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**Information Sharing in Competition Policy - Background note**

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# Information sharing in competition policy

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Competition rules governing information sharing must balance two primary risks: permissive rules may facilitate tacit collusion or explicit cartel conduct, while overly restrictive frameworks can chill legitimate collaboration and create market inefficiencies. This paper reviews how different forms of information exchange affect firm incentives and market outcomes, drawing on recent economic literature. It also examines how competition authorities across OECD jurisdictions have approached the issue in practice, including through enforcement, case law and guidance. The paper aims to clarify the main factors that shape competitive risk and how those factors are reflected in current assessment and enforcement.

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**Key words:** Competition, Antitrust, Information exchange, Collusion, Cartels, Information sharing.

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# Executive summary

Information sharing between competitors is one of the more complex and contested areas of competition law enforcement.<sup>1</sup> It can support legitimate market functioning, benchmarking and co-operation, but it can also reduce the uncertainty that competition is meant to preserve. Recent economic research and enforcement practice have made the assessment of such exchanges more exacting, particularly by challenging assumptions that certain forms of information sharing are necessarily low risk in all settings. This paper draws on recent economic literature and a review of enforcement practice and guidance across OECD jurisdictions to examine how competition authorities assess the benefits and risks of information sharing, and how these assessments are evolving.

The paper also identifies issues that are likely to require continued attention. These include how authorities should investigate and assess information exchange mediated through common digital systems or more opaque AI tools; how responsibility should be allocated where platforms, data intermediaries or other third parties structure or disseminate competitor information; and whether existing investigative and evidentiary tools will remain sufficient as these systems become more complex. These developments do not suggest that existing frameworks have become obsolete, but they may increasingly test how those frameworks are applied in practice.

## Key findings

### ***Reassessing the risks of information sharing***

Older heuristics about which forms of information sharing are relatively low risk are under increasing pressure. Recent economic research has refined the traditional framework, most clearly by showing that aggregated data may still be competitively significant where it permits sufficiently precise inference about rivals' conduct. Recent practice and guidance also suggest greater caution towards older assumptions that aggregated, historical or publicly available information is necessarily benign in all settings. In some jurisdictions, this has meant less reliance on fixed temporal or formal thresholds and greater emphasis on a contextual assessment of whether the exchange, in the market concerned, is capable of reducing strategic uncertainty and facilitating co-ordination.

### ***Information exchange may be a competition concern in its own right***

Recent decisional practice and guidance in several jurisdictions show that information exchange may, in some circumstances, be treated as a competition concern in its own right, rather than only as evidence of a broader infringement. This approach is not universal. Jurisdictions continue to differ in how they characterise such exchanges, the evidentiary thresholds they apply, and the weight they give to presumptions, market context and likely effects.

### ***Platforms, data intermediaries and algorithms can shape competitive risk***

Concerns about information exchange through intermediaries are not new but are increasingly being applied to new technological settings. Competition authorities have long scrutinised exchanges mediated through trade associations and other third parties. More recent guidance and case law extend the same logic to common platforms, data intermediaries and algorithmic tools, recognising that the mechanism through which information is structured, processed and disseminated may itself affect competitive risk. This is particularly relevant where digital systems make competitor information more frequent, granular, automated or actionable than traditional forms of exchange.

# 1. Introduction

1. Information sharing between actual or potential competitors raises familiar but difficult questions for competition policy. For the purposes of this paper, information sharing refers to the communication, provision or making available of commercially relevant information between competitors, including information sharing that occurs indirectly through intermediaries, platforms or automated tools and public disclosure (UNCTAD, 2011<sup>[1]</sup>).<sup>2</sup> Such disclosures can improve market functioning by reducing uncertainty, reducing transaction costs and supporting planning, but they may also reduce strategic uncertainty in ways that soften rivalry, facilitate co-ordination or help sustain cartel conduct. As the risks and benefits turn on multiple features of the information sharing and its setting, drawing clear lines in guidance and case law is challenging. A review of information sharing is timely for three reasons:

- **Economic research:** Recent economic research has refined some of the traditional heuristics used to assess information sharing, most clearly by showing that information often treated as lower risk, especially aggregated data may still facilitate co-ordination where it allows sufficiently precise inference about rivals' conduct.
- **Enforcement practice:** Several jurisdictions now recognise information exchange as a standalone infringement, yet continue to diverge in legal characterisation, evidentiary thresholds and the extent to which such exchanges are assessed under by-object/per se-type approaches or through effects-based/rule-of-reason analysis.
- **Technological changes:** Markets are increasingly becoming more concentrated and digitalised. Firms now access vast quantities of data and use new sharing mechanisms, such as algorithmic pricing tools, data intermediaries and even artificial intelligence agents, often without explicit bilateral contact.

2. For competition policy, the key question is not whether information sharing is harmful in the abstract, but which features of a given disclosure reliably predict competitive harm and can support workable legal rules. This paper focusses on the implications of information sharing for collusion and other forms of co-ordinated conduct, including bid rigging and disclosure practices insofar as they facilitate co-ordination.<sup>3</sup>

3. The paper is structured as follows:

- Section 2. sets out the economic framework for assessing information sharing. It discusses the circumstances in which information sharing may generate efficiencies, the mechanisms through which it may harm competition, and the factors that shape risk, including market structure, the nature of the information, the channel of disclosure and new technologies.
- Section 3. examines how these economic risk factors are reflected in enforcement practice, guidance and advocacy. It reviews the legal treatment of information sharing as part of cartel conduct, as a standalone infringement, and within horizontal co-operation arrangements. It also considers the role of intermediaries, including trade associations, digital platforms and algorithmic tools, and the use of guidance and advocacy to support legal certainty.
- Section 4. draws together the main takeaways for competition policy.

# 2. The economics of information sharing: Benefits, risks and context

4. Information sharing between competitors can take many forms and occur through various channels. For competition policy, the economic significance of such conduct lies not in the fact that information is shared, but in the extent to which the information sharing is likely to alter firms' incentives and behaviour in ways that soften rivalry and facilitate co-ordination, and whether, in the market context concerned, any such restrictive effects are likely to be outweighed by countervailing efficiency benefits (OECD, 2011<sup>[2]</sup>). Economics therefore matters because it helps identify which features of information sharing are most relevant to competitive assessment. In particular, the likely effects depend on the nature of the information, the timing, frequency and format of disclosure, the market context, and the role of any intermediaries. These factors interact, and different combinations can have materially different implications for both efficiency benefits and competitive harm.

5. To inform the legal and enforcement discussion that follows, this section begins by discussing the circumstances in which information sharing may give rise to efficiency benefits. This reflects the need to explain why firms and policymakers sometimes view information sharing as beneficial, and in which circumstances such claims may have economic substance. The section then turns to the mechanisms through which information sharing can harm competition. The analysis subsequently considers how the characteristics of the information, the channel of disclosure and the market context shape the overall assessment, before concluding with a discussion of how recent technological developments affect the economic analysis of information sharing.

## 2.1. Where benefits and efficiencies can arise

6. Competition authorities are regularly presented with arguments that information sharing can improve market outcomes by addressing uncertainty, supporting investment or facilitating the functioning of markets. In assessing such arguments, it is useful to consider the economic mechanisms through which information sharing may, in certain circumstances, generate efficiency benefits. This section sets out the principal efficiency rationales identified in the economic literature. These benefits are not unconditional, and whether they arise in each case depends on factors such as the characteristics of the information, the structure of the market and the design of the disclosure, issues examined further in Section 2.3. The purpose of this discussion is to provide economic context for the legal and enforcement analysis that follows, not to anticipate how any particular arrangement would be assessed under competition law.

7. When considering the potential benefits of information sharing, it is useful to distinguish between two broad settings. In some cases, information sharing takes the form of broad disclosure or transparency, where information is made available to consumers, investors or other market participants outside the group of competing firms. In other cases, information sharing is more narrowly targeted and takes place primarily or exclusively between competitors themselves. These two settings differ in both their economic rationale and their competitive implications. As a general matter, efficiency benefits are more likely to arise where information reaches actors outside the competitive relationship between firms, while more targeted exchanges between competitors often have less clear-cut efficiency benefits.

8. In relation to broader information sharing such as mandated disclosure, the information is typically directed at a specific audience such as consumers or investors, but once released it is available to rivals as well. Therefore, such public disclosure may also function as a co-ordination device and is worth considering the benefits and risks. Information disclosure to consumers for example through product labelling, price comparison requirements, nutritional information, energy ratings and similar regimes, can lead to benefits due to the reduction in information asymmetries between sellers and buyers. This improves consumer decision making and intensifies the competitive pressure on suppliers to compete on price and quality, particularly in markets where product characteristics would otherwise be difficult for consumers to verify (Dranove and Jin, 2010<sup>[3]</sup>). Disclosure to investors, including financial reporting requirements, improves capital allocation by allowing markets to price risk more accurately and identify underperforming firms (Diamond and Verrecchia, 1991<sup>[4]</sup>).

9. The efficiency benefits of narrowing information sharing between firms fall into four broad categories: (i) improved decisions and allocative efficiency under uncertainty; (ii) reduced barriers to irreversible investment; (iii) stability benefits in structurally interdependent sectors; and (iv) temporary co-operation in acute disruptions. These are taken in turn.

10. First, information sharing can affect firms' decisions under uncertainty by improving the information on which they individually base output or investment choices. For example, sharing information about aggregate demand conditions may allow firms to form more accurate expectations about market demand. In quantity-setting environments, where firms compete primarily by choosing how much to supply (such as some commodity or electricity generation markets), each firm may then adjust its own output decision accordingly. In that sense, information sharing can lead firms to adjust their output to different extents, not through any joint decision, but because they respond individually to better information about market conditions (Vives, 1984<sup>[5]</sup>). Sharing information about costs can operate in a similar way by reducing uncertainty about market conditions and rivals' behaviour. When firms have better information about cost shocks, they can adjust their own output decisions more accurately in response to realised conditions. In oligopoly models with cost uncertainty, this typically reduces the variability of aggregate output and prices, as firms respond in a more aligned way to similar information.

11. These mechanisms can have ambiguous welfare effects for consumers. In some settings, improved information can benefit consumers by allowing firms to match supply more closely to underlying market conditions, leading to fewer shortages, lower price spikes and improved allocative efficiency. In other settings, however, consumers gain disproportionately from episodes of intense competition associated with firms choosing higher output levels when making decisions under demand or cost uncertainty. By reducing uncertainty and aligning firms' expectations, information sharing can dampen such competitive fluctuations. As a result, greater informational precision can reduce consumer surplus in some settings, even when it improves firms' decisions or industry-level efficiency (Shapiro, 1986<sup>[6]</sup>). The welfare implications are therefore context-specific and depend on the competitive variable, the source of uncertainty, and the information structure of the market (Raith, 1996<sup>[7]</sup>). This context-dependence is explained further in Section 2.3.

12. Second, where entry, capacity expansion or other irreversible investment requires sunk costs, uncertainty about future market conditions is itself a barrier to commitment: firms delay or forgo investment they would otherwise make. Information that reduces this uncertainty, for example aggregated data on demand trends or capacity utilisation, can lower effective barriers to entry and expansion and support investment that benefits consumers over time (Pindyck, 2009<sup>[8]</sup>).

13. Third, in sectors where firms are highly interdependent, information sharing can produce system-wide stability benefits that individual firms may not fully internalise when acting alone. In financial services, for example sharing operational and risk-related data supports financial stability for the system as a whole (Van Dijk, Jenkinson and Pham, 2024<sup>[9]</sup>; Cho, 2021<sup>[10]</sup>).

14. Fourth, efficiency rationales can also arise in acute disruptions, where limited and temporary co-operation may be necessary to ensure continuity of supply. The COVID-19 pandemic provided a prominent example: major supply-chain disruptions prompted discussion of limited, temporary co-operation or information sharing where necessary to ensure the provision of essential goods and services, with competition authorities setting out the conditions under which such arrangements would not attract enforcement. The OECD's work during the pandemic reviewed the broader shortage literature and the related question of crisis cartels, underlining that these frameworks are time-limited and do not alter the standing treatment of information sharing outside acute disruption (OECD, 2020<sup>[11]</sup>).

15. The benefits set out in this section, from improved allocative efficiency to consumer and investor disclosure, share a common feature: each arises because information reduces uncertainty, and each can therefore also reduce the strategic uncertainty that sustains competition.

## 2.2. How information sharing can harm competition

16. Although information sharing can generate efficiencies, it can also harm competition. In the case of information sharing between competitors, the principal concern is typically its potential to facilitate co-ordinated conduct. Information disclosure may also be relevant in other contexts, including the use of selective disclosure for exclusionary conduct, but the discussion below focusses on co-ordination.

17. Co-ordinated conduct typically requires that firms reach a common understanding, monitor adherence to it, and punish deviations credibly (Stigler, 1964<sup>[12]</sup>). Each condition is harder to satisfy in the absence of reliable information about rivals' conduct. This three-part framework is the central organising principle for assessing the collusion risk of any information-sharing arrangement: the central question is whether a specific disclosure makes one or more of these conditions easier to satisfy (OECD, 2011<sup>[2]</sup>).

18. Information sharing can facilitate co-ordination by affecting each of these conditions directly:

- **On common understanding:** making rival strategies observable reduces ambiguity about the terms on which co-ordination might occur, making it easier for competitors to reach alignment (Kühn and Vives, 1994<sup>[13]</sup>).
- **On monitoring:** where firms interact repeatedly, collusion is self-sustaining only if deviations can be detected reliably. Information sharing enables firms to distinguish deliberate price-cutting from demand shocks (Stigler, 1964<sup>[12]</sup>; Green and Porter, 1984<sup>[14]</sup>).
- **On punishment credibility:** faster and more accurate detection reduces the lag before retaliation, strengthening the deterrent effect that keeps collusion stable (Abreu, Pearce and Stacchetti, 1990<sup>[15]</sup>; Green and Porter, 1984<sup>[14]</sup>).

19. These mechanisms are not merely theoretical. Where co-ordination is achieved, the consequence is typically elevated prices, restricted output, lower quality and a transfer of surplus from consumers to firms, which the empirical literature on cartel overcharges suggests is substantial (Connor, 2024<sup>[16]</sup>). Increased transparency and structured information flows can also raise prices and support co-ordinated outcomes in concentrated markets, where no explicit cartel is operating. Box 1 provides a concrete illustration through a public disclosure initiative.

### Box 1. Empirical illustration on the competitive impact of information sharing

The example below shows that increased transparency can, in some concentrated markets, have unintended competitive effects even where there is no allegation of an explicit cartel.

Denmark (ready-mixed concrete): A public transparency initiative led to the publication of firm-specific transaction prices for ready-mixed concrete in three Danish regions. Following publication, average prices of the reported grades rose by 15-20% within a year. The subsequent academic analysis concluded that the additional transparency likely reduced the intensity of price competition, contrary to the initiative's intended pro-competitive objective. Denmark later removed the requirement.

Sources: Albæk, Møllgaard & Overgaard (1997<sup>[17]</sup>), Government-Assisted Oligopoly Coordination? A Concrete Case, [DOI: 10.1111/1467-6451.00057](https://doi.org/10.1111/1467-6451.00057)

## 2.3. How circumstances shape risk

20. Both the likelihood of efficiencies and the risk of harm to competition depend on the circumstances of the information-sharing arrangement. The discussion below begins with the market conditions that determine whether information is likely to alter firms' expectations and incentives and then turns to the characteristics of the information itself, including its subject matter and timing, and the form and channel through which it is shared.

### 2.3.1. Market structure and context

21. The competitive effects of information sharing depend in part on market structure and conditions, which determine whether increased transparency is likely to influence expectations and sustain co-ordinated outcomes (OECD, 2011<sup>[2]</sup>; Motta, 2004<sup>[18]</sup>). These factors are discussed in turn below.

22. **Concentration** affects the probability that shared information has a competitive impact. Where a few firms account for a large share of supply, each firm places greater weight on predictions of rivals' behaviour, and information that reduces uncertainty can have larger effects on competitive outcomes. In more fragmented markets, individual firms have limited ability to influence overall market conditions, and the same information is less likely to materially alter strategic behaviour.

23. **Product homogeneity** or similarity also affects the risk associated with information sharing. Where firms offer highly similar products or services, disclosures about prices, output, or capacity are more likely to be strategically relevant to rivals and more readily translated into a common understanding of market conditions. By contrast, greater product differentiation can weaken the link between a rival's disclosure and a firm's own optimal response, making aligned conduct harder to establish and sustain (Thomadsen and Rhee, 2007<sup>[19]</sup>).

24. **Stability of demand and cost conditions** also affects the informativeness of disclosures. When market conditions change slowly and external shocks are limited, even historical or aggregated data can enable firms to infer competitors likely behaviour with reasonable accuracy. Economic research confirms that greater signal precision, including signals derived from aggregated or historical data, can increase the scope for detecting deviations and anticipating rivals' conduct, expanding the conditions under which co-ordinated outcomes are sustainable (Awaya and Krishna, 2020<sup>[20]</sup>).

25. **Barriers** to entry shape the durability of any competitive harm from information sharing. In markets where entry is slow or costly, the effects of co-ordination are less likely to be eroded by new competition, increasing the impact of any arrangement that softens rivalry. Where entry is easy, the competitive significance of information sharing is lower because co-ordinated outcomes are less sustainable.

26. **Baseline market transparency** is a further contextual factor. In markets where prices, output levels, or capacity utilisation are already observable, additional disclosures may have limited incremental effect. In markets where underlying conduct is opaque, equivalent disclosures can materially reduce uncertainty and alter strategic incentives (OECD, 2011<sup>[21]</sup>). The interaction between pre-existing transparency and additional disclosure is therefore relevant to the overall assessment.

**Table 1. Market context risk factors**

Dimension	Lower Risk	Higher Risk
Concentration	Fragmented (many competitors)	Oligopoly (few symmetric firms)
Market homogeneity	Highly differentiated markets	Highly homogeneous markets
Demand stability	Volatile, unpredictable demand	Stable, predictable demand
Barriers to entry	Low barriers (easy entry)	High barriers (slow/costly entry)
Baseline transparency	Already a transparent market	Opaque market (exchange adds most)

Sources: Motta (2004<sup>[18]</sup>), Thomadsen and Rhee (2007<sup>[19]</sup>), OECD (2011<sup>[21]</sup>) and Awaya and Krishna (2020<sup>[20]</sup>).

27. These structural factors do not determine competitive effects in isolation, but they shape the extent to which different types of information and levels of detail influence firms' expectations and incentives, other factors that shape the competitive impact are considered below.

### 2.3.2. Characteristics of the information

28. Having considered the market conditions that shape whether information sharing is likely to affect firms' expectations and incentives, the analysis turns to the characteristics of the information itself. Established analysis treats several characteristics as central to competitive risk: the subject matter of the information, its timing or age, its level of detail or aggregation, the frequency or pattern of disclosure, and whether it is genuinely public and readily accessible in practice (OECD, 2011<sup>[21]</sup>). Subsequent economic research has refined rather than displaced this framework, as highlighted in Box 2.

#### Box 2. Recent economic literature refining the analysis of information sharing

Recent economic research has refined rather than displaced the classic framework for assessing information sharing. Four of the most relevant developments are highlighted below:

**Aggregate data may still be risky.** Awaya and Krishna (2020<sup>[20]</sup>) show, in a repeated-oligopoly model with secret price cuts, that even aggregate sales disclosures can support near-perfect collusion when firms can infer rivals' conduct from the shared data. The test is not whether data are labelled "aggregated" but whether they still permit sufficiently precise inference.

**List prices and surcharges can be collusive focal points.** Harrington and Ye (2019<sup>[21]</sup>) show that firms can collude by co-ordinating on list prices or surcharges even where final transaction prices are negotiated. These announcements affect buyer behaviour and can raise transaction prices indirectly, making them economically significant despite not being the prices customers ultimately pay.

**Private exchanges of prices can raise prices even without a classic cartel mechanism.** Harrington (2022<sup>[22]</sup>) shows that a private exchange of prices, including non-transaction prices such as list prices and surcharges, can raise consumer prices under certain conditions without requiring the monitoring-and-retaliation mechanism of standard cartel models.

**Unverifiable communication ("cheap talk") can still facilitate collusion.** Spector (2022<sup>[23]</sup>) shows that in markets where reliable sales data become publicly verifiable only with a delay, the early

exchange of self-reported sales figures between competitors can support collusion even if those reports are unverifiable “cheap talk”. By allowing firms to detect market-share imbalances sooner and reallocate market shares without resorting to price wars, such communication reduces the window in which a deviation remains profitable.

**Reducing information access asymmetrically can soften competition.** Byrne et al. (2025<sup>[24]</sup>) exploit a natural experiment in Australian retail gasoline in which one firm lost access to a high-frequency price-sharing platform used by its rivals. Counter-intuitively, the shift from symmetric to asymmetric information sharing softened competition and raised margins, because the firm's strategic ignorance functioned as a commitment to higher pricing. The finding is a cautionary note for remedy design: restricting information sharing asymmetrically can have effects opposite to those intended.

Sources: Awaya, Y., & Krishna, V. (2020<sup>[20]</sup>) Information exchange in cartels. *RAND Journal of Economics*, 51(2), 421–446, <https://doi.org/10.1111/1756-2171.12320>; Byrne, D. P., de Roos, N., Lewis, M. S., Marx, L. M., & Wu, X. (2025<sup>[24]</sup>) Asymmetric information sharing in oligopoly: A natural experiment in retail gasoline. *Journal of Political Economy*, 133(7), 2031–2088, <https://doi.org/10.1086/734872>; Harrington, J. E., Jr., & Ye, L. (2019<sup>[21]</sup>) Collusion through coordination of announcements, *The Journal of Industrial Economics*, 67(2), 209–241, <https://doi.org/10.1111/joie.12199>; Harrington, J. E., Jr. (2022<sup>[22]</sup>) The anticompetitiveness of a private information exchange of prices, *International Journal of Industrial Organization*, 85, 102793, <https://doi.org/10.1016/j.ijindorg.2021.102793>

29. Established analysis and the more recent work highlighted in Box 2 point to the same underlying question: does the information shared reduce strategic uncertainty between firms in ways that make co-ordination easier to sustain? Five characteristics of the information itself bear most directly on this question: its subject matter, its timing or age, the frequency with which it is disclosed, its level of detail or aggregation, and whether it is genuinely public in practice. These factors do not operate independently. As Box 2 illustrates, information that appears low-risk on one dimension, for example because it is aggregated, may still be competitively significant if it is disclosed frequently enough, or with sufficient structure, to permit inference about individual firms' conduct. The discussion below addresses each factor in turn, considering its likely effects all else equal, before Section 2.3.3 turns to the form and channel through which information is communicated.

30. **Subject matter:** Co-ordination is most likely where the shared information is one in which firms may have an incentive to align their conduct or monitor deviations from a co-ordinated outcome. Information that bears directly on firms' commercial conduct or intentions is therefore generally the most competitively sensitive (Kühn and Vives, 1994<sup>[13]</sup>). In price-setting markets, price-related information typically presents the greatest risk because it directly reveals how rivals are likely to behave. In quantity or capacity-setting environments, information on output, sales, capacity utilisation, market shares, or customer allocation may be equally or more important because it helps firms monitor deviations from output restraint or quota-like understandings. In negotiated-price markets, non-transaction prices such as list prices and surcharges may also be competitively significant (Harrington and Ye, 2019<sup>[21]</sup>). Information about costs or demand conditions may also facilitate co-ordination, particularly where it helps firms distinguish genuine shocks from opportunistic undercutting, but its effects are often more context dependent. Operational or technical information (for example, logistics, safety, or standards) is generally lower risk where not connected to the strategic factors on which co-ordination typically relies, although the assessment remains context-specific (OECD, 2011<sup>[2]</sup>).

31. **Timing:** Forward-looking information, including intended prices, planned capacity adjustments, or future commercial strategies, is generally the most sensitive because it reduces uncertainty about rivals' future behaviour most directly. Recent work further illustrates this point by showing that disclosures of future price intentions can raise transaction prices even in the absence of any monitoring mechanism or reciprocal communication, by influencing firms' expectations about future offers (Harrington, 2022<sup>[22]</sup>). Current information may also be competitively significant because it can affect rivals' pricing or output choices directly and enable firms to monitor adherence to a co-ordinated outcome by detecting deviations in real time or with only a short lag. Historical information generally raises fewer concerns the older it is at

time of disclosure, because it becomes less helpful for firms monitoring deviations from co-ordinated outcomes.

32. **Frequency:** Frequency of disclosure is closely related to timing because it affects how quickly information can be used. Frequent disclosures make it easier for firms to update their beliefs about rivals' current positions, distinguish genuine market shocks from opportunistic deviations, and react before the gains from cheating dissipate. For the same reason, a systematic exchange repeated over months or years is generally more concerning than a one-off disclosure of equivalent content, because it provides an ongoing monitoring device rather than a single snapshot (OECD, 2011<sup>[2]</sup>).

33. **Granularity:** The level of detail or aggregation of the information also matters. Firm-specific or highly disaggregated data are generally more useful for co-ordination and monitoring than genuinely aggregated information, because they make it easier to identify or infer rivals' conduct. However, the relevant question is not only whether data are nominally aggregated, but whether the aggregation is sufficient to make inference about individual firms difficult in practice. Recent economic research qualifies the older presumption that aggregate data are relatively low risk by showing that even aggregate sales disclosures may sustain near-perfect collusion where they allow firms to infer rivals' behaviour with sufficient precision (Awaya and Krishna, 2020<sup>[20]</sup>; OECD, 2011<sup>[2]</sup>).

34. **Publicly available:** Whether information is genuinely public and readily accessible in practice is a further determinant of competitive risk. Information that is already observable to competitors and customers at low cost will generally raise fewer concerns, because its exchange is less likely to confer a private informational advantage or materially reduce strategic uncertainty beyond what the market already reveals. By contrast, information that is only nominally public may still be competitively significant where it is costly to collect, difficult to reconstruct, or sufficiently structured to reveal firm-specific conduct in practice.

### ***2.3.3. How information is transmitted and processed***

35. Beyond the characteristics of the information itself, the way information is disclosed also affects competitive risk. There can be differences in effect depending on the degree to which disclosure is targeted or broadly observable, one-way or iterative, direct or mediated through an intermediary, and merely transmitted or further processed into recommendations or other guidance. These features affect whether disclosures act as signals, monitoring devices, or inputs into rapid adjustment by rivals.

36. A first relevant dimension is the degree to which disclosure is targeted rather than broadly observable. This should be distinguished from the question, addressed in Section 2.3.2, whether information is already genuinely public and readily accessible in practice. Economically, private disclosure will often be more competitively significant because it gives rivals a targeted informational advantage that is not equally available to customers or other market participants. More broadly observable disclosure may nevertheless also soften competition where it is sufficiently detailed, regular, or forward-looking to shape rivals' expectations and create focal points for alignment. Recent work shows, for example, that disclosures of future price-related information can influence transaction prices even without reciprocal communication or a classic monitoring mechanism (Harrington, 2022<sup>[22]</sup>; Harrington and Ye, 2019<sup>[21]</sup>).

37. A second dimension is the extent to which disclosure allows reciprocal feedback rather than remaining essentially one-way. Reciprocal sharing of information can reduce ambiguity more quickly by allowing firms to clarify, confirm, or update one another's expectations, and may therefore be especially effective in supporting common understanding or monitoring. One-way disclosure may still be strategically significant, however, where it operates as signalling or a commitment device, particularly in concentrated markets where rivals can readily interpret and react to it (Harrington, 2022<sup>[22]</sup>; Kühn and Vives, 1994<sup>[13]</sup>). This connects the economics of information exchange to a broader literature on communication and collusion, which shows that firms may use both explicit and more indirect messages to co-ordinate

expectations, even though the latter are typically less effective in sustaining collusive outcomes (Andres, Bruttel and Friedrichsen, 2023<sup>[25]</sup>).

38. A third dimension is the use of intermediaries and whether their design facilitates the exchange or monitoring of the information. Intermediaries such as trade associations, benchmarking services, data pools,<sup>4</sup> or common platforms can increase the competitive significance of information by standardising, regularising, and widening its dissemination, thereby making rival conduct easier to compare over time. The economic concern is therefore not the presence of an intermediary as such, but whether the intermediaries' design makes information more useful for inference or monitoring. This helps explain why apparently lower-risk information may still facilitate collusion where the structure of disclosure allows firms to reconstruct rivals' conduct with sufficient precision.

39. A final distinction concerns whether information is merely transmitted or also processed. Algorithmic systems and data-driven platforms do not simply convey market information; they may combine, interpret, and react to it at speed, or convert it into pricing recommendations and other strategic guidance. The implications of technology such as algorithmic facilitation for competition are discussed further below.

## 2.4. How new technologies fit in the economic framework of information sharing

40. The economic theory set out in the preceding sections was developed originally with traditional forms of information exchange in mind: periodic disclosures, trade-association statistics, and bilateral contacts between firms. Several technological developments have since changed the practical conditions under which information is shared, observed and acted upon, without displacing the underlying economic logic. This section considers three such developments: pricing algorithms that learn to co-ordinate without explicit communication, common intermediaries through which information flows between rivals indirectly, and automated tools that have changed what counts as "publicly available" information.

41. First, pricing algorithms can now leave rivals as well-informed about each other's conduct as if they had exchanged information directly, using only prices that firms already post publicly. Computer experiments in which rival firms are represented by reinforcement-learning algorithms show that the algorithms consistently settle on prices above the competitive level, holding those prices through patterns of reward and retaliation similar to those that sustain classic cartels (Calvano et al., 2020<sup>[26]</sup>). Evidence from Germany's retail gasoline market points in the same direction: the adoption of pricing algorithms raised margins, but only in local markets where more than one competing station had adopted such algorithms (Assad et al., 2024<sup>[27]</sup>). Algorithmic interaction can therefore substitute for some of the functions that explicit communication or direct information exchange would otherwise serve, especially rapid monitoring of rivals and credible retaliation against deviations.

42. Second, common intermediaries that provide algorithmic pricing recommendations or benchmarking tools to multiple competing firms differ from ordinary algorithmic interaction because they centralise and standardise rival-relevant information. Instead of each firm observing public outcomes and reacting independently, a single intermediary processes information within a common framework and returns firm-specific guidance or benchmarks. In economic terms, this resembles a hub-and-spoke arrangement, and recent theoretical work shows that such structures can generate supra-competitive outcomes, with the intermediary's efficiency itself facilitating collusion (Harrington, 2026<sup>[28]</sup>). Even non-binding recommendations can influence pricing behaviour, with outcomes depending on how deviations are treated (Hunold and Werner, 2025<sup>[29]</sup>). This reinforces the view that the competitive significance of information sharing depends not only on the data disclosed but on how it is processed, standardised and disseminated through shared infrastructure.

43. Third, automated price monitoring and web scraping have reduced the cost of observing rivals' publicly posted prices to near zero, and the competitive implications cut both ways. Where rivals can

already observe a firm's conduct continuously, the marginal contribution of additional disclosure is smaller. But the traditional presumption that genuinely public information is low risk rested on the assumption that some public information was not practically useful for real-time monitoring. Automation has weakened that assumption, so the competitive significance of public information may be closer to that of actively shared information than the traditional framework implies (OECD, 2024<sup>[30]</sup>).

44. These developments do not necessarily call for new theories of competitive harm. The mechanisms already used to assess information sharing, the formation of common expectations, the ability to monitor rivals, and the credible threat of retaliation, continue to explain when information sharing facilitates co-ordination. What has changed is the range of channels through which those mechanisms operate. For practitioners, this adjusts the dimensions in Section 2.3.2: the effective frequency of disclosure is now continuous rather than periodic, the age of information at the point of response has collapsed to minutes, firm-specific inferences can be drawn from data that appears aggregated or public, and the gap between technically accessible and practically useful information has narrowed.

45. Looking forward, foundation models and large language models are likely to extend this dynamic further, reducing the cost of converting unstructured public sources, such as regulatory filings, earnings calls and trade press, into actionable competitive intelligence. Agentic AI may cut the other way, allowing consumers to search, compare and negotiate bilaterally in ways that reduce firms' ability to observe each other's offers (CMA, 2026<sup>[31]</sup>; OECD, 2026<sup>[32]</sup>). These forward-looking effects remain emerging questions for further research.

# 3. Competition enforcement and advocacy for information sharing

## 3.1. From economic risk factors to legal frameworks

46. Section 2. has set out the economic conditions under which information sharing may improve market outcomes or undermine competition. For enforcement authorities, the focus is then on how such economic principles should be assessed in practice under the applicable legal framework. This is increasingly important because recent economic literature, guidance and enforcement practice have placed older assumptions about “low-risk” information sharing under greater scrutiny (Awaya and Krishna, 2020<sup>[20]</sup>). Authorities and courts have also shown greater willingness to treat certain forms of information sharing as capable of restricting competition in their own right (CJEU, 2024<sup>[33]</sup>; DOJ, 2024<sup>[34]</sup>).

47. At the same time, the assessment remains context-dependent: the competitive significance of an exchange depends on the nature of the information, the way it is shared, and the market conditions in which it occurs. The challenge is to distinguish exchanges that materially reduce strategic uncertainty between competitors from forms of transparency or co-operation that do not pose the same competitive risk. Legal tests must therefore be both workable in practice and sufficiently sensitive to the features that make information sharing harmful (Klein and Neurohr, 2023<sup>[35]</sup>; OECD, 2011<sup>[2]</sup>).

48. Across jurisdictions, three settings recur in enforcement practice: information exchange that forms part of a broader cartel arrangement, information exchange that is assessed as a standalone restriction of competition, and information exchange that is embedded in a horizontal co-operation agreement. Section 3.2 begins by considering how authorities characterise conduct as falling within one of these three settings (Section 3.2.1), and then examines each in turn: how cartel-adjacent information exchange is treated as evidence of and contribution to a wider arrangement (Section 3.2.2); how standalone exchanges are assessed where the exchange itself is alleged to restrict competition (Section 3.2.3); and how exchanges in horizontal co-operation are assessed against the necessity and proportionality of the underlying co-operative arrangement (Section 3.2.4).

49. Within these settings, a recurring analytical question is how rigorously the exchange must be assessed. Approaches that demand detailed proof of anti-competitive effects in each case offer analytical rigour but risk under-enforcement where harm is difficult to demonstrate, for example in cases involving indirect, mediated or ostensibly aggregated exchanges (Padilla and Sarmiento, 2018<sup>[36]</sup>). Conversely, strong presumptions or by-object/per se treatment of certain categories of information sharing may facilitate enforcement, but risk over-inclusion where they fail to account adequately for market context or plausible efficiencies (Khoo and Soh, 2020<sup>[37]</sup>). The legal treatment of information sharing therefore requires a careful balancing exercise of accuracy, administrability and legal certainty. This question arises most directly in standalone cases, where the exchange itself is the alleged restriction, and is examined in Section 3.2.3.

50. A further set of questions concerns how existing legal frameworks apply where information sharing is mediated through particular channels or intermediaries. As Sections 2.3.3 and 2.4 discussed, the competitive significance of an exchange may depend not only on the information shared, but also on how

it is collected, processed and disseminated. Trade associations and other industry bodies may provide structured settings for repeated interaction and sector-wide information flows, while digital platforms, pricing algorithms and automated monitoring systems may replicate or intensify similar informational effects through technological means. Section 3.3 examines how these institutional and technological channels feature in enforcement practice.

51. Finally, information sharing also raises questions that sit outside individual enforcement cases. Firms and trade associations often need clarity on what is and is not permitted, while governments and sectoral regulators frequently introduce information-sharing obligations pursuing objectives such as transparency or financial stability without fully considering the co-ordination risks identified in Section 2. . This creates two distinct roles for competition authorities beyond enforcement: guidance to firms, and advocacy to government that the competition effects of information-sharing requirements are properly considered. These two roles are considered in Section 3.4.

## 3.2. Legal treatment of information exchanges in enforcement practice

### 3.2.1. Legal characterisation of information sharing

52. In practice, competition authorities and courts have assessed information sharing within one of three broad settings (OECD, 2011<sup>[2]</sup>): (i) exchanges that form part of a broader cartel agreement; (ii) exchanges that occur in the context of a horizontal co-operation arrangement; and (iii) standalone (or “pure”) information exchanges. This threefold classification remains a useful starting point to determine the legal treatment of the exchange (Geradin, 2022<sup>[38]</sup>).

53. First, information exchanges may form part of a broader cartel, such as a price-fixing, market-sharing or output-restriction agreement. In such cases, the exchange serves as a facilitating mechanism: it may help participants align their conduct, monitor compliance or detect deviations. The legal assessment therefore focusses primarily on the cartel as a whole, rather than on the competitive effects of the exchange taken in isolation (Geradin, 2022<sup>[38]</sup>). Once the broader collusive arrangement is established, there is no need to determine separately whether the information exchange, viewed on its own, was capable of restricting competition.

54. Second, information exchanges may be assessed as standalone practices, that is, outside the context of either a broader cartel or a formal co-operation agreement. These cases raise distinctive analytical questions because the exchange itself is the conduct alleged to restrict competition (Geradin, 2022<sup>[38]</sup>). The issue is whether the exchange itself is capable of restricting competition by reducing strategic uncertainty between competitors. Unlike cartel cases, the assessment cannot rely on a broader collusive arrangement to establish illegality. It must instead determine whether the characteristics of the exchange, read in light of the relevant market context, are sufficient to justify treatment as a restriction by object or per se, or whether a fuller effects-based assessment is required. Standalone cases therefore provide the clearest setting in which to examine how jurisdictions convert the economics of information sharing into legal treatment.

55. Third, information exchanges may occur in the context of a horizontal co-operation arrangement, such as a joint research and development project, benchmarking exercise or other collaborative frameworks. In these situations, the exchange may be part of a lawful co-operation mechanism or may support efficiencies generated by such co-operations, and its legal assessment therefore forms part of the broader consideration of the arrangement. The key question is whether the exchange is necessary and proportionate to the co-operation pursued, or whether it goes beyond what is needed and risks softening competition between the participants.

56. This classification is analytical rather than codified. In most legal systems, competition laws do not explicitly address information exchanges: they are instead caught under general prohibitions on

agreements, concerted practices, or collusion (Marosi and Soares, 2022<sup>[39]</sup>). The treatment of information sharing has therefore been largely enforcement-led and judicially developed, rather than grounded in explicit statutory provisions. However, as highlighted in Box 3, at least two OECD jurisdictions have now incorporated information sharing as a form of anticompetitive conduct directly into their legislation.

### Box 3. Explicit legal treatment of information sharing: Recent reforms in Mexico and Korea

Mexico and Korea stand out as examples of jurisdictions in which information sharing is now expressly addressed in the law. These two reforms move beyond an enforcement-led approach and incorporate information exchange directly into the competition legal framework.

In Korea, the express statutory treatment of information sharing was introduced through the 2020 amendment to Article 40(1)(9) of the Monopoly Regulation and Fair-Trade Act (MRFTA). This reform is particularly significant because it responds to earlier judicial constraints on enforcement. In its 2015 Ramyun Cartel judgment, the Supreme Court had held that the Korea Fair Trade Commission (KFTC) could not infer cartel conduct from information exchange alone, but had to establish the existence of a separate “agreement” beyond the exchange itself. The 2020 amendment sought to close that enforcement gap by expressly incorporating information exchange into the statutory framework governing collusion. The amended provision was applied for the first time in the Four Banks’ LTV case, which concerned the exchange of confidential information concerning loan-to-value. The parties have appealed the decision, and pending judicial review is expected to provide the first significant test of the scope of this legislative reform.

In Mexico, the recent 2025 reform to Article 53 of the Federal Economic Competition Law (Ley Federal de Competencia Económica, LFCE) adds information sharing to the statutory framework on cartel conduct. Under the previous version, information sharing was only relevant if it served as an object or effect of one of the classic forms of collusion, such as price fixing, output restriction, market allocation or bid rigging. The practical implications of this change remain to be clarified, as the new provision has not yet been applied.

Sources: Shin, Kim and Choi (2026<sup>[40]</sup>), Heightened cartel enforcement risk in Korea: Key Developments and implications, Lexology, <https://www.lexology.com/library/detail.aspx?g=7a5b52e8-a699-43a0-a85c-e3e8b74a85a6>; Lee (2026<sup>[41]</sup>), Main Developments in Competition Law and Policy 2025 – Korea, Kluwer Competition Law Blog, [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=6526718](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=6526718); Núñez Melgoza (2025<sup>[42]</sup>), Intercambio de información: nueva regulación de competencia, *El Economista*, <https://www.eleconomista.com.mx/opinion/intercambio-informacion-nueva-regulacion-competencia-20250810-772139.html>; Garcia (2025<sup>[43]</sup>), El intercambio de información entre competidores en la nueva LFCE de México: alcance, retos y riesgos en un entorno digitalizado, Centro Competencia, <https://centrocompetencia.com/el-intercambio-de-informacion-entre-competidores-en-la-nueva-lfce-de-mexico/>

57. Despite these reforms, explicit statutory treatment of information sharing remains exceptional. In most OECD jurisdictions, anti-competitive information sharing continues to be addressed through broader prohibitions and its legal treatment therefore continues to be shaped primarily by enforcement practice, guidance and judicial decisions. The following subsections examine how enforcement practices and case law treat information sharing in each of the three settings identified above: as a facilitator of cartel conduct, as a standalone infringement, and as part of horizontal co-operation.

#### 3.2.2. Information exchange as a facilitator of cartel conduct

58. Where information exchange forms part of a broader cartel, its legal significance is assessed in the context of that wider collusive arrangement. The exchange may help cartel participants reach a common understanding, implement agreed terms, monitor compliance or detect deviations. In this sense,

information exchange often performs an operational function within the cartel, rather than being assessed separately from it (CJEU, 2009<sup>[44]</sup>). In this context, hardcore cartels typically require some related exchange of information: competitors need to communicate about prices, customers, volumes or other strategic variables in order to agree on the terms of co-ordination and to monitor whether those terms are respected (Awaya and Krishna, 2016<sup>[45]</sup>; Geradin, 2022<sup>[38]</sup>). The legal assessment in these cases therefore focusses primarily on whether the broader collusive arrangement existed, with the information exchange treated as evidence of, and contribution to, that arrangement.

59. This role is closely connected to the economics of cartel stability. As discussed in Section 2. , sustained co-ordination generally requires that participants identify the terms of co-ordination, monitor adherence to those terms, and detect deviations quickly enough for retaliation to remain credible. Information exchange can support each of these conditions. It may allow cartel participants to identify a focal point for co-ordination, such as a price, surcharge, customer allocation or output level. It may also allow them to observe whether competitors are complying with the arrangement and to identify firms that deviate from the agreed conduct. For this reason, exchanges of commercially sensitive information can strengthen both the formation and the internal stability of a cartel (OECD, 2011<sup>[2]</sup>).

60. In cartel cases, authorities therefore examine not only whether information was exchanged, but also what role the exchange played in the alleged collusive arrangement. The assessment typically focusses on the nature of the information, its level of disaggregation, its age, the frequency of the exchange, the identity of the recipients, and the channel through which it was shared (Cardona Baquero and García de Brigard, 2022<sup>[46]</sup>). Information relating to prices, volumes, customers, financing conditions, costs, bids or commercial strategy will normally be more significant where it is non-public, recent, frequent, individualised and shared only among competitors. By contrast, information that is genuinely public, historical, aggregated or made available to customers and other market participants is less likely to support an inference of cartel implementation or monitoring (European Commission, 2023<sup>[47]</sup>). Box 4 shows how these factors have been assessed in cartel cases involving information exchange.

#### Box 4. Assessing information exchange in cartel cases: Selected examples

**Colombia (2016):** The competition authority examined exchanges that took place through “credit committees” attended by competing notebook suppliers. According to the authority, the participants discussed commercially sensitive and strategic information concerning customers, including client names, purchase volumes, prices, financing requests, outstanding debts and payment periods. This information was not assessed in isolation: the authority considered that it supported the broader cartel arrangement by helping competitors manage and align their commercial strategies towards customers, including by identifying customers considered risky, monitoring credit exposure, and informing decisions on the commercial conditions offered to those customers. The authority also emphasised that the information was disaggregated, recent, frequently exchanged through committee meetings and emails, and shared only among participating competitors, rather than with other companies or consumers.

**Japan (2010 and 2023):** In June 2010, the Japan Fair Trade Commission issued cease-and-desist orders and surcharge payment orders against four shutter manufacturers for two distinct infringements of the Act on Prohibition of Private Monopolisation and Maintenance of Fair Trade (AMA): bid-rigging in the Kinki region from at least May 2007, and a nationwide price-fixing agreement concluded on 5 March 2008, under which the three main companies agreed to raise shutter prices across Japan. The evidentiary core of the case was a single meeting held on 5 March 2008 among senior executives of the three companies, at which they exchanged information about their respective internal cost pressures (driven by rising steel prices) and future pricing intentions. No written agreement was produced. The companies challenged the JFTC's findings, arguing that the content of the discussion was too general

and "abstract" to establish a "meeting of minds", the legal element required to establish an unreasonable restraint of trade under Japanese law.

The Tokyo High Court, in its judgment of 7 April 2023, rejected this argument and upheld the JFTC's administrative decisions. The Court argued that where competitors exchange competitively sensitive information and subsequently behave consistently with that exchange, a "meeting of minds" may be inferred. The inference was supported here by the nature of the information (internal future pricing intentions not ordinarily shared with competitors), the context (an existing bid-rigging relationship between the same parties), and the outcome (closely aligned 10% price increases across all three companies following the meeting).

Sources: Superintendencia de Industria y Comercio (2016<sup>[48]</sup>), Resolución 54403 Cuadernos, <https://sedeelectronica.sic.gov.co/transparencia/normativa/resolucion-54403-de-18-de-agosto-de-2016-cuadernos>; Japan Fair Trade Commission (2010<sup>[49]</sup>), Cease and Desist Orders and Surcharge Payment Orders against Manufacturers of Shutters (Tentative Translation), <https://www.jftc.go.jp/en/pressreleases/yearly-2010/jun/individual-000019.html>; MLex (2023<sup>[50]</sup>), Japanese shutter makers Sanwa, Toyo, Bunka lost antitrust appeals to annul cartel sanctions, <https://www.mlex.com/mlex/articles/2239399/japanese-shutter-makers-sanwa-toyo-bunka-lost-antitrust-appeals-to-annul-cartel-sanctions>; Original ruling (in Japanese only) available at: <https://snk.jftc.go.jp/DC005/R050407R02G09000010>.

61. The cases above illustrate the functional role of information exchange in cartel enforcement. In this setting, the relevant question is whether the sharing of information helped to establish, implement, monitor or evidence the broader collusive arrangement (Geradin, 2022<sup>[38]</sup>). The same factors identified in Section 2 (including confidentiality, strategic relevance, granularity, age, frequency and access) remain relevant, but they are used to assess the exchange's contribution to the cartel rather than its independent restrictive character. The next section turns to standalone information-sharing cases, where the exchange itself is the alleged restriction of competition.

### **3.2.3. Information sharing as a standalone infringement**

#### *Standalone case law developing*

62. Historically, many competition authorities treated information sharing primarily as evidence of, or facilitation for, a broader collusive arrangement, rather than as an autonomous infringement (Marosi and Soares, 2022<sup>[39]</sup>). However, enforcement approaches have evolved. Recent practice suggests a growing willingness to assess information exchanges on a standalone basis, where the central question is whether the exchange itself may restrict competition by reducing strategic uncertainty, without needing to anchor the case to a broader cartel agreement (Whiddington and Scassini, 2025<sup>[51]</sup>; CJEU, 2024<sup>[33]</sup>).

63. As shown in the Annex (Table A.1), the review carried out for this paper identified at least ten standalone cases across OECD jurisdictions,<sup>5</sup> primarily in the EU. This does not mean that information sharing has ceased to matter in cartel enforcement or in the assessment of horizontal co-operation agreements. It remains relevant in both settings. But the increased number of standalone cases indicates a broader willingness by authorities to assess the exchange itself as a potential source of competitive harm (Tween, Eichlin and Latham, 2024<sup>[52]</sup>). Box 5 illustrates this development in the EU through the Portuguese Banks case, where a national authority's standalone information-sharing decision led to a preliminary ruling by the Court of Justice of the European Union<sup>6</sup>.

### Box 5. Portuguese banks and the confirmation of standalone information exchange under EU case law

The Portuguese Banks case illustrates how standalone information exchange may be assessed as an infringement in its own right, without being anchored to a broader price-fixing, market-sharing or output-restriction agreement.

In 2019, the Portuguese Competition Authority sanctioned fourteen banks for participating in a long-running exchange of information concerning credit spreads, risk variables and individual production data. The authority treated the exchange as a standalone restriction by object. It did not allege that the banks had entered into a separate price-fixing or market-sharing agreement. Rather, the theory of harm was that the exchange of confidential and strategic information was capable, by its nature, of reducing uncertainty about competitors' future conduct in concentrated lending markets.

The decision was appealed before the Portuguese Competition, Regulation and Supervision Court, which referred questions to the Court of Justice of the European Union for a preliminary ruling on the interpretation of Article 101(1) TFEU. In its 2024 judgment, the Court of Justice confirmed that a standalone exchange of confidential strategic information may fall within Article 101(1) TFEU where, having regard to its content and context, it is capable of removing uncertainty regarding competitors' future conduct. The Court considered that information on future credit spreads was strategic because it related directly to a parameter on which competition took place in the relevant markets. The same logic was reflected in the opinion of Advocate General Rantos in the case, who emphasised that confidential information is "strategic" where, in context, it enables participants to infer with sufficient precision the future conduct of competitors on the relevant competitive parameters.

The judgment is therefore significant not because it created a new legal category of infringement, but because it confirmed that a standalone exchange of confidential strategic information can be assessed as a restriction by object where the information is sufficiently capable of reducing strategic uncertainty. The case also illustrates how the economic risk factors identified in Section 2 (the subject matter, timing, granularity, confidentiality and market context of the information) can translate into legal assessment.

Sources: Autoridade da Concorrência (2019<sup>[53]</sup>), AdC imposes a fine of 225 million euros to 14 banks, Press Release 17/2019, 9 September 2019, <https://www.concorrencia.pt/en/articles/adc-imposes-fine-225-million-euros-14-banks>; Advocate General Rantos (2023<sup>[54]</sup>), Opinion delivered in Banco BPN/BIC Português SA and Others v Autoridade da Concorrência, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62022CC0298>; CJEU, Case C-298/22, Judgment of the Court (Fifth Chamber) of 29 July (2024<sup>[33]</sup>) (request for a preliminary ruling from the Tribunal da Concorrência, Regulação e Supervisão – Portugal) – Banco BPN/BIC Português SA and Others v Autoridade da Concorrência, <https://infocuria.curia.europa.eu/tabs/affair?lang=EN&searchTerm=banco+bpn&publishedId=C-298%2F22>.

64. The trend towards standalone theories of liability is not confined to the EU. In the United States, the Department of Justice has signalled in recent statements of interest that standalone information sharing may violate Section 1 of the Sherman Act without requiring proof of a separate price-fixing agreement<sup>7</sup> (DOJ, 2023<sup>[55]</sup>; 2024<sup>[34]</sup>; 2026<sup>[56]</sup>). This expansion across jurisdictions has not, however, produced convergence on a single analytical framework (Khoo and Soh, 2020<sup>[37]</sup>), reflecting the breadth of economic impact information sharing has in reality. Enforcement practice differs on whether a standalone exchange is assessed under a stricter approach (treating certain categories of information as inherently or presumptively harmful) or through a fuller effects-based analysis of its likely competitive impact.

65. The case examples in the following section illustrate that a standalone information exchange is not equated automatically in all jurisdictions with a by object or per se infringement:<sup>8</sup> even where the exchange is assessed independently from any broader collusive arrangement, the finding of an infringement may still require an evaluation of its likely effects on competition. Authorities and courts must therefore decide

whether to assess the exchange through a more contextual or effects-based framework, examining the market conditions, the characteristics of the information and the likely competitive impact, or through a stricter object or per se-type approach, under which certain categories of information, particularly private, firm-specific and forward-looking information, may be treated as inherently or presumptively harmful (see Section 2.3.2). The cases reviewed in this paper suggest that both approaches continue to co-exist across and within jurisdictions.

*Object, per se and effects: analytical approaches in practice*

66. Once information sharing has been characterised as a possible infringement in itself, the next question is how authorities assess it in practice. The cases reviewed suggest a spectrum rather than a strict divide. Some decisions use by-object terminology, treating the nature of the exchange, read in context, as sufficient to establish a restriction without proving actual effects. Others require a more detailed showing of how the exchange affected, or was capable of affecting, competitive conditions in the market. In both settings, however, the assessment remains context-dependent: the characteristics of the information, the structure of the market, the competitive relationship between the parties and the mechanism of exchange all remain relevant. Both approaches may be found within the same jurisdiction, suggesting that the analytical choice may depend not only on the legal framework, but also on the specific features of the case, including the nature of the information exchanged, the market context and the theory of harm advanced by the authority. The discussion below examines these two approaches, using selected cases from the Annex (see Table A.1) to illustrate their practical application.

67. Several of the cases reviewed for this paper use legal characterisations which do not require full effects analysis. This reflects the fact that enforcement against information sharing is often directed not only at conduct shown to have led to collusion, but also at conduct that increases the risk that collusion will emerge, become easier to reach, or prove more stable over time (Khoo and Soh, 2020<sup>[37]</sup>). In those cases, authorities do not need to prove actual market effects, but they still need to explain why the characteristics of the exchange, assessed in context, reveal a sufficient degree of harm to competition.

68. In practice, the strongest inferences of harm tend to arise where the exchange concerns private, individualised and forward-looking information on core competitive parameters, especially prices or quantities. Such exchanges are more readily viewed as capable, by their nature, of reducing strategic uncertainty in a commercially meaningful way and of enabling firms to align their conduct without an express cartel agreement (Carstensen and Marschall, 2023<sup>[57]</sup>). The more the information is forward-looking, firm-specific, confidential and linked to core competitive parameters, the more readily authorities and courts may infer anti-competitive potential from its intrinsic characteristics.

69. This logic is illustrated particularly clearly in the Portuguese Banks case introduced in Box 5. The case also illustrates an important feature of the by-object approach in information-sharing cases. The fact that an exchange is treated as harmful by its very nature does not mean that the legal test dispenses context altogether (Ibáñez Colomo, 2024<sup>[58]</sup>). By-object treatment does not require proof of actual effects, but it still requires an assessment of the content, objectives and legal and economic context of the exchange in order to determine whether it reveals a sufficient degree of harm to competition (Blanco, Kim and Georgieva, 2023<sup>[59]</sup>). As highlighted in Section 2. , this means looking not only at the nature of the information itself, but also at the market setting and the mechanism through which the information is exchanged. A similar logic can be seen in other similar cases such as the UK's Nortriptyline Tablets case, which is presented in Box 6 below.

### Box 6. Context in by-object information-sharing cases: the UK Nortriptyline Tablets case

The UK's Nortriptyline Tablets case illustrates how a by-object approach to information exchange may still require close attention to market context. The case concerned exchanges between pharmaceutical suppliers relating to prices, volumes, timing of supply and entry plans for nortriptyline tablets. The CMA found that those exchanges had the object of restricting competition because they reduced strategic uncertainty in the market and were directed at maintaining prices, or at least slowing their decline. The exchanges were not assessed as part of a broader price-fixing or market-sharing agreement, but as contacts between actual or potential competitors that were capable of influencing competitive conduct.

In reaching that conclusion, the CMA did not rely only on the abstract sensitivity of the information exchanged. It also examined the legal and economic context in which the exchange took place. In particular, the CMA stressed that nortriptyline tablets were a homogeneous product, that price was the key parameter of competition, that the market was highly concentrated, and that recent and potential entry had increased competitive pressure. Against that background, the disclosure of strategic information and accompanying assurances between actual or potential competitors were considered capable of creating competitive dynamics that did not correspond to normal market conditions.

The case therefore illustrates that, even in by-object information-sharing cases, context remains important. The relevant question is not simply whether information was exchanged, but whether the nature of the information, read together with the market conditions and the competitive relationship between the parties, reveals a sufficient degree of harm to competition. The CMA's by-object approach was later confirmed by the Competition Appeal Tribunal.

Sources: CMA (2020<sup>[60]</sup>), Decision of the Competition and Markets Authority: Nortriptyline Tablets Information Exchange (Case 50507.2) [https://assets.publishing.service.gov.uk/media/5ef469bcd3bf7f7142efc039/Information\\_Exchange\\_Decision.pdf](https://assets.publishing.service.gov.uk/media/5ef469bcd3bf7f7142efc039/Information_Exchange_Decision.pdf); CAT (2021<sup>[61]</sup>), Judgment 1344/1/12/20 Lexon (UK) Limited v Competition and Markets Authority, <https://www.catribunal.org.uk/judgments/134411220-lexon-uk-limited-v-competition-and-markets-authority-judgment-2021-cat-5-25-feb>.

70. In such by object cases the nature of the information exchanged, read together with the relevant context, is treated as a sufficiently strong indicator of harm without requiring detailed proof of actual effects. It is here that the link between the economics of information sharing and its legal treatment becomes most visible: the presumptions or strong inferences used to infer harm are based on the economic risk factors discussed in Section 2. . For that reason, a careful assessment of those risk factors remains essential, both to identify when such presumptions are justified and to guard against the risk of over-enforcement that by-object treatment can otherwise create.

71. In other cases, the same factors play a different evidentiary role. They are not treated as sufficient, in themselves, to support a strict legal characterisation, but instead serve as the starting point for a fuller assessment of how the information exchange affected, or was capable of affecting, competitive dynamics in the market. These cases require a broader evidentiary basis to sustain a finding of infringement.

72. In the US, for example, recent pleadings and statements of interest reflect that under US antitrust law, standalone information sharing claims are generally assessed under the rule of reason, which requires a fact specific inquiry into whether the exchange tends to harm competition, rather than treating information exchange as per se unlawful (DOJ, 2023<sup>[55]</sup>; 2024<sup>[34]</sup>; 2026<sup>[56]</sup>). At the same time, the DOJ has emphasised that information sharing may still be relevant to per se liability, where it is used as evidence of, or forms part of, a broader-price fixing, output restriction, market allocation, or other naked horizontal restraint. This effects-based logic is not confined to the United States. As Box 7 illustrates, authorities in other jurisdictions have also pursued information-sharing cases through effects-based analysis, examining how the exchange altered competitive incentives and market outcomes in practice.

## Box 7. Evidentiary demands of effects-based analysis: Two examples

### Norwegian grocery retail effects case

The case concerns information exchange between three large grocery retail groups in Norway. The market was assessed as being highly concentrated. The authority did not stop at identifying the strategic nature of the information exchanged or the concentrated structure of the market, although both were relevant to the analysis. It went further and examined how the information sharing altered competitive dynamics in practice.

The exchanges allowed the grocery chains' "price hunters" to collect and share large volumes of competitor price information several times a day, making price changes highly visible and rapidly observable. While the firms argued that prices were publicly observable and data related to current not future prices, the authority found that the information exchange weakened incentives to cut prices, because any price reduction could be matched by rivals within hours, reducing the gains from initiating the cut in the first place. At the same time, the same mechanism made price increases more attractive and less risky. The Authority's decision and effects-based analysis were upheld by the Competition Appeals Tribunal.

### Spanish tobacco case

The Spanish tobacco information-exchange case concerned the CNMC's 2019 finding that major cigarette manufacturers (Philip Morris, Altadis and JTI) unlawfully exchanged competitively sensitive daily sales data through the dominant wholesaler Logista, which acted as a hub by giving near-real-time, granular market information to competing firms, thereby allegedly reducing strategic uncertainty and facilitating tacit co-ordination.

The judicial review of the Spanish tobacco case illustrates the evidentiary challenges that effects-based information-sharing cases may face. The National Audience (the first instance review court for competition decisions in Spain) required a strict demonstration that the exchange had produced, or was capable of producing, anti-competitive effects.

The court considered that this standard had not been met for three main reasons. First, it found that the decision lacked a counterfactual analysis showing how the market would likely have evolved in the absence of the exchange. Second, it considered that the causal link between access to the sell-in data and the alleged deterioration of competition had not been established with sufficient precision. In particular, it noted that some of the effects identified by the authority appeared even where access to the data had ceased, were not observed in other tobacco products also covered by the service, and were said to arise only from 2008 even though the data exchange had existed since the late 1990s. Third, the court questioned the strategic relevance of the information itself, considering that daily provincial sell-in data were mainly logistical and did not adequately show how firms could shape the key competitive variables in the market.

Source: Norwegian Competition Authority (2024<sup>[62]</sup>), Press Release: Coop, Norgesgruppen and Rema fined 4.9 billion NOK, available at <https://konkurransetilsynet.no/coop-norgesgruppen-and-rema-fined-4-9-billion-nok/?lang=en>; OECD (2024<sup>[63]</sup>), Global Forum on Competition, Competition in the Food Supply Chain – Contribution from Norway, [https://one.oecd.org/document/DAF/COMP/GF/WD\(2024\)31/en/pdf](https://one.oecd.org/document/DAF/COMP/GF/WD(2024)31/en/pdf); Norwegian Competition Authority (Norwegian Competition Authority, 2025<sup>[64]</sup>), Norwegian Competition Authority decision fully upheld in the price hunter case, [https://www.concurrences.com/docrestreint/api/pdf/norwegian\\_competition\\_authority\\_decision\\_fully\\_upheld\\_in\\_the\\_price\\_hunter\\_case.pdf](https://www.concurrences.com/docrestreint/api/pdf/norwegian_competition_authority_decision_fully_upheld_in_the_price_hunter_case.pdf); Audiencia Nacional (2025<sup>[65]</sup>), SAN 4663/2025, [ECLI:ES:AN:2025:4663](https://www.tribunales.es/tribunales/audiencia-nacional/audiencia-nacional-2025-4663); Gomez-Acebo & Pombo (2025<sup>[66]</sup>), La Audiencia Nacional refuerza las exigencias probatorias en las infracciones "por efectos": anulación de la resolución de la CNMC en el caso Tabacos, <https://ga-p.com/publicaciones/la-audiencia-nacional-refuerza-las-exigencias-probatorias-en-las-infracciones-por-efectos-anulacion-de-la-resolucion-de-la-cnmc-en-el-caso-tabacos/>.

73. These cases highlight that effects analysis can be used to demonstrate anticompetitive effects in cases where information is shared rapidly and can change the incentives of market participants. At the same time, the Spanish tobacco case shows that this route may be evidentially demanding: even where the information has several features commonly associated with competitive risk, authorities may still need to explain, by reference to the counterfactual and the actual functioning of the market, how the exchange was capable of altering firms' competitive behaviour and market outcomes (Nieto and Pascual, 2026<sup>[67]</sup>).

74. The choice between a stricter object or per se approach and an effects-based characterisation is also relevant to the treatment of efficiency claims. Where an information exchange has a genuine pro-competitive rationale (for instance, by reducing information asymmetries between market participants) competition authorities may need to consider that rationale before concluding that the exchange is inherently harmful<sup>9</sup> (OECD, 2011<sup>[2]</sup>; Ibáñez Colomo, 2024<sup>[58]</sup>). Under effects-based analysis, pro-competitive explanations may be structurally part of the assessment and weighed against alleged restrictive effects, in which case an authority must engage with them before concluding on the net competitive impact of the exchange. Under a stricter approach, the threshold for pro-competitive claims is in practice considerably higher, for example in the EU the parties must demonstrate that the benefits are sufficient to outweigh an inference of harm that has already been established from the nature of the exchange itself (European Commission, 2023<sup>[47]</sup>). In either case, an important consideration is that the efficiencies most commonly associated with information sharing do not typically require the exchange of highly disaggregated, individualised or forward-looking data (Kühn and Vives, 1994<sup>[13]</sup>; OECD, 2011<sup>[2]</sup>).

75. Overall, the cases reviewed<sup>10</sup> do not establish a uniform boundary between by-object and effects-based treatment in information-sharing enforcement, although by object cases typically appear more often related to the exchange of future intentions. Guidance across different jurisdictions also helps structure the relationship between the two (Turkish Competition Authority, 2013<sup>[68]</sup>; Competition Bureau Canada, 2021<sup>[69]</sup>; CMA, 2023<sup>[70]</sup>; European Commission, 2023<sup>[47]</sup>). The guidance suggests that by-object or per se treatment is generally reserved for exchanges that reveal a sufficient degree of harm to competition by their nature. However, this does not mean that context is irrelevant in by-object cases: the assessment of the content, objective aims and legal and economic context of the exchange is required in all cases, regardless of whether the authority proceeds by object or by effect (Ibáñez Colomo, 2024<sup>[58]</sup>; Blanco, Kim and Georgieva, 2023<sup>[59]</sup>). That contextual assessment is directed at establishing whether the exchange reveals a sufficient degree of harm by its nature (which often points to exchanges of competitively sensitive information capable of removing uncertainty as to competitors' future conduct) rather than at quantifying actual market effects. Where that threshold is not met, a finding of infringement may still be possible, but it requires a fuller effects-based analysis demonstrating how the exchange affected, or was capable of affecting, competitive conditions. As the case examples above illustrate, authorities have in some instances been able to establish an infringement through that route even when a by-object or per se approach was not available or not pursued.

76. The key issue is therefore not whether one approach is always preferable to the other, but at what point the characteristics of the exchange, read in context, are sufficient to justify a strong inference of harm, and when a more complete demonstration of restrictive effects should instead be required. That boundary continues to be drawn differently across jurisdictions and across cases within the same jurisdiction and is likely to remain a point of continuing development in enforcement practice.

### **3.2.4. Information sharing in horizontal co-operation**

77. Information exchange between competitors may also arise as a feature of broader horizontal co-operation, including joint research and development projects, standardisation initiatives, joint production, joint purchasing, benchmarking systems, and other arrangements through which competitors collaborate on identifiable commercial activities. In these settings, the legal assessment of the exchange does not stand alone but forms part of the wider analysis of the co-operation arrangement. The central question is

whether the information-sharing component is necessary and proportionate to the legitimate objective of the co-operation, or whether it goes beyond what the co-operation requires and creates risks of softening competition between the participants on parameters unrelated to the co-operative activity (European Commission, 2023<sup>[71]</sup>; CMA, 2023<sup>[70]</sup>). The test draws on the broader doctrine of ancillary restraints and applies it specifically to information flows: an exchange of cost data may be necessary to set the prices for a joint venture's output, but it is not necessary to disclose each participant's broader pricing strategy in unrelated markets.

78. Where information exchange goes beyond what the co-operation requires, it falls outside the umbrella of the co-operation's legal treatment and is assessed on its own terms under the general framework set out in Sections 2.3 and 3.2. The point is significant because it allocates the burden of justification: parties wishing to rely on the lawful character of a co-operation arrangement to shelter information exchange must show that the exchange is genuinely necessary to the co-operation's functioning, not merely associated with it (OECD, 2011<sup>[2]</sup>).

79. Where the exchange forms part of a broader horizontal agreement, parties may in some cases benefit from existing block exemption regimes or other lower-risk frameworks, notably in areas such as research and development, specialisation or standardisation, provided that the conditions of those frameworks are met (for example, in guidance on joint research and development and standardisation in Japan, and in Canada's Competitor Collaboration Guidelines). At the same time, guidance shows authorities typically remain cautious where the exchange involves commercially sensitive information directly linked to competitive parameters such as prices, output, customers, costs or future strategy, since such exchanges may go beyond what is necessary for co-operation and create risks of co-ordination or exclusion (Competition Bureau Canada, 2021<sup>[69]</sup>).

80. These issues have become particularly salient in the context of sustainability-related co-operation. In recent guidance, sustainability agreements are generally treated as a subset of horizontal co-operation agreements, and ESG-related data sharing has emerged as a recurring feature of such co-operation (Schneider, 2025<sup>[72]</sup>; OECD, 2021<sup>[73]</sup>). The guidance accepts that some sustainability-related information exchange may fall outside competition law, or may be justified by efficiencies, where it does not influence competitive conduct or is genuinely necessary and proportionate to the objective pursued (CMA, 2023<sup>[74]</sup>; European Commission, 2023<sup>[71]</sup>). Even where safe harbours or exemption mechanisms exist, they usually require that the exchange be strictly limited to what is necessary and proportionate, and that any benefits be concrete and verifiable (Jenny, 2026<sup>[75]</sup>; OECD, 2021<sup>[76]</sup>). Box 8 provides an example of how authorities structure the assessment of information exchange when it is embedded in sustainability-related co-operation.

### **Box 8. Information sharing in sustainability agreements under the EU Horizontal Guidelines**

The 2023 revision of the European Commission's Horizontal Guidelines ("the Guidelines") introduced a dedicated chapter on sustainability agreements, clarifying when co-operation between competitors pursuing environmental or social objectives is compatible with EU competition law. In that context, the Guidelines set out how information exchange is approached, notably where co-operation entails sharing data on sustainability performance, supply chains, or compliance monitoring.

The Guidelines indicate that some sustainability-related information sharing may fall outside Article 101(1) where it does not influence competitive conduct. For instance, creating a database listing suppliers or distributors with (un)sustainable value chains or practices will generally not restrict competition if it does not oblige or forbid participants to buy from those suppliers or sell via those distributors (para 530).

The Guidelines also set out a soft safe harbour for sustainability standardisation agreements that meet six cumulative conditions. One of these conditions requires that any information exchange be strictly limited to non-sensitive information and be objectively necessary and proportionate to develop, implement, or update the sustainability standard. Exchanges that go beyond what is indispensable, particularly if they relate to pricing, individual firm data, or forward-looking commercial intentions, fall outside the safe harbour (para 549).

The Commission acknowledges that in some cases, pooling sustainability-related data (e.g., information on producers using sustainable processes) can help firms comply with EU or national sustainability obligations and thereby generate efficiency gains that may justify an exemption under Article 101(3). Such benefits must be concrete, verifiable, and directly or indirectly passed on to consumers (para 425).

Outside these limited contexts, sharing commercially sensitive information continues to be assessed under the general principles on information exchange set out elsewhere in the Guidelines. In practice, this means that the assessment turns on familiar factors such as the nature and strategic sensitivity of the information, whether it is current or forward-looking, its level of aggregation, whether it is public or non-public.

Source: European Commission (2023<sup>[47]</sup>), "Communication from the Commission – Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements", Official Journal of the European Union, C 259, [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=oj:JOC\\_2023\\_259\\_R\\_0001](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=oj:JOC_2023_259_R_0001).

81. More broadly, in the assessment of the effects of such agreements on competition, approaches differ across jurisdictions: some remain cautious and focus primarily on benefits accruing to the affected consumers, as in the EU, while others have been more open to taking broader sustainability gains into account, as illustrated, for instance, by the guidance of the Netherlands (ACM, 2023<sup>[77]</sup>), Greece (HCC, 2021<sup>[78]</sup>), Austria (AFCA, 2022<sup>[79]</sup>) and UK (CMA, 2023<sup>[74]</sup>). Guidance therefore reduces uncertainty, but may not remove the need for case-by-case assessment.

### 3.3. Channels and intermediaries in information exchange enforcement

82. As highlighted in section 2.3.3, information sharing's impact can also be impacted by the channel through which it is collected, processed and disseminated. This section discusses how such channels feature in enforcement practice starting with a discussion of trade associations before considering recent developments in technology and its implications for enforcement of information sharing.

#### 3.3.1. Trade associations and other industry bodies

83. Trade associations and other industry bodies are a common setting for information exchange between competitors. They often perform legitimate and pro-competitive functions, including advocacy, standard-setting, technical co-operation, market research, training, compliance support and the production of industry statistics. However, because they bring competitors together on a repeated and structured basis, they may also provide a forum or mechanism through which commercially sensitive information is exchanged (OECD, 2011<sup>[80]</sup>; Waller, 2018<sup>[81]</sup>). Depending on the circumstances, the association's role may provide evidence of a cartel agreement, constitute or facilitate a stand-alone information exchange, amount to a decision by an association of undertakings, or form part of legitimate co-operation subject to appropriate safeguards (European Commission, 2023<sup>[47]</sup>).

84. The analytical framework remains the one set out in Section 2.3.3. The relevant question is whether the exchange is capable of reducing strategic uncertainty between competitors, taking into account the commercial sensitivity of the information, its age, frequency, granularity, aggregation, identifiability and the market context. Trade associations do not alter that framework, but they can heighten its practical relevance because they may collect, standardise and redistribute information across a sector.

The fact that information is exchanged through a third party, including a trade association, does not reduce its capacity to facilitate co-ordination (OECD, 2011<sup>[2]</sup>). Particular concerns therefore arise where associations collect or share information that is recent, frequent, insufficiently aggregated, capable of identifying individual firms, or related to current or future prices, costs, output, capacity, customers, margins or commercial strategy. For this reason, enforcement cases concerning information exchange and trade associations occur with some regularity.<sup>11</sup>

85. Trade association cases also raise specific questions of attribution and participation. An association may be liable where it organises, encourages or facilitates anti-competitive exchanges among members, even if the commercially sensitive information originates from the members themselves. Members may also be exposed where they participate in association meetings or data exchanges, receive commercially sensitive information, or use association structures to monitor adherence to a common understanding. Authorities may therefore examine the role of the secretariat, the design of meetings and committees, access to raw or disaggregated data, the content of minutes and communications, the regularity of information flows, and whether the association acted as a hub through which sensitive information became attributable to members (OECD, 2011<sup>[2]</sup>; Waller, 2018<sup>[81]</sup>).

86. Safeguards are relevant because trade associations often operate in areas where lawful co-operation and problematic information exchange sit close together. In the context of information sharing, common safeguards include aggregation, anonymisation, time lags, restrictions on access to raw data, and procedures for objecting to or leaving problematic discussions. These measures do not automatically remove liability where sensitive information is exchanged. As academic commentary emphasises, governance safeguards are evidentially relevant rather than dispositive: authorities will look beyond formal compliance architecture to the substance of what was exchanged and to its effects (Waller, 2018<sup>[81]</sup>; Carstensen and Marschall, 2023<sup>[57]</sup>). Well-designed safeguards can nonetheless reduce the risk that legitimate association activity becomes a channel for co-ordination, while their absence is often evidentially significant in enforcement practice.

### **3.3.2. Digital platforms, algorithms and automated information flows**

87. Similar issues arise where the intermediary is technological rather than institutional. Digital platforms, algorithmic pricing tools, data pools and automated monitoring systems can collect, standardise and disseminate information between competitors in ways that resemble more traditional intermediated exchanges, but they may also go further by processing information, generating recommendations, monitoring behaviour and shaping commercial choices at speed and scale. As Section 2. explained, these tools can make information flows more continuous, granular and actionable, while narrowing the gap between information that is formally public and information that is practically useful for co-ordination. This subsection therefore considers how digital systems affect the legal assessment of information sharing, including the boundary between automated information exchange and digitally mediated co-ordination, questions of awareness, attribution and intermediary liability, and the evidentiary and remedial implications of algorithmic co-ordination.

88. Algorithmic pricing tools create a particular enforcement challenge where co-ordinated outcomes emerge through machine-mediated inference, common pricing tools or shared data infrastructure, rather than direct bilateral communication. This raises questions about whether existing concepts of information sharing, concerted practice, facilitation and hub-and-spoke co-ordination are sufficiently flexible, or whether some jurisdictions may need more targeted guidance, enforcement tools or reforms (Ezrachi and Stucke, 2016<sup>[82]</sup>). The difficulty is not that the competitive concern is conceptually new, but that the mechanism by which firms become aware of, react to and align with one another's conduct may be more opaque and more technologically mediated than in traditional cases.

89. A related issue concerns intermediary and platform liability. Digital platforms may facilitate alignment among competitors not only by transmitting information, but also by structuring, standardising

or processing it through a shared system. In some cases, the issue will be whether the platform or software provider has acted as a facilitator or hub for co-ordination among users. In others, the issue will be whether users can be treated as aware of, accepting, or relying on the common system in a way that supports liability. The practical legal questions therefore concern not only whether information has been exchanged, but also who should be responsible for the system's operation and what evidence is needed to establish knowledge, foreseeability or acceptance (OECD, 2015<sup>[83]</sup>).

90. The 2016 CJEU Eturas judgment illustrates one aspect of this boundary, although not as a pure information-sharing or algorithmic pricing case. The case concerned an online travel booking system through which the platform operator sent a system-wide message informing participating travel agencies that discounts offered through the platform would be capped at 3%, followed by technical changes connected with that limitation (CJEU, 2016<sup>[84]</sup>). Its relevance is that the common digital system transmitted a co-ordinating signal and helped operationalise a common commercial parameter. At the same time, the Court's reasoning turned on awareness and evidence: the message could support a finding of concerted practice where the agencies were aware of it and did not publicly distance themselves, but participation could not be presumed merely from the existence of the technical restriction. The case therefore illustrates how platform-mediated conduct may sit between information exchange, facilitation and concerted practice. More recent cases raise related issues in a more technologically complex form, as illustrated by the RealPage case discussed in Box 9 below.

### Box 9. Proposed RealPage settlement and DOJ's emerging approach to algorithmic pricing tools

In its case against RealPage and multiple landlord defendants, the U.S. Department of Justice (DOJ) alleged that RealPage's revenue management software relied on non-public, competitively sensitive information shared by competing landlords and included features designed to push price increases, limit price decreases and align pricing among competitors. The proposed settlement with RealPage, which remains subject to court approval, would impose constraints both on how competitor data is used and on product features that may weaken independent pricing decisions.

The proposed settlement draws a distinction between the software's (i) runtime operation (live operations that generate price recommendations and prices) and (ii) model training (how certain supply and demand models are developed and refined). First, it would require RealPage to stop using competitors' non-public, competitively sensitive information to determine rental prices in runtime operation. Second, it would restrict the use of such data in model training, limiting the use of non-public data in model training to backward-looking data aged at least 12 months and not derived from active leases. It would also restrict model design choices, including limiting the geographic granularity of certain models (with some models not determining geographic effects narrower than national level).

Beyond data inputs, the proposed settlement targets software features that may facilitate competitor alignment, prohibiting RealPage from offering features that limit independent pricing decisions. It would also require RealPage to (i) prohibit the use of market surveys to collect competitively sensitive information for pricing or occupancy recommendations, (ii) not share or disclose competitively sensitive information through pricing advisors, (iii) accept a court appointed monitor, and (iv) co-operate with the DOJ in related litigation.

Note: The proposed settlement between DOJ and RealPage followed earlier settlements by DOJ with certain landlord defendants and addresses RealPage's role as the software provider; claims against other non-settling landlord defendants remain ongoing, including in the DOJ's case and related proceedings involving State Attorneys General plaintiffs.

Source: DOJ (2025<sup>[85]</sup>), United States of America et al. v. RealPage, Inc. et al., Proposed Final Judgment, U.S. District Court for the Middle District of North Carolina, <https://www.justice.gov/opa/media/1419406/dl>; DOJ (2025<sup>[86]</sup>), Justice Department Requires RealPage to End the Sharing of Competitively Sensitive Information and Alignment of Pricing Among Competitors, <https://www.justice.gov/opa/pr/justice-department-requires-realpage-end-sharing-competitively-sensitive-information-and>.

91. More generally, authorities have begun to articulate how liability rules apply when co-ordination is implemented or monitored through algorithms. Their focus remains on the means by which collusive outcomes are achieved: parallel pricing is not in itself unlawful, but liability may arise where algorithms are used to signal intentions, exchange commercially sensitive information or enforce common policies (OECD, 2017<sup>[87]</sup>). Across the OECD, authorities also stress that both users and designers of pricing algorithms may face liability where they foresee that the tools will be used to co-ordinate behaviour, while cautioning against over-extending liability to purely unilateral analytics or benchmarking tools (OECD, 2023<sup>[88]</sup>). In this respect, the legal challenge is not that technology changes the core question of whether the conduct facilitates the formation of common expectations, monitoring or retaliation, but that it may change the evidentiary basis on which those co-ordination mechanisms are identified in practice.

92. Competition authorities have also started to treat platform-based algorithmic pricing as a potential hub-and-spoke problem. Recent OECD work for the G7 highlighted a shared concern that when multiple competitors rely on the same pricing algorithm or data hub, the provider may effectively act as the ‘hub’ of a collusive scheme, especially where the tool uses commercially sensitive data from several firms and steers them towards common pricing strategies (OECD, 2025<sup>[89]</sup>). These jurisdictions also distinguish alignment at code level (common or co-ordinated pricing logic embedded in a shared tool) from alignment at data level (use of a shared pool of competitors’ data to optimise prices), noting that both dimensions can support a hub-and-spoke theory of harm where firms are aware, or should be aware, that they are relying on a common solution to reduce competition (OECD, 2025<sup>[89]</sup>). Guidance from the European Commission and the UK similarly explains that subscribing to a third-party pricing tool that aggregates and uses rivals’ confidential information can amount to an unlawful indirect information exchange (European Commission, 2023<sup>[47]</sup>; CMA, 2023<sup>[70]</sup>).

93. Overall, the developments discussed above suggest that technologies such as algorithmic pricing tools, digital platforms and automated monitoring systems sharpen the same economic risk factors identified in Section 2. and complicate their legal application in practice. Existing concepts such as concerted practice, indirect information exchange and hub-and-spoke co-ordination remain capable of addressing at least some of these challenges, but the cases also show that questions of intermediary liability, system design and evidentiary thresholds are becoming increasingly important. In this context, guidance becomes increasingly important: as technology makes traditional distinctions harder to apply in practice, authorities need to clarify how existing rules apply to new forms of digitally mediated co-ordination. This is the subject of Section 3.4.

## 3.4. The role of guidance and advocacy in the assessment of information sharing

### 3.4.1. *Ex ante* guidance for firms

94. *Ex ante* guidance plays a distinct role in the assessment of information sharing. Its importance is underscored by the issues discussed in the previous sections: the boundary between by-object and effects-based treatment is not always clear from enforcement practice alone, and technological developments make traditional distinctions harder to apply in practice. Guidance can therefore serve a dual function. On the one hand, it helps authorities articulate theories of harm and clarify how existing rules apply to different forms of information sharing. On the other hand, it enhances legal certainty for firms, which are often required to assess *ex ante* whether commercial interactions, such as participation in trade associations, benchmarking exercises or data-sharing arrangements, may raise competition concerns.

95. As Section 2. has shown, the competitive significance of information sharing rarely turns on a single characteristic in isolation. Rather, it depends on the interaction between the nature of the information, its timing and granularity, the channel through which it is shared, and the structure of the market in which it occurs. This makes the area particularly resistant to bright-line rules: guidance must be capable of giving firms workable indications of risk without overstating the certainty with which forms of

conduct can be treated as benign or harmful in all circumstances. If guidance is not sufficiently clear and operational, this may create compliance challenges and, in some cases, risks of both under- and over-deterrence (Carrier and Luer, 2025<sup>[90]</sup>). In this context, well-designed guidance may contribute to improving both the effectiveness and the predictability of enforcement.

96. Across the OECD, ex ante guidance in relation to information sharing is provided through a range of instruments and with differing degrees of specificity. Table 2 provides an overview of the main forms through which ex ante guidance on information sharing is made available across OECD jurisdictions. The purpose of the table is therefore not to identify rigid legal models, but to show the principal settings in which firms and advisers are likely to encounter guidance on information sharing in practice.

**Table 2. Guidance featuring information sharing in OECD Jurisdictions**

Category of guidance	OECD jurisdictions
Specific guidelines on information exchange	Korea, Mexico (public consultation ongoing)
Sector/topic specific information exchange guidelines	Belgium, United States
Guidelines on information exchange embedded in trade or professional association rules	Belgium, Chile, Colombia, Czechia, Denmark, France, Germany, Iceland, Ireland, Israel, Japan, Latvia, Lithuania, New Zealand, Portugal, Spain, Sweden
Information exchange addressed within general national horizontal guidelines or guidelines on concerted practice	Australia, Canada, Greece, Netherlands, Slovakia, Türkiye, United Kingdom, United States (public consultation ongoing)
Explicit reference to the European Commission's Horizontal Guidelines	Finland, France, Germany, Ireland, Italy, Sweden, Switzerland

Source: Authors' review of guidance published online – full references in Annex A.

Note: The categories are not mutually exclusive or exhaustive: a single jurisdiction may rely on more than one instrument, and the same analytical principles may be communicated through different vehicles.

97. Several points emerge from Table 2. First, guidance dedicated specifically to information sharing remains relatively uncommon. More often, authorities address the issue through broader horizontal co-operation guidance or through guidance on trade or professional associations. Second, the prominence of trade association guidance suggests that authorities frequently encounter information-sharing concerns in recurring institutional settings rather than as an isolated legal category (discussed further in 3.3.1). Third, some jurisdictions supplement general guidance with sector-specific instruments where information exchange is structurally important. While this categorisation highlights differences in form, the content of guidance across jurisdictions shows significant common features and shared approaches, in line with the economic theory set out in Section 2. .

98. Most published guidance recognises that information sharing may generate both pro-competitive and anti-competitive effects and therefore emphasises that its assessment is context-dependent and does not turn on any single formal criterion.<sup>12</sup> Across jurisdictions, guidance repeatedly highlights a common set of factors, including the nature of the information exchanged, its timing, its degree of aggregation, its accessibility in practice, the mechanism through which it is shared, and the characteristics of the market in which it occurs.<sup>13</sup> Many instruments also translate these general principles into more practical indicators, for example by identifying conduct that warrants particular caution, safeguards such as aggregation, anonymisation or time delays, and scenarios that are less likely to raise concern.<sup>14</sup>

99. Taken together, these common themes suggest that the main differences across jurisdictions lie less in the basic analytical framework than in the degree of specificity with which that framework is operationalised. More detailed guidance can improve legal certainty and help firms identify lower-risk ways of sharing information in recurring settings such as trade associations, benchmarking or broader co-operation arrangements. At the same time, highly specific guidance may require periodic updating if market practices, data analytics or technologies change. Jurisdictions that do not currently publish clear and

accessible guidance may therefore wish to consider whether doing so would improve both compliance and the predictability of enforcement.

100. An illustration of how guidance in this area has evolved is the treatment of the age of information. Earlier instruments often set fixed numeric thresholds: the 2010 EU Horizontal Guidelines treated individual data more than one year old as presumptively historic (European Commission, 2011<sup>[91]</sup>), and the 1996 US DOJ/FTC Healthcare Statements treated data at least three months old as unlikely to raise concern (US Department of Justice and Federal Trade Commission, 1996<sup>[92]</sup>). Some older model instruments beyond the OECD retain similar fixed rules (UNCTAD, 2011<sup>[1]</sup>). Active OECD-country guidance has moved away from calendar thresholds. The 2023 EU Horizontal Guidelines and the UK CMA's 2023 Horizontal Agreements Guidance instead tie "historic" to market-specific factors such as the frequency of negotiations, the typical age of information relied on for business decisions, and contract length in the relevant sector, rather than to a fixed period. The US DOJ withdrew the three-month safe harbour in February 2023 (DOJ, 2023<sup>[93]</sup>). Newer national guidance in Korea and Australia relies on a qualitative distinction between forward-looking and backward-looking information without a numeric threshold.

101. As highlighted in section 3.3.1, trade associations often feature enforcement practice associated with information sharing and as reflected in Table 2, many authorities address information-sharing risks through guidance on trade or professional associations. This reflects the fact that trade associations bring competitors together on a repeated and structured basis around data benchmarking, advocacy, standard-setting, and discussions of sector developments. They therefore create a setting in which lawful co-operation and problematic information sharing may sit unusually close together (Waller, 2018<sup>[81]</sup>). For that reason, guidance in this area tends to focus less on abstract legal characterisation and more on governance and design. Common recommendations include ensuring that any data-sharing exercise relies on sufficiently aggregated, anonymised and, where appropriate, historical information; avoiding the dissemination of current or forward-looking information on prices, production, sales, costs or other strategic variables; limiting discussions to non-sensitive topics; and implementing clear compliance safeguards for meetings, agendas, minutes and communications.<sup>15</sup> Such guidance also often addresses the specific tools through which associations may influence member conduct, including recommendations, calculators, forecasts, member statistics, price portals, standard terms and similar communication devices.<sup>16</sup>

102. Guidance also plays an important role where information sharing forms part of broader horizontal co-operation. As discussed in Section 3.2.3, such exchanges may be necessary for legitimate arrangements such as research and development, standardisation, benchmarking, joint production, purchasing co-operation or sustainability initiatives. In this context, guidance helps firms distinguish information that is genuinely necessary for the co-operation from information that may spill over into independent commercial decision making. It commonly does so by focussing on necessity, proportionality, access restrictions, aggregation, anonymisation, clean teams, time lags and documentation of the purpose of the exchange.

### ***3.4.2. Advocacy and the design of information disclosure***

103. Guidance to firms is only one way in which competition authorities can address information-sharing risks ex ante. A separate role arises where governments, sector regulators or public bodies design disclosure obligations or transparency measures. In these settings, competition authorities may act as advocates, advising on how legitimate policy objectives can be achieved without unnecessarily increasing the risk of co-ordination between competitors.

104. Regulatory and policy developments also shape how information becomes available in markets. In many settings, disclosure is required or strongly encouraged to pursue objectives such as consumer protection, securities regulation, investor protection or environmental reporting. These regimes can generate important benefits, but they can also make rivals' behaviour more observable and thereby create conditions more conducive to co-ordination. This reflects the broader point made in Section 2. :

transparency and information exchange can generate efficiencies and serve legitimate policy goals, but their design matters because they may also reduce strategic uncertainty and facilitate co-ordination (OECD, 2021<sup>[76]</sup>).

105. Policy initiatives that encourage or require collaboration, including sustainability and other public-interest schemes, can create legitimate venues for information exchange between competitors. The competition assessment in these settings follows the same approach set out in Sections 2.2 and 2.3; the practical question is therefore whether the arrangement can achieve its policy objective without sharing competitively sensitive information, and what safeguards (subject-matter limits, aggregation, time lags, governance) are needed to mitigate co-ordination risk.

106. Competition authorities engage with mandated disclosure in two capacities. As advocates, they advise governments and sector regulators on the competitive implications of proposed transparency requirements. As decision makers, they impose or recommend transparency measures through enforcement remedies, merger commitments and market study recommendations. In each case, the question is whether the measure can be designed to deliver the intended transparency benefit to consumers, regulators or market entrants without simultaneously providing incumbents with a monitoring tool that facilitates co-ordination. Key design variables include what is disclosed, to whom, how often, and at what level of aggregation. The OECD Competition Assessment Toolkit identifies mandatory publication of information on supplier outputs, prices, sales or costs as a category of regulation warranting specific scrutiny (OECD, 2019<sup>[94]</sup>). The proposed settlement in the United States' Agri Stats case illustrates how these design variables may be translated into remedies for an information-sharing system operated by a data intermediary, and is explained in Box 10 below.

#### Box 10. Remedy design in information-sharing: the proposed Agri Stats settlement in the US

In May 2026, the DOJ and several State Attorneys General filed a proposed settlement to resolve claims that Agri Stats, a data-sharing and consulting company, unlawfully facilitated the exchange of price, output and cost information among competing meat processors. The proposed final judgment, which remains subject to court approval and does not constitute an admission of liability or an adjudication of any issue of fact or law, would redesign rather than simply prohibit the information sharing system.

The proposed remedies target the main features that made the exchange competitively sensitive. Agri Stats would be required to stop providing sales reports books and pricing data, and would be prohibited from reporting individual non-public information, including company, business unit, or facility-level production cost and labour data. It would also be restricted from disclosing participant identities, rankings or other markers such as "flags" that could allow firms to identify rivals' performance. At the same time, most information distributed by Agri Stats would have to be made available to any person in the United States, including all interested domestic purchasers on reasonable and non-discriminatory terms, reducing the asymmetry between competitors and buyers. The settlement would also impose limits on the timeliness of information, and requires a court-approved monitor and an antitrust compliance programme.

The proposed settlement illustrates how remedies in information-sharing cases can focus on the design of disclosure: what is shared, how granular and recent it is, who receives it, and what governance safeguards apply.

Source: DOJ (2026<sup>[95]</sup>), Justice Department Requires Agri Stats to End Exchange of Competitively Sensitive Information Among Nation's Largest Meat Processors that Suppressed Competition and Increased Prices for Decades, <https://www.justice.gov/opa/pr/justice-department-requires-agri-stats-end-exchange-competitively-sensitive-information>.

107. Public procurement illustrates the same institutional-consistency issue. Transparency can strengthen accountability and deter corruption, but excessive or poorly timed disclosure can also facilitate bid rigging by increasing observability among bidders. Recent OECD guidance therefore recommends limiting the disclosure of bidder identities and bid details during the tender process, and carefully considering what information is published at bid opening and in award notices, to avoid releasing competitively sensitive information that could facilitate co-ordination in repeated tenders. Similar principles have been reflected in OECD work on procurement transparency and disclosure, including recommendations to avoid publishing reserve prices and to delay or anonymise bidder-level information where publication is required (OECD, 2025<sup>[96]</sup>).

## 4. Conclusion

108. This paper has shown that the competitive significance of information sharing between competitors cannot be determined by any single feature in isolation. Whether an exchange is likely to harm competition depends on the interaction between the characteristics of the information itself, the channel through which it flows, and the structure and conditions of the market in which it occurs. Information sharing may improve forecasting, support legitimate co-operation and reduce information asymmetries, but it may also reduce strategic uncertainty and facilitate co-ordination. The central implication is therefore not that information sharing should be viewed as generally benign or generally harmful, but that its assessment remains inherently contextual. At the same time, the review of economic literature, decisional practice and guidance points to a number of developments of practical relevance.

109. First, recent economic research has refined some traditional heuristics, most clearly by showing that information often treated as lower risk, particularly aggregated data, may still be competitively significant where it permits sufficiently precise inference about rivals' conduct. The paper also highlights that the mechanism through which information is shared may itself affect competitive risk.

110. Second, information sharing remains relevant across the three enforcement settings examined in this paper, and, with growing prominence, as a standalone competition concern. In the latter setting, the assessment can proceed through by-object or per se treatment or through effects-based analysis. The key issue is whether the characteristics of the exchange, assessed in their legal and economic context, are sufficient to justify by-object or per se treatment or instead require a fuller effects-based analysis. Future guidance could usefully clarify when particular combinations of context and information features may warrant by-object or per se treatment.

111. Third, concerns about information exchange through intermediaries are increasingly being applied to new technological settings. More recent guidance and case law extend established concerns with mediated exchange to common platforms, data intermediaries and algorithmic tools, while also raising questions about whether existing investigative and legal tools will remain sufficient as such systems become more opaque and complex.

112. For competition authorities, the practical challenge is to translate this framework into workable enforcement and guidance. Rules that are too permissive may fail to address exchanges that materially soften competition; rules that are too rigid may chill legitimate benchmarking, standard-setting or operational co-operation. The paper suggests that well-designed guidance can help firms and advisers navigate this tension, especially in recurring settings such as trade associations, broader co-operation arrangements and mandated disclosure regimes. Advocacy also has a role alongside enforcement: disclosure and transparency rules should be designed to achieve legitimate public objectives without unnecessarily facilitating rival monitoring or co-ordination.

113. The paper also highlights issues that merit continued attention, including how authorities should investigate and assess information exchange mediated through common digital systems or more opaque AI tools; how responsibility should be allocated where platforms or intermediaries structure or disseminate competitor information; and whether existing investigative and evidentiary tools will remain sufficient as these systems become more complex. These issues do not suggest that existing frameworks have become obsolete, but they do show that technological change will continue to test how those frameworks are applied in practice.

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# Annex A. OECD case and guidance review

## OECD information exchange case analysis

Table A.1. Selected Standalone Information Exchange Cases

OECD Jurisdiction	Case	Conduct / key finding	Restriction of competition	Outcome
Denmark	<a href="#">Danish Competition Council, Hugo Boss / Kaufmann and Hugo Boss / Ginsborg (24 June 2020)</a>	Retailers exchanged information on future prices, discounts and quantities; the authority found that this reduced uncertainty over future sales, enabled co-ordination, and contributed to lower discounts and a narrower range of products on sale.	By object	Fine of approx. EUR 2.43 million
EU	<a href="#">CJEU, Case C-298/22, Banco BPN v BIC Português and Others (29 July 2024)</a>	Fourteen Portuguese banks exchanged current and future commercial conditions and production volumes in home loans, consumer credit and corporate lending; the Court confirmed that a standalone exchange of confidential strategic information may constitute a restriction of competition by object under Article 101(1) TFEU.	By object	Fine of EUR 225 million
France	<a href="#">French Competition Authority, Decision 19-D-25 of 17 December 2019, Meal Vouchers</a>	The four main meal voucher providers exchanged confidential information on their respective market shares on a monthly basis through the French National Meal Vouchers Commission; the authority found that they also entered into a series of agreements aimed at foreclosing the market by restricting the entry of new players and preventing the launch of dematerialised vouchers.	By effect	Fine of EUR 415 million
Hungary	<a href="#">GVH, CooperVision Optikai Cikkek Forgalmazó, Vj/96-310/2010 (23 June 2014)</a>	Leading suppliers of contact lenses and lens-care products used a market-research arrangement to exchange non-public, firm-specific recent sales-volume and revenue data, broken down by company and product segment; the GVH found that this created an information-sharing system capable of restricting competition because it gave competitors access to commercially sensitive data unavailable from public sources.	By effect	Fine of approx. EUR 257,000
Norway	<a href="#">Norwegian Competition Authority, Coop / Norgesgruppen / Rema (21 August 2024)</a>	Three grocery chains agreed on arrangements that allowed extensive collection of each other's store-level price information using hand scanners; the authority found that this enabled large-scale price surveillance in a market covering around 95% of grocery	By effect	Fine of approx. EUR 420 million

OECD Jurisdiction	Case	Conduct / key finding	Restriction of competition	Outcome
		turnover.		
Spain	<a href="#">CNMC, Tabacos / AENA Servicios Comerciales</a> ; annulled by the <a href="#">National High Court, Logista (2025)</a>	A tobacco distributor provided manufacturers with access to daily sales data by product and province; the CNMC found that these exchanges were strategic, recent, highly detailed and non-public, but the National High Court later annulled the decision on the basis that the anticompetitive effects had not been sufficiently proved.	By effect	EUR 21.9 million fine annulled on appeal
Spain	<a href="#">CNMC, S/0482/13 – Fabricantes de automóviles (23 July 2015)</a>	Twenty-one vehicle manufacturers/distributors and two consultancy firms engaged in a systematic exchange of current and future highly disaggregated commercially sensitive information relating to distribution and after-sales services; the CNMC treated this as part of a single and continuous cartel infringement, including exchanges affecting dealer remuneration, margins and commercial strategy.	By object	Fine of EUR 171 million
Türkiye	<a href="#">Competition Board, Corporate Loans, 17-39/636-276 (28 November 2017)</a>	Banks exchanged competitively sensitive information on loan prices, amounts and maturities in the corporate and commercial banking markets; the Board emphasised the importance of the timing and scope of the exchanges, and whether customers were aware of them, before concluding that some parties had infringed Article 4 through unlawful information exchange.	By object	Fine of approx. EUR 428,000
UK	<a href="#">CMA, Case 50507.2, Nortriptyline (4 March 020)</a>	Companies exchanged commercially sensitive information on prices, volumes, supply timing and entry plans with the aim of maintaining prices, or at least slowing their decline; the CMA found that the exchange reduced strategic uncertainty and had the object of preventing, restricting or distorting competition.	By object	Fine of GBP 1.5 million

## OECD authority guidance

Table A.2 below is based on an online search for competition authority guidance discussing information sharing. The table is not exhaustive but intended to highlight recent practices found in relation to guidance in this area across the OECD.

**Table A.2. Information Exchange Guidance Adopted by OECD Jurisdictions**

OECD Jurisdiction	Date	Category of Guidance	Language	Reference
Australia	2023	Guidance on information exchange within broader horizontal co-operation guidelines	English	<a href="#">Australian Competition and Consumer Commission (ACCC), Guidelines on Concerted Practices</a>

OECD Jurisdiction	Date	Category of Guidance	Language	Reference
Belgium	2025	Sector-specific information exchange guidance	English	<a href="#">Belgian Competition Authority (BCA), Communication on Competition Law and Combination Therapies</a>
Belgium	2019	Guidance embedded in trade or professional association rules	French	<a href="#">Belgian Competition Authority, Guide relatif à l'échange d'informations</a>
Canada	2021	Guidance on information exchange within broader horizontal co-operation guidelines	English	<a href="#">Competition Bureau, Competitor Collaboration Guidelines</a>
Chile	2011	Guidance embedded in trade or professional association rules	Spanish	<a href="#">Fiscalía Nacional Económica (FNE), Guía sobre asociaciones gremiales y libre competencia</a>
Colombia	2010	Guidance embedded in trade or professional association rules	Spanish	<a href="#">Superintendencia de Industria y Comercio (SIC), Cartilla sobre asociaciones de empresas y asociaciones de profesionales</a>
Czechia	2021	Guidance embedded in trade or professional association rules	Czech	<a href="#">Office for the Protection of Competition, Výměna informací mezi soutěžiteli</a>
Denmark	2025	Guidance embedded in trade or professional association rules	Danish	<a href="#">Danish Competition and Consumer Authority, Vejledning om kommunikation i brancheforeninger og konkurrencereglerne</a>
European Union	2023	Guidance on information exchange within broader horizontal co-operation guidelines	English	<a href="#">European Commission, Communication from the Commission – Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements</a>
France	2012	Guidance embedded in trade or professional association rules	French	<a href="#">Autorité de la concurrence, Organismes professionnels et droit de la concurrence</a>
Greece	n/a	Guidance on information exchange within broader horizontal co-operation guidelines	English	<a href="#">Hellenic Competition Commission, Guidelines on the implementation of Article 1A</a>
Germany	2021	Guidance embedded in trade or professional association rules	German	<a href="#">Bundeskartellamt, Leitlinien für Genossenschaften</a>
Iceland	2020	Guidance embedded in trade or professional association rules	Icelandic	<a href="#">Competition Authority of Iceland, Leiðbeiningar um beitingu 15. gr. samkeppnislaga Undantekning frá banni við samráði fyrirtækja</a>
Ireland	2017	Guidance embedded in trade or professional association rules	English	<a href="#">Competition and Consumer Protection Commission, Notice on Activities of Trade Associations and Compliance with Competition Law</a>
Israel	2014	Guidelines embedded in trade or professional association rules	English	<a href="#">Antitrust Authority, Public Statement 3/14 In the matter of Trade Associations and Their Activity</a>
Japan	2020	Guidance embedded in trade or professional association rules	English	<a href="#">Japan Fair Trade Commission, Guidelines Concerning Activities of Trade Associations</a>
Korea	2021	National guidance specifically on information exchange	Korean	<a href="#">Korea Fair Trade Commission (KFTC), Guidelines on the Review of Unfair Collaborative Acts Involving Information Exchange</a>
Latvia	n/a	Guidance embedded in trade or professional association rules	Latvian	<a href="#">Konkurences padome, Vadlīnijas asociācijām un to biedriem par Konkurences likuma 11.pantā minētā aizlieguma ievērošanu</a>

OECD Jurisdiction	Date	Category of Guidance	Language	Reference
Lithuania	n/a	Guidance embedded in trade or professional association rules	Lithuanian	<a href="#">Lithuanian Competition Authority, Asociacijų veikla: kaip nepažeisti Konkurencijos teisės reikalavimų</a>
Mexico	2015	National guidance specifically on information exchange	Spanish	<a href="#">Federal Economic Competition Commission (COFECE), Guía sobre el intercambio de información entre agentes económicos</a>
Mexico	2020	National guidance specifically on information exchange (public consultation update)	Spanish	<a href="#">Federal Economic Competition Commission (COFECE), Public consultation update to Guía sobre el intercambio de información</a>
Netherlands	2019	Guidance on information exchange within broader horizontal co-operation guidelines	English	<a href="#">Authority for Consumers and Markets, Guidelines Collaborations between competitors</a>
New Zealand	2021	Guidance embedded in trade or professional association rules	English	<a href="#">Commerce Commission New Zealand, Fact Sheet The Commerce Act – Trade associations</a>
Portugal	2021	Guidance embedded in trade or professional association rules	Portuguese	<a href="#">Portuguese Competition Authority (AdC), Guia para associações de empresas</a>
Slovakia	2014	Guidance on information exchange within broader horizontal co-operation guidelines	Slovak	<a href="#">Slovak Competition Authority, Commentary on § 4 - § 6 Agreement restricting competition</a>
Spain	2009	Guidance embedded in trade or professional association rules	Spanish	<a href="#">Spanish National Commission on Markets and Competition (CNMC), Guía sobre asociaciones empresariales</a>
Sweden	n/a	Guidance embedded in trade or professional association rules	Swedish	<a href="#">Swedish Competition Authority (Konkurrensverket), Vägledning för samarbete inom ramen för en branschorganisation</a>
Türkiye	2013	Guidance on information exchange within broader horizontal co-operation guidelines	English	<a href="#">Turkish Competition Authority, Guidelines on Horizontal Cooperation Agreements</a>
United Kingdom	2023	Guidance on information exchange within broader horizontal co-operation guidelines	English	<a href="#">Competition and Markets Authority, Horizontal Agreements Guidance</a>
United States	2014	Sector-specific information exchange guidance	English	<a href="#">U.S. Department of Justice &amp; Federal Trade Commission, Antitrust Policy Statement on Sharing of Cyber Threat Information</a>
United States	2016	Sector-specific information exchange guidance	English	<a href="#">U.S. Department of Justice &amp; Federal Trade Commission, Antitrust Guidance for Human Resource Professionals</a>
United States	2026	Guidance on information exchange within broader horizontal co-operation guidelines (public consultation)	English	<a href="#">U.S. Department of Justice &amp; Federal Trade Commission, Public consultation on guidance on business collaborations</a>

# Notes

<sup>1</sup> This policy paper was prepared by Greg Jackson and Eduardo Mangada Real de Asúa of the OECD Competition Division with support from Livia Labelle. Helpful comments and review were provided by Ori Schwartz, Cristina Volpin, Despina Pachnou Carolina Alessi, and Beatriz Marques, also of the OECD Competition Division. The note was prepared to serve as background material for discussions on “Information sharing in Competition Policy” taking place at the June 2026 session of the OECD Competition Committee.

<sup>2</sup> This paper primarily uses the term “information sharing”. It covers reciprocal exchanges as well as one-way communications, indirect sharing through third parties or digital tools, and public communications. The term does not imply that the information is necessarily confidential or non-public, although exchanges of confidential, strategic or competitively sensitive information generally raise greater competition concerns. The paper also uses “information exchange” interchangeably, reflecting the common terminology in legal practice, even where the conduct is not strictly reciprocal.

<sup>3</sup> This policy paper for the OECD Competition Committee draws together economic insights, enforcement practice and guidance across OECD jurisdictions. It updates earlier OECD work on information exchange and unilateral disclosure by examining how recent literature, decisional practice and guidance have developed in this area (OECD, 2011<sup>[2]</sup>; 2012<sup>[102]</sup>), and addressed adjacent topics, including algorithmic competition (OECD, 2023<sup>[88]</sup>), hub-and-spoke (OECD, 2019<sup>[101]</sup>) and algorithms and collusion arrangements (OECD, 2019<sup>[101]</sup>).

<sup>4</sup> Data pooling services are arrangements through which a third party collects data from multiple firms, standardises or aggregates them, and redistributes the resulting information often as benchmarks, market statistics, or comparative reports to participating firms or subscribers.

<sup>5</sup> The review focusses on enforcement cases adopted after 2010 in OECD jurisdictions. It includes cases in which the information exchange was investigated and addressed in a decision or judgment as a standalone theory of harm, rather than cases where information sharing was examined only as part of a broader cartel agreement or horizontal co-operation arrangement. The review does not seek to provide an exhaustive mapping of all investigations involving information exchanges, including investigations that were closed without a decision or remain pending.

<sup>6</sup> In the European Union, the Court of Justice, acting through the preliminary ruling procedure, provides authoritative interpretations of EU law that are binding on national courts and contribute to the uniform application of EU law across Member States.

<sup>7</sup> In the United States, Statements of Interest submitted by the Department of Justice pursuant to 28 U.S.C. § 517 (under which the DOJ may “attend to the interests of the United States” in pending litigation, including cases brought by private parties in which it is not a party) set out the government’s views on the proper interpretation and application of the law, without necessarily taking a position on ultimate liability. While such statements may be persuasive and can influence judicial reasoning and the development of case law, they do not bind the court and do not constitute judicial findings that the conduct at issue violates the antitrust laws. This distinguishes them from judicial rulings, including preliminary rulings of the Court of Justice of the European Union, which provide authoritative interpretations of EU law.

<sup>8</sup> The concepts of ‘by-object’ infringement under EU competition law and ‘per se’ restraint under US antitrust law originate in different legal systems and cannot be used interchangeably. Under EU law, establishing a restriction by object requires a context-specific assessment of the content, objective aims and legal and economic context of the practice. That inquiry may involve some contextual analysis, but it remains distinct from the fuller effects-based inquiry conducted under the rule of reason in the United States. The two categories therefore differ in purpose and scope: while both identify conduct that is treated as particularly harmful to justify stricter treatment, the ‘by-object’ category is not a shortcut to liability and does not dispense with contextual analysis (Ibáñez Colomo, 2024<sup>[58]</sup>). In the United States, by contrast, the per se category operates as a near-conclusive presumption of illegality once the restraint has been

properly characterised as falling within a recognised per se category, while a separate “rule of reason” track requires a fuller effects-based assessment. This paper uses the two terms in proximity when comparing enforcement approaches across jurisdictions, using 'by-object or per se' as shorthand to refer to stricter analytical approaches under which certain categories of information (particularly exchanges involving private, firm-specific and forward-looking information) may be treated as inherently or presumptively harmful, without requiring a full demonstration of actual market effects. This shorthand should not be taken to imply that the two categories are substantively equivalent

<sup>9</sup> The relevance of pro-competitive rationales at the object-assessment stage is illustrated by the CJEU's judgment in *Asnef-Equifax* (CJEU, 2006<sup>[99]</sup>). The case concerned a shared credit register operated by competing financial institutions in Spain. The Court found that the exchange did not restrict competition under Article 101(1) TFEU because it pursued a legitimate aim (reducing information asymmetry between lenders and borrowers) that was capable of improving the functioning of credit markets. Crucially, the pro-competitive rationale was not assessed as an exemption under Article 101(3) TFEU but was considered at the prior stage of determining whether the exchange had a restrictive object or effect. The judgment therefore illustrates that where an information exchange has a genuine pro-competitive purpose, authorities must engage with that purpose before characterising the exchange as restrictive by its very nature.

<sup>10</sup> An additional illustration of the effects-based approach can be found in the DOJ's ongoing litigation against Agri Stats in the United States. The DOJ's complaint alleges that Agri Stats organised information exchanges through which meat processors shared detailed, current and highly granular information on prices, output, costs, inventories and operations, and that the effect of those exchanges was to suppress competition by stabilising and increasing prices and reducing supply (DOJ, 2023<sup>[55]</sup>). In particular, the DOJ's allegations are not limited to the sensitivity of the information itself, but how competitors used that information, asserting that meat processors used Agri Stats reports to identify opportunities to raise prices, align conduct more closely with competitors, and restrain output in concentrated meat markets (DOJ, 2023<sup>[55]</sup>). In May 2026, the DOJ and several states filed a proposed settlement (DOJ, 2026<sup>[95]</sup>), discussed in Box 10. The case therefore illustrates that even in a DOJ-initiated civil enforcement action, standalone information-sharing claims in the United States are generally pleaded and pursued under a rule-of-reason framework that focusses on the tendency to suppress competition, consistent with the analytical approach set out in the statements of interest filed in the Pork (DOJ, 2024<sup>[34]</sup>) and Frozen Potato litigations (DOJ, 2026<sup>[56]</sup>).

<sup>11</sup> For example, in recent years cases have included:

Belgian Competition Authority (2025<sup>[98]</sup>), “The Belgian Competition Authority has accepted commitments from Belgapom in relation to the determination of the Belgapom quotation (price index for potatoes)”, *Press Release nr 4 – 2025*, <https://www.belgiancompetition.be/en/about-us/actualities/press-release-nr-4-2025>;

European Commission (2025<sup>[100]</sup>), “Commission fines car manufacturers and association €458 million over end-of-life vehicles recycling cartel”, *Press release*, [https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip\\_25\\_881/IP\\_25\\_881\\_EN.pdf](https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip_25_881/IP_25_881_EN.pdf);

Finnish Competition and Consumer Authority (2025<sup>[97]</sup>), “The Supreme Administrative Court imposed a fine of 6.56 million euros on the Finnish Real Estate Management Federation and real estate management companies for a competition restriction aimed at raising prices”, <https://www.kkv.fi/en/current/press-releases/the-supreme-administrative-court-imposed-a-fine-of-6-56-million-euros-on-the-finnish-real-estate-management-federation-and-real-estate-management-companies-for-a-competition-restriction-aimed-at-raisi/>;

<sup>12</sup> See guidance in Table A.2 in the Annex for: Korea, Section II; US, Cyber Threat Information, p. 6; Mexico, Sections B.1 and B.2; Belgium Trade Associations, section A; Chile, Section 2; Colombia, Section I; Denmark, Chapter 1; Germany, Section A; Iceland, para. 2; Ireland, para. 1.1; Israel, para. 1; Latvia, Section 1; Lithuania, p. 1; Portugal, p. 18; Spain, Section C; Netherlands, paras. 53–54; Slovakia, para. 3; Türkiye, Section 2.1; UK, paras. 8.3–8.4; EU, paras. 6.2.3–6.2.4.3. and para. 373.

<sup>13</sup> See guidance in Table A.2 in the Annex for: Korea, Section III and Section IV.3.b; Belgium Combination Therapies, para. 33; US Cyber Threat Information, p. 7; US Human Resource Professionals, pp. 4-6; Mexico, Section C; Belgium Trade Associations, Section B; Chile, Section 2; Colombia, pp. 15–16; Denmark, Section 6.2; France, paras. 180–209; Germany, paras. 119-125 and 147-150; Iceland, paras. 19, 23-24, 36, 41, 60, 72, 79 and 84-86; Ireland, para. 4.39; Israel, paras. 29–32; Japan, Part II, Items 9(1) and 9(2); Latvia, Section 3.1 and 3.4.1; Lithuania, pp. 1-2;

Portugal, pp. 19–20; Canada, Section 3.7.2; Greece, paras. 43–53; Netherlands, paras. 57-69; Slovakia, para. 3; Türkiye, pp. 12–16; UK, paras. 8.33–8.82; EU, paras. 6.2.3–6.2.4.3.

<sup>14</sup> See guidance in Table A.2 in the Annex for: Korea, Section IV.2.b(2), Section IV.3.b and Section V.3; Belgian Combination Therapies, para. 31; US Cyber Threat Information, pp. 6-7; US Human Resource Professionals, pp. 1-11; Mexico, Section D; Belgium Trade Associations, Sections C–F; Chile, Section 2; Colombia, p. 17; Czechia, subsection “And what exchange of information can be considered permissible?”; Denmark, pp. 50–52; Germany, paras. 121-125 and 147-150; Iceland, paras. 24, 30-34, 47-48, 57, 65, 72, 76-80 and 82-86; Ireland, Example 6 (“Information Exchange Probably Compatible”); Japan, Part II, Items 9(3); Latvia, Sections 3.2, 3.3, 3.4.1-3.4.4, and 4.1-4.3; Lithuania, pp. 1-2; New Zealand, p. 5; Portugal, p. 21; Canada, Section 3.7.2; Greece, para. 54; Slovakia, paras. 2 and 5; UK, pp. 201–202; EU, paras. 434–435.

<sup>15</sup> See guidance in Table A.2 in the Annex for: Chile, p. 15-16 and 36; Colombia, pp. 18-19; France, para 187 and pp. 61-62; Israel, paras. 24-32; Latvia, Section 3.4.3; Portugal, p. 22-23 and 29.

<sup>16</sup> See guidance in Table A.2 in the Annex for: Belgium, Sections C, D, E and F; Colombia, p. 13; Denmark, Chapters 3, 4, 5, 6, 7, 8 and 9; France, Section I.; Germany, Section D.I.4; Japan, Part II(1); New Zealand, p. 2.