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# Standardization for the Digital Economy:
## The Issue of Interoperability and Access Under Competition Law

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Summary of the paper by Björn Lundqvist, Standardization for the Digital Economy: The Issue of Interoperability and Access Under Competition Law, The Antitrust Bulletin 2017, Vol. 62, number 4, 710-725, available at http://journals.sagepub.com/doi/full/10.1177/0003603X17733359. This article attempts to identify what legal systems are applicable when data is obtained from devices, sent to other devices, and/or distributed to the Cloud, and, ultimately, when it is reused.

Summary

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**Standardization for the Digital Economy: The Issue of Interoperability and Access Under Competition Law**

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## Introduction

The article attempts to identify what legal systems are applicable when data is obtained from devices, sent to other devices, and/or distributed to the Cloud, and, ultimately, when it is reused.[1] The article specifically focuses on the application of competition law vis-á-vis the firms included in the standardization of the Digital Economy. The article concludes that general competition law may be applicable to access technical standards, ecosystems, or digital platforms when system leaders control these, or when joint standard-setting in consortia has been conducted to exclude or obstruct access to relevant markets.[2] The main issue under competition law in the Data Economy, in its current development, is to create a levelled playing field by trying to facilitate the implementation of Internet of Things.

## II. Data Economy for the Internet of Things

With Google, Amazon, and Facebook as the pioneers, private entities are starting to collect and store large volumes of data.[3] Firms seem to be using data together with software for profiling and predictive modelling including algorithms, to categorize, identify, and predict behaviour of potential customers or users.[4] Moreover, we seem to see that e-platforms, brick-and-mortar, and also telecom firms are teaming up in consortia to develop upper-layer interoperability standards.[5] Possibly, the technology decided in the consortia will be either put before an official standard-setting organization (SSO) in the hope of getting the technology to be elevated as a de jure standard, or put on the market with the object of getting the technology to become the de facto standard. We thus see some development for organised institutionalized upper-layer interoperability standard-setting, mirroring what have been customary practice when developing the infrastructure standards for the telecom sector, e.g. the 5G telecom standard soon being rolled out.

For some decades we have seen the procedure of developing technical infrastructure standards for the mobile telecom industry being institutionalized; nonetheless, it is very likely that the future will see a great deal of litigation between patentees and entrants for the infrastructure technology for the IoT, and perhaps also for the upper-layer interoperability technology. The industry might, however, overcome this if there is prudent and well-defined technical standards for the IoT, under which firms may access essential technologies under fair, reasonable and non-discriminatory royalty rates

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[1] See ARIEL EZRACHI&MAURICE E. STUCKE, VIRTUAL COMPETITION THE PROMISE AND PERILS OF THE ALGORITHM-DRIVEN ECONOMY (2016); and MAURICE E. STUCKE & ALLEN GRUNES, BIG DATA AND COMPETITION POLICY (2016).

[2] C-170/13, Huawei Technologies, EU: C:2015:477.

[3] Google is involved in several investigations in several jurisdictions regarding the company's business conduct. For example, EUR. COMM'N, STATEMENT OF OBJECTIONS TO GOOGLE ON ANDROID OPERATING SYSTEM AND APPLICATIONS (20 Apr. 2016). Cf. http://europa.eu/rapid/press-release_IP-16-1492_en.htm

[4] Stanley Greenstein, Our Humanity Exposed 112 et seq. (Doctoral Thesis, 2017).

[5] See for example Ericsson Press Release, The Formation of the "5G Automotive Association" (AUDI AG, BMW Group, Daimler AG, Ericsson, Huawei, Intel, Nokia and Qualcomm Incorporated, Sept. 27, 2016), https://www.ericsson.com/news/160927-telecommunications-and-automotive-players_244039854_c.

(FRAND). This implies, of course, that the firms that have provided the infrastructure technology are able to get a reasonable return for investing in R&D to provide 5G. Otherwise, the next generation (6G) to create the "Internet of Everything" will not be developed.

## III. Standards for the Internet of Things, Industrial Internet—the Issue of Interoperability

### A. Basic infrastructure interoperability standards and Upper Layer Standards

As Nicolo Zingales stated, at a minimum, one should distinguish standards for the "lower" and the "upper" layer, pointing to a division between infrastructural interoperability and data interoperability. While infrastructural interoperability, i.e. 5G, enables devices to exchange data under common network protocols, data interoperability concerns more directly users and developers of IoT applications within separate ecosystems, allowing them to meaningfully connect the software interfaces of those applications.[6]

There is currently a global technical standard race for IoT. Several different SSOs are fighting to become the SSO part of the collaborations that enact the standards for the new IoT era. Moreover, several prestandard collaborations (consortia) are being formed, including several different combinations of important players for the technologies that might be included in the IoT standards. These consortia are like "pacts" conducting lobbying and outright frontal attacks on other formations or pacts, all in the effort of getting their technologies inside the relevant standard.[7]

Indeed, the Commission seems in its policy to support, even force, standard-setting in all forms for the Digital Economy. Unfortunately, the Commission's efforts might even take wrong turns. One initiative from the Commission is to regulate FRAND, by decreasing the underlying value for which FRAND is calculated, not allowing SEP holders charging less to firms providing cheaper products etc. Such a legislative effort, even though done by soft law, will not promote competition, and may lessen the innovation rate and stop the development of the next generation, 6G, the "Internet of Everything".

Perhaps the European Commission should be more cautious vis-á-vis standard consortia and other forms of premarket collaborations now being set up for the upcoming Internet of Things/Industrial Internet paradigm and also against the risk of the establishment of dominance and dominant ecosystems in the Data Economy. The Commission and other competition agencies need to work "smart" and focus on collaborative and unilateral conducts that are likely to become anticompetitive when the IoT markets can be identified. This should presumably be done under Article 101 TFEU, so as not to resort to Article 102 TFEU, or the exceptional circumstance doctrine, and the Huawei case. Indeed, the ecosystems now being developed for the IoT may very well be such collaborations that may be encompassed by Article 101 TFEU as excluding competition.

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[6] Nicolo Zingales, Of Coffee Pods, Videogames, and Missed Interoperability: Reflections for EU Governance of the Internet of Things (TILEC Discussion Paper No. 2015-026, 2015), SSRN: https://ssrn.com/abstract¼2707570.

[7] See BJÖRN LUNDQVIST, STANDARDIZATION UNDER EU COMPETITION RULES AND US ANTITRUST LAWS – THE RISE AND LIMITS OF SELF-REGULATION 16 et seq. (2014).

## IV. The Application of Competition Law

### A. Standard-Setting—to Create Interoperability—Under Article 101 TFEU

According to the Commission, where participation in standard-setting is unrestricted and the procedure for adopting the standard in question is transparent, standardization agreements, which contain no obligation to comply with the standard and provide access to the standard on fair, reasonable, and non-discriminatory (FRAND) terms, will not normally restrict competition within the meaning of Article 101(1) TFEU.[8] There are certainly joint standard-setting efforts that should be exempted from the antitrust rules, but there are also collaborations that might benefit from a more intense antitrust scrutiny.

### B. Cases Regarding Standard-Setting

Consortia driven standard-setting should benefit from heightened antitrust scrutiny under Article 101 TFEU. Should anticompetitive exclusionary effects of such collaborations be found that outweigh any procompetitive effects, a possible remedy could be giving access under Article 101 TFEU. Indeed, interoperability obstruction under collaborative standard-setting within an ecosystem between firms, either horizontally or vertically, would render the technology to be forced open, and new entrants may gain access by obtaining the interfaces that might be needed.

### C. Dominance and Abuse

In reference to the SEPs and refusal to deal, there is the essential facility doctrine, or the exceptional circumstance doctrine. This doctrine especially under Huawei is certainly vague, and the indispensable requirement is also very uncertain. However, the doctrine has never implied a "license-to-all" requirement. Huawei dealt with the injunction doctrine, and violating the Huawei test does not imply that the SEP holder is obliged to license, only to abstain filling for injunction. Indeed, refusing access to SEPs or access to platform can be very similar conduct. "Interoperability obstruction" could include more conduct while still being more acceptable than obliging a collector of data to share. Moreover, as discussed above, possibly collusionary exclusion, group boycott, under Article 101 TFEU could be proven if the conduct could be viewed as based on a collaborative standard-setting effort or something similar. If Article 101 TFEU is applicable, dominance does not need to be proven.

## V. Conclusion

The competition authorities need to become more refined in their analysis of joint standard setting in the Digital Economy. Indeed, there is an interface between consortia, joint standard-setting, and the development of vertical and horizontal ecosystems that competition authorities need to take into consideration. A "carte blanc" attitude does not suffice and can create monopolies not only on individual markets but in the Digital Economy as a whole. Indeed, there is a possibility to judge the current tendency where ecosystems join in consortia fashion to develop data interoperability technology that do not facilitate solution to market failures or mirror infrastructure technology, but

[8] Eur. Comm'n, Guidelines on the Application of Art 101 of the Functioning of the European Union to Horizontal Co-Operation Agreements, OJ C 11, 14/01/2011, 1 (Horizontal Guidelines).

rather joint agreements regarding the use of certain technology to exclude or obstruct competing technologies or firms. Indeed, it may hit the idea of an open internet, with full interoperability. Of course, some of these strategies may only reflect competition on the merits, but the European Commission, by implementing a very broad safe harbor, has abdicated any form of antitrust scrutiny in reference to these consortia. Competition law clearly still has a place and a use in the Data Economy.[9]

[9] Not alone of this opinion: Allan Grunes & Maurice E Stucke, No Mistake About It: The Important Role of Antitrust in the Era of Big Data (University of Tennessee Legal Studies Research Paper No. 269, 2015), http://ssrn.com/abstract¼2600051.