COMPETITION POLICY INTERNATIONAL

CPI Antitrust Chronicle
Dec 2014 (1)

A Comparative Analysis of the Use of Merger Remedies in Technology Industries

Scott Sher & Kellie Kemp
Wilson Sonsini Goodrich & Rosati, PC

www.competitionpolicyinternational.com
Competition Policy International, Inc. 2014© Copying, reprinting, or distributing this article is forbidden by anyone other than the publisher or author.

A Comparative Analysis of the Use of Merger Remedies in Technology Industries

Scott Sher & Kellie Kemp[1]

I. INTRODUCTION

Antitrust regulators reviewing technology mergers frequently are confronted with complicated issues related to remedies. Indeed, merger remedies in technology markets often involve regulation of the merging parties' post-merger conduct as opposed to so-called "structural" remedies such as the sale of physical assets or intellectual property. Although structural relief historically has been the preferred remedy to resolve anticompetitive mergers, non-structural relief may be more appropriate in many technology mergers that are vertical in nature, involve transfers of intellectual property rather than accumulation of physical assets, or raise complex network effects issues.

Remedies involving non-technology mergers often are easier to administer than those in technology mergers, as the divestment of an "autonomous, on-going business unit"[2] often is a relatively straightforward task in non-technology industries: an airline merger can be resolved with the divestiture of airport slots; a retail or supermarket merger can be resolved with the divestiture of brick-and-mortar locations in a geographic region. These are options not always available as remedies in technology company mergers.

Confronted with difficult questions, antitrust agencies around the world are dealing with remedies in technology markets differently. This paper explores the varying approaches to technology remedies taken by the U.S. antitrust agencies, the European Commission, and MOFCOM in China, using case studies within each jurisdiction to explore how general principles play out in actual technology market mergers.

II. THE U.S. AGENCIES' APPROACH TO REMEDIES IN TECHNOLOGY MARKETS

The U.S. antitrust agencies (the Federal Trade Commission ("FTC") and Department of Justice ("DOJ")) recognize that technology industries often exhibit unique characteristics, particularly considering the nascent, dynamic, and growing nature of many such markets.[3] But

[1] Scott Sher is a partner and Kellie Kemp is an associate at Wilson Sonsini Goodrich & Rosati, PC in Washington, DC. The authors would like to thank Franklin Rubinstein and Jeff VanHooreweghe for their insightful comments, additions, and edits.

[2] Richard Feinstein, *Negotiating Merger Remedies, Statement of the Bureau of Competition of the Federal Trade Commission*, Federal Trade Commission (Jan. 2012), http://www.ftc.gov/tips-advice/competition-guidance/merger-remedies.

[3] For example, the agencies have recognized that technology markets present concerns not usually as pivotal in more traditional industries; for example, the prevention of "harm to innovation"—an often "overlooked" yet "decisive factor" in enforcement decisions in high tech industries. *See* Renata B. Hesse, Deputy Assistant Att'y Gen. for Criminal & Civil Operations, U.S. Dep't of Justice, Remarks as Prepared for the Conference on Competition & IP Policy in High-Tech. Indus.: At the Intersection of Antitrust & High-Tech: Opportunities for Constructive

these unique characteristics have not lead to decreased antitrust enforcement; indeed, the agencies emphasize that they "can and do[] enforce the antitrust laws in fast-moving high-tech markets."[4] Nor have these unique characteristics lead necessarily to unique remedies. The U.S. agencies continue to seek structural remedies (*i.e.*, divestitures of assets) in mergers raising horizontal competition concerns and behavioral remedies (*e.g.*, firewalls or confidentiality restrictions) in mergers raising vertical concerns—an approach the agencies tend to follow in more traditional industries.[5]

Yet, the DOJ's 2011 *Policy Guide to Merger Remedies* recognized the ongoing shift in enforcement from the strong preference for structural remedies to a more balanced analysis, emphasizing that:

> [t]he Division's focus is on effective relief for the particular merger presented. In certain factual circumstances, structural relief may be the best choice to preserve competition. In a different set of circumstances, conduct relief may be the best choice. In still other circumstances, a combination of both conduct and structural relief may be appropriate.[6]

The 2011 Policy Statement identified several different kinds of conduct remedies that may be effective in preserving competition—including firewalls, non-discrimination and anti-retaliation provisions, mandatory licensing, transparency provisions, and prohibitions on certain contracting practices.[7] As described below, these types of provisions are most effective in technology mergers.[8]

Engagement, (Jan. 22, 2014), http://www.justice.gov/atr/public/speeches/303152.pdf; *see also* Comm'r Julie Brill, *Merger Enforcement in High-Tech Markets*, *Skadden Arps/Compass Lexecon Symposium* (Jan. 28, 2013), http://www.ftc.gov/sites/default/files/documents/public_statements/merger-enforcement-high-tech-markets/130128skaddenhightechmarkets.pdf; Comm'r Joshua D. Wright, *Evidence-Based Antitrust Enforcement in the Technology Sector*, 3(1) CPI ANTITRUST CHRON. (Mar. 2013), https://www.competitionpolicyinternational.com/assets/Free/WrightMar-13Special.pdf.

[4] Brill, *supra* note 3, at 5; *see also* Hesse, *supra* note 3.

[5] Dir. Richard Feinstein, *Negotiating Merger Remedies, Statement of the Bureau of Competition of the Federal Trade Commission*, Federal Trade Commission (Jan. 2012), http://www.ftc.gov/tips-advice/competition-guidance/merger-remedies; *see also Antitrust Division Policy Guide to Merger Remedies, Department of Justice Antitrust Division*, *U.S. Dep't of Justice* (June 2011), http://www.justice.gov/atr/public/guidelines/272350.pdf; Comm'r Edith Ramirez, FTC Behavioral Remedies, Federal Trade Commission (Nov. 17, 2011), http://www.americanbar.org/content/dam/aba/publications/antitrust_law/at311550_fall_forum_panel_5.authcheckdam.pdf. The oft-cited exception to this approach is In the Matter of Evanston Northwestern Healthcare Corp., No. 9315, 2008 FTC LEXIS 62 (F.T.C. 2008), in which the FTC held the acquisition would substantially lessen competition in managed care organizations ("MCOs"). Although the merger was horizontal, the FTC concluded that in this "highly unusual case," divestiture would be too costly and risky, and instead imposed a conduct remedy that required Evanston to "establish separate and independent negotiating teams—one for Evanston Hospital . . . and another for Highland Park." *See* Comm'r Tom Rosch, *In the Matter of Evanston Northwestern Healthcare Corp.*, Opinion of the Commission on Remedy, Docket No. 9315, http://www.ftc.gov/sites/default/files/documents/cases/2008/04/080428commopiniononremedy.pdf.

[6] *Antitrust Division Policy Guide to Merger Remedies*, *supra* note 5.

[7] *Id.* at 13.

[8] Ariel Ezrachi, *Under (and Over) Prescribing of Behavioural Remedies*, (Univ. of Oxford Centre for Competition Law and Policy, Working Paper No. (L) 13/05, 2013), at 4, *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=913773.

Where a remedy is required, the U.S. antitrust agencies resolve nearly all anticompetitive horizontal mergers with a structural remedy, sometimes in conjunction with behavioral relief provisions to effectuate the primary structural relief. In technology markets, structural relief can be a straightforward tool in resolving horizontal concerns where a particular division or business line can be sold or an intellectual property ("IP") portfolio licensed.[9] Also, especially in software markets, structural relief can be effectuated in the form of a license, as opposed to divestment. In such cases, the license can be exclusive (even as to the licensor), or can allow the licensor to retain some rights to use the intellectual property, if retaining those rights is necessary to achieve some of the efficiencies of the transaction.[10]

A review of the remedies imposed by the U.S. agencies in recent technology mergers is instructive. Examples of horizontal mergers involving structural remedies (including licensing remedies) in technology markets include:

- *CoreLogic/DataQuick (2014)*: CoreLogic, a leading residential property information and analytics provider, acquired rival DataQuick Information Systems.[11] Prior to the acquisition, CoreLogic licensed to DataQuick certain national assessor and recorder bulk data that allowed DataQuick to sell a competitive product. The FTC concluded the parties had substantial overlap in the residential property information market and, as a condition of clearance, required that CoreLogic license the national assessor data to third party Renwood Realty Trac to enable the firm to "step into the shoes" of DataQuick and become an effective competitor.[12] The FTC also mandated that CoreLogic provide Renwood with customer and data management information, and waive employment and customer contract provisions to allow Renwood to hire and retain former DataQuick employees and customers.[13]
- *Nielsen/Arbitron (2013)*: Nielsen Holdings, a consumer insights provider, acquired Arbitron, a media and marketing research firm, in an effort to expand its understanding of the U.S. consumer's daily media consumption.[14] The FTC challenged the acquisition on the basis of its horizontal overlap in the *future* market for national syndicated cross-platform audience measurement services, concluding that, in absence of the merger, the products eventually developed by each company would compete directly against one another.[15] The FTC ultimately required Nielsen to license to comScore, Inc. certain

---

[9] *Id.* at 2.

[10] *Antitrust Division Policy Guide to Merger Remedies*, *supra* note 5.

[11] *CoreLogic to Acquire Marshall & Swift/Boeckh and Dataquick Information Systems for $661 Million* (July 1, 2013), *available at* http://www.corelogic.com/about-us/news/corelogic-to-acquire-marshall-swift-boeckh-and-dataquick-information-systems-for-$661-million.aspx.

[12] FTC Decision and Order, *In the Matter of CoreLogic, Inc.*, (May 20, 2014), http://www.ftc.gov/system/files/documents/cases/140521corelogicdo.pdf.

[13] *Id.*

[14] *Nielsen Acquires Arbitron* (Sept. 30, 2013), *available at* http://www.nielsen.com/content/corporate/us/en/press-room/2013/nielsen-acquires-arbitron.html.

[15] FTC Final Decision and Order, *In the Matter of Nielsen Holdings and Arbitron Inc.*, FTC No. 131 0058, (Feb. 28, 2014), http://www.ftc.gov/system/files/documents/cases/140228nielsenholdingsdo.pdf.

Arbitron assets to allow the company to replicate Arbitron's efforts in developing a national syndicated cross-platform audience measurement service.[16]

Yet, divestiture may not always fully resolve the competitive concerns of a merger, and may even defeat the pro-competitive efficiencies that would have resulted from the combination, particularly where a merger occurs between parties that: (i) operate at different levels of a supply chain (a "vertical merger"), (ii) compete in a networked market, or (iii) derive their market power primarily from IP assets.[17] When fashioning appropriate relief in technology markets, the agencies must consider the importance of network effects and IP, and evaluate whether the relief preserves, for example, merger efficiencies and the companies' incentives to innovate. The examples below are instructive:

- *Google/ITA (2011)*: In this vertical merger, the DOJ alleged that Google would have the incentive to deny or degrade access to ITA Software's airfare pricing and shopping systems ("P&S systems") to rival flight search competitors.[18] Recognizing that the merger would generate significant pro-competitive effects, the DOJ allowed the transaction to proceed but required Google to continue to license ITA's software to other companies, and erect a firewall to prevent Google from viewing sensitive competitive information in order to eliminate the likelihood of future discrimination.[19] Google also agreed to establish a formal process for customer and competitor complaints and submit to government monitoring for five years.
- *Comcast/NBC Universal (2011)*: The DOJ and Federal Communications Commission ("FCC") had concerns that this joint venture for Comcast and NBCU programming assets would enable Comcast to harm online video distributors ("OVDs")—viewed by Comcast as a competitive threat to its cable business—by denying them content from the joint venture.[20] The DOJ and FCC required Comcast to make available to OVDs the same package of broadcast and cable channels available to traditional video programming distributors on reasonable terms. The DOJ settlement also established a commercial arbitration procedure to resolve licensing disputes between the joint venture and OVDs, while the FCC Order allowed Comcast's satellite and telephone competitors to invoke FCC arbitration procedures to resolve program access and retransmission consent

---

[16] *Id.* Commissioner Joshua Wright filed a Dissenting Opinion, rejecting the FTC's theory that a merger could present competitive concerns in a market that did not yet exist. Commissioner Wright argued that the Commission overstepped its mandate in an attempt to "fix[]… perceived economic welfare-reducing arrangements." Dissenting Statement of Comm'r Joshua D. Wright, *In the Matter of Nielsen Holdings N.V. and Arbitron Inc.*, FTC No. 131-0058 (Sept. 20, 2013), at 6, http://www.ftc.gov/sites/default/files/documents/public_statements/dissenting-statement-commissioner-joshua-d.wright/130920nielsenarbitron-jdwstmt.pdf.

[17] Ezrachi, *supra* note 8, at 4; *see also* Robert Pitofsky, Former Chairman, Prepared Remarks at the Antitrust, Tech. & Intellectual Property Conference, Berkeley Center for Law and Technology: Antitrust and Intellectual Property: Unresolved Issues at the Heart of the New Economy (Mar. 2, 2001), http://www.ftc.gov/public-statements/2001/03/antitrust-and-intellectual-property-unresolved-issues-heart-new-economy.

[18] Final Judgment, *United States v. Google, Inc. & ITA Software, Inc.*, Case No. 1:11-cv-00688, (D.C. Oct. 5, 2011), http://www.justice.gov/atr/cases/f275800/275897.pdf.

[19] *Id.*

[20] *Justice Department Allows Comcast-NBCU Joint Venture to Proceed with Conditions* (Jan. 18, 2011), *available at* http://www.justice.gov/atr/public/press_releases/2011/266149.htm.

disputes. The DOJ and FCC additionally required Comcast to give other companies' content equal treatment under any of its broadband offerings, and prohibited Comcast from unreasonably discriminating in the transmission of an OVD's lawful network traffic to a Comcast broadband customer.[21]

- *Live Nation/TicketMaster (2009)*: Live Nation, a concert venue operator and promoter with a developing ticket sales line, merged with primary ticketing service TicketMaster.[22] The merger involved a horizontal overlap in primary ticketing services, and a vertical combination that could increase the combined entity's power in the concert management industry. The DOJ resolved the horizontal and vertical concerns with a "hybrid" structural and behavioral package, requiring LiveNation to license its ticketing platform to third party AEG and divest its ticketing division to Comcast-Spectator. The DOJ also prohibited LiveNation from (i) retaliating against venue owners that contracted with a rival for primary ticketing services, (ii) bundling or tying primary ticketing services and concert management services, or (iii) using ticketing data in their non-ticketing businesses.[23]

III. THE EUROPEAN COMMISSION'S APPROACH TO REMEDIES IN TECHNOLOGY MARKETS

Like the United States, the European Commission ("EC" or "Commission") views structural remedies (or "commitments")[24] as generally the best method for remedying horizontal overlaps, and even some vertical or so-called "conglomerate" combinations that would otherwise be anticompetitive.[25] The Commission affirms that structural commitments are desirable in

[21] *Id.*

[22] Christine A. Varney, Assistant Att'y Gen., U.S. Dep't of Justice, Remarks as Prepared for the South by Southwest: The TicketMaster/LiveNation Merger Review and Consent Decree in Perspective (Mar. 18, 2010), http://www.justice.gov/atr/public/speeches/263320.htm.

[23] Final Judgment, *United States v. Ticketmaster Entm't, Inc.*, Case No. 1:10-cv-00139, (D.C. Jul. 30, 2010), http://www.justice.gov/atr/cases/f260900/260909.htm. Another example of a deal that was resolved with a hybrid remedy is the merger between *Costar & Loopnet*, where the FTC required Costar to divest Loopnet assets to resolve its competitive concerns in the market for commercial real estate listings, and also required Costar to refrain from suing customers who chose to list with any other provider of online commercial real estate listings, a tactic that Costar previously had engaged in to impede its competitors from attracting new customers. Decision and Order, *In the Matter of CoStar Group, Inc., Lonestar Acquisition Sub, Inc., & LoopNet, Inc.*, FTC No. 1110172 (Aug. 30, 2012), http://www.ftc.gov/sites/default/files/documents/cases/2012/08/120830costardo.pdf.

[24] If the Commission is concerned that a merger may significantly affect competition, it will accept from the parties "commitments," i.e. offers to make certain modifications to the transaction to guarantee continued competition, rather than impose remedies upon the parties. *See* "Merger Control Procedures," European Commission, http://ec.europa.eu/competition/mergers/procedures_en.html.

[25] Commission notice on remedies acceptable under Regulation 139/2004 and under Regulation 802/2004 (2008) OJ C 267/1, ¶17 ("Divestiture commitments are the best way to eliminate competition problems resulting from horizontal overlaps, and may also be the best means of resolving problems resulting from vertical or conglomerate concerns"). *See also* OECD Policy Roundtable, Remedies in Merger Cases, DAF/COMP(2011) 13, at 234 ("commitments which are structural in nature . . . are, as a rule, preferable from the point of view of the Merger Regulation's objective"); 1-5 Competition Law of the European Community §5.17 ("As a general matter, the Commission prefers structural commitments that involve the divestiture of viable, stand-alone businesses, provided that "the new commercial structures resulting from them will be sufficiently workable and lasting to ensure that the significant impediment to effective competition will not materialise.").

many cases because they are often more "effective"[26] and "easier" to implement than behavioral remedies,[27] and do not "require on-going monitoring measures."[28]

The EC does recognize the utility of non-structural commitments, and provides that a conduct remedy can be used where it is "at least equivalent in its effects to a divestiture.[29] Indeed, the EC has been more liberal than the U.S. agencies in applying non-structural remedies to technology mergers, in part perhaps because of the EC's more collaborative commitments process, which allows the merging parties to craft the relief that would remedy a combination's anticompetitive effects,[30] and also because of the Commission's strong consideration of competitor complaints throughout the investigation.[31]

Nevertheless, the Commission emphasizes the many risks associated with behavioral remedies—including ongoing supervision requirements and implementation difficulties,[32]—and even in technology markets structural commitments remain the most common method for remedying horizontal combinations, as exemplified by the following recent mergers:

- *Syniverse Holdings/MACH (2013)*: The two companies were the two largest providers of Data Clearing ("DC") services and Near Trade Roaming Data Exchange ("NRTRDE") services, which enable consumers to use their mobile phones while travelling abroad. The Commission conditionally approved the transaction with Syniverse's commitment to divest MACH's DC and NRTRDE services in the EEA. The divestiture would include

[26] *Antitrust: Commitment Decisions – Frequently Asked Questions* (Mar. 8, 2013), *available at* http://europa.eu/rapid/press-release_MEMO-13-189_en.htm.

[27] *ECN Recommendation on the Power to Impose Structural Remedies*, European Competition Network (Nov. 20, 2013), http://www.concurrence.public.lu/fr/agenda/2013/Reunion-directeurs-generaux-26-et-27-novembre-2013/ECN-recommendation-on-the-power-to-impose-structural-remedies.pdf.

[28] *Working Party No. 3 on Co-operation & Enforcement: Remedies in Merger Cases*, Directorate for Financial and Enterprise Affairs Competition Committee, European Union (June 28, 2011), http://ec.europa.eu/competition/international/multilateral/2011_jun_remedies.pdf; *see also Best Practice Guidelines: The Commission's Model Texts for Divestiture Commitments & the Trustee Mandate under the EC Merger Regulation*, European Commission (Dec. 5, 2013), http://ec.europa.eu/competition/mergers/legislation/best_practice_commitments_trustee_en.pdf.

[29] *Id.*

[30] Alexander Italianer, Director Gen., European Commission, Legal certainty, proportionality, effectiveness: the Commission's practice on remedies at the Charles River Associates Annual Conference (Dec. 5, 2012), http://ec.europa.eu/competition/speeches/text/sp2012_07_en.pdf.

[31] *See* "Antitrust and General Correspondence," *available at* http://ec.europa.eu/competition/contacts/antitrust_mail.html. ("The Commission encourages citizens and firms to inform about suspected infringements of competition rules."); *see also* Edward T. Swaine, *Competition, Not Competitors' Nor Canards: Ways of Criticizing the Commission*, 23 U. PA. J. INT'L ECON. L. 597, 625 ("Another very important difference between the U.S. and EU approaches is the far greater importance attached to competitors by the European Commission during the course of its merger investigations . . . ." (alteration in original)); DG Competition Best Practices on the conduct of EC merger control proceedings (Jan. 20, 2004), http://ec.europa.eu/competition/mergers/legislation/proceedings.pdf.

[32] Working Party No. 3 on Co-operation and Enforcement: Remedies in Merger Cases, *supra* note 27; *see also* Frank Maier-Rigaud, *Behavioral versus Structural Remedies Under EU Law*, UCL Centre for Law, Econs. & Society, London (Nov. 13, 2013), http://www.ucl.ac.uk/cles/events/materials/13-11-13-maier-rigaud.pdf.

MACH's proprietary software, operational assets, dedicated personnel and infrastructure, and contracts with Mach's top customers, among other commitments.[33]

- *Thermo-Fisher/Life Technologies (2013)*: The EC concluded that the acquisition would create anticompetitive horizontal overlaps in the production and supply of (i) media and sera for cell culture, (ii) gene silencing products, and (iii) polymer-based magnetic beads.[34] The EC granted clearance with significant structural remedies, requiring Thermo Fisher to divest its media and sera business (excluding single use technologies where the parties' activities did not overlap); its gene modulation and silencing business; and its polymer-based magnetic beads business.

Despite the heightened operating costs associated with behavioral remedies, the Commission has been more willing than the U.S. agencies to accept their use to support structural commitments and also as stand-alone relief—even for mergers that were granted unconditional clearance by the U.S. antitrust agencies.[35] The "flexibility and reversibility" of behavioral remedies make them ideal tools for "dealing with changing market realities," especially the case in technology markets and networked industries,[36] as demonstrated by the following cases:

- *Intel/McAfee (2011)*: While the FTC cleared without conditions Intel's proposed acquisition of McAfee, an antiviral software designer, the EC did not. Although the parties were active in complementary product markets, the EC determined other companies might suffer from either a lack of interoperability between their security solutions and Intel CPUs, or from technical tying between Intel's CPUs and McAfee's security solutions.[37] The EC imposed a series of behavioral remedies requiring Intel to: (1) ensure the interoperability of the merged entity's products with those of competitors, (2) ensure competitor access to all information necessary to use functionalities of Intel's CPUs and chipsets in the same way as those functionalities used by McAfee, (3) refrain from hampering the operation of competitors' security solutions on Intel CPUs or chipsets, and (4) refrain from hampering the operation of McAfee's security solutions on personal computers containing CPUs or chipsets sold by Intel's competitors.[38]
- *Hutchison/ Telefonica Ireland (2014)*: The EC raised concerns regarding Hutchison 3G UK, Ltd.'s proposed acquisition of Telefonica's Ireland Division that the merger would lead to higher prices in the "relatively small" Irish mobile telecommunications network market.[39] In this case the Commission imposed a hybrid remedy, with both structural and

---

[33] Mergers: Commission clears Syniverse's acquisition of MACH, subject to conditions (May 29, 2013), *available at* http://europa.eu/rapid/press-release_IP-13-481_en.htm.

[34] Mergers: Commission clears acquisition of Life Technologies by Thermo Fisher, subject to conditions (Nov. 26, 2013), *available at* http://europa.eu/rapid/press-release_IP-13-1167_en.htm.

[35] Ezrachi, *supra* note 8.

[36] *Id.*

[37] Mergers: Commission clears Intel's proposed acquisition of McAfee subject to conditions (Jan. 26, 2011), *available at* http://europa.eu/rapid/press-release_IP-11-70_en.htm.

[38] *Id.*

Mergers: Commission clears acquisition of Telefónica Ireland by Hutchison 3G, subject to conditions (May 28, 2014), *available at* http://europa.eu/rapid/press-release_IP-14-607_en.htm.

conduct components. Hutchison agreed to divest up to 30 percent of the merged network capacity to two mobile virtual network operators ("MVNOs") for between 5-10 years at a fixed price and bandwidth.[40] The two MVNOs would have occasion to become full MNOs in the long term through H3G's commitment to divest five blocks of spectrum at a future date. The parties also committed to continuing an existing network sharing arrangement with Eircom, the third-largest MNO in the market, and maintain the necessary technical assistance and ancillary services as needed.[41]

IV. THE EVOLVING APPROACH TO REMEDIES IN CHINA

It is still too early in China's enforcement of its Anti-Monopoly Law ("AML") to make any conclusive observations on how China's antitrust agency (the Ministry of Commerce, MOFCOM) "traditionally" approaches remedies in technology mergers. But it is certain that MOFCOM has been very active in seeking remedies from merging technology companies since the AML was first adopted in 2008.[42]

Indeed, MOFCOM has made its presence well-known in the antitrust community, in part due to its novel approach to the remedies it has imposed in technology mergers.[43] Many of the remedies imposed include requirements that have never before been sought by other antitrust agencies around the world, making it a minefield of unpredictability. MOFCOM has imposed—seemingly without restriction—exceptional remedies deemed inferior and too difficult to administer by other jurisdictions; for example, (i) hold separates, (ii) pricing restrictions, (iii) investment requirements, (iv) sale restrictions, and (v) monitors designed to assure that the parties comply with the agency's often expansive and complicated remedial demands.[44] Below is a summary of the more significant remedies sought in technology mergers in recent years:

- *Thermo Fisher/Life Technologies (2014)*: Both the FTC and EC imposed divestment requirements upon Thermo Fisher, yet MOFCOM additionally mandated that Thermo-Fisher commit to reduce catalog prices for certain products by one percent each year for the next ten years, without lowering discount rates offered to Chinese distributors, and also honor existing supply contracts or, at the partner's option, offer a perpetual, non-exclusive technology license for those products.[45] The U.S. antitrust agencies, as well as the EC, consider pricing restrictions to be an inferior remedy, because they do not cure the anticompetitive concentration but merely dampen its effect.[46] Additionally, all of the

[40] *Id.*

[41] *Id.*

[42] Competition Policy and Enforcement in China, The US-China Business Council (Sept. 2014), *available at* https://www.chinabusinessreview.com/sites/default/files/AML%202014%20Report%20FINAL_0.pdf.

[43] *Id.*

[44] Scott Sher & Daniel Kane, *Recent Enforcement Decisions Involving Technology Mergers and Acquisitions at MOFCOM*, 10(2) CPI ANTITRUST CHRON., at 3 (Oct. 2014), *available at* http://www.wsgr.com/publications/PDFSearch/sher-1014.pdf.

[45] *The Ministry of Commerce Conditionally Approves the Acquisition of Shanghai Lifei Information & Technology Company by Thermo Fisher Scientific Inc.*, (Jan. 20, 2014), *available at* http://english.mofcom.gov.cn/article/newsrelease/significantnews/201401/20140100465371.shtml.

[46] Sher & Kane, *supra* note 44.

DOJ, FTC, and EC would hesitate to impose such contract and sale restrictions and thereby become embroiled in the day-to-day business of the merging entities.

- *Microsoft/Nokia (2014)*: Microsoft's $7.2 billion acquisition of Nokia's handset division—a move that would allow the tech giant to begin manufacturing smart phone devices,[47] received unconditional clearance from both the U.S. and EC regulators.[48] Yet, the deal faced resistance from Chinese authorities, who determined the merger "would have a greater impact" on the Chinese market than on U.S. or EU markets.[49] MOFCOM required that Microsoft and Nokia honor existing fair, reasonable, and nondiscriminatory ("FRAND") terms for all standard essential patents ("SEPs"); prohibited Microsoft from seeking injunctive relief against alleged infringers in China; and demanded that Microsoft not sell any patents within the Nokia portfolio for a period of five years.[50] As with pricing restrictions, other agencies predominately consider sale restrictions to require an impermissible intrusion into and monitoring of the business affairs of the parties.
- *Western Digital/Hitachi (2011)*: the FTC required Western Digital to divest to Toshiba Corporation the Hitachi 3.5" drive manufacturing and IP assets in response to competitive concerns regarding overlap in desktop hard drives (and particularly with the concurrent acquisition of Samsung's hard drive business by Seagate).[51] Although the FTC (and EC) were satisfied with the divestiture, MOFCOM required behavioral remedies disfavored in other jurisdictions; for example, MOFCOM imposed a "hold separate" to maintain the perception of competition between Western Digital and Hitachi, even after the merger already closed. The United States and EC, on the other hand, only utilize "hold separates" as an interim post-decision measure to ensure the buyer does not degrade the assets before sale.[52] MOFCOM's hold separate was far more expansive and required that Hitachi and Western Digital continue to compete despite Western Digital's acquisition of Hitachi's hard-disk drive business—a highly unusual remedy and something that the U.S. and EC antitrust would not require. Indeed, the hold separate in this transaction, as well as a similar one to resolve MOFCOM's concerns with the MStar/MediaTek merger,[53] has been in effect for two years, maintaining the artifice of

[47] *Microsoft Officially Welcomes the Nokia Devices and Services Business*, (Apr. 25, 2014), *available at* http://news.microsoft.com/2014/04/25/microsoft-officially-welcomes-the-nokia-devices-and-services-business/.

[48] *Justice Clears Microsoft's Purchase of Nokia's Mobile Business* (Dec. 2, 2013), *available at* http://online.wsj.com/articles/SB10001424052702304854804579234191181632558; *see also* Commission Clears Acquisition of Nokia's Mobile Device Business by Microsoft, European Commission (Dec. 4, 2013), *available at* http://europa.eu/rapid/press-release_IP-13-1210_en.htm.

[49] *The Ministry of Commerce Holds a Special Press Conference on Anti-monopoly Work*, (Apr. 11, 2014), *available at* http://english.mofcom.gov.cn/article/newsrelease/press/201404/20140400554324.shtml.

[50] *Id.*

[51] FTC Action Preserves Competition in the Market for Desktop Hard Disk Drives Used in Personal Computers, (Mar. 5, 2012), *available at* http://www.ftc.gov/news-events/press-releases/2012/03/ftc-action-preserves-competition-market-desktop-hard-disk.

[52] Sher & Kane, *supra* note 44.

[53] MOFCOM similarly imposed a "hold separate" to remedy the merger between rivals Mediatek Inc. and MStar Semiconductor, requiring that MStar's LCD TV control chip business remain an independent competitor from Mediatek. *See MOFCOM Announcement No. 61 of 2013 on Approval of Decision on Anti-monopoly Review*

competition between Hitachi and Western Digital, even though Western Digital owns the Hitachi assets.

V. CONCLUSION

Technology mergers present issues not often present in combinations occurring in more traditional industries, and jurisdictions around the globe are dealing with such challenges differently. Merging parties should bear in mind differences between these jurisdictions when contemplating future mergers and acquisitions, as the remedy strategy presented by each jurisdiction can play a role in the ultimate success of a deal.

Against Concentration of Undertakings on the Merger of MStar Semiconductor, Inc. (Cayman) by Media Tek. Inc. with Additional Restrictive Conditions, *supra* note 49.