



EUROPEAN COMMISSION

CASE DMA.100204
SP - Apple - Article 6(7) - Process

(Only the English text is authentic)

Digital Markets Act
**Regulation (EU) 2022/1925 of the European Parliament and of
the Council**

Article 8(2) Regulation (EU) 2022/1925

Date: 19/03/2025

This text is made available for information purposes only. A summary of this decision is published in all EU languages in the Official Journal of the European Union.

Parts of this text have been edited to ensure that confidential information is not disclosed. Those parts are replaced by a non-confidential summary in square brackets or are shown as [...].

Brussels, 19.3.2025
C(2025) 3001 final

COMMISSION IMPLEMENTING DECISION

of 19.3.2025

**pursuant to Article 8(2) of Regulation (EU) 2022/1925 of the European Parliament and
of the Council on contestable and fair markets in the digital sector**

Case DMA.100204 – Article 6(7) – Apple iOS and iPadOS – SP - Process

(Only the English text is authentic)

COMMISSION IMPLEMENTING DECISION

of 19.3.2025

pursuant to Article 8(2) of Regulation (EU) 2022/1925 of the European Parliament and of the Council on contestable and fair markets in the digital sector

Case DMA.100204 – Article 6(7) – Apple iOS and iPadOS – SP - Process

(Only the English text is authentic)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2022/1925 of the European Parliament and of the Council of 17 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act),¹ and in particular Article 8 thereof,

After consulting the Digital Markets Advisory Committee,

Whereas:

1. INTRODUCTION

- (1) In accordance with Article 8(2) of Regulation (EU) 2022/1925, the Commission hereby specifies the measures that Apple Inc., together with all the legal entities directly or indirectly controlled by Apple Inc. (hereinafter referred to as “Apple”), has to implement in relation to its operating systems iOS and iPadOS in order to effectively comply with Article 6(7) of Regulation (EU) 2022/1925 as regards the process for requesting interoperability concerning existing features, as further defined in Section 4 of this Decision.
- (2) Pursuant to Article 8(1) of Regulation (EU) 2022/1925, it is up to the gatekeeper to ensure and demonstrate compliance with its obligations, and the measures implemented by the gatekeeper shall be effective in achieving the objectives of the Regulation and of the relevant obligation. Recognising that for certain obligations gatekeepers may benefit from the Commission’s guidance on the concrete implementation measures, the legislation enables the Commission to specify, in the specific circumstances of a gatekeeper and core platform service(s), such concrete implementation measures. On the basis of an extensive and continuous dialogue with Apple and third parties, the Commission laid out the measures in this Decision.

¹ OJ L 265, 12.10.2022 p. 1-66.

2. PROCEDURE

2.1. Legal framework for specification proceedings

- (3) To specify the measures pursuant to Article 8(2) of Regulation (EU) 2022/1925, the Commission shall adopt an implementing act. This implementing act shall be adopted within six months from the opening of the proceedings pursuant to Article 20 of Regulation (EU) 2022/1925. Before adopting such an implementing act, the Commission shall communicate to the gatekeeper its preliminary findings, including the measures it is considering taking, within three months.
- (4) Pursuant to Article 8(6) of Regulation (EU) 2022/1925, to effectively enable interested third parties to provide comments, the Commission shall, when communicating its preliminary findings to the gatekeeper or as soon as possible thereafter, publish a non-confidential summary of the case and the measures that it is considering taking or that it considers the gatekeeper concerned should take. The Commission shall specify a reasonable timeframe within which such comments are to be provided.
- (5) Pursuant to Article 8(9) of Regulation (EU) 2022/1925, the Commission may, upon request or on its own initiative, decide to reopen specification proceedings where (a) there has been a material change in any of the facts on which the decision was based, (b) the decision was based on incomplete, incorrect or misleading information, or (c) the measures as specified in the decision are not effective.

2.2. Chronology of the proceedings

- (6) On 5 September 2023, the Commission adopted a decision designating Apple as a gatekeeper pursuant to Article 3(4) of Regulation (EU) 2022/1925 (the “Designation decision”).² The Designation decision lists the following core platform services (“CPSs”) that are provided by Apple and which individually constitute an important gateway for business users to reach end users: (i) its online intermediation service App Store; (ii) its operating system iOS; and (iii) its web browser Safari. On 29 April 2024, the Commission adopted a decision amending the Designation Decision to include Apple’s operating system iPadOS as a core platform service.³
- (7) Pursuant to Article 3(10) of Regulation (EU) 2022/1925, Apple has had to comply with the obligations laid down in that Regulation in relation to App Store, iOS and Safari, since 7 March 2024, and in relation to iPadOS, since 4 November 2024.
- (8) The Commission held an extensive regulatory dialogue with Apple regarding compliance with its interoperability obligation. Between June 2023 and September 2024, the Commission and Apple held more than ten meetings focusing on Apple’s compliance with Article 6(7) of Regulation (EU) 2022/1925.⁴ In order to be able to monitor how Apple processes requests for interoperability, on 2 April 2024, the

² Decision C(2023) 6100 final.

³ Decision C(2024) 2500 final.

⁴ The Commission met Apple to discuss Apple’s compliance with Article 6(7) of Regulation (EU) 2022/1925 on, *inter alia*, 28 June 2023, 21 September 2023, 16 November 2023, 14 December 2023, 18 January 2024, 8 February 2024, 20 June 2024, 9 July 2024, 12 July 2024, 17 July 2024, and 3 September 2024, both online and in person. The Commission also sent Apple requests for information and received Apple’s replies, see in particular: Apple’s reply of 6 November 2024 to RFI 7 (DMA.100196) of 27 June 2024; and Apple’s reply to RFI 8 (DMA.100196) of 11 July 2024. See also Apple’s submission of 13 November 2023 on “Apple’s compliance plans in relation to Article 6(7)”.

Commission requested Apple to submit monthly reports on the requests Apple receives through its request form.⁵

- (9) On 3 September 2024, the Commission informed Apple of its intention to assist Apple in its compliance efforts in relation to a selected field of use cases and to its general interoperability request process through opening of specification proceedings pursuant to Article 8(2) of Regulation (EU) 2022/1925.
- (10) On 19 September 2024, the Commission adopted a decision opening proceedings pursuant to Article 20(1) of Regulation (EU) 2022/1925 with a view to adopting a decision pursuant to Article 8(2) of that Regulation specifying the measures that Apple has to implement in relation to its operating systems iOS and iPadOS in order to effectively comply with Article 6(7) of that Regulation (“Specification Opening Decision”).⁶
- (11) On 25 September 2024, the Commission held a state of play meeting with Apple in which it outlined to Apple the preliminary scope of the specification proceedings and a proposal for a constructive engagement centred around technical meetings, in line with the spirit of the regulatory dialogue and Article 8 of Regulation (EU) 2022/1925.
- (12) The Commission and Apple held three extensive technical meetings between 9 October and 7 November 2024.⁷ The engagement between the Commission and Apple also included written questions by the Commission⁸ and spontaneous submissions by Apple.⁹
- (13) On 13 December 2024, the Commission outlined to Apple in a conference call the scope of the upcoming Preliminary Findings.
- (14) On 18 December 2024 the Commission communicated to Apple its Preliminary Findings pursuant to Article 8(5) and 34(1) of Regulation (EU) 2022/1925, providing Apple with the opportunity to comment on its findings and the proposed measures.¹⁰

⁵ Commission’s RFI 5 (DMA.100196) of 12 March 2024; and RFI 6 (DMA.100196) of 2 April 2024. In the Commission’s RFI 7 (DMA.100196) of 27 June 2024 and subsequent e-mails from the Commission to Apple of 19 July 2024, and 4 September 2024, the Commission requested changes to the formatting of the monthly report. In the Commission’s RFI 11 (DMA.100196) of 28 November 2024, the Commission requested to submit monthly reports for an additional six months.

⁶ Decision C(2024) 6661 final.

⁷ The Commission held technical meetings with Apple on the specification proceedings relating to process on 9 October 2024, 24 October 2024 and 7 November 2024.

⁸ Apple’s reply of 7 October 2024 to the Commission’s Request for inputs on APIs of 30 September 2024; Apple’s reply of 21 October 2024 to the Commission’s Request for inputs on transparency and internal features of 14 October 2024; and Apple’s reply of 14 November 2024 to the Commission’s Request for inputs on 8 November 2024.

⁹ The Commission received a number of submissions from Apple during these specification proceedings. See in particular: Apple’s letter of 15 October 2024 on “Case DMA.100203 / DMA.100204: Apple Article 8(2) specification proceedings”; Apple’s submission of 24 October 2024 on “Submission on the interpretation of Article 6(7) DMA”; Apple’s Letter of 17 December 2024 concerning the ongoing specification proceedings pursuant to Article 8(2) DMA; and the Commission’s Reply to Apple’s Letter of 17 December 2024. In the same period, Apple sent two submissions with suggestions on proposed changes to the request-based approach, cf. Apple’s submission dated 5 November 2024 on “Apple’s proposed updates to the Article 6(7) DMA interoperability request process”; and Apple’s submission dated 20 November 2024 on “Apple’s proposed updates to the Article 6(7) DMA interoperability request process”.

¹⁰ The Commission’s Preliminary Findings on Case DMA.100204, Decision C(2024) 9277 final.

- (15) On the same day Apple requested access to the Commission’s documents referenced in the Preliminary Findings according to Article 8(1) and Article 8(2) of the Implementing Regulation (EU) 2023/814. On the same day, in response, the Commission sent the requested non-confidential version of all the documents mentioned in the Preliminary Findings. On 18 December 2024, Apple also requested access to the Commission’s file pursuant to Article 8(3) of the Commission’s Implementing Regulation (EU) 2023/814. Apple’s external legal counsel was granted full access to the Commission’s file in the present case at the Commission’s premises via a data room pursuant to the Terms of Disclosure laid down in the Commission Decision of 18 December 2024 (“Data Room Decision”).¹¹ The access through data room was given in the period 19 December 2024 - 20 December 2024 and then continued in the period from 6 January 2025 - 10 January 2025.¹² Apple’s external counsel prepared [...] the data room report. The [...] data room report was shared with Apple on 10 January 2025 (“Data Room Report”).¹³
- (16) In parallel, on 18 December 2024, in line with Article 8(6) of Regulation (EU) 2022/1925, the Commission published a non-confidential summary of the case and the Commission’s proposed measures to enable interested third parties to provide comments.
- (17) The public consultation was open until 9 January 2025 and the Commission granted extensions upon requests until 15 January 2025. During the consultation, the Commission received 51 contributions from business users, end users and other interested third parties. All submissions were shared with Apple on a rolling basis, as agreed with Apple’s external legal counsel.¹⁴
- (18) On 10 January 2025, Apple requested an extension to respond to the Preliminary Findings. The Commission granted an extension until 20 January 2025, thereby granting Apple one full calendar month including 20 working days to submit its observations in a process lasting only a total of 6 months.¹⁵
- (19) On 17 January 2025, Apple sent to the Commission a request to exceed the page limit for its reply to the Preliminary Findings, set at 50 pages as prescribed by the Implementing Regulation (EU) 2023/814, by 20 pages. The Commission granted an extension to exceed the page limit by 10 pages, thereby granting Apple 60 pages to respond to the Preliminary Findings.¹⁶

¹¹ Commission Decision setting out the terms of disclosure for the purpose of access to the Commission’s file pursuant to Article 34(4) of Regulation (EU) 2022/1925 and Article 8 of Regulation (EU) 2023/813, cf. Decision C(2024) 9287 final.

¹² The initial deadline for the data room (8 January 2025) was extended until 10 January 2025 at the request of Apple’s external counsel. See email exchanges between Apple’s external counsel to the Commission of 8 January 2025 and 9 January 2025.

¹³ Data Room Report.

¹⁴ The Commission sent third parties’ contributions to Apple via email on 20 December 2024; on 3 January 2025; on 9 January 2025; on 14 January 2025; on 16 January 2025; and on 17 January 2025. After the Public Consultation the Commission received an additional submission which was sent to Apple on 6 February 2025.

¹⁵ Apple’s e-mail to the Commission of 10 January 2025 with request for deadline extension for reply to the Commission’s Preliminary Findings, and the Commission’s e-mail to Apple on 13 January 2025 extending the deadline to reply to the Preliminary Findings.

¹⁶ Apple’s e-mail to the Commission of 17 January 2025 regarding extension of page limit; and the Commission’s e-mail to Apple of 17 January 2025 extending the page limit.

- (20) On 20 January 2025, Apple sent its reply to the Preliminary Findings.¹⁷ In addition to its reply to the Preliminary Findings, on 22 January 2025, Apple also submitted a mark-up of the measures included in the Annex of the Preliminary Findings with Apple's suggested changes and comments.¹⁸ Apple sent updated comments on the measures on 28 January 2025, 31 January 2025, and 4 February 2025.¹⁹
- (21) The Commission held meetings with Apple to discuss Apple's feedback on the measures on 23 January 2025 and 29 January 2025.²⁰ The Commission sent an additional request for information to Apple on 30 January 2025, to which Apple responded on 4 February 2025.²¹ Apple also provided a submission on 4 February 2025.²²
- (22) By way of courtesy, on 10 February 2025 the Commission sent to Apple amended proposed measures reflecting observations received in the Public Consultation and Apple's observations, and gave Apple until 17 February 2025 to submit final comments on the proposed measures.²³
- (23) The Commission held a meeting with Apple to discuss Apple's feedback on the measures on 13 February 2025²⁴ and the Commission received Apple's input on the amended proposed measures on 14 February 2025.²⁵ The Commission sent an additional request for information to Apple on 14 February 2025, to which Apple responded on 18 February 2025.²⁶ On 21 February 2025, Apple sent another email summarising its position.²⁷

2.3. The Commission's engagement with Apple

- (24) The Commission organised the specification proceedings in a diligent and transparent manner, in accordance with the text and the spirit of Regulation (EU) 2022/1925. As shown in Section 2.2, throughout the proceedings, the Commission actively engaged with Apple on all matters within the scope of the proceedings, kept Apple fully informed of next steps, offered Apple extensive meetings and accepted all requests for meetings coming from Apple.
- (25) Apple was made aware of the upcoming formal opening of the proceedings more than two weeks ahead of the adoption of the Specification Opening Decision. The Commission proactively agreed with Apple on a clear and detailed timetable of engagement which ensured that there would be sufficient time to discuss each of the

¹⁷ Apple's Reply to Preliminary Findings on Case DMA.100204.

¹⁸ Apple's submission on "Apple's comments on the EC's proposed measures".

¹⁹ Apple submitted a second mark-up of the measures included in the Annex of the Preliminary Findings on 28 January 2025; feedback on [measures], cf. email from Apple of 31 January 2025, subject "RE: DMA.100203 & DMA.100204 - recap and way forward"; and feedback [on measures], cf. email from Apple to the Commission on 4 February 2025, subject "Re: DMA.100203 & DMA.100204 - recap and way forward".

²⁰ Following the technical meetings the Commission sent an e-mail to Apple on 30 January 2025 summarizing the discussions which took place during the technical meetings.

²¹ Apple's Response to RFI 12 of 30 January 2025.

²² Apple's submission on [timelines] of 4 February 2025.

²³ E-mail from the Commission to Apple of 10 February 2025, subject "DMA.100204 - Draft final measures for observations".

²⁴ Minutes from meeting between the Commission and Apple on 13 February 2025.

²⁵ Email from Apple to the Commission on 14 February 2025, subject "Re: DMA.100204 - Draft final measures for observations".

²⁶ Apple's response to the Commission's RFI of 14 February 2025.

²⁷ Email from Apple to the Commission of 21 February 2025 at 13:38 with subject line "Following up".

aspects of the investigation. For most technical meetings, which lasted approximately four hours each, the Commission scheduled fallback meetings with Apple on the following day, to ensure sufficient time for the discussions. Apple never expressed an interest to use this additional time to extend any of the discussions, even when explicitly queried.

- (26) The Commission informed Apple in line with Article 8(5) of its preliminary findings in a timely manner in full regard of the process and the deadlines set out in Article 8 Regulation (EU) 2022/1925. The Preliminary Findings state the reasons that led the Commission to propose each of the measures it specified in the scope of this Decision.
- (27) Furthermore, as described in the previous section, the Commission continued the engagement with Apple even after the adoption of the Preliminary Findings, by taking into account its submissions and remarks, and holding meetings with Apple to discuss Apple's feedback on the measures. In the spirit of good cooperation, on 10 February 2025, the Commission shared the amended proposed measures. Apple provided comments on some of these measures during a meeting on 13 February 2025 and in an email sent to the Commission on 14 February 2025.
- (28) It follows from the above that the Commission, through an extensive regulatory dialogue that started following the entry into force of Regulation (EU) 2022/1925, provided Apple with the opportunity to provide its views before and after the opening of these proceedings.
- (29) As part of this engagement, Apple sent to the Commission, during these proceedings, a total of 12 submissions and outlined potential and preliminary compliance proposals for the request-based process covered by these proceedings.
- (30) In that respect, the Commission first notes that under Article 8 of Regulation (EU) 2022/1925, it is a prerogative of the Commission to specify the details of how a gatekeeper should comply with an obligation of said Regulation. While all Apple's proposals and submissions have been carefully assessed and taken into account by the Commission,²⁸ the purpose of specification proceedings is not to assess the suitability of the gatekeeper's proposal in view of making such proposals binding.²⁹
- (31) Furthermore, and for completeness, the Commission notes that some of Apple's proposals focus on practical details – [...] ³⁰ – which in some cases may be relevant at the stage of the implementation of this Decision but do not form part of the measures specified in this Decision. The assessment of the actual compliance by the gatekeeper will be monitored by the Commission following the adoption of the decision pursuant to Articles 8(2) and 26(1) of Regulation (EU) 2022/1925.
- (32) Against this background, and contrary to Apple's claims,³¹ the Commission considers that it discharged its obligations under Article 41 of the Charter (right to

²⁸ Where appropriate, the Commission has built upon these proposals in defining the measures. See for instance Section 5.4.1 on Queries for technical references and Section 5.6.2.1 on the Internal review mechanism.

²⁹ Article 8 of Regulation (EU) 2022/1925 does not provide for making commitments offered by the gatekeeper binding in the context specification proceedings. The Commission may only do so in a market investigation into systemic non-compliance pursuant to Article 25 of Regulation (EU) 2022/1925 in combination with Article 18 of that Regulation.

³⁰ See Section 5.5.2.3 of this Decision.

³¹ Apple's reply to preliminary findings of 18 December 2024, Section X.

good administration). In particular, the Commission duly considered Apple's submissions on the principle of proportionality, Apple's fundamental rights and Apple's intellectual property rights (IPRs) as set out in Section 5.3.2. The Commission also took Apple's submissions related to these proceedings into account. Apple's claims that the Commission did not reply to all its submissions and arguments prior to the adoption of the Preliminary Findings disregard that the object of the Preliminary findings is precisely to give Apple the opportunity to be heard on the Commission's findings and the measures it may take as a result: should Apple consider that its prior submissions have not been duly taken into account, the reply to the Preliminary Findings allows Apple to argue accordingly, as it has. Moreover, it is established case law that, even in adversarial proceedings which would result in a fine, which is not the case of the present proceedings, the duty to state reasons does not require that the Commission reply to each and every submission and argument raised by the company during the administrative procedure.³² In its reply to the Preliminary Findings, Apple was given the opportunity to respond to each of the reasons put forward by the Commission to justify the measures it intended to take, and the Commission took into account Apple's remarks, in a number of cases leading to amendments of the measures originally envisaged.

2.4. The Commission's engagement with third parties

- (33) The Commission has engaged with third parties throughout the proceedings since Apple launched its formal process for lodging interoperability requests through a form.³³ The Commission has received feedback from various stakeholders, including from developers who requested interoperability in accordance with Article 6(7) of Regulation (EU) 2022/1925, on the effectiveness of this system to achieve effective interoperability as mandated by this provision. In particular, the Commission has engaged with third parties through meetings, and submissions received from third parties.³⁴ The Commission has also sent several requests for information to developers.³⁵ Furthermore, in the context of the public consultation conducted after the adoption of the Preliminary Findings pursuant to Article 8(4) of Regulation (EU) 2022/1925,³⁶ the Commission has received feedback from developers, industry

³² See by analogy, judgment of 9 April 2019, *Qualcomm v Commission*, T-371/17, EU:T:2019:232, paragraphs 70 to 71 and case law cited. See also judgement of 24 May 2023, *Meta v Commission*, T-451/20, EU:T:2023:276, paragraph 160.

³³ Cf. recital (97).

³⁴ The Commission has in particular met with more than a dozen third parties, including developers, industry representatives and non-profit organisations.

³⁵ The Commission sent a request for information ("RFI 1") on 11 July 2024 and 2 August 2024 asking developers for information on their experience requesting for interoperability and Apple's process for handling their request. RFI 1 was sent to a total of 244 recipients, including developers who had sent interoperability requests to Apple, as well as to a selection of the largest developers, based on a list of developers with the largest number of applications downloaded for iPadOS. The Commission sent a second request for information ("RFI 2") on 10 October 2024 asking developers for information on their experience identifying features that Apple uses for its own services and hardware. RFI 2 was sent to a total of 45 recipients, to gather qualitative input on the extent of informational gaps that would impact the ability of interested third parties to effectively request interoperability. RFI 2 was sent to a subset of respondents to RFI 1, covering developers who had indicated in their reply to question A.A.1 of RFI 1 (information about the developer's request for interoperability) that they had introduced an interoperability request or had plans to introduce such a request, as this subset of developers was deemed susceptible to be able to provide useful feedback to RFI 2.

³⁶ Cf. recital (16) and (17).

associations, non-profit organisations and citizens on the measures envisaged in these Preliminary Findings.³⁷

- (34) In its reply to the Preliminary Findings, Apple indicates in various instances³⁸ that specific measures were considered by the Commission without having been requested by third parties. In that respect, the Commission notes that the purpose of the present Decision, and of the specification proceedings in general, is not to address specific requests or demands from third parties, but to specify the measures that are appropriate to ensure effective compliance with the legislative provisions. While the views of third parties can help it specify measures, the Commission is not precluded from specifying measures that were not expressly referred to by third parties.
- (35) Furthermore, the input collected from third parties has been used to inform the specification by providing qualitative insights and considering, to the extent relevant, the responses independently, not as a statistical measure of consensus.
- (36) In any case, the feedback from both Apple and third parties has been thoroughly analysed and taken into account throughout the proceedings, as reflected in this Decision.

3. INTEROPERABILITY OBLIGATION PURSUANT TO ARTICLE 6(7) OF REGULATION (EU) 2022/1925

- (37) Pursuant to Article 6(7) of Regulation (EU) 2022/1925, gatekeepers shall:
- (a) Allow providers of services and providers of hardware, free of charge, effective interoperability with, and access for the purposes of interoperability to, the same hardware and software features accessed or controlled via the operating system or virtual assistant listed in the designation decision pursuant to Article 3(9) of Regulation (EU) 2022/1925 as are available to services or hardware provided by the gatekeeper. Furthermore, the gatekeeper shall allow third parties and alternative providers of services provided together with, or in support of, CPSs, free of charge, effective interoperability with, and access for the purposes of interoperability to, the same operating system, hardware or software features, regardless of whether those features are part of the operating system, as are available to, or used by, that gatekeeper when providing such services; and
 - (b) Not be prevented from taking strictly necessary and proportionate measures to ensure that interoperability does not compromise the integrity of the operating system, virtual assistant, hardware or software features provided by the gatekeeper, provided that such measures are duly justified by the gatekeeper.
- (38) Article 2(29) of Regulation (EU) 2022/1925 defines interoperability as the ability to exchange information and mutually use the information which has been exchanged

³⁷ Most business users and organisations (primarily developers and industry organisations) expressed support for the envisaged measures and often provided substantive suggestions on enhancing the measures. The Commission also received contributions from end users and a few other third parties, a majority of which expressed general concerns with respect to the need to preserve security and privacy, with a few providing specific comments on the envisaged measures.

³⁸ Apple's reply to preliminary findings of 18 December 2024, paragraphs 7, 25, 26, 27, 28, 36, 61 (b), 79, 80, 96, 152, 197 and 208.

through interfaces or other solutions, so that all elements of hardware or software work with other hardware and software and with users in all the ways in which they are intended to function.

- (39) Pursuant to Article 8(1) of Regulation (EU) 2022/1925, the gatekeeper shall ensure that the implementation of measures implemented to ensure compliance with Article 6(7) of that Regulation complies with applicable law, in particular Regulation (EU) 2016/679, Directive 2002/58/EC, legislation on cybersecurity, consumer protection, product safety, as well as with the accessibility requirements.
- (40) While the measures that gatekeepers may introduce in relation to the interoperability solutions are limited to integrity measures, this does not exclude that gatekeepers may apply measures enabling end users to effectively protect security in relation to third-party software applications, pursuant to Article 6(4) of Regulation (EU) 2022/1925. Furthermore, software application store providers (including a software application store in relation to which a gatekeeper may have been designated, subject to Regulation (EU) 2022/1925 and in particular Article 6(12) of that Regulation) may introduce safeguards³⁹ to prevent abuse by malicious actors, protect the security and privacy of end users, and comply with applicable law (in particular Regulation (EU) 2022/2065,⁴⁰ Regulation (EU) 2016/679, Directive 2002/58/EC, legislation on cybersecurity, consumer protection, product safety, as well as with the accessibility requirements) for apps distributed on their stores.

3.1. Scope of Article 6(7) of Regulation (EU) 2022/1925 – effective interoperability

3.1.1. *Interoperability with the same features as available to the gatekeeper Apple and under equal conditions*

- (41) Pursuant to Article 6(7) of Regulation (EU) 2022/1925, effective interoperability and access for the purposes of interoperability should be granted with the same features as are available or used by the gatekeeper’s services or hardware.
- (42) The use of the adjective “*same*” implies that the very same feature – not a similar one – needs to be made accessible to third parties. Recitals 55 and 57 of Regulation (EU) 2022/1925 clarify that the interoperability solution should be equally effective to the solution available to the gatekeeper and should be made available under equal conditions. Equal effectiveness and equality of conditions are assessed by comparison to how the gatekeeper implements interoperability and access to hardware and software features for its own services and hardware. It includes aspects both user-facing and non-user-facing, such as the end user journey, ease of use, device and software set-up, data transmission speed, and energy consumption. Indeed, these may be critical properties of the feature itself.
- (43) Apple argued that Article 6(7) of Regulation (EU) 2022/1925 simply requires Apple to allow for interoperability which is effective, i.e. putting third parties in a position to offer an “*alternative solution*”, but does not mandate that interoperability must be

³⁹ Such safeguards should not undermine effective interoperability with features as prescribed in Article 6(7) of Regulation (EU) 2022/1925 and implementing acts specifying measures that a gatekeeper should implement to effectively comply with the obligation in that Article.

⁴⁰ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Services Act), OJ L 277, 27.10.2022, p. 1-102.

“*equally effective*” to the solution available to Apple or be provided “*under equal conditions*”.⁴¹

- (44) The Commission notes that Apple’s position is contradicted by the language and aim of Article 6(7) of Regulation (EU) 2022/1925 and its respective recitals. By referring to “*the same features*” in Article 6(7) of Regulation (EU) 2022/1925 and the need for “*equally effective interoperability*” in recital 55 of that Regulation, the EU legislator made a clear distinction. On the one hand, the feature – the “*what*” of the interoperability – needs to be the same as the feature available to the gatekeeper’s services and hardware. On the other hand, the actual interoperability solution – the “*how*” of the interoperability – needs to be “*equally effective*” to the solution available to the gatekeeper and be provided “*under equal conditions*,” without necessarily being exactly the same solution. By mandating an equally effective interoperability solution, the legislator acknowledged that the implementation of interoperability does not always need to (and potentially cannot always) be the same for the gatekeeper and third parties, but interoperability must be granted to the same feature under equal conditions.
- (45) Providing interoperability with the same feature allows third parties to offer their services and hardware and innovate on an equal footing with the gatekeeper. Access to a partial, degraded or barren feature would not create a level playing field required under Article 6(7) of Regulation (EU) 2022/1925 and is therefore liable to undermine the goals of contestability and fairness of that Regulation.
- (46) The interpretation of Article 6(7) of Regulation (EU) 2022/1925 proposed by Apple is at odds with the clear language of that provision, which refers, as explained, to the “*same*” features. Apple’s interpretation would also be contrary to the legislator’s aim to ensure legal certainty and to facilitate *ex ante* compliance so that business and end users can benefit from Regulation (EU) 2022/1925 without delay.⁴² The legislator achieved this goal by requiring interoperability with the same feature in a way that is equally effective as the solution available to the gatekeeper independently of the feature and third party. It is entirely unclear what level of interoperability would be required under the legal tests proposed by Apple: in its reply to the Preliminary Findings in the parallel specification proceedings on Features for Connected Physical Devices (DMA.100203), to which Apple refers in its reply to the Preliminary Findings in the present proceedings,⁴³ Apple argues that it [...]⁴⁴ [...]⁴⁵ [...]⁴⁶ [...]⁴⁷ [...].⁴⁸
- (47) Common to Apple’s proposed legal standards is the need to assess why third parties are currently unable to provide a “*competitive offering*” or an “*alternative solution*”.

⁴¹ Apple’s reply to the Preliminary Findings, paragraphs 16, 41, 42, and 45(a).

⁴² Recital 5 of Regulation (EU) 2022/1925. The legislator adopted that regulation to aid the shortcomings that antitrust “*enforcement occurs ex post and requires an extensive investigation of often very complex facts on a case-by-case basis*”.

⁴³ Apple’s reply to the Preliminary Findings in particular paragraphs 41, 42, 43, 45, 67 and 137.

⁴⁴ Apple’s reply to the Preliminary Findings on Features for Connected Physical Devices, paragraph 55. See also Apple’s reply to the Preliminary Findings, paragraphs 66, 135, 144(a).

⁴⁵ Apple’s reply to the Preliminary Findings on Features for Connected Physical Devices, paragraph 6, second bullet.

⁴⁶ Apple’s reply to the Preliminary Findings on Features for Connected Physical Devices, paragraph 53.

⁴⁷ Apple’s reply to the Preliminary Findings on Features for Connected Physical Devices, paragraph 57.

⁴⁸ Apple’s reply to the Preliminary Findings on Features for Connected Physical Devices, paragraphs 55 and 20.

Such an assessment, which would require an individual examination of the specific circumstances of each third party, is not required by Article 6(7) of Regulation (EU) 2022/1925. Such an assessment would introduce the requirement to investigate on a case-by-case basis the effects on competition of a gatekeeper's given conduct, which the legislator explicitly rejected.⁴⁹ Moreover, this would undermine effective and timely compliance, also affecting Apple's general obligation to demonstrate compliance under Article 8(1) of Regulation (EU) 2022/1925.

- (48) Apple's statements regarding specific features in its reply to the Preliminary Findings in the parallel specification proceedings on Features for Connected Physical Devices (DMA.100203) further underline how its approach is in contradiction with the wording and the aim of Article 6(7) of Regulation (EU) 2022/1925. For example, for iOS notifications, Apple claims that the Commission must conduct "*a rigorous assessment of the [...] importance of the notifications functionalities and their impact on contestability*,"⁵⁰ even for the basic functionality that end users can reply to notifications on third-party smartwatches just like on the Apple Watch. Such an assessment of impact or effects is not provided for in Regulation (EU) 2022/1925, nor is the scope of Article 6(7) of that Regulation limited to features of "*importance*". In another instance, for the NFC controller in Reader/Writer Mode, Apple argued that it already provides "*the tools necessary*" for interoperability⁵¹ based on the fact that one single developer was able to develop a "*technical workaround*" requiring significant engineering work and delaying its product launch by several years. Again, the Commission reiterates that Article 6(7) of Regulation (EU) 2022/1925 does not provide for an assessment of whether making available some capability of a feature could, under certain circumstances or for certain third parties, be sufficient to safeguard contestability, but instead mandates effective interoperability with the same feature as available to Apple's services or hardware.

3.1.2. *Features and functionalities*

- (49) The scope of a specific feature must be assessed in light of the goal of Article 6(7) of Regulation (EU) 2022/1925 to ensure that capabilities controlled by the operating system are not reserved by the gatekeeper for its own services or hardware, which would be contrary to the clear language and objective of Article 6(7) of that Regulation. Features within the meaning of Article 6(7) of Regulation (EU) 2022/1925 include capabilities that the operating system makes available to the gatekeeper's services or hardware. Such capabilities encompass technical functionalities of the device on which the operating system runs, such as near-field-communication technology, secure elements and processors, authentication mechanisms and the software used to operate those technologies.⁵²

⁴⁹ Recital 11 of Regulation (EU) 2022/1925: "*This Regulation pursues an objective that is complementary to, but different from that of protecting undistorted competition on any given market, as defined in competition-law terms, which is to ensure that markets where gatekeepers are present are and remain contestable and fair, independently from the actual, potential or presumed effects of the conduct of a given gatekeeper covered by this Regulation on competition on a given market.*"

⁵⁰ Apple's reply to the Preliminary Findings on Features for Connected Physical Devices, paragraph 127.

⁵¹ Apple's reply to the Preliminary Findings on Features for Connected Physical Devices, paragraph 365.

⁵² Recital 56 of Regulation (EU) 2022/1925.

- (50) Therefore, a feature consists of one or more functionalities.⁵³ A functionality alone, or in combination with other functionalities, may be necessary to enable access to a feature. Therefore, denying or undermining access to a functionality may be tantamount to denying or undermining access to a feature. For example, in the parallel specification proceedings on Features for Connected Physical Devices (DMA.100203), the iOS notifications feature includes a functionality to read notifications and a functionality to reply to them. Undermining access to any of them would undermine access to the iOS notifications feature.
- (51) In its reply to the Preliminary Findings, Apple argues that the Commission relied on an overly broad definition of features, while not defining features or functionalities.⁵⁴ Further, in its reply to the Preliminary Findings in the parallel specification proceedings on Features for Connected Physical Devices (DMA.100203), to which Apple refers in its reply to the Preliminary Findings in the present proceedings,⁵⁵ Apple disputes that a feature can consist of several functionalities and argues that there is no obligation to provide access to the same functionalities as available to Apple.⁵⁶ The Commission rejects this interpretation, as it would allow gatekeepers, by withholding access to a functionality, to withhold access to a feature of the operating system and preserve that feature exclusively for its own services or hardware. Whenever a feature consists of several functionalities, effective interoperability with that feature requires interoperability with all of those functionalities.⁵⁷ Providing access to only some functionalities of a feature would not amount to effective interoperability with that same feature and would be contrary to the objective of Article 6(7) of Regulation (EU) 2022/1925 to create a level playing field.

3.1.3. *Future updates and new functionalities*

- (52) Article 6(7) of Regulation (EU) 2022/1925 aims at ensuring that third-party providers of services and hardware relying on an operating system to access their users are able to provide their services and hardware on a level playing field with the gatekeeper's services and hardware, insofar as access to the operating system is required.⁵⁸ A level playing field only exists if third-party providers of connected physical devices or related services obtain effective access to any updates, including new functionalities, at the same time as the gatekeeper and under equal conditions. In practice, this means that third parties need to be able to test any of such planned updates or new functionalities and obtain access to them once they are available to the gatekeeper's own services or hardware.
- (53) Apple argues that it does not need to allow third parties with interoperability for future updates, including new functionalities, of the features controlled or accessed

⁵³ A functionality of a feature may be a feature in its own right. This is similar to how intermediate products in a manufacturing supply chain are produced from other intermediate products in earlier steps of the manufacturing process, but also serve as inputs for subsequent steps. For operating systems, these layered components are collectively called "software stack". Third-party applications are built using components at different levels of the software stack.

⁵⁴ Apple's reply to the Preliminary Findings, paragraphs 45(b) and 66.

⁵⁵ Apple's reply to the Preliminary Findings, in particular paragraphs 45, 67, 137.

⁵⁶ Apple's reply to the Preliminary Findings on Features for Connected Physical Devices, Section V.D.

⁵⁷ In the Preliminary Findings, the Commission used the expression "feature functionality" as a shorthand for "functionality of the feature". In this decision, the expression has been replaced with "functionality" when clear from the context, but the meaning has not changed.

⁵⁸ Recital 55 of Regulation (EU) 2022/1925.

via iOS or iPadOS at the same time as they are available to Apple. According to Apple, such an obligation is not within the scope of Article 6(7) of Regulation (EU) 2022/1925 and would limit Apple's incentives to innovate, increase the development cost of new features, reduce Apple's competitive advantage and allow third parties to free ride on Apple's innovation.⁵⁹

- (54) In this respect the Commission notes that Article 6(7) of Regulation (EU) 2022/1925 sets out that if a feature is available to or used by a gatekeeper, it needs to be made available and fully interoperable for third parties. Recital 65 of that Regulation further stipulates that a gatekeeper should ensure compliance with Regulation (EU) 2022/1925 by design and deploy a proactive approach to compliance. Especially for new functionalities of features which have already been made interoperable, it is unclear why a gatekeeper would not be able to design and implement these functionalities as interoperable from the start. If such updates were not made interoperable, the effective interoperability that was previously granted would regress.
- (55) The Commission also notes that contrary to Apple's claims,⁶⁰ providing interoperability with new features and functionalities when they become available to the gatekeeper does not deprive the gatekeeper of its incentives to innovate or of its competitive advantage. As regards Apple, this is clear from the following:
- (a) *First*, any development or improvement of iOS or iPadOS features improves in the first place iOS or iPadOS itself, and therefore its attractiveness to end users. As such, these development efforts benefit first and foremost Apple as the exclusive provider of iPhones and iPads – the only devices that can run iOS and iPadOS, respectively. Article 6(7) of Regulation (EU) 2022/1925 does not take this advantage away from Apple.
 - (b) *Second*, even with full interoperability, Apple continues to enjoy an intrinsic advantage in the development of services and hardware accessing iOS or iPadOS features. As the developer of iOS and iPadOS, only Apple decides which iOS or iPadOS features are being prioritized, planned and developed. Apple can use this privileged position for the development of its services and hardware that make use of the respective iOS or iPadOS features. Apple can thus already design its products to integrate with those new iOS or iPadOS features in parallel – and will often design new iOS or iPadOS features precisely to support innovations to its products – ahead of any third party. Third parties will have access to the iOS or iPadOS feature at the same time (i.e. in the same iOS or iPadOS release) as Apple starts using the feature for its services and hardware, but the third parties then still need to go through implementing the new iOS or iPadOS feature for their own services and hardware, while Apple can already fully use it from day one after the iOS or iPadOS release. This Decision does not require Apple to disclose its internal development plans and pipeline to third parties. However, once a (new or updated) feature becomes available to Apple's services or hardware, Apple needs to make the feature available to third parties. A further delay would not be reconcilable with the obligation to grant access “*under equal conditions*”

⁵⁹ Apple's reply to the Preliminary Findings on Features for Connected Physical Devices, Section V.F.d; and Apple's reply to the Preliminary Findings, paragraphs 161-169.

⁶⁰ Apple's reply to the Preliminary Findings, paragraph 168.

and afford Apple an even greater first-mover advantage, making it very difficult or impossible for third parties to effectively compete with Apple on a level playing field. On the contrary, if Apple's argumentation were to be validated it would leave it entirely to Apple's discretion as of the time it would need to provide interoperability for new functionalities.

- (c) *Third*, Apple fails to take into account the overall incentives and opportunities for innovation that interoperability creates, both for Apple and for third parties. As set out in Section 3.2 of this Decision, a more open ecosystem does not preclude innovation of Apple's products or features subject to this Decision. Furthermore, access to features under equal conditions fosters contestability and fairness for third parties dependent on Apple's operating systems and indirectly increases Apple's incentives to bring innovation within iOS and iPadOS.

3.1.4. *Eligibility of beneficiaries, apps and use cases*

- (56) Article 6(7) of Regulation (EU) 2022/1925 does not provide for any limitations as to the beneficiaries, apps, products, and use cases for interoperability with iOS or iPadOS features, insofar as this feature is available to, or used by, the gatekeeper. If a business user or end user is eligible under Article 1(2) of Regulation (EU) 2022/1925, then Article 6(7) of that Regulation applies. Indeed, one of the key objectives of Regulation (EU) 2022/1925 is to foster and promote innovation in the digital sector and remove barriers that could prevent market participants from innovating.⁶¹ Specifically, Article 6(7) of Regulation (EU) 2022/1925 aims to allow third parties to develop and provide innovative services or hardware complementing or supporting the designated operating system offered by a gatekeeper.⁶² Such innovation can only take place if interoperability is not limited to a select group of beneficiaries, apps or use cases. In particular, it cannot be left to the discretion of the gatekeeper to decide which third parties, apps, products and use cases can benefit from the interoperability mandated by Article 6(7) of Regulation (EU) 2022/1925, whether through discriminatory restrictions of any nature or the outright exclusion of beneficiaries, apps, or use cases.
- (57) According to Apple, Article 6(7) of Regulation (EU) 2022/1925 only requires Apple to provide interoperability to a third party that is a competitor of an Apple service or hardware in the Union. To support its interpretation, Apple refers to recitals 55 and 57 of Regulation (EU) 2022/1925, which mention "*competing service or hardware providers*" and "*competing third parties*" respectively.⁶³
- (58) Apple's restrictive interpretation of Article 6(7) of Regulation (EU) 2022/1925 is not supported by the language or aim of that provision.
 - (a) *First*, the language of Article 6(7) of Regulation (EU) 2022/1925 does not contain any limitations on the eligibility of beneficiaries, apps and use cases of this provision. It simply refers to "*providers of services and providers of*

⁶¹ See, for example, recitals 4, 32 and 107 of Regulation (EU) 2022/1925.

⁶² Recital 57 of Regulation (EU) 2022/1925.

⁶³ Apple's reply to preliminary findings of 18 December 2024, paragraphs 16, 66.

hardware”. An interpretation of the recitals cannot limit the scope of the relevant operative provision.⁶⁴

- (b) *Second*, as described above, Article 6(7) of Regulation (EU) 2022/1925 aims at promoting innovation by opening up access to operating system features which currently operate as a gate and lock end users into gatekeepers’ ecosystems. If interoperability were to be limited to those services and hardware that a gatekeeper already offers, the gatekeeper would enjoy a first-mover advantage for every use case relying on reserved iOS or iPadOS features, leaving little room for innovation. It would be up to the gatekeeper to determine which new services or hardware are in the scope of the obligation. This would effectively cap innovation at the level of the gatekeeper and tie innovation to the moment in time when the gatekeeper decides to use the available iOS or iPadOS features to offer a specific use case – if ever. Third parties must be granted interoperability especially for novel and new innovative products and services that the gatekeeper does not yet offer to be able to “*overcome barriers to entry*” and “*challenge the gatekeeper on the merits of their products and services*”.⁶⁵
- (c) *Third*, Article 6(7) of Regulation (EU) 2022/1925 applies to features “*as are available to, or used by*” the gatekeeper’s services and hardware, rather than only to features *used by* the gatekeeper’s services and hardware. If this provision would only apply to the same services and hardware as the gatekeeper is offering in competition with a third party, there would be no need to also cover features *available to* but not *used by* the gatekeeper. Instead, the language of Article 6(7) of Regulation (EU) 2022/1925 makes clear that once a feature is available to a service or hardware of the gatekeeper, that feature must be made interoperable for third-party services or hardware.
- (d) *Fourth*, the reference to “*competing*” in recitals 55 and 57 of Regulation (EU) 2022/1925 does not support Apple’s proposed interpretation. Recital 55 of that Regulation discusses competing providers in a situation in which the gatekeeper already provides services or hardware, such as wearable devices, for which competing providers exist. It does not discuss other situations. Recital 57 of Regulation (EU) 2022/1925 refers, most prominently, to “*alternative*,” not competing service and hardware providers, and of the gatekeeper’s “*complementary or supporting*” services or hardware. These references do not mean that Article 6(7) of Regulation (EU) 2022/1925 limits interoperability to third-party services or hardware that are identical to the ones of the gatekeeper. It rather emphasises the general purpose of Article 6(7) of Regulation (EU) 2022/1925, namely, to be able to rely on a designated operating system’s features to foster and promote innovation in the digital sector and remove barriers that could prevent market participants from innovating.
- (e) *Fifth*, Apple’s contention that Article 6(7) of Regulation (EU) 2022/1925 is limited to competing services or hardware, with the implication, according to

⁶⁴ In any case, recitals 55 and 57 of Regulation (EU) 2022/1925 cannot be interpreted as suggesting that “*competing*” implies defining markets. Such an interpretation would be contrary to the objectives of Regulation (EU) 2022/1925. In this regard it is worth recalling that recital 23 of that Regulation excludes the relevance of market definition in the context of designation. See Judgment of 17 July 2024, Bytedance Ltd, T 1077/23, EU:T:2024:478, Paragraphs 45-46.

⁶⁵ Recital 32 of Regulation (EU) 2022/1925.

Apple, that these provisions should be applied on a case-by-case basis depending on whether a concerned third party is, or is not, competing with Apple's own services or hardware, would require a definition of the relevant market and an analysis of the actual or potential competition between a given set of product and service offerings. Such a situation would not be consistent with recital 5 and 11 of Regulation (EU) 2022/1925, according to which this Regulation aims to ensure fair and contestable markets, independently from the actual, potential or presumed effects of the conduct of a given gatekeeper on competition in a given market. The legislators' intention is to avoid pursuing an extensive investigation of complex facts so as to allow for a swift implementation of the Regulation towards its beneficiaries.

3.1.5. *Interoperability must be effective*

- (59) Interoperability under Article 6(7) of Regulation (EU) 2022/1925 needs to be effective, meaning that it must enable the desired result to be achieved in practice. As such, the interoperability solution must be granted in a manner that is technically sound, stable, and workable in practice for third parties without unnecessary hurdles, be they on the side of third-party providers or on the side of end users.
- (60) The gatekeeper must enable third parties to interconnect smoothly through interfaces or similar solutions to the respective features. For this purpose, the gatekeeper may have to technically develop and implement such interfaces (e.g. application programming interfaces ("APIs") or other solutions), to ensure that the features subject to Article 6(7) of Regulation (EU) 2022/1925 work with the hardware and software of third parties in all the ways in which they are intended to function. This means that for an interoperability solution to be effective, the solution that a gatekeeper has to make available to third parties may in some cases go beyond merely making an interface available to third parties. As such, this might require, for instance, the use of technical standards, the provision of technical documentation or assistance, or the provision of software development kits ("SDKs"), which are commonly used to achieve interoperability.⁶⁶
- (61) In addition, for interoperability to be effective in practice, gatekeepers cannot be circumventing it through practices that may render an interoperability solution ineffective, such as imposing conditions that unduly differentiate between third parties; imposing conditions that are not equal to those that apply to the gatekeeper's own services and hardware; failing to properly consider the needs of third parties that will make use of the solution, e.g. by implementing limitations that prevent certain use cases; providing implementations that are not properly tested for bugs or other shortcomings (e.g. design gaps, performance and stability issues); providing implementations that are less stable or consistent over time than the feature used by or available to the gatekeeper; failing to provide adequate and up-to-date documentation; or failing to provide adequate and timely assistance to third parties that report issues (e.g. by submitting bug reports).

⁶⁶ For instance, Apple makes available the iOS and iPadOS SDK, which app developers must use for software development for iOS and iPadOS devices. See e.g. <https://developer.apple.com/documentation/ios-ipados-release-notes/ios-ipados-18-release-notes>: "The iOS & iPadOS 18 SDK provides support to develop apps for iPhone and iPad running iOS & iPadOS 18," last visited 25 November 2024.

- (62) In this context the Commission also notes that for an interoperability solution to be effective, the solution must take account of how the third-party making use of the solution makes its services available to its end users and with the possible involvement of other third parties. As such, the interoperability solution should not impose undue costs – including development costs – for third parties directly benefitting from the interoperability solution or for other third parties that are involved in the use of the relevant feature⁶⁷ For instance, when notifications received on a smartphone are also displayed on a connected smartwatch, three parties are involved: the operating system (provided by the gatekeeper), the smartwatch provider, as well as providers of apps that post notifications, such as messaging apps. These apps that post notifications use existing operating system APIs that may currently (only) support the gatekeeper’s own connected physical devices *out-of-the-box*, i.e. without the need to implement any modification to support them. The developers of these apps would want to continue using the same APIs to interconnect with other smartwatch providers. Indeed, developers of apps posting notifications would have limited incentives to switch to or to add support for different APIs, only to facilitate interoperability for other third parties (such as smartwatch providers), as this would entail additional development costs that such app developers would be unlikely to bear. Therefore, if an interoperability solution for some third parties were to require *other* third parties (e.g. messaging app providers) to adapt their apps to make the solution workable in practice, this would de facto shift the burden of compliance from the gatekeeper to those third parties, in breach of the obligation for the gatekeeper to ensure effective interoperability under equal conditions.⁶⁸
- (63) Especially on the side of end users, the effectiveness of interoperability solutions could be undermined by introducing unnecessary “friction” when an end user uses third-party services or hardware. Friction refers to any obstacle, difficulty, or inefficiency that hinders or affect the end user’s ability to complete a task or achieve their goal in the shortest possible time and with the least effort. For instance, with respect to connected devices, friction has an impact on the ease, convenience and speed of using the connected physical device and related apps from the end user perspective. Friction is unnecessary if it is imposed by the operating system only on

⁶⁷ These third parties may not necessarily be business users of the third parties that benefit from the interoperability solution. For example, when a notification from a messaging app is displayed on a smartwatch, this is made possible by the technical implementation of the operating system, which acts as an intermediary. It is not required – and normally it is not the case – that the app developer and the smartwatch provider are in a professional relationship, or even that they are aware of each other’s product.

⁶⁸ For example, on iOS, many messaging apps currently use a specific set of iOS APIs to post notifications. These APIs are interoperable out-of-the-box for the Apple Watch: messaging apps providers do not need to write any custom code to ensure that the notification is displayed on the Apple Watch. Such out-of-the-box support should be available to third-party smartwatch providers too. Indeed, if every messaging app provider – including Apple itself, which provides apps posting notifications, such as the Mail app – was required to develop custom support to display notifications on third-party smartwatches, this would be outside of the control of any third-party smartwatch provider (the beneficiary). This requirement would therefore shift the burden of compliance onto messaging app providers and create a “chicken and egg” situation: on one hand, messaging app providers (which are not the relevant beneficiaries of the interoperability solution) may have low incentives to devote efforts to develop custom code for third-party smartwatches, given that they currently have low adoption among iOS users; on the other hand, third-party smartwatches would remain less attractive to end users until they are supported by at least the most popular messaging apps.

end users of third-party services and hardware, but not on end users of the gatekeeper's services and hardware.

- (64) While Apple argues that Article 6(7) of Regulation (EU) 2022/1925 does not support any requirement regarding friction, such a requirement follows directly from “effectiveness” and “equal conditions”. Indeed, it is well known that adding only a small amount of friction can have an outsized impact on end user behaviour and ultimately on commercial success.⁶⁹ Digital service providers often employ teams and tools to study user behaviour and minimise or, in some cases, maximise friction.⁷⁰
- (65) A user experience without unnecessary friction is essential to enable a level playing field between third-party and gatekeeper's services and hardware. End users expect a frictionless experience. For instance, with respect to connected devices, friction makes it more likely that an end user will abandon a user journey that is necessary to use some functionalities of their connected physical device or related services, e.g. setting up, using, or configuring the device. Unnecessary friction undermines effective interoperability, as end users may not enjoy the full functionality of a third-party service or hardware, in turn reducing the commercial attractiveness of those services or hardware. The avoidance of friction and the seamlessness of a user journey is critical to improving the user experience, i.e. “*the overall experience users have [...], which includes the perceived utility, ease of use and efficiency of interacting with it*”.⁷¹
- (66) Friction is introduced by measures that make the “user journey” – i.e. “*the series of actions or steps for users to perform in order to reach their goal*”⁷² – slower or more complicated and frustrating than necessary. Friction can be caused by any behavioural techniques or interface design elements that force an end user to take several, potentially confusing actions before the end user can use a service or complete a task. Examples of such techniques are successive and excessive permission prompts, or unnecessary requirements to switch apps to complete an operation.
- (67) Friction can also be caused by offering choices to the end user in a non-neutral manner that steers the end user towards making certain choices, or by limiting the ability to exercise its choice effectively and easily. Examples of such techniques are misrepresenting the risks of using the connected physical device or communicating

⁶⁹ For example, Google explains that when a website “*reduce[d] load times from nine seconds to 1.4 seconds, ad revenue increased three percent, and page views-per-session went up 17 percent*” and that “[w]hen you speed up service, people become more engaged - and when people become more engaged, they click and buy more,” see <https://www.thinkwithgoogle.com/future-of-marketing/digital-transformation/the-google-gospel-of-speed-urs-hoelzle/>, last visited 24 February 2025.

⁷⁰ <https://www.thealien.design/insights/ux-metric>, last visited 24 February 2025.

⁷¹ See “Guidelines 03/2022 on Deceptive design patterns in social media platform interfaces: how to recognise and avoid them,” European Data Protection Board, version 2.0, 2023, https://www.edpb.europa.eu/system/files/2023-02/edpb_03-2022_guidelines_on_deceptive_design_patterns_in_social_media_platform_interfaces_v2_en_0.pdf, last visited 15 November 2024.

⁷² See “Guidelines 03/2022 on Deceptive design patterns in social media platform interfaces: how to recognise and avoid them,” European Data Protection Board, version 2.0, 2023, https://www.edpb.europa.eu/system/files/2023-02/edpb_03-2022_guidelines_on_deceptive_design_patterns_in_social_media_platform_interfaces_v2_en_0.pdf, last visited 15 November 2024.

risks based on the mere theoretical possibility that such risks might materialise. Another example is the practice of disabling by default a permission that is necessary for the proper and full functioning of the connected physical device and requiring the user to actively search for the option in settings in order to change it.

- (68) Regulation (EU) 2022/1925 recognizes the harmful impact of friction and its detrimental effect on contestability and fairness. Recital 37 of Regulation (EU) 2022/1925 provides that “*gatekeepers should not design, organise or operate their online interfaces in a way that deceives, manipulates or otherwise materially distorts or impairs the ability of end users to freely give consent*”. Further, it requires that “*not giving consent should not be more difficult than giving consent*” and that the gatekeeper “*should proactively present a user-friendly solution to the end user to provide, modify or withdraw consent in an explicit, clear and straightforward manner*”. Articles 13(4) and (6) of Regulation (EU) 2022/1925 recognise that friction undermines effective compliance, including via the use of behavioural techniques or interface design and by making the exercise of those rights or choices unduly difficult, including by offering choices to the end user in a non-neutral manner, or by subverting end users’ or business users’ autonomy, decision-making, or free choice via the structure, design, function or manner of operation of a user interface or a part thereof.
- (69) Equally effective interoperability requires that end users can set preferences (i.e. settings) in relation to third-party services and hardware as they can for the gatekeeper’s services and hardware. To allow the end user to configure a specific setting, there are generally two options for the location of these settings: to include the setting in system-level settings, or to have it inside the app provided by the third party (or both). For example, the settings to enable do-not-disturb mode at night on a connected physical device may be located in system-level settings or in the companion app of the device.⁷³ If the end user is required to switch between a third-party app and the system-level settings in order to change relevant settings, this may add significant friction compared to the use of the gatekeeper’s services or hardware, in particular if not clearly directed to the relevant setting.⁷⁴ Therefore, when the gatekeeper designs the interoperability solution, it should ensure that the location and design of the relevant settings: (i) do not make the user experience more burdensome for end users of third-party services and hardware; and (ii) are sufficiently flexible to meet reasonable differentiation needs of different third parties.⁷⁵
- (70) Contrary to what Apple claims, the measures in this Decision neither require Apple to remove friction from, nor to ensure the functioning or the attractiveness of the services or hardware of third parties.⁷⁶ Apple is only required to ensure effective interoperability under equal conditions. In the context of friction, this means that Apple is only required not to add, directly or indirectly, friction with regard to third parties that does not exist for its own services and hardware.

⁷³ A companion app is an app that facilitates the use of connected physical devices.

⁷⁴ It is often difficult for the end user to locate and change the setting in system-level settings, if the relevant setting is not highlighted and the end user is not guided back to the third-party app.

⁷⁵ For example, for the do-not-disturb mode, a flexible solution may be to surface the system-level do-not-disturb mode setting to the third-party companion app, so that the third party may decide whether to automatically apply it to the connected physical device, or whether to have a separate setting that allows the end user to have more granular control over do-not-disturb mode for that specific connected physical device. For some features, this Decision specifies the location of relevant settings.

⁷⁶ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 40, 42(c).

- (71) Apple submits that Article 6(7) of Regulation (EU) 2022/1925 speaks of “*allowing*” interoperability, which is limited to permit the interconnection with features, but does not entail a duty to create new technologies or additional engineering work.⁷⁷
- (72) Article 6(7) of Regulation (EU) 2022/1925 requires Apple to ensure that third-party services and hardware can access or interoperate with existing features controlled by or accessed via iOS or iPadOS, and not to create new features. This may require additional engineering work to make the those features interoperable.
- (73) The above interpretation is fully in line with the language and aim of Article 6(7) of Regulation (EU) 2022/1925, which are focused on one result, namely effective interoperability with the same feature under equal conditions, but not necessarily with the same software implementation (see Section 3.1.1 of this Decision). *First*, interoperability itself is a results-based concept, where, as per the definition of “*interoperability*” in Article 2(29) of Regulation (EU) 2022/1925, “*all elements of hardware or software work with other hardware and software and with users in all the ways in which they are intended to function*”. Regulation (EU) 2022/1925 therefore makes it clear that a gatekeeper may have to undertake certain engineering work to make an interoperability solution available to third parties. The definition also provides that information shall be exchanged “*through interfaces or other solutions*”. Recital 57 of Regulation (EU) 2022/1925 explains that the gatekeeper should “*allow competing third parties to interconnect through interfaces or similar solutions to the respective features*”. Recital 57 of Regulation (EU) 2022/1925 further clarifies that a gatekeeper is “*required to ensure [...] effective interoperability*”. *Second*, the verb “*allow*” does not intrinsically refer only to a passive action. Instead, “*allow*” defines an endpoint of “*making it possible for something to be done or to happen*,”⁷⁸ in this case interoperability with the same features as available to the gatekeeper.⁷⁹
- (74) What an effective interoperability solution requires depends on the gatekeeper’s choices regarding the design of its operating system. For some features a mere lifting of a contractual or technical restriction might be sufficient. In other cases, the gatekeeper might need to implement the prerequisites – including software components – that are required to provide effective interoperability.
- (75) Apple’s argument is also inconsistent insofar as Apple itself asks to be able to build new and separate interoperability solutions for third parties because some of the solutions available to Apple would not be suitable for third parties.⁸⁰ In fact, in its reply to the Preliminary Findings in the parallel specification proceedings on Features for Connected Physical Devices (DMA.100203), Apple has not proposed any alternative interoperability solution that would require a simple lifting of a contractual or technical restriction, even when these would be theoretically possible. [...].

⁷⁷ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 39 and 134 (b).

⁷⁸ See Cambridge Dictionary, <https://dictionary.cambridge.org/dictionary/english/allow>, last visited 24 February 2025.

⁷⁹ The above interpretation is also in line with the judgment *Alphabet v AGCM*, where the Court of Justice held that granting interoperability can entail the adoption of additional work, such as the development of a template to implement a requested interoperability for certain third-party apps. See judgement of the Court of Justice of 25 February 2025, *Alphabet v AGCM*, C-233/23, ECLI:EU:C:2025:110, paragraphs 73-74.

⁸⁰ Apple’s reply to the Preliminary Findings on Features for Connected Physical Devices, Section II.B.

3.2. Innovation

- (76) A main goal of Article 6(7) of Regulation (EU) 2022/1925 is to enable innovation by third parties. Recital 57 of Regulation (EU) 2022/1925 explains that a lack of interoperability under equal conditions could significantly undermine innovation by alternative providers. A level playing field allows fair competition, which in turn creates incentives for innovation.⁸¹ Apple claims, in relation to some of the measures envisaged in the Preliminary Findings that they will suppress innovation. Apple argues that requiring to make its proprietary technologies available to developers for free deprives Apple of its ability to build and monetise differentiating products.⁸² Contrary to Apple's claims, the measures in this Decision will enable innovation by alternative providers and will create more incentives also for Apple to innovate.
- (77) Article 6(7) of Regulation (EU) 2022/1925 is designed to ensure that complementary and supporting services by the gatekeeper cannot enjoy exclusive or privileged access to operating system features compared to third-party complementary and supporting services. Access to features under equal conditions fosters contestability and fairness for business users dependent on the gatekeeper's operating system as a gateway by lowering barriers to entry and expansion.⁸³ Such contestability and fairness, in turn, improve the innovation potential of the wider online platform economy, *inter alia* by preventing unfair practices by gatekeepers in relation to their CPS.⁸⁴
- (78) The measures in this Decision enable such innovation. For example, a more efficient request-based process that produces effective, future-proof interoperability solutions in a timely manner will put third-party services and hardware on a more level playing field with Apple's services and hardware, enabling them to compete with Apple's services and hardware on other aspects – such as design and battery life – and incentivising Apple to innovate on the same or other aspects.
- (79) The measures specified by the Commission will also indirectly increase Apple's incentives to innovate within iOS or iPadOS itself. More contestability for complementary or supporting services or hardware will bring more contestability for operating systems. The measures will improve interoperability of third-party services and hardware, for example smartwatches, with iOS and iPadOS, thus allowing such products to compete more fairly with Apple's services and hardware, for example the Apple Watch, potentially attracting more buyers. Unlike the end users of Apple's services and hardware, these end users of third-party services and hardware are not locked into Apple's ecosystem⁸⁵ and are able to switch more easily to third-party

⁸¹ See Competition and Markets Authority, *Mobile ecosystems market study: Final report*, Section 7, <https://www.gov.uk/government/publications/mobile-ecosystems-market-study-final-report>, last visited 24 February 2025.

⁸² Apple's reply to preliminary findings of 18 December 2024, paragraphs 12, 42(c), 51, 137, 167-169. See also Apple's reply to the Preliminary Findings on Features for Connected Physical Devices, Section II.C and paragraph 101.

⁸³ Recitals 32, 33, 34 and 57 of Regulation (EU) 2022/1925.

⁸⁴ Recital 32 of Regulation (EU) 2022/1925.

⁸⁵ For example, when an iPhone user owns an Apple Watch and wants to buy a new smartphone, the switching costs to switch to a non-Apple smartphone are higher than just buying a new iPhone. Indeed, because the Apple Watch does not work with non-Apple smartphones, the user would need to buy also a new smartwatch that works with the non-Apple smartphone. This phenomenon is what Apple itself calls the "stickiness" of Apple's ecosystem – see *United States v. Apple Inc.*, No. 1:24-cv-00783

smartphones or tablets. Thus, an increased number of end users of third-party services and hardware will increase Apple’s incentives to bring innovation within iOS and iPadOS to attract consumers to buy and continue using iPhones and iPads. Finally, the existence of more open ecosystems shows that interoperability does not preclude innovation nor its monetisation. Apple can continue to build and monetise differentiating products using the features subject to this Decision. These products will be differentiated *inter alia* by Apple’s proprietary branding and design. Providers of operating systems that are mostly interoperable by design have been able to continue to innovate, and so have the providers of complementary and supporting services for these operating systems.⁸⁶

3.3. Integrity justification

- (80) According to Article 6(7) of Regulation (EU) 2022/1925, the gatekeeper shall not be prevented from taking strictly necessary and proportionate measures to ensure that interoperability does not compromise the integrity of the operating system, virtual assistant, hardware or software features provided by the gatekeeper, provided that such measures are duly justified by the gatekeeper.
- (81) Recital 50 of Regulation (EU) 2022/1925 clarifies that the integrity of the hardware or the operating system includes any design options that need to be implemented and maintained in order for the hardware or the operating system to be protected against unauthorised access, by ensuring that security controls specified for the hardware or the operating system concerned cannot be compromised.
- (82) Within the architecture of Regulation (EU) 2022/1925, integrity has a distinct meaning from users’ privacy and security. While a measure to ensure that interoperability does not compromise the integrity of the operating system, virtual assistant, hardware or software features provided by the gatekeeper (“integrity measure”) may have positive effects on the privacy or security of the user, the legislator clearly distinguished these concepts in the context of Regulation (EU) 2022/1925, making them appear in different provisions namely Articles 7(9) and 6(4) of that Regulation.⁸⁷ As regards security, recital 50 of Regulation (EU) 2022/1925 describes security and integrity differently, referring to “*end users’ security*,” indicating that security can be seen as pertinent to the end user. Similarly, recital 72 of Regulation (EU) 2022/1925 describes privacy (and data protection) as “*interests of end users*”.
- (83) By contrast, Regulation (EU) 2022/1925 does not apply integrity as an attribute or property of end users, but only as a property of services and of their features.⁸⁸ A

(D.D.C. 2024), pages 6, 30, 68, <https://www.justice.gov/archives/opa/media/1344546/dl?inline>, last visited 24 February 2025.

⁸⁶ See Competition and Markets Authority, *Mobile ecosystems market study: Final report*, Section 7, <https://www.gov.uk/government/publications/mobile-ecosystems-market-study-final-report>, last visited 24 February 2025.

⁸⁷ In a lawsuit against Apple, the US Department of Justice has already identified the risk of overly flexible concepts of privacy and security, claiming that “*Apple deploys privacy and security justifications as an elastic shield that can stretch or contract to serve Apple’s financial and business interests*.” See *United States v. Apple Inc.*, No. 1:24-cv-00783 (D.D.C. 2024), p. 12, <https://www.justice.gov/archives/opa/media/1344546/dl?inline>, last visited 24 February 2025.

⁸⁸ Similarly, in *Alphabet v AGCM*, within the context of Article 102 TFEU, the Court of Justice made clear that a dominant undertaking may not need to provide an interoperability solution if it compromises the integrity or security of “*the platform concerned*” but does not refer to the integrity or security of the end user (see judgment of 25 February 2025, C-233/23, ECLI:EU:C:2025:110, paragraph 73).

pertinent definition of integrity is the state of being unimpaired of such service or feature – that is, still functional and not damaged nor corrupted. Regulation (EU) 2024/2847 (Cyber Resilience Act)⁸⁹ links integrity to the absence of manipulation or modification not authorised by the user.⁹⁰ The records of the legislative process that led to the adoption of the Regulation (EU) 2022/1925 indicate that the legislator has considered but ultimately rejected the position that cyber security and end user data protection may serve as a justification. Instead, it decided in favour of a justification grounded on integrity only.⁹¹

- (84) Therefore, in the context of Article 6(7) of Regulation (EU) 2022/1925, the concept of integrity encompasses the risks which threaten to impair the correct functioning of the gatekeeper's operating system, or hardware or software features provided by the gatekeeper, including of security controls designed to prevent unauthorised access to the operating system or these features which might compromise their integrity.⁹² User authorisation may in certain cases be sufficient to address an integrity concern.⁹³ This is consistent with the goal of Article 6(7) of Regulation (EU) 2022/1925 to enable user choice and innovation by alternative providers of services,⁹⁴ and is consistent with the functioning of operating systems as a platform for third-party apps and services. Indeed, Article 6(7) of Regulation (EU) 2022/1925 aims at providing access to features that are important for third-party innovation and therefore only allows gatekeepers to take measures that are strictly necessary and duly justified to ensure interoperability does not compromise integrity of the operating system, hardware and the features at stake. Such third-party innovation may include novel types of services and hardware that the gatekeeper does not (yet) provide, but which rely on access to features accessed or controlled via operating system.
- (85) In this respect, the Commission notes that compliance with specific obligations in the areas of data protection and security falls within the competence of the public authorities in charge of those respective sectors. Both Apple and the providers of services or hardware requesting effective interoperability under Article 6(7) of Regulation (EU) 2022/1925 are subject to legal obligations applicable to their activities concerning, *inter alia*, security or privacy. The Commission further notes

⁸⁹ Regulation (EU) 2024/2847 of the European Parliament and of the Council of 23 October 2024 on horizontal cybersecurity requirements for products with digital elements and amending Regulations (EU) No 168/2013 and (EU) 2019/1020 and Directive (EU) 2020/1828 (Cyber Resilience Act).

⁹⁰ Annex I Part I paragraph 2 of Regulation (EU) 2024/2847 provides that “*products with digital elements shall: [...] (f) protect the integrity of stored, transmitted or otherwise processed data, personal or other, commands, programs and configuration against any manipulation or modification not authorised by the user, and report on corruptions.*”

⁹¹ During the legislative process, the European Parliament's position before the Trilogue included a justification allowing for integrity, end user data protection and cyber security grounds, see P9_TA(2021)0499, Amendments adopted by the European Parliament on 15 December 2021 on the proposal for a regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act) (COM(2020)0842 – C9- 0419/2020 – 2020/0374(COD)). The Union legislator rejected this position in favour of an integrity justification.

⁹² See, by analogy, judgment of 17 September 2007, Microsoft v Commission, T-201/04, EU:T:2007:289, paragraphs 1165 and 1220.

⁹³ Annex I Part I paragraph 2 of Regulation (EU) 2024/2847 provides that “*products with digital elements shall: [...] (f) protect the integrity of stored, transmitted or otherwise processed data, personal or other, commands, programs and configuration against any manipulation or modification not authorised by the user, and report on corruptions.*”

⁹⁴ Recital 57 of Regulation (EU) 2022/1925.

that Article 6(7) of Regulation (EU) 2022/1925 shall be interpreted in conformity with the principle of proportionality and the fundamental rights guaranteed in the Charter of Fundamental Rights of the European Union.

- (86) The Commission considers that, in some circumstances, protecting integrity can bring benefits for end users' security and privacy. Indeed, integrity measures are used to ensure that security and privacy controls are not manipulated without the end user's authorisation. For example, integrity measures can ensure that no app can unduly disable an end user's passcode to unlock the screen, preventing unauthorised access and increasing security. Similarly, when a map app triggers a system prompt to obtain the end user's permission for access to GPS location, integrity measures may prevent a malicious actor from manipulating the prompt, to ensure that it is the end user who makes the actual choice about the end user's privacy.⁹⁵ The same applies to every security and privacy control ensuring that choices made by end users are respected, such as: access to camera, microphone, or photos depending on the app; enforcing automatic VPN connections on certain Wi-Fi networks; or use of biometrics to unlock the phone. Integrity ensures that these controls function without manipulation or corruption, including by malware.
- (87) However, some privacy and security aspects fall outside the scope of integrity within the meaning of Regulation (EU) 2022/1925. In particular, the concept of integrity in Regulation (EU) 2022/1925 does not allow gatekeepers to impose their own model of security and privacy on third-party services. Indeed, nothing in Regulation (EU) 2022/1925 precludes competition or differentiation in relation to models of security and privacy, as long as they are compliant with applicable legislation. For example, the gatekeeper should not prevent third-party apps from accessing the smartphone's or tablet's camera if they have obtained user's consent – as access to the camera is necessary for many legitimate use cases, such as video conferencing apps. Therefore, given that third-party services and hardware remain subject to applicable legislation, including on data protection and cyber security, the choice whether to use a service should be the prerogative of the end user, not of the gatekeeper controlling the operating system.
- (88) Under Regulation (EU) 2022/1925, the burden is on the gatekeeper to duly justify how the measures it intends to take to mitigate any integrity risk are necessary and proportionate in the context of the implementation of the effective interoperability. It is the gatekeeper, having the full knowledge of its own operating system, who is best placed to detect any risks to the integrity of its operating systems resulting from interoperability access and to propose and duly justify specific measures to ensure that integrity is not compromised. In practice, to discharge this burden, gatekeepers ought to substantiate the specific integrity concerns in the context of the operating system in question, the measures it intends to implement to mitigate those risks, how the measures will address the identified integrity risk, why the measures are strictly necessary; and why the measures are proportionate, including considering the extent to which the proposed measure may reduce effective interoperability.

⁹⁵ In this example, the permission prompt itself is therefore a privacy measure, not an integrity measure. On the other hand, a measure preventing manipulation of the system prompt would be an integrity measure ensuring that the integrity of the operating system and of the feature is not compromised. Modern operating systems employ many such measures, such as hardware-backed integrity, to ensure that system files – including those enforcing privacy prompts – are not manipulated.

- (89) In doing so, the gatekeeper must demonstrate, in a verifiable way using data or other objective means, the existence and magnitude of the integrity risk.⁹⁶ In that respect, evidence regarding how other operating systems deal with the same or similar integrity risk can be relevant.
- (90) To satisfy the standard of strict necessity and proportionality, the gatekeeper must, where there are several available integrity measures that are suitable to achieve the objective of mitigating the integrity risks, select the measure which is least restrictive as regards achieving effective interoperability under Article 6(7) of Regulation (EU) 2022/1925. Proportionality ought to be examined by taking into consideration, in particular, the objectives of Article 6(7) of Regulation (EU) 2022/1925 and that Regulation itself, which necessitates that those objectives be weighed against the objective pursued by the integrity justification in the second subparagraph of that provision. An integrity measure may therefore not be appropriate if it disproportionately limits the attainment of the objective of Article 6(7) of Regulation (EU) 2022/1925 taking into account, for instance, the nature of the integrity concern and availability of alternative measures to mitigate these concerns.⁹⁷ For instance, asking users, via a permission prompt whether they would like to grant computing power to a specific app may be less restrictive than imposing strict limits on the use of such power resources for all third-party apps for integrity reasons, and only a permission prompt may be appropriate in light of the objective of Article 6(7) of Regulation (EU) 2022/1925 and of that Regulation as a whole.⁹⁸
- (91) Moreover, the Commission considers that an integrity measure cannot be considered strictly necessary and proportionate if it seeks to achieve a higher level of integrity than the one that Apple requires or accepts in relation to its own services or hardware. Integrity measures can only be proportionate if they are based on transparent, objective, precise and non-discriminatory conditions that apply equally to the gatekeeper's and third parties' services and hardware.⁹⁹ These conditions must be clearly defined.¹⁰⁰ These requirements ensure that the integrity justification is not used arbitrarily.¹⁰¹ They also ensure that conditions do not discriminate against

⁹⁶ By analogy, judgments of 21 December 2023, *International Skating Union*, C-124/21 P, EU:C:2023:1012, paragraphs 137, 138 (“verifiable objectives”); of 26 September 2013, *Ottica New Line di Accardi Vincenzo*, C-539/11, EU:C:2013:591, paragraph 56. See also, by analogy, judgments of 20 March 2014, *Commission v. Poland*, C-639/11, EU:C:2014:173, paragraph 62; of 20 March 2014, *Commission v. Lithuania*, C-61/12, EU:C:2014:172, paragraph 67. The case law cited in this section referring to the legal principle of proportionality (including in case law on the EU fundamental freedoms) is relevant since Article 6(7), second subparagraph of Regulation (EU) 2022/1925 imposes a proportionality requirement and typically also refers to the invocation of a justification or exception.

⁹⁷ By analogy, judgment of 23 December 2015, *Scotch Whisky Ass'n*, EU:C:2015:845, paragraph 28.

⁹⁸ See, by analogy, judgment of 20 February 1979, *Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein (Cassis de Dijon)*, C-120/78, ECLI:EU:C:1979:42, paragraph 13, where informing customers by way of labelling was considered less restrictive than minimum alcohol content requirements set out by German law.

⁹⁹ By analogy, judgments of 21 December 2023, *Superleague*, C-333/21, EU:C:2023:1011, paragraphs 135, 147, 254; of 28 February 2013, *Ordem dos Técnicos Oficiais de Contas*, C-1/12, EU:C:2013:127, paragraphs 84-86, 90, 91 and 99.

¹⁰⁰ By analogy, judgments of 28 February 2023, *Ordem dos Técnicos Oficiais de Contas*, C-1/12, EU:C:2013:127, paragraph 99; of 16 December 2020, *International Skating Union*, T-93/18, EU:T:2020:610, paragraph 88.

¹⁰¹ By analogy, judgments of 21 December 2023, *Superleague*, C-333/21, EU:C:2023:1011, paragraph 255; of 22 January 2002, *Canal Satellite Digital*, C-390/99, EU:C:2002:34, paragraph 35; of 13 June 2019, *TopFit and Biffi*, C-22/18, EU:C:2019:497, paragraph 65.

innovative use cases and innovative types of services and hardware by third parties, including those that the gatekeeper is not yet providing.

- (92) Similarly, to prevent arbitrary limitations on the obligation to allow for effective interoperability under Article 6(7) of Regulation (EU) 2022/1925, the gatekeeper shall only apply conditions whose satisfaction is capable of being independently verified and are not exclusively within the gatekeeper's control. Absent verifiability, the gatekeeper retains broad discretion to abuse its power.¹⁰² Otherwise, the affected third parties, other independent third parties, the Commission, and courts would be incapable of assessing compliance,¹⁰³ and the gatekeeper could set conditions which are unachievable by third parties. Such conditions would be intrinsically liable to affect third parties more than the gatekeeper's own services and hardware, with a consequent risk that the gatekeeper would place third parties at a particular disadvantage.¹⁰⁴ Leaving the decision to deny or limit interoperability via the integrity justification entirely to the gatekeeper is liable to affect its objectivity and impartiality.¹⁰⁵
- (93) The Commission also considers that a gatekeeper may not justify an integrity measure implemented in relation to third parties' services or hardware solely based on whether the gatekeeper controls or trusts such third parties. In particular, a gatekeeper may not justify integrity measures by the mere fact that third parties are not the gatekeeper, and therefore they cannot be trusted. This is because whether a gatekeeper trusts a third party is a subjective assessment exclusively within the gatekeeper's control. The requirement of "*gatekeeper's trust*" is a condition that is neither capable of being independently verified, nor objective or precise. A gatekeeper should set out the objective conditions which, in its view, mitigate or remove its integrity concerns and which should be met by its own and third-party services and hardware – for example, the requirement that apps are appropriately signed by the third party¹⁰⁶ and include a "*manifest*".¹⁰⁷
- (94) Moreover, the trust gatekeepers place into their own services and hardware may be misplaced, because a gatekeeper's own services or hardware may also pose risks for the end user. Indeed, the mere possibility to exercise control does not mean that

¹⁰² By analogy, judgments of 21 December 2023, *International Skating Union*, C-124/21 P, EU:C:2023:1012, paragraphs 137, 138; of 16 December 2020, *International Skating Union*, T-93/18, EU:T:2020:610, paragraphs 88 ("*authorization criteria must be clearly defined, transparent, non-discriminatory, reviewable and capable of ensuring the organisers of events effective access to the relevant market*"), 118 ("*Given the absence of objective, transparent, non-discriminatory and verifiable authorisation criteria, the applicant's broad discretion to authorise or reject such events was in no way limited.*"), and 129; judgment of 28 February 2023, *Ordem dos Técnicos Oficiais de Contas*, C-1/12, EU:C:2013:127, paragraph 99.

¹⁰³ Apple lists as one core requirement for its new service Private Cloud Compute the "*verifiable transparency*" stating that "*researchers need to be able to verify, with a high degree of confidence, that our privacy and security guarantees for Private Cloud Compute match our public promises,*" see <https://security.apple.com/blog/private-cloud-compute/>, last visited 24 February 2025.

¹⁰⁴ See, by analogy, judgments of 13 April 2010, *Bressol and Others*, C-73/08, EU:C:2010:181, paragraph 41; of 30 November 2000, *Österreichischer Gewerkschaftsbund*, C-195/98, EU:C:2000:655, paragraph 40; of 18 July 2007, *Hartmann*, C-212/05, EU:C:2007:437, paragraph 30.

¹⁰⁵ By analogy, judgment of 10 March 2009, *Hartlauer*, C-169/07, EU:C:2008:478, paragraph 69.

¹⁰⁶ See <https://support.apple.com/en-gb/guide/security/sec7c917bf14/web>, last visited 24 February 2025.

¹⁰⁷ An app manifest is a document declaring to the operating system some important information about the app, such as which sensitive features are accessed by the app and the ways in which the app can interact with other apps. See <https://developer.android.com/guide/topics/manifest/manifest-intro>, last visited 24 February 2025.

services or hardware are fully protected against any risk, such as unauthorised access or design or implementation flaws¹⁰⁸ invalidating the expected protections.¹⁰⁹ Indeed, vulnerability of apps, services, and operating systems is well documented and providers regularly provide updates to address these vulnerabilities, indicating that despite their efforts, vulnerabilities existed.¹¹⁰ Operating system providers also run programmes enabling and rewarding third parties to identify such vulnerabilities.¹¹¹ Moreover, insider attacks coming from inside the operating system provider are explicitly considered as a risk to protect against by some operating system providers.¹¹² Finally, the fact that an end user has made the decision to buy a device running the gatekeeper’s operating system does not mean that the end user can be assumed to automatically trust all of the gatekeeper’s services and hardware that interoperate with that operating system. In fact, Article 5(2) of Regulation (EU) 2022/1925 enshrines the principle that end user trust does not automatically extend to all different services provided by the same entity.¹¹³

- (95) A condition or integrity measure is only suitable to achieve the objective of mitigating integrity risks if it genuinely reflects a concern to attain integrity in a consistent and systematic manner.¹¹⁴ This requirement ensures that the condition or measure is suitable to attain the objective of protecting integrity rather than using the integrity justification as a means of arbitrary discrimination or a disguised restriction.

¹⁰⁸ For example, Apple has recently agreed to pay \$95 million to settle a proposed class action according to which users’ “*confidential or private communications were obtained by Apple and/or were shared with third parties as a result of an unintended Siri activation.*” See *Lopez v. Apple, Inc.*, 4:19-cv-04577-JSW (N.D. Cal.), Document 336-2, <https://cdn.arstechnica.net/wp-content/uploads/2025/01/Lopez-v-Apple-Proposed-Settlement-Agreement-12-31-2024.pdf>, last visited 24 February 2025.

¹⁰⁹ See, by analogy, judgment of 24 January 2023, *Stanleybet*, C-186(11) ao, EU:C:2013:33, paragraphs 33-36, requiring that, for national legislation reducing opportunities for gambling to be lawful under Union law, it must be ensured that public authorities exercise effective and strict controls.

¹¹⁰ For instance, Apple has self-reported 11 991 vulnerabilities of its products to the National Vulnerabilities Database maintained by the US National Institute of Standards and Technology: https://nvd.nist.gov/vuln/search/results?form_type=Advanced&results_type=overview&search_type=all&isCpeNameSearch=false&cpe_vendor=cpe%3A%2F%3AApple, last visited 24 February 2025.

¹¹¹ For instance, under the Apple Security Bounty Apple promises a monetary reward of up to US\$ 2 million for identifying vulnerabilities (see <https://security.apple.com/bounty/>, last visited 24 February 2025). Microsoft (<https://www.microsoft.com/en-us/msrc/bounty>, last visited 24 February 2025) and Google (<https://bughunters.google.com>, last visited 24 February 2025) have similar programs.

¹¹² For example, Google employees write: “[*Insider*] attacks can occur at many more levels in the complex supply chain of hard- and software vendors, including [...] malicious insiders at the platform vendor (i.e. Google). [...] Another class of supply chain attacks are organizational attacks on a legal or political level. These may for example take the form of compelled technical insider attacks [...]. The possibility of insider and/or organizational attacks at many levels is an effect of the ecosystem size, and such attacks need to be part of a realistic threat model.” See *The Android Platform Security Model* (2023), <https://arxiv.org/pdf/1904.05572v3>, last visited 24 February 2025.

¹¹³ Article 5(2) of Regulation (EU) 2022/1925 and principles of data protection in EU law and established data protection practices reject the idea that end user trust automatically extends to different services provided by the same entity. For example, the legal basis (including consent) for a certain processing operation does not automatically extend to any processing operation carried out by the same controller – even more so if the processing operations are carried out for different purposes by distinct services, even if provided by the same controller. Article 5(2) of that Regulation enshrines the same legal principle by requiring specific consent for data combination and cross-use.

¹¹⁴ Judgments 21 December 2023, *Superleague*, C-333/21, EU:C:2023:1011, paragraph 251; of 8 September 2009, *Liga Portuguesa de Futebol Profissional and Bwin International*, C 42/07, EU:C:2009:519, paragraph 61; of 6 October 2020, *Commission v Hungary* (Higher education), C 66/18, EU:C:2020:792, paragraph 178; of 10 March 2009, *Hartlauer*, C-169/07, ECLI:EU:C:2009:141, paragraph 55.

Instances where this requirement may not be met include where the gatekeeper allows the particular integrity risk to persist in other areas, undermining the attainment of the goal¹¹⁵ – either technically or due to lack of enforcement or monitoring¹¹⁶ – or where the measure is not effective in reaching the goal,¹¹⁷ which requires assessing the effects of the measures even after their adoption.¹¹⁸

4. APPLE’S APPROACH TO COMPLIANCE WITH ARTICLE 6(7) OF REGULATION (EU) 2022/1925

- (96) On 7 March 2024, Apple submitted its compliance report pursuant to Article 11 of Regulation (EU) 2022/1925 (“Apple’s Compliance Report”) to the Commission.¹¹⁹ In that report, Apple announced three measures it intended to take to comply with Article 6(7) of Regulation (EU) 2022/1925 in relation to Apple’s iOS CPS.¹²⁰ In the revised compliance report submitted by Apple on 1 November 2024, Apple stated that these measures have been introduced for both the iOS and iPadOS CPSs.¹²¹ Apple has introduced:
- (a) An engineering team focused on ensuring that Apple provides third parties with effective interoperability with newly released iPhone and iOS, as well as iPad and iPadOS, hardware and software features, at least to the extent required by Article 6(7) of Regulation (EU) 2022/1925;
 - (b) A new request form for eligible¹²² developers to request additional interoperability with hardware and software features built into iPhone and iOS, as well as iPad and iPadOS; and
 - (c) New capabilities for alternative browser engines to interoperate with iOS and iPadOS.
- (97) In this report, Apple explains that it has introduced a formal interoperability request process (“request-based process”).¹²³ Apple describes the process as follows: first, developers submit a request for effective interoperability with iOS or iPadOS hardware and software features through a request form on Apple’s developer

¹¹⁵ Judgments of 17 July 2008, *Corporación Dermoestética*, C-500/06, EU:C:2008:421, paragraphs 39-40; of 10 March 2009, *Hartlauer*, C-169/07, EU:C:2008:478, paragraphs 60-63; of 23 December 2025, *Hiebler*, C-293/14, EU:C:2015:843, paragraphs 65 to 78.

¹¹⁶ See judgments of 24 January 2023, *Stanleybet*, C-186(11) a.o., EU:C:2013:33, paragraphs 33-36.

¹¹⁷ Judgments of 11 June 2015, *Berlington a.o.*, C-98/14, EU:C:2015:386, paragraphs 71 and 72 in particular; of Jose Manuel Blanco Perez, C-570/07 & C-571/07, EU:C:2010:300, paragraphs 101-102.

¹¹⁸ Judgments of 30 June 2016, *Admiral Casinos*, Case C-464/15, EU:C:2016:500, paragraphs 34, 36-37; of 23 December 2015, *Scotch Whisky Ass’n*, EU:C:2015:845, paragraphs 60-65.

¹¹⁹ Apple’s Compliance Report submitted on 7 March 2024.

¹²⁰ Apple’s Compliance Report submitted on 7 March 2024, pages 21, 73-76.

¹²¹ Apple’s revised Compliance Report submitted on 1 November 2024, pages 21, 73-79. See also Apple’s submission on Apple’s iPadOS Compliance of 11 September 2024. For completeness, the Commission notes that in the latest compliance report, submitted by Apple on 7 March 2025, Apple describes, with respect to its compliance with Article 6(7) of Regulation (EU) 2022/1925, the same measures that it had described in previous versions of its compliance report.

¹²² To be eligible, the developer’s Apple Developer Program membership must be in good standing and the developer must have entered into the current terms of the Apple Developer Program License Agreement, cf. Apple’s revised Compliance Report submitted on 1 November 2024, page 76, Annex 15 to Section 2, paragraph 14.

¹²³ Apple’s revised Compliance Report submitted on 1 November 2024, pages 75 to 77. Cf. recital (96)(b).

portal.¹²⁴ Subsequently, a cross-functional team within Apple evaluates the requests. Should the interoperability request require Apple to engineer new functionalities or interoperability frameworks, those will be delivered in line with Apple's release cycles.¹²⁵

- (98) The request form requires developers to provide an answer to the following questions:¹²⁶
- (a) Account information.
 - (b) Provide name of the feature in iOS, iPadOS, iPhone and/or iPad.
 - (c) Provide the reason why you need Apple's help to develop an effective interoperability solution for your product.
 - (d) Describe the product that uses or will use the feature. If you have multiple products please list them all.
 - (e) How will your products use the feature?
 - (f) Where do you offer or will you offer these products?
 - (g) Have you evaluated other frameworks or technologies (including those offered by Apple or that you could build) to achieve an effective solution for your products? If so, please describe.
 - (h) Additional information (Optional).
- (99) After the developer submits their request for effective interoperability, Apple's assessment of the request consists of three different phases. Apple describes these phases as follows:¹²⁷
- (a) In the first phase named "*Initial assessment*" (hereinafter "Phase I"), Apple makes an initial assessment of the request and determines based on the available information whether the request, according to Apple, appears to fall within Article 6(7) of Regulation (EU) 2022/1925. Apple may contact the developer if additional information is required to evaluate the request. Apple will inform the developer of the outcome of the initial assessment.

¹²⁴ Apple's revised Compliance Report submitted on 1 November 2024, page 76, Annex 15 to Section 2, paragraph 14. Per the Compliance Report, hereinafter, Apple's "developer portal" refers to its website hosted at <https://developer.apple.com/>.

¹²⁵ Apple's revised Compliance Report submitted on 1 November 2024, page 76, Annex 15 to Section 2, paragraph 13.

¹²⁶ Apple's reply of 6 August 2024 to RFI 8 (DMA.100196) of 11 July 2024, paragraph 5.2. In Apple's submission on Apple's iPadOS Compliance of 11 September 2024, paragraph 16, Apple states that it "*has modified the new request form [...] so that it also encompass interoperability with iPad and iPadOS*". This was confirmed in Apple's submission dated 20 November 2024 on "Apple's proposed updates to the Article 6(7) DMA interoperability request process", paragraph 8. In Apple's submission of 11 December 2023 on "Apple's compliance plans in relation to Article 6(7)", Apple indicated that [...].

¹²⁷ Apple's revised Compliance Report submitted on 1 November 2024, page 76, Annex 15 to Section 2, paragraphs 16-19; Apple's reply of 6 August 2024 to RFI 8 (DMA.100196) of 11 July 2024, question 2; Apple's support webpage for requesting interoperability for iOS, <https://web.archive.org/web/20240420004732/https://developer.apple.com/support/ios-interoperability/>, last visited 20 April 2024; and Apple's support webpage for requesting interoperability for iOS and iPadOS, <https://developer.apple.com/support/ios-interoperability/>, last visited 6 November 2024.

- (b) In the second phase named interchangeably “*Tentative project plan*” and “*Introduction of interoperability solutions*” (hereinafter “Phase II”), based on Apple’s initial assessment of the appropriateness of the request and whether it falls within Article 6(7) of Regulation (EU) 2022/1925, Apple will start working on designing a solution for effective interoperability with the requested feature. If appropriate, Apple will work on a tentative project plan following the initial assessment. If Apple determines that it is not feasible to design an effective interoperability solution or that it is not appropriate to do so under Article 6(7) of Regulation (EU) 2022/1925, Apple will communicate that to the developer.
 - (c) In the third phase named “*Development and release of the interoperability solution*” (hereinafter “Phase III”), if Apple considers that an effective interoperability solution is feasible and appropriate under Article 6(7) of Regulation (EU) 2022/1925, it will develop a solution addressing the request. Apple will notify the developer when the interoperability request is addressed in a prerelease or software update. If Apple considers that it ultimately cannot reasonably develop an interoperability solution, Apple will inform the developer.
- (100) Following these phases and the engagement between Apple and developers, the outcome of the interoperability process will thus be the development and release of an interoperability solution.¹²⁸ In this Decision, these terms are used as follows:
- (a) “Developers” refer to all third parties that can benefit from interoperability under Article 6(7) of Regulation (EU) 2022/1925, i.e. providers of services and providers of hardware, business users and alternative providers of services provided together with, or in support of, core platform services.
 - (b) References to an “interoperability solution” concern specifically those interoperability solutions that Apple developed as part of the request-based process, unless otherwise specified.
 - (c) “Development” encompasses all stages of Apple’s development cycle, including the convergence and performance stages that are part of this cycle. “Development” is also used irrespective of whether the interoperability solution requires Apple to adapt an existing piece of software, develop a new piece of software, or even only adapt policy or contractual requirements to address the interoperability request.
 - (d) As regards the release, per Apple’s explanation, a “major” iOS or iPadOS release is the, usually annual, release of a “.0” version, for example iOS/iPadOS 19, 20, etc. This is followed by several interim (“dot”) releases until the next major release, for example iOS/iPadOS 19.1, 19.2, etc.
- (101) Before the present proceedings, Apple indicated to the Commission that it would endeavour to review the requests in Phase I within [...] business days and in Phase II within [...] business days.¹²⁹ [...] On its website, Apple indicated that it would aim at

¹²⁸ Apple explained its development and release cycle in its reply to RFI 8 (DMA.100196) of 11 July 2024, question 1 with annexes Q1b1-Q1b4.

¹²⁹ Apple’s submission of 13 November 2023 on “Apple’s compliance plans in relation to Article 6(7)”.

providing developers updates every 90 days. No further public information is provided by Apple on how and when it would communicate with developers.¹³⁰

- (102) It appears from the 108 interoperability requests received by Apple from January 2024 until 31 October 2024,¹³¹ that the time taken by Apple to process interoperability requests through the different stages is significantly longer than the timelines mentioned in the previous paragraph. For instance, as of 4 October 2024, Apple’s median timeline for completing Phase I review (i.e., moving the request to Phase II or rejecting the request) is [...] U.S. business days.¹³² Furthermore, as of 31 October 2024, on average, interoperability requests have been pending in Phase I for [...] calendar days, in Phase II for [...] calendar days and in Phase III for [...] calendar days.¹³³ For completeness, the Commission notes that the data available for the period between 31 October 2024 and 31 January 2025 confirms that the situation in terms of the overall backlog has not significantly evolved in the meantime.¹³⁴

5. RATIONALE FOR THE SPECIFIED MEASURES

5.1. Effective interoperability when the gatekeeper implements a request-based process in relation to existing features

- (103) On the basis of the information in its possession, the Commission considers it warranted to specify measures to achieve effective interoperability under Article 6(7) of Regulation (EU) 2022/1925 with respect to Apple’s interoperability request process in relation to features existing on the date of the adoption of this Decision. Hereinafter, the Commission will refer to these features as “existing features”.
- (104) The Commission notes at the outset that Article 6(7) of Regulation (EU) 2022/1925 requires the gatekeeper to ensure that the features that fall under the scope of this provision are effectively interoperable. It does not require gatekeepers to introduce a request-based process, nor does it require the publication of a reference offer, as Article 7(4) of that Regulation does. Gatekeepers should ensure compliance with Article 6(7) of Regulation (EU) 2022/1925 by design¹³⁵ and free of charge. This serves the purpose of respecting the self-executing nature of Article 6(7) of that Regulation and lowering the transaction costs for developers. Such a proactive approach to compliance and interoperability by design should be adopted by default with respect to new features, released after the adoption of the Specification Decision.

¹³⁰ Apple’s support webpage for requesting interoperability for iOS, <https://web.archive.org/web/20240420004732/https://developer.apple.com/support/ios-interoperability/>, last visited 20 April 2024; and Apple’s support webpage for requesting interoperability for iOS and iPadOS, <https://developer.apple.com/support/ios-interoperability/>, last visited 6 November 2024.

¹³¹ Apple’s reply of 6 November 2024 to RFI 7 (DMA.100196) of 27 June 2024.

¹³² Apple’s submission dated 5 November on “Apple’s proposed updates to the Article 6(7) DMA interoperability request process”, cf. footnote 4.

¹³³ Data calculated based on Apple’s reply of 6 November 2024 to RFI 7 (DMA.100196) of 27 June 2024.

¹³⁴ Data calculated based on Apple’s reply of 10 February 2025 to RFI 11 (DMA.100196) of 28 November 2024, it appears for instance that, as of 31 January 2025, it took Apple in average [...] US business days (with the median being [...] business days) to reject requests, and in average [...] US business days to move requests to Phase II (median [...] business days).

¹³⁵ Recital (65) DMA indicates: “The gatekeepers should ensure the compliance with this Regulation by design. Therefore, the necessary measures should be integrated as much as possible into the technological design used by the gatekeepers.”

- (105) Unlike proactive approaches such as interoperability by design, a request-based system presents important limitations and difficulties for third parties. In particular, it causes delays due to the need to process requests and implement solutions, and it leads to associated transaction costs. It requires third parties to (attempt to) recognise the hardware and software features that may be available to or used by the gatekeeper.¹³⁶ It may also necessitate the disclosure of third parties' confidential information to the gatekeeper.¹³⁷ Moreover, it risks enabling the gatekeeper to maintain control over the request-based process and its outcome (i.e. whether, when and how interoperability will be provided), in a context where the gatekeeper may have incentives to refuse, delay, or restrict the provision of interoperability to competitors or potential competitors. Overall, in a context characterised by information asymmetry and imbalance in bargaining power, a request-based process may allow the gatekeeper to undermine the effectiveness of Article 6(7) of Regulation (EU) 2022/1925, and the ability of third parties to innovate.
- (106) In that respect, the Commission notes that multiple respondents to the public consultation stress the importance of interoperability by design and consider that ensuring interoperability cannot rely solely on a reactive, request-based process, in particular with respect to new features.¹³⁸
- (107) Although it might be challenging in practice for the gatekeeper to, immediately as of the entry into force of the obligation, ensure effective interoperability with all existing features for which interoperability may not have been envisaged in the original design of the operating system and/or of the features, the risks linked to a

¹³⁶ As illustrated by the fact that Apple's request form for interoperability requires developers to state the name of the feature with which they request interoperability, cf. recital (98)(b).

¹³⁷ As illustrated by the fact that Apple's request form for interoperability asks developers to describe which product(s) use or will use the feature, how the product(s) will use the feature, and where the products are or will be offered, cf. recital (98)(d)-(f).

¹³⁸ See in this regard submissions to the public consultation from: [joint submission from associations]: "A fundamental shift towards "interoperability by design" would be the most impactful improvement, instead of a reactive, request-driven approach." And "As noted at the outset of its submission, Apple's request-drive approach is at odds with the DMA since it represents a reactive stance that undermines interoperability by design"; [association]: "However, Apple is not treating Article 6(7) as the affirmative legal obligation which it is. Instead, it has introduced a request-based approach which comes with significant limitations for developers. We urge the commission to push Apple towards the desired pathway of "interoperability by design"; [association]: "[association] supports the Preliminary Findings in Case DMA.100204. The Proposed Measures are necessary to ensure that Apple's request-based process for existing functionalities is effective. However, we would like to emphasize that a request-based process is only appropriate for existing features and functionalities; Apple should ensure that new features and functionalities are interoperable by design"; [third party developer]: "In Case DMA.100204 (Process), the Commission should require Apple to make available by design the largest number of interoperable features/functionalities as a long-term objective of Apple's compliance with article 6.7 of the DMA. Although it is not forbidden to adopt a "upon request" approach, the latter leaves a discretionary margin to the gatekeeper that seems to contradict the ex ante straightforward approach set by the DMA which aims at compliance by design as a matter of principle (recital 65)"; [academic researcher]: "The default position should be that at a minimum, the gatekeeper makes all of the functionality available to its own non-OS software in its operating systems (or any designated virtual assistant) available to third parties, with detailed public documentation for developers"; [third party developer], "It is our view that the request-based process does not eliminate the strong network effect and the self-preferencing of the gatekeeper's own products." and "If the requirements were sufficiently clear and the accountability of the gatekeeper via DMA sufficiently ensured, there should be no need to undergo a request procedure in the terms proposed by Apple"; and [association], "We therefore disagree as a matter of principle that a request-based approach is a fair and effective pathway to support interoperability."

request-based process need to be properly addressed to ensure respect of third parties' right to interoperability.

- (108) In light of the above, the Commission considers it necessary to guide Apple to make the request-based process – which Apple itself has chosen to implement – fast, transparent and predictable, leading to effective results in relation to existing features. While a request-based process may be a way for a gatekeeper to become aware of features in relation to which specific market demand exists, the fact that a gatekeeper has received no request in relation to a given feature does not affect the principle that the gatekeeper should proactively work towards the development of interoperability solutions for the features that fall under the scope of Article 6(7) of Regulation (EU) 2022/1925.
- (109) Under these circumstances, the Commission considers it appropriate to specify certain relevant aspects of Apple's interoperability request process to ensure effective compliance with Article 6(7) of Regulation (EU) 2022/1925 in relation to Apple's designated operating systems CPSs in the European Union. In particular, such specifications are required to ensure that the overall process is effective, i.e. timely, transparent and predictable, objective, fair and non-discriminatory for all developers requesting access.
- (110) This Decision is without prejudice to the requirement that Apple continues to work on ensuring interoperability by design with respect to new features, in relation to which Apple itself acknowledges that interoperability by design would be implemented.¹³⁹

5.2. Principles for an effective process

- (111) The Commission considers that a set of clear principles and safeguards are necessary to guide the design and implementation of the process.
- (112) In particular, transparency is a key element of a fair and effective process: access to relevant information and resources is necessary for developers to exercise their rights under Article 6(7) of Regulation (EU) 2022/1925. Furthermore, transparency vis-à-vis developers is essential to give them sufficient predictability on the process and its outcome, and to be able to provide useful feedback to the gatekeeper.
- (113) Besides transparency, other safeguards are necessary to ensure the fairness of the process, in a context where gatekeepers, due to their dual role,¹⁴⁰ may have incentives to refuse, delay or restrict the request. It is essential that developers can have confidence that the process is designed and implemented in an objective, fair and non-discriminatory manner.
- (114) Finally, any disadvantages for developers resulting from Apple's choice to rely on a request-based process should be as limited as possible. In particular, delays should be minimised and adequate support should be provided to developers so as to limit, as much as possible, the complexity and transaction costs related to the process.

¹³⁹ [...]

¹⁴⁰ As highlighted by recital 57 of Regulation (EU) 2022/1925: “If dual roles are used in a manner that prevents alternative service and hardware providers from having access under equal conditions to the same operating system, hardware or software features that are available or used by the gatekeeper in the provision of its own complementary or supporting services or hardware, this could significantly undermine innovation by such alternative providers, as well as choice for end users.”

- (115) On this basis, the Commission sets out below the principles and safeguards which must guide the design and implementation of all aspects and stages of the request-based process:
- (a) At the stage where developers consider submitting an interoperability request, they should be provided, at their request, with clear and accurate information to reach a sufficient level of understanding of which features can be subject to interoperability and of how the request-based process works. Throughout the process, swift two-way communication with the gatekeeper is essential, and the developer should be given the opportunity to provide feedback in particular on the envisaged interoperability solution, cf. Section 5.4.1, 5.5.1 and 5.5.2.
 - (b) In cases where interoperability requests are rejected, in whole or in part, developers should be adequately informed of the reasoning for such decision. They should also be able in relevant cases to contest that decision through a fair and impartial mechanism, cf. Section 5.6.1 and 5.6.2.
 - (c) Where an interoperability solution is developed, the gatekeeper should ensure that this solution is made available to all developers, adequately documented, maintained and future-proof, cf. Section 5.7.1.
 - (d) Each stage of the process should be subject to a clear and transparent timeline, cf. Section 5.8.1.
 - (e) An adequate level of transparency vis-à-vis the broader developer community, or in some cases vis-à-vis the general public, is important to foster accountability, cf. Sections 5.8.2 and 5.8.3.
- (116) In the implementation of the specified measures, Apple may take strictly necessary, proportionate and duly justified measures to ensure that interoperability does not compromise the integrity of the operating system, hardware and software features. Moreover, pursuant to Article 8(1) of Regulation 2022/1925, the gatekeeper shall ensure that the implementation of any measures pursuant to Article 6(7) of Regulation 2022/1925 complies with applicable law, in particular Regulation (EU) 2016/679, Directive 2002/58/EC, legislation on cybersecurity, consumer protection, product safety, as well as with the accessibility requirements.
- (117) As part of the effort to ensure the overall proportionality in the obligations imposed on Apple, the Commission has taken into account, and where appropriate built upon, the process set up by Apple, including the different phases of the request-based process described in recital (99).
- (118) This Decision presents the measures that are necessary and proportionate for Apple to implement to ensure a fair and effective process, to the extent Apple relies on a request-based process. The Commission retains the possibility of reopening the specification proceedings if the specified measures turn out not to be effective, as provided for in Article 8(9)(c) of Regulation (EU) 2022/1925.
- (119) In light of the above, the following aspects of the request-based process are specified:
- (a) Transparency of iOS and iPadOS features reserved to Apple.
 - (b) Effectiveness and transparency of the process vis-à-vis requesting developers.
 - (c) Handling of rejections.
 - (d) Future-proof effective interoperability.

(e) Predictability and accountability.

5.3. Commission's observations on Apple's horizontal arguments

(120) In its Reply to the Preliminary Findings, Apple makes a number of cross-cutting arguments. The arguments that relate to specific measures are addressed in the corresponding sections.

5.3.1. *The Commission's competence under Article 8(2) of Regulation (EU) 2022/1925*

(121) Apple claims that the measures envisaged in these proceedings as outlined in the Preliminary Findings exceed the intended scope of specification proceedings, impose high-level principles unsupported by evidence, and unlawfully interfere with Apple's property rights, including intellectual property, under Article 17 of the Charter of Fundamental Rights.¹⁴¹

(122) Apple argues that the Commission's competence under Article 8(2) of Regulation (EU) 2022/1925 is limited to specifying measures without altering the normative content or scope of Article 6(7) of Regulation (EU) 2022/1925 as any attempt to do so would exceed its competence under Article 8(2) of Regulation (EU) 2022/1925, Article 288 TFEU, Article 291(2) TFEU, and Article 13(2) TEU.¹⁴²

(123) Apple further argues that Article 8(2) of Regulation (EU) 2022/1925 is intended to address narrow, fact-specific issues and does not serve as a substitute for a broader regulatory framework requiring extensive dialogue, as seen in the telecom industry.¹⁴³

(124) Lastly, Apple argues that the proposed measures lack the precision and foreseeability required under Article 52(1) of the Charter of Fundamental Rights which ultimately leads to arbitrary interference with its rights without clear limiting principles.¹⁴⁴

(125) The Commission considers these claims as unfounded. Regulation 2022/1925 draws an important distinction between two types of obligations: those laid down in Article 5,¹⁴⁵ which are a priori not susceptible of being further specified; and those laid down in Articles 6 and 7, which can be subject to further specification. While all the obligations contained in Regulation (EU) 2022/1925 are directly applicable, the legislator has considered that for the provisions of Article 6 and Article 7, it could be appropriate for the Commission to specify the obligations provided there in order to ensure effective compliance in line with the objectives of Regulation (EU) 2022/1925. In that respect, Article 8 does not define a priori the type of measures that the gatekeeper may be required to implement, nor contains a distinction between substantive and non-substantive measures, which would be incompatible with the goal of specification proceedings to ensure that gatekeepers effectively comply with that Regulation.

(126) It is not clear whether Apple argues that the specification decision should only lay down procedural rules, such as the ones mentioned in paragraph 32 of Apple's reply

¹⁴¹ Apple's reply to preliminary findings of 18 December 2024, paragraphs 36-37.

¹⁴² Apple's reply to preliminary findings of 18 December 2024, paragraphs 32-33.

¹⁴³ Apple's reply to preliminary findings of 18 December 2024, paragraphs 34-35.

¹⁴⁴ Apple's reply to preliminary findings of 18 December 2024, paragraphs 37-38.

¹⁴⁵ The third subparagraph of Article 8(2) leaves open the possibility for the Commission to also specify obligations laid down in Article 5 when the Commission opens proceedings on its own initiative for circumvention pursuant to Article 13.

to the preliminary findings,¹⁴⁶ or rather that it is a specific tailored procedure to tackle and address narrow fact-specific issues, as suggested in paragraph 35 therein. In any case, the Commission considers that there is no basis for either of those restrictive interpretations of the Commission's competence under Article 8(2). There is no basis in Article 8(2) to argue, as Apple seems to do, that such a provision can only be used to address narrow fact-specific issues. While specification decisions should take into account the specific circumstances of the gatekeeper and the relevant service,¹⁴⁷ the measures that are required to ensure effective compliance with a particular obligation do not need to be limited to measures tackling narrow issues raised in connection with that particular obligation.

- (127) As is the case for all obligations laid down in Regulation 2022/1925, Article 6(7) can apply to different gatekeepers, and to different core platform services, with different technologies and business models. While Article 6(7) sets up a broad interoperability obligation, the concrete measures that gatekeepers should take to effectively provide this interoperability will vary depending on the specific circumstances of the gatekeeper and the relevant service. In this case, Apple's designated operating systems are part of a vertically integrated and, in several ways, closed ecosystem comprising different layers of hardware, software and digital services. To comply with this provision in relation to existing features, Apple had so far not taken proactive steps to make those features available but chose to set up a reactive request-based process (cf. Section 4). In light of this choice, as well as Apple's vertical integration and the nature of its ecosystem, the Commission considers that, in the absence of appropriate measures to ensure that the request-based process is fair, transparent and objective, the effectiveness of Article 6(7) would be undermined.
- (128) Effective enforcement of Regulation (EU) 2022/1925 ensures that it can be implemented under uniform conditions in all Member States.¹⁴⁸ The measures in this Decision are necessary and appropriate for the implementation of Regulation (EU) 2022/1925 and consistent with the goal of Article 6(7) of that Regulation and that Regulation as a whole.¹⁴⁹

5.3.2. *Right to property*

- (129) Pursuant to Article 8(7) of Regulation (EU) 2022/1925, in specifying the measures that the gatekeeper concerned has to implement in order to effectively comply with its obligations, the Commission shall ensure that the measures are effective in achieving the objectives of that Regulation and the relevant obligation and are proportionate in the specific circumstances of the gatekeeper and the relevant service. Subject to the principle of proportionality, limitations may be made only if they are

¹⁴⁶ Apple refers in particular to implement acts that may be adopted pursuant to Article 46(1), (a), (h) and (j) of Regulation (EU) 2022/1925.

¹⁴⁷ Cf. Article 8(7) of Regulation 2022/1925.

¹⁴⁸ Judgement of 15 October 2014, *Parliament vs Commission*, C-65/13, EU:C:2014:2289, paragraphs 43-46 and the conclusions of Advocate General Cruz Villalón, in particular paragraphs 41 and 42; Judgment of 18 March 2014, *Commission v Parliament and Council*, C-427/12, EU:C:2014:170, paragraph 39.

¹⁴⁹ Judgement of 15 October 2014, *Parliament vs Commission*, C-65/13, EU:C:2014:2289, paragraph 44 and case law cited.

necessary and genuinely meet objectives of general interest recognised by the Union or the need to protect the rights and freedoms of others.¹⁵⁰

- (130) Apple mainly submits that the measures envisaged in the Preliminary Findings would disproportionately interfere with Apple's Intellectual Property Rights (IPRs) under Article 17 of the Charter.¹⁵¹ According to Apple, such measures would interfere with Apple's IPR by requiring Apple to publish and provide information protected by IPR. Further, the measures would remove the incentive for Apple to invest in innovation if the resulting solutions were to be immediately provided to all third parties. Apple claims that the Preliminary Findings do not acknowledge Apple's intellectual property.¹⁵²
- (131) Article 17 of the Charter and Article 1 of the First Protocol to the European Convention on Human Rights (ECHR) grant everyone the right to own, use, and dispose of their lawfully acquired or created property, including their intellectual property, to the exclusion of third parties.
- (132) However, Apple has not, in its Reply to the Preliminary Findings or during the administrative specification proceedings, substantiated its claim that compliance with the measures envisaged in the Preliminary Findings interfere with Apple's IPR protected in the Union.
- (133) Apple's approach during the administrative proceedings prior to the communication of the Preliminary Findings was to add a footnote to its submissions in which it claims that its software is proprietary and protected by trade secrets.¹⁵³ The submissions themselves do not discuss fundamental rights or IPR, except for: (i) a short letter in which, without identifying the IPR at issue and without substantiating its claim, Apple calls for a balancing exercise taking account of restrictions of Apple's freedom to do business and right to property;¹⁵⁴ and (ii) a reply to a request for information on a specific transparency measure.¹⁵⁵
- (134) In its response to the Preliminary Findings,¹⁵⁶ Apple also refers to IPR claims that Apple had made in the context of various replies to requests for information that it submitted during the specification proceedings on Features for Connected Physical Devices (DMA.100203) which ran in parallel with the proceedings for this Decision. Regardless of the legitimacy of Apple's comments, Apple does not explain how these claims would apply to the measures contained in the Preliminary Findings of the proceedings for this Decision. Finally, Apple sent a letter to the Commission on

¹⁵⁰ Article 52(1) of the Charter.

¹⁵¹ Apple's reply to preliminary findings of 18 December 2024, Section IV.

¹⁵² Apple's reply to preliminary findings of 18 December 2024, paragraph 48.

¹⁵³ Apple submits that "*Apple's software is proprietary and protected as a trade secret.*" Apple's response to the Commission's request for inputs of 30 September 2024, footnote 10.

¹⁵⁴ Apple's Letter of 15 October 2024 on "Case DMA.100203 / DMA.100204: Apple Article 8(2) specification proceedings", paragraph 15.

¹⁵⁵ Apple submitted that "*an obligation to provide its proprietary technology, including its internal details, to third parties interferes disproportionately with Apple's fundamental rights*", see Apple's response to the Commission's request for inputs on transparency and internal features of 14 October 2024, paragraph 9.10.

¹⁵⁶ See Apple's reply to preliminary findings of 18 December 2024, paragraph 49.

15 March 2025 regarding the impact of the specification proceedings on Apple's IPR, without providing any new substantive arguments to support Apple's claims.¹⁵⁷

- (135) Regardless of Apple's failure to indicate the precise IPR that it considers protected, and how exactly such IPR would be interfered with by the measures, the Commission recalls that according to settled case law, the right to property guaranteed by Article 17 of the Charter, including the right to intellectual property – as any other right protected by the Charter – is not absolute and its exercise may be subject to restrictions justified by objectives of general interest pursued by the European Union.¹⁵⁸ As is apparent from Article 52(1) of the Charter, restrictions may be imposed on the exercise of the right to property, provided that the restrictions genuinely meet objectives of general interest and do not constitute, in relation to the aim pursued, a disproportionate and intolerable interference, impairing the very substance of the right guaranteed.¹⁵⁹ The objective of Regulation (EU) 2022/1925 and of Article 6(7) in particular is to contribute to the proper functioning of the internal market by laying down rules ensuring contestability and fairness for the markets in the digital sector.¹⁶⁰ This is an objective pursued by the Union in the general interest. Therefore, any claimed interference with a right protected by the Charter should be balanced against this general interest.
- (136) In that respect, Apple has not substantiated how any interference by this Decision with its IPR would be disproportionate. In particular, Apple has not explained why the interference with its IPR by this Decision is of such nature and weight to cast aside, in this particular case, the Union legislator's weighing of the public interests against the private interests of economic operators impacted by that legislation as reflected in the wording of Article 6(7) of Regulation (EU) 2022/1925, which does not provide for a justification based on intellectual property rights.¹⁶¹
- (137) Last, due to the lack of substantiation of Apple's claims regarding IPR set out above, the Commission was neither able nor obliged to engage with these claims in the Preliminary Findings.
- (138) To conclude, while the Commission notes that Apple has not provided evidence on how the measures envisaged in the Preliminary Findings would interfere with Apple's IPR in concrete terms, the Commission explains in detail for each relevant measure (see Sections 5.4.1.4.1 and 5.7.1.3) how none of the measures of this Decision will allow developers to copy Apple's technology or have direct access to internal information and source code pertaining to Apple's operating system.

¹⁵⁷ Letter from Apple dated 14 March 2025 (received on 15 March 2025) on "Case DMA.100203 / DMA.100204: Apple Article 8(2) specification proceedings". The letter was submitted only four working days before the legal deadline and one working day before the scheduled meeting with the Digital Markets Advisory Committee.

¹⁵⁸ Joined Cases C-8/15 P to C-10/15 P, *Ledra Advertising and Others v Commission and ECB*, EU:C:2016:701, paras 69 and the case law cited.

¹⁵⁹ Joined Cases C-8/15 P to C-10/15 P, *Ledra Advertising and Others v Commission and ECB*, EU:C:2016:701, paras 70 and the case law cited.

¹⁶⁰ Recital 7 of Regulation (EU) 2022/1925.

¹⁶¹ Similarly, the Trade Secrets Directive must be interpreted in light of its recital 18, which specifically provides for disclosure of trade secrets "whenever imposed or permitted by law". See Directive (EU) 2016/943 of the European Parliament and of the Council of 8 June 2016 on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure.

5.4. Transparency of iOS and iPadOS features reserved to Apple

5.4.1. Queries for technical references

5.4.1.1. Principles

- (139) For developers to fully exercise their rights under Article 6(7) of Regulation (EU) 2022/1925, they need to be aware of the hardware and software features accessed or controlled via iOS or iPadOS available to or used by services or hardware provided by Apple, and that by virtue of that Regulation are subject to effective interoperability. As explained in Section 3.1.2, this extends to any of the different functionalities that the feature consists of.
- (140) Apple indicates that it already provides interoperability with many of the core technologies built into iOS and iPadOS,¹⁶² and that the request-based process enables developers to request “additional”¹⁶³ interoperability. Logically, the need for “additional” interoperability applies to features, including any of their functionalities, that are currently only available to or used by Apple’s services and hardware, or not available in an equally effective manner to all third-party developers, hereinafter named “reserved features”. It is this “interoperability gap”, between the reserved features and the existing interoperable ones, that gatekeepers are required to bridge under Article 6(7) of Regulation (EU) 2022/1925. However, it is often not possible for third parties to determine, based on the information currently provided by Apple,¹⁶⁴ what may be the full extent or content of that gap,¹⁶⁵ revealing a need for increased transparency of reserved features. As further explained in Section 5.4.1.3, providing more transparency can also help Apple in identifying and closing the interoperability gap. This would accelerate the processing of interoperability requests and the availability of interoperability solutions.
- (141) Apple’s choice to make interoperability with existing reserved features subject to a reactive request-based process, rather than proactively opening up interoperability to third parties, shifts the burden of identifying the interoperability gaps that should be closed onto the developers. In the absence of sufficient transparency, it would

¹⁶² Apple’s webpage <https://developer.apple.com/support/dma-and-apps-in-the-eu>, last visited on 25 November 2024.

¹⁶³ Apple’s revised Compliance Report submitted on 1 November 2024, page 75, Annex 15 to Section 2, paragraph 9: “A new request form for developers to request additional interoperability [...]”; Apple’s support webpage for requesting interoperability for iOS and iPadOS, <https://developer.apple.com/support/ios-interoperability/>, last visited 6 November 2024: “Developers of apps in the EU can request additional interoperability [...]”.

¹⁶⁴ Apple’s support page for requesting interoperability does not contain or refer to information about which “hardware and software features accessed or controlled via the operating system or virtual assistant listed in the designation decision pursuant to Article 3(9) [are] available to services or hardware provided by the gatekeeper”, per Article 6(7) of Regulation (EU) 2022/1925. Cf. Apple’s support webpage “Requesting interoperability with iOS and iPadOS in the European Union”, <https://developer.apple.com/support/ios-interoperability/>, last visited 6 November 2024. Furthermore, Apple’s developer documentation only covers public-facing features that developers currently already have interoperability with. See Apple’s developer documentation website, <https://developer.apple.com/documentation>, last visited 17 November 2024.

¹⁶⁵ Agreed minutes of meeting with [third party developer] of 31 October 2024, paragraphs 1 and 18; [third party developer]’s submission of 24 July 2024, paragraph 2.2; [third party developer]’s reply to RFI 2, question C.1; [third party developer]’s reply to RFI 2, question C.1; [third party developer]’s reply to RFI 2, question C.1; [third party developer]’s reply to RFI 2, question C.1; [third party developer]’s reply to RFI 2, question C.1; [third party developer]’s reply to RFI 2, question C.1; [third party developer]’s reply to RFI 2, question C.1; [third party developer]’s reply to RFI 2, question C.1; and [third party developer]’s reply to RFI 2, question C.1.

generally be difficult or even impossible for developers to sufficiently understand what the reserved features are and what capabilities they provide. This, in turn, limits the developers' ability to determine what reserved features they are entitled to obtain – and subsequently request – interoperability with, and thus limits the exercise of their rights.

- (142) To remedy this situation, *first*, third parties should be able to determine, with sufficient precision and confidence, whether specific features that may be relevant to their service or hardware are currently available to Apple's services and hardware. Increased transparency should make it easier for developers to judge for themselves whether a request is needed altogether. This would also contribute to making the request-based process more efficient, by avoiding unnecessary requests for features that Apple considers are not available to Apple at all, and that Apple would therefore reject, as has already happened in the past.¹⁶⁶
- (143) *Second*, third parties should be able to discover which features are *reserved* to Apple's services and hardware, to reduce the information asymmetry.¹⁶⁷ Third parties should have a clear view on the features that they have the right to interoperate with, and that they can therefore request.¹⁶⁸ In fact, several developers have given clear feedback that they currently struggle to observe and identify features.¹⁶⁹ This would avoid that third parties submit incomplete interoperability requests or do not request interoperability at all due to a lack of awareness. This would also avoid that third parties submit interoperability requests for features where Apple considers that effective interoperability already exists, as has already happened in the past.¹⁷⁰
- (144) *Third*, developers should be able to precisely describe in their interoperability request what the specific features are that are the subject of the request. Increased transparency helps in focusing the request on reserved features as well as avoiding

¹⁶⁶ See, for example, requests from [third party developer], [third party developer], [third party developer], [third party developer], [third party developer], [third party developer], and [third party developer], cf. Apple's reply of 6 November 2024 to RFI 7 (DMA.100196) of 27 June 2024. This is without prejudice to the Commission's assessment of Apple's positions in these cases.

¹⁶⁷ In their replies to RFI 2 on how information on reserved features would be useful, several developers describe such an information asymmetry and explains that detailed information would help identify and describe gaps in public APIs compared to Apple, cf. [third party developer]'s reply to RFI 2, question C.1.2, C.1.3, C.1.4; [third party developer]'s reply to RFI 2, question C.1.1, C.1.2; [third party developer]'s reply to RFI 2, question C.1.3; and [third party developer]'s reply to RFI 2, question D.1.

¹⁶⁸ See in this regard submissions to the public consultation from: [association], "A *high level list of frameworks, libraries, daemons* [sic], *features and functionality is an important first step for developers getting a lay of the land and being able to make informed choices as to what to make interoperability requests for.*"

¹⁶⁹ In their replies to RFI 2 on identifying and describing features, certain developers highlighted that they consider developers to have a lack of visibility into which non-public features exist, with one developer referring to them as "obscured", cf. [third party developer]'s reply to RFI 2, question C.1, B.1; [third party developer]'s reply to RFI 2, question C.1, D.1; [third party developer]'s reply to RFI 2, question D.1; [third party developer]'s reply to RFI 2, question C.1; and [third party developer]'s reply to RFI 2, question C.1. See also footnote 184 of this Decision.

¹⁷⁰ See, for example, requests from [third party developer], [third party developer], [third party developer], [third party developer], [third party developer], [third party developer], [third party developer], [third party developer], [third party developer], [third party developer], [third party developer], cf. Apple's reply of 6 November 2024 to RFI 7 (DMA.100196) of 27 June 2024. This is without prejudice to the Commission's assessment of Apple's positions in these cases.

the risk of misinterpretation of the requested features. Several developers have confirmed this.¹⁷¹

- (145) *Fourth*, developers should be enabled to ascertain whether the interoperability solution envisaged or provided by Apple would ensure effective interoperability under equal conditions with the same feature. On that basis, developers would then be able, in particular where they are concerned about the effectiveness of the interoperability solution, to provide relevant feedback to Apple (cf. Section 5.5.2), and where necessary, use the dispute resolution mechanism (cf. Section 5.6.2).
- (146) Despite Apple's claims,¹⁷² the circumstance that some developers are (and have been) able to submit interoperability requests at all, and that Apple considers that it has in most of these cases been able to understand these requests, does not mean that the current level of transparency on reserved features is sufficient to ensure the effectiveness of the request-based process, nor does it invalidate the observations made by the Commission in recitals (142) to (145). Ultimately, the lack of transparency could also discourage some developers from submitting interoperability requests altogether.
- (147) In practice, some developers have not described in their interoperability requests what features are needed, but rather provided a general description of the "outcome" they would like to achieve, as confirmed by Apple.¹⁷³ While developers should be able to use such an approach if they consider it adequate,¹⁷⁴ it should not be the only option available to them. First, this outcome-based process can present some clear

¹⁷¹ In their replies to RFI 2 on how information on features would be useful, several developers explained that such detailed information would make filing an interoperability request easier and faster. In particular, among these replies, developers stated that the benefits of such information would be: reducing the effort required to investigate (the replicability of) iOS or iPadOS features, including the avoidance of reverse engineering, and producing a more detailed, precise, and specific interoperability request that references exact APIs, cf. [third party developer]'s reply to RFI 2, question C.1.2; [third party developer]'s reply to RFI 2, question C.1.1, C.1.2; [third party developer]'s reply to RFI 2, question C.1.1, C.1.2, C.1.3; [third party developer]'s reply to RFI 2, question C.1.1; [third party developer]'s reply to RFI 2, question C.1.3; [third party developer]'s reply to RFI 2, question C.1.3; [third party developer]'s reply to RFI 2, question C.1.1 – C.1.4; [third party developer]'s reply to RFI 2, question C.1.2; [third party developer]'s reply to RFI 2, question C.1.2; [third party developer]'s reply to RFI 2, question C.1.2; and [third party developer]'s reply to RFI 2, question C.1.2, C.1.4. This was further described in replies to the public consultation. See for example, [third party developer]: "Apple is uniquely positioned to know which features its products and services access, many of which may be "Private APIs" available only to Apple as these are not publicly documented, it is hard for an external developer to request interoperability with APIs that they don't know exist", [third party developer]: "Apple, as the developer of iOS and iPadOS, uniquely understands the finite set of features and APIs required to achieve the interoperability that Article 6(7) DMA aims to facilitate. Third parties such as [third party developer] do not know the full extent of capability nor the extent to which Safari and WebKit take advantage of iOS and iPadOS features and APIs."; and [third party developer]: "This topic seems at first sight well covered in the proposal, ensuring that developers have access to the necessary information regarding the functionalities that are not publicly available. It is essential for developers to understand the functionalities that exist to be able to challenge the fact that some are reserved to Apple."

¹⁷² Apple's reply to preliminary findings of 18 December 2024, paragraphs 70, 73 and 76.

¹⁷³ See Apple's reply to Request for inputs on transparency and internal features of 14 October 2024, paragraph 9.7, referencing requests from [third party developer], [third party developer]; and [third party developer], cf. Apple's reply of 6 November 2024 to RFI 7 (DMA.100196) of 27 June 2024.

¹⁷⁴ Where this is the case, Apple should continue to allow such possibility and engage in good faith with the developers to ensure that it is clear which feature is subject to the request, and develop a solution that corresponds to what is required.

shortcomings, as it puts Apple into a position where it has to interpret what features are subject to the request, and may have to engage further with the developer to obtain clarifications. This can result in delays,¹⁷⁵ as Apple admits itself,¹⁷⁶ and risks that the interoperability solution developed based on this interpretation would not actually correspond to what the developer sought to request.¹⁷⁷ Apple states that “developers’ requests are driven by the specific practical problems that they are facing”,¹⁷⁸ but appears to ignore that the current lack of transparency and asymmetry of information can limit the ability of developers to describe their “problems” in a clear way, precisely because they are not in a position to provide a more detailed description of features.

- (148) Developers should be able to understand for themselves the different features that are available to Apple’s services and hardware, in order to be able to request and obtain an equally effective access to the same features, including all of their functionalities. In fact, some developers already sought to concretely describe the technical implementation of reserved features in their interoperability request.¹⁷⁹
- (149) Not all features, including all of their functionalities, are (equally) easy to observe.¹⁸⁰ Closed systems, such as iOS and iPadOS, only allow third parties to observe inputs, outputs, and behaviour, but give no view on how this is achieved.¹⁸¹ The experience acquired by the Commission in the parallel specification proceedings on Features for Connected Physical Devices (DMA.100203) illustrates the complexity of some features, i.e., how they required extensive engagement with Apple and third parties to enable a full assessment,¹⁸² or how they were not always well understood by third parties.¹⁸³

¹⁷⁵ In its reply to Request for inputs on transparency and internal features of 14 October 2024, question 9.d, Apple has argued that [...]. However, the Commission notes that enabling developers to introduce more precise interoperability requests referring to reserved features may facilitate Apple’s assessment when it comes to understanding which feature is requested, and what may be the gap between reserved features and what is requested.

¹⁷⁶ Apple itself states that [quote on Apple’s handling of interoperability requests], creating delays in the processing of the request that might have been avoided with more transparency, cf. Apple’s reply to preliminary findings of 18 December 2024.

¹⁷⁷ Agreed minutes of meeting with [third party developer] of 31 October 2024, paragraph 1; and [third party developer]’s submission of 14 November 2024, paragraph 2.5.4.

¹⁷⁸ Apple’s reply to preliminary findings of 18 December 2024, paragraph 73.

¹⁷⁹ See, for example, requests containing references to private frameworks from [third party developer], [third party developer], [third party developer], cf. Apple’s reply of 6 November 2024 to RFI 7 (DMA.100196) of 27 June 2024.

¹⁸⁰ For example, features that may be difficult to observe include features (including any of their functionalities) that improve battery life, performance, or use other hardware optimizations; concern backgrounded apps; or involve communication between multiple devices. These may depend on low-level interactions and in some cases non-deterministic behaviour that are not readily observable.

¹⁸¹ While it is sometimes possible, for example, by reverse engineering operating system libraries, to gain deeper insight into the internal workings of closed systems, this would likely be very burdensome, resource- and time-consuming. Cf. Agreed minutes of meeting with [third party developer] of 25 July 2024, paragraph 3; and Agreed minutes of meeting with [third party developer] of 29 October 2024, paragraphs 1 and 3.

¹⁸² For example, for the proximity-triggered pairing feature, the discussion revealed the insufficiency of Apple’s current *AccessorySetupKit* interoperability solution to provide effective interoperability with that feature, including all of its functionalities. Furthermore, this is shown by the Commission’s need for RFIs to Apple on, *inter alia*, (i) background execution, see Apple’s reply to RFI 4 (DMA.100203) of 14 October 2024, questions 4-27; Apple’s reply to RFI 6 (DMA.100203) of 23 October 2024, questions 13-22; Apple’s reply to RFI 7 (DMA.100203) of 14 November 2024, questions 7-10; (ii) automatic Wi-

- (150) Therefore, developers should be able to obtain sufficient knowledge of complex features (including all of their functionalities) in all relevant aspects, including beyond what may be user-facing, to clarify the existence and extent of these features (including all of their functionalities), and thus achieve effective interoperability with the same feature as available to Apple’s services and hardware, cf. Section 3.1.1. At the same time, it is both unreasonable and impractical to put the burden on developers to independently discover and understand reserved features in iOS and iPadOS. Developers have indicated that this is difficult for them.¹⁸⁴ For these reasons, and as Apple chose to introduce a request-based process instead of providing interoperability proactively, it is proportionate to reduce the burden for the developer by requiring Apple to provide more transparency.
- (151) In sum, the measure to increase transparency should take into account: the inherent information asymmetry between Apple and third-party developers,¹⁸⁵ which inevitably grants Apple a first-mover advantage; the need for comprehensive transparency to effectively advance the request-based process for developers;¹⁸⁶ and the need to provide access to the information in a way that is readily and quickly available and usable for developers, without excessive burden.¹⁸⁷

5.4.1.2. Approach envisaged in the Preliminary Findings

- (152) Based on the principles and considerations described in the previous section, the Commission had envisaged, in the Preliminary Findings, a measure requiring (i) the publication of a general high-level list of frameworks, libraries, and daemons, and (ii) the provision of a detailed technical reference on demand.

Fi connection, see Apple’s reply to RFI 4 (DMA.100203) of 14 October 2024, question 31; Apple’s reply to RFI 6 (DMA.100203) of 23 October 2024, question 12; and (iii) the NFC Controller in Reader/Writer mode, see Apple’s reply to RFI 8 (DMA.100203) of 13 November 2024, question 1-5.

¹⁸³ For example, for media casting and AirPlay, the discussion revealed misconceptions by third parties about support for DRM-protected content when screen mirroring.

¹⁸⁴ In their replies to RFI 2 on information for identifying features, certain developers noted that they consider that: discovering non-public features and APIs is “very difficult”, unless developers are “proficient” or “have deep knowledge of the Apple ecosystem”, and that discovering such APIs may require “unofficial ways”. Similarly, certain developers described the steps needed to discover and investigate non-public features, such as testing replicability, as resource/time-consuming, cf. [third party developer]’s reply to RFI 2, question C.1; [...]’s reply to RFI 2, question B.1, C.1; [third party developer]’s reply to RFI 2, question C.1; [third party developer]’s reply to RFI 2, question C.1; [third party developer]’s reply to RFI 2, question C.1.2; [third party developer]’s reply to RFI 2, question C.1.1; and [third party developer]’s reply to RFI 2, question C.1.1.

¹⁸⁵ This is for example explicitly mentioned in [third party developer]’s reply to RFI 1, question C.5; [third party developer]’s reply to RFI 2, question C.1; and [third party developer]’s submission of 24 July 2024, paragraph 2.2.

¹⁸⁶ Replies to RFI 1 from several developers for example describe how a lack of transparency negatively impacts their product planning, cf. [third party developer]’s reply to RFI 1, question C.3; [third party developer]’s reply to RFI 1, question C.2; [third party developer]’s reply to RFI 1, question C.2; [third party developer]’s reply to RFI 1, question C.2; and [third party developer]’s reply to RFI 1, question C.2.

¹⁸⁷ In their replies to RFI 2, a number of developers specifically mention that information on reserved features should match and be consistent with Apple’s existing documentation, cf. [third party developer]’s reply to RFI 2, question C.1.4; [third party developer]’s reply to RFI 2, question C.1.4, C.1.5; [third party developer]’s reply to RFI 2, question C.1.4; [third party developer]’s reply to RFI 2, question C.1.4; and [third party developer]’s reply to RFI 2, question C.1.4.

- (153) In its reply to the Preliminary Findings, Apple argues that the transparency measure is disproportionate in requiring to disclose unnecessary information which may never be subject to a request, and in imposing infeasible deadlines, as the required information and documentation [...].¹⁸⁸
- (154) From its engagements with Apple, the Commission understands that [...] ¹⁸⁹ [...] ¹⁹⁰ [...].¹⁹¹
- (155) Taking into account Apple’s observations and in particular [...], the Commission considers that, at this stage, it is appropriate to revise the measure proposed in the Preliminary Findings and adopt a staggered and bottom-up approach, only requiring transparency through technical references to be progressively built in relation to features where such a need is raised by developers. The revised measure remains anchored in the objective and well-defined concept of frameworks, as further detailed below in recital (157). This systematicity enables quick responses and helps ensure the accuracy and completeness of the responses. The revised measure also provides additional safeguards to Apple, in terms of the right to ask developers to explain the relevance of the technical reference. This avoids abuse through bad-faith queries, and particularly avoids that these cause Apple to waste time and effort.
- (156) This transparency measure aims to provide developers with the necessary insights into existing reserved features, in a way that requires from Apple an effort that is proportionate to the need to make the insights understandable and usable for developers to exercise their right to obtain interoperability effectively. The information disclosed should therefore not go beyond what is needed to achieve the transparency needed to enable an effective request-based process. In light of the above, the information provided should on the one hand improve developers’ ability to request interoperability with reserved features, and on the other hand ensure that the interoperability solutions developed in the context of the request-based process are as effective as the reserved features.

5.4.1.3. Measure set out in this Decision

5.4.1.3.1. Progressive transparency

- (157) The Commission understands that so-called “frameworks” are the primary unit in which iOS and iPadOS make features available to services and hardware. This is also recognised by Apple.¹⁹² Frameworks are reusable software building blocks,

¹⁸⁸ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 88-90.

¹⁸⁹ Apple’s reply to preliminary findings of 18 December 2024, paragraph 88; Apple’s reply to Request for inputs on APIs of 30 September 2024, paragraphs 4.3, 6.2 and 7.1; and Apple’s reply to Request for inputs on transparency and internal features of 14 October 2024, paragraphs 5.1, 9.4, 11.1, 11.2.

¹⁹⁰ Apple’s reply to Request for inputs on APIs of 30 September 2024, paragraph 6.2.

¹⁹¹ Apple’s reply to preliminary findings of 18 December 2024, paragraph 88; and Apple’s reply to Request for inputs on APIs of 30 September 2024, paragraph 7.1.

¹⁹² Apple’s developer documentation is primarily organized by framework, see Apple’s developer documentation website <https://developer.apple.com/documentation>, last visited 17 November 2024. In the interoperability request form, Apple also asks whether developers have “*evaluated other frameworks or technologies*” for interoperability, cf. recital (98)(g). In Apple’s reply to RFI 2 (DMA.100203) of 30 September 2024, Annex 1.2, in response to the Commission’s question “*List each API or similar interface (including Apple private APIs) that is used to implement the feature*”, [...]. In Apple’s submission dated 5 November on “Apple’s proposed updates to the Article 6(7) DMA interoperability request process”, paragraph 8, Apple indicated that “*frameworks are the way developers can integrate with iOS functionalities*”. The Commission takes note that in Apple’s email sent to the

containing shared resources such as code and data.¹⁹³ Frameworks are comprised of symbols,¹⁹⁴ also called application programming interfaces or APIs,¹⁹⁵ that are exposed or “vended” as a programmatic interface that apps call upon.¹⁹⁶ Frameworks come pre-installed with iOS and iPadOS as part of system libraries.¹⁹⁷

- (158) Certain “public” frameworks are already publicly available and documented in Apple’s developer documentation.¹⁹⁸ In contrast, the “private” frameworks that provide reserved features (including any of their functionalities) are currently not officially publicly fully documented.¹⁹⁹ Even where a public framework exists, granting effective interoperability in their entirety with the same features as are available to or used by Apple’s services or hardware, cf. Section 3.1.2, could require providing additional interoperability with those reserved features (including any of their functionalities) contained “within” a public framework.
- (159) As a precursor to obtaining that additional interoperability, developers have indicated the need for detailed information on the existence of reserved features to understand the full extent of features (including all of their functionalities) Apple uses or has access to.²⁰⁰ This is in particular relevant when it comes to discovering parts (e.g., symbols/APIs) of otherwise public frameworks that provide features (including any of their functionalities) that are not publicly available and documented, where the interoperability gap may be even less apparent.²⁰¹ The relevance of this is

Commission on 21 November 2024 at 00:55:48, subject “Re: DMA.100204 - Process - Apple’s proposal”, Apple indicated that [...].

¹⁹³ See Apple’s developer documentation website

<https://developer.apple.com/library/archive/documentation/MacOSX/Conceptual/BPFrameworks/Concepts/WhatAreFrameworks.html>, last visited 17 November 2024.

¹⁹⁴ Apple’s reply to Request for inputs on APIs of 30 September 2024, table 1. See also Apple’s developer documentation website <https://developer.apple.com/documentation/xcode/adding-identifiable-symbol-names-to-a-crash-report>, last visited 17 November 2024.

¹⁹⁵ More generally, Application Programming Interfaces (APIs) are software interfaces that allow two or more pieces of software to communicate with each other. APIs are typically implemented in one piece of software to offer (or “expose”) capabilities to other software, including applications. An API generally comes together with an API specification, i.e. a document describing how to use the API. The term API is sometimes used to refer to its specification, rather than its actual implementation.

¹⁹⁶ Apple’s reply to Request for inputs on transparency and internal features of 14 October 2024, question 7; and Agreed minutes of meeting with [third party developer] of 29 October 2024, paragraph 2. Within Apple’s developer documentation website <https://developer.apple.com/documentation>, last visited 17 November 2024, the types of symbols that are listed and named in frameworks include but are not limited to: classes, enumerations, functions, methods, properties, protocols, structures, and variables.

¹⁹⁷ See Apple’s developer documentation website

<https://developer.apple.com/documentation/xcode/adding-identifiable-symbol-names-to-a-crash-report>, last visited 17 November 2024.

¹⁹⁸ As an example, see Apple’s developer documentation website:

<https://developer.apple.com/documentation/Message>, last visited 17 November 2024.

¹⁹⁹ Independent public resources document iOS frameworks that are otherwise not publicly documented based on their reverse-engineering efforts, for example

<https://theapplewiki.com/wiki/Filesystem:/System/Library/PrivateFrameworks>,

last visited 17 November 2024, or <https://developer.limneos.net/>, last visited 17 November 2024.

²⁰⁰ Agreed minutes of meeting with [third party developer] of 31 October 2024, paragraphs 3 and 11; and slide deck, slide 13.

²⁰¹ Agreed minutes of meeting with [third party developer] of 25 October 2024, paragraph 7; Agreed minutes of meeting with [third party developer] of 31 October 2024, paragraph 3 and slide deck, slides 3 and 13; and Agreed minutes of meeting with [third party developer] of 8 November 2024, Sections 3 and 4. See also footnote 167 of this Decision.

corroborated by Apple, since it has shown that certain public frameworks contain private symbols that are reserved to its services and hardware.²⁰²

- (160) Apple should provide to developers a description, in the form of a technical reference, of those features (including their functionalities) that iOS and iPadOS frameworks expose only to Apple's services and hardware. Such a reference should offer developers insight and details about the way iOS or iPadOS enable hardware and software features controlled by iOS or iPadOS for Apple's and third-party hardware and services. Subsequently, this supports developers in submitting a detailed interoperability request that clearly states the concrete feature gap with which the developer requires interoperability, making the request-based process more efficient.
- (161) For the purpose of understanding possible interoperability limits, such a technical reference should include information on reserved features, comprising at least:²⁰³
- (a) descriptions of the features (including their functionalities) accessed or controlled by iOS or iPadOS, as enabled by the existence of relevant frameworks, so that developers adequately understand their existence and purpose;
 - (b) indications of whether the features (including any of their functionalities) are only available to or used by Apple's services or hardware, or also available to all or some third parties, by indicating whether they are enabled by frameworks that are private to Apple, such that developers can easily distinguish features (including any of their functionalities) that are not (yet) available to them; and
 - (c) a list of Apple's services and hardware to which the features (including any of their functionalities) are available, as enabled by the availability of relevant frameworks, such that developers understand which services or hardware provided by Apple can take advantage of the features (including any of their functionalities).
- (162) Apple should make the technical reference as useful and insightful as possible to a developer, in particular in relation to that developer's specific query.²⁰⁴ Where relevant, Apple should include additional details in the technical reference beyond the list prescribed in recital (161). Such information could include, where appropriate, more concrete descriptions of the way in which (specific) frameworks,

²⁰² Apple's reply to RFI 2 (DMA.100203) of 30 September 2024 Annex 1.2, all rows stating "[...]".

²⁰³ In their replies to RFI 2, certain developers indicated as elements of useful documentation: that the documentation contains functional descriptions, markings of public and non-public features, and feature use by Apple's services and hardware, as well as that the documentation should be comprehensive, cf. [third party developer]'s reply to RFI 2, question C.1.1; [third party developer]'s reply to RFI 2, question C.1.4; [third party developer]'s reply to RFI 2, question C.1.1; [third party developer]'s reply to RFI 2, question C.1.1, C.1.2; [third party developer]'s reply to RFI 2, question C.1.2, C.1.3; [third party developer]'s reply to RFI 2, question C.1.4; [third party developer]'s reply to RFI 2, question C.1.1; [third party developer]'s reply to RFI 2, question C.1.4; [third party developer]'s reply to RFI 2, question C.1.1; [third party developer]'s reply to RFI 2, question C.1.3; [third party developer]'s reply to RFI 2, question C.1.4; and [third party developer]'s reply to RFI 2, question C.1.1.

²⁰⁴ See in this regard submissions to the public consultation from: [third party developer], "*We believe that Apple should take the initiative to provide comprehensive information about frameworks that are directly or indirectly related to any requests. This includes not only the frameworks explicitly mentioned in the request, but also those that may not have been mentioned but could potentially address the needs of the requester.*"

potentially including private frameworks, function to enable the features (including any of their functionalities) contained in the developer’s reference query. Apple is not required to include concrete internal implementation details as part of the technical reference.

- (163) In the context of identifying the relevant feature in an interoperability request, Apple has indicated, [...].²⁰⁵ Despite this difficulty for Apple, Apple remains the best placed to assemble this information into a technical reference, as it has the best access to the necessary (internal) information. It would be an undue burden on third parties, or likely even impossible, to gather this information themselves, making it necessary and proportionate to require Apple to provide this information.

5.4.1.3.2. Access to information

- (164) Notwithstanding the previously outlined benefits of transparency with respect to reserved features, the Commission considers it reasonable that Apple produces technical references to features when developers express an interest in interoperability. Apple should be required to produce this technical reference upon reasoned query by a developer, hereinafter referred to as “reference query”.²⁰⁶ Providing this information on demand ensures its efficient and timely production, as well as the proportionality of the measure by limiting disclosure to those features for which there is a specific need. In such a reference query, the developer should provide context on their query and the assistance they seek, such as the feature, functionality, or desired outcome for which they seek technical information.
- (165) Apple’s requirements for the query should be calibrated towards the role that the reference query plays in the request-based process. The reference query is not an interoperability request of itself but precedes it. Compared to interoperability requests, the process of submitting a reference query should be less demanding. The process of submitting a reference query should therefore be reasonably distinct from submitting an interoperability request, though it may be integrated within the same portal.
- (166) Apple may require the developer to explain the relevance of the technical reference for the purpose of submitting an interoperability request. Any rejections to provide technical references on the grounds of the query being unrelated to interoperability should be exceptional and remain subject to the reporting requirements in paragraph 57 of the Annex. The rejection test should be oriented towards assessing the (ir)relevance of frameworks to interoperability, not towards evaluating the validity of the developer’s interoperability needs.
- (167) Given the information asymmetry between developers and Apple, developers can only develop their query based on the – possibly limited – information available to them. Apple should therefore not require extensive and excessive detail in the reference query. In particular, in contrast to Apple’s current interoperability request form,²⁰⁷ the developer should not be required to extensively describe the products for which the developer might need interoperability.

²⁰⁵ Apple’s reply to Request for inputs on transparency and internal features of 14 October 2024, paragraphs 9.9 and 9.10.

²⁰⁶ See in this regard Agreed minutes of meeting with [third party developer] of 31 October 2024, paragraph 11.

²⁰⁷ Cf. recital (98)(d)-(e) of this Decision.

- (168) Any developer should be able to submit a reference query prior to any interoperability request. At the same time, a reference query might only be necessary for those developers who need to gain more insights on reserved features. Submitting a reference query can thus not become a requirement for submitting an interoperability request, as to not prolong the request-based process. Vice versa, one potential outcome of the reference query is that Apple provides the developer with information that demonstrates that iOS or iPadOS already provide the necessary effective interoperability. It can thus also not be a requirement that a reference query is followed by an interoperability request.
- (169) If a developer submits a reference query, Apple should provide the technical reference quickly, following a predictable timeline, so as to limit any additional delay to the request-based process. Once a developer has received clarifications in the form of the technical reference, Apple should also be able to more precisely address their subsequent interoperability request(s), and possibly move these requests through the process faster.
- (170) To ensure that the information is maximally useful for developers, Apple should provide the information in a clear and organised manner that is familiar to developers. Developers already extensively rely on the public developer documentation to reason about the structure of iOS and iPadOS and discover how to access iOS and iPadOS features, creating familiarity.²⁰⁸ Wherever relevant, Apple should align the style and structure of the information provided with the public developer documentation, which is primarily organised by framework.²⁰⁹ In case the information is already provided by the public developer documentation, Apple can even simply refer to that documentation.
- (171) Taking into account the inherent information asymmetry between Apple and the developers, the measure should be complemented by appropriate communication channels and resources, as further detailed in Section 5.5.2 below. Apple should swiftly clarify any further uncertainties if developers raise questions during or after the process of submitting a reference query and receiving the technical reference. Apple should engage in good faith with a developer to understand and address their interoperability request, irrespective of whether that developer has submitted a reference query.
- (172) In line with the measure on transparency of interoperability requests vis-à-vis the broader developer community laid out in Section 5.8, the Commission considers it reasonable, once a developer has submitted a reference query and Apple has produced the technical reference, that this technical reference is also made available to other developers. This prevents duplicate efforts, for developers to submit reference queries and for Apple to answer them. The disclosure of these references to all developers is also in line with the subsequent requirement to provide the interoperability solutions to all developers (cf. Section 5.7). Apple should publish these technical references in a structured manner. This may be done in a way that reorganizes and aggregates technical references across separate reference queries, as long as there is no loss of technical information.

²⁰⁸ [Third party developer]’s submission of 9 September 2024, paragraph 1.4; Agreed minutes of meeting with [third party developer] of 25 October 2024, paragraph 2; and Agreed minutes of meeting with [third party developer] of 29 October 2024, paragraph 3.

²⁰⁹ See Apple’s developer documentation website <https://developer.apple.com/documentation>, last visited 17 November 2024.

- (173) The intent and nature of the technical references are to provide necessary insight into the way iOS or iPadOS enable features for interoperability purposes. While broad insight from these technical references is relevant for all developers, the developer who submits the reference query provides a specific context to their query, cf. recital (164), and it may be relevant that Apple provides additional details in their response to provide insight relevant specifically for that developer, cf. recital (162). If the technical reference includes information that could be considered business secrets and whose disclosure to a wider developer audience would harm Apple's or the requesting developer's legitimate interests, both the developer concerned as well as Apple may request that such confidential information is not included as part of the version of the technical reference that is published and made available to other developers. *A minima*, the minimally required contents of a technical reference, as described in recital (161) and paragraph 4 of the Annex, do not require the inclusion of internal implementation details as part of the technical reference, and should thus raise no concerns as to the disclosure of the technical reference to all developers.
- (174) Furthermore, in order to support the Commission in assessing whether the actions taken by Apple to comply with the measure described in this Section are effective, and in identifying possible areas for improvements, an audit of the process for responding to reference queries and supplying technical references should be undertaken every year. Where appropriate, the auditor should collect feedback from developers which have used this mechanism on their experience, and should make recommendations to Apple for improvements. A non-confidential summary of the auditor's report should be published by Apple.
- (175) Finally, a more systematic mapping can help Apple identify and subsequently close the remaining interoperability gap, and thus inform Apple's approach towards progressively and proactively ensuring full interoperability, cf. recital (140). This would act in complement to the reactive request-based process, while Apple works towards full compliance with Article 6(7) of Regulation 2022/1925. Such a mapping can be built internally to promote progress in providing interoperability.
- (176) The measure regarding on-demand technical references provides a first step in this way. In particular, mapping relevant frameworks is expected to be a necessary part of the required fact-finding exercise that Apple should do to respond to the reference query. A global mapping of features but also frameworks can then be built incrementally, using the individual mappings per reference query, but also proactively, including based on past interoperability requests.
- (177) The Commission will closely monitor the implementation and impact of the actions taken by Apple to progressively increase the level of transparency and will consider whether the specification of additional measures is required in the future.
- (178) These clarifications on the required level of transparency should also give useful indications, beyond the scope of the present proceedings, for new features, released after the adoption of the Decision, for which Apple will equally have to ensure interoperability pursuant to Article 6(7) of Regulation 2022/1925.

5.4.1.4. Commission's Assessment of the Gatekeeper's views

- (179) The Commission notes that the content of the measure contained in the present Decision has significantly evolved following the feedback from third parties and the

intense regulatory dialogue that continued with Apple after its reply to the Preliminary Findings.²¹⁰ While many of the concerns raised by Apple in relation to the measure envisaged in the Preliminary Findings no longer seem to be applicable to the measure imposed in the Decision, they are addressed in the rest of this section for the sake of completeness.

5.4.1.4.1. Intellectual Property Rights

- (180) With respect to Apple’s claims that the transparency measure contained in the Preliminary Findings unlawfully interfere with Apple’s IPRs, the Commission notes that several claims of what Apple defines as “information requirements” in its reply to the Preliminary Findings are no longer applicable given the reduced scope of the measure in this Decision. Furthermore, as explained in detail in Section 5.3.2, Apple does not, in response to the Preliminary Findings or during the administrative proceedings, sufficiently substantiate its claim that compliance with this envisaged measure would interfere with Apple’s IPR protected in the Union.
- (181) In any event, to the extent that the transparency obligation could theoretically interfere with Apple’s IPRs (which is something that Apple does not demonstrate), any interference with those rights would be limited and, as further explained below, would be proportionate in view of the objectives of general interest pursued by Regulation 2022/1925 and, more specifically, by Article 6(7) of that Regulation.
- (182) The proportionality of the measure described in Section 5.4.1.3 is ensured in particular by the fact that the scope and disclosure of information is limited to features for which there is a specific need expressed by a developer. The measure also ensures that the gatekeeper is not required to disclose more internal information than is needed for addressing interoperability needs and that their business secrets are protected.
- (183) Regardless of Apple’s insufficiently substantiated claims, and the revised scope of the transparency measure, the Commission addresses below Apple’s outstanding claims set out in the reply to the Preliminary Findings. Apple claims in essence, that, as a result of the “information requirements” set out in the Preliminary Findings, it will be forced to give unlimited access to confidential information to any party interested in how Apple’s proprietary technologies work at the API level. This would allow third parties to copy Apple’s solutions. In addition, this measure would interfere with Apple’s IPR, as “*this information is protected by copyright, constitutes trade secrets and implicates Apple’s patents*”.²¹¹
- (184) First, as a result of the revised transparency measure described in Section 5.4.1.3, Apple will only be required to provide information that can be relevant for the purpose of submitting an interoperability request. Apple may therefore refuse to provide this information where developers would fail to explain why a reference query is relevant for a possible interoperability request. Furthermore, the information that Apple is required to provide is limited to what is necessary, in relation to a given interoperability project, to enable developers to obtain a sufficient understanding of

²¹⁰ Cf. Section 2.2, in particular: the email from Apple to the Commission on 4 February 2025, subject “Re: DMA.100203 & DMA.100204 - recap and way forward”; the email from Apple to the Commission on 14 February 2025, subject “Re: DMA.100204 - Draft final measures for observations”; and Minutes from meeting between the Commission and Apple on 13 February 2025, after which Apple expressed no further concerns regarding the measure.

²¹¹ Apple’s reply to the Preliminary Findings of 18 December 2024, paragraph 51.

the features that Apple currently reserves to itself, including any capability that only Apple’s services and hardware can use. Without this knowledge, and as explained in Section 5.4.1.1, the ability for developers to obtain effective interoperability under Article 6(7) of Regulation (EU) 2022/1925 would be undermined.

(185) Second, the measure envisaged in the Preliminary Findings and imposed by this Decision will not allow developers to “copy” Apple’s technology, as alleged by Apple.²¹² Developers will not have direct access to internal information and source code pertaining to Apple’s operating systems, but only to technical references prepared by Apple containing limited information, as set out in recitals (161) and (162). The transparency measure only sheds some light on the features currently reserved to Apple, not on how the technology is built. In this regard, the Commission observes that Apple already provides third parties with many interfaces (i.e. APIs) that interact with, and are supported by, the iOS or iPadOS source code, without that code being revealed. The transparency measure imposed on Apple requires Apple neither to give access to the source code of iOS or iPadOS, nor to provide access to the internal implementation solution that Apple uses for its own services and hardware. In fact, the measure does not even require Apple to provide a specific description of that implementation solution. In this regard, it is unclear and, in any event, factually incorrect that this “*measure would make it possible for third parties to use Apple’s patented implementation without Apple’s authorization*”.²¹³ As explained above, the measure does not allow developers to copy Apple’s solution. Furthermore, Apple reports having [...] European patents that would be affected by this measure, without substantiating which specific patents and underlying technologies would be affected.

(186) In light of the above, besides Apple’s claim that the measure will interfere with Apple’s IPR, notably copyright, trade secrets and patents is not sufficiently substantiated, the revised measure included in this Decision is necessary and proportionate for the objective of enabling developers to request – and obtain – effective interoperability under Article 6(7) of Regulation (EU) 2022/1925.

5.4.1.4.2. Interpretation of “features” and the scope of Article 6(7) of Regulation (EU) 2022/1925

(187) With respect to Apple’s claim that the measure is based on an overly broad and undefined concept of features and functionalities,²¹⁴ the Commission refers to Section 3.1.2.

(188) Apple argues that developers should be able to identify features, but do not need information about frameworks.²¹⁵ [...] ²¹⁶ even though [...] ²¹⁷ thus undermining the principle of a platform with boundaries through APIs.²¹⁸

(189) The Commission considers that these arguments are no longer applicable in light of the scope and content of the transparency measure described in Section 5.4.1.3. As previously explained, this measure does not require Apple to reveal detailed

²¹² See in particular: Apple’s reply to preliminary findings of 18 December 2024, paragraphs 51 and 63.

²¹³ Apple’s reply to preliminary findings of 18 December 2024, paragraph 51(c).

²¹⁴ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 65-68.

²¹⁵ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 68 and 82.

²¹⁶ Apple’s reply to preliminary findings of 18 December 2024, paragraph 83.

²¹⁷ Apple’s reply to preliminary findings of 18 December 2024, paragraph 84.

²¹⁸ Apple’s reply to preliminary findings of 18 December 2024, paragraph 85.

information about internal implementation solution, and no longer refer to “libraries” or “daemons”. For completeness, the Commission notes that Apple grossly misrepresents the content of the transparency measure proposed in the Preliminary Findings. In particular, it was never envisaged that Apple would be required to open up private frameworks or APIs for access by third parties, as was also extensively discussed with Apple in the course of the regulatory dialogue.²¹⁹ Furthermore, and as indicated in recital (292), nothing in this Decision (or in the Preliminary Findings) prevents Apple from developing public interoperability solutions separate to its own distinct solution; see also Section 3.1.1.

5.4.1.4.3. The need for a list of non-public features

- (190) As a preliminary point, the Commission has explained in detail in Section 5.4.1.1 why it considers that progressively increasing transparency in relation to reserved features is necessary in the context of the request-based process. Furthermore, the Commission observes that Apple makes clear throughout its Reply to the Preliminary Findings²²⁰ that it considers that it is not required, under Article 6(7) of Regulation (EU) 2022/1925, to provide interoperability solutions that would be equally effective, and provided under equal conditions, compared to the solution that it uses for its own services and hardware. It follows that Apple considers that it is irrelevant for developers to learn how such internal solutions enable reserved features, given that they are not entitled to obtain an interoperability solution that would be equally effective. Hence, Apple does not consider that developers need a list of non-public features to effectively request interoperability, and that more transparency of the features available to developers is needed.²²¹
- (191) In that respect, and as explained above in Section 3.1.1 and recital (148), the Commission considers on the contrary that Apple is required under Article 6(7) of Regulation (EU) 2022/1925 to provide access to the same features, as effectively and under equal conditions compared to the solution that it uses for its own services and hardware. It is therefore important that developers can demand and obtain the information that they need to adequately evaluate features, reducing their effort and therefore accelerating interoperability requests and the availability of interoperability solutions.
- (192) Apple refers to examples from the parallel specification proceedings on Features for Connected Physical Devices (DMA.100203), where “the Commission identified [functionalities] through publicly available developer materials”.²²² The Preliminary Findings do not claim that there is no information available at all, but Apple’s suggestion that public materials would have sufficed is also inaccurate.²²³ In any event, the measure specifically concerns information that is not available but is necessary for developers, which was also made clear to Apple during the course of the regulatory dialogue.²²⁴
- (193) Apple’s position neglects how, absent a detailed description of features, developers may just be unable to provide more exact and concrete feature definitions, even if

²¹⁹ Cf. recital (12) of this Decision.

²²⁰ Apple’s reply to preliminary findings of 18 December 2024, paragraph 45.

²²¹ Apple’s reply to preliminary findings of 18 December 2024, Section V.B.

²²² Apple’s reply to preliminary findings of 18 December 2024, paragraph 72.

²²³ Cf. recital (149) of this Decision.

²²⁴ Cf. recital (12) of this Decision.

they would want to. Curiously, Apple suggests that the “publication of technologies/frameworks”²²⁵ is a more proportionate measure, as suggested by one developer, despite this being in line with the measure envisaged in the Preliminary Findings.²²⁶ In the same vein, contrary to Apple’s argument,²²⁷ the Commission makes no claim in the Preliminary Findings that Apple rejected requests because they did not mention APIs or private frameworks.

- (194) Regarding Apple’s arguments claiming a lack of evidence from the file for the measure envisaged in the Preliminary Findings,²²⁸ the Commission has the following observations.
- (195) First, as outlined in Section 2.4, the existence and importance of potential demand from market players in relation to a given measure is not determinative in the context of specification proceedings. In particular, when defining the measure to increase transparency, the scope should be primarily driven by the Commission’s analysis and regulatory dialogue.²²⁹ Input from third parties is relevant and helpful, but should be considered in the context of the lack of transparency for third parties, which implies that the latter cannot be assumed to be aware of all considerations relevant to interoperability with a closed system on which, by definition, they have no visibility.
- (196) Second, and for completeness, the Commission notes that many developers have generally expressed that the measure envisaged in the Preliminary Findings, i.e., increasing the level of transparency on reserved features, would be useful and important. This was already reflected in responses to RFI 2, as referenced in the Preliminary Findings.²³⁰ Subsequently, in the same spirit, respondents to the public consultation who specifically commented on the measure called it, e.g., “necessary”, “crucial”, “critical”, and “helpful”.²³¹

²²⁵ For the avoidance of doubt, it is very likely that “technologies” should be read in the context of Apple’s developer documentation (<https://developer.apple.com/documentation>, last visited 17 November 2024), where it is a near-synonym to “frameworks”.

²²⁶ See also this Decision, Section 5.4.1.2.

²²⁷ Apple’s reply to preliminary findings of 18 December 2024, paragraph 78.

²²⁸ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 61(a), 71, 73, 75, 77, 79, 80, 86 and 87.

²²⁹ For example, as regards Apple’s reply to preliminary findings of 18 December 2024, paragraphs 79 and 86, the technical engagement with Apple revealed the utility of including libraries and daemons in the measures of the Preliminary Findings. In Apple’s reply to RFI 2 (DMA.100203) of 30 September 2024, Annex 1.2, in response to the Commission’s question “*List each API or similar interface (including Apple private APIs) that is used to implement the feature*”, Apple [...].

²³⁰ See footnote 49 in the Preliminary Findings, equal to the first part of footnote 171 in this Decision.

²³¹ See in this regard submissions to the public consultation from: [association], page 1: “*Apple should provide a complete inventory of interoperability resources used by all internal teams building on iOS*”, similarly on page 2 “*First, the creation of a complete inventory of frameworks, libraries, and daemons. [...] creating such an inventory is a necessary first step*”; [third party developer], page 1 “*# Access to API*” specifically said “*That is really helpful for developing first-class software at the same level as Apple’s own apps*”; [association], p. 2 “*we believe the obligation on feature disclosure should be proactively undertaken by Apple to document what Apple’s own services can access its existing frameworks, libraries, and APIs of its iOS and iPadOS, which are currently restricted from rivals. We agree with the Commission that sufficient documentation must be supplied by Apple to rivals for them to understand how rivals can build competing non-OS solutions that are compatible with Apple devices running iOS or iPadOS.*”; [third party developer], “*Third parties such as [third party developer] do not know the full extent of capability nor the extent to which Safari and WebKit take advantage of iOS and iPadOS features and APIs. As a result, third parties are not able to achieve interoperability with and access to the same software and hardware features of iOS and iPadOS as are available to Apple’s*

- (197) Third, Apple claims that “end-user functionalities are easily observable and identifiable”, and that “there is nothing happening on the iPhone that is not observable”.²³² Furthermore, Apple states that “developers are able to request interoperability with the end-user functionalities they seek to enable, which has proven sufficient for Apple to understand the request”.²³³ Apple also considers that responses from third parties to the request for information from the Commission reveals that third parties are generally able to identify non-public features that Apple uses for their own services or hardware.²³⁴ In that respect, and as indicated in Section 5.4.1.1, the Commission notes that Article 6(7) covers a broad range of features, some of which are inherently complex to observe and identify. In that respect, the Commission notes that Apple’s claim is contradicted by feedback from multiple developers that they find it difficult to observe and identify features,²³⁵ and Apple’s own admission that time has to be spent to understand what the developers are actually requiring.²³⁶

services and hardware, as Article 6(7) DMA requires”; [third party developer]: “Apple is uniquely positioned to know which features its products and services access, many of which may be “Private APIs” available only to Apple. As these are not publicly documented, it is hard for an external develop (sic) to request interoperability with APIs that they don’t know exist. Therefore, [third party developer] welcomes the measures proposed in Section 2 (Transparency of iOS and iPadOS features and functionalities reserved to Apple)”; [association], “critical [...] that the list of available features and functionality that a developer could request are known and documented”, see also on page 10: “We support the necessity of both the high level list and the on-demand requests for detailed technical references.”; [third party developer]: “We find the proposed transparency requirements well-balanced and appropriate, and we believe their enforcement will benefit both Apple and the developer community”; [joint submission from associations], page 3: “We applaud the Commission in proposing comprehensive rules promoting transparency and higher quality standards for Apple’s documentation of application programming interface (API) access”; [third party developer], page 2: “One notable area of focus is the publication of private frameworks that Apple reserves for its own use. This topic seems at first sight well covered in the proposal, ensuring that developers have access to the necessary information regarding the functionalities that are not publicly available. It is essential for developers to understand the functionalities that exist to be able to challenge the fact that some are reserved to Apple”; and [third party developer], page 2: “Several aspects of the preliminary findings stand out as serving to significantly improve the status quo: Transparency of iOS features [...]”. See also: [third party developer]. A contrario, the submission from [association], considers that the measure would be disproportionate, as it would “turn Apple’s operating systems into an open-source community, managed at Apple’s expense for the benefit of rivals”. The submission from [third party developer], suggests reducing the scope of the measure, as “not every aspect of private iOS/iPadOS APIs should be published/described but only those that are specific to hardware access and inter-app OS services”.

²³² Apple’s reply to preliminary findings of 18 December 2024, paragraph 70.

²³³ Apple’s reply to preliminary findings of 18 December 2024, paragraph 73.

²³⁴ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 71 and 77.

²³⁵ In addition, while Apple indicates that “*The [...] Data Room Report reveals that more than a dozen developers indicated that they are generally able to identify non-public features that Apple uses for their own services or hardware*”, this statement leaves aside the fact that out of the 31 third parties which responded to that RFI, many others pointed out the difficulty or impossibility to identify such features (cf. footnote 169 of this Decision). Even amongst the dozen of third parties mentioned by Apple (Apple’s Reply to the Preliminary Findings of 18 December 2024, footnote 72), the Data Room Report, show that in many cases the statements are much more nuanced than what Apple seem to suggest, and often point to the difficulty of obtaining sufficient information and the importance of increased transparency (see for instance the positions from third parties 10, 22, 37 in pages 11 and 12 of the Report).

²³⁶ Apple’s reply to Request for inputs on transparency and internal features of 14 October 2024, paragraph 9.9.

- (198) Fourth, Apple argues that developers do not face issues in using Apple’s request-based system.²³⁷ In that respect, the Commission notes, as previously explained, that the issue at stake is not whether it is easy or difficult to fill the template, but whether developers are able to understand with sufficient precision, and without having to invest considerable resources, which features are available, and that they are able to provide the necessary information to obtain an effective interoperability solution.²³⁸
- (199) Fifth, Apple states that [...].²³⁹ Apple adds that several developers indicated that a list of non-public features would not be useful or necessary at all or, while generally useful, they would still prefer a different approach, which shows that there was no consensus among developers.²⁴⁰
- (200) In that respect, the Commission notes – once again – that the revised transparency measure imposed by this Decision does not require Apple to disclose internal implementation details. For completeness, the Commission disagrees with Apple’s interpretation of the feedback from third parties collected by the Commission.²⁴¹ In the first place, and as previously described the feedback from developers in response to the Commission’s RFIs²⁴² and during the public consultation²⁴³ confirm that many consider that transparency requirements such as those envisaged in the Preliminary Findings would be very useful. Furthermore, the Commission notes that, even when considering the responses of the five developers to which Apple refers in support of this argument, the replies from most of these five developers confirm the need for increased transparency, and the relevance of the transparency measure as imposed in this Decision.²⁴⁴
- (201) Sixth, regarding Apple’s comments on the representativeness of RFI 1 and RFI 2,²⁴⁵ replies to RFI 1 and RFI 2 were analysed in conjunction with the input received from the public consultation as well as from meetings with relevant stakeholders. Together

²³⁷ Apple’s reply to preliminary findings of 18 December 2024, paragraph 73.

²³⁸ As pointed out by [third party developer]’s reply to RFI 1, question B.2: *“It is not difficult to fill in the template fields provided, but Apple provides no guidance on what information it may need to provide interoperability or to determine the most effective way to do so. Until the outcome of the requests is known, it will not be possible meaningfully to assess the ease or difficulty of using the template.”*

²³⁹ Apple’s reply to preliminary findings of 18 December 2024, paragraph 74.

²⁴⁰ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 75 and 87.

²⁴¹ Replies to RFI 2 informed the transparency measure in Section 5.4.1.3 in conjunction with input from the public consultation as well as meetings with relevant stakeholders. The Commission did not indicate nor consider the input from RFI 2 as representing the views of the iOS developer community. In this context the Commission interpreted the input collected without reflecting verbatim the replies from developers to RFI 2.

²⁴² The Data Room Report, notes that “many respondents indicated that “a public list of non-public features” would be useful to identify the non-public features” (cf. page 10 of the Report). This is consistent with the feedback also received during the public consultation.

²⁴³ Cf. recital (196) of this Decision.

²⁴⁴ See the Data Room Report, in particular the position from Third party 20, which Apple quotes in paragraph 75 of its reply to the Preliminary Findings, which suggests to “(...) *focus more on the function those interfaces serve. Those functions can be observed from the outside, without needing to know what specific interfaces/APIs are used internally. In the end, this is what matters: What Apple can do and third parties are not allowed to. An example for such a function would be „Can I do X, just like Apple does it in their App Y?”*. This position seems to be in line with the transparency measure described in Section 5.4.1.3. Similarly, the positions from Third Party 8 (cf. page 12 of the Report) and Third Party 38 (cf. page 14 of the Report) indicate that an explanation of non-public features and how to interoperate with them would be useful.

²⁴⁵ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 79 and 80.

with all other inputs gathered from Apple and third parties, the responses to these RFIs informed the measure.

5.4.1.5. Effectiveness and proportionality of the measure

- (202) In light of the above, the Commission concludes that the measure in Section 1 of the Annex, as revised as a result of the input received from Apple and third parties, is an effective and proportionate way to achieve the objective of Regulation (EU) 2022/1925 and of Article 6(7). Ensuring that developers are able to access relevant information on the reserved features constitutes a prerequisite to an effective request-based process.

5.5. Effectiveness and transparency of the process vis-à-vis requesting developers

5.5.1. Support for developers interested in interoperability

- (203) A functioning request-based process requires that the developers interested in interoperability have access to clear and accurate information enabling them to understand what the process entails, how it is structured, and how it will be carried out. Developers should be able to make informed choices regarding whether to submit a request and what specific details to include in their request. To provide developers with predictability with respect to the process and of its outcome, transparent criteria are necessary. Developers should be able to anticipate the evaluation process and adjust their requests accordingly, in order to engage effectively with, and navigate through, Apple's request-based process.
- (204) Apple's developer portal provides a web page (to which Apple refers as the "Landing Page") that describes the nature and sequence of the process for requesting interoperability, with a short description of each phase and answers to three "frequently asked questions".²⁴⁶ The Landing Page links to the request form, cf. recital (98).
- (205) In its Preliminary Findings, the Commission has outlined the measure envisaged to ensure that developers would receive clear information on the request-based process, that would enable them to effectively engage with Apple's request-based process. Where appropriate, the Commission has clarified or adjusted some of the measures envisaged in the Preliminary Findings following Apple's and third parties' input. As a result, Section 2.1 of the Annex specifies the requirements for Apple's process. These requirements include providing, on the support webpage, up-to-date information on how to submit requests; describing the different phases, deadlines, and assessment criteria; and providing guidance on directing questions and concerns. This support webpage should also include clear information about the measures that Apple would be taking with respect to protecting confidential information of the developer (cf. Section 5.8.2).

5.5.1.1. Commission's Assessment of the Gatekeeper's views

- (206) Apple argues that the measures envisaged in the Preliminary Findings fall outside the scope of Article 6(7) of Regulation (EU) 2022/1925.²⁴⁷ In that respect, the Commission refers to the elements provided in Section 3.1 above.

²⁴⁶ Apple's revised Compliance Report submitted on 1 November 2024, page 76, Annex 15 to Section 2, paragraph 15; and Apple's support webpage for requesting interoperability for iOS and iPadOS, <https://developer.apple.com/support/ios-interoperability/>, last visited 6 November 2024.

²⁴⁷ Apple's reply to preliminary findings of 18 December 2024, paragraphs 91-92.

- (207) Apple subsequently argues the measure on support for developers interested in interoperability is disproportionate.
- (208) In that respect, Apple argues in the first place that the measure is disproportionate as the current Landing Page already explains the different phases and which criteria apply in the respective phases.²⁴⁸
- (209) In that respect, the Commission considers that the information and guidance currently provided on the current Landing Page are insufficient. In particular, this page includes no timeline beyond a reference to the fact that Apple would update developers every 90 days – which has often not been done in practice²⁴⁹ – and contains generally vague language providing very little predictability to developers.²⁵⁰ Finally, the Commission notes that Apple [...].²⁵¹
- (210) In the second place, Apple argues²⁵² that the measure is disproportionate since Apple proposed “less onerous measures”, i.e., [...].²⁵³ With respect to the assessment of proposals made by Apple in the context of these proceedings, the Commission refers to the explanations it has provided in Section 2.4. The Commission also explains, in Section 5.8.1, why clear and predictable timelines are an important element of an effective request-based process.
- (211) For completeness, the Commission notes that Apple has not explained how the proposed measure in the Preliminary Findings differed from Apple’s own suggested changes in such a way that makes it disproportionate vis-à-vis Apple’s suggestions. The measures specified in this Decision does not exclude the possibility for Apple to consider its own suggestions with regard to providing communication and relevant information to developers. Further, the Commission has taken Apple’s feedback during the specification proceedings into account and adjusted the measure accordingly.
- (212) Finally, Apple argues that the measure is not supported by evidence on the file, since many developers clearly confirm the effectiveness and transparency of the request-based process.²⁵⁴
- (213) The Commission notes that Apple particularly highlights the replies to Question B.1 of RFI 1,²⁵⁵ where the Commission asked the developers “*How easy was it to fill in the template for requesting interoperability*”. The replies to that question showed that the template *itself* was not very difficult to fill in as such, which in itself is not particularly revealing about whether the developers viewed Apple’s implemented support to developers as sufficient or transparent. Contrary to what Apple argues, the

²⁴⁸ Apple’s reply to preliminary findings of 18 December 2024, paragraph 95.

²⁴⁹ See for instance replies from [third party developer],[third party developer], [third party developer] to RFI 1, question A.A1.

²⁵⁰ For instance: “*If Apple determines that it’s not feasible to design an effective interoperability solution or that it is not appropriate to do so under the DMA Apple will communicate that to you.*” Furthermore, the Commission notes that in practice even when requests are moved to Phase II, Apple does not confirm to developers that their request is considered to be in scope of Article 6(7).

²⁵¹ Apple’s submission dated 20 November 2024 on “Apple’s proposed updates to the Article 6(7) DMA interoperability request process”, paragraphs 2-4.

²⁵² Apple’s reply to preliminary findings of 18 December 2024, paragraphs 94 and 97.

²⁵³ Apple’s submission dated 20 November 2024 on “Apple’s proposed updates to the Article 6(7) DMA interoperability request process”, paragraphs 2-4.

²⁵⁴ Apple’s reply to preliminary findings of 18 December 2024, paragraph 96.

²⁵⁵ RFI 1.

Commission took that feedback into account and did not propose any measure relating to altering the content, format or questions in the template.

- (214) Further, the data room report showed that (i) developers who had submitted a request rated the transparency as insufficient²⁵⁶ and (ii) a number of developers demonstrated a lack of transparency by indicating that the lack of transparency highly impacted their product planning and development, innovation and marketing.²⁵⁷
- (215) These elements confirm the Commission’s analysis, identifying structural gaps in the request-based process in the information provided by Apple and the communication.
- (216) In this regard, the Commission notes that third parties before²⁵⁸ and during²⁵⁹ the Public Consultation stated that insight into the criteria and decision-making processes are important to increase transparency.

5.5.1.2. Effectiveness and proportionality of the measure

- (217) In light of the above, the Commission concludes that the measure in Section 2.1 of the Annex, as revised as a result of the input received from Apple and third parties, is an effective and proportionate way to achieve the objective of Regulation (EU) 2022/1925 and of Article 6(7). Ensuring that developers are able to easily access

²⁵⁶ See Data Room Report, page 16-17: In evaluating the transparency of Apple’s current request-based process, the Data Room Report cites that out of 57 substantive responses, the overall average rating was 2.61 out of 5 with 1 being the lowest possible reply, indicating a moderate-to-low perception of transparency. More notably, when isolating the responses from developers who had submitted interoperability requests, a clear majority - 24 out of 33 – gave an average rating of 1.88 out of 5, where 1 star meant “poor” and 5 stars meant “excellent”.

²⁵⁷ Data Room Report, page. 17.

²⁵⁸ See as one example the agreed minutes of meeting with [association] of 19 July 2024, paragraph 2: “[association] highlighted two types of transparency for effective compliance with Article 6(7). The first type involves the transparency of the criteria and decision-making processes for API access. This includes Apple clearly stating the parameters and threat models used to assess API availability requests. By making these criteria public, developers and regulators can better understand the basis for approvals or rejections, allowing for more informed appeals and oversight.”

²⁵⁹ See for example submissions from [third party developer]; [third party developer]: “Apple currently has a page outlining how to request interoperability, but there is room for improvement. From our standpoint, having access to an example of a fully completed request would be invaluable. This would help us complete the form accurately and could potentially expedite the triage process on Apple’s end.” And “There is a significant lack of transparency regarding communication, the reasons for rejections, and timelines. It would also be valuable to have access to statistics on accepted and developed interoperability requests to assess the effectiveness of this process”; [joint submission from associations]: “We support the transparency measures outlined in Section 3.1 and agree that Apple should provide freely accessible and up-to-date information regarding verification for interoperability requests.” and “the draft decision emphasizes the need for Apple to provide “adequate support” to developers to minimize the complexities and costs associated with the interoperability request process. Besides clear and comprehensive documentation and establishing dedicated contact points and responsive communication channels, Apple should set up a forum where developers could openly discuss interoperability challenges, share solutions, and collaborate with each other and Apple engineers. This open forum could complement the existing request-based system by facilitating knowledge exchange and faster resolution of common issues”; [third party developer]: “The emphasis on transparency regarding the progress of requests [...] is crucial”; and [association]: “Transparency is one of the most critical principles that needs to be adopted to make Apple’s interop process effective. There is an information asymmetry and power imbalance between Apple and the developers that wish to interoperate with their system. Worse, as Apple has incentives to keep functionality reserved for itself, this process is to a significant degree adversarial.” and “In particular we support: Apple being obligated to more clearly explain their interop process including its steps and purpose. [...]”.

clear information about the process and the criteria applied by Apple constitutes an important element of an effective request-based process.

5.5.2. *Communication, updates and feedback on the request*

- (218) A functioning request-based process requires that the developers interested in interoperability have access to a two-way channel of communication, enabling them to navigate the request-based process without difficulties and to address issues arising during the assessment and implementation of their requests. Developers should be able to contact Apple to this end and to receive clarifications on questions, in particular regarding procedural steps, expected timelines, and necessary technical requirements. This is necessary to provide developers with sufficient predictability with respect to the process.
- (219) Given the often complex and technical nature of interoperability requests, a lack of transparent and collaborative engagement could undermine developers' rights to effective interoperability. Such good-faith engagement and two-way communication is generally recognised as a critical factor in hardware and software development and contributes to fostering a process where developers can plan and allocate resources effectively.
- (220) As described in the Annex, appropriate communication channels and feedback loops should be established to ensure the effectiveness and transparency throughout the process. This includes in particular (i) setting up a designated contact point, (ii) providing regular updates to the developer on the status of their request and (iii) enabling the developer to provide feedback throughout the process.
- (221) The specific requirement to establish an identifiable contact point can be fulfilled through various means, such as a functional mailbox, provided that the chosen channel is reliable and regularly monitored by Apple's teams. The contact point should serve as a dependable interface for developers seeking information or clarification in line with the measures set out in the Annex.

5.5.2.1. Contact point and response time

- (222) Compliance with Article 6(7) of Regulation 2022/1925 requires a reliable, responsive and accessible contact point at the gatekeeper. This is important not only for the developers but also for the gatekeeper to ensure that developers can engage meaningfully with the request-based process.²⁶⁰ To this end, Apple should ensure that developers receive timely assistance and clarification and ultimately that they can navigate the request-based process efficiently and address any issues that may arise during the assessment and implementation of their requests.
- (223) To facilitate effective communication between developers and Apple during the request-based process, a contact point should be identified and communicated to

²⁶⁰ In their replies to RFI 1, several developers indicate that more frequent communication and replies within a reasonable time would serve to improve the transparency and timeliness of the process, cf. [third party developer]'s reply to RFI 1, question B.6; [third party developer]'s reply to RFI 1, question B.8; [third party developer]'s reply to RFI 1, question B.8; [third party developer]'s reply to RFI 1, question B.8; and [third party developer]'s reply to RFI 1, question B.8. Similarly, several developers indicated that feedback and clear communication could also be improved RFI 1, cf. [third party developer]'s reply to RFI 1, question B.8; [third party developer]'s reply to RFI 1, question B.8; [third party developer]'s reply to RFI 1, question B.8; [third party developer]'s reply to RFI 1, question B.8; and [third party developer]'s reply to RFI 1, question C.2.

developers. This contact point should be sufficiently equipped to respond to inquiries swiftly and no later than the indicated in Section 2.2 of the Annex.

- (224) Developers should be kept sufficiently informed throughout the request-based process. They should be notified whenever there is a change to the status of their request. To ensure that developers have visibility into the status of interoperability requests at all points during the process, Apple should maintain a dedicated space on its developer portal where all relevant information and updates can be accessed.

5.5.2.2. Feedback mechanism on the envisaged interoperability solution

- (225) In presence of a request-based process, a process conducive to effective interoperability requires the gatekeeper's active engagement throughout the various stages and in particular during the development of the interoperability solution. Developers are reliant on a feedback cycle that ensures correct understanding between Apple and the requester and addresses risks of misunderstandings regarding the final interoperability solution.
- (226) This understanding is further supported by input received from developers, where they highlighted the need for specific engagement in different Phases of the process to ensure efficient use of both developer's and Apple's resources.²⁶¹ In this regard, developers independently mentioned the ineffectiveness of one of Apple's current feedback mechanisms ("Feedback Assistant") through which Apple engages with developers.²⁶²
- (227) In line with industry best practices and modern software development practices,²⁶³ it is important for both Apple and developers to actively engage with one another throughout the process. The absence of meaningful opportunities for developers to contribute during critical phases may result in misalignment, delays, and inefficient resource use for both Apple and interested developers, which could compromise the effectiveness of the interoperability solution as well as the viability of the request-based process. The generally adopted collaborative nature of software development contributes to the transparency and predictability needed for an efficient and effective interoperability process.
- (228) In a request-based process, developers should be given the opportunity to offer feedback at relevant stages of the process, in particular regarding the interoperability solution Apple intends to develop. While the design and the development of interoperability solutions is Apple's responsibility, it is important to give developers

²⁶¹ See submissions to the public consultation from [third party developer]; [joint submission from associations]: *"We fully support the Commission's requirement that Apple incorporates developers' feedback in an effective manner into the interoperability solution. Apple's current "Feedback Assistant" is widely perceived as ineffective and has a notably poor reputation among those seeking access due to Apple's inadequate responses"*; and [third party developer]: *"[in relation to the feedback process] this particular way of working together would have helped a lot with our first interoperability request, instead of receiving a non-working solution 5 months after the request was made."*

²⁶² See submissions to the public consultation: [third party developer]: *"Apple's "Feedback Assistant" (their bug-tracker) is an abysmal black hole. You submit a bug report or interoperability issue, and either Apple doesn't answer at all, or just tells you that your report is a duplicate - but without possibility to watch or engage in the other report."*; and as well as [joint submission from associations]: *" Apple's current "Feedback Assistant" is widely perceived as ineffective and has a notably poor reputation among those seeking access due to Apple's inadequate responses"*.

²⁶³ Fontão et al., "A Developer Relations (DevRel) model to govern developers in Software Ecosystems", *Journal of Software: Evolution and Process*, 2023, 35(5):e2389. DOI 10.1002/smr.2389, <https://onlinelibrary.wiley.com/doi/10.1002/smr.2389>, pages 18-19.

the possibility to comment on the envisaged technical solution and for Apple to take that feedback into account.

- (229) To that end, Apple should communicate, at the end of Phase II, a Project Plan containing sufficiently detailed information on the envisaged interoperability solution. Furthermore, where Apple considers that it is strictly necessary and proportionate to introduce mitigation measures to ensure that interoperability does not compromise the integrity of the operating system, hardware and software features, Apple should provide together with the Project Plan an explanation for its integrity concerns, and clearly explain what measures it intends to take to mitigate those concerns, and how those measures are strictly necessary and proportionate.
- (230) In that respect, in the course of the regulatory dialogue with Apple,²⁶⁴ it emerged that in exceptional cases, integrity risks that could not be identified in Phase II would arise for the first time in Phase III. This could lead to the need to adapt the envisaged interoperability solution, as described in the Project Plan. In such a case, Apple should therefore inform the developer without delay and provide the developer with the possibility to provide feedback on the modifications envisaged to the interoperability solution and to use the dispute resolution mechanisms described in Section 5.6.2. In such cases, the procedures set in Section 2.2 and 3.2 of the Annex should apply *mutatis mutandis* and the time limits should be suspended pursuant to Section 5.1.5 of the Annex.
- (231) The introduction of a feedback mechanism is crucial to ensure that there is no misunderstanding on the object and scope of the interoperability request, and that the ensuing development adequately addresses the needs expressed by developers and leads to an effective interoperability solution. The developer should be able to ascertain if all aspects of its interoperability request are addressed, and that the solution is at least equally effective as the solution used by Apple.
- (232) It is also a measure efficient in achieving the aim of making the request-based process more navigable in that it introduces a feedback point at appropriate points in the request-based process and allows potential issues to be identified and resolved as early as possible.
- (233) In addition to the feedback mechanism described in Section 2.2.2 of the Annex, Apple may consider where relevant to engage with other developers who may have an interest in interoperating with a requested feature in particular where relevant to ensure that the solution is designed in accordance with the requirements set out in Section 4 of the Annex. In doing so, Apple should not disclose information related to the developer who made the request considers that this developer considers confidential.

5.5.2.3. Commission's Assessment of the Gatekeeper's views

- (234) With regard to Apple's argument²⁶⁵ regarding the scope to specify requirements regarding the request process, the Commission refers to the reasoning elaborated above in Section 5.3.1.
- (235) Apple subsequently argues that the measures are disproportionate:

²⁶⁴ Minutes from meeting between the Commission and Apple on 13 February 2025, point 7.

²⁶⁵ Apple's reply to preliminary findings of 18 December 2024, paragraphs 91-93.

- (236) First, Apple argues that the measure is not supported by evidence on the Commissions file, since in its view many developers confirm the effectiveness and transparency of the request-based process.²⁶⁶
- (237) The Commission refers to the assessment in recital (212) above. Further, Apple’s responsiveness has been pointed out as insufficient by respondents to the RFIs sent by the Commission.²⁶⁷ The importance of such responsiveness has been confirmed by various submissions in the public consultation.²⁶⁸ On different occasions of communication hiccups, delays, missing messages and repeated reminders to Apple have been reported.²⁶⁹ In that context, the need to enhance the communication between Apple and the requesting developers are further supported by the feedback from the Public Consultation.²⁷⁰
- (238) Second, Apple argues²⁷¹ that the measure on communication and updates is disproportionate, since Apple proposed “less onerous measures”, i.e., [...].²⁷²
- (239) With respect to the assessment of proposals made by Apple in the context of these proceedings, the Commission refers to the explanations it has provided in Section 2.3. In any case, the Commission notes, that Apple has not explained how the

²⁶⁶ Apple’s reply to preliminary findings of 18 December 2024, paragraph 96.

²⁶⁷ As outlined in the Data Room Report, p. 16 with regard to RFI 1 Question B.10; 22 replies out of 32 substantive replies (excluding those who replied, “don’t know”) indicated that Apple’s communication was “not effective”.

²⁶⁸ See in particular [third party developer]: *“Quick answers, and communication throughout the process is of paramount importance.”*. See also submission from [third party developer] and from [third party developer].

²⁶⁹ In particular, in an email exchange in October 2024 (see in particular Apple’s email of 11 October 2024), Apple informed the Commission that [...] (see Apple’s reply of 10 February 2025 to RFI 11 (DMA.100196) of 28 November 2024, request from [third party developer]. See also the Data Room Report where it was noted that *“Third Party 16 flags flaws in the communication process with Apple, mentioning that after having submitted an interoperability request, its request first was denied and then – a few months later - partially granted.”*, page 18.

²⁷⁰ See for example submissions from [association]; [third party developer]; [association]; *“We agree with the Commissions’ position that a fair request-based approach would require [...] “swift two-way communication” between any developer and Apple”; [third party developer]: “Transparency at every stage of the process - both towards the requesting developer and the broader developer community - is essential. We find the proposed transparency requirements well-balanced and appropriate, and we believe their enforcement will benefit both Apple and the developer community. These measures will foster trust between the parties and reduce the likelihood of misunderstanding throughout the process. Ensuring due process and predictability through clearly established communication channels, designated points of contact and defined timelines will significantly help developers. Many developers are small with limited resources, often finding it challenging to navigate exchanges with the gatekeeper due to the asymmetry of power. By providing this framework, the proposed measures will encourage competition by ensuring that developers feel confident in submitting interoperability requests to Apple without fear of being discouraged or ignored”; [association]: “The Proposed Measures would significantly increase the transparency of the process and allow developers to provide feedback and meaningfully engage with the process through the appointment of a dedicated point of contact and the requirement to make process status notifications and updates available to developers.” and “The Proposed Measures would significantly increase the transparency of the process through the requirement to make process status notifications and updates available to developers”; and [third party developer] “Additionally, the establishment of a designated contact point with a maximum response time enhances communication and ensures that developers can receive timely assistance throughout their requests.” and “The emphasis on transparency regarding the progress of requests [...] is crucial.”*

²⁷¹ Apple’s reply to preliminary findings of 18 December 2024, paragraph 97.

²⁷² Apple’s submission dated 20 November 2024 on “Apple’s proposed updates to the Article 6(7) DMA interoperability request process”, paragraph 7.

proposed measure in the Preliminary Findings would differ from Apple's own suggested changes in such a way that makes it disproportionate vis-à-vis Apple's suggestions. The measures specified in this Decision do not exclude the possibility for Apple to consider its own suggestions with regard to the type of communication tool that Apple should use when communicating with developers; insofar as Apple provides an effective and reliable two-way communication channel and adequate information for developers to navigate the request-based process.

- (240) Further, the proposals made by Apple on communication prior and after the Preliminary Findings, were taken into account and reflected in this decision. The Commission notes for completeness that while some of these proposals could *a priori* – and subject to further analysis and engagement in the context of the regulatory dialogue following the adoption of this Decision – be relevant to implement the measures specified in these Decision [...], it is not the purpose of this Decision to specify in detail the type of tools or resources that Apple should use, or the exact wording of the information Apple should provide on its website in order to comply with these measures.²⁷³ The concrete implementation of the measure remains Apple's responsibility.
- (241) Finally, Apple argues²⁷⁴ the measure on feedback is disproportionate, since Apple i) [...] suggested to [...], ii) it will negatively impact Apple's software development process, iii) enabling developers to provide feedback *"gives them the opportunity to seek commercial gain by requesting additional or more tailored solutions from which they could benefit, claiming that these are required to achieve effective interoperability, diverting Apple's resources to the whims of competitors"*.
- (242) The Commission considers that the need to ensure that developers are adequately informed and able to provide feedback stems from Apple's choice to implement a request-based process. An effective feedback process is essential for ensuring efficient interoperability access and ultimately efficiency and effectiveness in the development phase. As such, a lack of a structured feedback mechanism not only ultimately risks limiting developer's rights under Article 6(7) of Regulation (EU) 2022/1925 but also the potential for efficient and innovative interoperability solutions.
- (243) The requirement to implement a feedback mechanism addresses the abovementioned risk adequately and takes relevant input from both developers and Apple into account. Developers have indicated the importance of Apple's active engagement to ensure that interoperability solutions align with their requests.²⁷⁵ A feedback mechanism at a crucial stage of the process effectively mitigates this inherent risk of

²⁷³ The Commission will monitor Apple's updates with regard to information and communication and engage to ensure necessary efficiency and transparency.

²⁷⁴ Apple's reply to preliminary findings of 18 December 2024, paragraphs 100-103.

²⁷⁵ The Data Room Report refers on page 14 to the fact that Third Party 5 recommending that *"third parties should be able to submit feedback on modifications"*. This report also notes that *"Third Party 12, Third Party 13 and Third Party 11 flag that the feedback from Apple on their request was too vague."* on page 18, lastly on *"B.8 Were the outcomes of your requests clearly communicated to you with clear and understandable reasons? Was the feedback timely?"* at least eight developers indicated the response or the reasoning for the outcome/reason for rejection was not clear." on page 19.

the request-based process. The measure on feedback has further been supported in the feedback received during the Public Consultation.²⁷⁶

- (244) The specified feedback mechanism enables developers and Apple to clarify expectations at a critical stage of development and provides a mutual chance for both parties to align. It does not provide for requests that fall outside the scope of Article 6(7) of Regulation (EU) 2022/1925 and in any case the scope limits developers' rights to interoperability to features to the extent these are available to Apple's first-party services and products.

5.5.2.4. Effectiveness and proportionality of the measure

- (245) In light of the above, the Commission concludes that the measure in Section 2.2 of the Annex, as revised as a result of the input received from Apple and third parties, is an effective and proportionate way to achieve the objective of Regulation (EU) 2022/1925 and of Article 6(7). The presence of appropriate communication channels and effective feedback mechanism constitute important elements of an effective request-based process.

5.6. Handling of rejections

5.6.1. Transparency with respect to rejection of requests

- (246) Where Apple has good reasons to reject a request for access for the purpose of interoperability, the assessment of the request should be made in a transparent manner and the rejection should be duly motivated. Given Apple's control over the assessment and outcome of each request, it is particularly important that developers are given the opportunity to understand why their requests are being rejected. Transparency in relation to the basis of, and detailed reasoning for, such a rejection is critical for the assessment of whether the rejection is objectively justified in conformity with Apple's obligation pursuant to Article 6(7) of Regulation (EU) 2022/1925.²⁷⁷

²⁷⁶ See for example submissions from [third party developer]: *"We find the proposed transparency requirements well-balanced and appropriate, and we believe their enforcement will benefit both Apple and the developer community. These measures will foster trust between the parties and reduce the likelihood of misunderstanding throughout the process. Ensuring due process and predictability through clearly established communication channels, designated points of contact [...] Many developers are small with limited resources, often finding it challenging to navigate exchanges with the gatekeeper due to the asymmetry of power"*; [association]: *"The Proposed Measures would significantly increase the transparency of the process and allow developers to provide feedback and meaningfully engage with the process through the appointment of a dedicated point of contact and the requirement to make process status notifications and updates available to developers"*; [joint submission from associations]: *"We fully support the Commission's requirement that Apple incorporates developers' feedback in an effective manner into the interoperability solution"*; and [association]: *"This section has a great number of sensible and important design points. In particular we support: [...] Developers being able to provide feedback as to the interop solution Apple is implementing or designing at any point in the process. Apple being obligated to both consider this feedback and to provide detailed explanations as to how their solution supports the use case."*

²⁷⁷ In that respect, it can be relevant to point out by analogy that, in the context of the application of Article 102 TFEU to a company controlling a digital platform, the Court of Justice has recently observed that *"a failure by the undertaking in a dominant position to respond to a request from a third-party undertaking seeking to have that dominant undertaking ensure the digital platform which it owns is interoperable with an app developed by that third-party undertaking could constitute evidence that the refusal to ensure such interoperability is not objectively justified"* (25 February 2025, Alphabet v AGCM, C-233/23, ECLI:EU:C:2025:110, paragraph 77). This observation confirms that

- (247) Transparency with respect to the rejection of a request is also important to enable the developer to decide whether to use the dispute resolution mechanism, as further described in Section 5.6.2 below.
- (248) In addition, the transparency requirement is important if Apple is to reject a request (or parts of a request) where Apple considers that the request (or parts of a request) does not fall under the scope of Article 6(7) of Regulation (EU) 2022/1925, first subparagraph. In the request-based process set up by Apple, such rejection would take place in Phase I. However, where Apple would decide to reject a request (or parts of a request), at other stages of the process, or for other reasons, it would equally be necessary to ensure that the developer is adequately informed of the reasons for such a rejection.
- (249) Furthermore, where Apple decides to reject a request, it should inform the developer of the possibility to use the internal review mechanism and subsequently the conciliation procedure for decisions falling under the scope of these procedures and indicate the conditions and timeline for such procedures.
- (250) Pursuant to the Commission Decision of 25 March 2024 relating to measures pursuant to Article 26(1) of Regulation (EU) 2022/1925,²⁷⁸ the Commission notes that Apple is required to retain all relevant information related to the denial of the request. Where required by the conciliator under Section 5.6.2, Apple should also provide access to those documents to the conciliator.
- (251) Where appropriate, the measure ensuring transparency with respect to rejection of request set out in the Preliminary Findings has been revised to take into account Apple's and third parties' input.

5.6.1.1. Commission's Assessment of the Gatekeeper's views

- (252) Apple firstly argues that the Commission lacks competence to specify such measure, as it fall outside the scope of Article 6(7) of Regulation (EU) 2022/1925.²⁷⁹ In that respect, the Commission refers to the assessment in Section 5.3.1 in which the Commission rejected Apple's restrictive interpretation of Articles 8(2) and 6(7) of Regulation 2022/1925.
- (253) Apple also argues that it is disproportionate to require it notifying developers of rejected interoperability requests and to inform them of whom to contact for questions and whom to complain to for disagreements.²⁸⁰
- (254) The Commission notes that Apple has not further reasoned why such a measure would be disproportionate. Apple only limits itself to referring to its own suggestion to [...].²⁸¹ Apple does not seem to dispute that rejections should be properly reasoned.
- (255) The Commission considers this measure appropriate to mitigate the risk of unjustified refusals. By allowing developers to verify the reasons for the rejection of a request, it increases their trust in the process implemented by Apple to comply with Article 6(7).

transparency with respect to a refusal to provide an interoperability solution is essential to ensure that such a refusal is objectively justified within the applicable legal framework.

²⁷⁸ Decision C(2024) 2077 final.

²⁷⁹ Apple's reply to preliminary findings of 18 December 2024, paragraphs 104-107.

²⁸⁰ Apple's reply to preliminary findings of 18 December 2024, paragraph 108.

²⁸¹ Apple's submission dated 20 November 2024 on "Apple's proposed updates to the Article 6(7) DMA interoperability request process", paragraph 24.

- (256) Furthermore, the feedback from third parties which commented on that measure during the Public Consultation confirms the appropriateness of the measure.²⁸²

5.6.1.2. Effectiveness and proportionality of the measure

- (257) In light of the above, the Commission concludes that the measure in Section 3.1 of the Annex, as revised as a result of the input received from Apple and third parties, is an effective and proportionate way to achieve the objective of Regulation (EU) 2022/1925 and of Article 6(7). Transparency with respect to the rejection of their request is necessary to ensure that the outcome of the request-based process is fair and understandable by the developer.

5.6.2. Dispute resolution mechanisms

- (258) In a request-based system where the gatekeeper retains discretion to reject a request for interoperability, the potential for disputes is inherent. For developers to be reassured that their rights under Article 6(7) of Regulation (EU) 2022/1925 are respected and that the gatekeeper is not using its control of the request-based process and the situation of asymmetry of information to arbitrarily reject or restrict the provision of interoperability, developers must be able to rely on a fair and swift mechanism to address possible disagreement and disputes. This mechanism should provide a structured framework for resolving disputes of a technical nature that may arise between Apple and developers in relation to interoperability requests.
- (259) In line with Article 5(6) of Regulation (EU) 2022/1925, the introduction of such a dispute resolution mechanism is without prejudice to the possibility for business users or end users to raise any issue of non-compliance with that Regulation or with measures specified by the Commission pursuant to Article 8(2) thereof by the

²⁸²

See in particular submissions from [association]: “*This is an important paragraph to prevent games that delay or impede the interoperability process. Clarity around rejections is critical in allowing requesting developers to pursue interoperability. In cases where developers have inadvertently submitted an invalid request, this step will make it straight forward for them to rectify their errors and submit their request. Where their request is not allowed under the DMA, this will provide clarity to the developer as to the scope of what is allowed*”; [association]: “[association] welcomes the prospect of increased transparency as regards any rejection or mitigation measure that Apple may adopt to preserve the integrity of the OS or of its own hardware and software features. In particular, we welcome the increased accountability imposed on Apple through the obligation to provide the Commission with detailed reasoning as to why it is necessary to reject an interoperability request to preserve integrity. Effective compliance with Article 6(7) DMA can only be achieved if Apple’s system integrity concerns are indeed duly justified, proportionate and necessary”; [joint submission from associations]: “We welcome the Commission’s initiative to increase transparency on grounds and reasons for rejection of interoperability requests under Article 6(7)”; [third party developer]: “While the suggested measures are a very welcome step in the right direction, it is essential that any rejection by Apple of such requests must be clearly substantiated and justified”; [third party developer]: “The emphasis on transparency regarding the progress of requests and the potential for rejections is crucial. This transparency not only builds trust between developers and Apple but also allows for better planning and adjustment of strategies as needed”; [third party developer]: “detailed feedback on rejections will empower our development team to effectively address technical challenges and request new features from Apple”; [third party developer]: “very important to be able to discuss the rejection to determine next steps”; [association]: “We agree with the Commissions’ position that a fair request-based approach would require: [...] adequate information as to “the reasoning for such rejection” of interoperability”; and [third party developer]: “In addition, where Apple withholds access to certain features, it should clearly (and promptly – see below) articulate the specific reasons why such restrictions are necessary and proportionate to safeguard integrity of iOS and iPadOS. The Commission should also ensure that third parties can challenge these justifications in accordance with the procedure for the handling of rejections set out in the proposed measures.”

gatekeeper with any relevant public authority, including national court, related to any practice of the gatekeeper.

- (260) Under Union’s merger control and competition law as well more generally in regulatory contexts, whenever “access remedies” or “access commitments” or access obligations are imposed (e.g. access to relevant APIs),²⁸³ it is common to establish alternative dispute resolution mechanisms to offer to the beneficiaries of the obligation an additional avenue for enforcement, complementing the Commission’s oversight.²⁸⁴ Disputes over the implementation of access remedies/commitments can be highly technical. Relying solely on traditional regulatory dialogue or courts proceedings may therefore lead to delays and inefficiencies. In this context, alternative dispute resolution mechanisms ensure faster, more flexible enforcement, allowing the beneficiaries to enforce their rights more effectively.
- (261) Importantly, the presence of an alternative dispute resolution mechanism does not diminish the Commission’s authority to enforce said obligations. The Commission notes that Apple has put in place an alternative dispute resolution mechanism in the context of Article 6(12) of Regulation (EU) 2022/1925, which contains an explicit requirement in that respect.²⁸⁵ Apple has also established recourse to an independent third party in the context of its compliance with Article 6(4) of Regulation (EU) 2022/1925 although that provision, like Article 6(7) of Regulation (EU) 2022/1925, contains no reference to such a mechanism.²⁸⁶ Apple also committed to a dispute settlement system under a specific arbitration procedure to allow for an independent review of Apple’s decisions restricting or denying access to the so-called “Near-Field Communication (NFC) Entitlement Program” in the context of the antitrust case AT.40452 – Apple - Mobile payments.²⁸⁷
- (262) In light of the above, the implementation of a measure outlining a dispute resolution mechanism through an internal review mechanism and a conciliation process is important to ensure that developers can effectively exercise their rights as beneficiaries of Article 6(7) of Regulation (EU) 2022/1925. Neither the internal review mechanism nor the conciliation process precludes the right of either party to bring the dispute in front of a court, including when such procedures are pending.
- (263) Against this background, in its Preliminary Findings the Commission has outlined measures to achieve the objective of a predictable and efficient alternative dispute

²⁸³ See, for example, merger decisions in Case M.9660 - *GOOGLE/FITBIT* and Case M.10262 - *META/KUSTOMER*.

²⁸⁴ See, for example, paragraph 130 of Commission Notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (2008/C 267/01) “[...] *the Commission will often require the involvement of a trustee to oversee the implementation of such commitments and the establishment of a fast-track arbitration procedure in order to provide for a dispute resolution mechanism and to render the commitments enforceable by the market participants themselves.*”

²⁸⁵ Apple’s revised Compliance Report submitted on 1 November 2024, pages 114 and 115. The non-confidential summary of this report is available at <https://www.apple.com/legal/dma/NCS-October-2024.pdf> and reads: “*Mediation - Apple has processes in place that help developers appeal decisions associated with their access to the App Store. Apple also provides a mediation process for developers 21 established in the EU who want to distribute apps on EU storefronts of the App Store, and are not satisfied that Apple correctly applied the terms relating to the access to the App Store in their specific case. The mediation is available following a developer’s unsuccessful appeal to the App Review Board. It is EU-based, easily accessible, impartial, independent, and free-of-charge.*”

²⁸⁶ Apple’s revised Compliance Report submitted on 1 November 2024, page 67.

²⁸⁷ Additional information available at <https://competition-cases.ec.europa.eu/cases/AT.40452>.

resolution method. Where appropriate, these measures have been revised taking into account Apple's and third parties' input. In particular, the Commission has introduced an internal review mechanism (cf. Section 5.6.2.2), has further refined the scope of the conciliation process, reaffirmed and underscored the confidentiality obligation that is ordinarily inherent in alternative dispute resolution mechanisms, set out a cost allocation mechanism by referring to the criteria used in the Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (cf. Annex, Section 3.2.2, paragraph 25(g)).

5.6.2.1. Scope of internal review mechanism and conciliation

- (264) Developers should be able to trigger the internal review (cf. Section 5.6.2.2) and conciliation mechanisms (cf. Section 5.6.2.3) in relation to decisions that are mainly of a technical nature. The scope of these mechanisms is limited to the following categories of decisions: (i) the rejection of a request as outside the scope of Article 6(7) of Regulation (EU) 2022/1925, where that rejection is based on technical considerations, e.g., because the feature to which the developer has asked access is not controlled by or accessed via iOS or iPadOS²⁸⁸ (see Annex, section 3.2.1, paragraph 20(a)); and (ii) decision in relation to the envisaged interoperability solution communicated by Apple to the developer as part of the Project Plan 5 (see Annex, section 3.2.1, paragraph 20(b)).
- (265) The Interoperability Request Review Board (IRRB) or the conciliator may, as necessary, suspend the proceedings and seek the Commission's guidance as regards the scope of these mechanisms.

5.6.2.2. Internal review mechanism

- (266) The internal review mechanism provides developers with a simple and swift mechanism to oppose Apple's rejection of developers' interoperability request (see Annex, Section 3.2.1). The mechanism ensures that developers have the ability to challenge Apple's initial decisions falling under the scope described in Section 5.6.2.1 in front of the IRRB. The Commission considers that this first step of the dispute resolution mechanism, [...],²⁸⁹ is appropriate and proportionate as it would give Apple, within a short timeline (30 working days) the opportunity to reconsider, at a higher level within Apple, initial decisions that affect developers.

5.6.2.3. Conciliation process

- (267) Entrusting the handling of the dispute to an impartial party with sufficient technical expertise is important to ensure and demonstrate that the outcome of the process is fair and objective, in particular in a context where the gatekeeper may have incentives to refuse or restrict the provision of effective interoperability (cf. recital (105)).
- (268) The Commission has therefore set out a framework that Apple should follow to set up the conciliation process in order to facilitate the prompt and efficient resolution of disputes, which entails clear indications on how to select a panel of conciliators with

²⁸⁸ Conversely, rejections by Apple that are primarily based on non-technical considerations, for instance, whether what is requested constitutes, or is part of, a feature within the meaning of Article 6(7) or whether it is available to or used by Apple within the meaning of recital 57 of Regulation (EU) 2022/1925, are not subject to the internal review mechanism and the conciliation.

²⁸⁹ Second mark-up of the measures included in the Annex of the Preliminary Findings submitted on 28 January 2025.

relevant technology expertise and procedural safeguards for developers and Apple (see Annex, Section 3.2.2).

- (269) Should developers be not satisfied with the outcome of the internal review mechanism, the developer may initiate a conciliation process with an external non-binding technical expert review. The developers can appeal the IRRB's decision within fifteen (15) working days from the notification of the IRRB decision.
- (270) While the outcome of the conciliation mechanism is non-binding, Apple and the developers can reach a settlement agreement based on the solution recommended by the conciliator (cf. Annex, Section 3.2.2, paragraph 25 (b) and (c)).
- (271) The Commission retains the possibility at any stage to intervene in the process and can closely follow the process by receiving reports of the conciliators (cf. Annex, Section 3.2.2, paragraph 25(d)). The Commission may in particular intervene where there is a risk that the conciliation would cover issues unrelated to the scope of dispute resolution mechanism, as described in recital (265) above.

5.6.2.4. Commission's Assessment of the Gatekeeper's views

- (272) In response to the Commission's Preliminary Findings,²⁹⁰ Apple argues that the proposed conciliation process exceeds the Commission's competence under Article 8(2) of Regulation (EU) 2022/1925 read together with Article 291(2) TFEU and Article 13(2) TEU. In particular, Apple points out that Regulation (EU) 2022/1925 does not provide for a conciliation process in Article 6(7) of Regulation (EU) 2022/1925, and that the Commission's proposal to introduce one in an implementing act would establish a new substantive obligation with no basis in the text of Regulation (EU) 2022/1925. According to Apple, the Commission's justification of the conciliation process by referencing other provisions of Regulation (EU) 2022/192 or Union legislation and national regimes is also unfounded.²⁹¹ Furthermore, in Apple's view, the proposed conciliation mechanism is not supported by the objective and purpose of Article 6(7) of Regulation (EU) 2022/1925, which aims to promote innovation and choice for end-users.²⁹²
- (273) In addition, Apple argues that even if the Commission had the competence to prescribe a dispute resolution mechanism under Articles 6(7) and 8(2) of Regulation (EU) 2022/1925 (*quod non*), the proposed mechanism violates, in Apple's view, the principle of proportionality and Apple's fundamental rights.²⁹³ In particular, according to Apple, the Commission fails to demonstrate why the proposed conciliation process is necessary to achieve the aims of contestability and fairness, and it does not consider less onerous solutions. Therefore, Apple considers that the Commission has not demonstrated why other solutions, [...], was not sufficient.²⁹⁴ Additionally, the Commission's proposal does not place any good-faith obligation on developers to refrain from abusing the conciliation process, allowing them to force Apple into conciliation at Apple's expense.²⁹⁵ Furthermore, the process imposes disproportionate disadvantages on Apple compared to other gatekeepers, including

²⁹⁰ Apple's reply to preliminary findings of 18 December 2024, paragraphs 110-113.

²⁹¹ Apple's reply to preliminary findings of 18 December 2024, paragraphs 114-117.

²⁹² Apple's reply to preliminary findings of 18 December 2024, paragraph 113.

²⁹³ Apple's reply to preliminary findings of 18 December 2024, paragraphs 114-122.

²⁹⁴ Apple's reply to preliminary findings of 18 December 2024, paragraphs 120-121.

²⁹⁵ Apple's reply to preliminary findings of 18 December 2024, paragraph 125.

the potential disclosure of confidential information and trade secrets.²⁹⁶ Apple therefore considers the proposed conciliation process unjustified and discriminatory, violating Apple’s fundamental right of equal treatment.²⁹⁷ Finally, Apple argues that the Commission’s file also lacks support for the conciliation process, with only two third parties referring to some form of appeal mechanism in response to the Commission’s request for feedback.²⁹⁸

- (274) Apple raised the same arguments concerning infringement of Commission’s competence under Article 8(2) of Regulation (EU) 2022/1925 and proportionality principle in relation to the obligation, set out in the Preliminary Findings,²⁹⁹ to publish the non-confidential versions of the conciliator’s recommended solutions issued in the context of the conciliation and key performance indicators related to the conciliation mechanism (cf. Section 5.3 of the Annex).³⁰⁰ Therefore, the same rebuttals by the Commission as set out in the following recitals of this section apply *mutatis mutandis*.
- (275) At the outset, the Commission notes that the primary objective of Article 6(7) of Regulation (EU) 2022/1925 is to foster innovation through interoperability. To achieve this goal, a structured conciliation process plays a crucial role by reducing disputes and expediting solutions, thereby ensuring “effective” compliance with interoperability requirements. Although Article 6(7) of Regulation (EU) 2022/1925 does not explicitly mention a conciliation process, the Commission considers that, in a situation where a gatekeeper has adopted a request-based approach to comply, this procedural tool constitutes an adequate and important safeguard to ensure effective compliance with this provision. Furthermore, by facilitating a collaborative and efficient resolution of disputes, the conciliation process can help to promote a culture of cooperation and innovation, ultimately contributing to the achievement of the objectives of Article 6(7) of Regulation (EU) 2022/1925. In this context, the Commission believes that a conciliation process is a useful mechanism ensuring that gatekeepers, like Apple, comply with the interoperability requirements in a timely and effective manner.
- (276) Besides, the Commission underlines that the outcome of the conciliation is and remains non-binding. Both Apple and the developers retain the right to go to court even after the conciliator has provided its expert opinion (cf. Annex, Section 3.2.2, paragraph 23). Therefore, the conciliation process does not restrict or limit in any way whatsoever Apple’s (or the developer’s) fundamental right to access courts pursuant to Article 47 of the EU Charter of Fundamental Rights.
- (277) In view of the foregoing, the Commission considers that none of Apple’s arguments described in recitals (272) and (273) above convincingly challenge the lawfulness of the conciliation process.
- (278) First, with respect to the argument that this measure exceeds the Commission’s competence under the Regulation (EU) 2022/1925, the Commission considers that,

²⁹⁶ Apple’s reply to preliminary findings of 18 December 2024, paragraph 124.

²⁹⁷ Apple’s reply to preliminary findings of 18 December 2024, paragraph 127.

²⁹⁸ Apple’s reply to preliminary findings of 18 December 2024, paragraph 126.

²⁹⁹ Preliminary findings of 18 December 2024, Section 5.9.2, paragraph 162.

³⁰⁰ Apple’s reply to preliminary findings of 18 December 2024, paragraph 201: “*As the imposition of a conciliation mechanism has no legal basis, so would result in the Commission exceeding its competence and would violate the principle of proportionality and Apple’s fundamental rights, an obligation to include any KPIs related to this envisaged conciliation mechanism has the same legal deficiencies*”.

as also outlined in Section 5.3.1 above, in cases where a gatekeeper has chosen to comply with Article 6(7) of Regulation (EU) 2022/1925 through a request-based process, the conciliation process is a necessary procedural measure to ensure effective compliance with that Article and therefore it is within the scope of the substantive obligations set out in the said provisions.

- (279) Therefore, the Commission rejects Apple's view that the proposed conciliation mechanism is not supported by the objective and purpose of Article 6(7) of Regulation (EU) 2022/1925. Apple has incentives to leverage its dual role so as to deny or restrict interoperability, leading to protracted litigation. This would undermine the objectives of Article 6(7) of Regulation (EU) 2022/1925. By creating a fair and transparent process for resolving disputes, and without excluding the possibility for each of the parties to seek remedies before competent courts, the conciliation mechanism ensures that especially smaller developers have an additional, expedited and cost-effective avenue to enforce their rights under Article 6(7) of Regulation (EU) 2022/1925.
- (280) Second, with respect to the argument that the proposed conciliation mechanism violates the principle of proportionality the Commission underlines that, as indicated above in Section 2.2, the regulatory dialogue continued after the preliminary findings. In that context, Apple submitted, on a "without-prejudice basis", detailed drafting proposals. The Commission considered these proposals and, where appropriate and proportionate, made changes to this measure, thereby taking into account Apple's input in a manner that ensures proportionality.³⁰¹
- (a) Regarding the scope of the dispute resolution mechanism, the Commission has further clarified it. As a result, and similar to the scope of the internal review mechanism, the conciliation cover two specific instances (see Section 5.6.2.1 above and Annex, Section 3.2.1, paragraph 20 and Section 3.2.2, paragraph 22).³⁰²
- (b) The Commission has found appropriate to include, as a first step to the dispute resolution mechanism, an internal review mechanism, [...]. However, contrary to what Apple contends in the reply to the Preliminary Findings,³⁰³ Apple's internal review mechanism alone is insufficient to ensure a transparent and accountable process, with clear explanations for the outcome. This is because Apple's internal review process alone does not offer an impartial and neutral technical forum for seeking to resolve disputes. This approach is supported by the responses to the consultation, which suggested that even the selection of the pool of external conciliators by Apple may compromise the impartiality of conciliators and lead to biased decisions.³⁰⁴
- (c) With respect to the second stage of the dispute resolution mechanism, Apple had proposed in its submission of 22 January 2025 [...] (cf. recital (261) above) rather than a conciliation mechanism.³⁰⁵ Mediation is a process where parties attempt to reach a mutually acceptable agreement through direct

³⁰¹ See Section 2.2 of this Decision, footnotes 18, 19, 20.

³⁰² In its proposals of January 2025, Apple did not maintain objections in relation to that scope. Apple's proposal of 22 January 2025, 28 January 2025 and 31 January 2025.

³⁰³ Apple's reply to preliminary findings of 18 December 2024, paragraph 109.

³⁰⁴ Cf., submission to the public consultation from [academic researcher].

³⁰⁵ Apple's submission on "Apple's comments on the EC's proposed measures", pages 10-13 and cf. footnote 18 above.

communication, with the assistance of a mediator which acts as a neutral third-party facilitator. Conversely, in conciliation, also sometimes referred to as “expert opinion”,³⁰⁶ the conciliator not only facilitates the settlement but also provides a non-binding opinion based on their technical expertise for the purpose of settling the case. Expert opinions can indeed be particularly valuable in helping parties resolve disputes in technical areas, by providing a common understanding of the technical issues which can assist the parties focus on the key areas of disagreement and work towards a mutually acceptable resolution.

- (d) In the context of Apple’s request-based process, the Commission considers that a conciliation mechanism is adequate as it will result in an independent expert opinion which would analyse, from a technical point of view, the dispute and seek to facilitate an agreement between the parties. Following the explanations provided by the Commission, [...].³⁰⁷
 - (e) With respect to costs, as outlined in the Annex, Section 3.2.2, paragraph 25(g), the Commission considers that many developers who may disagree with decisions from Apple confirmed by the IRRB may be deterred from using the conciliation mechanism if they had to support the costs of conciliation – in addition to their own costs in the procedure. In that respect, and following the regulatory dialogue with Apple, the Commission considers relevant to distinguish between large developers who can support the costs of the conciliation and smaller developers where Apple would cover the costs,³⁰⁸ subject to control of possible abuses. To draw this distinction the Commission is relying on the notion of small and medium-sized enterprise.³⁰⁹ In the meeting of 13 February 2025, Apple [...].³¹⁰
- (281) In light of the above, the Commission concludes that the conciliation mechanism established in the Annex, Section 3.2.2 is a suitable means of achieving the objective pursued by Article 6(7) of Regulation (EU) 2022/1925 in the context of Apple’s request-based process, and that it represents the least restrictive means of ensuring ‘effective’ interoperability under Article 6(7) of Regulation (EU) 2022/1925.
- (282) Third, regarding Apple’s argument that the conciliation process prevents it from declining participation in unreasonable or abusive cases, the Commission rejects this claim as ineffective:

³⁰⁶ Cf., for example, the rules of procedure for arbitration, conciliation, fact-finding, and mediation by International Centre for Settlement of Investment Disputes (ICSID), available at <https://icsid.worldbank.org/rules-regulations/mediation/key-differences-between-meditation-and-conciliation> and the so-called “expert determination” procedure under World Intellectual Property Organization (WIPO), available at <https://www.wipo.int/amc/en/expert-determination/what-is-exp.html>. For the avoidance of doubt, under WIPO rules, the expert determination is binding unless parties agree otherwise, while in the present case the expert opinion is non-binding unless the parties agree to settle.

³⁰⁷ Apple indicated on 28 January 2025 that: “[...]” (Second mark-up of the measures included in the Annex of the Preliminary Findings submitted on 28 January 2025).

³⁰⁸ Cf. email from the Commission to Apple on 30 January 2025, subject “DMA.100203 & DMA.100204 - recap and way forward”.

³⁰⁹ Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises, C(2003) 1422, OJ L 124, 20.5.2003, pp. 36–41, cf. Commission’s webpage dedicated to SME definition available at https://single-market-economy.ec.europa.eu/smes/sme-definition_en.

³¹⁰ Apple however suggested, [...]. Minutes from meeting between the Commission and Apple on 13 February 2025.

- (a) The Commission considers that the burden that this obligation would put on Apple is proportionate to ensuring effective interoperability, particularly in light of Apple's decision to use a request-based process to comply with Article 6(7) of Regulation (EU) 2022/1925.
 - (b) The Commission has introduced obligations which are typical in alternative dispute resolution, including non-binding conciliation, to promote good faith cooperation and prevent delays. These measures encourage parties to participate in conciliation with a genuine intent to resolve disputes fairly and efficiently (Annex, Section 3.2.2, paragraph 23).
 - (c) Additionally, the requirement to publish of a non-confidential summary of technical arguments and expert opinions from the Conciliator's report (Annex, Section 3.2.2, paragraph 25(e) and Section 5.3, paragraph 52(b)) ensures that lessons learned from a technical perspective during the conciliation process³¹¹ are retained and shared, supporting future interoperability efforts, which can contribute to reduce the need for future conciliation.
- (283) Fourth, concerning Apple's argument on the risk of potential disclosure of confidential information and trade secrets, the Commission considers it unfounded:
- (a) The Commission emphasises that confidentiality is an important characteristic of alternative dispute resolution mechanisms, including this conciliation process, as it can foster open discussions and achieving the best possible settlement.
 - (b) To ensure confidentiality, the Commission has established confidentiality obligations for both parties and the conciliator, consistent with industry standards for alternative dispute resolution mechanisms³¹² (cf. Annex to this decision, paragraphs 25(a) and (e)). Building on the Preliminary Findings, the Commission has further clarified that any confidential information exchanged during the conciliation process may only be used for the limited purpose of facilitating effective interoperability and may not be disclosed or used for any other purpose without the prior written consent of the relevant party (Annex, Section 3.2.2, paragraph 25(e)).
 - (c) To strike a balance between the need for transparency and the need to protect confidential information, based on feedback from Apple and the public consultation,³¹³ the Commission has determined that only a non-confidential summary of the subject matter and outcome of the dispute, as set out in the Conciliator's Report, will be published (see Annex, Section 3.2.2, paragraph

³¹¹ As also one participant in the public consultation noted, technical arguments discussed during conciliation hold significant value, cf. submission from [association], point 7.

³¹² Cf. *inter alia*, at EU level, Commission Recommendation of 4 April 2001 on the principles for out-of-court bodies involved in the consensual resolution of consumer disputes, C(2001) 1016, OJ L 109, 19/04/2001 pp. 56 – 61, Letter D.1.(b) and Regulation (EU) No 524/2013 of the European Parliament and of the Council of 21 May 2013 on online dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (Regulation on consumer ODR), OJ L 165, 18.6.2013, pp. 1 – 12, Article 13; at international level WIPO Mediation Rules available at <https://www.wipo.int/amc/en/mediation/rules#15a> and WIPO Expert Determination Rules available at <https://www.wipo.int/amc/en/expert-determination/rules/>.

³¹³ See, for example, submission from [association], point 7.1.

25(e) and Section 5.3, paragraph 52(b)).³¹⁴ The publication of this summary, a distinctive feature of the conciliation process introduced in this case, is warranted by the need to foster transparency in the context of Apple's request-based process.

- (284) Fifth, concerning Apple's argument that the imposition of conciliation violates the principle of equal treatment, as it subjects the company to a requirement that is not applied to other gatekeepers, the Commission points out that according to settled case law of the Court of Justice, the principle of equal treatment requires that similar situations be treated similarly, and that differences in treatment must be justified by objective reasons.³¹⁵ This case law also held that the elements that characterise different situations, and hence their comparability, must in particular be determined and assessed in the light of the subject-matter and purpose of the Union act that makes the distinction in question. The principles and objectives of the field to which the act relates must also be considered.³¹⁶ It follows that a breach of the principle of equal treatment as a result of different treatment presumes that the situations concerned are comparable, having regard to all the elements that characterise them.
- (285) In this respect, the Commission has explained above in recital (258) why it considered that, in the context of a gatekeeper choosing to comply with Article 6(7) through a reactive request-based process, and considering the specific circumstances of Apple, the possibility for developers to get access to a timely, independent and expert review mechanism constituted an important safeguard to ensure the effectiveness of the process. This is without prejudice to the assessment of the compliance with Article 6(7) by other gatekeepers.
- (286) Finally, in response to Apple's argument³¹⁷ that only two third parties referred to some form of appeal mechanism in the event of disputes regarding interoperability requests, the Commission notes the following:
- (a) At the outset, as outlined in Section 2.4, demand from market players is not a determinative factor in the context of specification proceedings under Article 8 of Regulation (EU) 2022/1925.
 - (b) In addition, it is not surprising that the Commission did not receive feedback on such mechanisms in the responses to its RFI to developers to collect feedback on their experience with Apple's request-based process given that, as also acknowledged by Apple,³¹⁸ that RFI contained no questions on alternative dispute resolution methods.

³¹⁴ In the Preliminary Findings, Section 5.5.2, paragraph 109(e), the publication of the non-confidential version of the conciliator's report was envisaged.

³¹⁵ See, *inter alia*, Judgment of 13 December 1984, *Sermide SpA v Cassa Conguaglio Zuccheri and others*, Case 106/83 EU:C:1984:394, paragraph 28; Judgment of 5 October 1994, *Antonio Crispoltoni v Fattoria Autonoma Tabacchi and Giuseppe Natale and Antonio Pontillo v Donatab Srl*, Joined Cases C-133/93, C-300/93 and C-362/93, EU:C:1994:364, paragraphs 50 and 51; and Judgment of 11 July 2006, *Franz Egenberger GmbH Molkerei und Trockenwerk v Bundesanstalt für Landwirtschaft und Ernährung*, Case C-313/04, EU:C:2006:454, paragraph 33).

³¹⁶ See, to that effect, Judgment of 19 October 1977, *Ruckdeschel and Others*, Joined Cases 117/76 and 16/77, ECLI:EU:C:1977:160, paragraph 8; Judgment of 5 October 1994, *Germany v Council*, Case C-280/93 EU:C:1994:367, paragraph 74; and Judgment of 10 March 1998, *T. Port GmbH & Co. v Hauptzollamt Hamburg-Jonas*, Joined Cases C-364/95 and C-365/95, EU:C:1998:95, paragraph 83.

³¹⁷ Apple's reply to preliminary findings of 18 December 2024, paragraph 126.

³¹⁸ Data Room Report, page 18, Section (III).

- (c) Nonetheless, the Commission has engaged with third parties throughout the proceedings and has received feedback from stakeholders supporting the introduction of alternative dispute resolution methods before³¹⁹ and during the public consultation.³²⁰

5.6.2.5. Effectiveness and proportionality of the measure

- (287) In light of the above, the Commission concludes that the measure in Section 3.2 of the Annex, as revised as a result of the input received from Apple and third parties, is an effective and proportionate way to achieve the objective of Regulation (EU) 2022/1925 and of Article 6(7) thereof. Ensuring that developers have access to a fair and timely dispute resolution mechanism is necessary, in the context of a request-based process, to guarantee that developers can exercise their rights.

5.7. Future-proof effective interoperability

5.7.1. *Effectiveness of interoperability solutions developed as part of the request-based process*

5.7.1.1. Principles

- (288) It is necessary to ensure that interoperability solutions³²¹ developed as part of the request-based process are, and remain in the future, effective. Moreover, to foster and promote innovation, the solutions should not be unduly limited to specific use cases or developers, as outlined in Section 3.1.4 above.
- (289) The choice for a reactive request-based process introduces a high risk that the resulting interoperability solution would be tailored to the specific request and not usable otherwise, thus not contributing to reducing the broader interoperability gap concerning that feature. Apple should instead take advantage of the interest shown by that developer in interoperability with that feature to close the broader interoperability gap in relation to that feature, as part of Apple's progress towards full effective interoperability. Apple should thus ensure that the interoperability solution developed can be used beyond any specific use case that the specific requesting developer may have been seeking.
- (290) Similarly, developers should not have to constantly introduce new interoperability requests in relation to features that have already been made interoperable by Apple following the request-based process, as this would continuously add significant delays and transaction costs, and undermine the right of third parties to obtain effective interoperability.³²² This would make the process unnecessarily burdensome

³¹⁹ Agreed minutes of meeting with [association] of 17 July 2024, paragraph 11: “[association] recommended the development of a formal appeals process for denied interoperability requests, as interoperability is a key regulatory tool for DMA. This would provide developers with a means to challenge decisions perceived as unfair or discriminatory, ensuring that gatekeepers cannot arbitrarily deny access. [association] further suggested moving towards automatic interoperability for less complex issues, reducing the need for individual requests and fostering a more open and competitive environment” and related slides.

³²⁰ See submissions from [citizen]; [association]; [academic researcher]; and [third party developer].

³²¹ Cf. recital (100) of this Decision.

³²² The Commission notes in that regard that Apple has already had to respond to an interoperability request for extending an existing interoperability solution to cover new use cases that were already available to Apple's own services. Apple's response of 9 August 2024 to RFI 8 (DMA.100196) of 11 July 2024, paragraph 1.8; and [third party developer]'s response to RFI 1, question A.A.1.

for all parties, and would in particular unfairly disadvantage less-resourced developers.

- (291) Designing and developing interoperability solutions such that they stand the test of time and cover a broad set of various use cases, rather than case-by-case development of use case-specific solutions, can reduce any need for Apple to continuously adapt solutions to new use cases, reducing the overall maintenance burden, and give more confidence to third parties that they can rely on the solutions in the long term, including for innovative use cases. This is also in line with [...].³²³
- (292) An efficient, automatic way for Apple to guarantee effective interoperability with a feature, is for Apple to use the public interoperability solution that provides that feature in its own services and hardware. This would inherently preclude any feature gap and deliver equal effectiveness under equal conditions by default. Such an approach has also been called for by several third parties in the public consultation.³²⁴ Such an approach may in particular be appropriate in relation to new features following the principle of interoperability by design. Nevertheless, the present Decision, which only applies to the existing features subject to the request-based process, does not prohibit Apple from continuing to use a distinct solution that is only available to its own services and hardware, in parallel to a public solution.

5.7.1.2. Measure set out in this Decision

- (293) Article 6(7) of Regulation (EU) 2022/1925 requires that the interoperability solution made available to third parties is equally effective and provided under equal conditions to any interoperability solution available to the gatekeeper's own services and hardware. This means that the interoperability solution must work in practice and must be accessible to all third parties.
- (294) It is therefore necessary in the design of the interoperability solution as part of the request-based process to ensure that there are no restrictions that would be imposed, *a priori*, on the type or use case of the service or hardware. This also entails that Apple should not limit the use cases for which developers can then use the interoperability solution.
- (295) In many cases, it should not be necessary that the interoperability solution depends on the type or use case of the service or hardware that calls the solution. The interoperability solution is in the first place an element of iOS or iPadOS granting access to a feature, and wherever applicable should be designed from that perspective. For example, an API for access to the camera should focus on intermediating between the hardware and the OS, and then forwarding the video feed to whoever calls the API. The use case of the service or hardware calling the API

³²³ Apple's reply to Request for inputs on transparency and internal features of 14 October 2024, question 10.

³²⁴ See submissions from [third party developer]: "*our understanding is that the public APIs offered to developers should in the end ideally be the same APIs used by Apple's own products, with no need to private APIs, which would allow a level playing field*"; [academic researcher], "*Allowing a gatekeeper to continue using its own "private" OS functionality rather than a public interoperable version will create a strong incentive for it to undermine the functionality, performance and other qualities of the latter*"; [association], p. 4: "*Require Apple to use the same implementation of features and functionalities as third-party developers wherever possible.*"; and [third party developer], p. 4: "*This could involve mandating that all of Apple's services be developed using only public and documented APIs from the OS. Such a requirement would effectively prohibit the privileged or reserved use of OS features and functionalities that are not publicly documented.*"

should be irrelevant in that case. In many cases, it should thus be possible to design the interoperability solution in a sufficiently generic, and neutral way, that automatically allows for its usage across a broad set of use cases by all developers.

- (296) Notwithstanding the previous point, if, certain design decisions are made, based on the relevant assumptions and resulting in inherent technical limitations, these design decisions, assumptions, and technical limitations should be described in the documentation of the interoperability solution, outlining to third-party developers how Apple provides the solution.
- (297) Furthermore, in the design of the interoperability solution, there could be reasons to introduce additional optimisations for a certain set of use cases.³²⁵ Nevertheless, where there are such optimizations in relation to a certain set of use cases, Apple should ensure that the set of use cases in question is not narrowly defined. Moreover, this circumstance should not prevent technical access to the interoperability solution for other use cases, including those which were not specifically considered.
- (298) Apple should allow that the interoperability solution is used for innovative and potentially unforeseen use cases. Therefore, once the interoperability solution has been implemented and released in iOS or iPadOS, Apple cannot restrict the types or use cases of the service or hardware that uses the interoperability solution at the iOS or iPadOS platform level. There should be no restrictions that result in an inability for any developer to use the interoperability solution for any use case. In particular, there should be no policy restrictions on the use case or developer. For the avoidance of doubt, the implementation of an adequate and non-discriminatory user permission system does not constitute a restriction, as the user retains the agency to allow the third party to use the interoperability solution.
- (299) Given the inherent limitations due to the design of the interoperability solution, there may be outlier cases where, if a developer chooses to use an interoperability solution outside of the presumed use cases and prescribed limitations, the interoperability solution may not be fully functional. Apple has no *ex ante* responsibility to anticipate unsupported use cases that ignore those limitations, but must allow technical access *ex post*, as described in recital (298).
- (300) Where a developer identifies that the released interoperability solution does not properly function for their desired use cases, Apple should engage in good faith with the developer to address the issue, cf. Section 3.1.5. In particular, a policy restriction on use cases cannot be an adequate answer to known bugs in the interoperability solution. The engagement with the developer should happen through appropriate channels. This may be the request-based process, where extensions to support additional use cases are likely to require only minor engineering efforts. This may also be Apple's existing process for bug reporting (outside the context of the request-based process), whose system may be less onerous and more suited to sharing artifacts of the discovered bugs (e.g., screenshots, debugging logs). This engagement from the developer gives Apple further guidance as to use cases that may have been unclear or unanticipated, and where support from the interoperability solution would be appropriate.

³²⁵ For example, when providing integration for “smart home” devices, on top of the solution supporting generic communication with appliances, the solution could optimize for specific appliance types which exhibit very specific properties.

- (301) As outlined in Section 3.1.1, Article 6(7) of Regulation (EU) 2022/1925 requires that an interoperability solution offered to third parties must be equally effective and provided under equal conditions to the interoperability solution available to Apple's own services and hardware. Equal effectiveness must be provided across all dimensions of the interoperability solution. Such dimensions include, but are not limited to, the end user journey, ease of use for end users, device and software setup, data transmission speed, and energy consumption.
- (302) Interoperability solutions require proper documentation so they can be used by developers effectively.³²⁶ Such documentation usually contains all the information required to work with the interoperability solution, including the frameworks and symbols (or APIs) within them, cf. recital (157). To make the documentation of the interoperability solutions maximally useful and usable to developers, it should integrate with and follow the style and structure of Apple's current documentation. Furthermore, as shown by the example of Apple's current developer documentation, it is important to include in the documentation, on top of the technical description, additional materials that are appropriate to make the documentation usable by developers, such as sample code, tutorials, and examples.
- (303) For interoperability to be effective, the technical solutions resulting from the request-based process must remain stable over time, to avoid undue costs to third parties due to the need to switch interoperability solutions or quickly implement unforeseen changes, in particular when such changes break the proper functioning of their services or hardware. The request-based process cannot result in stop-gap solutions that temporarily achieve interoperability with Apple's features but are quickly undone by changes that would regress the effective interoperability that was previously granted, restore the previous advantage of the gatekeeper, or break existing interoperability solutions.
- (304) After releasing an interoperability solution that provides a certain feature, Apple should ensure that the interoperability solution remains effective over time. This includes any maintenance³²⁷ tasks required to ensure the availability, correct functioning, and usability of the interoperability solution. Such tasks include making the necessary changes to preserve compatibility with newer iOS or iPadOS versions and extending changes in documentation style or structure to the interoperability solutions.
- (305) Over time, certain software and hardware capabilities may become obsolete, go out of fashion, or be superseded by better alternatives, including in response to improvements in integrity standards or the discovery of vulnerabilities. In such cases, the gatekeeper may decide, subject to the requirements of Article 6(7) of Regulation (EU) 2022/1925, to adjust or deprecate (parts of) an interoperability solution that it provides to third parties. When deciding on the deprecation of interoperability

³²⁶ See in this regard the submission to the public consultation from [third party developer], "*it is not enough to make thousands of APIs available without describing their content, parameters and uses, to satisfy the obligation to interoperate.*"

³²⁷ Wherever measures in this section address maintenance or adjustment of an interoperability solution, this maintenance or adjustment covers, among others, any software changes concerning the interoperability solution. This is agnostic to the choice of how such changes are made, such as, by "refactoring" (i.e. restructuring) the existing code. This may include the creation of (and replacement by) a new framework, in the case where this is the most appropriate way of maintaining or adjusting the interoperability solution.

solutions, the gatekeeper should refrain from taking deprecation decisions that could constitute a circumvention of Article 6(7) of Regulation (EU) 2022/1925 in the meaning of Article 13 of Regulation (EU) 2022/1925, such as degrading the conditions or quality of iOS or iPadOS as provided to business users who avail themselves of the rights laid down in Article 6(7) of Regulation (EU) 2022/1925.

- (306) Effective interoperability requires that third-party developers can rely on the interoperability solution over time. Third parties develop their hardware and services based on the interoperability solution and make significant investments for this purpose. A deprecation or discontinuation of an interoperability solution could significantly impact the functioning of third-party services and hardware and therefore the developer's investments, and ultimately the incentive to start and continue innovating based on iOS or iPadOS interoperability solutions. Third parties cannot be obliged to adapt their implementation at short notice or lose interoperability, as they depend on these interoperability solutions for their services and hardware. In particular in the case of hardware, products that are already in development or have been sold to consumers are built with the assumption that the hardware and software features of the operating system necessary for their functioning will remain available.
- (307) If a gatekeeper decides to adjust or deprecate (parts of) an interoperability solution, it is therefore necessary that the gatekeeper does so in a transparent and predictable manner, and with a sufficient notice period.³²⁸ In the case of Apple, the Commission observes that Apple's current processes for deprecation contain appropriate transparency measures, such as listing deprecations in its release notes,³²⁹ and marking APIs as "deprecated" in its public developer documentation, and that the actual deprecation post-notice aligns with the iOS and iPadOS release cycle, and in particular major releases. This improves reliability for third parties regarding the availability of solutions, including to third-party hardware,³³⁰ with deprecation happening only at well-defined times.
- (308) The purpose of the specification proceedings is to move forward on providing more interoperability, not create opportunities for new interoperability gaps in the future. A future-proofing obligation is necessary to prevent those new gaps from emerging, by ensuring that the effective interoperability for third parties does not regress. If Apple continues using a distinct solution that is only available to its own services and hardware in parallel to a public interoperability solution that Apple has developed as part of the request-based process, to preserve the level playing field (cf. Section 3.1.3), it is thus crucial that developers obtain effective access to any future updates and enhancements, including new functionalities, to the features of the distinct solution, such that both solutions evolve on par. In practice, this means that developers need to obtain access to the updated public interoperability solution, and by extension its documentation, at the same time and under equal conditions as the updated feature becomes available to Apple's own services or products. This access

³²⁸ As regards the measure set out in paragraph (29) of the Annex to this Decision, if deprecation of an interoperability solution is communicated when announcing a major release, that release counts as the first of the three major iOS and iPadOS releases for which the solution should be supported.

³²⁹ See <https://developer.apple.com/documentation/ios-ipados-release-notes/ios-ipados-18-release-notes>, last visited 25 November 2024.

³³⁰ Apple usually discontinues operating system updates (except security updates) for older hardware when releasing a new major iOS or iPadOS release.

cannot be contingent on the need to undergo the request-based process again, as there cannot be an endless requirement to subject already interoperable features to new requests.

- (309) At the same time, to ensure that public interoperability solutions remain functional and usable, Apple should thoroughly test updates to the public interoperability solutions internally before releasing them.³³¹ Apple can further use its process of beta releases to solicit feedback from developers and users when testing the next releases of its software that integrate the updates to the public interoperability solutions. This also aligns with [...].³³² Nevertheless, the goal of the obligation is to ensure that, when end users of Apple services and hardware gain access to Apple's own updated solution, end users of third-party services and hardware can obtain access to the updated public interoperability solution at the same time. Since end users will get this access as part of an iOS or iPadOS update, this naturally aligns with Apple's release cycle. Apple has the freedom to choose its own timing for communicating and releasing the updates, as long as these updates become available at the same time to third parties. Apart from the fact that Apple will always benefit from its innovation on iOS and its own services and hardware, Apple will still retain an inherent first-mover advantage, as it alone decides the modalities and timing of the improvements and updates, well in advance of the actual release to third parties. However, compliance with Article 6(7) of Regulation (EU) 2022/1925 requires improving the level playing field with third parties, cf. Section 3.1.3.
- (310) The experience from the parallel specification proceedings on Features for Connected Physical Devices (DMA.100203) confirms that the measure prescribed in this Section is justified. [...] ³³³ [...] ³³⁴ This proves the risk of recreating an interoperability gap and the importance of closing it.
- (311) In its Preliminary Findings, the Commission outlined a measure to ensure the futureproofing of newly interoperable features. The measure has been revised in consideration of Apple's and third parties' input.³³⁵ In particular, the Commission has clarified, for the avoidance of doubt, that the Decision contains no obligation for Apple to comply with an "interoperability by design" approach in relation to existing features. Moreover, the Commission has clarified the scope of interoperability solutions and the role of integrity measures, and the alignment of updates or deprecations of interoperability solutions with Apple's release cycle.

³³¹ For example, Apple indicates [...], Email from Apple of 14 February 2025, subject "Re: DMA.100204 - Draft final measures for observations", item "Para 31. Future-oriented". Apple is free to deploy and test in such an environment internally, before simultaneous public release to its own services and products and those of third parties.

³³² Email from Apple of 31 January 2025, subject "RE: DMA.100203 & DMA.100204 - recap and way forward", item "[future-proofing]".

³³³ [...]

³³⁴ Apple's reply to preliminary findings of 18 December 2024, paragraph 172.

³³⁵ Cf. Section 2.2, in particular: the email from Apple to the Commission on 14 February 2025, subject "Re: DMA.100204 - Draft final measures for observations"; and Minutes from meeting between the Commission and Apple on 13 February 2025, after which Apple expressed no further concerns regarding the measure.

5.7.1.3. Commission’s Assessment of the Gatekeeper’s views

5.7.1.3.1. “Interoperability by design”

- (312) According to Apple, the measure envisaged in the Preliminary Findings would require it to ensure compliance with Article 6(7) of Regulation (EU) 2022/1925 through “interoperability by design” in the context of the request-based process.³³⁶ Apple argues³³⁷ that Article 6(7) of Regulation (EU) 2022/1925 provides no support for importing an overarching “interoperability by design” requirement into a request-based approach.³³⁸ While Apple does not accept any legal obligation to integrate interoperability by design when it responds to requests, it indicates that it already seeks to adopt this principle where possible.
- (313) As explained above in recital (110), the Commission considers that Apple should continue to work on ensuring interoperability by design with respect to new features, which is something that Apple does not seem to dispute in its responses to the Preliminary Findings. That said, the Decision specifically addresses the request-based process that Apple has chosen to put in place and that is only applicable to existing features. The specified measure contributes to making compliance with Article 6(7) of Regulation (EU) 2022/1925 more automatic. This furthers the objective of interoperability by design, providing a “pathway” to such interoperability (per the language used in the title of the corresponding section in the Preliminary Findings) but not an obligation, as further clarified in Section 5.7.1.
- (314) With respect to Apple’s arguments that the measure disregards that interoperability should be limited to developers who compete with Apple’s services or hardware,³³⁹ as explained in Section 3.1.4, Article 6(7) of Regulation (EU) 2022/1925 does not provide for any such limitations as to the beneficiaries, apps, products and use cases for interoperability.
- (315) Apple also argues that an obligation to build solutions for all potential beneficiaries and use cases would be disproportionate and inconsistent with Apple’s freedom to conduct business.³⁴⁰ In that respect, the Commission considers that this argument is based on (i) an erroneous reading of the measure that is described in this Section, as it only requires Apple to avoid building unnecessary restrictions into the design of the solution without imposing an *ex ante* responsibility to anticipate unsupported use cases, as further explained in recital (294) to (300); and (ii) a restrictive interpretation of Article 6(7) of Regulation (EU) 2022/1925, as described in Sections 3.1.2 and 3.1.4. In the same vein, Apple’s claims³⁴¹ that the measure would lead to a degradation of security and privacy due to “introducing interoperability solutions by design”³⁴² seem based on the erroneous premise that this Decision would impose interoperability by design for interoperability solutions developed as part of the request-based process and are not further substantiated.

³³⁶ Apple’s reply to preliminary findings of 18 December 2024, paragraph 128.

³³⁷ Apple’s reply to preliminary findings of 18 December 2024, paragraph 131.

³³⁸ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 132-138.

³³⁹ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 143-145.

³⁴⁰ Apple’s reply to preliminary findings of 18 December 2024, paragraph 137(a).

³⁴¹ Apple’s reply to preliminary findings of 18 December 2024, paragraph 137(b).

³⁴² Apple’s reply to preliminary findings of 18 December 2024, paragraph 137(b).

- (316) Apple also argues that the “interoperability by design” requirement would disregard the inherent geographical limit in Article 1(2) of Regulation (EU) 2022/1925,³⁴³ as Apple would be required to allow developers established and operating outside the EU to make use of interoperability solutions in circumstances where those developers do not fall within the territorial scope of the DMA. In that respect, the Commission notes – once again – that interoperability by design is not mandated by this Decision. Furthermore, Apple’s interoperability request form requires developers to indicate where they will offer the products that will use the interoperable feature.³⁴⁴ Apple has indicated that this information is necessary to assess whether the developer intends to offer the products within the geographic scope of Regulation (EU) 2022/1925.³⁴⁵ In that respect, the Commission notes that there is nothing in this Decision that alters or extends the territorial scope of Regulation (EU) 2022/1925, as set by its Article 1(2). Accordingly, nothing in this Decision would prevent Apple from limiting the use of interoperability solutions developed in the context of the request-based process to the territorial scope of the Regulation.
- (317) Furthermore, Apple argues that requiring the development and public availability of (updates to) interoperability solutions and its documentation, as part of the request-based process, amounts to a disproportionate interference with Apple’s IPRs.³⁴⁶ However, making available a public interoperability solution is the logical outcome of the request-based process. Making the interoperability solution and its documentation publicly available is necessary to achieve effective interoperability and is proportionate in that it aligns with current practices. In fact, Apple currently already provides many interoperability solutions (through “more than 250,000 APIs”³⁴⁷) and make their documentation publicly available on Apple’s developer portal. This documentation is therefore available not only to developers but to everyone.³⁴⁸
- (318) Finally, Apple argues³⁴⁹ that if the Commission ultimately adopts the “interoperability by design” concept envisaged in the Process Preliminary Findings, it would unlawfully exceed its competence under Article 8(2) of Regulation (EU) 2022/1925 (read together with Article 291(2) TFEU and Article 13(2) TEU). In that respect, the Commission refers to Section 5.3.1 and recital (313) above.

5.7.1.3.2. Scope of the interoperability solution

- (319) Apple claims³⁵⁰ that this obligation³⁵¹ is disproportionate, unworkable and gives rise to significant integrity and security risks requiring bespoke development by Apple. Apple further argues³⁵² that there are serious engineering difficulties in complying with this obligation, as API design is a case-by-case exercise and use case

³⁴³ Apple’s reply to preliminary findings of 18 December 2024, para. 36(b). See also the similar argument in para. 45(c) of the response.

³⁴⁴ See recital (98)(f) of this Decision.

³⁴⁵ Apple’s reply of 6 August 2024 to the Commission’s RFI 8 (DMA.100196), question 5, page 8.

³⁴⁶ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 137, 153, 159 and 165.

³⁴⁷ Apple’s reply to Request for inputs on APIs of 30 September 2024, question 2.

³⁴⁸ See Apple’s developer documentation website <https://developer.apple.com/documentation>, last visited 17 November 2024.

³⁴⁹ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 139-140.

³⁵⁰ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 146-154.

³⁵¹ Set out in paragraph 116 of the Preliminary Findings.

³⁵² Apple’s reply to preliminary findings of 18 December 2024, paragraphs 155-158.

restrictions will be necessary or appropriate; to do otherwise would be an excessive time and resource burden.

- (320) Once again, Apple misinterprets the measure described in this Section, which does not require or suggest bespoke solutions.³⁵³ To the contrary, the Decision makes clear that Apple’s stated goal to restrict access to interoperability solutions exclusively for specific use cases and developers³⁵⁴ would undermine effective compliance with Article 6(7) of Regulation (EU) 2022/1925. Per paragraph 26 of the Annex, the measure allows for necessary and proportionate measures to ensure that interoperability does not compromise integrity. Furthermore, as explained in Sections 5.7.1.1 and 5.7.1.3.1, the measure at stake does not require Apple to anticipate each and every potential use case, however unlikely.³⁵⁵
- (321) For the examples given by Apple of APIs where use case restrictions are seemingly necessary,³⁵⁶ it is unclear why Apple could not have designed these solutions to be broadly applicable and scalable – [...] – which would therefore have fulfilled the obligation to not design solutions with restrictions on use cases in mind.
- (322) With respect to Apple’s argument that there was no demand from third parties for this measure,³⁵⁷ the Commission refers to Section 2.4. For completeness, the Commission observes that in the feedback to the public consultation, third parties which commented specifically on this measure showed support and considered it “crucial and well-justified”.³⁵⁸

5.7.1.3.3. Documentation (“IOD IP Requirements”)

- (323) Regarding the obligation to adequately document interoperability solutions,³⁵⁹ Apple argues³⁶⁰ that it would result in unlawful interferences with Apple’s IPRs, including the protection of Apple’s copyrights, trade secrets and patents, as they fail to meet the requirements of Article 52(1) Charter.
- (324) As recalled in Section 5.3.2 above, Apple does not substantiate its claim that the obligation to provide documentation ignores Apple’s IPRs. To the extent Apple develops an interoperability solution for third parties while using a different solution

³⁵³ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 149-150.

³⁵⁴ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 147 and 151.

³⁵⁵ [...]

³⁵⁶ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 156 and 157.

³⁵⁷ Apple’s reply to preliminary findings of 18 December 2024, paragraph 152. [...]

³⁵⁸ See in this regard submissions to the public consultation from: [joint submission from associations]: *“We believe that Apple’s interoperability solutions must be technologically neutral, [...]. Such neutrality is currently reflected in the proposed measures, which stress that interoperability solutions should be accessible across different devices and use cases. We argue that Apple should not impose limitations that restrict access based on formal grounds or device-specific requirements”*; [association]: *“This rule is crucial and well-justified under the wording of Article 6(7). Apple should only be permitted to impose restrictions and conditions on access to these functionalities and APIs that are strictly necessary and proportionate to safeguard the integrity of its operating system and services.”* and *“It is important that Apple ensures that any interoperability solution accommodates all reasonably foreseeable use cases by developers beyond the one who submitted the request. Failing to do so risks Apple deliberately designing overly narrow or restrictive solutions that address only the immediate request, thereby rendering them ineffective or impractical for other developers or future scenarios. Such an approach would compel developers to file repetitive or redundant requests for similar solutions, creating unnecessary hurdles and delaying progress”*; and [third party developer], *“we expect all solutions that come out of it to be exposed to all developers.”*

³⁵⁹ Set out in paragraph 117 of the Preliminary Findings.

³⁶⁰ Apple’s reply to preliminary findings of 18 December 2024, paragraph 159.

for its own services and hardware, Apple does not have to document the interfaces of its internal solution.

- (325) In any event, the Commission notes that the measure at stake will neither allow developers to copy Apple's technology nor have direct access to internal information and source code pertaining to Apple's operating systems. The measure only requires Apple to provide documentation comparable to the public developer documentation Apple routinely makes available.

5.7.1.3.4. Future-oriented solutions

- (326) Apple has several concerns with the obligation that solutions be future-oriented³⁶¹ and specifically, the requirement that Apple must ensure updates to its distinct proprietary solutions are also made available as part of public interoperability solutions, at the same time as those updates are made available to any of Apple's hardware and services.
- (327) First, Apple argues that this requirement breaches the principle of proportionality. Second, Apple argues that this requirement serves to undermine innovation in the market. Third, Apple argues there are anticipated practical difficulties with the timing proposed by the Commission for access to new features and functionalities. Fourth, Apple argues that there are potential risks for ensuring the protection of end users' security and privacy rights. Fifth, Apple claims that providing updates to public interoperability solutions at the same time as its own services and hardware receives them infringes on its rights to conduct its business under Article 16 Charter. The proposed requirements would significantly alter Apple's business model, essentially making its proprietary technology public and requiring the company to facilitate its use and copying by third parties, which exceeds even open-source development standards and strips Apple of its intellectual property rights.³⁶²
- (328) Apple appears to misconstrue the measure proposed by the Commission, since as explained in Section 5.1, new features are not covered by this Decision.
- (329) In addition to the elements already mentioned above in Section 5.7.1.2, the Commission notes that the freedom to conduct a business as a fundamental right does not extend to protecting mere commercial interests or opportunities, which are inherently uncertain and can be subject to regulatory prescriptions. Consistent with Article 16 of the Charter and settled case law,³⁶³ the freedom to conduct a business is not absolute, but must be viewed in relation to its social function and may therefore be subject to a broad range of interventions on the part of public authorities which may limit the exercise of economic activity in the public interest. In that respect, the Commission's measure does not affect the core content of the freedom to conduct a business but merely specifies, that, pursuant to Article 6(7), the gatekeeper must make available updates to public interoperability solutions at the same time as its own services and hardware. In particular, such requirement does not prevent whatsoever the gatekeeper from creating or marketing any new features. Furthermore, for the reasons explained in recitals (303) and (304) and further developed below in this Section, this requirement is appropriate and necessary in

³⁶¹ Set out in paragraphs 118-119 of the Preliminary Findings.

³⁶² Apple's reply to preliminary findings of 18 December 2024, paragraphs 160-177.

³⁶³ See for instance the judgment of the Court of 22 January 2013, Sky Österreich GmbH, C-283/11, paras 46 to 49; see also: 14 May 1974, *J. Nold, Kohlen- und Baustoffgroßhandlung v Commission*, Case 4-73, paragraph 14, ECLI:EU:C:1974:51.

order to attain the objectives of Article 6(7) of Regulation (EU) 2022/1925. Therefore, Apple’s argument that the said measure infringes its right to conduct a business is without merit.

- (330) Apple claims that the measure “*go[es] well-beyond even an open-source model*” and “*require Apple [...] to provide third parties with detailed instructions [...] to make copying of Apple’s technology by third parties even easier*”.³⁶⁴ Here again, Apple misconstrues the measure, which nowhere mandates that the source code of interoperability solutions need to be made open. The measure only covers the provisioning of interfaces for third parties to interoperate. With regards to the unfounded claim of copying of Apple’s technology, the Commission refers to recital (185).
- (331) Apple argues that “*the intention stated in the Process PFs does not require that Apple create improvements for public interoperability solutions, developed as part of the request-based process, equivalent to improvements to Apple’s own solutions and release those improvements at the same time*”.³⁶⁵ Moreover, Apple finds that it “*should have the ability to benefit [...] by making its proprietary updates for its own solutions available to market before those are rolled out to public interoperability solutions*”.³⁶⁶ Recital (308) explains how simultaneous updates to public interoperability solutions are necessary to maintain effective interoperability.
- (332) Apple argues that the requirement to provide improvements at the same time to third parties would undermine its own and third parties’ innovation, and would “*allow developers to free-ride on Apple’s proprietary innovation and investment*”.³⁶⁷ Apple also posits how it “*would be unable to add enhancements*”³⁶⁸ and be “*deprive[d] of its ability to manage the announcement of new features*”.³⁶⁹ In that respect, the Commission refers to its observations in Section 3.2, and to recital (309), which clarifies that the obligation of simultaneous access primarily concerns the wide deployment to end users in an iOS or iPadOS release. Furthermore, Apple’s argument on free riding ignores that third parties must still invest time and efforts to integrate the interfacing with Apple’s interoperability solutions into their products, hardware, and services. Apple is not required to contribute to that integration.
- (333) Apple argues that engineering public solutions to be launched at the same time as the proprietary solutions available to Apple imposes a disproportionate burden and would delay the launch of Apple’s own solutions as the design for use case-agnostic solutions will be more complex.³⁷⁰ In that respect the Commission notes, first, that Apple is not required under Article 6(7) of Regulation (EU) 2022/1925 or under this Decision to engineer separate solutions to provide interoperability for third parties, but could choose to use the public interoperability solutions for its own services and hardware. Second, this measure concerns only upgrades of interoperability solutions developed as result of the request-based process, hence there is no delay to the launch of Apple’s own solutions, but only that the upgrades proceed in parallel.

³⁶⁴ Apple’s reply to preliminary findings of 18 December 2024, paragraph 164.

³⁶⁵ Apple’s reply to preliminary findings of 18 December 2024, paragraph 166.

³⁶⁶ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 161(a) and 165.

³⁶⁷ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 167 and 169.

³⁶⁸ Apple’s reply to preliminary findings of 18 December 2024, paragraph 171.

³⁶⁹ Apple’s reply to preliminary findings of 18 December 2024, paragraph 173.

³⁷⁰ Apple’s reply to preliminary findings of 18 December 2024, paragraph 161(c).

- (334) Apple suggests that it may not always be able to make use case-agnostic interoperability solutions “available to the market at all in circumstances where they cannot be provided in the manner arbitrarily dictated by the Commission”.³⁷¹ With respect to the reference to use-case agnostic solutions, the Commission refers to Section 5.7.1.3.2. Furthermore, the Commission notes that, under paragraph 58 of Annex to this Decision, the Commission may, in exceptional circumstances, in response to a reasoned request from Apple showing good cause, modify or substitute one or more of the measures. Apple could submit such a request reasoning, in case it were to consider so in the future, that, exceptionally, it would not be possible to make the updated solution available for third parties at the same time as it becomes available to Apple.
- (335) Apple anticipates practical difficulties for providing third parties with simultaneous access to interoperability solutions, as Apple would need to design the public solution to be workable, stable, and with integrity safeguards, leading to delays in launching Apple products.³⁷² Apple particularly claims that [...].³⁷³ In that respect the Commission notes that the measure does not deny Apple the right to properly develop and internally test any updates to interoperability solutions to ensure they are workable, stable, maintainable, and secure, for Apple as well as for third parties ahead of releasing the interoperability solution to Apple and third parties, simultaneously as prescribed.
- (336) Apple notes that it does not consider that providing interoperability to all developers in a use case-agnostic and future-proof manner is compatible with its current level of privacy safeguards.³⁷⁴ In that respect, the Commission notes that its claims are not further substantiated, and do not seem to relate to the protection of integrity, cf. Section 3.3.
- (337) With respect to Apple’s argument that there was no demand from third parties for this measure,³⁷⁵ the Commission refers to Section 2.4. For completeness, the Commission observes that in the feedback to the public consultation, third parties which commented specifically on this measure expressed support,³⁷⁶ including for deprecation³⁷⁷ and simultaneously updated interoperability solutions.³⁷⁸

³⁷¹ Apple’s reply to preliminary findings of 18 December 2024, paragraph 168.

³⁷² Apple’s reply to preliminary findings of 18 December 2024, paragraph 170.

³⁷³ Apple’s reply to preliminary findings of 18 December 2024, paragraph 171.

³⁷⁴ Apple’s reply to preliminary findings of 18 December 2024, paragraphs 175-177.

³⁷⁵ Apple’s reply to preliminary findings of 18 December 2024, paragraph 161(b).

³⁷⁶ See in this regard submissions to the public consultation from: [association]: “*Failing to do so risks Apple deliberately designing overly narrow or restrictive solutions that address only the immediate request, thereby rendering them ineffective or impractical for other developers or future scenarios. Such an approach would compel developers to file repetitive or redundant requests for similar solutions, creating unnecessary hurdles and delaying progress*”; [joint submission from associations], “*The solution proposed by Apple should be future proof, recognising that bugs in APIs commonly arise, and demand timely and effective fixes by Apple*”; [third party developer], provides a nuanced view: “*Once an API is published, it requires ongoing maintenance, which leaves little room for error in its initial development. If an API is not generic enough, it will have to be extended or modified in future versions of the OS. Conversely, if an API is too generic and allows misuse (creating security problems, extracting unwanted data, etc.), it may become necessary to “break” the API and introduce a second version in a subsequent OS update, which would involve scrapping the first version and potentially disrupting applications that have already begun to rely on it. This is why many APIs are initially developed as non-public; this approach allows for the creation of a first version that can be tested within a real service context. By doing so, developers can evaluate the interface, formalism, and*

5.7.1.4. Effectiveness and proportionality of the measure

- (338) In light of the above, the Commission concludes that the measure in Section 4 of the Annex, as revised as a result of the input received from Apple and third parties, is an effective and proportionate way to achieve the objective of Regulation (EU) 2022/1925 and of Article 6(7). This measure is necessary to ensure that interoperability solutions developed as part of the request-based process are, and remain in the future, effective and are not unduly restricted.

5.8. Predictability and accountability

5.8.1. Timeline

- (339) The timeliness and predictability of the interoperability process is essential for third-party developers who invest significant resources (technical, marketing, human resources) in the development of their app, to bring to the market their apps, devices and innovative services. In fast-moving digital industries, late entry into market caused by lack of interoperability undermines the ability for third-party developers to innovate and expand their business.³⁷⁹ In the same vein, a predictable process is required to gain the confidence to allocate and adequately plan time and resources in product development.³⁸⁰
- (340) For the time being, Apple has communicated – and only to the Commission – tentative non-binding timelines for its request-based process, cf. recital (101), therefore not providing the necessary predictability. Looking at Apple’s practice since the entry into force of Regulation (EU) 2022/1925, as detailed in recital (102), Apple has not upheld these tentative timelines. Overall, Apple’s timelines have not yet resulted in the timely assessment of the requests received and the subsequent development and release of interoperability solutions.³⁸¹
- (341) Against this background, in its Preliminary Findings, the Commission outlined measures to achieve the objective of a predictable and efficient process. Where

restrictions before committing to a public release, ensuring that the API is of sufficient quality to warrant documentation and long-term maintenance.”

³⁷⁷ See in this regard submissions to the public consultation from: [association]: “*developers must be given significant advance notice of feature removals. It is equally vital that Apple complies with Article 13(6) of the DMA and refrains from entirely removing essential functionality*”.

³⁷⁸ See in this regard submissions to the public consultation from: [association]: “*Apple should alert developers to new features prior to their release on iOS/iPadOS. Apple should design new features and functionalities with the aim to share them with third-party developers and hardware manufacturers on day one of their release. This includes appropriate security design, technical documentation and if needed entitlements*”; and [association]: “*[Apple should] identify changes to interoperability resources and disclose[] them in advance to the developer community*”.

³⁷⁹ See for example [association]’s submission of 17 October 2024, page 5: “*Timeliness is an important element of effective interoperability and any interoperability solution or request process established by Apple should recognise and reflect this. Apple should not be allowed to grant itself the discretion arbitrarily to delay the provision of information, development of solutions, or the processing and implementation of requests, especially in situations where it already enjoys interoperability with its own products. To the extent that Apple retains control over the process of achieving interoperability, we believe that reasonable timelines at each stage of the interoperability process should be respected.*”

³⁸⁰ Replies to RFI 1 indicated that for product development purposes and planning, clarity in this respect would benefit the process, cf. [third party developer]’s reply to RFI 1, question B.6; [third party developer] reply to RFI 1, question B.6; [third party developer] reply to RFI 1, question B.6; [third party developer] reply to RFI 1, question B.6; and [third party developer] reply to RFI 1, question B.6.

³⁸¹ Cf. recital (100) of this Decision.

appropriate, this measure has been revised taking into account Apple's and third parties' input. In particular, the Commission has further refined the differentiation between the different levels of complexity and has acknowledged the need for additional flexibility. The Commission considers it appropriate to use Apple's existing request-based process, outlined in recital (99), as a basis for the measure set out in this Decision. The revised measure foresees the following phases:

- (a) Phase I – Eligibility phase: Apple assesses the eligibility request to ensure that the requests fit within the scope of the first subparagraph of Article 6(7) of Regulation (EU) 2022/1925. In light of this, the eligibility assessment of each interoperability request can be carried out within a reasonably short period of time. This assessment, and the communication of the outcome thereof to the developer have to be concluded within **20 working days** from the day a third-party developer has submitted its interoperability request.
 - (b) Phase II – Project Plan: The Project Plan should be completed by Apple within **40 working days**, starting from the end of phase I. Apple should communicate the project plan to the developer who will have the opportunity to provide its feedback on it (see Section 5.5.2). This Project Plan should include: (i) the information necessary for the developer to be able to provide feedback on the envisaged interoperability solution; (ii) the level of complexity (i.e., minor, mild or significant engineering efforts) of the request; (iii) a description of the work and resources needed to implement the request, justifying the level of complexity assigned to the request; and (iv) an indicative timeline for the development and release of the interoperability solution.
 - (c) Phase III – Development: to establish a predictable and reliable timeline for the development phase, it is appropriate to make a distinction between interoperability requests based on the level of complexity and the necessary efforts required to develop interoperability solutions. This can objectively justify different timelines. Against this background, the measure establishes that Apple should develop interoperability solutions that require minor, mild, and significant efforts within **6, 12, or 18 months** from the submission of the interoperability request, respectively.
- (342) To align the development timelines with the complexity of developing a solution to address the interoperability request, the Commission has also relied on Apple's existing business practices and third-party feedback. In this regard, Apple's submission shows that [...].³⁸² Against this background, the Commission considers that:
- (a) requests can be expected to require **minor engineering efforts** where the interoperability solution would, in particular, (i) not introduce new dependencies for other parts of iOS/iPadOS, and/or (ii) have a low potential for impact on other parts of iOS/iPadOS, including the user interface, and/or (iii) not require Apple to make multiple new interfaces, and/or (iv) only require re-engineering an existing iOS or iPadOS framework,³⁸³ and/or (v) require only a

³⁸² Apple's submission on "Estimated Development Timelines" of 4 February 2025.

³⁸³ "Re-engineering existing frameworks" covers any software changes that seek to maintain and replicate the behaviour of the existing frameworks. This is agnostic to the choice of how such changes are made, such as, by "refactoring" (i.e., restructuring) the existing code. This may include the creation of a new

single engineering team to develop the solution, and/or (vi) require limited documentation changes, and/or (vii) only require changing policies or granting permissions where a third party is currently prevented from accessing an existing framework. In this regard, Apple has also indicated that [...].³⁸⁴

- (b) requests can be expected to require **mild engineering efforts** where the interoperability solution would, in particular, (i) have a moderate impact on the operating system and hardware dependencies, and/or (ii) potentially affect performance, and/or (iii) require new UI and new iOS settings, and/or (iv) require Apple implementing significant architectural changes involving the re-engineering of several existing iOS or iPadOS frameworks, and/or (v) require a thorough privacy and security review,³⁸⁵ and/or (vi) require develop new framework-level protections required for objectively justified integrity reasons. In this regard, Apple has also indicated that [...].³⁸⁶
 - (c) requests can be expected to require **significant engineering efforts** where the interoperability solution would, in particular, (i) have a large impact on the operating system and hardware dependencies, and/or (ii) require Apple to provide hardware specifications, and/or (iii) require cross-team efforts within Apple, and/or (iv) require a privacy and security review presenting particularly complex aspects,³⁸⁷ and/or (v) be subject to regulatory frameworks, and/or (vi) require developing new OS-level protections required for objectively justified integrity reasons.
- (343) The Commission notes that relevant additional considerations can also be relevant to determine the level of complexity for the development of interoperability solutions with third parties could include the following:
- (a) **Impact on the operating system, hardware dependencies, and cross-app interactions.** This includes (i) depth of integration with iOS/iPadOS, e.g., system-wide user interface changes, (ii) dependencies on other parts of iOS/iPadOS, (iii) firmware-level changes, (iv) cross-app binary interactions, e.g., runtime usage or asset delivery, or (v) impact on existing functionality affecting other apps.
 - (b) **Impact on user experience.** This includes (i) design considerations to accommodate all use cases, (ii) user-facing performance impact due to resource usage, (iii) impact on the battery life, (iv) policies for user experience, e.g., rate limits, or (v) runtime stability, e.g., crash mitigation.
 - (c) **Development effort.** This includes (i) development of new APIs, (ii) development of new documentation, (iii) changes to the development toolchain, e.g., SDK or Xcode updates, or (iv) backwards compatibility for older OS versions.

parallel framework, in the case where this is the most appropriate way of creating an interoperability solution that provides the behaviour of the existing frameworks.

³⁸⁴ Apple's submission on "Estimated Development Timelines" of 4 February 2025.

³⁸⁵ This is a consideration for estimating the required engineering efforts and is without prejudice to Section 3.3 of this Decision.

³⁸⁶ Apple's submission on "Estimated Development Timelines" of 4 February 2025.

³⁸⁷ See footnote 385 of this Decision.

- (d) **Impact on Apple developer teams.** This includes (i) the need for coordination between multiple Apple teams, or (ii) the availability of engineers with specific knowledge.
 - (e) **Other considerations** including, where applicable, privacy and security, regulatory requirements and industry standards.
- (344) Apple should take into account the elements and considerations mentioned in the two previous recitals in providing the description and explanations of the level of complexity as part of the Project Plan as described in recital (341)(b) above.
- (345) The Commission will closely monitor Apple’s categorization methodology to ensure that Apple is diligent in assessing the complexity of interoperability requests.
- (346) Concerning the release of the interoperability solution, the Commission considers appropriate to align, as far as possible, with Apple’s development and release cycles for iOS and iPadOS.³⁸⁸ This entails that, after the completion of the development in Phase III, Apple releases the interoperability solutions with one of the following interim (“dot”) or major iOS or iPadOS releases,³⁸⁹ depending on the complexity of the request, [...].³⁹⁰ The measure allows Apple to maintain its existing release cycle when integrating interoperability solutions. However, in order to provide enough predictability to developers, Apple should, in any case, release interoperability solutions, regardless of their complexity, within 24 months from their interoperability request.
- (347) Apple can, in exceptional and duly justified cases, derogate from one or more timelines set out in the Section 5.1 of the Annex. These cases may not result from a lack of adequate resources. Apple’s justification should be communicated to the developers and the Commission. This provides the necessary flexibility for Apple while still requiring Apple to prove that, despite Apple’s diligent behaviour, it might not be able to respect some of the timelines in exceptional circumstances. Such circumstances can include unforeseen technical challenges arising during development that would severely impact the stability of the interoperability solution developed by Apple, or unforeseen technical challenges arising after development requiring Apple to postpone the release as they would cause severe disruption to Apple’s release cycle.
- (348) In light of the above, the Commission considers it necessary to specify clear timelines with the aim of assisting Apple in making the process more effective and conducive to effective interoperability and to grant third parties more transparent, predictable, and effective cooperation. A clear framework including specific, publicly available timeframes for responding to initial queries, providing follow-up information, and resolving issues that arise during the request-based process is crucial for ensuring that developers can predict, invest and organise their work.

³⁸⁸ In its reply to RFI 8 (DMA.100196) of 11 July 2024, question 1 with annexes Q1b1-Q1b4, Apple explained its development and release cycle.

³⁸⁹ Cf. recital (100)(d) of this Decision. The Commission notes that Apple has released new features seemingly requiring significant engineering efforts, not only in major releases but also in subsequent “dot” releases. For example, Apple has released its first set of features powered by Apple Intelligence in the “dot” releases iOS 18.1 and iOS 18.2. Cf. Apple’s Response to RFI 12 of 30 January 2025.

³⁹⁰ Apple’s response to the Commission’s RFI of 14 February 2025, question 2.

5.8.1.1. Commission's Assessment of the Gatekeeper's views

- (349) First, Apple argues³⁹¹ that Article 6(7) of Regulation (EU) 2022/1925 does not provide a legal basis for the Commission to impose such intrusive timelines or indeed any procedural framework.
- (350) Second, Apple states that the prescribed timelines are unworkable and disproportionate and that they would require “*Apple to prioritize the handling of interoperability requests over the innovation and development of new technologies [...] to the extent that the development of new software would become virtually impossible*”.³⁹²
- (351) Third, Apple states that the Preliminary Findings “*wrongly require Apple to prescribe fixed timelines for simple and complex requests, [which is] often [...] impossible to make this distinction at the outset of the interoperability request process*”.³⁹³ Furthermore, the Commission's timelines would fail to take into account Apple's actual software development.
- (352) Fourth, the timelines envisaged by the Commission would not be supported by any evidence in the file.
- (353) Finally, Apple argues that there are less onerous measures available, [...].³⁹⁴
- (354) On Apple's argument in recital (349), the Commission refers to the reasoning elaborated above in recitals (125) until (127). On Apple's argument mentioned in recital (350) that the prescribed timelines would require Apple to prioritize the handling of interoperability requests over the innovation and development of new technologies, the Commission notes that:
- (a) Apple is not required to create new features, but to provide interoperability with features that already exist and are available to Apple. it is unclear how this amount of work would make it “*virtually impossible*” for Apple to develop new software given the relatively limited number of interoperability requests received by Apple since the launch of the request-based process (113 requests as of 31 January 2025),³⁹⁵ therefore an average of around 10 requests per month. Furthermore, the Commission has provided Apple with the necessary safeguard under recital (347), should Apple face a sudden and exceptional increase of interoperability requests.
 - (b) As stated above at recital (342)(a), Apple [...].
- (355) On Apple's arguments that the Commission erroneously prescribed Apple for fixed timelines for requests requiring minor or mild engineering efforts in Phase I, the Commission notes that the measure provides that the complexity of the request must be indicated as part of the Project Plan to be communicated by Apple at the end of Phase II. [...].³⁹⁶

³⁹¹ Apple's reply to preliminary findings of 18 December 2024, paragraphs 181 – 185.

³⁹² Apple's reply to preliminary findings of 18 December 2024, paragraph 191.

³⁹³ Apple's reply to preliminary findings of 18 December 2024, paragraph 192.

³⁹⁴ Apple's proposed updates to the Article 6(7) interoperability request process submitted on 21 November 2024.

³⁹⁵ Apple's reply of 10 February 2025 to RFI 11 (DMA.100196) of 28 November 2024.

³⁹⁶ [...]

- (356) On Apple’s arguments that the timelines are unworkable and disproportionate, and that the Commission fails to take into account Apple release cycles, the Commission notes that Apple refers to the timelines set out in the Preliminary Findings, proposing that Apple would release interoperability solutions within 90 working days for requests requiring minor or mild engineering efforts and within 12 months for requests requiring significant engineering efforts. Regardless of Apple’s claims, following the extensive regulatory dialogue with Apple, the Commission has adjusted the measure in order to further ensure its proportionality.
- (357) Furthermore, on the proportionality of the measure, the Commission notes the following:
- (358) First, at the Commission’s request, Apple has provided information about the time that it took Apple to develop and release new features in iOS 18.³⁹⁷ These timelines range from [...] months to [...] months (from the start of the development to the public release). The latter confirms that the timelines set out in this measure are workable and proportionate, since they require Apple only to provide interoperability solutions in relation to existing features, which is less complex than developing a new feature. In this regard, the Commission also notes that the median time to release a new feature for iOS 18 is [...] months, with none of the more than [...] features mentioned requiring more than [...] months.³⁹⁸ Finally, the Commission notes the timelines proposed by Apple [...].³⁹⁹
- (359) Second, the measures establish appropriate safeguards for Apple ensuring that the timelines are suspended if developers fail to provide necessary information to Apple regarding their interoperability request, provide their feedback to the project plan later than 5 working days, or if developers introduce an appeal before the internal review mechanism and a conciliation procedure.
- (360) Third, as established by the Commission in the Preliminary Findings and in the measure, Apple can in exceptional and duly justified cases derogate from one or more timelines set out at recital (347).
- (361) To conclude, the timelines in this measure are proportionate and workable, as they take into account the complexity of the request, the time needed by Apple to develop a solution, while ensuring a reasonable expectation on the side of developers to have their requests implemented.
- (362) On Apple’s argument that there is no evidence in the file supporting the timelines, the Commission refers to the assessment in Section 2.4. For completeness, the Commission notes that besides input received before the Public Consultation,⁴⁰⁰

³⁹⁷ Apple’s Response to RFI 12 of 30 January 2025.

³⁹⁸ In one case [...], Apple indicated that the specific features had taken about [...] months, although indicating that this feature was part of a larger project which had taken about [...] months. See Apple’s Response to RFI 12 of 30 January 2025.

³⁹⁹ Apple’s comments on the EC proposed measure submitted on 28 January 2025.

⁴⁰⁰ See for example [association]’s submission of 17 October 2024, page 5: “*Timeliness is an important element of effective interoperability and any interoperability solution or request process established by Apple should recognise and reflect this. Apple should not be allowed to grant itself the discretion arbitrarily to delay the provision of information, development of solutions, or the processing and implementation of requests, especially in situations where it already enjoys interoperability with its own products. To the extent that Apple retains control over the process of achieving interoperability, we believe that reasonable timelines at each stage of the interoperability process should be respected.*”

many respondents to the Public Consultation replied that the proposed timelines are needed and reasonable.⁴⁰¹

- (363) Finally, on Apple’s argument that there are less onerous measures available, which were addressed in Apple’s Process Proposal,⁴⁰² the Commission refers to the position expressed in Section 2.3 of this Decision. In addition, the Commission notes that in its submission, Apple proposed to [...].⁴⁰³ [...].
- (364) The Commission notes that Apple did not commit to any binding timeline. Furthermore, Apple proposed [...]. Therefore, a significant number of developers could have faced a situation in which Apple would not implement their request within a reasonable timeframe, but Apple would still be compliant with its own proposal. Apple’s proposal would have not made Apple accountable for fulfilling all interoperability requests and would have also remove predictability for developers seeking interoperability, ultimately making Regulation (EU) 2022/1925 devoid of purpose.

5.8.1.2. Effectiveness and proportionality of the measure

- (365) In light of the above, the Commission concludes that the measure in Section 5.1 of the Annex, as revised as a result of the input received from Apple and third parties, is an effective and proportionate way to achieve the objective of Regulation (EU) 2022/1925 and of Article 6(7). Ensuring that requests are processed following reasonable and predictable timelines is important to ensure the effectiveness of the request-based process.

⁴⁰¹ See for example submissions from [association]; [third party developer]; [association]; [third party developer]; [third party developer]; and [third party developer]. Some submissions contained suggestions on how to alter the measure, as for example submission from [third party developer]: “*Timeline of Apples response with regard of requiring minor or mild engineering effort (rec. 45) could be shortened to 30 working days. · Timeline with regard to developers response to Apple (rec. 66) could be prolonged to 5 working days*”; [third party developer]: “*90 days for simpler interop solutions 90 working days are not 3 months, but 4½. Quite long, but acceptable if it works. However, my experience so far is different... [...] Complex software takes time. We are not affected, since our problem is simple. On the other hand, Apple only needs to implement solutions which Apple already uses itself, thus just needs to split as separate API (e.g. if it cannot open the internally used API for security reasons, but the requested interop feature can be isolated). Then 12 months is way too long... I rather would opt for 6 months, and Apple should explain and defend the reasons to e.g. a conciliator if it takes longer*”; and a submission from citizen/independent technology researcher: “*1.) Timelines: The deliver the planning ability aimed-for in 6.1.1. requires significant shortening of proposed timelines. Small and medium-sized enterprises do not have the balance sheets required, especially in the EU with its weak capital markets, to deal with 90 days - let alone 12 months - of processing per request. Apple can legitimately insist on per-request processing but as a trade-off would need to resource 10 business days (54) to 20 business days (55). Such a modification is both technically feasible from an engineering lens and financially proportionate*”. [third party developer], expressed a nuanced view: on the one hand, [third party developer] expressed support for the timelines and considered them reasonable, while, on the other hand, expressing concerns that imposing strict deadlines could conflict with the tight deadlines imposed by the OS release cycle within which developers are used to operate. In a follow-up submission, [third party developer] suggested to provide more flexibility in managing requests that may require additional attention or resources or whose timing is incompatible with the OS release calendar, while ensuring that Apple does not exploit this flexibility strategically to delay responses or hinder the progress of interoperability requests.

⁴⁰² Apple’s proposed updates to the Article 6(7) interoperability request process, cf. Apple’s submission dated 20 November 2024 on “Apple’s proposed updates to the Article 6(7) DMA interoperability request process”.

⁴⁰³ Apple’s submission dated 5 November on “Apple’s proposed updates to the Article 6(7) DMA interoperability request process”.

5.8.2. *Transparency vis-à-vis the broader developer community and protection of confidential information*

- (366) To give full effect to the rights granted by Article 6(7) of Regulation (EU) 2022/1925, the request-based process should be designed in such a way that the broader developer community has confidence in the process and its effectiveness in delivering effective interoperability. An appropriate degree of transparency with respect to the content of the interoperability requests submitted by other developers may provide useful information and insights to third parties into how the process works, the nature on the different existing requests and refer to those requests in their own requests. This also enables third parties to verify how the gatekeeper progresses towards compliance by design with its obligation of effective interoperability.
- (367) To this end, Apple should create a transparent and easily accessible tracker system, where it organises the interoperability requests, and make it available to developers. This tracker system should provide developers with all relevant information to obtain the necessary transparency into the request-based process. Apple is encouraged to involve developers and relevant third parties in the design and functionality of the tracker by giving them the opportunity to provide input on its design and functionality.
- (368) At the same time, developers retain their full right to preserve their business interest vis-à-vis other developers and the gatekeeper itself, and thus maintain an innovation potential. In line with Article 6(2) of Regulation (EU) 2022/1925, it is crucial that the gatekeeper takes appropriate measures to preserve confidentiality with respect to such information provided in interoperability requests, including within the gatekeeper's own organisation.⁴⁰⁴
- (369) In its Preliminary Findings, the Commission had outlined a measure to achieve the objectives described in the recitals above. Where appropriate, the measure has been revised to take into account Apple's and third parties' input.

5.8.2.1. Commission's Assessment of the Gatekeeper's views

- (370) Apple argues that Article 6(7) of Regulation (EU) 2022/1925 provides no basis for the measure.⁴⁰⁵
- (371) In that respect, the Commission refers to the assessment of the Commission's competence to specify measures pursuant to Article 8(2) of Regulation (EU) 2022/1925 and the scope of Article 6(7) of Regulation (EU) 2022/1925 in Section 5.3.1 above.
- (372) In the context of the request-based process, third-party feedback before⁴⁰⁶ and during the Public Consultation⁴⁰⁷ confirmed that developers would benefit from increased

⁴⁰⁴ The need to protect confidential information has been highlighted by several third parties in the public consultation. See for example submission from [association]: *"Another essential aspect missing from Apple's request-based solution is a requirement that the Apple team handling developer requests be absolutely prohibited from communicating or disclosing information about incoming requests to Apple teams which are using the interoperability resources at issue. There would be a fundamental flaw in the approach if Apple was able in any way to use the request-based approach to gain competitive advantage or otherwise discover the business plans of its competitors in a way they could use to compete against those rivals."*

⁴⁰⁵ Apple's reply to preliminary findings of 18 December 2024, paragraphs 181-185.

⁴⁰⁶ Cf. recital (214) of this Decision.

transparency. Ensuring more transparency on the requests made by other developers and on how Apple is handling them contributes to ensure a fair and objective process. Feedback from the Public Consultation showed support for the proposed measure.⁴⁰⁸ At the same time, feedback before⁴⁰⁹ and during the Public Consultation⁴¹⁰ also showed the importance for developers that information about their requests for interoperability would not be shared internally within Apple.

- (373) Following feedback from the Public Consultation⁴¹¹ [...] ⁴¹² the Commission has further distinguished “Fully Available” and “Partly Available” requests.

⁴⁰⁷ See for example Submission from [third party developer]: “*The emphasis on transparency regarding the progress of requests and the potential for rejections is crucial. This transparency not only builds trust between developers and Apple but also allows for better planning and adjustment of strategies as needed.*” See also submissions from [third party developer]; and [third party developer] “*There is a significant lack of transparency regarding communication, the reasons for rejections, and timelines. It would also be valuable to have access to statistics on accepted and developed interoperability requests to assess the effectiveness of this process.*”

⁴⁰⁸ See for example [joint submission from associations]: “*We strongly support the Commission’s plan to implement a tracker system that provides those seeking access (developers) with relevant information regarding the status of their interoperability request. In particular, we welcome the publicity mechanisms for those requests. This promotes transparency and permits a more thorough evaluation of Apple’s discretionary power over interoperability*”; [third party developer]: “*It would be beneficial to see requests from other developers*”; [third party developer]: “*tracker system could bring value, in particular knowing that other 3rd-party developers are affected by the same issues*”; [third party developer]: “*We particularly welcome the proposed Tracker System, which will be invaluable for organizations to see what others have already requested, thereby reducing duplicated effort across the industry*”; and [association] Section 9: “*One of the best proposals in this public consultation is the addition of the publicly accessible tracker system. Given the significant power imbalance that favours Apple, this transparency mechanism will serve as a vital tool for levelling the playing field. It will provide developers with multiple opportunities to gain a clearer understanding of Apple’s decision-making processes, identify patterns, and collaborate with one another. By making the outcomes of previous requests and disputes visible, the tracker will enable developers to analyse Apple’s justifications and arguments (particularly for rejections) evaluate their consistency, and leverage the work and experiences of others to strengthen their own cases. In many cases multiple developers will be requesting the same feature and will be able to publicly collaborate with each other via the system. It will also alert developers to important functionality or aspects of functionality that they can include in their own requests. The transparency in itself will encourage Apple to act more fairly and consistently. We believe the tracker system will be instrumental in driving the EU’s goal of achieving meaningful interoperability.*”

⁴⁰⁹ See for example [association]’s submission of 17 October 2024, page 4-5: “*It is, however, crucial to balance transparency with the legitimate protection of the gatekeeper’s, developers’ and OEMs’ commercially sensitive information. Information that could reveal details about innovative features or elements of a developer’s products should not be made public or shared with the gatekeeper through such a process. Developers and OEMs may be uncomfortable sharing information that could be used to create competing products. The fear of reprisals or misuse of information is a significant barrier to participation. To mitigate this, the Commission should implement safeguards that protect developers and OEMs from the misuse of their information (e.g., data silos), fostering greater openness and trust in the request process.*”

⁴¹⁰ See for example Submission from [third party developer]: “*We think it is very important that the company handles requests in a way that is impartial but also firewalled from the rest of the company. For example, it should not be possible for App Store review to punitively reject app updates because we filed interoperability requests, or for the marketing team to use our proposals as “examples of how we are trying to bypass Apple’s privacy features”.*”

⁴¹¹ See for example Submission from [citizen]: “*[It] should be clarified or expanded so that the ‘Fully available’ option encompasses the publication of the request in its entirety but also any of the correspondence or documentation exchanged between Apple and the requesting entity, as well as any information and documentation related to the conciliation process.*” and “*It’s unclear how the ‘Partly available’ and ‘Confidential’ options differ*”; [third party developer] “*except in the case of confidential*

- (374) Apple suggested⁴¹³ that [...] . The Commission considers that it should be within the discretion of the requesting party, regardless of its legal status, to decide to what extent they want to make their request or identity available in the tracker.
- (375) [...],⁴¹⁴ the Commission has further specified that, for a developer who does not give their explicit consent to make their request public in the dedicated tracker system (Confidential requests), the description of “the requested feature” should be a generic description of the requested feature provided by the developer. The Commission considers that this will maintain sufficient transparency while avoiding that some developers could be discouraged from submitting a request, for instance if they fear that the disclosure of a detailed description of the requested feature could reveal confidential plans or strategies.

5.8.2.2. Effectiveness and proportionality of the measure

- (376) In light of the above, the Commission concludes that the measure in Section 5.2 of the Annex, as revised as a result of the input received from Apple and third parties, is an effective and proportionate way to achieve the objective of Regulation (EU) 2022/1925 and of Article 6(7). Ensuring transparency vis-à-vis the broader developer community while protecting their confidential information constitutes an important element of an effective request-based process.

5.8.3. Public reporting and KPIs

- (377) In the situation where the gatekeeper has chosen to comply with Article 6(7) of Regulation (EU) 2022/1925 by introducing a request-based process, another appropriate safeguard to give full effect to the rights granted by this provision is for the gatekeeper to introduce regular public reporting on the performance and outcome of the request-based process. This increases accountability for the gatekeeper, enabling an assessment of the effectiveness of the request-based process, and encourages them to comply with providing effective interoperability.
- (378) In light of this, it is necessary to provide clear and reliable information to the public showing how the gatekeeper is actively facilitating effective interoperability with its chosen method of compliance. Such reporting should take place on a regular basis to enable developers and other third parties to understand the actions taken by the gatekeeper to work towards effective compliance with its obligation and interoperability by design.
- (379) To make effective interoperability verifiable, it is necessary to establish a series of key performance indicators (KPIs). Publicly reporting on such KPIs will ensure transparency on the timeliness and performance of the request-based approach, not

requests, all of Apple’s responses should be publicly available in the tracker entry for that request”; and [association]: “In the context of requests that developers have designated as “Fully Available,” it is essential to ensure that information about these requests, including their current status, responses, and the timeline of status changes, is publicly accessible and easy to understand.”

⁴¹² Apple’s submission on “Apple’s comments on the EC’s proposed measures”.

⁴¹³ Apple’s submission on “Apple’s comments on the EC’s proposed measures”.

⁴¹⁴ Minutes from meeting between the Commission and Apple on 13 February 2025; Email from Apple to the Commission on 14 February 2025, subject “Re: DMA.100204 - Draft final measures for observations”.

only to developers requesting interoperability and to the Commission, but to a broader range of third parties, thus increasing accountability.⁴¹⁵

- (380) The data used to calculate the KPIs should cover the time period counting back to the end point of the data covered by the previous report. The data used for the first Report to be published, cf. Annex, Section 6, should be calculated on data available at the entry into force of the Decision, cf. Annex, Section 6. Each Report should clearly specify which time period it relates to, and all versions of the Report should be easily available for interested third parties to access.
- (381) In its Preliminary Findings the Commission had outlined a measure to achieve the objectives described in the recitals above. Where appropriate, this measure has been revised taking into account Apple's and third parties' input. In particular, in view of the introduction of an internal review mechanism, cf. Section 5.6.2.1, this Decision includes also KPIs for this measure. The Commission has further adjusted the KPIs for the measure on Conciliation, cf. Section 5.6.2.3.⁴¹⁶ Finally, [...],⁴¹⁷ the Commission adjusted the measure for the specific KPIs with regard to requests received prior to the entry into force of this Decision, taking into consideration that Apple thereafter will have to abide by dedicated timelines after the entry into force of this Decision.⁴¹⁸

5.8.3.1. Commission's Assessment of the Gatekeeper's views

- (382) Apple argues that the Commission lacks competence to specify such measure, as it fall outside the scope of Article 6(7) of Regulation (EU) 2022/1925.⁴¹⁹
- (383) Apple subsequently argues, that in the event the Commission has competence to specify such measure, the measure is disproportionate, since Apple's Process Proposal suggested [...].⁴²⁰

⁴¹⁵ See for example agreed minutes of meeting with [association] of 19 July 2024, paragraphs 2-3: "[association] highlighted two types of transparency for effective compliance with Article 6(7). [...] The second type of transparency involves the public visibility of API requests and outcomes. [association] indicated that cross request visibility could be useful. [association] said this would include data on the volume of requests, average response times, and the ratio of approvals to denials, which can help ensure that Apple's process is transparent and accountable"; and [association]'s submission of 17 October 2024, page 4: "Aggregate data on the number of requests, their processing times, and the general nature of the requests. This transparency would help third parties coordinate efforts, gain confidence in the process, and encourage more developers to participate all while preserving the confidentiality of information relating to individual requests. General descriptions of approved, pending, and rejected solutions. This could help other third-party developers understand what is feasible without revealing proprietary technical details and avoid unnecessary duplication of effort by both the gatekeeper and third parties."

⁴¹⁶ See in this regard also Submission from [citizen] suggesting: "The KPI metrics that Apple should be required to report should also include data (in aggregate) related to the conciliation process which I have already proposed be in the tracker system, which goes beyond what is already in the proposed measures as 'Specific KPIs for the conciliation mechanism'". See further the consideration intended for measure 5.6.2: "should entail the publication of information related to the triggering of the conciliation process, what stage it was triggered at and to resolve what type of question, what the outcome was (fully or partially siding with either party), whether Apple chose to accept the conciliator's view, whether the Commission was informed, whether its opinion was requested (and if it has responded already) and whether it intervened."

⁴¹⁷ Apple's submission on "Apple's comments on the EC's proposed measures"; Minutes from meeting between the Commission and Apple on 13 February 2025; and Email from Apple to the Commission on 14 February 2025, subject "Re: DMA.100204 - Draft final measures for observations".

⁴¹⁸ Apple's submission on "Apple's comments on the EC's proposed measures": Apple stated that [...].

⁴¹⁹ Apple's reply to preliminary findings of 18 December 2024, paragraph 200.

- (384) Finally, Apple argues that the KPIs on frameworks and conciliation would breach Apple’s fundamental rights, since the measure on frameworks/conciliation itself breaches Apple’s fundamental rights.⁴²¹
- (385) On Apple’s first argument, the Commission refers to its assessment regarding its competence to specify measures pursuant to Article 8(2) of Regulation (EU) 2022/1925 and the scope of Article 6(7) of Regulation (EU) 2022/1925 in Section 5.3.1 above.
- (386) On Apple’s second argument, the Commission notes that Apple has not further reasoned why the concrete measure is disproportionate, other than [...].⁴²²
- (387) On the content of the KPIs, the Commission notes that Apple suggested [...].⁴²³ The Commission considers it useful for third parties to be made aware of the number of requests received by Apple, detailing how many requests are in which phase, and what the different outcomes of requests are. The Commission considers on the one hand that the information needed for the KPIs is easily available to Apple and therefore not disproportionately burdensome for Apple to collect. On the other hand, having such information helps developers and other interested third parties understand the progress towards effective compliance with the interoperability obligation. The Commission considers that the KPIs individually and collectively support the purpose of the measure, which is to ensure transparency on the timeliness and performance of the request-based approach, cf. recitals (377) through (379).
- (388) Concerning the frequency of reporting, the Commission considered important to have a first public report in accordance with Annex, Section 6. To ensure proportionality of the reporting burden on Apple, subsequent reports will be made public annually and can be published as part of the public report pursuant to Article 11(2) of Regulation 2022/1925.
- (389) On Apple’s third argument about breach of Apple’s fundamental rights, the Commission refers to the arguments laid down in Sections 5.4.1.4 and 5.6.2.4 above.

5.8.3.2. Effectiveness and proportionality of the measure

- (390) In light of the above, the Commission concludes that the measure in Section 5.3 of the Annex, as revised as a result of the input received from Apple and third parties, is an effective and proportionate way to achieve the objective of Regulation (EU) 2022/1925 and of Article 6(7). Enabling developers and other interested third parties to ascertain whether requests are being processed fairly and diligently constitutes an important element of an effective request process.

6. CONCLUSION

- (391) In light of the above, the Commission concludes, pursuant to Article 8 of Regulation (EU) 2022/1925, that Apple is to implement the measures as specified by the Commission in the Annex within the deadlines specified in the Annex, Section 6.

⁴²⁰ Apple’s reply to preliminary findings of 18 December 2024, paragraph 201.

⁴²¹ Apple’s reply to preliminary findings of 18 December 2024, paragraph 202.

⁴²² Apple’s submission dated 20 November 2024 on “Apple’s proposed updates to the Article 6(7) DMA interoperability request process”, paragraph 44.

⁴²³ Apple’s submission dated 20 November 2024 on “Apple’s proposed updates to the Article 6(7) DMA interoperability request process”, paragraph 44.

- (392) The Findings in this Decision are based on the information available to the Commission at the time of its adoption. They are without prejudice to the possibility that the Commission may, upon request or on its own initiative, decide to reopen the proceedings pursuant to Article 8(9) of Regulation (EU) 2022/1925, where there has been a material change in any of the facts on which the decision was based, or the decision was based on incomplete, incorrect or misleading information, or the measures as specified in the Decision are not effective.
- (393) The Commission will assess the effectiveness and impact of the specified measures within 2 years following the adoption of the Decision. This assessment should also take into account the compliance actions taken by Apple with respect to new features. If appropriate, the Commission may decide to reopen the proceedings to adapt or withdraw the specified measures.

HAS ADOPTED THIS DECISION:

Article 1

Apple is to implement the measures as specified by the Commission pursuant to Article 8 of Regulation (EU) 2022/1925 in the Annex within the deadlines specified in the Annex, Section 6. The effectiveness and impact of these measures will be evaluated within 2 years following the adoption of this Decision, taking into account the compliance actions taken by Apple with respect to new features.

Article 2

This Decision is addressed to Apple Inc., One Apple Park Way, Cupertino, CA 95014, United States of America, and Apple Distribution International Limited, Hollyhill Industrial Estate, Hollyhill, Cork, Ireland.

Done at Brussels, 19.3.2025

For the Commission

Signed

*Henna VIRKKUNEN
Executive Vice-President*

DMA.100204 – Apple – Operating Systems – iOS – Article 6(7) – SP – Process

Decision of 19 March 2025 – Final Measures

Non-Confidential Version

[This version has been adapted for publication. Only the adopted decision is legally binding.]

Table of Contents

1.	TRANSPARENCY OF IOS AND IPADOS FEATURES RESERVED TO APPLE....	1
2.	EFFECTIVENESS AND TRANSPARENCY OF THE PROCESS VIS-À-VIS REQUESTING DEVELOPERS	3
3.	HANDLING OF REJECTIONS.....	4
4.	FUTURE-PROOF EFFECTIVE INTEROPERABILITY	8
5.	PREDICTABILITY AND ACCOUNTABILITY	10
6.	IMPLEMENTATION AND REPORTING TO THE COMMISSION.....	16

1. TRANSPARENCY OF IOS AND IPADOS FEATURES RESERVED TO APPLE

1.1. Queries for technical references

- (1) Apple shall increase transparency on reserved features accessed or controlled via iOS or iPadOS and available to, or used by, Apple’s services and hardware.
- (2) To that end, Apple shall establish a program whereby any interested developer¹ may submit a reasoned query (hereinafter referred to as “reference query”) in response to which Apple shall produce a technical reference. This reference shall offer the developer insight and details about the way iOS or iPadOS enables hardware and software features controlled via iOS or iPadOS for Apple’s and third-party hardware and services, including features (including their functionalities) that are currently reserved to Apple’s hardware and services.
- (3) In the reference query, the developer shall, based on the information available to them, provide context on their query and the assistance they seek, such as the feature, functionality, or desired outcome for which they seek technical information. Apple may require the developer to explain the relevance of the technical reference for the purpose of submitting an interoperability request.
- (4) In the technical reference, Apple shall include the information relevant for the developer to obtain the aforementioned insight. This includes at least: (i) descriptions of the features (including their functionalities) enabled by the frameworks relevant to the developer’s reference query; (ii) whether the features (including any of their

¹ Apple may require that developers are part of Apple’s Developer Program in order to submit a reference query.

functionalities) are enabled by private frameworks; and (iii) a list of Apple's services and hardware to which relevant frameworks are available.

- (5) Whenever the information referred to above already exists in the public developer documentation made available by Apple, Apple may simply refer the developer to that documentation.
- (6) Apple shall not require developers to submit a reference query before submitting an interoperability request. It shall, irrespective of whether the developer has submitted a reference query, engage in good faith with the developer to understand and address the developer's interoperability request, in line with Section 2 of this Annex.
- (7) Within 20 working days from the receipt of a reference query, Apple shall provide the developer with the technical reference described in paragraph (2) of this section. In exceptional cases where, due to a significant number of parallel reference queries from the same developer, Apple would not be able to provide the technical reference within 20 working days, it shall inform the developer and notify the Commission as early as possible and shall explain the objective reasons for such delay. Apple shall ensure that the delay in such situation is as limited as possible.
- (8) After responding to the developer's reference query, Apple shall make the technical reference available to other developers through the developer portal in a structured manner. Where the information provided by Apple to the developer who submitted the reference query contains information that would be relevant only in relation to that reference query, and to the extent that Apple, or the developer concerned, consider that this information constitutes a business secret whose disclosure would harm their legitimate interests, the information shall be excluded from the technical reference that is made available to other developers. In such cases, Apple shall inform the Commission, indicating which information is excluded, and explaining how its disclosure would harm Apple's, or the developer's, legitimate interests.
- (9) An audit of the actions taken by Apple to comply with the measure laid down in this Section shall be undertaken every year. To that end, an independent expert or organization with proven expertise in the analysis of operating systems shall be appointed by Apple on the basis of criteria defined by the Commission in order to conduct an audit of the actions taken by Apple to comply with the obligations laid down in this Section, in particular the organisation and process put in place by Apple and how Apple handled queries. Where appropriate, the auditor shall collect feedback from developers who have used this mechanism on their experience; and shall make recommendations. The auditor may ask the Commission for clarifications regarding the methodology and scope of the audit. Apple shall bear the costs of the audit. Apple shall cooperate in good faith with the auditor and shall provide access to the necessary internal information and resources. Apple shall take into account the recommendations made in this audit with a view of ensuring that developers are receiving timely and useful responses to their reference queries. The report of the auditor shall be communicated to Apple and to the Commission. The auditor, with the assistance of Apple, shall prepare a non-confidential summary of the main findings and conclusions of the audit report. This summary will be subject to a final review by Apple to ensure that it contains no business secrets. This non-confidential summary shall be included in the report published by Apple pursuant to Section 5.3, paragraph 52(c) of this Annex.

2. EFFECTIVENESS AND TRANSPARENCY OF THE PROCESS VIS-À-VIS REQUESTING DEVELOPERS

2.1. Support for developers interested in interoperability

- (10) Apple shall put in place a structured, adequately documented process setting out how interoperability requests will be received, acknowledged, assessed and responded to. To this end, Apple shall provide a publicly accessible support webpage which shall contain up-to-date information including:
- (a) clear and detailed information on how to submit a request, what information the developer should provide in the request form, a description of the phases and their deadlines as well as a clear description of the criteria and considerations for the assessment of the request in the various phases, including an example of a fully completed request;
 - (b) guidance on whom developers can contact and how, if they have any questions on the request process or their pending request; and
 - (c) clear information about the measures that Apple would be taking with respect to protecting confidential information of the developer (cf. Section 5.2.2 below).

2.2. Communication, updates and feedback on the request

2.2.1. Contact point and response time

- (11) Apple shall put in place a reliable, accessible and adequately staffed contact point facilitating two-way communication. Apple shall ensure that developers receive timely assistance and clarification on the request-based process.
- (12) Apple shall respond within **5 working days** to inquiries from developers regarding the request-based process or their interoperability requests.
- (13) Apple shall keep developers sufficiently informed throughout the request-based process. Apple shall notify developers whenever there is a change to the status of their request, including in relation to any updates regarding the timelines outlined in section 5.1. Further, these notifications shall be specific and detailed enough to enable developers to adjust and respond to any changes rapidly.
- (14) Apple shall maintain a dedicated space on its developer portal where the developer can directly and independently access all relevant information relating to the status of their interoperability request, including, but not limited to, information about the request's current phase, information already submitted, any communication of feedback provided to the developer, expected timelines, and contact details.

2.2.2. Feedback mechanism on the envisaged interoperability solution

- (15) Apple shall at the end of Phase II (cf. Section 5.1.2 below) provide the opportunity to developers to provide feedback on the envisaged interoperability solution and Project Plan and take due account of such feedback in accordance with paragraphs (16)(a)-(16)(b).
- (16) Apple shall put developers in a position to effectively provide the feedback set out in paragraph (15) in accordance with the timelines outlined in Section 5.1 and in particular paragraphs (34)-(37). To that end, the Project Plan shall contain in particular:
 - (a) Sufficiently detailed information on the envisaged interoperability solution. The developer should be able to ascertain if all aspects of its interoperability request

are addressed, and that the solution is at least equally effective as the solution used by Apple. In particular, where Apple has made available information to developers pursuant to Section 1.1 of this Annex, Apple shall provide the developer with the reference to the relevant information; and

- (b) Where Apple considers that it is strictly necessary and proportionate to introduce mitigation measures to ensure that interoperability does not compromise the integrity of the operating system, hardware and software features (cf. paragraph (26) below), Apple shall provide together with the Project Plan an explanation for its integrity concerns, and shall clearly explain what measures it intends to take to mitigate those concerns, and how those measures are strictly necessary and proportionate. In exceptional cases where integrity risks could not be identified in the context of preparing the Project Plan and which only arose in the development context, Apple shall inform the developer without delay. In such cases, the developer should be entitled to the procedures to which they would have had access if Apple had identified the issue when drafting the Project Plan, i.e., be able to provide feedback on the modifications envisaged to the interoperability solution pursuant to the procedure detailed above in this Section and have access to the dispute resolution mechanisms of Section 3.2. In such cases, the time limits should be suspended pursuant to Section 5.1.5 of this Annex.
- (17) In cases where the developer has expressed concerns that the envisaged interoperability solution considered by Apple would not address all aspects of the interoperability request, Apple shall communicate to the developer how their feedback was taken into account within the timeline specified in paragraph (38) of Section 5.1 of this Annex. Apple shall inform the developer that it has the possibility to use the internal review mechanism and subsequently the conciliation procedure for decisions falling under the scope of these procedures.
- (18) In the event Apple intends to close an interoperability request based on a finding that the submitted request or specific parts thereof are related to a feature for which an interoperability solution already exists, Apple shall indicate to the developer where the documentation about this solution can be found.

3. HANDLING OF REJECTIONS

3.1. Transparency with respect to rejection of requests

- (19) When Apple decides to reject an interoperability request, it shall ensure that the developer receives a notice of such decision without delay. The notice to the developer shall include, at the minimum, the following information:
 - (a) **Reasoning and justification.** Apple must give the developer a detailed explanation of the grounds for rejection. This explanation must include the specific reasons for the rejection, clearly outlining the criteria or requirements that were not met by the request.
 - (b) **Guidance.** Apple must inform the developer (i) whom the developer can contact and how if they have questions on the rejection; and (ii) the possibility to use the internal review mechanism and subsequently the conciliation procedure for decisions falling under the scope of these procedures (cf. Section 3.2 of this Annex), and indicate the conditions and timeline for such procedures.

3.2. Dispute resolution mechanisms

3.2.1. Internal review mechanism

- (20) Apple shall give developers the opportunity to appeal, by means of an internal review mechanism, Apple's initial decisions with respect to:
- (a) the rejection of a request for being outside the scope of Article 6(7) of Regulation (EU) 2022/1925, where that rejection is based on technical considerations, e.g., because the feature to which the developer has asked access is not controlled by or accessed via iOS or iPadOS;² and
 - (b) the envisaged interoperability solution communicated by Apple to the developer, where the developer considers that, despite the feedback it has provided to Apple pursuant to Section 2.2.2 of this Annex, this solution would not be equally effective compared to the feature (including any of its functionalities) used by or available to Apple.
- (21) This appeal shall be made by the developer within fifteen (15) working days from the communication of Apple's notification of the rejection to that developer, or the response that Apple provides to the developer's feedback pursuant to paragraph (38) of this Annex, respectively. The internal review mechanism shall include the following steps:
- (a) Along with the appeal, developers will be asked to submit a brief statement setting forth the grounds for the appeal;
 - (b) The appeal will be heard by an Interoperability Request Review Board (IRRB) comprised of senior members from Apple. The IRRB will consult with members of the team responsible for the handling of the interoperability requests, as needed;
 - (c) The IRRB will consider the appeal based on the developer's submission. In case of doubt on whether a given dispute, or issue within this dispute, falls under the scope defined in paragraph (20) above, the IRRB may, as necessary, suspend the proceedings and seek the Commission's guidance;
 - (d) The IRRB will issue a reasoned written decision on the appeal within thirty (30) working days after the appeal has been submitted.³ In its decision, the IRRB may decide to overturn Apple's initial decision, refer it back for new consideration, or reject the appeal. Any such decision shall be communicated without delay to the developer and to the Commission and kept confidential, subject to the publication by Apple of an aggregated summary of the outcome of the decision by the IRRB pursuant to Section 5.3, paragraph (52)(a) of this Annex. Apple shall provide the developer the possibility to review this aggregated summary for the purpose of ensuring that it does not contain any information that the developer considers confidential; and

² Conversely rejection by Apple that are primarily based on non-technical considerations, for instance, whether what is requested constitutes, or is part of, a feature within the meaning of Article 6(7) of Regulation (EU) 2022/1925) or whether it is available to / used by Apple within the meaning of Recital 57 of that Regulation, are not subject to the internal review mechanism and the conciliation.

³ Where the IRRB seeks the Commission's guidance pursuant to paragraph (21)(c) of this Annex, this timeline shall be suspended until the Commission provides such guidance or declines to respond.

- (e) The internal review mechanism will be free of charge for the developer. Relying on the Internal Review Mechanism will not preclude developers from recourse to the courts.

3.2.2. *Conciliation*

- (22) If the developer is not satisfied with the outcome of the Internal Review Mechanism, the developer may initiate an external non-binding technical expert review process (conciliation) within fifteen (15) working days from the notification of the IRRB decision.
- (23) Apple shall set up a conciliation mechanism that complies with the key features described in this Section. The conciliation process shall not preclude the right of either party to seek redress in court.⁴ Apple and the developer shall participate in good faith to the conciliation process, with a genuine intent to resolve the disputes fairly and efficiently, and to this end shall refrain from any conduct intended to cause undue delay or frustration of such process.
- (24) **Composition and appointment of conciliators**
 - (a) In order to facilitate the prompt and efficient resolution of disputes, Apple shall establish upfront (i.e., within 4 months from the notification of the Specification Decision as per paragraph (54) below) a panel of conciliators who can be available to intervene swiftly in the event of disputes with developers. The conciliators shall be selected by Apple through a transparent and impartial process to be communicated to the Commission. The conciliator can be an organisation, or one or several natural persons. The panel shall comprise at least five conciliators with relevant technology expertise and experienced in conciliating technology issues in the context of business-to-business disputes. To this end, the conciliators must be independent of Apple. Provisions to be communicated to the Commission must be established to ensure that conciliators in the pool are not and will not become exposed to a conflict of interest with the parties. In particular, the selected conciliators shall not provide services to or become an employee of Apple or the concerned developer, neither during its mandate as a conciliator in the pool nor for a period of three years following their mandate termination from the pool.
 - (b) Appointment of conciliator(s) by Apple and the concerned developer: in case of a dispute, the developer has the following choice concerning the appointment of conciliators:
 - i. The developer can choose a conciliator within the panel set up by Apple pursuant to letter (a) of this paragraph above. To this end, upon the developer's request, Apple will have to promptly communicate the developer the curricula vitae of the conciliators in the pool; or
 - ii. If the developer considers that none of the conciliators in the pool have the relevant expertise to decide on the subject matter of the dispute, it will have to promptly communicate it to Apple and, in agreement with Apple, will have to appoint a conciliator with the relevant expertise. If the parties do not reach an agreement on the name of the conciliator, each party may designate a conciliator and the two thus selected will then appoint a third

⁴ For the avoidance of doubt, the conduct or commencement of the conciliation will not be necessary before initiating a court action.

conciliator that will act as the chair of the panel. Alternatively, parties also have the option to seek the assistance of a suitable institution in connection with the appointment of conciliators. The conciliator(s) chosen by Apple and the developer must be independent of Apple and the concerned developer. Provisions must be established to ensure that it is not and will not become exposed to a conflict of interest with the parties. In particular, the conciliator shall not provide services to or become an employee of Apple or the concerned developer, neither during its mandate nor for a period of three years following mandate termination.

(25) **Procedure**

- (a) Duties and powers of the conciliator: The conciliator's services facilitate discussions impartially, aiming to help both sides reach a mutually acceptable settlement. To this end, the parties to the conciliation would submit written submissions stating their factual positions, which would be assessed by the conciliator. If such factual positions do not align or are not consistent, the conciliator will encourage the parties to establish agreed factual positions. If that is not possible, the conciliator, with the help of the parties, shall proceed within as short a time as possible to establish the facts of the case by all appropriate means. To fulfil this task, the conciliator shall be entitled to request relevant information from the parties to the conciliation including confidential information. Where the relevant information is confidential, this confidentiality shall be preserved in the conciliation proceedings. In case of doubt on whether a given dispute, or issue within this dispute, falls under the scope defined in paragraph (20), the conciliator may, as necessary, suspend the proceedings and seek the Commission's guidance;
- (b) Non-Binding Proposal: At the conclusion of the procedure, the conciliator shall issue a report containing (i) a factual summary of the process before them and (ii) a recommended solution based on its expert opinion (the "Conciliator's Report"), which is not legally binding unless both parties agree to it and it is without prejudice to the Commission's competence to enforce Regulation (EU) 2022/1925. In this respect, either party would have the option to accept or reject the conciliator's recommended solution contained in the Conciliator's Report;
- (c) Settlement Agreement: If both Apple and the developer accept the recommended solution outlined in the Conciliator's Report, this will be written up by the parties as the settlement agreement, which will be binding and enforceable as a matter of contract law (the "Settlement Agreement"). The Settlement Agreement is without prejudice to the Commission's competence to enforce Regulation (EU) 2022/1925;
- (d) Involvement of the Commission in the process: As soon as the developer decides to engage in conciliation and contact Apple to this end, Apple will inform the Commission by providing all available details about the subject matter of the conciliation procedure. The Commission might *inter alia* request to participate as an observer in person or virtually at the hearing(s). Apple shall communicate to the Commission the interim (where applicable) and final version of the Conciliator's Report(s) (cf. above point (b) of this paragraph) and the Settlement Agreement (cf. above point (c) of this paragraph) if available. In addition, the Commission may request any other documents exchanged by the conciliator with the parties;

- (e) Confidentiality: All proceedings will be held in private. The Parties to the conciliation and the conciliator shall maintain confidentiality regarding the conciliation proceedings. Confidentiality also extends to the Conciliator's Report and the Settlement Agreement (where applicable), which are not to be made public. Confidential information exchanged or disclosed in the course of these proceedings may only be used by Apple for the purpose of providing effective interoperability, and by the developer for the purpose of seeking and obtaining effective interoperability. This confidential information cannot be used for any other purposes without Apple's or the developer's prior written consent. The conciliator, with the assistance of the parties, shall prepare a non-confidential summary of the dispute and of the expert opinion as laid down in the Conciliator's Report, setting out the subject matter and the outcome of the dispute. This summary will be subject to a final review by both Apple and the developer to ensure that it shall contain no business secrets. This non-confidential summary shall be published as part of the report set out in Section 5.3, paragraph (52)(b);
- (f) Duration: it is important that the conciliation process is concluded in a timely and efficient manner. Therefore, the procedure shall be limited to maximum three months;⁵
- (g) Costs: Unless the parties agree otherwise, the costs of setting up the pool of conciliators would be borne by Apple. The costs of the conciliation process in itself would be equally borne by Apple and the developer participating in the conciliation process, unless the developer is a micro, small or medium-sized enterprise ("SME") under the Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises ("SME Recommendation").⁶ In the case of an SME, Apple would cover the costs of the conciliation process. Apple may require developers who request Apple to cover these costs to declare in writing – consistent with Article 3 of the SME Recommendation – that they are an SME and that they are not a subsidiary of another organisation or acting on behalf of another organisation that would not fall under the above-mentioned definition of SME. Each party would bear its own costs (including legal representation fees) in the process.

4. FUTURE-PROOF EFFECTIVE INTEROPERABILITY

4.1. Effectiveness of interoperability solutions developed as part of the request-based process

- (26) Apple may take strictly necessary and proportionate measures to ensure that interoperability does not compromise the integrity of the operating system, hardware and software features. Any integrity measure shall be duly justified and shall be based on transparent, objective, precise and non-discriminatory conditions that also apply to Apple's services and hardware. Under Article 6(7) of Regulation (EU) 2022/1925, second subparagraph, Apple shall only impose conditions and take integrity measures that reflect a genuine integrity risk and do so in a consistent and systematic manner. Under Article 6(7) of Regulation (EU) 2022/1925, second subparagraph, Apple shall

⁵ Where the conciliator seeks the Commission's guidance pursuant to paragraph (25)(a) of this Annex, this timeline shall be suspended until the Commission provides such guidance or declines to respond.

⁶ Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises, C(2003) 1422, OJ L 124, 20.5.2003, pp. 36–41, cf. Commission's webpage dedicated to SME definition available at https://single-market-economy.ec.europa.eu/smes/sme-definition_en.

only apply conditions the compliance with which is capable of being independently verified and not exclusively within the gatekeeper's control. An integrity measure cannot be considered strictly necessary and proportionate if it seeks to achieve a higher integrity standard than the one that Apple requires or accepts in relation to its own services or hardware.

- (27) **Scope:** Without prejudice to the need of preserving integrity as detailed in paragraph (26), with respect to interoperability solutions developed as part of the request-based process, Apple shall not restrict the types or use cases of the service or hardware that uses the interoperability solution. Apple shall make all interoperability solutions developed as part of the request-based process available to all developers at the same time. All interoperability solutions developed by Apple as part of the request-based process shall be equally effective to the interoperability solutions available to Apple's own services and hardware. Apple shall apply such equal effectiveness across all dimensions.
- (28) **Documentation:** Apple shall adequately document all interoperability solutions developed as part of the request-based process on a publicly available developer documentation portal. Apple shall make this documentation available to all developers at the same time, no later than at the time that Apple makes the interoperability solution available in an iOS or iPadOS release, without restrictions. This documentation shall be complete and accurate. This documentation shall be comparable in style, structure, and detail to the public developer documentation made available by Apple. The documentation shall also list any terms, conditions, restrictions, or entitlements that apply to the interoperability solutions.
- (29) **Future-oriented:** Once Apple has developed an interoperability solution as part of the request-based process, Apple shall maintain the solution over time such that the solution and its documentation continues being available, functional, usable, and effective for all developers that may need it, without interruption.⁷ The solution shall be sufficiently stable over time. If Apple decides to adjust or deprecate (parts of) an interoperability solution that is still relied on by third parties, Apple must do this adjustment or deprecation in a transparent and predictable manner with sufficient public prior notice to third parties. Once Apple has communicated to developers its decision to deprecate a solution, Apple shall support the solution for at least the next three major iOS or iPadOS releases. Any changes to or deprecations of solutions must be properly documented both within the main documentation and in a changelog.
- (30) Insofar as Apple does not use the solution that is made available to other developers pursuant to its interoperability obligations, but uses a distinct solution for its own services or hardware to provide the same feature (including any of its functionalities), Apple shall ensure that any improvement to its own solution, for instance in terms of enhanced capabilities or improved performance, is proactively – i.e. without the need to be requested through the request-based process – made available as part of the public interoperability solution. Apple shall make available the updated interoperability solution and documentation to developers in an iOS or iPadOS release

⁷ Wherever measures in this Section address maintenance or adjustment of an interoperability solution, this maintenance or adjustment covers, among others, any software changes concerning the interoperability solution. This is agnostic to the choice of how such changes are made, such as, by “refactoring” (i.e., restructuring) the existing code. This may include the creation of (and replacement by) a new framework, in the case where this is the most appropriate way of maintaining or adjusting the interoperability solution.

no later than at the time the updated distinct solution is made available to any of Apple's hardware and services.

5. PREDICTABILITY AND ACCOUNTABILITY

5.1. Timeline

- (31) Apple shall act diligently in processing, handling, developing and implementing interoperability requests of third-party developers. In particular, Apple shall comply with the time limits set in this Section, except in exceptional and duly justified cases as foreseen in paragraph (42).

5.1.1 Phase I: eligibility phase

- (32) Apple shall conclude the eligibility assessment and communicate the outcome thereof to the developer within **20 working days** from the day a developer has submitted their interoperability request.
- (33) The assessment of the eligibility request aims to ensure that the request falls within the scope of the first subparagraph of Article 6(7) of Regulation (EU) 2022/1925.

5.1.2. Phase II: Project Plan

- (34) Apple shall communicate to the developer within **40 working days** the **Project Plan**, starting from the end of phase I.
- (35) The Project Plan shall indicate:
- (a) the information necessary for the developer to be able to provide feedback on the envisaged interoperability solution, pursuant to Section 2.2 of this Annex;
 - (b) the level of complexity (i.e., minor, mild or significant engineering efforts) of the request;
 - (c) a description of the work and resources needed to implement the request, justifying the level of complexity assigned to the request;⁸ and
 - (d) an indicative timeline for the development and release of the interoperability solution, taking into account the upper time limits set out at paragraphs (39)-(40).
- (36) Phase II shall be terminated when Apple communicates the Project Plan to the developer.

5.1.3. Phase III: Feedback mechanism and development cycle

- (37) Apple shall allow developers to indicate, within 5 working days of receipt of the Project Plan, whether they intend to provide feedback on the Project Plan, including the envisaged interoperability solution. If the developer does not communicate to Apple, within these 5 working days, whether it would provide feedback, Apple shall start the development. If the developer communicates to Apple that it will provide feedback, but that this will take longer than 5 working days, the timeline is suspended according to paragraph (41).
- (38) Upon receipt of the feedback from the developer, Apple shall indicate to the developer, within 5 working days, how the feedback was taken into account in the

⁸ In providing this description and explanations of the level of complexity, Apple shall in particular refer to the relevant elements and considerations, including those mentioned in recitals 341-342 of Section 5.8.1 of the Decision.

Project Plan. For requests requiring significant engineering efforts, that time limit shall be extended to 10 working days.

- (39) Apple shall conclude the development cycle of the interoperability solution within the following periods:
- (a) **6 months** from the submission of the interoperability request for interoperability solutions that require minor engineering efforts.
 - (b) **12 months** from the submission of the interoperability request for interoperability solutions that require mild engineering efforts.
 - (c) **18 months** from the submission of the interoperability request for interoperability solutions that require significant engineering efforts.

5.1.4. Implementation and release

- (40) Except for the exceptional cases established in paragraph (42), Apple shall release⁹ and make available to developers the solutions as quickly as possible following the completion of the development cycle, within:
- (a) the first or second interim (“dot”) iOS or iPadOS release to be released after the completion of the development cycle, for requests requiring minor or mild engineering efforts;
 - (b) the first major iOS or iPadOS release to be released after the completion of the development cycle or, where necessary, an interim (“dot”) release, for requests requiring significant engineering efforts; and
 - (c) in any event, **24 months** from the day of the submission of the interoperability request, for requests requiring minor, mild or significant engineering efforts.

5.1.5. Suspension of time limits and derogation

- (41) Any of the timelines set out in this Section shall be suspended if:
- (a) the developer fails to provide Apple with information that is necessary to process or address their interoperability requests within 3 working days from Apple’s request for clarification; or
 - (b) if the developer takes longer than 5 working days to provide its feedback to the Project Plan according to paragraph (37); or
 - (c) the developer introduces an appeal before the Internal Review Mechanism according to paragraph (20) and/or a conciliation procedure according to paragraph (22).
- (42) In exceptional and duly justified cases, where, despite having taken all necessary actions to handle the request in a timely manner – including having adequately prioritised the handling of the request and mobilised sufficient resources to that effect – Apple is not able to comply with one of the timelines set out in the present Section, Apple shall inform the developer and notify the Commission as early as possible, and shall explain the objective reasons for such delay. Apple shall ensure that the delay in such situation is as limited as possible.

⁹ Including the making available of the supporting documentation as per paragraph 28 of Section 4.1.

5.1.6. *Resources*

- (43) Apple must allocate sufficient resources in terms of staff, infrastructure and funding to ensure that it can assess, handle, process, implement and release all interoperability requests falling within the scope of Article 6(7) of Regulation 2022/1925 diligently, and within the timelines set out in this Annex. The level of resources allocated shall be appropriate for the level of complexity assigned to the development of a given interoperability solution and comparable to the level of resources Apple would devote to a similar task for its own services and hardware in its ordinary course of business.

5.2. **Transparency vis-à-vis the broader developer community and protection of confidential information**

5.2.1. *Tracker system*

- (44) Apple shall organise the requests it receives in a transparent and easily accessible tracker system providing developers with all relevant information on the status of each interoperability request, including, for each request, information on its current phase and expected timeline. The tracker shall be up to date and be easily accessible to all interested developers via a dedicated section on the developer portal. Apple shall provide access to the tracker to the Commission.
- (45) Apple shall provide clear instructions on how developers can access and use the tracker effectively. To ensure ease of use, the tracker must be designed to allow developers to easily search and retrieve the status of requests.
- (46) Developers shall have discretion to decide to make their requests partly or wholly visible to other developers. Depending on the consent given by the developer, Apple shall therefore treat the request as:
- (a) **Fully available:** If the developer gives their explicit consent through the request portal, Apple must make the entire request fully available in the dedicated tracker system. Apple must also make available via that tracker all messages and updates between Apple and the developer related to the request, including any information that Apple is required to provide to the developer pursuant to this Specification Decision. The tracker must also include the name of the organisation, ID number of the request, the date the request was received, and the general status of the request (Phase I, II, III and released or rejected).¹⁰
 - (b) **Partly available:** If the developer gives their explicit consent through the request portal, Apple must make the developer's request partly available in the dedicated tracker system. In such a case, the following information would be available to other developers: name of the organisation, the requested feature, the developers own non-confidential description of the request, the ID number of the request, the date the request was received, and the general status of the request (Phase I, II, III and released or rejected).
 - (c) **Confidential:** If a developer does not give their explicit consent through the request portal to make its request "Fully available" or "Partly available" in the dedicated tracker system, Apple shall keep the request confidential. In such cases, Apple shall only make available the following information: a generic description of the requested feature provided by the developer, the ID number of the request,

¹⁰ Apple should be able to redact information from the request or subsequent communications which refer to confidential information about Apple. In such case, Apple should notify the developer hereof, and provide justifications for why Apple considers it necessary to redact the specific information.

the date the request was received, and the general status of the request (Phase I, II, III and released or rejected). Any other information (including the developer's identity and the content of the request) must remain confidential and may not be disclosed by Apple to third parties or internally to employees who are not responsible for or involved in the handling of the interoperability requests and the development of interoperability solutions in accordance with Section 5.2.2 below.

- (47) It should be possible for other developers to refer to or indicate their interest for another developer's request, in their own request.

5.2.2. Protection of the developers' interests vis-à-vis the gatekeeper

- (48) Apple shall put in place measures to ensure that any non-publicly available information received from the developers in the context of the request-based process, including reference queries (cf. Section 1.1 of this Annex), is only used by Apple for the purpose of assessing interoperability requests or reference queries and providing effective interoperability. Furthermore, Apple shall ensure that the circulation of such information is strictly limited, on a need-to-know basis, to the teams within Apple that are responsible or involved in the handling of the interoperability requests or reference queries and the development of interoperability solutions. In particular, Apple shall take specific and effective measures, including in the context of the dispute resolution mechanism laid down in Section 3.2 of this Annex, to ensure that this information is not accessible by teams and individuals within Apple who may be involved in any capacity in the development, marketing and commercialisation of services and hardware that may potentially or actually compete with services and hardware that the developer would intend to provide. Apple shall conduct an annual internal audit into the effectiveness of the mechanisms that have been put in place to preserve the protection of the developers' confidential information vis-à-vis the gatekeepers. The result of this audit shall be communicated to the Commission as part of the report that Apple shall provide to the Commission pursuant to Article 11(1) of Regulation 2022/1925.

5.3. Public reporting and KPIs

- (49) Apple shall make public a report (hereinafter, the "Report") on the functioning of its request-based process, having due regard to the confidentiality of the information as indicated by the requesting developers.
- (50) Apple shall publish the first Report within the deadline as specified in Section 6 below. Apple shall thereafter publish the Report on an annual basis. Apple may publish this report together with its public report pursuant to Article 11(2) of Regulation 2022/1925.
- (51) Each Report shall include, for the time period it covers, at least the following metrics concerning interoperability requests based on Article 6(7) of Regulation 2022/1925:

Number of requests received.	[x]
Number of pending requests.	[x]
Number of requests that Apple considers to be within the scope of Article 6(7).	[x]

Number of requests that Apple considers to be out of the scope of Article 6(7).	[x]
Number of requests that Apple considers requiring “minor” engineering efforts in order to be implemented.	[x]
Number of requests that Apple considers requiring “mild” engineering efforts in order to be implemented.	[x]
Number of requests that Apple considers requiring “significant” engineering efforts in order to be implemented.	[x]

Number of requests currently in phase I.	[x]
Number of requests currently in phase II.	[x]
Number of requests currently in phase III.	[x]

Average time between request received and Phase I decision. ¹¹	[x days]
Average time between Phase I decision and Phase II decision. ¹²	[x days]
Average time between Phase II decision and completion of Phase III. ¹³	[x days]
Percentage of requests that moved from Phase I into Phase II.	[x %]
Percentage of requests that moved from Phase II into Phase III.	[x %]
Percentage of requests that did not move from Phase I.	[x %]
Percentage of requests that did not move from Phase II.	[x %]
Number of requests in relation to which Apple has notified the Commission and informed the developer that it was unable to comply with one of the timelines set out in Section 5.1.	[x]

¹¹ Requests received by Apple prior to the entry into force of the Specification Decision shall not be included in this KPI.

¹² Requests received by Apple prior to the entry into force of the Specification Decision shall only be included in this KPI if they enter in Phase II after the entry into force of the Specification Decision.

¹³ Requests received by Apple prior to the entry into force of the Specification Decision shall only be included in this KPI if they enter in Phase III after the entry into force of the Specification Decision.

Number of interoperability requests that have moved to Phase III and for which an interoperability solution has been released.	[x]
--	-----

Specific KPIs on queries for the technical reference, cf. Section 1.1

Total number of received reference queries.	[x]
Total number of queries to which Apple has responded.	[x]
Total number of queries rejected by Apple.	[x]

Specific KPIs for the internal review mechanism, cf. Section 3.2.1

Number of situations where the internal review mechanism was undertaken or is in the process of being undertaken.	[x]
Aggregated information about the type of disputes: The rejection of a request. The envisaged interoperability solution. The level of complexity assigned by Apple.	[x] [x] [x]

Specific KPIs for the Conciliation, cf. Section 3.2.2

Number of requests for which conciliation was undertaken or is in the process of being undertaken.	[x]
Number of requests for which Apple and the concerned developer reached a Settlement Agreement.	[x]
Number of requests for which Apple and the concerned developer did not reach a Settlement Agreement.	[x]

- (52) Each Report shall furthermore include the following information:
- (a) An aggregated summary of the outcome of the appeals before the IRRB issued during the relevant time period (cf. Section 3.2.1, paragraph (21)(d)).
 - (b) A non-confidential summary of the dispute and of the expert opinion as laid down in the Conciliator's Report, setting out the subject matter and the outcome of the dispute cf. Section 3.2.2, paragraph (25)(e).
 - (c) A non-confidential summary of the audit report, cf. Section 1.1, paragraph (9).
 - (d) For each case where Apple has notified the Commission and informed the developer that it was unable to comply with one of the timelines set out in Section 5.1, a summary of the request and of the reasons invoked by Apple.

6. IMPLEMENTATION AND REPORTING TO THE COMMISSION

- (53) Subject to the following paragraph, Apple shall implement the measures specified in this Annex within two months from the notification of the Specification Decision, unless otherwise indicated below.
- (54) Apple shall implement the measures specified in Section 3.2 above in relation to the implementation of dispute resolution mechanisms within 4 months from notification of the Specification Decision.
- (55) For requests submitted prior to the adoption of this Specification Decision, the deadlines for the different stages specified in Section 5.1 above will count as of the date of the adoption of the Specification Decision.

6.1. REPORTING TO THE COMMISSION

- (56) Upon expiry of the implementation deadline indicated in paragraph (53), Apple shall communicate to the Commission all the measures that it has taken to comply with the Specification Decision.
- (57) In the event that Apple rejects an interoperability request or specific parts of an interoperability request pursuant to Section 3.1, or a reference query pursuant to Section 1.1, Apple shall notify the Commission, state reasons for the rejection, and forward all relevant material relating to the request and the rejection of the request to the Commission without undue delay.
- (58) The Commission may, in exceptional circumstances, in response to a reasoned request from Apple showing good cause, modify or substitute one or more of the measures listed in this Annex or a part of them. The request shall not have the effect of suspending the application of the measures and, in particular, of suspending the expiry of any time period in which the measure has to be complied with.
