

Digital Law and IOT: a legal and regulatory view

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In 2019, Decree No. 9,854/19 was published, which created the Brazilian Internet of Things Plan. The Decree set relevant premises to facilitate the development of the Internet of Things (IoT) in Brazil as well as a strategic plan for the country to establish public policies in this area.

The Decree consolidates the Brazilian government's efforts to boost Internet of Things solutions in the Brazilian scenario. After all, this new technology is permanently changing the way we interact with the physical world.

Despite the creation of the Brazilian Internet of Things Plan, the insufficiency of some of the decree's rules and the absence of other regulations raise legal claims related to the regulation and taxation of IoT applications. In order to shed light on some of the main questions related to Digital Law and IoT on Brazil, we talked to experts Andrea Oliveira, Felipe Schwartzman and João Paulo Cavinatto. Check it out!

Digital Law and IoT: what are the main challenges in regulating the applications?

The publication of **Decree No. 9,854** arrives three years after the public call of the study "Internet of Things: an action plan for Brazil", carried out by the National Bank for Economic and Social Development (BNDES), in partnership with the Ministry of Science, Technology, Innovation, and Communications (MCTIC).

Throughout the study, several regulatory aspects that could catalyze or hinder the development of the IoT ecosystem in Brazil were taken into account. The Decree gives priority to four subjects for IoT solutions in the country: health, cities, industry, and rural applications. In this scenario, we highlight three areas that may be affected: regulation, tax, and personal data protection.

See more about each of them below!

Regulation

One of the main issues regards whether or not to regulate the Internet of Things as a telecommunication service. The legislation governing this area in Brazil sets the boundaries between telecom services — which usually require a prior grant and attract sectorial regulation —, and the value-added services (VAS), which do not require any grant and are not subject to the telecommunications regulation.

The Internet of Things depends on the telecommunications services support, and it may be considered, for regulatory purposes, an infrastructure that constitutes a value-added service (VAS) provision. However, the IoT also depends on connectivity to work and may include telecommunication services that consequently cause the sectorial regulation.

In this environment that comprises the provision of a set of services, experts discuss the need to regulate the Internet of Things and define what this service is. Additionally, this information is important to understand what rules the IoT is subject to: whether to the regulation by ANATEL (Brazilian Telecommunications Agency) or by other agencies.

Another relevant concept introduced by the Decree is the definition of machine-to-machine ("M2M") communication systems. Several aspects confirm the relevance of this concept. The first of them has an influence on the incidence of several quality standards set forth by ANATEL. This is because traditional telecommunication services, as they are provided directly to the users, must comply with quality regulatory obligations that were not conceived for IoT devices.

Tax

Precisely in this context of uncertainty regarding the IoT being a telecommunication service or not, or whether or not it can be considered a VAS provision, questions arise regarding its taxation. Notably, there are discussions about whether the ICMS (Tax on Distribution of Goods and Services) or the ISS (Services Tax - of a value-added service, for instance) should apply, or if none of them should.

As per the very General Telecommunications Law, a VAS is not a telecommunications service. Therefore, it is not subject to ICMS. However, the VAS is also not included in the list of services subject to ISS (Supplementary Law No. 116/03), which would also prevent it from being applicable.

Thus, "the regulatory definition may affect the taxation and the fees applicable to the sector. At the end of the day, it is necessary to know whether the ICMS-communication or the ISS will apply. Moreover, this definition is relevant not only to determine which taxes will be paid, but also to set which sectorial fees will apply", explains Felipe Schwartzman, BMA's Digital Law and New Technologies lawyer.

Another aspect affected by the definition of machine-to-machine communication systems are the sectorial charges borne by IoT devices. For instance, in 2014, there was a regulation on the matter for the purpose of relieving the burden of the Installation Inspection and Operation Inspection Fees.

Decree No. 8,234 defined these M2M communication systems as devices that, without human intervention, use telecommunications networks to send data to remote applications. Now, with this 2014 decree being revoked, the current version of the Brazilian Internet of Things Plan suppressed the reference to human interaction.

Since the concept of M2M no longer mentions the inexistence of human interaction, the burden of those sectorial fees that form the Telecommunications Control Fund (FISTEL) may be reduced even further. In

practice, this reduces costs for a broader universe of IoT devices.

Data Protection

As the number of connected devices increases, there is also more collection, processing and storage of data. After the General Personal Data Protection Law enters into force, as of August 2020, this matter is expected to be better understood, and thus solved.

How is the IoT regulation in Brazil?

The first step to answer the questions related to the regulation and taxation of the Internet of Things came with the definition of the **Brazilian Internet of Things Plan**. According to the document, IoT is: "The infrastructure that constitutes the provision of value-added services with capacity for physical or virtual connection of things with devices based on existing information and communication technologies and their developments, with interoperability".

Notwithstanding the fancy definition, it brings several relevant answers. By defining the Internet of Things as the infrastructure that constitutes the provision of value-added services, the decree clarifies that this is not a telecommunications service, since the General Telecommunications Law **does not consider telecom as a value service**.

"This is a very important definition. Firstly, it eliminates the ICMS taxation, which is very relevant. However, it presents a new discussion about whether or not it will be an ISS-taxed service. Not every type of service is subject to ISS", explains João Paulo Cavinatto, BMA's partner in the indirect taxation and customs legislation area.

There is a list of the services subject to ISS. The document is categorical. Therefore, in the current context, it is possible to understand that the services related to the Internet of Things **are not subject to taxation**.

For better understanding the rules that this technology must be subject to, the National Telecommunications Agency (ANATEL) initiated in August a public inquiry to hear society's opinion on this subject. The purpose was to discuss the reduction of regulatory barriers to the IoT market, and a relevant portion of the regulation of this new segment will be defined in accordance with this inquiry.

The public hearing held in September and the Regulatory Impact Analysis produced in Public Inquiry No. 39/2019 identified eight thematic axes that guide ANATEL's proposal for systematizing the discussion: grant; provision rules; taxation and licensing; numbering; compliance assessment; spectrum; and infrastructure and inputs. ANATEL is expected to analyze the contributions presented during the Public Inquiry and the agency's regulation is expected to be in harmony with the IoT Decree published in 2019.

What is the future of IoT in Brazil?

The Internet of Things enables **business models based on several possible services**. Thus, one of the challenges for the future will be, in Schwartzman's

words: "to know which services will adopt and better accommodate IoT applications and which will be the business model that will have the best performance in the development of Internet of Things solutions".

Depending on the answers given by the regulation, we may have a more decisive taxation scenario regarding the IoT applications. In the point of view of Andrea Oliveira, BMA's Tax Lawyer, "when you have any new activity or service fueled by new technologies, the question always comes up: where in the law does this activity 'fit' so its tax aspects can be defined? From year 2000 on, everything evolved really fast and the legislation does not keep up with such speed. But if there is something that we must pay attention to is the possible tax reform, because depending on the project that is approved, we may have significant changes to the intangibles' legislation as a whole, including the solutions associated with the IoT".

Furthermore, in order to understand the future of the IoT in Brazil, one must follow ANATEL's public inquiry on the Internet of Things. After all, this debate intends to create a set of measures to **regulate, tax, and encourage this infrastructure**. It is also worthy paying attention to the forecast of a bidding process for 5G frequencies, because the allocation of spectrums for the fifth generation of mobile connection will enable the increase in the number of devices connected to the Internet of Things.

It is obvious that Brazil still needs to give answers to many questions related to the **Digital Law and IoT**. However, the implementation of the Brazilian Internet of Things Plan shows that the country is making an effort to understand and regulate this new technology. Although many questions remain, we see a huge potential for the future of the Internet of Things in Brazil.

If you have any questions or if you wish to understand more about Digital Law and the IoT, contact us and talk to our lawyers. Just **go to our contact page!**

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