Position Statement of the Max Planck Institute for Innovation and Competition of 26 April 2017 on the European Commission’s “Public consultation on Building the European Data Economy”


The Max Planck Institute for Innovation and Competition is a research institute within the Max Planck Society that since its founding 51 years ago has been committed to the analysis and development of intellectual property and competition law on the basis of established scientific principles. The Max Planck Institute undertakes research on fundamental questions of law in these areas. Through its wide range of contributions to research, it has initiated and provided guidance for important legislation at the national, European and international level. The Institute regularly advises governmental bodies and other organisations. It takes an international approach and places emphasis on the comparative analysis of law as well as economic and technological aspects of legal development.

Based on its Communication of 10 January 2017, the European Commission has launched a public consultation in which the Max Planck Institute takes part by answering several questions contained in the online consultation form. This Position Statement is annexed to the Institute’s responses to the online consultation. It provides a more comprehensive picture of the Institute’s assessment of the Communication and discusses core issues that particularly relate to Chapter 3 of the Communication on ‘data access and transfer’ including issues of ownership in data

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and access to data. This Position Statement also takes into account the debate on further developing the concept of data portability, which is addressed in Chapter 5 of the Communication. In presenting this Position Statement, the Institute also builds on its early Position Statement of 16 August 2016 on ‘Data Ownership and Access to Data’.

I. Introduction

1 The Institute welcomes and supports the initiative of the European Commission and its policy goal of enhancing access to data as a measure to build a European data economy in the process of the current digital transition of industrial production. The Institute shares the Commission’s understanding that the goal should be to promote innovation and ultimately economic growth and social welfare by enhancing new business models that build on a new generation of machines, tools and devices in which sensors are embedded as well as new business models for the exploitation of the data that are collected through such sensors by relying on big-data analyses in particular.

2 The Institute is also of the opinion that access to data will be key for the building of the European data economy. Data access is not only important for other business operators, but also for public sector bodies acting in the public interest, including public health, protection of the environment, control of energy consumption, infrastructure and urban planning.

3 In the introduction to its Communication the Commission quite rightly points out that data is not only used as a component of new and innovative services and to improve goods or production, but also for improving decision-making. Indeed, improving decision-making can even be considered as the overarching paradigm for describing the advantages that derive from any processing of data in this new economy, whether it happens within a machine or a technological environment or by producing new knowledge and insights of human beings through data analytics which will then enable the government and business operators to make better decisions. In the field of autonomous driving, decisions will be made by the connected car itself, whereby modern algorithms based on deep learning will constantly improve and enhance the quality of those decisions based on the data they collect from

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the sensors embedded in the car and additional information the car receives through the Internet of Things (IoT).

4 The overarching goal of improving decision-making deserves to be pointed out, since ‘improving decisions’ is not a public interest in itself. The societal and economic effects completely depend on the goals that are pursued by the decision-maker, or – as will now often be the case – by the machine that will increasingly assist human beings in making decisions as an expression of artificial intelligence. This shows that the ‘free flow of data’ should not always be promoted. This is especially the case where decision-making by firms can harm competition. A critical discussion on the cartel-like effects of big-data applications that result from automated and targeted pricing based on data analyses and algorithms is just about to emerge\(^4\) and may need to be taken into account more critically in the future.

5 Further limitations to the ‘free-flow-of-data’ principle may become necessary insofar as the protection of fundamental rights will be affected by automated decision-making processes. Fundamental rights, such as the protection of human dignity and personality rights, including in particular the right to data protection, need to be carefully considered and a high level of protection needs to be maintained. The Institute believes that in this regard a separate in-depth discussion of legal as well as ethical principles is of fundamental importance. The Max Planck Institute therefore welcomes the corresponding discussion initiated by the European Parliament.\(^5\)

6 As regards its Communication of 10 January 2017, the Commission should however not be accused of neglecting the potential negative effects of making use of data. In Chapter 2 of the Communication, where the Commission conceives the free flow of data as almost a new fundamental freedom, it also confirms that there are public-interest grounds that can justify restrictions, not least among them legitimate privacy concerns. Moreover, the Commission


moves a considerable step forward in its recent Communication by now taking into account the interface between new data-based business models and data protection, while in the earlier Communication of 6 May 2015 on the Digital Single Market Strategy, the free-flow-of-data initiative was deliberately limited to non-personal data. This limitation was important at the preparatory stage in order to clearly separate the different barriers to the flow of data. But the Institute welcomes the fact that the Commission is now widening the perspective. The free-flow-of-data initiative is not only about firms that produce intelligent machines and robots that operate in the factories of industrial customers. It also regards pharmaceutical companies that monitor the body functions of patients during the course of medication and the manufacturers of household devices that may also collect data about the living habits of individuals. In building up their business models, especially firms offering sensor-equipped products to end-consumers necessarily have to take into account data protection rules.

7 By far, the Communication does not appear to address all issues relevant for the development of the European data economy, yet it is very ambitious. By not specifically taking into account the potentially negative effects of access, the Commission concentrates its undertaking on identifying the impediments to the free flow of data in the market for the purpose of preparing future actions to overcome such impediments. This is a valid approach by itself. To the extent that the Institute hereby comments on the Communication, it seeks to contribute to a future regulatory framework for the European data economy by looking at both ownership and access. In the following, both aspects of ownership and access regimes will be discussed in more detail.

II. Data ownership and potential legislation on a data producer’s right

8 Prior to the publication of the Communication a most intensive academic, political and even public debate emerged on whether data ownership should be recognised and who the owner should be. The discussion was even inspired by the Commission itself in its 2015 Communication on the Digital Single Market Strategy. The Institute particularly welcomes the Commission’s decision to discuss a potential ‘data producer’s right’ only as part of a legal framework for data access. This distinguishes the Commission’s proposal from other more recent academic proposals on a data producer’s right that advocate a proprietary right that seeks economic participation of the data producer in the income generated from the commercialization of data in

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downstream markets. While such proposals are influenced by considerations of distributive justice – especially when it comes to deciding on who should be recognised as the data-producer –, by deductions based on already existing rights, such as the right in personal data, and by dogmatic arguments, the Commission is taking a functional approach that relies on economic arguments. This coincides with the position of the Institute according to which any recognition of a new intellectual property right as a particular form of regulation of the market is in need of an economic justification. Rather than on arguments of distributive justice, such justification has to rely on a sound understanding of identifiable market failures. A new property rights system should only be introduced if such a right will improve the functioning of the data economy. This need for an economic justification also has to guide the design of any new property right regime, including the protected subject-matter, the right-holder and the scope of protection. Hence, the question to be answered is whether it is possible to identify a market failure in the form of insufficient access to data that requires the introduction of a data producer’s right as considered by the Commission.

More specifically, the Communication considers the possibility of legislation on a data producer’s right as a right of the ‘owner or the long-term user’ of a sensor-equipped device. The idea is that such a right would give more choice to the data producer and thereby help the data producer to use the data and to ‘unlock’ machine-generated data held by the manufacturers. This implies that there are cases where the owner or user has a legitimate interest in access to the data, whereas the manufacturer having de facto control over the data would not be willing to grant such access.

The Institute agrees that such situations could indeed be imagined. One hypothetical scenario regards maintenance cases. Sensors are often embedded in modern devices to enable predictive maintenance. Indeed, manufacturers also have an interest in providing repair and maintenance services. If the user of the device wants to switch to an independent supplier of repair and maintenance services, this will not be possible if the information controlled by the manufacturer is not made available to the competitor. Another example regards cases where users use multiple devices equipped with sensors that are supplied by different manufacturers. In such cases, there is an obvious interest of the user to have access to the datasets of the different manufacturers. For instance, the owner of a factory needs access to the data collected by all the

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machines used in the factory in order to employ a comprehensive data-based factory management system. The same is true of the operator of any building, such as an administrative building or a hotel, who is in need of access to the data collected by all the grid operators for the supply of water, electricity, energy and ITC services, as well as the suppliers of smart devices, for operating a smart facility management system for that building. Furthermore, there is the example of a farmer who uses the machines of different manufacturers but wants to operate a system for ‘smart farming’ based on the service of an external service provider. In some of these cases the manufacturer of the devices will be willing to grant access. However, manufacturers could also refuse to grant access to the data to force customers to buy their products only. Hence, in all of these cases, promoting access to the data in the interest of the user can be justified by competition policy concerns. It will be seen whether the Commission’s consultation will produce better evidence for the existence of such problems and the practical need for intervention in such cases.

11 If one assumes that there is such a market failure that requires legislative action, the question remains whether the data producer’s right is the right approach to tackle the problem. Indeed, against the backdrop of the questions asked in the online consultation, the data producer’s right seems to be only one option, and indeed one that is situated at the very interventionist end of the scale. Hence, it is important to also look at other alternative approaches. The following options are indicated in the consultation: (a) let the parties decide who should have the right to license the re-use of the data (at para. 13 below); (b) introduce non-mandatory contract rules that can be combined with the application of rules on the control of unfair contract terms in B2B relations (at para. 14 below); (c) both parties share the right to license the re-use of the data (at para. 15 below); (d) the manufacturer is vested with the exclusive right to license the re-use of the data (at para. 16 below); and (e) the user will be vested with the exclusive right to license the re-use of the data (‘data producer’s right’) (at paras 17-19 below).

12 The Commission is addressing these options in a rather neutral manner, namely, with regard to a potential positive effect on the availability of machine-generated data for the purpose of re-use. This is important to note, since it is also clear that a decision on the attribution of a property right to the user of the device could also have negative effects on access to data when third parties seek direct access to the larger and more diverse datasets held by the manufacturer.

13 The option to leave the allocation of the right to license the re-use of the data to the parties based on the principle of freedom of contract will most likely lead to an agreement whereby the manufacturer will retain that right. The manufacturer typically exercises de facto control over the data. Such de facto
control based on technological protection measures already enables manufacturers to commercialise the data since third parties will otherwise not be able to access this data. This explains why firms today can already engage in ‘trading’ and ‘sharing’ data based on contract law without legal recognition of data ownership. Factual control creates factual exclusivity as the basis for effective bargaining and pricing. In contrast, the user of the device will hardly be able to claim full control over the licensing of the re-use of the data, since it will be the manufacturer who will typically use standard contract terms formulated in its own interest. Even in cases as described above where the user has a clear interest in access to the data, a manufacturer who strives to reserve a larger portion of the business for itself will be very reluctant to grant a contractual access right to the user.

But non-mandatory contract rules coupled with the application of rules on the control of unfair contract terms could in fact provide some help. In particular, such contract rules could specifically be limited to cases as described above where there is an identifiable interest of the user in gaining access. However, there are also particular shortcomings to that approach. Such rules may be quite difficult to enforce, especially if they rely on the rather diffuse standard of fairness. More importantly, the scope of application would be too limited. Such rules would only protect the direct purchaser who has entered into a contract with the manufacturer. But the direct purchaser and owner of the device can also immediately lease the device to an end-user who is not a party to the contract with the manufacturer.9 Similarly, small entrepreneurs often do not buy devices, but corresponding services. For example, small farmers often refrain from buying all machines themselves for economic reasons and instead ‘buy’ farming services from the operators/owners of farming machines that work on the fields of many farmers. Yet it is the individual farmer who is in need of access to the data without being the owner or even the user of the device. Moreover, the original purchaser may sell the device after a certain period of use. Under the principle of privity of contract, the contractual right of access to the data will not travel with the property in the used device.

Most problematic is the idea of recognising the manufacturer and the user of the device as co-owners of the data. There is only one argument that seems to support this solution. If one asks who is ‘producing the data’, on a purely factual basis, the argument could be advanced that both parties should be considered co-producers. First, the input of the manufacturer is essential. It is in fact the manufacturer who has developed the product and the underlying business model and fully controls the technical process of ‘producing’ the data. But the specific data will not be produced without use of the device; and the kind of data produced depends on who uses the device and how it is used.

9 This case is explicitly stated in the Communication (n. 1), p. 13.
Yet the obvious problem is that co-ownership would lead to a blocking situation if only one of the co-owners is willing to license, and the applicable national law on ownership requires joint administration. In particular co-ownership will prevent access where the user wants to provide a third party with access to the data to enable a service for the user against the interests of the manufacturer. The applicable national law could only provide some leeway by providing for a duty to cooperate by not unduly refusing consent to the licensing of the re-use. However, such a duty would also need to be enforced before the courts in case of conflict.

16 The investment made by the manufacturer in the development of the product and the innovative business model could argue in favour of vesting an exclusive right to license in the manufacturer. This would also have advantages for many re-users, since they would get access to the whole dataset of the manufacturer collected from all the devices the manufacturer has put on the market. However, investment by itself does not justify a new IP right. Any new IP right would be in need of being justified by an identifiable market failure to which it responds. Yet the manufacturer is not in need of a property right. As shown above (at para. 13), it can in any case assert the right to license the re-use of the data based on its *de facto* control over the data.

17 Yet, without further legislation, the problem remains that exclusive control of the manufacturer over the data will not help the user of the device in cases where this user has a vital interest in access to the data. This leaves us with the question whether an exclusive right of the user as the ‘data producer’ should be recognised. However, this proposal also has to be rejected. Such a right would not go far enough, since it does not really solve the underlying market failure problem (at para. 18 below), and, at the same time, it would go too far by creating additional access problems (at para 19 below).

18 The underlying problem is one of unequal bargaining power and the particular market power of the manufacturer. But recognition of an exclusive right as such cannot be considered a means to overcome superior market power.¹⁰ The exclusive property right vests the rightholder with full autonomy to license the right, even on a royalty-free basis. Since in the abovementioned situations the interest of the manufacturer consists in barring the rightholder from access, it will include a clause in its contract that compels the purchaser/user to grant an exclusive and royalty-free licence to the manufacturer. As regards users that are not directly legally bound by a contract with the manufacturer, the manufacturer could achieve the same result by obliging its direct customers to provide in their contracts with the users for the grant of an exclusive third-party licence to the manufacturer for the use of the data.

¹⁰ This argument is also made by Wolfgang Kerber, ‘A New (Intellectual) Property Right for Non-Personal Data? An Economic Analysis’ (2016) *Gewerblicher Rechtsschutz und Urheberrecht Internationaler Teil* 989, 996.
At the same time such exclusive ownership right would run the risk of restricting the abilities of the manufacturer to license the datasets under its control to third parties. Many third parties will not want to contract with the many individual users as rightholders if they seek, or even depend upon, access to the larger datasets controlled by the manufacturer. Hence, if a data producer’s right was introduced for the user of the device, a manufacturer would have to do everything in its power to obtain exclusive licences for the use of the data from all the users. Since such licences are clearly needed to create downstream data markets for the more comprehensive datasets held by the manufacturer, the law should not prevent the manufacturer from asserting such a right to license to third parties in its contracts with the users.

III. A data access right as a potential alternative to the data producer’s right

Rather than establishing a new property rights system, the better solution would therefore consist in recognising a targeted and non-waivable data access right. The legislature is at best confronted with an access problem. Hence, it should also limit any future legislation to solving this problem. Accordingly, the Institute recommends that the Commission consider legislation on such a data access right as a possible alternative approach to a data producer’s right.

This approach has several advantages. First, as a statutory non-waivable right it can also be vested in a person who is not the purchaser of the device. Indeed, the entitled person should be the one who has a legitimate interest in access to the data. This is not even necessarily the ‘user of the device’, as becomes apparent in the case of the farmer whose land is worked by a third-party service provider. The relevant interest arises from the need of a person, such as the farmer, for additional services linked to that data. In the light of this interest, it is not relevant who bought, who owns or who uses the device. It seems more appropriate to vest the right of data access in the beneficiary of the use of the device. Second, the interest in access also defines the scope of protection. The right of access should be limited to the purpose of conducting data analysis in the interest of the entitled person, irrespective of whether this analysis is organised within the company of the entitled person or whether this analysis is out-sourced to an independent data analysis service provider. In the latter case the data access right should include the right to request the manufacturer to grant access to the independent service provider.

Furthermore, it is to be noted that these limitations of the data access right can be regulated in a positive way, meaning that they can be formulated as requirements for the grant of the right in a way that builds on the specific interest in access. In terms of legal technique, this is a clear advantage. When
the Commission discusses the ‘data producer’s right’ of the user of the device it understands that the recognition of such right may go too far and thus require specific exceptions and limitations. Technically speaking, an exclusive data producer’s right would first be defined as a right in rem as regards general use of the data without any regard to the underlying market failure. Then, the legislature would have to cut back excessive protection by formulating exceptions and limitations. This, however, is enormously difficult to implement, since the legislature would have to cover all those cases in a negative way where there is no justification for protection. A data access right, on the other hand, would avoid excessive protection up front by directly targeting the market failures it is supposed to respond to.

23 However, there are several sub-issues of the data access right that will need further consideration and discussion. In particular, it is not clear whether the data access right should be implemented as a general access regime applicable to all sectors or whether a more sector-specific approach should be preferred. Indeed, it should be noted that the European legislature has already adopted sector-specific access regimes that build on a very different form of regulatory model as regards data access in favour of independent providers of motor vehicle maintenance and repair services. In the motor vehicle sector, this may be the more effective, and for consumers more convenient, approach to regulation of access to the data held by the manufacturer. This example shows that more information about the use cases will be needed prior to the adoption of general legislation. Ultimately, the most appropriate approach could consist in the adoption of general legislation on an access right for the beneficiary of the use of a sensor-equipped device without prejudice to the application of sector-specific regulation.

24 Another issue for further consideration and discussion concerns the question of whether access should be free of charge or not. In the motor vehicle sector, independent service providers can only claim access to the data of the manufacturers against the payment of a reasonable and proportionate fee (Article 7 Regulation No. 715/2007). In contrast, whether such a rule should also apply in a case where a patient seeks access to the personal data collected by a pharmaceutical company during the course of medication may be decided completely differently. In general, it seems less necessary to charge the beneficiary of the use of the device for data access than an independent service providers for its direct access. On the one hand, the manufacturer will already take into account the costs of generating and processing data in the

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framework of calculating the price for the sale of the device and the provision of on-going services directly linked to the device. Hence, the question of a fee will mostly relate to the additional costs the manufacturer incurs for enabling access. Yet, if legislation on access free-of-charge was adopted, the manufacturer could still consider future access costs as potential costs in calculating the price for the device. In this regard, it does not matter whether the holder of the access right is a direct or only an indirect purchaser. Direct purchasers can be expected to pass the surcharge on to any third person who may have a right of data access. In any instance, any system of remuneration should be based on the idea of FRAND licensing and possibly provide for institutional arrangements that reduce the likelihood that the potential for disputes about the appropriate royalty rate will reduce the effectiveness of the access regime.

25 While the Institute recommends taking the potential need for sector-specific legislation into account, the Commission should also work in the direction of streamlining regulatory approaches. In this regard, the potential right of data access could even be conceived as a generalisation of the right of data portability as already contained in Article 20 General Data Protection Regulation. Indeed, some cases that relate to the collection of personal data through devices in which sensors are embedded may already be covered by this right. An example would be the monitoring of the body functions of a patient during medication through a pharmaceutical company for the purpose of preventing hazardous side effects. Such patients will often be in need of several drugs and doctors or hospitals will often prefer to prescribe drugs from different pharmaceutical companies. Hence, also in this case the responsible doctor or hospital will be in need of access to the data of all pharmaceutical companies in order to get a reliable and better picture of the health of the patient. Whether Article 20 General Data Protection Regulation already applies depends on whether in this case the patient ‘has provided’ personal data to the pharmaceutical companies. This example highlights the particular pro-competitive character of the data portability legislation. Where several persons cooperate in the production of data, but only one person is in de facto control of the data, the other more access-minded person can be vested with the right of data access not only in its own interest but also for the purpose of opening up data markets to other economic players as data-service providers who may otherwise have difficulties entering the market. Hence, it seems that there is enough reason to consider the pros and cons of extending the data portability rule of Article 20 General Data Protection Regulation as a general regulatory approach beyond cases of use of non-personal data.

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IV. Legislation on access regimes

26 The Commission seems to believe that legal measures may especially be needed as regards access regimes. However, it is not that clear in which cases new access regimes are needed and whether the Commission should prefer generally applicable access regimes or sector-specific rules. The Institute believes that the discussion of different approaches to access regimes should be in the focus of the Commission’s work in continuation to its current initiative. Indeed, by advocating a discussion on a data access right for the beneficiary of the use of sensor-equipped devices, the Institute aims to redirect the discussion away from the introduction of new property rights to the more important discussion on access.

27 However, there are also huge challenges as regards possible legislation on access. Also in this regard, the Institute recommends taking an analytical approach. This analysis should first look at the availability of remedies under general competition law. In its Position Statement of August 2016, the Institute has already argued that mere reliance on competition law will not suffice.\(^\text{13}\) This is also shown in the cases above where the user of a device is in need of access to the data. In such cases, the requirement of market dominance can turn out to be a first major obstacle to enforcing competition law. Furthermore, competition law is not a very viable remedy where public sector bodies seek access to privately held data in order to fulfil public tasks. In such cases, public sector bodies are not conducting any economic activity and therefore cannot be regarded as an undertaking and, hence, as a victim of an exclusionary conduct in the sense of Article 102 TFEU. The only way to argue a violation of Article 102 TFEU would then be to rely on exploitation. Exploitation is, however, rather uncharted land for competition law practice, even more so in the case of data markets, where it may be particularly difficult to decide what the appropriate price for access should be.

28 As regards access of public sector bodies to data in particular, it is also clear that reliance on pure economic efficiency and market failure analysis cannot be the only guidepost for legislation. Public-interest grounds are equally important. In its consultation the Commission also asks whether stakeholders would support access regimes regarding non-personal data in favour of public sector bodies based on specific public-interest grounds. Such general, non-sector specific legislation could indeed be discussed. Still, to answer the question of whether access should be free of charge or not or how the royalty should be calculated, the concrete public-interest ground may play a key role. It seems much easier to justify access to privately held data where public

\(^{13}\) Position Statement of 16 August 2017 (n. 2), para. 32-38. See also the further analysis by Drexl (n. 8), 44-55 (with an analysis on the European case-law on refusals to license).
health is at stake than the interest of the state in promoting urban planning. Indeed, general legislation on the access of public sector bodies to privately held data would in certain ways constitute the other side of the coin of European legislation on public sector information, which, in the form of generally applicable legislation and some sector-specific exceptions, promotes the access of private businesses for the re-use of publicly held data.  

Public-interest grounds could also be imagined as a basis for access of private actors to data that is held by other private operators, including competitors. The REACH Regulation, which promotes access of producers of hazardous chemicals to other firms’ studies on animal testing for the purpose of avoiding unnecessary testing, is an example of such access regulation.  

This example shows that, as regards access of private entities, cross-sector regulation is not readily conceivable, since recognition of public interest as a basis for data access is a sector-specific exception rather than a cross-sectorial rule.

A most complex field will be cases in which private actors seek access to the data of other actors only for the purpose of enhancing their own decision-making. This is the original domain of competition policy. However, as is evidenced by the recommendation of the Institute to consider the introduction of a data access right for the beneficiaries of the use of devices in which sensors are embedded, access regimes can be conceived provided that these regimes are targeted at an identifiable market failure and that they will enhance competition.

In many instances data-sharing arrangements and platforms, even among competitors, will be important for making the data economy work, such as in the case of data-sharing platforms of car manufacturers as an infrastructure for autonomous driving. As mentioned in the introductory part, however, there is also the concern that private entities will share data too much, with potentially adverse effects on competition. This problem should primarily be dealt with by DG Competition. However, in the framework of the free-flow-of-data initiative as well, this risk should always be kept in mind, since any access regime that is too far-reaching can later be relied upon by firms as a justification for their data-sharing.

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