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WRITTEN SUBMISSION TO THE PROPOSED NATIONAL DATA AND CLOUD POLICY IN TERMS OF THE ELECRONIC COMMUNICATIONS ACT, 2005 (ACT 36 OF 2005) PUBLISHED FOR COMMENT ON 1 APRIL 2021

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1. **BACKGROUND**

The Minister of Communications and Digital Technologies published the proposed National Data and Cloud Policy pursuant to section 3(5) of the Electronic Communications Act No. 36 of 2005 ("**The Policy**") inviting written comments.

The **rationale** for the data and cloud policy is defined as the strengthening of the capacity of the State to deliver services to its citizens, ensuring informed policy development based on data analytics as well as promoting South Africa's data sovereignty and the security thereof.

The **stated purpose** of the Policy is the "*alignment of existing policies, legislation and regulations*" in order to "*enable South Africans to realise the socio-economic value of data*". The objectives of the Policy are to:

- *Promote connectivity and access to data and cloud services;*
- *Remove regulatory barriers and enable competition;*
- *Ensure implementation of effective cybersecurity privacy, and data and cloud infrastructure protection measures*
- *Provide for institutional mechanisms for the governance of data and cloud services;*
- *Support the development of small, medium, and micro enterprises (SMMEs); and*
- *Provide for research, innovation, and human capital development.*

The Policy is however drafted in a such an incoherent matter that it raises many issues of concern. At face value, it would appear that the content of the policy does not support these noble purpose statements, in fact implementation of this draft policy would cause disinterest of foreign investment and severely impact on ownership of intellectual property rights claiming that all data, regardless of where the technology company is domiciled shall belong to the government and 'all data generated from SA natural resources shall be co-owned by government and the private sector participants whose private funds were used to generate the research'.

2. **SCOPE AND CONTEXT OF COMMENTARY**

We do not intend to deal with **all** the policy issues identified in the Policy. Our comments are limited to considering those policy interventions relating to the **treatment of Data and Cloud Infrastructure**, which in our view would undermine the stated objectives of the Policy.

The Policy recognizes that commercial activity is increasingly Data driven and reliant on the availability and use of Cloud Infrastructure. Government's commitment under the Policy to support investment in Cloud Infrastructure to ensure universal access thereto to South African's is to be applauded. What is baffling are the "policy interventions" which are proposed to achieve these goals. At face value the "policy interventions" would not only undermine the objectives, but stifle foreign interest in South Africa as a suitable location for investment in Cloud Infrastructure.

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The policy proposals for Data are equally, if not more, concerning. There is an assumption that Data must be owned and controlled by government in order to realise the beneficial use thereof for the South African "*digital economy*". Failing that, it is reasoned that "*international technology giant companies*" will own the Data and reap the rewards exclusively to the detriment of South Africans. These assumptions unfortunately bedevil the entire Policy document insofar as it relates to policy proposals dealing with how Data should be treated.

To have a better understanding of the framing the Policy issues we need to examine how the terms Data and Cloud infrastructure are defined in the Policy:

"Data" is defined as:

> *"electronic representations of information in any form suitable for communication, interpretation, or processing by human beings or by automatic means"*

This definition clearly includes databases. A database is a collection of information that is organized so that it can be easily accessed, managed and updated. Databases typically require labour and skill to produce, and for this reason are protected under copyright and know-how with ownership rights being conferred on the person/entity which has created the database and/or the data (generally speaking).

"Cloud Infrastructure" is defined as:

> "*hardware and software components – such as servers, storage, networks and virtualisation software – that are needed to support the computing requirements of a cloud computing model*"

The Cloud Infrastructure deployed by cloud services providers to provide cloud services to customers are business critical assets and require a significant capital investment to establish and maintain.

Placing limitations on how ownership rights in and to "Cloud Infrastructure" and "Data" may be exploited, and especially (in some cases) simply demanding these rights be handed over to the government, is nothing more than a deprivation of property, as the discussion of the relevant policy issues will show.

3. **RELEVANT POLICY ISSUES**

3.1 Policy Issues on Digital Infrastructure

Insofar as "*development of digital infrastructure*" is stated to be a priority for government, and that it should "[ensure]…*universal access to cloud and data infrastructure services for all South Africans*", we broadly agree.

The policy interventions proposed to achieve this include investment in ICT infrastructure, establishment of certain SEO's and government agencies (being the *State Digital Infrastructure Company* or "*SDIC*" and the *High-Performance Computing and Data Processing Centre* or "*HPCDPC*") and the establishment of "*Special Economic Zones*" to "*support foreign investment in data and cloud infrastructure and services*" to name a few. These proposals, feasibility aside, can at least be said to be consistent with governments commitment to ensure access to digital infrastructure and services.

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What is concerning, and wholly inconsistent with any policy which has as its aim to attract foreign investment and private sector participation is the following statement:

> "*Given the centrality of digital infrastructure in the South African economy (since most services are delivered over such infrastructure),* ***digital infrastructure of critical scale should be declared a national strategic asset****, and* ***data centres hosting critical cloud computing (including core network points of presence) should be declared national critical information infrastructure***" (**our emphasis**)

It needs hardly be stated that this raises fundamental constitutional concerns with respect to private property. The declaration of digital infrastructure as a national strategic asset or critical infrastructure will invariably result in limitations being placed on how these assets may be exploited and the returns which the proprietor of such assets can leverage.

We submit that it is impossible to reconcile this with the goal of attracting foreign investment in digital infrastructure, much less to view it as a "[measure] *to ensure that South Africa is an attractive host to the data centre industry",* being another goal of the Policy.

The following statement is also problematic:

> "*Currently, cloud computing infrastructure (data centre) investment in South Africa is distributed across the country, largely concentrated in big metros located in Gauteng, KwaZulu-Natal and Western Cape, and* ***is mostly foreign-owned****. Recognising that* ***data ownership, data sovereignty, and data protection are critical elements for the digital economy, it is important for government to put in place measures to decentralise investments to ensure distribution of opportunities in this area****. The small scale of South Africa's current government data infrastructure is characterised as fragmented and silo-based which implies duplication of effort and a waste of resources*" (**our emphasis**)

First, it is difficult to understand why foreign ownership of cloud computing infrastructure should be viewed as a problem, especially given that it is a result of foreign investment (which after all is what government is trying to attract). Second, it is not clear or explained what exactly "*decentralisation*" of investment in cloud computing infrastructure entails, or how such would safeguard "*data ownership*" or "*data sovereignty*" (each nebulous concepts), or how "*data protection*" would be supported thereby.

In sum, government's proposal to effectively nationalise "*digital infrastructure of critical scale"* as well as to "*decentralise investments*" (foreign) is nothing short of a disaster. The largest data centres in South Africa are foreign owned. It is conceivable that most South African businesses which are reliant on cloud services make use of these facilities for internet connectivity and data hosting services, either directly or via intermediary service providers. Nationalisation of these facilities and/or implementation of measures to "*decentralise investments*", with all that such would imply, would surely only serve to deter foreign investors and as a result make cloud infrastructure and services less accessible to South Africans.

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3.2 Policy Issues on Access to Data and Cloud Services

The merits of an "open data" policy are touted under this heading, with a proposal to establish a "*National Open Data Strategy*" to make Data accessible to South African citizens. This strategy will employ the so-called "*Data for Good*" principles which require that Data be used for the betterment of society.

This is all well and good to the extent that it is proposed that government will create (or encourage the creation of) useful open Data sets which are derived from publicly available data. The scope of the proposed policy interventions is however not clear, nor is it defined, and the rationale provided in support of these interventions would appear to include non-public, and even potentially confidential Data:

> "*Data has several important features that afford opportunities for socio-economic development and inclusion. In addition, data is essential for descriptive and diagnostic purposes, which are both critical to government for developing future predictions and prescriptions when planning. However,* ***data tends to be held and owned by the main actors who own the service or product offered to the customer or citizens****. Various intermediaries also hold significant customer and citizen data*" (**our emphasis**)

also:

> "*there is* ***critical data that is held by the private sector*** *which, if shared with government, could enhance government's planning and service delivery capability,* ***without infringing on the rights of citizens***" (**our emphasis**)

and further:

> "*There is a need for South Africa to develop an open data strategy/framework for the sharing of data, informed by 'Data for Good' principles, to* ***enable access to relevant data for all South Africans including*** *NGOs, and enterprises large and small.* ***The terms and conditions of such access to data will be defined in the open data strategy****. The 'Data for Good' principle for NGOs accessing relevant data without paying for access should be considered*" (**our emphasis**)

The *National Open Data Strategy* and its objectives must be considered against these statements, in particular the objective to:

> "*Address data sharing and interoperability,* ***ownership****, data sovereignty, economic rights, integrity and quality" (****our emphasis****)*

Government therefore apparently sees fit to implement measures requiring **private entities** (multinationals such as AWS and Microsoft for instance) to share (and even transfer) the data in their custody. This Data, it is said, are "held and owned" by such entities and would, if shared with government, enhance its capabilities to serve the citizens of South Africa.

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The reality is that cloud services providers have in their custody Data belonging to themselves as well as their customers and other parties. A cloud services provider may for instance use its own Data to enable it to provide certain cloud services to its customers (SaaS offerings), or it may make available only Cloud Infrastructure for use by its customers (IaaS offerings) upon which customer Data can be hosted, or both.

Any requirement for such Data to be "shared" is clearly problematic and would amount to a deprivation of the property rights and underlying intellectual property rights in and to the Data owned by both cloud services providers, their customers and business partners. Data, as an asset, can be the result of significant capital investment and have great commercial value. The right of a Data owner to control the use thereof is what allows it to be commercially exploited in a manner which may realise maximum returns for the owner, like any other asset. Placing limitations on this fundamental right will have serious consequences – cloud services providers will not be willing to make significant investment in cloud offerings, and customers seeking to make use of cloud services will ensure that their Data is held offshore.

Multinationals such as AWS, who have invested in locally based cloud services infrastructure, would accordingly be disincentivised to continue operating, or expanding, in South Africa. This result would clearly undermine the objective of the Policy insofar as it seeks to stimulate foreign investment.

3.3 **Policy Issues on Localisation and Cross Border Data Transfers**

The location of Data which is generated in South Africa and the ownership thereof are regarded by government as key factors upon which the ability of the South African "*digital economy*" to generate value for its citizens depends. The fact that Data which is "*generated in Africa and South Africa*" is often stored in a data centre located off-shore is viewed as problematic, as also the fact that Data, where it is stored locally, is "*owned by international technology giant companies*".

It is stated that:

> "*the development and growth of the digital economy* ***makes it necessary for South Africa to restrict and protect some of its citizen's data to effectively participate in the global digital economy****. This challenge, with data being the central productive force in the digital economy, compels the* ***South African Government to play a more central role in the collection, dissemination, and analysis of data****, understanding that key economic advantages are contained within it*" (**our emphasis**)

Accordingly, the following policy interventions are described:

> *To ensure* ***ownership and control****:*
>
> • ***Data generated in South Africa shall be the property of South Africa****, regardless of where the technology company is domiciled.*
>
> • ***All research data shall be governed by the Research Big Data Strategy of the Department of Science and Innovation (DSI)****.*

• ***All data generated from South African natural resources shall be co-owned by government and the private sector participant/s whose private funds were used to generate such****, and a copy of such data shall be stored in the HPCDPC.* ("**our emphasis**")

The rationale for these policy interventions is non-sensical and the proposed interventions themselves are deeply problematic. "Data", it must be repeated, is property (this is even acknowledged in the Policy where data is described as a "*tradable commodity*"). As explained above, Data is not necessarily exclusively owned by "*international technology giant companies",* but by their clients and users. These interventions, apparently designed to "protect" South Africa citizens by preventing the appropriation of all Data by giant multinationals, are misconceived and would only serve to deprive South African citizens of access to cloud services and also their own property, or a freedom of choice as to how and where protect or place such property.

Of equally great concern is government "[playing] *a more central role in the collection, dissemination and analysis of data*".

Within the context of the specific interventions which are proposed, it clearly means that government believes that it should not only govern Data (for instance "*Research data*"), but also own it. These proposals amount to nothing other than an expropriation of property rights in Data.

4. CONCLUSION

The proposed policy interventions with respect to Cloud Infrastructure and Data not only raise serious concerns, but it undermined the stated objectives of the Policy to increase access of South Africans to Cloud Infrastructure and cloud services. In the case of Cloud Infrastructure especially, dependent as it is on foreign investment, these interventions would in our view result in South Africa becoming a less attractive destination for investment.

Data, as a valuable asset, created and used by business and individuals to derive economic wealth and contribute to the economy should be afforded the same considerations and protections as traditional property forms. The Policy however proposes limitations being placed on how these assets can be exploited and whether they can be privately owned at all. This is, needless to say, a fundamental constitutional concern, which as with the proposal to do with Cloud Infrastructure, will serve only to drive investment and business offshore, a result which would clearly be to the detriment of an already struggling South African economy.

We are of the view that the Policy should be reconsidered comprehensively, in a manner which acknowledges the contribution of foreign investment in Cloud Infrastructure and property rights in Data, especially their importance to economic growth in South Africa. The Policy, in present form, unfortunately ignores these aspects and should not be implemented in its proposed form.

- **End**

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