Anticipated acquisition by International Business Machines Corporation of HashiCorp, Inc.

Decision on relevant merger situation and substantial lessening of competition

ME/7119/24

The Competition and Markets Authority's decision on relevant merger situation and substantial lessening of competition under section 33(1) of the Enterprise Act 2002 given on 25 February 2025. Full text of the decision published on 3 April 2025.

The Competition and Markets Authority (**CMA**) has excluded from this published version of the decision information which the CMA considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [✂]. Some numbers have been replaced by a range, which are shown in square brackets

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SUMMARY

OVERVIEW OF THE CMA'S DECISION

1. The Competition and Markets Authority (**CMA**) has found that the acquisition by International Business Machines Corporation (**IBM**) of HashiCorp, Inc. (**HashiCorp**) is a relevant merger situation that does not give rise to a realistic prospect of a substantial lessening of competition (**SLC**).

2. In April 2024, IBM agreed to acquire 100% of the share capital of HashiCorp pursuant to a share purchase agreement. The CMA refers to this acquisition as the **Merger**. IBM and HashiCorp are together referred to as the **Parties** and, for statements relating to the future, the **Merged Entity**.

Who are the businesses and what products/services do they provide?

3. Both IBM and HashiCorp supply Infrastructure-as-Code (**IaC**) tools, ie tools that help to create and manage the resources that make up a customer's cloud. IBM supplies IaC tools through its wholly-owned subsidiary Red Hat, Inc. (**Red Hat**). HashiCorp supplies IaC tools, such as software provisioning, securing and connecting cloud-native infrastructure resources.

4. The Parties' products that the CMA looked at in detail are HashiCorp's Terraform and IBM's Ansible, which are mainly designed for provisioning and configuration cloud automation functions, respectively. Provisioning refers to the creation of cloud infrastructures to make resources and data available to systems and users. Configuration refers to ongoing maintenance of established cloud infrastructure (after provisioning has occurred).

Why did the CMA review this merger?

5. The CMA's primary duty is to seek to promote competition for the benefit of consumers. It has a duty to investigate mergers that could raise competition concerns in the UK, provided it has jurisdiction to do so. In this case, the CMA has concluded that the CMA has jurisdiction to review this Merger because a relevant merger situation has been created: each of the Parties is an enterprise that will cease to be distinct as a result of the Merger and the share of supply test is met.

What evidence has the CMA looked at?

6. In assessing the Merger, the CMA considered a wide range of evidence in the round.

7. The CMA received several submissions, including responses to information and document requests, from the Parties. In particular, the CMA reviewed information (eg HashiCorp's win/loss data) and several documents provided by the Parties about the extent to which the Parties currently compete, including by developing

their products. The CMA also engaged directly with the Parties throughout the investigation to discuss the CMA's emerging thinking.

8. The CMA also gathered evidence from third parties, including customers and competitors, to better understand the competitive landscape and to get their views on the impact of the Merger.

What did the evidence tell the CMA about the effects on competition of the Merger?

9. The CMA assessed whether the Merger would lead to an SLC in the global supply of paid IaC multi-cloud infrastructure provisioning tools (**IaC multi-cloud provisioning tools**) and of paid IaC multi-cloud infrastructure configuration tools (**IaC multi-cloud configuration tools**), as a result of a loss of current competition between Terraform and Ansible and their rivalry to develop these products.

10. The CMA found that there is currently limited overlap between Ansible and Terraform. Although there are some use cases where in principle either of these tools can be used, there are key differences between Ansible and Terraform. They are typically perceived as complementary as opposed to substitutes: they are designed for, and better suited, to provisioning and configuration, respectively. While Terraform and Ansible have high market share in their respective areas of use, customers do not tend to perceive Terraform and Ansible as competing products or switch between them.

11. The CMA found that competition between Terraform and Ansible is not an important driver of the development of these products. Although IBM previously had one project to develop Ansible to bring it closer to, and compete against, Terraform, this project was never fully implemented and it was cancelled before the Merger was in contemplation, for reasons unrelated to the Merger. Neither IBM nor HashiCorp have plans to develop Ansible and Terraform to compete closer with each other, absent the Merger.

12. Open source software, hyperscalers, and independent software vendors (**ISVs**) compete with the Parties at least as much as Ansible and Terraform compete with each other. Together, these suppliers will continue to exert some constraint on the Merged Entity after the Merger.

13. The CMA also assessed whether the Merger would lead to an SLC through foreclosure of the Merged Entity's rivals, as a result of the Merged Entity offering bundle discounts for Terraform and Ansible or degrading interoperability with rivals' tools. The CMA found that the Merged Entity would lack the ability to foreclose rivals through bundle discounts, as any resultant loss of sales by competitors would be unlikely to materially weaken competition and make consumers worse off. The CMA also found that the Merged Entity would lack the incentive to degrade interoperability, as the Merged Entity would risk considerable losses that would not be outweighed by the potential gains (eg interoperability can be replicated by the open source community or in-house).

What happens next?

14. The Merger will therefore **not be referred** under section 33(1) of the Enterprise Act 2002 (the **Act**).

ASSESSMENT

1. PARTIES, MERGER AND MERGER RATIONALE

15. IBM develops, produces and markets information technology (**IT**) solutions, including enterprise IT software and systems (eg servers, storage systems, cloud and cognitive offerings) and IT implementation services (eg business consulting and IT infrastructure services). IBM offers cloud infrastructure automation solutions through its wholly owned subsidiary Red Hat. The turnover of IBM in the financial year ending 31 December 2023 was approximately £49,750 million ($61,860 million) globally and £3,060 million in the UK.[1]

16. HashiCorp provides hybrid cloud infrastructure automation software for provisioning, securing and connecting cloud-native[2] infrastructure resources. HashiCorp offers free and commercial / enterprise products to support development and operations on public cloud, private data centres and hybrid environments. HashiCorp's main products include Vault, Terraform and Consul. The turnover of HashiCorp in the financial year ending 31 January 2024 was approximately £469 million ($583.1 million) globally and [✂] in the UK. [3]

17. IBM agreed to acquire 100% of the share capital in HashiCorp.[4]

18. The Parties submitted that the main strategic rationale for the Merger is as follows:[5]

    (a) The Merger is part of IBM's continued investment and focus on developing its hybrid cloud solutions. IBM also expects to realise synergies through, for example, expanding HashiCorp's customer base and developing products to better appeal to enterprise clients.

    (b) The Merger will support HashiCorp's growth using IBM's global presence. The Merged Entity will compete [✂] against other vendors and cloud service providers, including the largest public cloud providers Amazon, Google and Microsoft (collectively, the **hyperscalers**).

19. The CMA considers that the Parties' internal documents broadly support the above rationale, in particular IBM's focus on hybrid cloud provisioning.[6]

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[1] Final Merger Notice submitted 24 December 2024 (**FMN**), paragraphs 2.3, 2.4, 3.4, 6.1 and 6.2. Global revenue converted from USD to GBP applying average annual rate for 2023: USD/GBP 1.2434.
[2] In this context, 'cloud-native' refers to infrastructure resources built to operate with cloud services.
[3] FMN, paragraphs 3.5-3.7 and 6.5. Revenue converted from USD to GBP applying average annual rate for 2023: USD/GBP = 1.2434.
[4] FMN, paragraph 2.7. The Parties informed the CMA that the Merger is also the subject of review by competition authorities in Australia, Austria, Germany and US. The Merger was unconditionally cleared in Germany on 6 June 2024 and in Austria on 17 June 2024. FMN, paragraphs 2.26 and 2.27.
[5] FMN, paragraphs 2.10 and 2.14.
[6] IBM's Internal Document, IBM-CMA-014089, '[✂]', April 2024, pages 1-2; IBM's Internal Document, IBM-CMA-000453, '[✂]', February 2024, pages 4 and 8.

2. PROCEDURE

20. The CMA's mergers intelligence function identified the Merger as warranting an investigation.[7]

21. The CMA commenced its phase 1 investigation on 31 December 2024. As part of its phase 1 investigation, the CMA gathered a significant volume of evidence from the Parties. For instance, in response to targeted information requests, the CMA received and reviewed internal documents from the Parties to understand how closely they compete, their future development plans and who they consider to be their closest competitors. The Parties also had opportunities to make submissions and comment on the CMA's emerging thinking throughout the phase 1 investigation. For example, in February 2025, the CMA invited the Parties to attend an Issues Meeting, and the Parties submitted their views in writing. The CMA also gathered evidence from other market participants, such as customers and competitors of the Parties.

22. The evidence the CMA gathered has been tested rigorously, and the context in which the evidence was produced has been considered when deciding how much weight to give it. Where necessary, this evidence has been referred to within this Decision.

23. The Merger was considered at a Case Review Meeting.[8]

3. BACKGROUND

24. Cloud computing refers to a method of accessing computing resources and services on demand over the internet. Customers use cloud computing to access various services such as servers, storage, databases, networking, software, analytics and intelligence.

25. Customers can use different types of cloud architectures: public cloud refers to third-party computing services offered over the internet; private cloud refers to dedicated computing resources for a single organisation; and hybrid cloud refers to a combination of public and private clouds. Consistent with the provisional findings of the CMA's separate recent market investigation into the supply of public cloud infrastructure services in the UK (**Cloud MI**), the Parties and third parties envisage that the use of cloud and associated tools will increase. [9]

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[7] Mergers: Guidance on the CMA's jurisdiction and procedure (**CMA2**), 25 April 2024, paragraphs 6.4–6.6.
[8] CMA2, page 39.
[9] Cloud MI: Provisional Decision Report (**Cloud MI Provisional Report**), paragraph 3.367. For example, IBM's Internal Document, IBM-CMA-000345, '[✂]', April 2024, pages 1–2, which outlines how AI workloads drive expansion of cloud operations; and response to the CMA questionnaire from a number of third parties, January 2025, question 12.

3.1 Cloud infrastructure automation tools

26. The Parties mainly overlap in relation to their IaC tools (using code instead of manual processes) that help to manage and automate cloud infrastructure.

27. The Parties have described the multiple phases of cloud infrastructure lifecycle management as follows:[10]

    (a) Day 0: Initial provisioning of foundational infrastructure. For example, setting up security groups, network access controls and firewalls.

    (b) Day 1: Initial setup and configuration of application infrastructure like middleware and database software. (Provisioning tools carry out tasks that can be included in Day 0 steps. Configuration tools carry out application specific tasks.)

    (c) Day 2: Using ad hoc runbooks to deploy and maintain the application, such as patching, restarting or creating new versions of the application.

28. Software, including cloud infrastructure tools, is available under two main types of ownership and licensing models, namely:

    (a) Open source (or 'Community') software refers to software distributed or released with its source code and under a license that allows the use, study, modification or distribution of the software for any purpose.[11] Open source software is developed through online collaboration by multiple users and typically available for free.[12]

    (b) Proprietary (or closed source) software is software distributed, usually for a fee, under a license whereby copyright remains with the developer of the software. Copyright prohibits modification or distribution of the software without the owners' permission.

29. Some software suppliers, such as Spacelift, env0 and Scalr, incorporate open source provisioning and configuration tools into their own products and then build features on top of them (**IaC management platforms**). Other suppliers, such as GitLab DevSecOps, Broadcom VMware vSphere and NSX, add open source tools only to enable provisioning and configuration capabilities within their own products.

3.2 The Parties' tools

30. HashiCorp's Terraform and IBM's Ansible are popular cloud infrastructure automation IaC tools, which work across clouds owned by different providers,

[10] FMN, paragraph 12.66.
[11] See definition of open source software by the open source initiative available at: The Open Source Definition – Open Source Initiative
[12] Paid open source model refers to suppliers offering open source software for free, and selling additional support services for use with the free software. See FMN, paragraph 13.9(b).

including private cloud and on-premises environments. The CMA refers to these as 'multi-cloud' tools, but they are also sometimes referred to as 'cloud-agnostic'.[13]

31. HashiCorp's Terraform and IBM's Ansible focus on two functions of automation in the cloud through IaC: provisioning and configuration.

    (a) Terraform is used for provisioning or 'infrastructure provisioning', which refers to the creation of cloud infrastructures to make resources and data available to systems and users (mainly Day 0 tasks). Provisioning tools are also used for decommissioning when a resource is no longer needed.

    (b) Ansible is used for configuration or 'infrastructure configuration', which refers to ongoing maintenance of established cloud infrastructure after provisioning occurs.

3.2.1 HashiCorp's Terraform

32. HashiCorp's Terraform is mainly used for infrastructure provisioning and deprovisioning.[14] Terraform supports all major public and private clouds and has around 3,000 integrations with multiple cloud, software and hardware platforms.[15]

33. Terraform Community Edition is the free, open source version of Terraform.[16] Terraform was previously available through a Mozilla Public Licence.[17] In August 2023, HashiCorp introduced a Business Source Licence (**BSL**) for all future releases, including future versions of Terraform. This change prevents companies incorporating HashiCorp's tools into their own paid products that compete against HashiCorp.[18] In response, organisations forked pre-BSL versions of HashiCorp's products; forks involve developing a copy of the source code as independent software. The forked version of Terraform is named OpenTofu. When developing products that compete against HashiCorp, competitors can incorporate the forks (because they cannot incorporate the future versions of HashiCorp's products).

34. HashiCorp also offers versions of Terraform that include management tools, such as Terraform Standard, Terraform Plus and Terraform Enterprise Edition. Customers pay for this software.[19] These versions offer additional capabilities built on top of the open source edition and additional support from HashiCorp.[20]

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[13] Ansible works directly within private data centres, whereas Terraform must interoperate with intermediary software through a connecting plugin (also called a Terraform 'provider'). A Terraform provider allows Terraform to interact with external systems, such as cloud platforms or on-premises infrastructure.
[14] FMN, paragraph 5.7.
[15] FMN, paragraph 12.39(b).
[16] FMN, paragraph 14.48.
[17] MPL 2.0 FAQ — Mozilla. 'Like all other free and open source software, software available under the MPL is available for anyone (including individuals and companies) to use for any purpose. The MPL only creates obligations for you if you want to distribute the software outside your organization.'
[18] See HashiCorp adopts Business Source License 'Vendors who provide competitive services built on our community products will no longer be able to incorporate future releases, bug fixes, or security patches contributed to our products'.
[19] FMN, footnote 88. See also Terraform Pricing.
[20] FMN, paragraph 14.48. For example, Terraform Enterprise Edition is offered as a private installation and includes control, security and integration features normally valued by enterprise and business customers.

3.2.2 IBM's Ansible

35. IBM (Red Hat)'s Ansible is primarily used to automate the configuration and management of existing cloud systems after the provisioning process has occurred (ie Day 2 maintenance of established cloud infrastructure).[21] Ansible provides a solution for automating IT operations, including hybrid-cloud or multi-cloud environments.[22]

36. Ansible Community is the free, open source version of Ansible. Red Hat licenses the source code under a GNU General Public License version 2 licence. GitHub is the primary platform for Ansible's source code and where collaboration related to Ansible Community occurs.[23]

37. IBM sells Ansible support subscriptions and services under the 'Ansible Automation Platform',[24] which is intended for enterprise customers.[25]

4. JURISDICTION

38. As the initial period for consideration of the Merger under section 34ZA(3) of the Act started on 31 December 2024, the amendments to the tests for assessing jurisdiction under the Act introduced by the Digital Markets, Competition and Consumers Act 2024 do not apply to the Merger.[26] Accordingly, the jurisdictional tests as in force immediately prior to 1 January 2025 apply to the Merger.[27]

39. The CMA has jurisdiction to review transactions under its merger control function set out in the Act where arrangements are in progress or in contemplation which, if carried into effect, will lead to the creation of a relevant merger situation as a result of two or more enterprises ceasing to be distinct, and either the turnover or the share of supply test is met.[28]

4.1 The Parties' submissions

40. The Parties submitted that there is no plausible supply of particular goods or services where the share of supply test is met because their products do not overlap.[29] The Parties noted that data from independent analyst Gartner shows that there is no overlap between Ansible and Terraform and that even in sub-

[21] FMN, paragraphs 5.7 and 12.57.
[22] FMN, paragraph 12.57.
[23] FMN, paragraph 12.59 and footnote 71.
[24] FMN, paragraph 14.39.
[25] FMN, paragraph 12.190(c). These services include additional lifecycle support that extends beyond Ansible Community and cover the rollout of updates and new versions, backporting of bug fixes, technical support (8x5 or 24x7), enhanced security, analytics, product documentation, training and consultation. (FMN, paragraph 14.39).
[26] The Digital Markets, Competition and Consumers Act 2024 (Commencement No. 1 and Savings and Transitional Provisions) Regulations 2024, Schedule (Savings and transitional provisions), paragraph 5(1)(b)(i).
[27] References in this Decision to the Act should be construed as references to the version of the Act in force immediately prior to 1 January 2025.
[28] Section 23 of the Act. See also CMA2, 25 April 2024, chapter 4. CMA2 was further updated on 2 January 2025, however Chapter 4 of the April 2024 version remains the applicable guidance for the purposes of the jurisdictional assessment.
[29] FMN, paragraph 5.7.

segments of 'Delivery Automation', in which both HashiCorp's Terraform and IBM's Ansible fall,[30] the Parties' combined share of supply in the UK was [10-20]%.[31]

41. The Parties considered that the CMA has ignored important constraints on the Parties (eg constraints from hyperscalers and open source software) in considering the frame of reference for the share of supply test in order to establish jurisdiction. The Parties submitted that this may be an understandable approach to take in relation to the share of supply test, as it is to measure any frame of reference which combines paid-for and free products. They noted, however, that it is not an acceptable position when assessing market power.[32] The Parties provided revenue-based share of supply estimates using Gartner data and the Parties' best estimates.[33]

4.2 Enterprises ceasing to be distinct

42. Each of IBM and HashiCorp is an enterprise. As a result of the Merger, these enterprises will cease to be distinct.

4.3 Turnover test

43. The UK turnover of HashiCorp based on the most recent audited financial statements for the year ended 31 January 2024 did not exceed £70 million. The turnover test in section 23(1)(b) of the Act is therefore not satisfied.

4.4 Share of supply test

44. In applying the share of supply test, the CMA may, under section 23(8) of the Act, apply such criteria as it considers appropriate to decide whether certain goods or services should be treated as goods or services of a separate (or the same) description in any particular case.[34] The Act confers on the CMA a broad discretion to identify a specific category of goods or services supplied or acquired by the merger parties, as well as in the setting of the criteria used to identify when such goods or services can be treated as goods or services of a separate description.[35]

45. The share of supply test is not an economic assessment of the type used in the CMA's substantive assessment. Therefore, the group of goods or services to which the jurisdictional test is applied need not amount to a relevant economic market. The description of goods or services to which the jurisdictional test is

[30] Parties' response to the Issues Letter, 7 February 2025, paragraph 2.2; and FMN, paragraph 13.18, Tables 8 and 9.
[31] FMN, paragraphs 5.8 and 13.18. See also Parties' response to the Issues Letter, 7 February 2025, paragraph 2.2.
[32] Parties' submission of 9 January 2025, paragraph 2.7.4.
[33] FMN, paragraphs 13.6-13.8. In relation to possible non-revenue metrics, including the number of downloads, the Parties submitted that they do not in the ordinary course of business track these and that they were not aware of any public repositories or industry standards that provide such information in a comprehensive and reliable manner. FMN, paragraph 13.23.
[34] CMA2, 25 April 2024, paragraph 4.59(d).
[35] CMA2, 25 April 2024, paragraph 4.59.

applied may differ from the relevant economic market used for the purposes of the substantive assessment of the merger.[36]

46. The CMA will have regard to any reasonable description of a set of goods or services to determine whether the share of supply test is met. Whilst the share of supply used may correspond with a standard recognised by the industry in question, this need not necessarily be the case.[37] The CMA will consider the commercial reality of the merger parties' activities and whether there are sufficient elements of common functionality between the merger parties' activities.[38]

4.5 CMA assessment

47. The evidence set out in the competitive assessment indicates that there is some overlap in functionality between IBM's Ansible and HashiCorp's Terraform as they each support provisioning and configuration automation to some extent.[39] The CMA therefore considers that the Parties overlap in the supply of provisioning and configuration automation solutions. Accordingly, the CMA believes that the Parties both supply services of a particular description, ie paid IaC multi-cloud infrastructure provisioning and configuration automation solutions.

48. The evidence set out in the competitive assessment also indicates that:

    (a) The hyperscalers' solutions are tailored for their own cloud infrastructures and are not substitutes for solutions designed for multi-cloud uses like Ansible and Terraform.[40]

    (b) Free, open source solutions are not viable for some organisations that typically require, for example, the more advanced features, easier scalability, and support and security only associated with the paid versions of provisioning and configuration automation solutions.[41]

    (c) There is a meaningful distinction between IaC tools and manual tools as the former enable IT teams to adopt an approach that is code-based and automated (as opposed to manual and ticket-based), resulting in cost reduction, increase in speed of deployments, error reduction and improved infrastructure consistency.[42]

49. The CMA therefore considers that the hyperscalers' infrastructure solutions, free, open source offerings, and manual (ie non-IaC) solutions should be treated as goods or services of separate descriptions.

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[36] CMA2, 25 April 2024, paragraph 4.59(a).
[37] CMA2, 25 April 2024, paragraph 4.59(b).
[38] CMA2, 25 April 2024, paragraph 4.59(c).
[39] See paragraphs 93–105.
[40] See paragraphs 123–126.
[41] See paragraphs 116–122.
[42] See footnote 130.

50. Accordingly, the CMA considers that the supply of 'paid IaC multi-cloud infrastructure provisioning and configuration automation solutions' constitutes a reasonable description of service.

51. The CMA also considers that revenue is an appropriate criterion to measure whether the share of supply test is met.[43] The CMA has estimated shares of supply based on the Parties' and third-party revenue data.[44] According to the CMA's estimates, the Parties' combined share (by value) in the supply of IaC multi-cloud tools in the UK was [70-80]% (increment [20-30]%) in 2024. The CMA therefore considers that the share of supply test in section 23 of the Act is met.

4.6 Conclusion on jurisdiction

52. The CMA therefore believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

53. The initial period for consideration of the Merger under section 34ZA(3) of the Act started on 31 December 2024 and the statutory 40 working day deadline for a decision is therefore 25 February 2025.

5. COUNTERFACTUAL

54. The CMA assesses a merger's impact relative to the situation that would prevail absent the merger (ie the counterfactual).[45]

55. In an anticipated merger, the counterfactual may consist of the prevailing conditions of competition, or conditions of competition that involve stronger or weaker competition between the parties to a merger than under the prevailing conditions of competition.[46] In determining the appropriate counterfactual, the CMA will generally focus on potential changes to the prevailing conditions of competition only where there are reasons to believe that those changes would make a material difference to its competitive assessment.[47]

56. In this case, the CMA has not received submissions (or other evidence) suggesting that the Merger should be assessed against an alternative counterfactual. Therefore, the CMA believes the prevailing conditions of

[43] Revenue is a widely accepted metric to measure share of supply and – as referred to above – the Parties submitted that they do not in the ordinary course of business track non-revenue metrics and that they were not aware of any public repositories or industry standards that provide such information in a comprehensive and reliable manner.
[44] The Parties provided both global and UK revenue estimates for competitors. The CMA also requested actual global and UK revenue figures from competitors. For UK shares, where the CMA did not receive actual revenues, the CMA assumed that the UK revenues of these competitors were not more than 5% of global revenues. This was in line with the ratio of UK revenues to global revenues from competitors who did provide revenues. The CMA notes that, when compared to actual revenues provided by third parties, the Parties' estimates consistently overestimated both the global and UK revenues of competitors. The CMA considers that using the Parties' revenue estimates for competitors therefore likely overstates the shares of supply of competitors.
[45] Merger Assessment Guidelines (**CMA129**), March 2021, paragraph 3.1.
[46] CMA129, paragraph 3.2.
[47] CMA129, paragraph 3.9.

competition to be the relevant counterfactual. The CMA's assessment of the counterfactual does not seek to ossify the market at a particular point in time. An assessment based on the prevailing conditions of competition can reflect that, absent the merger, the position of the merging parties and their competitors would have continued to evolve in the market.[48]

6. COMPETITIVE ASSESSMENT

6.1 Market definition

57. Where the CMA makes an SLC finding, this must be 'within any market or markets in the United Kingdom for goods or services'. An SLC can affect the whole or part of a market or markets. Within that context, the assessment of the relevant market(s) is an analytical tool that forms part of the analysis of the competitive effects of the merger and should not be viewed as a separate exercise.[49]

58. Market definition involves identifying the most significant competitive alternatives available to customers of the merger parties and includes the sources of competition to the merger parties that are the immediate determinants of the effects of the merger.

59. While market definition can be an important part of the overall merger assessment process, the CMA's experience is that in most mergers, the evidence gathered as part of the competitive assessment, which will assess the potentially significant constraints on the merger parties' behaviour, captures the competitive dynamics more fully than formal market definition.[50]

6.1.1 Product market

6.1.1.1 Parties' submissions

60. The Parties submitted that HashiCorp's Terraform and IBM's Ansible are differentiated products and do not meaningfully compete. The Parties submitted that the market should be defined with reference to the categories recognised by Gartner, namely a market for IT Operation Management (ITOM) software or, on a narrower basis, Delivery Automation.[51]

61. The Parties stated that it was not appropriate to include both configuration and provisioning IaC multi-cloud tools within the same product market, as they are two sets of tools with different customer purposes. [52] Further, the Parties submitted that it would be inconsistent with the CMA's decisional practice to consider that

[48] CMA129, paragraph 3.3.
[49] CMA129, paragraph 9.1.
[50] CMA129, paragraph 9.2.
[51] FMN, paragraphs 12.138–12.155.
[52] Parties' response to the Issues Letter, 7 February 2025, paragraph 4.12.

because the products compete for the same budget they should be included within the same product market.[53]

62. The Parties also submitted the product market should include (i) open source tools (including free and forked versions of their own products) and (ii) tools from hyperscalers. The Parties indicate that open source and hyperscalers' tools are closer substitutes to (the paid versions of) Terraform and Ansible than configuration and provisioning IaC multi-cloud tools are to each other.[54] The Parties also submitted that some non-IaC tools pose a competitive constraint on the Parties.[55]

6.1.1.2 CMA's assessment

63. Product market definition starts with the relevant products of the merging firms – in this case the supply of each of provisioning and configuration IaC tools. The relevant product market is identified primarily by reference to demand-side substitution. [56]

64. In cases involving differentiated products, such as this one, there is often no 'bright line' that can or should be drawn. Accordingly, the CMA will generally not come to finely balanced judgements on what is 'inside' or 'outside' the market.[57]

65. The CMA notes that, in line with the Parties' submissions, the following evidence supports separate product markets for provisioning and configuration IaC tools:

(a) The Parties' internal documents distinguish between provisioning and configuration, with some limited overlap. For example, some internal documents evaluating competition present provisioning and configuration tools separately.[58] Further, documents discussing the Merger rationale describe Terraform and Ansible as complementary products.[59]

(b) Some third parties consider that, for the most part, provisioning and configuration tools are not substitutable. For example, the majority of customers considered it was necessary to have both configuration and provisioning tools and customers did not consider Terraform and Ansible as alternatives.[60]

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[53] The Parties submitted that references in internal documents to provisioning and configuration tools competing for the same 'share of wallet' (ie IT budgets) did not mean the tools are substitutes or in the same product market, but rather reflected an income effect. (see Parties' response to the Issues Letter, 7 February 2025, paragraph 4.12). The Parties referenced past decisional practice where the Competition Commission segmented television advertising from internet advertising, even though they compete for the same budget. See case British Sky Broadcasting Group PLC / ITV PLC merger inquiry, Final Report, 20 December 2007, paragraphs 4.138–4.145.
[54] FMN, paragraphs 12.150–12.154; 14.48. See also Parties' response to the CMA's s.109 notice dated 29 October 2024 and the Parties' response to the Issues Letter, 7 February 2025, paragraph 4.14.
[55] FMN, paragraph 14.48. See also Parties' response to the CMA's s.109 notice dated 29 October 2024 and the Parties' response to the Issues Letter, 7 February 2025, paragraphs 4.21-4.32.
[56] CMA129, paragraphs 9.6 and 9.7.
[57] CMA129, paragraph 9.4.
[58] IBM's Internal Document, IBM-CMA-000570, '[✂]', April 2024, page 7.
[59] IBM's Internal Document, IBM-CMA-000438, '[✂]', January 2024, pages 4–5.
[60] Response to the CMA questionnaire from a number of third parties, January 2025, questions 10 and 13.

(c) Third-party market reports acknowledge that there is currently limited overlap between provisioning and configuration tools but note the possibility of future convergence.[61]

66. The CMA, therefore, considered the Parties to be active in two separate product markets (ie Terraform in the supply of paid IaC multi-cloud provisioning tools and Ansible in the supply of paid IaC multi-cloud configuration tools), but noted there is some limited overlap between the product markets.

67. In addition, the CMA considered whether to include tools other than IaC multi-cloud tools within any defined product markets. As discussed further in the competitive assessment, the evidence set out in the competitive assessment also indicates that hyperscalers' solutions are not direct substitutes for solutions designed for multi-cloud uses like Ansible and Terraform;[62] free, open source solutions are not viable for some organisations;[63] and there is a meaningful distinction between IaC tools and manual tools.[64]

68. As a starting point, for the purpose of the competitive assessment of this Merger, the CMA assessed the effects of this Merger by reference to the supply of IaC multi-cloud provisioning tools and IaC multi-cloud configuration tools, separately.[65] As the Merger does not give rise to a realistic prospect of an SLC on any plausible basis, it has not been necessary for the CMA to reach a conclusion on whether the relevant product market should be broadened, including to encompass open source and single-cloud provisioning and configuration IaC tools.

6.1.2 Geographic market

69. The Parties submitted that the most appropriate geographic market is global.[66] The Parties indicated that in similar cases involving software the CMA accepted that the geographic market should be global.[67] The Parties noted decisions from the European Commission stating that customers considered offers from vendors around the world, the lack of technological barriers when supplying software globally and that infrastructure software was identical across different countries.[68]

70. The evidence reviewed by the CMA supports that the conditions of competition do not materially differ between world regions or countries. The CMA, therefore, considered the effects of the Merger IaC multi-cloud provisioning tools and IaC multi-cloud configuration tools at global level.

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[61] For example, HashiCorp's Internal Document, DOC-00006500, '[✂]', January 2022, page 53.
[62] See paragraphs 123–126.
[63] See paragraphs 116–122.
[64] See footnote 130.
[65] This includes IaC management platforms, but not suppliers leverage open source tools to enable provisioning and configuration capabilities within their own products or resellers of the Parties' IaC multi-cloud tools.
[66] FMN, paragraph 12.176.
[67] FMN, paragraph 12.175. See Anticipated acquisition by Broadcom Inc of VMware, Inc., paragraph 94.
[68] FMN, paragraph 12.175. See European Commission decision, Broadcom / Symantec Enterprise Security Business, paragraph 26.

6.2 Theories of harm

71. The CMA assesses the potential competitive effects of mergers by reference to theories of harm. Theories of harm provide a framework for assessing the effects of a merger and whether or not it could lead to an SLC relative to the counterfactual.[69]

72. In its investigation of this Merger, the CMA has primarily considered the following theory of harm: horizontal unilateral effects in the supply of IaC multi-cloud provisioning tools and IaC multi-cloud configuration tools. This theory of harm is considered below.[70]

6.2.1 Horizontal unilateral effects in the supply of IaC multi-cloud provisioning tools and in the supply of IaC multi-cloud configuration tools

73. Horizontal unilateral effects may arise when one firm merges with a competitor that previously provided a competitive constraint, allowing the merged entity profitably to raise prices or to degrade quality on its own and without needing to coordinate with its rivals.[71] Horizontal unilateral effects are more likely when the parties to a merger are close competitors.[72] The CMA generally takes a forward-looking approach to its assessment of theories of harm, considering the effects of the merger both now, and in the future.[73] In some sectors, an important aspect of how firms compete involves efforts or investments aimed at protecting or expanding profits in the future. This includes efforts that may give firms the ability to compete in entirely new areas (ie to enter), or the ability to compete more effectively in areas where they are already active (ie to expand).[74]

74. The CMA assessed whether the Merger may result in an SLC as a result of horizontal unilateral effects in the supply of IaC multi-cloud provisioning tools and in the supply of IaC multi-cloud configuration tools. The CMA has considered both product-level competition and dynamic competition between the Parties (ie rivalry to innovate and develop products to compete more effectively with each other).

75. The CMA has considered evidence from the Parties (including submissions, internal documents and sales data), as well as third-party competitors and customers. In particular, the CMA has assessed:

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[69] CMA129, paragraph 2.11.
[70] In section 8 of this Decision, the CMA outlines its consideration of whether the Merged Entity could use its strong positions in the supply of provisioning and configuration tools to restrict rivals' access to products. Furthermore, other than Terraform and Ansible, IBM and HashiCorp offer other products to support development and operations on cloud and hybrid environments. For example, HashiCorp's core products also include Vault, which offers security management and data protection capabilities, and Consul, which addresses needs for microservice application deployment by allowing applications to connect to each other. (See FMN, paragraphs 12.38-12.56.) On the basis of the evidence gathered by the CMA, the CMA considered at an early stage in its investigation that there are no plausible competition concerns in respect of the supply of these additional products as a result of the Merger and concerns in relation to these products are therefore not discussed further in this Decision.
[71] CMA129, paragraph 4.1.
[72] CMA129, paragraph 4.8.
[73] CMA129, paragraph 2.14
[74] CMA129, paragraph 5.17.

(a) shares of supply;

(b) closeness of competition between HashiCorp's Terraform and IBM's Ansible; and

(c) competitive constraints on HashiCorp's Terraform and IBM's Ansible.

6.2.2 Shares of supply

76. Shares of supply can be useful evidence when assessing closeness of competition, particularly when the degree of differentiation between firms is more limited.[75] In other cases, such as this one, where the boundaries of the market are not as clear-cut, shares of supply may not provide evidence on the closest alternatives available to the merger firms' customers as these may be different from the products that achieve the greatest sales across a wider body of customers.[76]

77. The Parties submitted shares of supply estimates based on data from Gartner. They noted, however, that calculating shares for their products is challenging because Terraform's and Ansible's capabilities and functionalities span many segments and there is a lack of definitive market data from industry analysts.[77] Upon request from the CMA, the Parties also provided revenue estimates for competitors identified as paid, multi-cloud, IaC, infrastructure provisioning and configuration tools. These estimates were based on a range of publicly available sources.[78]

78. The CMA has estimated shares of supply based on the Parties' and third-party revenue data for the supply of IaC multi-cloud provisioning tools and of IaC multi-cloud configuration tools (separately), as set out in Table 1 and Table 2 below. (The third parties identified in Table 1 and 2 are all the suppliers of paid, multi-cloud, IaC, infrastructure provisioning and configuration tools identified by the Parties in response to the request from the CMA). The CMA is not aware of any independent estimates of the total global market size for these markets and has, therefore, based its estimate of the total market size on the sum of the sales of the suppliers listed in Table 1 and Table 2 below.

[75] CMA129, paragraph 4.14.
[76] CMA129, paragraph 4.15.
[77] FMN, paragraph 13.2.
[78] Parties' response to the CMA's s.109 notice dated 29 October 2024, questions 2–5.

Table 1: Global shares of supply in the supply of IaC multi-cloud provisioning tools (2024)

Vendor	Revenue (£m)	Share (%)
HashiCorp	**[✂]**	**[60-70]%**
CloudBolt Software	[✂]	[5-10]%
Pulumi	[✂]	[5-10]%
Morpheus Data	[✂]	[0-5]%
Spacelift	[✂]	[0-5]%
env0	[✂]	[0-5]%
Crossplane	[✂]	[0-5]%
Gruntwork.io	[✂]	[0-5]%
Scalr	[✂]	[0-5]%
Cloud Posse	[✂]	[0-5]%
Harness	[✂]	[0-5]%
Total	**[✂]**	**100.0%**

Table 2: Global shares of supply in the supply of IaC multi-cloud configuration tools (2024)

Vendor	Revenue (£m)	Share (%)
IBM	**[✂]**	**[80-90]%**
Chef	[✂]	[10-20] %
Puppet	[✂]	[5-10] %
VMware (SaltStack)	[✂]	[0-5]%
NorthernTech	[✂]	[0-5]%
Total	**[✂]**	**100.0%**

Source: CMA analysis using data received from the Parties and third parties.[79]

79. Table 2 shows that IBM (Ansible) is by far the largest supplier of IaC multi-cloud configuration tools. The CMA estimates that IBM (Ansible) has a global share of supply of [80-90]% in IaC multi-cloud configuration tools in 2024, followed by Chef with a share of [10-20]% and Puppet with a share of [5-10]%.

80. Similarly, Table 1 shows that HashiCorp (Terraform) is by far the largest supplier of IaC multi-cloud provisioning tools. The CMA estimates that HashiCorp has a global share of supply of [60-70]%, followed by CloudBolt Software with [5-10]% and Pulumi with [5-10]% in 2024.

81. These shares are consistent with the Parties' internal documents in which Terraform is consistently described as [✂] [80] with a very high market share,[81] a

[79] Revenues requested were those attributable to both (i) software usage and (ii) support subscriptions and services such as updates, bug fixes, enhanced security, analytics, product documentation, and training and consultation. The Parties provided both global and UK revenue estimates for competitors. The Parties provided estimates of revenue shares of supply for third parties for 2021–2023. Where third-party data has not been submitted to the CMA, the CMA has used the 2023 global estimates provided by the Parties. For global shares, where the CMA did not receive revenue estimates from third parties, the CMA used either the Parties' estimates or, where a range was provided, the mid-point of the range. The CMA notes that, when compared to actual revenues provided by third parties, the Parties estimates consistently overestimated both the global and UK revenues of competitors. The CMA considers that using the Parties' revenue estimates for competitors therefore likely overstates the shares of supply of competitors.
[80] HashiCorp's Internal Documents, DOC-00000064, '[✂]', September 2022, page 4; and DOC-00000752, '[✂]', July 2024, page 2.
[81] IBM's Internal Document, IBM-CMA-014070, '[✂]', April 2024, page 1.

view that is corroborated by third-party market reports. [82] Similarly, the Parties' internal documents describe Ansible's popularity and market-leading status.[83]

82. The CMA notes that the shares provided are revenue shares. Open source software products and hyperscalers' tools are typically free or provided as part of a wider cloud services bundle, their inclusion in the market would therefore have no impact on the share of supply estimates. The extent to which open source software and hyperscalers' tools provide a competitive constraint on the Parties is considered below in the competitive assessment.

6.2.3 Closeness of competition

83. In differentiated markets, horizontal unilateral effects are more likely where the merger firms are close competitors. The merger firms need not be each other's closest competitors for unilateral effects to arise. It is sufficient that the merger firms compete closely and that the remaining competitive constraints are not sufficient to offset the loss of competition between them resulting from the merger.[84]

6.2.3.1 Parties' submissions

84. The Parties submitted that that they do not view each other as close competitors, describing their technologies as complementary.

85. The Parties also explained that there is only a limited, conceptual overlap between IBM's Ansible and HashiCorp's Terraform and that they are not alternatives. In particular, the Parties submitted that:

    (a) The two tools run on fundamentally different domain models or paradigms; Ansible is role-based while Terraform is resource-centric. [85]

    (b) As mentioned above, these two tools are used for different purposes and objectives.[86] The Parties' internal documents, websites and real-life use case examples support that the tools are complementary.[87]

86. HashiCorp also submitted opportunity data collected in the ordinary course of business by its sales team and recorded on its salesforce database for all opportunities (including new customers and renewals) from 2021-2024.[88] This data identified, for each opportunity, the 'primary competitors' and the 'winner'.

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[82] HashiCorp's Internal Documents, DOC-00004174, '[✂]', March 2023, page 1; and DOC-00004178, '[✂]', October 2022, page 1.
[83] HashiCorp's Internal Document, DOC-00029160, '[✂]', April 2024, page 2; and IBM's Internal Documents, IBM-CMA-019797, '[✂]', September 2024, page 45; and IBM-CMA-019630, '[✂]', August 2024, page 5.
[84] CMA129, paragraph 4.8.
[85] FMN, paragraphs 12.67 and 16.28.
[86] FMN, paragraph 12.61.
[87] FMN, paragraphs 12.93–12.105.
[88] Parties' response to the Issues Letter, 7 February 2025, Annex 1.

HashiCorp submitted that this data showed that Terraform and Ansible do not compete with each other in any meaningful way.[89]

87. As regards future developments to Ansible, IBM submitted that none of the current planned product developments for Ansible would bring it closer in functionality to Terraform.[90] IBM noted that any plans that IBM had to add Terraform-like functionality to Ansible were stopped prior to Merger contemplation, which is evidenced by internal documents that show [✂].[91]

88. HashiCorp had no plans, in the last 12 months, to enter or expand into potentially relevant markets.[92] Any ideas discussed that would have led to developing Ansible features on Terraform were [✂].[93]

6.2.3.2 Internal documents

89. The CMA has considered the extent to which the Parties' internal documents indicate that they are close competitors, including whether and the extent to which:

    (a) There is current competition between Ansible and Terraform; and

    (b) The Parties are competing dynamically through innovation and product development efforts, including in ways that will bring them into closer competition in the future.

90. In its assessment of internal documents, the CMA has taken into account when discussions between the Parties regarding the Merger were initiated. As a general principle, the CMA believes that internal documents prepared in the ordinary course of business are liable to have higher probative value than internal documents prepared with the Merger already in contemplation, which may understate the competitive dynamics between the Parties.[94]

91. While there was an initial consideration by IBM to buy HashiCorp in early 2023, there is no evidence in the internal documents that this was considered beyond January 2023. It does not seem that IBM contacted HashiCorp at that time.[95] The CMA therefore considers after November 2023 when HashiCorp's advisers contacted IBM about the possibility of a sale.[96]

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[89] Of the [✂] opportunities in the dataset, IBM is only mentioned as a competitor to Terraform in [0-5]% of cases. Of the [✂] opportunities where Terraform did not win the opportunity, Ansible was the winner in only [0-5]% of cases. The Parties submitted that these results are consistent regardless of whether it was a new opportunity or a renewal, whether the customer was a large company, or whether the business was deemed to have multi-cloud or single-cloud requirements.
[90] FMN, paragraph 12.194.
[91] Parties' response to the Issues Letter, 7 February 2025, Annex 2, paragraphs 9.1–9.7.
[92] FMN, paragraph 10.7.
[93] Parties' response to the Issues Letter, 7 February 2025, paragraphs 1.32–1.37; and 5.27–5.36.
[94] CMA129, paragraph 2.29.
[95] The Merger is not referred to in HashiCorp's internal documents until November 2023 and IBM's internal documents do not refer to discussions with HashiCorp prior to that date.
[96] For example, IBM's Internal Document, IBM-CMA-006179, '[✂]', January 2024, page 3. See also Parties' response to the Issues Letter, 7 February 2025, paragraph 4.4.

6.2.3.2.1 Current competition between Ansible and Terraform

92. The CMA has considered the extent to which there is overlap between the feature sets of Ansible and Terraform and whether they currently compete directly. The CMA has found that there is currently limited overlap and direct competition between the Parties' technologies, and that they are often described as complementary.

93. The majority of the Parties' internal documents indicate that Ansible and Terraform have different strengths and weaknesses across various parameters, and often describe the two technologies as complementary.[97]

(a) A strategy report commissioned by IBM considers Ansible and Terraform to have complementary strengths across their feature set.[98] Another IBM competitive walkthrough document notes that Terraform's resource-centric domain model makes it generally inappropriate as a configuration management tool and that it is almost always used in conjunction with Ansible.[99] A strategic rationale document from January 2023 describes Terraform's strengths in provisioning whilst Ansible's strength is in automation of other tasks using a declarative approach.[100]

(b) HashiCorp's internal documents indicate that neither tool is a replacement for the other,[101] a view that is shared by a number of third-party analyst reports.[102]

94. None of HashiCorp's documents that the CMA reviewed referred to direct competition between Ansible and Terraform. However, some IBM internal documents do indicate that, while they complement each other, both technologies also compete to an extent and can be used for some of the same applications and use cases.[103] Some third-party industry reports indicate that Terraform is perceived to compete against Ansible.[104] The references to competition between these tools may reflect customers choosing to pay for only one of Ansible or Terraform but still

[97] IBM's Internal Documents, IBM-CMA-003622, '[✂]', May 2024, page 8; and IBM-CMA-033980, '[✂]', September 2024, page 2.
[98] IBM's Internal Document, IBM-CMA-000584, '[✂]', May 2024, page 5.
[99] IBM's Internal Document, IBM-CMA-003861, '[✂]', August 2024, pages 16 and 18.
[100] IBM's Internal Document, IBM-CMA-006096, '[✂]', January 2023, page 1; HashiCorp's Internal Document, DOC-00006499, '[✂]', January 2022.
[101] For example, see HashiCorp's Internal Document, DOC-00006751, '[✂]', March 2023, page 2.
[102] HashiCorp's Internal Documents, DOC-00006494, '[✂]', January 2022, pages 23–24; and DOC-00008281, '[✂]', January 2022, page 51.
[103] For example, an IBM product messaging guide notes the complementarity between the two products but also that Ansible can be used for provisioning as well as configuration (IBM's Internal Document, IBM-CMA-028827, '[✂]', September 2022, page 4). Another document about the strategic rationale for the Merger also describes how Ansible both complements *and* competes with Terraform (see IBM's Internal Document, IBM-CMA-13527, '[✂]', January 2023, page 1). One IBM document, with a product overview of Ansible and Terraform notes that, if customers do not already have a provisioning tool, then Ansible can also be used to automate provisioning (IBM's Internal Document, IBM-CMA-000094, '[✂]', February 2023, page 3).
[104] IBM's Internal Document, IBM-CMA-007214, '[✂]', March 2023, page 17; and HashiCorp's Internal Document, DOC-00006497, '[✂]', January 2022, page 17.

using the open source version of the other. Ansible and Terraform may therefore compete for the same share of customers' wallets.[105]

95. The Parties also submitted documents that summarise customers' views and behaviour, which indicate that, while some customers perceive Ansible and Terraform as competitors, customers generally do not consider them as close alternatives. Customers often mention other products as equally close or closer alternatives to Ansible and Terraform.[106] There is also limited evidence in other, similar, internal documents of customers switching between Ansible and Terraform.[107]

6.2.3.2.2 Dynamic competition between Terraform and Ansible

96. While both Parties are continuing to develop their respective product offerings in the context of a growing and dynamic market, the evidence suggests that rivalry between Terraform and Ansible to innovate is not an important driver of product development.

97. There is evidence in the internal documents that in the past IBM was pursuing product developments in order to compete more closely with Terraform. However, the evidence indicates that this programme of work stopped prior to contemplation of the Merger.

98. In 2022, IBM started a programme of work called '[✂]' in response to the perceived competitive threat from Terraform.[108] The last phase of this programme (phase 3) involved developing [✂].[109] The internal documents list the development of two features which could bring Ansible closer in functionality to Terraform: '[✂]'[110] [✂]. However, IBM's internal documents indicate that, while the first two phases of this programme that focused on the complementary nature of the two products were implemented, phase 3 was not. Internal documents indicate that work stopped on the product before August 2023, before the Merger was in contemplation, in favour of other Ansible development projects.[111] There is no evidence that Terraform felt threatened or reacted to '[✂]'.

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[105] IBM's Internal Documents, IBM-CMA-013527, '[✂]', January 2023, page 1; and IBM-CMA-016064, '[✂]', September 2023, page 2.
[106] For example, an IBM document summarises customer interviews records that [✂]' (see IBM's Internal Document, IBM-CMA-000048, '[✂]', August 2024.). A document prepared for HashiCorp from late 2021 reports on [✂]. (HashiCorp's Internal Document, DOC-00010434, '[✂]', December 2021, page 6.)
[107] IBM's Internal Document, IBM-CMA-000550, '[✂]', April 2024.
[108] IBM's Internal Document, IBM-CMA-000079, '[✂]', August 2024, page 7. 1. This '[✂]' plan was included in a presentation that [Member of Red Hat Board] delivered to [Member of the IBM Board] in January 2023 (see IBM's Internal Document, IBM-CMA-013092, '[✂]', January 2023). The first phase of this programme involved [✂]. The second phase involved [✂].
[109] IBM's Internal Document, IBM-CMA-003238, '[✂]', April 2022, page 53.
[110] State refers to the recording of a system's status and configuration at a given time. Terraform is stateful, meaning it stores a record of previous changes to configurations, whereas Ansible is stateless. [✂].
[111] IBM's Internal Document, IBM-CMA-028268, '[✂]', August 2023, page 3.

99. Apart from the '[✂]' project, the CMA did not see further evidence to indicate that competition between Terraform and Ansible drives innovation for Ansible. For example:

(a) Ansible's main R&D deliverables for 2023, [✂] have no relation to Terraform with [✂].[112]

(b) A presentation given by [✂] in July 2023 as part of a performance-team meeting at IBM that highlighted product innovations from Red Hat included no mention of the innovations associated with '[✂].'[113]

100. As regards HashiCorp product development, internal documents reviewed by the CMA contain no mention of competition with Ansible as a driver of Terraform product development. There is evidence that HashiCorp was considering a project that would involve [✂] and could have led to closer competition with Ansible.[114] This project was [✂].[115] However, this project was not included in HashiCorp's final R&D plan and there is no evidence that HashiCorp ever allocated resources to the project. The Parties submitted that this project, as well as HashiCorp's stated objective of managing infrastructure throughout its lifecycle,[116] does not mean that HashiCorp was seeking to use Terraform to handle every aspect of managing infrastructure. Instead, HashiCorp intended to better integrate with existing configuration tools such as Ansible, rather than creating competing capabilities.[117]

6.2.3.3 Third-party evidence

101. Evidence received from third-party suppliers and customers also indicates that there are key differences between Terraform and Ansible and they are generally used for different purposes.

102. While some customers noted that Terraform and Ansible can both be used for provisioning and configuration, these customers also noted that the overlap between these products was limited and the products were better in their respective areas as provisioning and configuration tools, respectively.[118] For example, one customer described Terraform as offering a far richer infrastructure provisioning capability and Ansible offering a richer infrastructure configuration capability with it being 'much more awkward and more work' to use them the opposite way around.[119]

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[112] IBM's Internal Document, IBM-CMA-013092, '[✂]', January 2023, page 12.
[113] IBM's Internal Document, IBM-CMA-001675, '[✂]', July 2023, page 4.
[114] HashiCorp's Internal Document, DOC-00007284, '[✂]', November 2023, page 2. [✂].
[115] HashiCorp's Internal Document, DOC-00000211, '[✂]', May 2024, page 43.
[116] See, for example, HashiCorp's Internal Document, DOC-00009944, '[✂]', September 2022. HashiCorp's Internal Document, DOC-00028303, '[✂]', August 2023, page 1.
[117] FMN, paragraph 12.86. The Parties submitted that one example of this integration is giving customers the ability to [✂]. See also Parties' response to the Issues Letter, 7 February 2025, paragraph 5.38.
[118] Response to the CMA questionnaire from a number of third parties, January 2025, question 13.
[119] Response to the CMA questionnaire from a number of third parties, January 2025, question 13.

103. When customers were asked by the CMA what the closest alternatives to Ansible and Terraform are:

(a) The vast majority of customers did not consider Terraform as an alternative to Ansible. Even one of the customers that did noted that, while Terraform can be an alternative for provisioning infrastructure, its configuration capabilities are limited.[120]

(b) The majority of customers did not mention Ansible as an alternative to Terraform. Those customers that mentioned Ansible as an alternative to Terraform rated it as a 'good' or 'average' product.[121]

104. Supplier evidence was mixed on competition between Ansible and Terraform. All suppliers that responded to the CMA's questionnaire acknowledged that there is some overlap in the features of Terraform and Ansible and that they overlap in the broader IT automation space.[122] However, almost all suppliers also submitted that they are used for different use cases and any overlap is limited.[123]

105. No customers submitted that Ansible and Terraform could possibly become closer competitors in the future. More generally, most customers indicated they were unconcerned by the Merger.[124]

6.2.3.4 Opportunity data

106. The CMA has assessed the reliability of HashiCorp's opportunity data. The CMA has some concerns regarding (i) the process by which the sales team identify primary competitors for opportunities; and (ii) that this is opportunity data rather than tender data and customers may consider a wider range of options than those captured in the data. Nevertheless, the CMA considers that the broad findings are likely robust to these effects and consistent with other evidence. Given the above limitations, the CMA placed more weight on the data about the 'winner' of each opportunity (rather than the wider group of 'identified competitor'). In any case, the CMA agrees with HashiCorp that the opportunity data suggests that Terraform and Ansible are not close competitors.

6.2.3.5 Conclusion on closeness of competition

107. The CMA considers that there is currently limited overlap between Terraform and Ansible. Although there are some use cases where in principle either technology can be used, there are key differences between the Parties' technologies. The Parties' customers and most of the Parties' internal documents indicate that

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[120] Response to the CMA questionnaire from a third party, January 2025, question 7.
[121] Response to the CMA questionnaire from a number of third parties, January 2025, question 4.
[122] Response to the CMA questionnaire from a number of third parties, January 2025, question 7.
[123] Response to the CMA questionnaire from a number of third parties, January 2025, question 7.
[124] Response to the CMA questionnaire from a number of third parties, January 2025, question 18. Two customers indicated concerns related to potential IBM business practices in relation to IBM's integration of HashiCorp software and its continued support for open source. One customer noted that the Merger may actually improve the offering due to the combination of the products and IBM's superior product support.

Terraform and Ansible are generally used for different purposes and are complementary as opposed to being competitors. The evidence also shows that customers do not tend to perceive Terraform and Ansible as competing products or switch between them. This lack of current competition is supported by HashiCorp's opportunities data.

108. The CMA found that competition between Terraform and Ansible is not an important driver of the development of these products. Although IBM previously had one project developing Ansible to bring it closer to, and compete against, Terraform, this project was never fully implemented and it was cancelled before the Merger was in contemplation, for reasons unrelated to the Merger. Neither IBM or HashiCorp have plans to develop Ansible and Terraform to compete closer with each other, absent the Merger.

109. For the reasons set out above, the CMA believes that the Parties are not close competitors and that there is only limited dynamic competition between them.

6.2.4 Competitive constraints

110. This section describes the evidence gathered by the CMA in relation to the competitive constraints provided by other suppliers of provisioning and configuration tools.

6.2.4.1 Parties' submissions

111. The Parties submitted that they face strong competition from multiple other competitors in the supply of both configuration and provisioning tools.

112. The Parties stated that Ansible's and Terraform's closest competitors globally are their own open source products. The Parties explained that these tools have virtually the same functionality as the paid versions and that the Parties' key challenge is to convince customers to pay for a tool when there is a near-identical version which is available for free.[125] HashiCorp's opportunity data shows that of all the opportunities Terraform lost, [60-70]% were to open source software.[126] HashiCorp also noted that they have lost a number of high-profile customers who have decided to return to the open source software alternatives.[127] In addition, the Parties submitted that competitors can take these open source products and fork them to create competing products, for example OpenTofu which is a fork of pre-BSL Terraform.[128]

113. The Parties also submitted that they face a strong constraint from hyperscalers' configuration and provisioning tools that are provided for free as part of their cloud offering.[129] The Parties stated that these cloud-native tools can work across

[125] Parties' response to the Issues Letter, 7 February 2025, paragraph 6.18.
[126] Parties' response to the Issues Letter, 7 February 2025, Annex 1, table 2.
[127] Parties' response to the Issues Letter, 7 February 2025, paragraph 6.19.
[128] Parties' response to the Issues Letter, 7 February 2025, paragraph 6.28.
[129] Parties' response to the Issues Letter, 7 February 2025, paragraphs 6.8–6.16.

multiple clouds and that customers can, and do, use them as alternatives to Terraform and Ansible.

114. Further, the Parties submitted that they are constrained by multiple ISVs such as Chef, Puppet, Pulumi, env0, Spacelift, Scalr, Harness, VMware (SaltStack), as well as vendors that leverage open source tools, such as Gitlab and VMware (vRealize).[130]

6.2.4.2 CMA's assessment

115. The CMA has assessed the constraint imposed on the Parties by each of suppliers of open source software, hyperscalers, and ISVs with regards to internal documents, third-party evidence, and the HashiCorp's opportunity data. The CMA found that each represents some level of competitive constraint on both Terraform and Ansible, at least as much as these Parties' tools pose on each other.

6.2.4.2.1 Constraint from open source software

116. As an overarching point, the CMA considers that the Parties' own open source software is as a customer acquisition channel for paid versions of the Parties' products. The Parties mostly benefit from the widespread use of their open source products as opposed to competing with them.[131] If that were not the case, the Parties would have little incentive to continue developing these open source products. The Parties' internal documents indicate that they control which features to allow open source users access to and which to limit to paid users. [132] Therefore, while the Parties' open source software may provide a current, product-level, competitive constraint (eg in terms of price setting), they do not pose a dynamic constraint on the Parties.

117. In contrast, open source forks (or the threat of them) of the Parties' own products (such as OpenTofu), or other open source software, are developed independently of the Parties and may therefore provide a dynamic constraint. Although, the CMA notes that HashiCorp's adoption of the BSL prevents potential competitors from forking the most recent version of Terraform.

118. Internal documents from both Parties show that there are some customers for whom an open source product is not a viable alternative to, or is less desirable than, paid products. This is due to the advanced features, support and security

[130] Parties' response to the Issues Letter, 7 February 2025, paragraph 6.3. The Parties also submitted that they face competition from non-IaC tools such as BMC. The CMA considers that sufficient factors (such as higher cost, lower speed deployments, greater errors, less infrastructure consistency, and inability to be used across multiple clouds) exist to differentiate IaC solutions from non-IaC ones such that the latter does not pose a competitive constraint on the former.
[131] See, for example, IBM's Internal Document, IBM-CMA-000260, '[✂]', November 2023, page 9.
[132] IBM's Internal Document, IBM-CMA-000438, '[✂]', May 2024, page 2; and HashiCorp's Internal Document, DOC-00007709, '[✂]', February 2023, page 28.

associated with the paid services.[133] However, many internal documents also show that a key business challenge is [✂].[134]

119. HashiCorp's internal documents also point to some constraint from OpenTofu, as well as HashiCorp's awareness of the potential challenge posed by OpenTofu. Some documents note OpenTofu's growing popularity and discuss strategies for how [✂].[135] A few documents note that open source projects need [✂].[136]

120. HashiCorp's opportunity data also shows that Terraform lost most opportunities to open source software, in particular open source Terraform.[137] OpenTofu appeared as a competitor in only [0-5]% of the opportunities.

121. In terms of third-party evidence, some customers submitted that open source software products are alternatives to Terraform.[138] However, customers also submitted that, while they may be functionally equivalent, open source software products may not be appropriate for use at scale in larger organisations without considerably more in-house resource or another third-party vendor managing the service.[139] Most suppliers told the CMA that open source software alternatives compete with paid versions,[140] although some also noted that certain customers require a managed service, particularly if the customer needs significant scale.[141]

122. OpenTofu was listed as an alternative to Terraform by only around a few customers,[142] of which all considered it either adequate,[143] or good.[144]

6.2.4.2.2 Constraint from hyperscalers' configuration and provisioning tools

123. The Parties' internal documents and analyst reports consistently identify the ability to easily provision and configure across different cloud environments and on-premises solutions as a key selling point of Terraform and Ansible. They also indicate that hyperscalers' tools are not a viable alternative for customers that require this capability.[145]

124. The CMA has not received evidence that hyperscalers' tools are designed to operate well across multiple clouds. While some internal documents indicate that

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[133] HashiCorp, Inc. Form 10-K for the fiscal year ended 31 January 2024, page 12; HashiCorp's Internal Documents, DOC-00004603, '[✂]', September 2023, page 4; DOC-00024026, '[✂]', May 2023, page 1; and IBM's Internal Documents, IBM-CMA-002267, '[✂]', August 2024, pages 2, 7, 14 and 23; and IBM-CMA-019630, '[✂]', August 2024, pages 23 and 24.
[134] IBM's Internal Documents, IBM-CMA-000293, '[✂]', January 2022, page 22; IBM-CMA-018689, '[✂]', June 2024, page 2; and IBM-CMA-000284, '[✂]', August 2024, page 6.
[135] IBM's Internal Document, IBM-CMA-015469, '[✂]', June 2024, page 11; and HashiCorp's Internal Document, DOC-00000247, '[✂]', April 2024, page 13.
[136] See HashiCorp's Internal Document, DOC-00024026, '[✂]', May 2023, page 1.
[137] Parties' response to the Issues Letter, 7 February 2025, Annex 1.
[138] Response to the CMA questionnaire from a number of third parties, January 2025, question 5.
[139] Response to the CMA questionnaire from a number of third parties, January 2025, question 5.
[140] Response to the CMA questionnaire from a number of third parties, January 2025, question 5.
[141] Response to the CMA questionnaire from a number of third parties, January 2025, question 5.
[142] Response to the CMA questionnaire from a number of third parties, January 2025, question 4.
[143] Response to the CMA questionnaire from a third party, January 2025, question 4.
[144] Response to the CMA questionnaire from a third party, January 2025, question 4.
[145] HashiCorp, Inc. Form 10-K for the fiscal year ended 31 January 2024, pages 12 and 13; HashiCorp's Internal Document, DOC-00004603, '[✂]', September 2023, page 12.

the Parties compete against hyperscalers' tools and contain comparisons between product offerings, these references are not in the context of providing multi-cloud solutions.[146]

125. HashiCorp's opportunity data suggests hyperscalers do not pose a material constraint on Terraform.[147]

126. Third-party evidence indicates that for some uses cases, hyperscalers' tools are alternatives to the Parties, but not when multi-cloud capability is required. Just over half of customers considered at least one of the hyperscalers' tools to be an alternative to Terraform,[148] and all respondents specified that hyperscalers' tools are limited to, or strongly tied to, the hyperscalers' native environment. In addition, nearly all customers considered that having multi-cloud capability was either important or very important for their business.[149]

6.2.4.2.3 Constraint from Independent Software Vendors (ISVs)

127. ISVs appear relatively frequently in the Parties' internal documents. In terms of competitors to Ansible, Puppet and Chef are often mentioned as a competitor to Ansible and IBM have an explicit sales strategy in place for when [✂].[150] SaltStack is also mentioned as a competitor relatively frequently in Red Hat's internal documents.[151] In terms of competitors to Terraform, Pulumi is identified most frequently in the Parties' internal documents.[152]

128. Other tools/providers are discussed in both the Parties' internal documents such as Spacelift, env0, Scalr, Crossplane and VMware.[153]

129. In relation to evidence from customers:

(a) For Terraform, only Pulumi and Puppet were each considered to be an (adequate or good) alternative by more than one customer.[154] Other

[146] IBM's Internal Documents, IBM-CMA-000570, '[✂]', April 2024, pages 2 and 9; and IBM-CMA-000089, '[✂]', March 2023, page 8.
[147] Amazon was the competitor with the second most mentions appearing in [5-10]% of opportunities. However, Amazon was only recorded as the winner in [0-5]% of the opportunities Terraform lost. Microsoft had fewer mentions than Ansible as a competitor and was the winner in [0-5]% of opportunities. Google did not appear in the Parties' opportunity data. The Parties submitted that hyperscalers may be underestimated in the dataset, since, if a customer has already chosen a cloud native solution, HashiCorp would not identify the opportunity in the first instance and so would never register a 'loss' against the hyperscalers. (Parties' response to the Issues Letter, 7 February 2025, Annex 1).
[148] Response to the CMA questionnaire from a number of third parties, January 2025, question 4.
[149] Response to the CMA questionnaire from a number of third parties, January 2025, question 12.
[150] IBM's Internal Document, IBM-CMA-019630, '[✂]'' August 2024, page 11.
[151] IBM's Internal Documents, IBM-CMA-019630, '[✂]', August 2024, page 12; and IBM-CMA-028827, '[✂]', September 2022, page 5.
[152] For example, in HashiCorp's Internal Document, DOC-00004603, '[✂]', September 2023, page 12; and IBM's Internal Document, IBM-CMA-019630, '[✂]', August 2024, page 21.
[153] For example, in IBM's Internal Document, IBM-CMA-000089, '[✂]', April 2024, page 4 and HashiCorp's Internal Document, DOC-00027447, '[✂]', September 2020, page 12. The CMA understands that products such as Spacelift. Scalr and env0 are not themselves IaC tools and are instead IaC management platforms that leverage open source software (either from the Parties or third parties) to provide a managed service. These have nevertheless been treated as ISVs in the CMA's analysis.
[154] Response to the CMA questionnaire from a number of third parties, January 2025, question 4.

suppliers – Crossplane, JFrog Artifactory, Scalr, env0, and VMware – were each only considered at least adequate by one customer.[155]

(b) For Ansible, Puppet was considered to be an alternative by all customers, [156] and Chef was considered to be an alternative by the vast majority of customers.[157] Other suppliers – JFrog Artifactory, SaltStack, BMC TrueSight, Rundeck and Powershell were each considered alternatives by one customer.[158]

130. In relation to evidence from suppliers, approximately half of the suppliers told the CMA that Puppet[159] and Chef[160] are competitors. Just over a third of suppliers stated that Pulumi was a competitor and considered an adequate tool.[161] Salt was mentioned once.[162] Smaller suppliers (Spacelift, Snyk limited, Crossplane, env0, and Scalr) were mentioned by two or fewer suppliers each, and were consistently described as weaker than the Parties, with no supplier rating them above adequate.[163]

131. HashiCorp's opportunity data suggest that ISVs pose only a limited constraint on Terraform.[164]

6.2.4.3 Conclusion on competitive constraints

132. HashiCorp's opportunity data (for Terraform) and some internal documents show that Terraform and Ansible compete against open source software, including open source versions of their own product. However, the Parties mostly benefit from their own open source software as a customer acquisition channel and have control over what is included in the open source version. In addition, some customers may still require a managed service for which open source software is not an option. While the constraint posed by the Parties' own open source software is, at least to some extent, controlled by the Parties, forks of the Parties' products (such as OpenTofu), and the threat of forking Ansible by potential competitors, may still exert some dynamic constraint post-Merger.

133. Evidence from internal documents and third parties indicates that the Parties face some competitive constraint from hyperscalers, however this constraint is much more limited when multi-cloud capability is required. The CMA considers that while

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[155] Response to the CMA questionnaire from a number of third parties, January 2025, question 4.
[155] Response to the CMA questionnaire from a third party, January 2025, question 4.
[156] Response to the CMA questionnaire from a number of third parties, January 2025, question 7.
[157] Response to the CMA questionnaire from a number of third parties, January 2025, question 7.
[158] Response to the CMA questionnaire from a number of third parties, January 2025, question 7.
[159] Response to the CMA questionnaire from a number of third parties, January 2025, question 3.
[160] Response to the CMA questionnaire from a number of third parties, January 2025, question 3.
[161] Response to the CMA questionnaire from a number of third parties, January 2025, question 3.
[162] Response to the CMA questionnaire from a third party, December 2024, question 1.
[163] Response to the CMA questionnaire from a number of third parties, January 2025, question 3. The CMA considered the extent to which GitLab and VMware (vRealize) provide a competitive constraint to the Parties. However, the CMA received strong evidence from customers and suppliers that they do not compete with the Parties and are larger product applications whose use extends beyond provisioning and configuration into other areas of software management. (Response to the CMA questionnaire from a number of third parties, December 2024, question 1).
[164] No ISVs were mentioned in more than [0-5]% of the opportunities or won more than [0-5]% of the opportunities in which Terraform lost. Parties' response to the Issues Letter, 7 February 2025, Annex 1.

hyperscalers' tools can in theory be used for multi-cloud infrastructure automation, customers would have to face significant inconvenience to do so, as these tools are designed to operate on their native clouds. This is broadly similar to how both Ansible and Terraform are designed for different use cases (configuration vs provisioning) and customers would face inconvenience having to use one to do the other. Consequently, the CMA considers the constraint posed by hyperscalers (at least in terms of product-level competition) to be broadly similar to the constraint the Parties pose to each other.

134. Evidence from the internal documents and third parties indicates that ISVs are alternatives to the Parties' products. However, HashiCorp's opportunity data and their much smaller relative revenues suggest that the degree of constraint is limited, against the Parties' strong and established market positions.

135. Overall, the CMA considers that open source software, hyperscalers, and ISVs compete with Ansible and Terraform at least as much as Ansible and Terraform compete with each other. Together, these suppliers will continue to provide some constraint on the Merged Entity.

6.2.5 Conclusion on theory of harm

136. For the reasons set out above, the CMA believes that there is currently limited overlap between Ansible and Terraform. Although there are some use cases where in principle either of these tools can be used, there are key differences between Ansible and Terraform and they are typically perceived as complementary as opposed to substitutes: they are designed for, and better suited to, provisioning and configuration, respectively. Customers do not tend to perceive Terraform and Ansible as competing products or switch between them. This was a view supported by the Parties' internal documents and by most of the Parties' competitors and customers.

137. The CMA found that competition between Terraform and Ansible is not an important driver of the development of these products. Although IBM previously had one project to develop Ansible to bring it closer to, and compete against, Terraform, this project was never fully implemented and it was cancelled before the Merger was in contemplation, for reasons unrelated to the Merger. Neither IBM or HashiCorp have plans to develop Ansible and Terraform to compete closer with each other, absent the Merger.

138. Despite Ansible's and Terraform's strong market position in their respective markets, open source software, hyperscalers, and ISVs compete with them at least as much as Ansible and Terraform compete against each other. Together, these suppliers will continue to provide some constraint on the Merged Entity.

139. Accordingly, the CMA found that the Merger does not give rise to a realistic prospect of an SLC a result of horizontal unilateral effects in relation to the global supply of IaC multi-cloud provisioning tools and IaC multi-cloud configuration tools.

7. OTHER THEORIES OF HARM CONSIDERED

140. A number of the Parties' internal documents suggest that IBM plans to improve integration between Terraform and Ansible and/or sell a bundled offering following the Merger.[165] The CMA therefore also considered whether the Parties could use the Merger to harm competition via conglomerate effects, either through:

(a) Using the Parties' strong position in the supply of provisioning tools to restrict rivals from accessing customers of configuration tools; or

(b) Using the Parties' strong position in the supply of configuration tools to restrict rivals from accessing customers of provisioning tools.

141. The CMA considered whether the Merged Entity could implement these strategies through either of the following mechanisms:

(a) Degrading interoperability with other provisioning and/or configuration tools; or

(b) Offering discounts or improved functionality to those customers who purchase both Terraform and Ansible.

7.1 The Parties' submissions

142. The Parties submitted that the Merged Entity may offer a bundled option of both Terraform and Ansible together following the Merger.[166] They also submitted that they may improve interoperability, eg '[✂]' and/or may introduce [✂].[167]

143. The Parties submitted that they would not, however, introduce features that would lock customers into a bundled solution or prevent third parties from developing alternative offerings.[168] The Parties submitted that that the Merged Entity would not have the ability or incentive to foreclose competitors through degrading interoperability of Terraform or Ansible with rival software,[169] including because (i) Terraform and Ansible do not have market power; (ii) any attempt to reduce interoperability would run counter to IBM's public commitment to interoperability and its open source approach and to the core marketability of Terraform and Ansible;[170] (iii) both Ansible and Terraform will remain available as standalone options; and (iv) improved interoperability between Ansible and Terraform offers no significant competitive edge and rivals can replicate (ie the interoperability between Ansible or Terraform and rivals' offerings can be improved, including by [✂]).[171]

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[165] For example, HashiCorp's Internal Documents, DOC-00000651, '[✂]', June 2024, pages 3 and 4; and DOC-00000206, '[✂]', July 2024, page 4.
[166] FMN, paragraph 19.95.
[167] FMN, paragraph 19.95.
[168] FMN, paragraph 19.96.
[169] FMN, paragraph 19.7.
[170] FMN, paragraphs 19.7.and 19.50.
[171] Parties' submission of 9 January 2025, paragraphs 3.4 to 3.6.

7.2 CMA assessment

144. As set out in the competitive assessment, the CMA considers that Terraform is the market leader in the supply of provisioning tools, and Ansible is the market leader in the supply of configuration tools. The Merged Entity would have market power in both.

7.2.1 Harm to interoperability

145. In terms of the Merged Entity's ability to reduce Ansible's and Terraform's interoperability with other tools, the CMA received mixed evidence from third parties on whether this would be technically possible. Some customers and competitors indicated that it would be technically possible, for example by altering the API (Application Programming Interface) of the Parties' products or implementing licensing restrictions.[172] However, some customers were of the view that it would not be possible,[173] including because OpenTofu or other proxies could be used to achieve interoperability.[174] Given this evidence, the CMA considers that the Merged Entity may not have the ability to foreclose its competitors through harming interoperability.

146. In relation to the Parties' incentive to reduce Terraform's and Ansible' interoperability with other tools, when asked how they would respond if the Merged Entity harmed interoperability with other tools, all customers that responded stated that their response would be to evaluate their options. Customers expected that options could include alternatives from third parties,[175] developing in-house software,[176] or using open source tools.[177] In addition, some customers considered it unlikely that the Merged Entity would worsen interoperability for example due to the open source nature of Terraform and Ansible, community support and 'market pressures' among other things,[178] or because it could reduce the attractiveness of their proposition.[179] Similarly, a competitor submitted that harming interoperability would be unlikely in practice because changing Terraform's current open source, multi-cloud nature would negatively impact the value of Terraform and result in customers switching to OpenTofu.[180]

147. The Parties' internal documents also show that the Parties consider they benefit from interoperability and a community that uses their free, open source products in order to, for example, drive demand for the paid versions. Many methods of restricting interoperability would harm the Parties' free products.

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[172] Response to the CMA questionnaire from a third party, January 2025, questions 13 and 16.
[173] Response to the CMA questionnaire from a number of third parties, January 2025, question 16.
[174] Response to the CMA questionnaire from a number of third parties, January 2025, question 16.
[175] Response to the CMA questionnaire from a number of third parties, January 2025.
[176] Response to the CMA questionnaire from a number of third parties, January 2025.
[177] Response to the CMA questionnaire from a third party, January 2025, question 17.
[178] Response to the CMA questionnaire from a third party, January 2025, question 16.
[179] Response to the CMA questionnaire from a third party, January 2025, question 16.
[180] Response to the CMA questionnaire from a third party, January 2025, question 11.

148. The CMA considers that, if the Merged Entity were to degrade interoperability with other tools, it would risk considerable losses that would not be outweighed by the potential gains, and that the Merged Entity therefore lacks the incentive to degrade interoperability.

7.2.2 Bundle discounts

149. Bundle discounts of complementary products can be efficient and reduce prices for customers.[181] The evidence reviewed by the CMA indicates that Terraform and Ansible are expected to remain available as standalone options[182] and the Parties' internal documents do not indicate that the Parties plan to pursue a strategy of weakening competitors through discounting. The CMA also notes that for some customers, using a mix of paid and open source configuration and provisioning tools may still be more attractive than the Merged Entity's discounted bundle.[183]

150. Some customers told the CMA that discounts could be attractive.[184] Any gain in sales and corresponding loss of sales by competitors is not problematic in and of itself. Concerns would only arise if these lost sales materially weakened competitive constraints. No customer expressed concerns that competitors would be foreclosed. A few customers were concerned that, after the Merger, they could be forced to buy products they don't need.[185] However, the evidence does not indicate that Terraform and Ansible will only be offered as a pure bundle. One competitor expressed concerns that, if IBM were to offer bundle discounts and lock customers into the IBM ecosystem, this will make it much harder for competitors to persuade customers to switch to their products and allow increase prices to customers in the long term. [186]

151. Overall, the CMA consider that, although bundle discounts could make it harder for competitors to win customers, the evidence does not support that competitors would be foreclosed in a way that materially weakens competition and makes consumers worse off.[187]

152. Therefore, the CMA considers that the Merged Entity lacks the ability to foreclose its rivals through bundle discounts.

7.2.3 CMA conclusion

For the reasons set out above, the CMA found that the Merger does not give rise to a realistic prospect of an SLC as a result of conglomerate effects in relation to

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[181] CMA129, paragraphs 7.30–7.33.
[182] FMN, paragraph 19.82 and IBM's Internal Document, IBM-CMA-000021, '[✂]', July 2024.
[183] Response to the CMA questionnaire from a number of third parties, January 2025, question 17.
[184] Response to the CMA questionnaire from a number of third parties, January 2025, question 15.
[185] Response to the CMA questionnaire from a number of third parties, January 2025, question 18.
[186] Response to the CMA questionnaire from a third party, January 2025, questions 12, 13 and 14.
[187] CMA129, paragraphs 7.31. Loss of sales by competitors is not problematic in and of itself, and linked sales of related products can result in efficiencies. However, competition concerns may arise if such a strategy would result in rivals in the focal market becoming less effective competitors, which may result in higher prices or lower quality in the longer term.

the global supply of IaC multi-cloud provisioning tools and IaC multi-cloud configuration tools.

DECISION

153. Consequently, the CMA does not believe that it is or may be the case that the Merger may be expected to result in an SLC within a market or markets in the United Kingdom.

154. The Merger will therefore not be referred under section 33(1) of the Act.

Joel Bamford
Executive Director, Mergers
Competition and Markets Authority
25 February 2025