

Factsheet

Study ‘Ex post evaluation of the implementation and effectiveness of EU antitrust remedies’

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Background

In anticipation of the twentieth anniversary of Regulation 1/2003, DG Competition launched in October 2022 a first-of-its-kind ex post evaluation study of the implementation and effectiveness of EU antitrust remedies. The study is part of (1) DG COMP’s broader efforts to improve its enforcement practice and policies based on economic ex post evaluation and (2) the broader evaluation and review of Regulation 1/2003. Its design was inspired by the pioneering 2005 merger remedies study, which at the time formed the basis for the Commission to significantly improve its remedy practice in the area of merger control.¹

The contract for the study was awarded in May 2023 to a consortium led by the law firm Grimaldi and the economic consultancy Nera. The team led by the consortium also included monitoring trustee Thomas Hoehn and competition law professor Peter Whelan. The study’s analysis and conclusions are the contractors’ own and do not bind DG Competition or the Commission.

Objective, scope, evidence

The **objective** of the study was to review (with the benefit of hindsight) the design, implementation and effectiveness of remedies imposed or accepted by the Commission in non-cartel antitrust decisions adopted during the past 20 years since entry into force of Regulation 1/2003 with a view to identify areas where further improvements to the Commission’s existing antitrust remedies policy and procedures could be made.

In terms of **scope**, the study carries out a descriptive and statistical analysis of all all 108 non-cartel antitrust decision adopted by the Commission between the entry into force of Regulation 1/2003 on 24 January 2003 and 31 December 2022. It then makes an in-depth retrospective evaluation of a carefully and objectively selected sample of twelve significant antitrust cases, where the Commission imposed remedies (going beyond a cease-and-desist order) in an Article 7 decision or made binding commitments in an Article 9 decision.² In these case studies, the contractor assessed the implementation and effectiveness of the imposed remedies.

For the purpose of the study, *implementation* was defined as whether the remedy had been complied with by the addressee of the antitrust decision; *effectiveness* as whether the remedy imposed had achieved the objectives intended by the antitrust decision imposing or accepting the remedies in question.

¹ On the basis of the ex post evaluation study the Commission changed its merger remedy policy and adopted in 2008 new merger remedy guidelines: Commission notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004, OJ C 267, 22.10.2008, p. 1–27.

² Annex 1 sets out the key differences between these two types of decisions. In the following, remedies and commitments are referred together as “remedies”.

Importantly, the analysis of the effectiveness did not question whether the remedies imposed or accepted by the Commission should have pursued different objectives. The focus was deliberately only on the suitability of the design and modalities of the remedies to achieve the objectives intended by the relevant decision and not on whether the Commission could or should have been more or less ambitious in what it wanted to achieve with its intervention.

The findings of the study are based on **evidence** from the following sources: (i) an extensive literature review of over 120 economic and legal articles; (ii) interviews with enforcers from other competition authorities (BKartA, Autorité de al Concurrence, DoJ, FTC), academics and practitioners; (iii) a novel dataset created for the purpose of the study of the aforementioned 108 non-cartel antitrust decisions; and (iv) the twelve case studies.

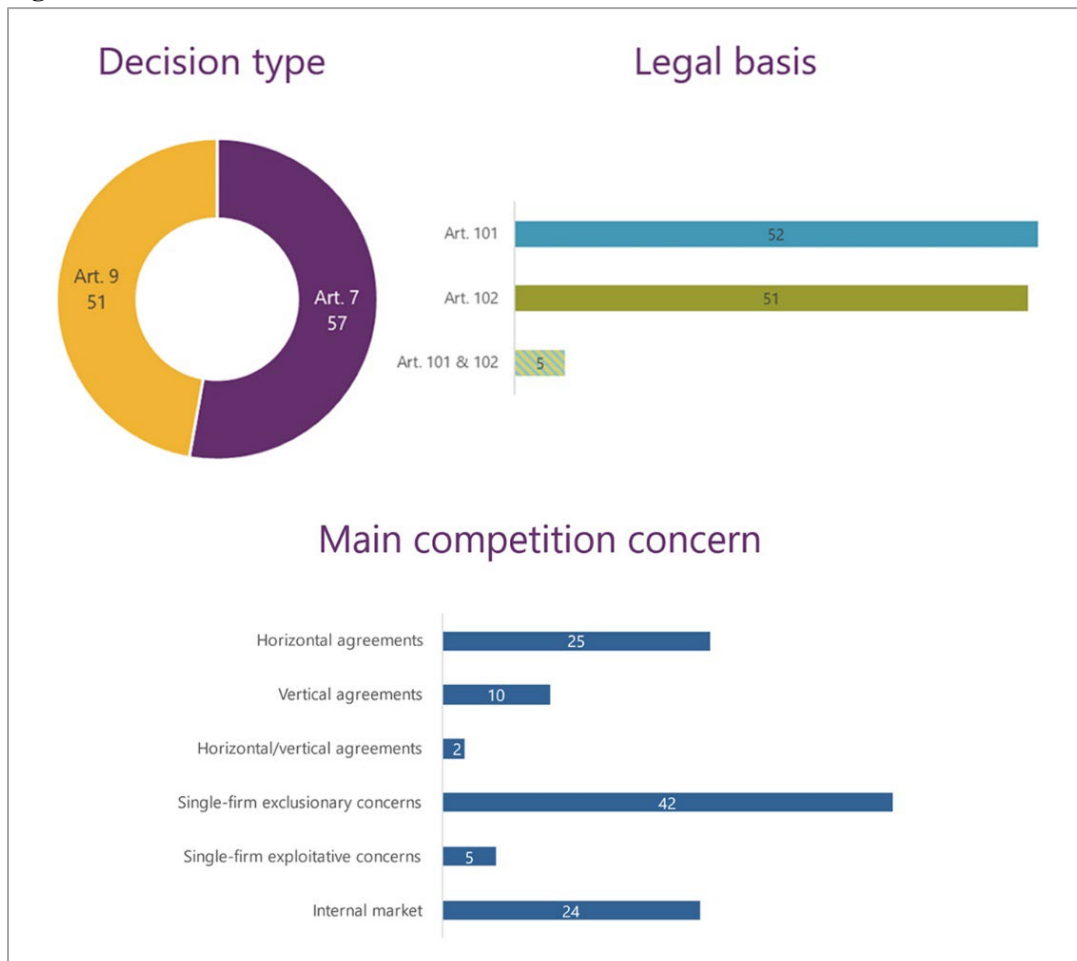
Based on the above four strands of evidence, the study identifies common trends in antitrust remedies practices and elaborates lessons learnt and non-binding recommendations for the improvement of antitrust remedies practice, policy and rules both within the current legal and as part of the forth of the ongoing review of Regulation 1/2003.

Findings of the statistical analysis of all Article 7 and 9 decisions

The **statistical analysis** of the dataset of all non-cartel antitrust decisions adopted since entry into force of Regulation 1/2003 until December 2022 reveals a number of long-term trends in the Commission's decision practice, such as the following, illustrated in Figure 1 below.

- Including simple 'cease and desist' orders, the commission adopted over 20 years 108 decisions or around 5.4 non-cartel antitrust decisions per year.
- The number of article 7 decisions (57) was similar to the number of Article 9 decisions (51).
- The number of decisions based on article 101 TFEU (52) was similar to the number of decisions based on Article 102 TFEU (51). Five decisions were based on both articles.
- In around 40% of the decisions, the main concern was single-firm exclusionary conduct. The second and third most common main concerns are related to horizontal agreements and the internal market.

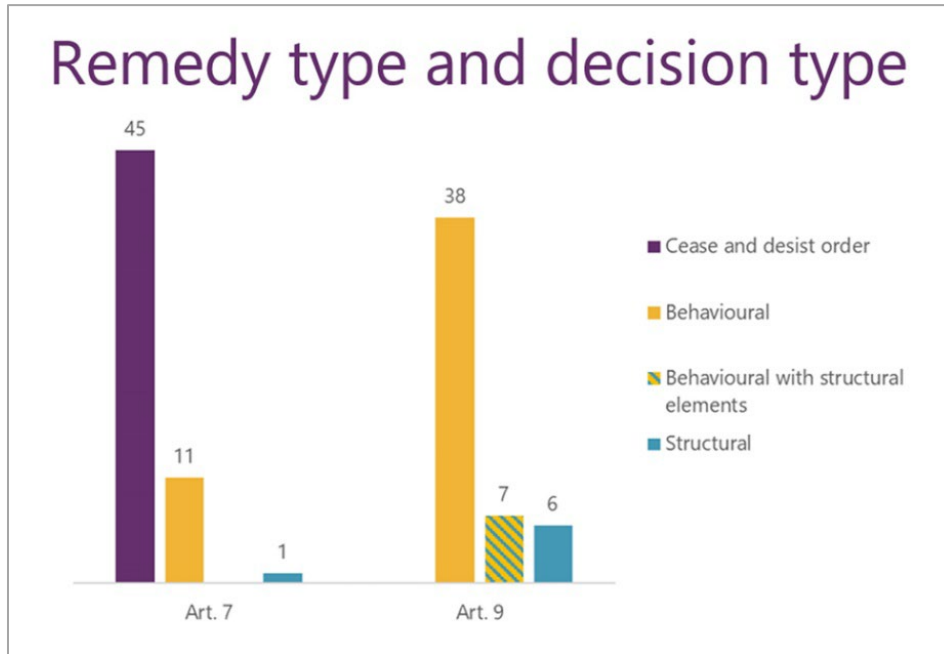
Figure 1



As regards the types of remedies imposed and accepted, the analysis finds the following (see Figure 2):

- In a large majority of Article 7 decisions (45) the Commission issued only a ‘cease-and-desist order’. In 38 of those decisions the cease-and-desist orders were reinforced with a supplementary clause prohibiting conduct with the same object or effect as the prohibited conduct
- The Commission imposed remedies going beyond cease-and-desist orders only in 12 Article 7 decisions. Structural remedies were only imposed once (AT.39759 ARA foreclosure)
- In Article 9 cases, where Regulation 1/2003 does not insist on a subordination of structural to behavioural remedies, behavioural remedies are none the less much more frequent (38) than structural remedies (6). The Commission also accepted 7 behavioural remedies with structural elements (e.g. slot remedies in airline cases).

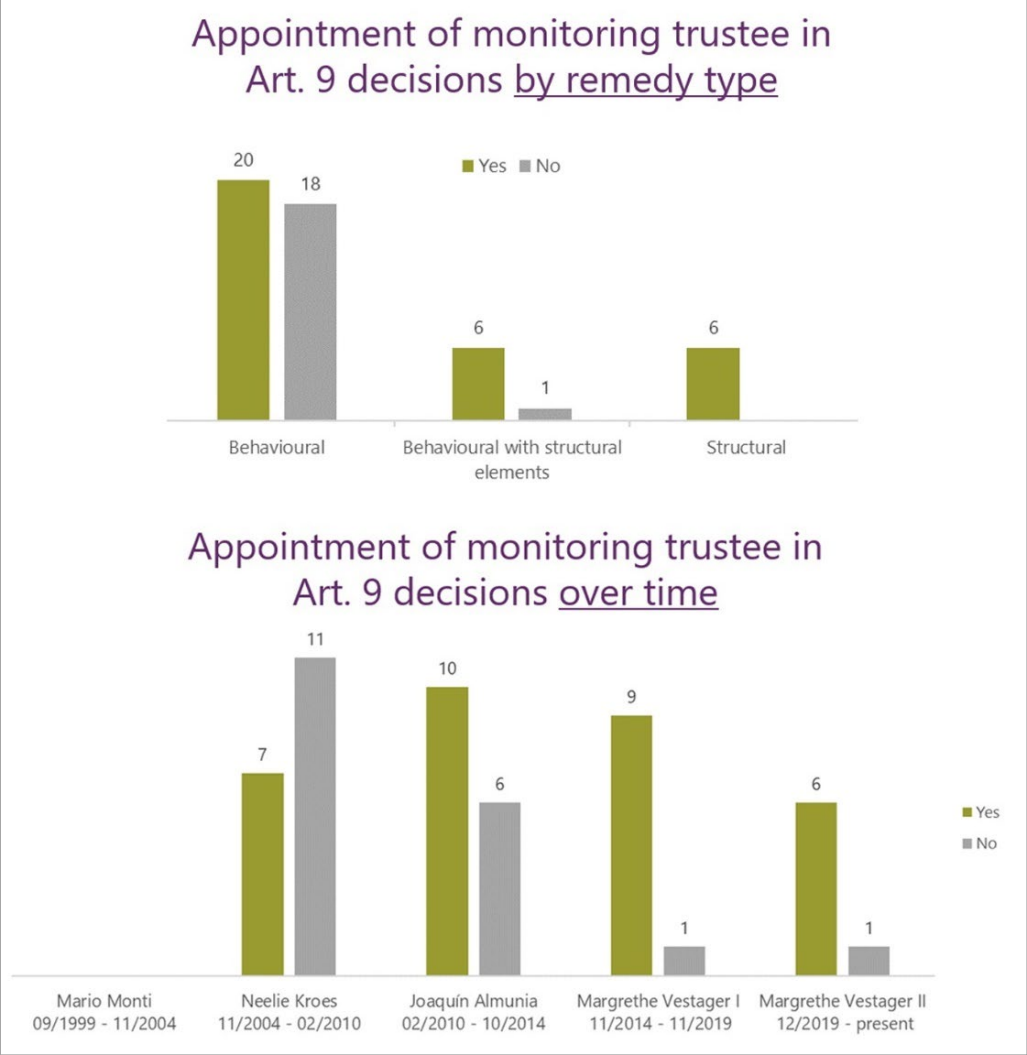
Figure 2



An analysis of the remedy modalities and flanking measures, in particular the appointment of a monitoring trustee, also provides insights, illustrated in Figure 3, namely:

- In Article 7 decisions the Commission has not appointed a monitoring trustee since case *AT.37792 Microsoft*, where the appointment of a monitoring trustee and the obligation of the concerned undertaking to pay for it was annulled by the General Court.
- In Article 9 decisions the Commission appointed a monitoring trustee
 - In about half of the decisions in which a behavioural remedy was accepted
 - In six of the seven decisions with behavioural remedies with structural elements
 - In all cases with structural remedies
 - The appointment of a monitoring trustee has become more frequent over time

Figure 3



Findings of the ex post evaluation of remedies in 12 significant decisions

The central **ex post evaluation part** of the study covered a sample of 12 ‘significant’ remedies decision which the contractor selected on the basis of objective criteria, in order to preclude bias in the sample selection. As required by the tender specifications, the sample of 12 evaluated cases did not include cases which were pending in Court at the time of the evaluation in order not to interfere with ongoing litigation.³

The study contains an evaluation of the remedy for each selected case study, in terms of implementation and effectiveness.⁴ The retrospective evaluation of the implementation and effectiveness of the remedies in those cases was performed on the basis of mostly qualitative evidence

³ Cases therefore excluded from the evaluation include AT.39740 Google Search (Shopping), AT.40099 – Google Android and AT.39816 Upstream gas supplies in central and Eastern Europe.

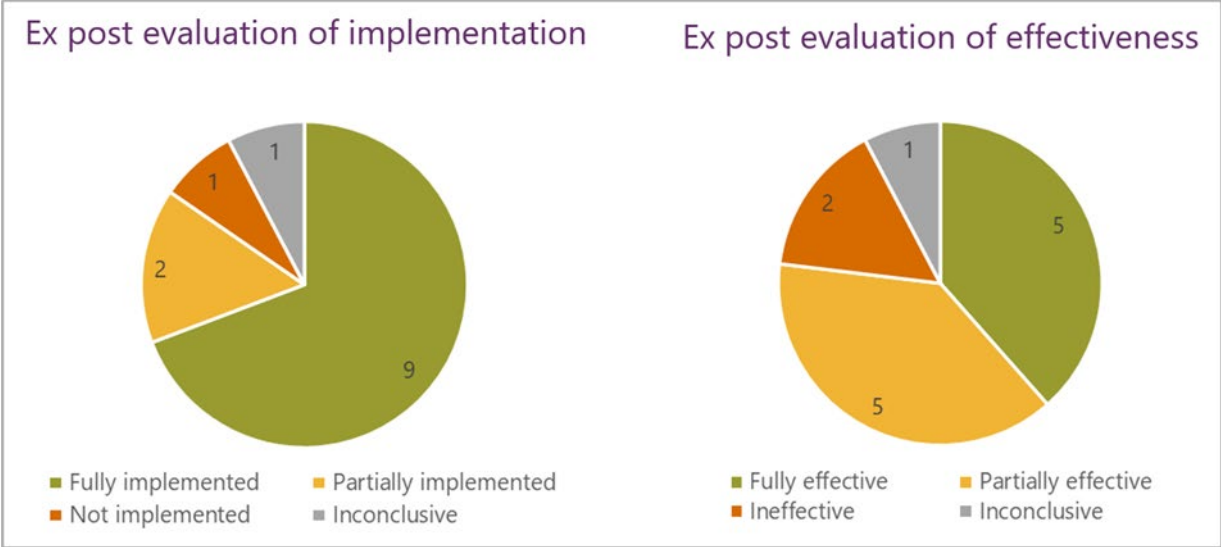
⁴ See Annex 2 for a table with all 12 cases selected, the concern, the remedy and the study’s conclusion on implementation and effectiveness. One of the selected cases was Case AT 37792 Microsoft, where the Commission imposed two different remedies to address two different types of concern, related to interoperability and tying. The case study of *Microsoft* evaluates both those remedies. Therefore, the statistics of the study are based on 13 remedies, related to 12 cases

from interviews with decision addressees, market participants and case teams combined with desk and OSINT research.

As intended by the tender specifications the sample of 12 evaluated remedies cases includes some of the most significant remedies decisions adopted during the past 20 years (eg. *Microsoft*, *Mastercard*, *AB InBev*, *Aspen*) which have been selected based on objective criteria. While the sample of the evaluation was limited to 12 cases, the ex post evaluation of those cases performed by the contractor nevertheless is likely informative of more general trends in the remedies practice of the Commission. These observed more general trends include the following:

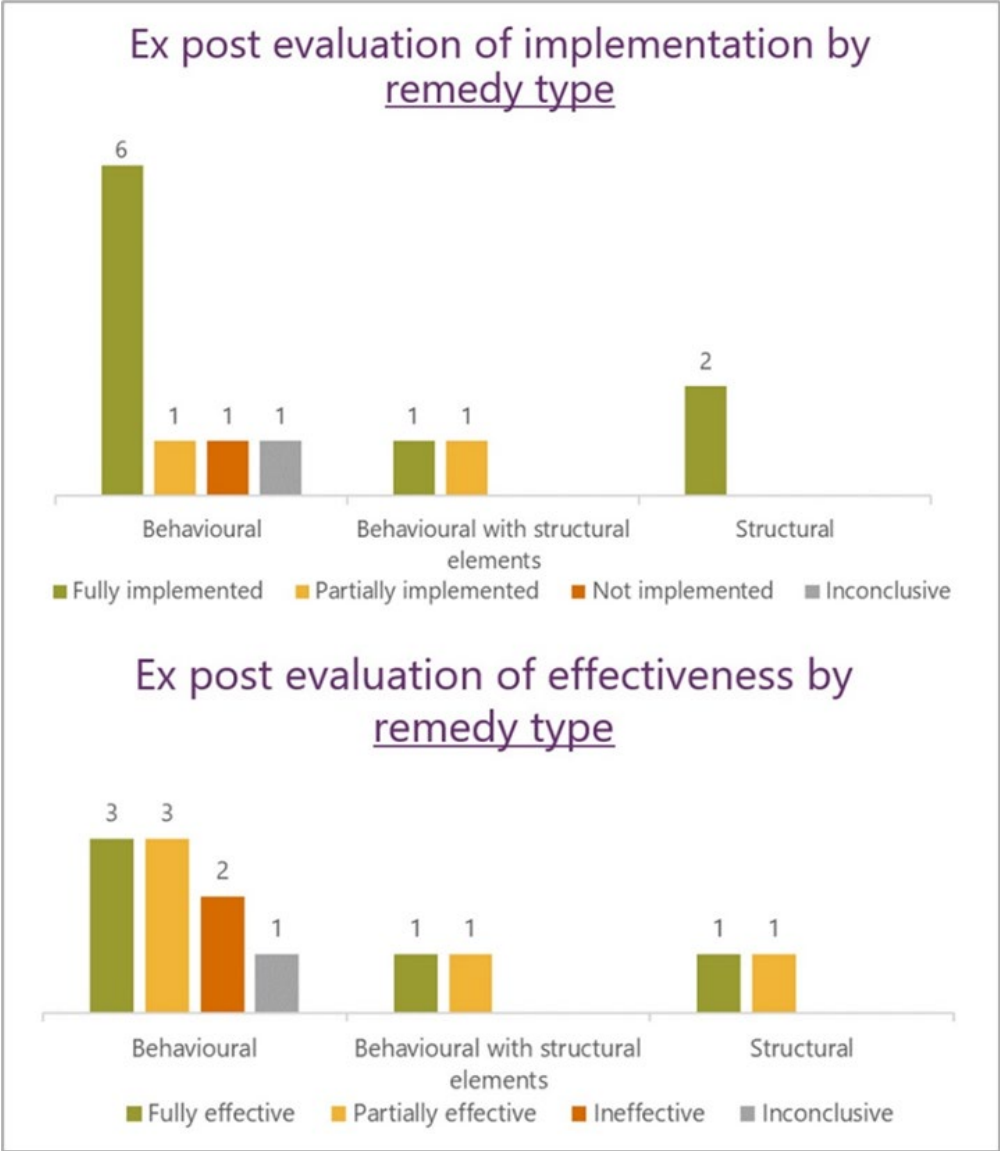
- As shown in Figure 4, while the majority of the remedies assessed were fully implemented, less than half were fully effective in attaining their intended objective.

Figure 4



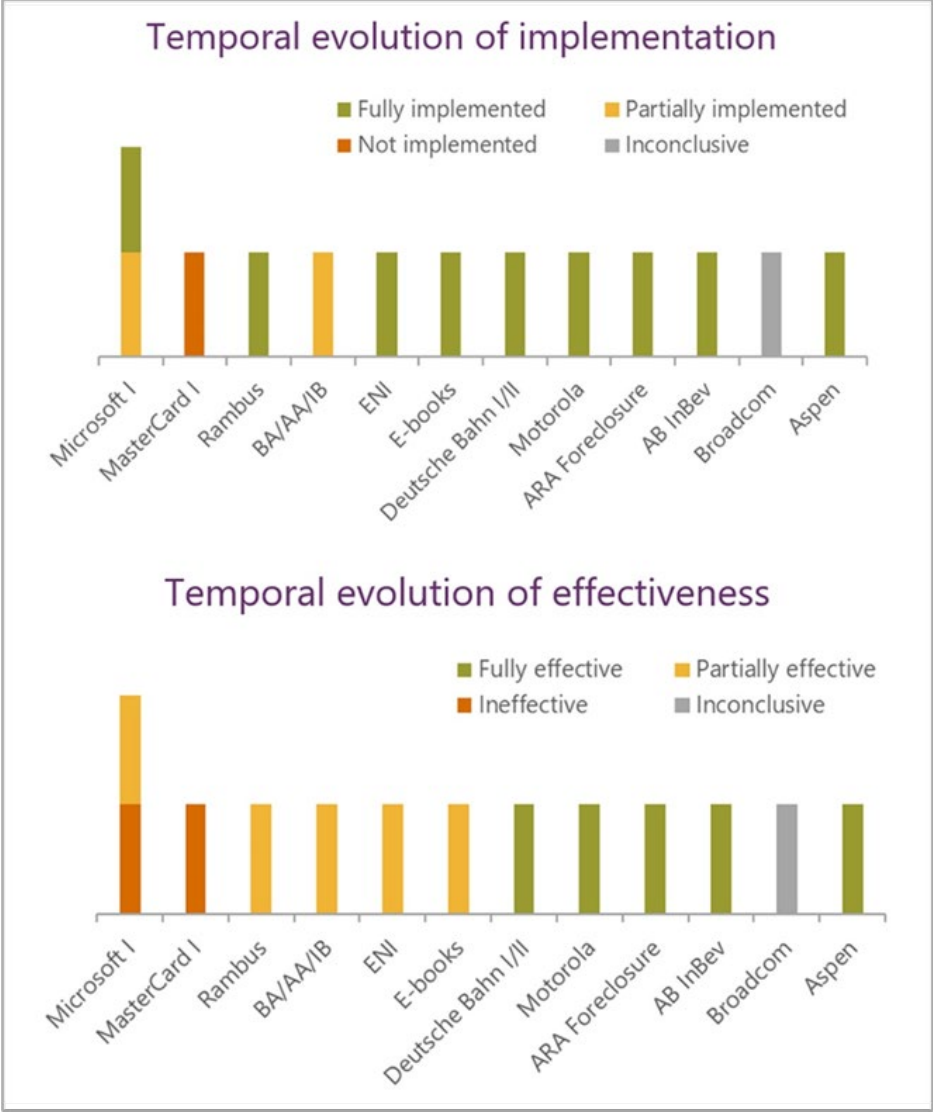
- As illustrated in Figure 5, purely behavioral remedies were the least likely to be fully implemented and fully effective.
 - All structural remedies were fully implemented, while one remedy with structural elements was only partially implemented and two purely behavioural remedies were either only partially implemented or not implemented at all
 - Two thirds of behavioural remedies were either only partially effective or not effective at all.
 - Also the one structural remedy and one behavioural remedy with structural elements were only partially effective.

Figure 5



Implementation and effectiveness seem to have improved over time, as can be seen in Figure 6 below.

Figure 6



Lessons learnt and recommendations

Based on the evidence from all study workstreams (ex post evaluation of 12 cases, statistical analysis, interviews with experts and literature review) the study reports a number of challenges and lessons learnt. On that basis, it makes 18 non-binding recommendations, presented in abbreviated form in Figure 7 below, for further improvements of the Commission’s remedy practice and policy as well as of the rules of Regulation 1/2003.⁵

⁵ The full list of recommendations can be found in Annex 3.

Figure 7

General (Art. 7 and 9)	Article 7	Article 9	Modalities and flanking measures	Additional
<p>1. Remedies objective: should also seek to (i) prevent repetition and (ii) remove effects</p> <p>2. Principle of effectiveness should govern the design of antitrust remedies</p> <p>3. Streamline AT proceedings to ensure timely intervention</p>	<p>4. Remove textual hierarchy between structural and behavioural</p> <p>5. Legally allow appointment of monitoring trustees</p> <p>6. Separate infringement and remedy decision, where appropriate</p> <p>7. Systematic market testing of remedies</p> <p>8. Formalize cooperation procedure</p>	<p>9. Encourage use of Article 9 commitments in appropriate cases</p> <p>10. Simplify formalities around market testing (e.g., remedies in O.J.)</p>	<p>11. Increased use of Article 8 interim measures in cases of urgency</p> <p>12. Monitoring Trustee default practice</p> <p>13. Technical experts and independent advisors before the decision is taken to help with remedy design in appropriate cases</p>	<p>15. Publish guidance + templates on AT Remedies</p> <p>16. Strengthen ex post evaluation</p> <p>17. Continue to create synergies with regulatoin</p> <p>18. Dedicated cross-instrument “remedy unit” for remedy design, implementation and effectiveness</p>

[Annex 1 - Remedies under Articles 7 and 9 of Regulation 1/2003](#)

[Annex 2 - Overview of the ex post evaluation of 12 significant cases](#)

[Annex 3 - 18 recommendations for further improvements](#)

Annex 1: Remedies under Articles 7 and 9 of Regulation 1/2003

The legal basis for EU non-cartel antitrust enforcement decisions are Articles 101 and 102 of the Treaty on the Functioning of the European Union (TFEU) and Regulation 1/2003.

Under Article 7(1) of Regulation 1/2003, where the Commission finds that there is an infringement of Articles 101 or 102 TFEU, it may by decision impose remedies, according to the following rules:

- The Commission may require the firms concerned *'to bring such infringement to an end'*; such decisions are often called 'cease and desist orders'.
- *'For this purpose'* (i.e. to bring the infringement to an end), the Commission *'may impose on them any behavioural or structural remedies which are proportionate to the infringement committed and necessary to bring the infringement effectively to an end'*.
- In this regard *'structural remedies can only be imposed either where there is no equally effective behavioural remedy or where any equally effective behavioural remedy would be more burdensome for the undertaking concerned than the structural remedy'*.

It follows that remedies under Article 7: (1) are imposed by the Commission in the final decision, (2) include as the most basic remedy the order *'to bring the infringement to an end'*, (3) include beyond this basic remedy *'any other behavioural or structural remedy'* which serves the purpose to *'bring the infringement effectively to an end'*, (4) subordinates the possibility to adopt structural remedies to the availability of behavioural remedies.

Under Article 9(1) of Regulation 1/2003, where the Commission has concerns that would lead to a decision finding an infringement under Article 7, the undertakings concerned may decide to offer commitments to meet the preliminary concerns expressed by the Commission. Such remedies under Article 9(1):

- may by an Article 9(1) commitment decision be made binding on the undertakings concerned;
- the commitment decision may be adopted for a specified period;
- the commitment decision must conclude that there are no longer grounds to take action by the Commission.

It follows that commitments under Article 9(1): (1) are voluntarily offered by the undertakings concerned (*'may'*), (2) need to be accepted by the Commission which has margin of appreciation whether to do so (*'may'*), (3) are made binding by the commitment decision (*'must'*).

Annex 2: Overview of the ex post evaluation of 12 significant cases

No	Case	Decision type	Year	Legal basis	Implementation	Effectiveness
1	AT.37792 <i>Microsoft I</i>	Art. 7	2004	Art. 102 TFEU	Interoperability: partial Tying: fully;	Interoperability: partial Tying: ineffective
2	AT.34579 <i>Mastercard I</i>	Art. 7	2007	Art. 101 TFEU	Not implemented	Not effective
3	AT.39985 <i>Motorola GPRS essential patents</i>	Art. 7	2014	Art. 102 TFEU	Fully implemented	Fully effective
4	AT.39759 <i>ARA foreclosure</i>	Art. 7	2016	Art. 102 TFEU	Fully implemented	Fully effective
5	AT.40134 <i>AB InBev beer trade restrictions</i>	Art. 7	2019	Art. 102 TFEU	Fully implemented	Fully effective
6	AT.38636 <i>Rambus</i>	Art. 9	2009	Art. 102 TFEU	Fully implemented	Partially effective
7	AT.39315 <i>ENI</i>	Art. 9	2010	Art. 102 TFEU	Fully implemented	Partially effective
8	AT.39596 <i>BA/AA/IB*</i>	Art. 9	2010	Art. 101 TFEU	Partially implemented	Partially effective
9	AT.39847 <i>E-books</i>	Art. 9	2012	Art. 101 TFEU	Fully implemented	Partially effective
10	AT.39678/AT.39731 <i>Deutsche Bahn I/II</i>	Art. 9	2013	Art. 102 TFEU	Fully implemented	Fully effective
11	AT.40608 <i>Broadcom*</i>	Art. 9	2020	Art. 102 TFEU	Inconclusive	Inconclusive
12	AT.40394 <i>Aspen*</i>	Art. 9	2021	Art. 102 TFEU	Fully implemented	Fully effective

Annex 3: 18 recommendations for improvement

1. The aspiration of antitrust remedies should always be not only to stop the anticompetitive behaviour of the concerned undertakings but also to prevent its repetition (or circumvention) and to remove the detrimental effects on the market that it caused, whenever feasible.
2. Consistent with the existing legal framework, the principle of effectiveness should be the fundamental principle in the design of antitrust remedies.
3. Timely antitrust decision is important for remedies to be effective. The Commission should consider introducing measures to streamline antitrust proceedings.
4. In line with Article 10 of the ECN+ Directive, the subordination of structural remedies to behavioural remedies should be removed from the text of Article 7 of Regulation 1/2003, leaving it to the principles of effectiveness and proportionality to inform the choice of the best remedy type, depending on the facts of a case.
5. Overcoming the lack of legal basis in Regulation 1/2003, as the Microsoft judgment has held, the Commission should be enabled to require an addressee of an infringement decision to bear the costs of monitoring the implementation of remedies, making the appointment of a monitoring trustee practically easier also in Article 7 cases.
6. In complex Article 7 cases, the Commission should consider separating the infringement decision from the remedy decision, allowing for dedicated efforts to design remedies, market test the remedies under consideration and achieve more transparency on the remedies ultimately imposed.
7. The benefits of market testing remedies, which is required in the framework of Article 9, also apply to Article 7 remedies. Accordingly, this practice should be encouraged to the extent possible also in the latter case.
8. Consider formalising a cooperation procedure in the framework of non-cartel Article 7 cases, ensuring more certainty for the undertakings regarding conditions and benefits related to this procedure.
9. In suitable cases, the Commission should encourage the use of the Article 9 procedure, which provides for shorter proceedings, more flexibility in the design of remedies, better monitoring of implementation and lower risk of judicial challenges, albeit at the cost of a smaller contribution to case precedent and deterrence.
10. The formalities around market testing, such as the publication of the proposed remedies in the EU Official Journal and related translation requirements, could be simplified in the interest of agility.
11. In cases of urgency, more systematically explore the adoption of Article 8 interim measures, in particular in cases where there may be strong substantive and procedural synergies between the interim measures and the possible subsequent remedies.
12. The implementation of remedies needs to be verified. Reporting obligations should be included in Commission decisions as standard practice, including in simple cease-and-desist orders.
13. The appointment of a monitoring trustee should be the default practice in antitrust remedy decisions, unless there are compelling reasons against it. In the process, the role of the Commission in the appointment of the monitoring trustee could be strengthened in that the Commission could for

example: (i) have the option to ask that more than one monitoring trustee be proposed; (ii) have the final word on the selected monitoring trustee; (iii) have the ability to quickly replace the monitoring trustee during their mandate in case of any issues, including suspected conflicts; (iv) define appropriate limits to the powers of the monitoring trustee; (v) allow for the appointment of technical experts; and (vi) establish suitable governance systems in complex cases which require resource intensive monitoring efforts.

14. The appointment of an independent advisor to the Commission in the remedy design phase should be considered in appropriate cases, for example where the design of remedies may require technical expertise or their implementation may be particularly complex.

15. Consider the publication of guidance on antitrust remedies, similar to the Merger Remedies Notice (2008) and the Commission's model text for the trustee mandate under EU merger control (2013), which may provide significant benefits to all parties, enhance remedy implementation and effectiveness, and speed up the remedy design process.

16. Consider reinforcing the ex post evaluation of remedies as a standard practice, by collecting relevant market information (such as market shares) from the concerned undertakings and market participants at the conclusion of each antitrust case.

17. The Commission should continue to exploit synergies between antitrust remedies adopted in different decisions, and use the experience and market knowledge gained from antitrust remedies to inform and pro-competitively enhance sector regulation, whilst respecting the legal limits of Regulation 1/2003.

18. The Commission should consider setting up a dedicated unit to support the case teams on remedy design, implementation and effectiveness across all relevant EU competition policy areas (antitrust, merger control, State aid, DMA and Foreign Subsidies Regulation). At the very least, a knowledge repository on remedies should be put in place.