

CNMC public consultation on cloud services

(open from May 7 to June 21 2024)

This document is for information purposes only. Responses to the public consultation must be submitted by filling out the web form that can be found at the [following link](#).

Why is the CNMC conducting a public consultation on cloud services?

Law 3/2013 of 4 June 2013 creating the National Markets and Competition Commission (CNMC), includes among the functions of the institution the drafting of studies and research on competition matters, as well as general reports on the different economic sectors (art. 5.1.h)). The Board of CNMC has exercised this prerogative by initiating a market study on cloud services. In particular, the study will analyze the elements that may determine the efficient and competitive functioning of this sector (see the [press release](#)).

The interest of the study lies in the fact that cloud services are a basic pillar of the digital transformation process and of business competitiveness, as they allow for data to be processed, stored and managed remotely. As a result, the market study will include a series of recommendations to promote a competitive environment in the sector that supports innovation and a better use of resources.

What is the purpose of the public consultation?

The public consultation aims to reach the largest number of stakeholders involved in this field to gather their views on the activity of the cloud services sector. In addition, it is aligned with the CNMC's objective that market studies should be based on public consultations to encourage the participation of the general public in their preparation.

The responses provided will be analyzed to identify possible areas for improvement. These will be reflected in the market study and may lead to recommendations to promote competition and efficiency in the cloud services sector.

Rules for participating in this public consultation

This public consultation follows a transparent process and the contributions received will be taken into consideration for drafting the study. The contact e-mail address of the participants in the consultation will remain confidential and shall not be published under any circumstance. The full name of the individual or institution responsible for the contribution may be kept confidential **if expressly requested**. However, **answers may be published in their entirety**, unless there are duly justified confidentiality reasons.

Required fields are marked with an asterisk (*). Answering the rest of the questions is not mandatory, **so participants are encouraged to focus their contributions on those sections where they hold relevant information**, leaving the questions where no information or judgment is available unanswered or marked as DK/NA ("don't know/no answer").

Answers to open-ended questions are provided with a maximum character length in order to ensure a concise response. Participants are encouraged to include references or links to publicly available documentation to reduce the extension of the contribution as much as possible. If a participant wishes to submit additional information, an electronic file (pdf, excel, word, etc.) may be sent to the e-mail address dp.estudios@cnmc.es with the subject "Study on cloud services". Accordingly, **this documentation may be published in its entirety**, unless otherwise requested for duly justified confidentiality reasons.

1. Participant's information

In what capacity or on whose behalf are you participating in this public consultation?*

- Cloud service provider (also includes providers of cloud infrastructure, independent software providers and intermediaries)
- Associations of cloud service providers
- End user of cloud services
- Associations of consumers and/or end-users of cloud services
- Public or regulatory body
- Academia and industry experts
- Others (please specify):

In case of representing a company, please specify the type of company:

- Large company
- SME
- Micro
- Self-employed

Full name (of the participant or represented institution)*:

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
- Confidential

Contact email (will remain confidential)*:

2. Assessment of the market's functioning

This section seeks to better understand the general features of the sector and the elements that determine competitive dynamics, both on the supply and demand side.

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).
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).
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).

3. Barriers to competition in the cloud sector

In a preliminary analysis, the CNMC has identified several challenges from the point of view of competition in the cloud sector. The aim of this section is to identify and assess possible barriers to competition to determine whether there is room for improvement in terms of competition and efficiency.

13. Assess whether there are significant barriers to entry into 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).

Cloud migration and change of provider

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).
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).

Interoperability of cloud services

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).

Commercial terms

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).

Public procurement of cloud services

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).

Additional comments

23. Provide additional comments on other barriers, distorting factors or issues that you consider relevant to the functioning of this sector (max. 500 words).

4. Assessment of the sector regulation and other solutions

Currently, the functioning of the cloud sector is subject to a set of national and European regulations (in particular, recent regulations relating to the digital economy and the use of data). The objective of this section is to obtain information on possible improvements to the current regulations, as well as other possible solutions or recommendations that could foster competition in this key sector for the digital transformation.

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).

Additional comments

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).