

DT RESPONSE TO COMMISSION 'S PUBLIC CONSULTATION ON THE *PRELIMINARY REPORT - SECTOR INQUIRY INTO CONSUMER IOT*

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Deutsche Telekom welcomes the Commission 's initiative to better understand the consumer IoT sector, its competitive landscape, developing trends and potential competition issues. The sector inquiry into the consumer IOT will provide the Commission with valuable insight into the functioning and the competitive constraints of these markets, as the Preliminary Report already shows.

The Preliminary Report makes clear how important it is in the digital era to have a better understanding of the needs of all market participants and the obstacles they are confronted with given that often a small number of large players control vertically integrated IoT ecosystems. The report rightly finds that these few large players unilaterally determine the terms of interoperability and 3rd party access to the ecosystem of smart devices and services and control the related user data. The control of all these aspects of such an ecosystem creates barriers to entry and obstructs effective competition of other market participants. Trying to compete with the few large players and their ample resources to preserve such a fully integrated ecosystem with proprietary technologies is prohibitive for other market participants given the high entry costs due to the significant upfront technology investment.

Deutsche Telekom appreciates the opportunity to share our views and comments on the Preliminary Report of the sector inquiry into consumer IoT, which already reflects the input we provided last year in the response to the questionnaires on the smart home and voice assistant markets. Non the less, we would like to use this opportunity to highlight some critical points and deficiencies of the consumer IoT markets in reaction to this Preliminary Report.

Current perceived market situation

Against the backdrop of increased digitalization large players have utilized the provision of easy and developer friendly access to cloud-based processing capabilities and services, which the developers use for the production of their customer services, in order to set “quasi standards”. The few large cloud providers provide common products with their “quasi standards”, which then are the basis for interoperability, instead of commonly developed “technical standards” for interoperability by a large community of companies. This trend is happening also in the wider IoT landscape beyond just the consumer IoT area, but you can also observe this phenomenon beyond the IoT space in many other areas of digital economy.

With the “quasi standards” gaining weight in the digital markets the technology is increasingly under control of a few large players. The incentive of other, smaller, companies to invest in collaborative innovation is also reduced by the fact that standardization bodies are often dominated by these large players. Even in the cases where a new technical standard is being developed in a new open manner the large players have massive influence on the outcome.

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Beyond that device manufacturer adjust their design to the requirements of large players that dominate the consumer IoT services market. Their first choice is to develop devices that are compatible with the proprietary APIs of the systems of the large voice assistant suppliers. As this design implementation is part of a closed ecosystem, it cannot be reused to connect to any of the consumer IoT services of the smaller players. As a result, development of devices that are compatible with consumer IoT services of smaller players is done at a later stage if at all by the device manufacturers. Typically, for those smaller players, the manufacturers even expect to utilize the manufacturer’s APIs and therefore shift the burden of the integration work to the smaller consumer IoT service supplier. This leads to a double disadvantage for the small players not only do smaller consumer IoT service reach interoperability later, but they also have more burden on the integration than the large voice assistant suppliers.

The common production of services within proprietary cloud environment of large players also offers those providers additional synergies, since user habits and preferences can be evaluated and beneficially used, even if users are connected via third party products or devices.

These developments clearly show that as in many other digital markets also in the consumer IoT ecosystem “size does matter” and without timely intervention this will lead to “the winner takes it all” markets in the long run.

Vision of a healthy, and lively Eco-System

In order to counteract this trend to “quasi standards” the use of truly commonly developed independent technical frameworks, based on open “technical standards” needs to be encouraged. This would enable a broader range of companies to provide and differentiate with their products within a common framework. The underlying principle should be: cooperation on the creation of common technical standards and competition and differentiation on product level.

A good example of a successful common technical framework that led to the creation of a healthy and competitive eco-system is the global partnership project 3GPP within the scope of the European Telecommunications Standards Institute (“ETSI”). While ETSI and 3GPP are well known in the telecommunication sector, ETSI also accounts for global partnership projects in the IT domain. For instance, the oneM2M Partnership Project, which enables to decouple devices from particular cloud solutions and hence enables a functionality which can be described as Bring your own Cloud (“ByoC”) to enable multivendor, cross-vertical IoT use cases. Typical areas of applications of such standards are for example smart cities, but also applications that connect different verticals, like utilities and other industries among each other. Such an evolution to more technical standardization would have the potential to enable a flourishing and lively multivendor and more divers provider ICT eco system.

Data Collection and Self-preferencing

The large voice assistant providers also use their position to accumulate large amounts of data, which they then may benefit of in different manners such as improving and marketing of own services, locking-in user relationships by leveraging into adjacent markets as well as data monetization opportunities in the digital advertising market.

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Beside this, the providers of the large ecosystems benefit of their various positions along the value chain to promote their own products.

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Synergies with other European Targets

While competitive and flourishing consumer IoT markets are beneficial for the consumer and from an overall welfare perspective, other welfare targets also need to be taken into consideration. For instance, in order to achieve sustainability targets, such as the global CO2 targets, it is required that connected things manage and consume less resources. A healthy competition with products and solutions coming from different manufacturers and companies will also help to achieve these targets. For all those different products and devices, a common data exchange format based on open standards is also needed to make them interoperable.

Such standards even would also allow for a more efficient product life cycle-management. For instance, single products in the ecosystem could be replaced even if one manufacturer or provider may no longer be available on the market.

In this sense, we welcome the promotion and support given by the Commission to the industry encouraging the use of open and commonly developed standards in Europe like already done in other regions (https://www.digitalsme.eu/standardisation_success_onem2m_india/). This is a useful example of how the growing proprietary silos may be torn down and enable a competitive and flourishing consumer IoT landscape, and more generally a digital European market.

Conclusion

Overall, Deutsche Telekom highly values DG Competition's findings in the Preliminary Report and would encourage DG Competition to act upon the concerns identified in this report. Executive Vice-President Margrethe Vestager rightly pointed out: *"...From the first results published today, it appears that many in the sector share our concerns. And fair competition is needed to make the most of the great potential of the Internet of Things for consumers in their daily lives. This analysis will feed into our future enforcement and regulatory action,..."*

DG Competition's timely intervention is needed as complementary tool to regulatory initiatives, such as the DMA proposal. For one, ex-post antitrust enforcement cannot be substituted by ex-ante regulation. Second, given the dynamics in the digital markets, in particular the consumer IoT markets, it is also crucial that such enforcement is swift. For timely interventions interim measures seem particularly suitable, especially given the ample insight that the sector inquiry has provided to DG Competition on the functioning of the ecosystems and the IoT markets.

In order to establish competitive and contestable consumer IoT markets it is essential to facilitate seamless interoperability, common standardisation and curb the anti-competitive practices of the large players. More concretely:

- Operating Systems should be turned into open and accessible platforms, which allow for integration and interoperability at multiple layers allowing smaller players to enter different niches
- Industry-standards for products sold in the EU should be established to enable also smaller companies to interact with consumer IoT devices easily and build solutions on top of it with the same chances for success
- Fair and non-discriminatory commercial relationships between ecosystem owners and market participants need to be assured

It is crucial, that the concerns of the Preliminary Report are tackled to create a competitive environment, where also smaller companies can flourish, in particular the European players, that are often heavily regulated and dealing with fragmented markets. Ultimately, this will lead to more customer choice and a stronger European digital market.