In what capacity or on whose behalf are you participating in this public consultation?	Trade association representing a broad cross section of communications and technology firms
In case of representing a company, please specify the type of company:	
Full name (of the participant or represented institution):	Computer & Communications Industry Association (CCIA Europe)
Do you wish to make your name publicly available with your answer or keep it confidential (in which case it will be published as an anonymous answer)?	Public
Contact email (will remain confidential)	[CONFIDENTIAL]
1. In your opinion, what will be the main factors that will drive the growth of the sector in the coming years? (max. 300 words).	The main factors driving the growth of the cloud sector in the coming years will include the increasing need for flexibility and diversification of cloud strategies, as well as the EU's ambition to have 3/4 of enterprises having adopted cloud solutions by 2030. Flexibility and the ability to diversify cloud strategies are paramount. Previous research1 has highlighted that organisations of various sizes prioritise the freedom to select cloud infrastructure of choice when migrating legacy footprints to the public cloud. This freedom is crucial as it allows businesses to avoid vendor lock-in, giving them the flexibility to choose the best cloud solutions tailored to their specific business needs, switch cloud infrastructure providers if desired, or adopt multi cloud strategies. Diversifying cloud providers not only reduces dependency on a single vendor and fosters competition in the cloud sector, but also enhances resilience and fosters innovation by leveraging the benefits of multiple cloud providers. A second growth driver for the sector might be the EU's recent political target to push 2 "75% of EU enterprises" to adopt cloud solutions by 2030. Currently, the majority of IT workloads are still used on-premise. In fact, according to recent statistics3, only 45% of European organisations use the cloud. Considering all these factors, we can anticipate that in the coming years, cloud solutions will see increased adoption. Organisations will either use them alongside on-premise systems or fully migrate to the cloud. Nevertheless, this will heavily depend on the implementation of effective policies that encourage increased cloud adoption, which are currently lacking. 1. https://kinsta.com/blog/cloud-market-share/ 2. https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en 3. https://ec.europa.eu/eurostat/web/interactive-publications/digitalisation-2024
2. How would you classify the different types of agents/operators involved in the cloud market value chain? (max. 300 words).	

3. Would you highlight any particular feature of the cloud market in Spain as compared to other European countries? How do you assess the overall competitive situation of the cloud market in Spain? Are there any particularly significant trends? (max. 300 words).	
4. In your opinion, what are the main elements that determine the dynamics of competition among cloud service providers? In your opinion, which other markets can affect the competitive dynamics in the provision of cloud services? (max. 300 words).	The competitiveness of the cloud sector is evidenced by the growing prevalence of multi- and hybrid cloud strategies adopted by organisations across various scales. The simultaneous usage of multiple cloud services providers (CSPs) is driven by factors such as geographic or regulatory governance requirements, the necessity for uninterrupted business operations, and/or the desire to leverage unique features offered by specific CSPs. In essence, organisations are reluctant to rely solely on a single CSP, opting instead to diversify them. This trend highlights how competition in the cloud sector continues to foster a broader range of options for both businesses and consumers. At the same time, it is important to recognise that the adoption of multi cloud and hybrid cloud strategies by organisations is a business-driven decision, influenced by a variety of factors. Organisations should retain freedom to choose whether they prefer to utilise cloud services from a single CSP or multiple. Therefore, the choice of a multi cloud strategy needs to remain a customer business-decision, not a regulatory requirement. Furthermore, given the distinct characteristics of provided products relating to e.g., storage or IT integration, CSPs face competition from hybrid CSPs and those who deploy on-premise solutions. By adapting their strategies and expanding their offerings, CSPs strive to remain competitive and address the diverse needs of their customers. It is noteworthy that the growing expenditure1 on cloud services, combined with the dynamic competition among CSPs, signifies the presence of opportunities for new actors to enter the cloud sector, compete for customers, and achieve significant growth. Lastly, competitive dynamics in the cloud sector can be influenced by restrictive licensing from legacy vendors of on-premise productivity software. You will find more details on this point in the answer to question 15. 1. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Cloud_computing_-_statistics_on_the_use_by_enterprises
5. In your opinion, when contracting cloud services from an operator, how do the main providers' offers differ from each other? (max. 300 words).	

6. When contracting cloud services from an operator, describe in order of importance the factors that, in your opinion, are the main determinants of the contracting decision, such as, among others, price, technical quality of the service, the provider's portfolio of services, security, transparency of the contract, nationality of the provider, previous relationship with the same provider, previous knowledge by the staff, etc. (max. 300 words).	
7. When contracting cloud services from an operator, assess the extent to which contract terms and conditions are negotiable (max. 300 words).	
8. Indicate what difficulties may arise, at the time of contracting a provider's cloud services, to anticipate the final cost of use of the contracted service (max. 300 words).	

9. Assess the transparency of contract terms and conditions and indicate whether changes in contract terms and conditions are common (max. 300 words).	
10. In migrating to the cloud, explain the role of the integrator or intermediary, and its relevance to the competitive dynamics of the market (max. 300 words).	
11. For software development companies offering independent cloud-based software applications, consider which are the main channels to reach the end customer and the factors on which the choice of the chosen channel(s) depends. When offering independent cloud-based software applications, consider whether it is possible to do so in more than one marketplace from a vertically integrated provider (max. 300 words).	
12. Assess the conditions required to intermediaries to be able to sell the products of one or more cloud service providers, and whether in your opinion they affect the competitiveness of the final solution offered by the intermediary in relation to other sales channels (max. 300 words).	

13. Assess whether there are significant barriers to entry in the cloud services or cloud infrastructure market. If so, indicate and describe what type of barriers (e.g., regulatory, investment size, availability of qualified staff, other) and indicate which services or cloud layer (IaaS, PaaS, SaaS) are affected by each barrier (max. 300 words).	
14. In your opinion, assess which cloud layers (IaaS, PaaS, SaaS) present the greatest competitive challenges and explain why (max. 300 words).	
15. For companies already present in the cloud market, what are the main obstacles to their activity and to competition in the sector? (max. 300 words).	The EU Data Act1 already seeks to address perceived concerns about customers’ ability to switch cloud providers by addressing issues related to interoperability and data transfer fees.The remaining obstacle to the activity of CPS and competition in the cloud sector is the presence of restrictive software licensing. These practices are employed by legacy software vendors who leverage their established positions in the productivity software market to unfairly influence customer choices. By imposing restrictive licensing terms, these vendors incentivise customers of their on-premise productivity software to use the vendor's own cloud infrastructure, thereby discouraging the use of third-party cloud services. As a result, customers face significant barriers when attempting to migrate their workloads to the cloud, limiting their options of cloud providers and stifling switching between various CPSs. In fact, recent research conducted by Savanta found that restrictive licensing is particularly pronounced in Spain with more than half (53%) of Spanish organisations who had considered switching saying that licensing restrictions factored in their decision not to do so. 1. https://eur-lex.europa.eu/eli/reg/2023/2854 2. https://info.savanta.com/l/1038663/2024-01-31/98tx5h/1038663/1706715090z4m1HiQG/Assessing_the_impact_of_software_licensing_practices.pdf

16. Assess what technical or economic difficulties exist for migrating to the cloud. Indicate, in your opinion, which solutions could be implemented to mitigate them (max. 300 words).	See answer to question 15.
17. In your opinion, once the services of one cloud provider have been contracted, what technical, economic or other factors might make it difficult to change provider? In your opinion, which solutions might be implemented to mitigate these difficulties? (max. 300 words).	Switching cloud infrastructure providers is limited, or even made impossible, by the presence of restrictive software licensing, which we have described in our response to question 15. To mitigate negative consequences restrictive software licensing creates in the cloud sector, we urge the CNMC to launch an antitrust investigation into these practices. In terms of a potential remedy, we underline the importance of customers being free to migrate their previously purchased software products (used on-premise) to their preferred cloud infrastructure without incurring additional charges or fees. Specifically, they should not be required to buy separate, duplicate licences for the same software. They should also be free from licensing restrictions and increased costs that hinder their ability to run their licensed software in the cloud and on the cloud providers of their choice.
18. In your opinion, what are the difficulties in contracting the services of more than one cloud provider? In your answer, please assess aspects of vertical interoperability (between services located in different cloud layers), horizontal interoperability (between services located in the same cloud layer) and interoperability of the data produced when using different cloud services. In your opinion, what solutions could be implemented? (max. 300 words).	

19. Assess the advantages and disadvantages of adopting interoperability standards or protocols, including their impact on competition and/or innovation (max. 300 words).	
20. When contracting services from the same cloud provider, and from the point of view of its commercial offer, assess what obstacles exist to contracting each service separately (max. 300 words).	
21. When contracting additional services from a cloud provider, assess the relationship between contracting these services and the discounts for the use of additional services (max. 300 words).	When contracting additional services from a cloud provider, the relationship between these additional services and the discounts offered can play a critical role in the decision-making process. According to Savanta's research1, a significant concern for customers considering switching cloud infrastructure providers is the potential loss of discounts, with 40% of surveyed companies expressing this worry. These discounts are often a major factor influencing the initial choice of technology providers, with 42% of cloud infrastructure customers choosing their providers because of the discounts tied to existing software licences. 1. https://info.savanta.com/l/1038663/2024-01-31/98tx5h/1038663/1706715090z4m1HiQG/Assessing_the_impact_of_software_licensing_practices.pdf
22. Assess the existing obstacles to competition in the public procurement of cloud services, and indicate the solutions that could be implemented in your opinion (max. 300 words).	

23. Provide additional comments on other barriers, distorting factors or issues that you consider relevant to the functioning of this sector (max. 500 words).	
24. Assess the current European and national regulatory framework in its ability to promote an efficient and competitive operation of the cloud services market. If so, how could it be improved? (max. 500 words).	
25. In your opinion, what other regulations could affect the competitive dynamics of the cloud sector? If so, how could they be improved? (max. 500 words).	

26. Provide additional comments on other solutions or recommendations (not necessarily of regulatory nature) to improve the competitive dynamics in the cloud sector (max. 500 words).	