

Study on the effectiveness of EU antitrust remedies
PMU Competition conference

Paul Arenas, Senior Consultant/Principal at NERA 05 June 2025



Project team

Authors

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Disclaimer

The information and views set out in this study are those of the authors and do not necessarily reflect neither the view of their employers nor the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein. The anonymity of the interview partners has been granted and the protection of the business secrets of their employers or clients have been ensured.

Conflict safeguards

All cases on which the consortium partners and their subcontractors were involved as advisers were communicated to DG COMP before the contract was awarded. Such involvement did not affect the selection of cases studies. As a result of such involvement, NERA and Thomas Hoehn did not participate in the evaluation of AT.37782 *Microsoft I.* For the same reason, Thomas Hoehn did not participate in the evaluation of AT.34579 *Mastercard I* as well.





Context and methodology

Context and objective of the Study

Context

- Evaluation of Regulation 1/2003, on the occasion of its twentieth anniversary
 - Art. 101 TFEU (restrictive agreements) and Art. 102 TFEU (abuse of a dominant position) define an infringement of EU competition law
 - Regulation 1/2003 governs the enforcement of EU competition law by the European Commission, national competition authorities and national courts
 - The Commission can impose remedies to "bring [an] infringement effectively to an end" (Art. 7 of Regulation 1/2003) or make commitments proposed by an undertaking to "meet the [competition] concerns" preliminarily identified binding on it (Art. 9 of Regulation 1/2003)
 - Questions about the timeliness and effectiveness of antitrust intervention, in light of the increasing complexity of cases

Objective

- Retrospective evaluation of implementation and effectiveness (compared to their intended objective) of antitrust remedies imposed by the Commission under Regulation 1/2003
- Policy and practice recommendations to improve implementation and effectiveness

Key features of the EU legal framework governing remedies

Article 7

- A prohibition decision finds an infringement
- When present at all in the decision, (structural or behavioural) remedies complement a "cease-and-desist" order, which in turn can be a basic order or a "like-object-or-effect" order
- Coercive (apart from cooperation procedure)
- No market test required
- Strict application of the proportionality principle for remedies
- The *Microsoft* judgment restricts the scope and ability of the Commission to order an undertaking to appoint a monitoring trustee and pay for its costs
- Statutory subordination of structural to behavioural remedies: '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'

Article 9

- A commitments decision does not (conclusively) find an infringement
- Remedies (commitments) are at the heart of the decision
- Cooperative
- Formal market test required by Art. 27(4)
- Less strict application of the proportionality principle for remedies
- No restrictions on the appointment of a monitoring trustee
- No subordination of structural to behavioural remedies

Article 8

- In addition, the Commission has the legal power to impose interim measures in case of **risk of serious and irreparable damage** to competition based on **prima facie findings of infringement**
- A preliminary step towards adopting an enforcement decision with more lasting effects
- Renewable if still necessary and proportionate

The Study in numbers

scholars, practitioners and officials interviewed on challenges and best practices



oral or written interviews with case teams, decision addressees, monitoring trustees and market participants

108
EU (non-cartel) antitrust decisions reviewed (of which 63 remedies decisions)

12 in-depth case studies

Novel dataset on all EU antitrust decisions of the last twenty years, including two-level typology for competition concerns and remedies Detailed and comprehensive set of twelve significant case studies on ex post evaluation of remedy implementation and effectiveness

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Overall methodological approach

a. Literature review

 Systematic review of the legal and the economic literature on antitrust remedies

c. Dataset construction and statistical analysis

- Construction of a dataset comprising all (non-cartel) antitrust decisions that the Commission adopted between the entry into force of Regulation 1/2003 on 24 January 2003 until 31 December 2022
- Statistical analysis of the dataset with respect to the cases (e.g. competition concern), remedies (e.g. remedy type) as well as modalities and flanking measures (e.g. appointment of a monitoring trustee)

b. Expert interviews on challenges and best practices

- Interviews on the challenges and best practices in the design and implementation of remedies conducted with
 - Case managers from DG COMP's antitrust and merger units
 - Other competition authorities: Autorité de la concurrence,
 Bundeskartellamt, Antitrust Division of the Department of Justice and Federal Trade Commission
 - Legal and economic scholars
 - Monitoring trustees

d. Ex post evaluation of twelve significant cases

- Selection of twelve significant EU antitrust remedy cases, based on a range of quantitative criteria
- Ex post evaluation of remedy implementation and effectiveness, both individually and across the twelve cases, using input from case teams, decision addressees, market participants and OSINT
- Ex post evaluation was necessarily only qualitative, since a more rigorous quantitative analysis would have forced us to limit ourselves to a much smaller number of cases

Ex post evaluation of significant cases

Common methodology

• The case studies employed a common methodology involving the examination of official documents, extensive OSINT research, and the preparation of detailed questionnaires to evaluate the implementation and effectiveness of imposed remedies.

Stakeholder Engagement

• In-person interviews were conducted with Commission case team members to clarify substantive and procedural aspects of remedy design, while separate questionnaires were developed for relevant stakeholders, including customers, competitors, and legal representatives, to gather their insights.

Iterative Evaluation Process

• The information-gathering process was iterative, with new stakeholder input leading to additional questions, ultimately culminating in an evaluation of the level of implementation and effectiveness of the remedies against the Commission's intended objectives

Value and limitations of case studies

- The case study approach provided a detailed exploration of the complexities involved in individual cases, particularly valuable in non-cartel antitrust enforcement where the number of cases is limited, and specificities are vast.
- The methodology's reliance on qualitative information and stakeholder input presents limitations; efforts were made to balance perspectives and protect the anonymity and business secrets of interview partners.



Decision dataset, case selection and case studies

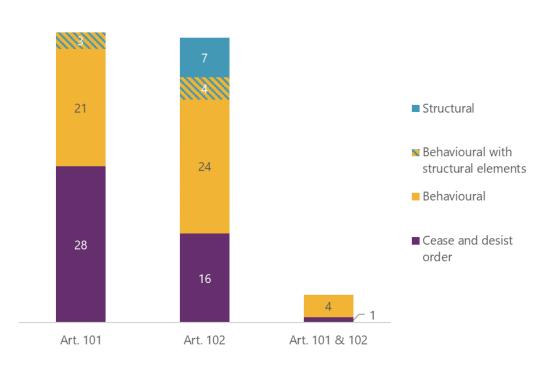
Decision dataset Descriptive statistics on remedies

Remedy type and legal instrument

38 Cease and desist order Behavioural Behavioural with structural elements Structural

Art. 9

Remedy type and legal basis





Art. 7

Exclusion and ranking criteria for case selection

Universe of cases 57 Art. 7 cases 51 Art. 9 cases

Exclusion criteria

- Decisions that did not impose any remedies (above and beyond a cease-and-desist order)
- Decisions under ongoing judicial review
 - AT.39740 Google Search (Shopping), AT.40099 Google Android, AT.40411 Google Search (AdSense), AT.40208 International Skating Union's Eligibility Rules, AT.39816 Upstream gas supplies in Central and Eastern Europe
- Decisions that were (entirely or broadly) annulled by the EU courts
 - AT.38698 CISAC Agreement, AT.40023 Cross-border access to pay-TV

Eligible cases

7 Art. 7 cases **49** Art. 9 cases

Ranking criteria

Selection of most significant cases, measured by the importance of the case and the importance of the remedy, while ensuring coverage by legal basis, industry, competition concern, remedy type and decision year

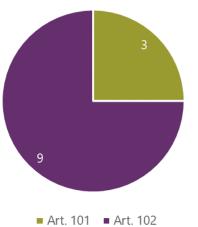
- Art. 7: Straightforward to select five out of seven Art. 7 cases*
- Art. 9: Quantitative measures of case and remedy importance
 - Indicators of case importance: length of decision, the number of downloads from DG COMP's website and the number of references to the case in the reviewed literature
 - Indicators of remedy importance: number of press release paragraphs on remedies, number of recitals and articles related to remedies
 - Selection of the **highest-ranking cases**, while ensuring **coverage**

Selected cases 5 Art. 7 cases 7 Art. 9 cases

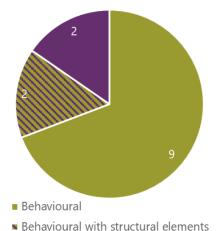
^{*} According to the tender specifications, (at least) five Art. 7 and seven Art. 9 cases had to be selected for the ex post evaluation.



Selected cases by legal basis



Selected remedies by type



Structural

Note: Because in case AT.37792 Microsoft I we evaluate two distinct remedies, these statistics are based on 13 remedies (as relating to 12 cases).

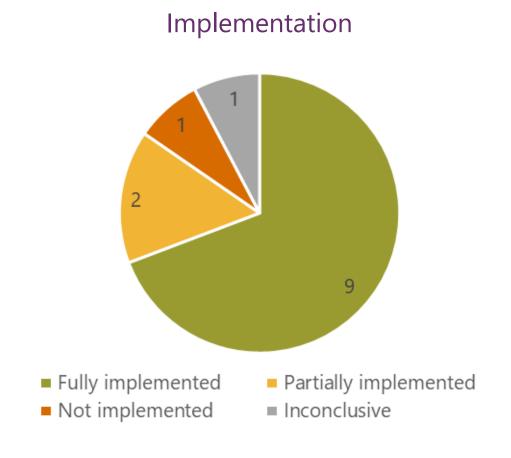
Resulting selection of twelve significant cases

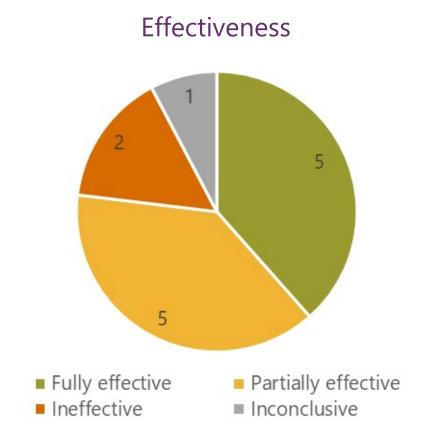
No	Case	Decision type	Decision year	Legal basis	Competition concern	Remedy type	Implementation	Effectiveness
1.1	AT.37792 Microsoft I	Art. 7	2004	Art. 102 TFEU	Single-firm exclusionary concerns (tying)	Purely behavioural (untying)	Full	No
1.2	AT.37792 Microsoft I	Art. 7	2004	Art. 102 TFEU	Single-firm exclusionary concerns (refusal to supply)	Purely behavioural (access to technical information)	Partial	Partial
2	AT.34579 Mastercard I	Art. 7	2007	Art. 101 TFEU	Horizontal agreements (multilateral interchange fees)	Purely behavioural (price caps)	No	No
3	AT.39985 Motorola GPRS essential patents	Art. 7	2014	Art. 102 TFEU	Single-firm exclusionary concerns	Purely behavioural (remove contractual clauses)	Full	Full
4	AT.39759 ARA foreclosure	Art. 7	2016	Art. 102 TFEU	Single-firm exclusionary concerns (refusal to supply)	Structural (divestiture of business or assets)	Full	Full
5	AT.40134 AB InBev beer trade restrictions	Art. 7	2019	Art. 102 TFEU	Concerns about internal market	Purely behavioural (multi-language labels)	Full	Full
6	AT.38636 <i>Rambus</i>	Art. 9	2009	Art. 102 TFEU	Single-firm exploitative concerns	Purely behavioural (price caps)	Full	Partial
7	AT.39596 <i>BA/AA/IB</i> *	Art. 9	2010	Art. 101 TFEU	Horizontal agreements	Behavioural with structural elements (release of airport slots)	Partial	Partial
8	AT.39315 <i>ENI</i>	Art. 9	2010	Art. 102 TFEU	Single-firm exclusionary concerns	Structural (divestiture)	Full	Partial
9	AT.39847 <i>E-books</i>	Art. 9	2012	Art. 101 TFEU	Horizontal and vertical agreements	Purely behavioural (change contracts)	Full	Partial
10	AT.39678/AT.39731 Deutsche Bahn I/II	Art. 9	2013	Art. 102 TFEU	Single-firm exclusionary concerns (margin squeeze)	Behavioural with structural elements (access to infrastructure, operational separation)	Full	Full
11	AT.40608 Broadcom*	Art. 9	2020	Art. 102 TFEU	Single-firm exclusionary concerns (exclusive dealing)	Purely behavioural (remove contractual clauses)	Inconclusive	Inconclusive
12	AT.40394 Aspen*	Art. 9	2021	Art. 102 TFEU	Single-firm exploitative concerns (excessive prices)	Purely behavioural (price caps)	Full	Full

Note: The asterisk denotes cases in which the remedy obligations are still ongoing.



Twelve case studies Overall statistics









Lessons learned and recommendations

ECONOMICS. EXPERTS. EXPERIENCE.

Summary of recommendations

General (Art. 7 and 9)

- 1. Remedies
 objective: should
 also seek to (i)
 prevent repetition
 and (ii) remove
 effects
- 2. Principle of effectiveness should govern the design of antitrust remedies
- Streamline AT proceedings to ensure timely intervention

Article 7

- 4. Remove textual hierarchy between structural and behavioural
- 5. Legally allow appointment of monitoring trustees
- 6. Separate infringement and remedy decision, where appropriate
- 7. Systematic market testing of remedies
- 8. Formalise cooperation procedure

Article 9

- **9. Encourage** use of Article 9 commitments in appropriate cases
- **10. Simplify formalities** around market testing
 (e.g., remedies in O.J.)

Modalities and flanking measures

- 11. Increased use of Article 8 interim measures in cases of urgency
- **12. Monitoring trustee** default practice
- 13. Technical
 experts and
 independent
 advisors before
 the decision is
 adopted to help
 with remedy
 design in
 appropriate cases

Additional

- 15. Publish
 guidance +
 templates on AT
 remedies
- 16. Strengthen ex post evaluation
- 17. Continue to create synergies with regulation
- 18. Dedicated cross-instrument "remedy unit" for remedy design, implementation and effectiveness

Lesson learned

Enforceability and timeliness: keys to effective antitrust remedies

Enforceability

• Remedies should be practical, not overly costly, or complex to implement

Timeliness

• Remedies must address competition concerns effectively at the right moment, particularly in fast-paced markets

Evolution of remedy practice

• Older cases (e.g., AT.37792 *Microsoft I*, AT.34579 *MasterCard I*) showed more issues with implementation and effectiveness compared to recent ones, reflecting improved practices

Broader impact

- Remedies can influence future guidance, judicial decisions, and sector regulation
- Remedies often transition from ex post measures (post-violation) to ex ante obligations (prevention-based regulation)
- Example: AT.34579 MasterCard I paved the way for the 2015 EU Interchange Fee Regulation

General recommendations

De lege lata and de lege ferenda

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.

Principle of effectiveness

Consistent with the existing legal framework, the principle of effectiveness should be the fundamental principle in the design of antitrust remedies.

Timely antitrust decisions are important for remedies to be effective. The Commission should consider introducing measures to streamline antitrust proceedings.

Recommendations on Art. 7 remedies

4	Removal of the statutory subordination of structural to behavioural remedies	In line with Article 10 of Directive 01/2019 (the <i>ECN+ Directive</i>), the subordination of structural remedies to behavioural remedies should be removed from the text of Art. 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	<i>Microsoft I</i> judgment	Overcoming the lack of legal basis in Regulation 1/2003, as the <i>Microsoft I</i> 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	Separation of infringement and remedy decision	In complex Art. 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	Market testing	The benefits of market testing remedies, which is required by Art. 27(4) in the framework of Art. 9, also apply to Art. 7 remedies. Accordingly, this practice should be encouraged to the extent possible also in the latter case.

Further recommendations

Reporting The implementation of remedies needs to be verified. Reporting obligations should be included in Commission **obligations** decisions as standard practice, including in simple cease-and-desist orders. 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 **Monitoring** 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 trustee 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 system in complex cases which require resource intensive monitoring efforts. The appointment of an independent advisor to the Commission in the remedy design phase should be considered **Technical experts** and independent in appropriate cases, for example where the design of remedies may require technical expertise or their advisors implementation may be particularly complex. Consider the publication of guidance on antitrust remedies, similar to the Merger Remedies Notice (2008) and the Commission's model texts for divestiture commitments and the trustee mandate under EU merger control (2013), **Antitrust remedy** auidance which may provide significant benefits to all parties, enhance remedy implementation and effectiveness, and speed up the remedy design process.





THANK YOU



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