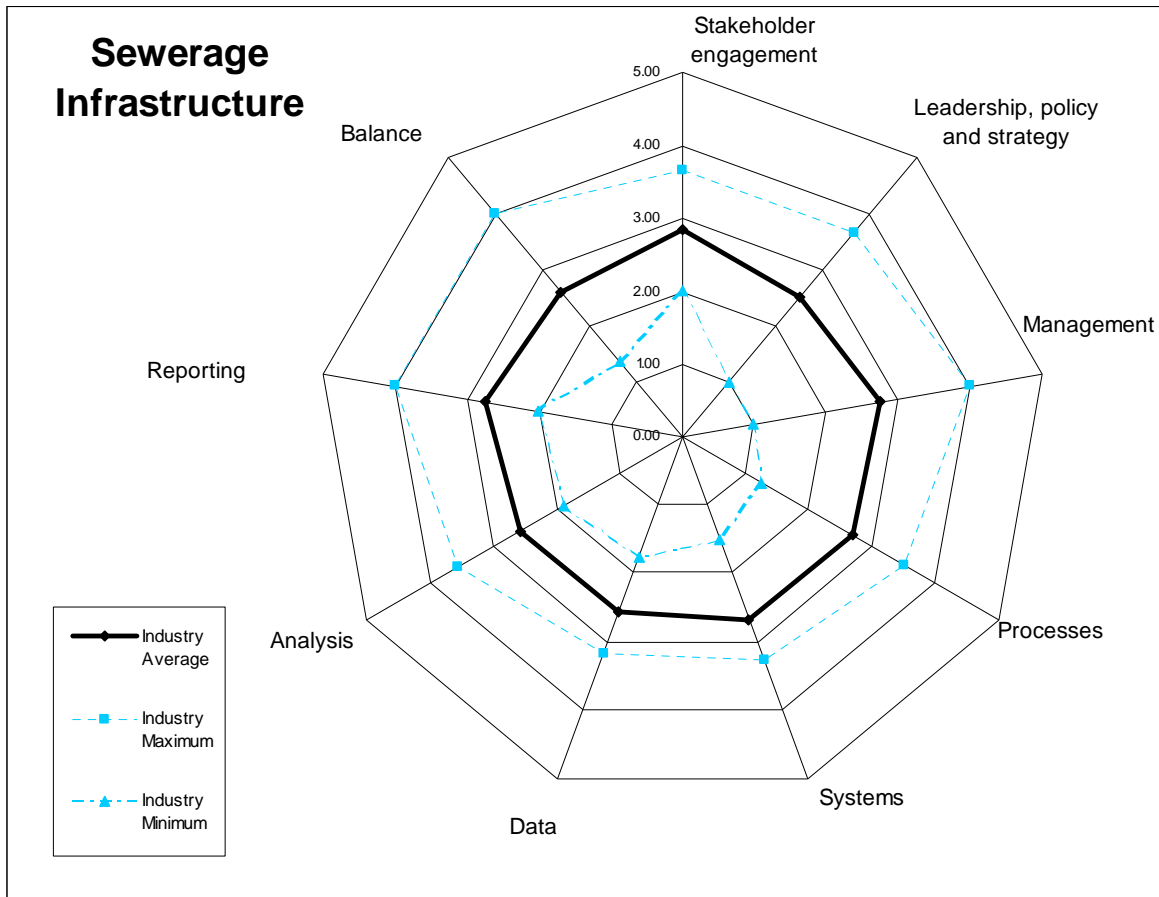
Step 3 includes a calculation that defines the proportion of the company’s draft business plan expenditure that is subjected to the AMA challenge (that is, the ‘amount exposed’). It is determined by comparing the expenditure in the draft business plan (less exceptional items) with the AMP4 (adjusted) expenditure. This gives the ‘uplift’, which was exposed to our AMA challenge and we also exposed a proportion of companies’ historic expenditure to challenge, equal to the ‘uplift’ amount. The total ‘amount exposed’ was therefore twice the ‘uplift’.

Step 4 is where we translated our assessment of each sub-service into an expenditure challenge. The percentage AMA score was applied to the amount of expenditure that is exposed to a challenge. A fully justified plan would have an AMA score of 100% and no challenge deduction. Scores less than 100% resulted in a ‘challenge’ amount (equal to $100 - \text{AMA score } \% \times \text{amount exposed}$) which we deducted from the draft business plan expenditure (less exceptional items).

Appendix B

Industry minimum, average and maximum AMA scores by sub-service area





Appendix C
Company specific minimum, average and maximum AMA scores by sub-service area