Appendix S: Methodology for a cloud provider's analysis of licensing costs

S.1 In this section, we set out the methodology and assumptions a cloud provider made in its analysis of licensing costs on that cloud provider compared to Azure. We note that the cloud provider conducted its analysis for both shared and dedicated hardware.[1] However, we have only considered the analysis for shared hardware, given dedicated hardware is outside the scope of this investigation.

S.2 The cloud provider's numerator consisted of the estimated difference in the licence price that it would pay to Azure to host Windows Sever workloads and the price that customers would pay to use Windows Server licences on Azure (ie the cost of Software Assurance): [2]

(a) **Estimated price customers pay to use Windows Server licences on Azure.** The cloud provider [✂]. In doing so, it assumed that Software Assurance is the entire licensing cost that customers pay to host Microsoft workloads on Azure.[3, 4] The cloud provider submitted that this is because, to qualify for Azure Hybrid Benefit (AHB), customers must have Software Assurance or a subscription licence available as part of certain commercial agreements. The cloud provider submitted that, as shown on Microsoft's website (see Azure Hybrid Benefit for Windows Server | Microsoft Learn), the AHB discount is equal to the cost of the Windows Server licence for Azure infrastructure products, and therefore the discount reflects the entire cost of the Windows Server licence.[5]

The cloud provider then estimated the cost of Software Assurance [✂]:

(i) [✂]

(ii) [✂].[6]

(b) **Estimated price that the cloud provider pays to host Windows Server workloads.** The cloud provider estimated this by multiplying the price it pays

[1] [✂] submission to the CMA [✂].
[2] [✂] submission to the CMA [✂].
[3] We note that the cloud provider's analysis does not include the initial price of licences that customers would have paid to acquire the licence in the first place. We consider this to be appropriate because customers with such licences will have incurred this cost regardless of whether they choose to move to Azure or another cloud. As such, the costs used in this analysis are the additional costs incurred through moving Windows Server workloads to the cloud.
[4] [✂] submission to the CMA [✂].
[5] [✂] submission to the CMA [✂].
[6] [✂] submission to the CMA [✂].

per virtual core per hour by the standard number of hours in a month by the number of cores for the product.[7]

S.3 The cloud provider used the denominator of the price customers pay for Azure infrastructure. The cloud provider used Azure's pricing tables for Windows Server for the region UK South, and provided the results for the region UK West as a sensitivity check.[8] In doing so, it estimated the infrastructure prices for PAYG, 3-year and 1-year savings plans. The cloud provider said that this is conservative because Microsoft's reserved plans provide more significant discounts. [9]

[7] [✂] submission to the CMA [✂].
[8] [✂] submission to the CMA [✂].
[9] [✂] submission to the CMA [✂].