

## **Investigating the Misalignment in the Existing ICT Legislation of South Africa**

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## **Abstract**

South Africa has recently enacted several ICT legislation in order to address the escalating e-crime, the rise in electronic abuse and also the indifferences of the past. However, research shows that many organisations including public institutions do not understand these laws and thus, fail to comply with them. One major contributor to this are the inconsistencies found in the legislation. The National Development Plan and the Mid-term Strategic Framework recognise the complexity of laws, and thus endorse improvements in the removal of unnecessary obstacles and consistencies. The present study examines the existing ICT legislation in South Africa, and investigates areas of misalignment and the factors that contribute to the misalignment. This study will also develop and propose a framework that can be used as a guide to align ICT legislation in South Africa.

Extensive literature review was conducted to understand the alignment of legislation. Firstly, all the ICT legislation that was passed between the years 2000 and 2013 was retrieved and obtained from Sabinet database. This legislation was studied extensively and inconsistencies were identified. In conjunction with this, available literature on this legislation was also retrieved from various databases such as Google scholar. Some information was obtained from these websites: SA Law Reform Commission, Parliament of RSA, Department of Justice and the Parliamentary Monitoring Group. Articles were retrieved from different publications and from these relevant journal articles it was picked up that to a certain extent there has been research done in this area. However, while the literature on gaps and inconsistencies in the legislation exists; there are very limited studies on alignment of ICT legislation. From the literature, the researcher identified four main factors that contribute to the misalignment in legislation which are lack of harmonization, lack of coherence, lack of interoperability and the defective legislative process. A conceptual framework is then proposed based on these factors and the research propositions are made.

This positivist study will be conducted in the Parliament of the Republic of South Africa and the conceptual model will then be tested in future in the SA Legislative Sector. The results of this study will contribute in the South African law making process. Once legislation is aligned and inconsistencies are reduced, it is predicted that compliance can be improved.

**Key words:** Alignment, Coherence, Compliance, Harmonization, Interoperability, Legislation, Legislative Process, South Africa.

## **1. Introduction**

To this day, a number of legislation governing the use of Information and Communications Technology (ICT) has been passed in South Africa (SA), to address the escalating e-crime and also the indifferences of the past. However, many organizations including public institutions do not understand these laws, and as such fail to comply (Kyobe, 2010). Throughout this paper, the terms ICT legislation / ICT Law, Electronic legislation / Electronic Law or e-legislation, are used interchangeably. SA has recently enacted several ICT legislation which includes, but not limited to: the Electronic Communications and Transactions (ECT) Act 25 of 2002, Promotion of Access to Information Act (PAIA) 2 of 2000, Protection of Personal Information (POPI) Act 4 of 2013, Regulation on Interception of Communication Related Information Act (RICA) 70, 2002, and the Protection of State Information Bill 6, 2010. Research shows that, although these laws have been enacted, compliance with these pieces of legislation has created many challenges for businesses, organizations and public institutions (Warkentin, Johnston, & Shropshire, 2011; Mushore & Kyobe, 2013).

Literature shows that even though legislation is enacted, issues of compliance remain (Rogers, 1997; Elc, 2005; Lane, 2007; Michalson, 2009; Mushore & Kyobe, 2013). Some of the major reasons that attributed to this lack of compliance are not only the complexity of the legislation, lack of awareness and lack of understanding of these regulations, but also that this legislation is fragmented and therefore misaligned (Zhang, 2005; Kyobe, 2010 & Islam, Mouratidis & Jurjens, 2011). The National Development Plan (NDP) and Mid-Term Strategic Framework (MTSF) also recognise the fact that laws and regulations are complex, and thus removal of unnecessary obstacles and inconsistencies must be improved. Recent studies have also identified gaps, grey areas and inconsistencies in the Electronic Law (Belanger & Hiller, 2006; Kyobe, 2009 & 2010). In addition, lack of appropriate mechanisms and penalties to enforce these laws have also been identified (Furlong, 1991; Kyobe, 2010; Zhang, 2005).

Having studied the literature including the legislative process (the law making process) it becomes evident that the fragmentation that leads to the misalignment of the ICT legislation is one of the most critical contributing factors that influence noncompliance with this law (Zhang, 2005; Kyobe, 2010 & Islam, Mouratidis & Jurjens, 2011). Therefore, the legislative process and the existing ICT legislation need to be examined, and the misalignment investigated thoroughly, in order to develop strategies to ultimately achieve enhanced or improved compliance.

## **2. Objectives**

The main objective of this study is to examine the existing ICT legislation in SA and investigate areas of misalignment. The sub-objectives are:

- i) To identify the factors that contribute to the misalignment,
- ii) To develop and propose a framework that can be used as a guide to align ICT legislation in SA.

## **3. Literature Review Summary**

### **3.1. The use of Information, Communication and Technology in South Africa**

The effective use of Information Technology (IT) by government institutions allows for and provides good relations between the businesses, government and its citizens. The use of IT in government allows for a transparent fashion, provides for accountability and encourages good governance (Barnard et al., 2003; Ndou, 2004; Gichoya, 2005; Farelo & Morris, 2006). Due to the rise in electronic abuse, government has since established a number of legislation as regulatory measures (Kyobe, 2009); however, compliance remains a critical issue and a major problem (Rogers, 1997; Elc, 2005; Lane, 2007; Michalson, 2009; Mushore & Kyobe, 2013). Kyobe (2010) mentions that, while technology adoption comes with many different advantages in the way that government operates; amongst other issues and challenges that it brings relate to data protection, abuse of privacy and access rights and also protection of data and electronic signatures. Hence, the subsection that follows discusses literature on ICT legislation that has been enacted in South Africa.

### **3.2. The Electronic Law**

As mandated in the Constitution of the Republic of South Africa (RSA), the South Africa Legislative Sector (SALS), which comprises of the nine provincial legislatures and Parliament is responsible for making and passing laws in SA including the electronic law (The Constitution, Act 108, 1996). However amongst these institutions, Parliament of RSA “Parliament” is the only institution that is responsible for passing the national legislation such as the electronic law that will be discussed in this study. The Electronic Law referred to herein this section includes legislation on the use of electronic information, mobile technology and cybercrime. A number of electronic legislation has been passed in SA, however, based on the scope of this study only the following legislation will be examined: The Electronic Communications and Transactions (ECT) Act 25, 2002; Regulation of Interception of Communications and Provision of Communication-Related Information Act (RICA) 70, 2002; Promotion of Access to Information Act (PAIA) 2, 2000; Protection of Personal Information (POPI) Act 4, 2013; Protection of State Information Bill 6, 2010.

Existing studies show that it is not only SA that experiences a situation whereby there are limitations, gaps and grey areas in the law; even the American law poses some limitations (Lipton, 2014). Electronic law is unstable and incomplete Islam et al., (2011). Other researchers argue that there are too many legislations in SA but very little progress (Dagada et al., 2009). These researchers pose a question about the redundancy of SA’s information security legislation. Pertaining to cyber inspectors, in their study, Dagada et al., (2009) assert that even though the ECT Act had good intentions but SA government had not appointed cyber inspectors, and they also conclude that the Act is not very effective. According to Lipton (2014, p1117) “existing disharmonized state laws can effectively deter conduct that typically crosses state or national borders”. According to Gerada (2006) ECT Act has been criticized as too prescriptive when it comes to electronic transactions which could disturb the way in which e-commerce and electronic transactions are carried, currently. Furthermore, the ECT Act provides for admissibility of data messages to count as acceptable evidence and should constitute as sufficient proof when produced in a hard copy print out; whereas Snail (2008) argues that even though this Act is in existence, some regulations such as the Common Law are still applicable especially in areas where the ECT Act has not made provisions, e.g. for criminal sanctions. Therefore both the ECT Act and the Criminal law must still be able to work together in harmony without confusing the consumer. For that reason the kind of misalignment between the ICT laws needs to be investigated thoroughly and all those areas be identified. Grobler, van Vuuren, & Leenen (2012, p217) reflect on the progress and way forward in terms of Cyber Security Policy implementation in South Africa, and they note that RICA 70, 2002, ECT Act 25, 2002 and POPI Bill 2010 (which was later enacted Act 4, 13) are laws that seek to “address criminal punishment for cyber security crimes” Whereas certain laws do not provide definitions for certain terms; RICA provides for comprehensive definitions that can be confusing (Ferreira, 2012). In the subsection that follows, the process of making and passing the law in SA is discussed.

### **3.3. The Law-making (Legislative) Process in SA**

Sections 73 to 79 of the Constitution of RSA discuss the national legislative process (The Constitution, Act 108, 1996). In these sections the process of law making is described as one of core functions of Parliament and the provincial legislatures. As indicated in the subsection above, the national legislation that is examined in the present study is legislation that is passed only in Parliament. Section 42, chapter 4 of the Constitution of RSA discusses the composition of Parliament and it is explained in this chapter that Parliament is composed of two houses, namely: the National Assembly (NA) and the National Council of Provinces (NCOP). These two houses perform different roles, and amongst these roles, the NA is responsible for amending the constitution and passing legislations (section 42, Constitution of RSA). Even though the NCOP does not specifically have that responsibility, it also participates in the national legislative process.

Having clarified the role of Parliament in the legislative process and in the context of this present study, the subsections that follows will discuss how the Bill is introduced, passed and the gaps identified in the process.

### **3.3.1.Introducing and Passing a Bill**

Before any piece of legislation is passed as law or an Act, it is first drafted and introduced as a Bill. There are different types of bills, however for the purposes of this study, only National Bills will be pondered on. According to Section 73 of the Constitution of RSA, all Bills, except for money Bills, may only be introduced by a Member of the Cabinet or a Deputy Minister or a Committee of a member of the NA committee, in the NA. Money Bills are only introduced by the Minister of Finance (section 73). Bills follow a certain structure, and even though this structure will not be discussed in this report, the researcher notes that some Bills contain a clause (section of the Bill) called the Schedule. The Schedule contains information about laws that are being repealed or amended by the current Bill.

### **3.3.2.Process followed when introducing a Bill**

The Cabinet member or Deputy Minister who intends to introduce a Bill in the NA must submit a proposed draft Bill as approved by the Cabinet to the Speaker of the House. The draft Bill is then referred to the relevant Portfolio Committee (PC). The NA, referred herein as the “House” has different set of House Rules. Therefore in terms of House Rule 220, the draft Bill must be translated into at least one of the official languages before it is sent to the president for assent (Joint Rules of Parliament, 2011). When a Bill is introduced to Parliament, it must be referred to the Joint Tagging Mechanism (JTM) for classification. The JTM classifies the Bill as either a section 74, 75, 76 or 77 Bill, according to the Constitution of RSA. The JTM consists of the Speaker and Deputy Speaker of the NA, and the Chairperson and Deputy Chairperson of the NCOP. The JTM Committee is advised by the Parliament’s Constitutional and Legal Services Office. After the Bill has been tagged and classified, the PC that the Bill was referred to may report to the NA or NCOP, and thereafter the relevant government department is briefed.

The step that follows is the facilitation of public involvement as obligated by the Constitution of RSA (Sections 59 and 72). Following the public involvement, the Committee members deliberate on the public inputs received, and thereafter vote on the Bill, clause-by-clause. After the Bill has been agreed to, the Committee reports to the House on the Bill. Once the Committee agrees on the Bill, with or without amendments, the Committee report is placed on the Announcements, Tabling and Committee Process (ATC) document, and thereafter put on the Order Paper for consideration by the House. On adoption by the House, the Bill is sent to the President for assent, and once the President signs-off the Bill, it gets published in the Government Gazette.

### **3.3.3.Gaps identified in the Legislative Process**

Having studied the legislative process above, the major gap that has been identified in the entire process of drafting the Bill is that there is no clearly dedicated clause that shows how the new Bill is aligned with the existing related laws. The process of aligning the new Bill especially with other related laws is not indicated, therefore this study will also investigate this area. For instance the only clause relating to alignment of laws found in the POSI Bill is in Chapter 13 under General Provisions whereby Regulations, Repeal of law and Transitional provisions are discussed. Hence the present research also seeks to investigate all the factors that contribute to the misalignment of ICT legislation, including the gaps in the legislative process.

According to Munatsi (2011) the technical capacity of the policy makers (people who are involved in the process of drafting Bills) is also a major problem when drafting policies / laws. Munatsi (2011) asserts that parliamentary institutions use ICTs in the process of making and enacting legislation, and therefore their ICT capacity must be developed. Drafting legislation requires a certain sets of skills (Weems, 2005; Munatsi, 2011), moreover drafting ICT legislation could mean a special and specific skill-set requirement. Therefore lack of adequate skills could also impede the effectiveness of making and passing ICT legislation (Waema, 2005).

The following subsection is a brief discussion on compliance issues with legislation that is not aligned.

### **3.4. Compliance with ICT Legislation**

Compliance with ICT legislation in SA has created many challenges for businesses, organizations and public institutions (Warkentin et al., 2011; Mushore & Kyobe, 2013). In this study, compliance is defined as adherence or an act in accordance with guidelines or provision(s) as outlined or required in a piece of legislation, regulations or laws (Kolk, 2008 & Kyobe, 2010). Failure to comply with the laws and regulations may result in penalties, criminal fines and even imprisonment (Kyobe, 2010). Islam et al., (2011) declare that compliance with laws and regulations is becoming critical for software systems that are managing and processing sensitive data. They also conclude that another significant problem to compliance with legislations is the fact that many times these laws or regulations are amended or repealed and new legislation gets enacted (Islam et al., 2011). This could essentially mean that, while consumers are trying to understand certain provisions of these legislations, those specific provisions are being or have been amended or revised already (Bracciali, Firpo, Leth, Michelet, & Sacchi, 2011) and thereby resulting into confusion which in turn complicates compliance.

Belanger & Hiller (2006) also claim that the enactment and implementation of information security and privacy laws comes with compliance demands. However, Furlong (1991) maintains that there is generally no mechanisms to enforce these laws and sometimes penalties for breaching the laws tend to be weak, and therefore this suggests compromise in compliance. “The problem is exacerbated by the fact that most South African companies do not comply with the requirements of Chapter 7 and Part III of Chapter 3 of the ECT Act” Dagada (2009, p5) declares. Consequently, the present study aims to examine the existing ICT legislation in South Africa in order to investigate areas of misalignment; identify the factors that contribute to the misalignment, and ultimately develop and propose a framework that can be used as a guide to align ICT legislation in South Africa.

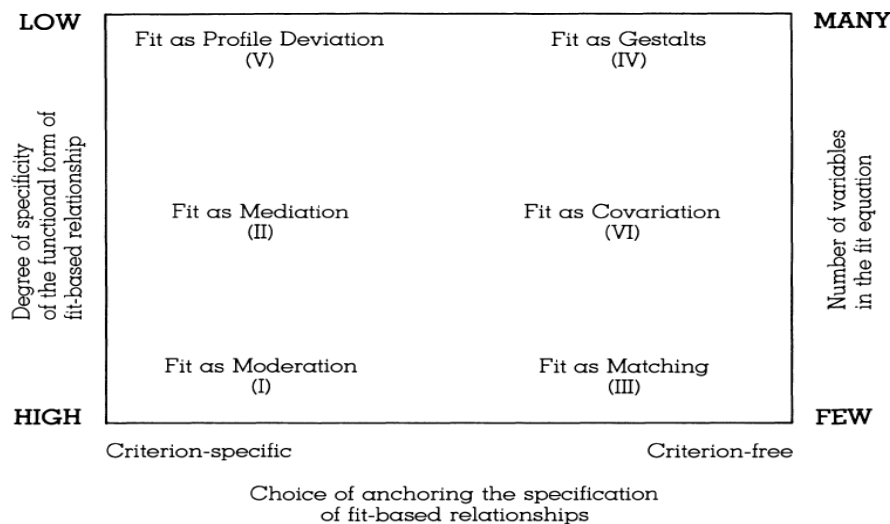
While these regulations enforce individuals and institutions to comply, compliance comes with significant challenges (Warkentin et al., 2011). Arko-Cobbah (2008, p190) argues that capacity for civil society should be built, and that public officials be trained as to how to comply with information access legislation. Later, in his study of IS Security Policies and Regulations in a University, Kyobe (2010) concludes that alignment of regulatory requirements with legislations and standards can be a solution and may result to enhanced compliance.

### **3.5. Alignment of ICT Legislation**

Kyobe (2010) developed a framework to guide compliance with IS security policies in a University. In his study, he elaborates more on ICT related pieces of legislation, and further argues that while this legislation prescribes requirements for compliance, there are no specific processes or methods specified to ensure compliance and alignment. This paper then attempts to resolve alignment issues with the ICT legislation so as to improve compliance. In this subsection, firstly the Alignment theory is discussed, and later the factors that contribute to alignment in the legislation.

### 3.5.1. The Alignment Theory

Venkatraman (1989) introduces a classificatory framework that can be used for mapping the six perspectives of fit or alignment, see figure 1 below. The six perspectives of fit can be classified as follows: Fit as Moderation; Fit as Mediation; Fit as Matching; Fit as Gestalts; Fit as Profile Deviation and Fit as Covariation.



**Figure 1:** A Classificatory Framework for Mapping the Six Perspectives of Fit in Strategy Research (Venkatraman, 1989)

The six perspectives of fit, according to Venkatraman (1989) can be classified and briefly discussed as follows (see Figure 1):

**Fit as Moderation:** Venkatraman (1989, p424) declares that this perspective is based on two variables (the predictor and the criterion) which predict the third variable (the moderator). He further mentions that the fit between the predator and the moderator determines the criterion variable.

**Fit as Mediation:** is based on the relationship between variables namely: antecedent and consequent (Venkatraman, 1989), whereby the intervening consequences between the antecedent and the consequent variables are specified. The functional form of fit in this perspective is “viewed simply as indirect effects, less precise than moderation perspective” Venkatraman (1989, p429). However, he also mentions that, with this perspective, in order to reduce the level of precisions, more than two variables can be used.

**Fit as Gestalts:** According to Venkatraman (1989), in the fit concept, a multivariate perspective can be applied whereby many or more than two variables are used. He claims that this multivariate perspective “is the identification of gestalts which is defined in terms of the degree of internal coherence among a set of theoretical attributes” Venkatraman (1989, p432). Citing the work of Miller (1981), Venkatraman (1989, 432) describes the role of Gestalts as “a frequently recurring clusters of attributes”

**Fit as Profile Deviation:** this perspective is very much reliant on a specific criterion and many variables are used in the fit equation, yet it shows a very low degree of specificity of the functional form of fit-based relationship. Venkatraman (1989) states that for instance, when there is a relationship between a strategy profile and a certain environment, a business unit’s degree of adherence could be positive or negative. In the case whereby the level of strategy-environment co-alignment is high then the results would be positive performance; contrary, when level of strategy-environment co-alignment is low meaning that there is negative performance, that is then termed Deviation (Venkatraman, 1989).

**Fit as Covariation:** Unlike the other perspectives of fit, Venkatraman (1989, p435) defines fit as “a pattern of covariation or internal consistency among a set of underlying theoretically related variables”

He further explains that the four dimensional areas of business need to be specified by researchers in order to present a schematic representation or illustration for this fit perspective.

**Fit as Matching:** Venkatraman (1989, p430) defines fit in the Fit as Matching as “theoretically defined match between two related variables” This perspective, as explained by Venkatraman (1989) represents a match between two variables (Bourgeois, 1985; Venkatraman, 1989; Chorn, 1991 & Maes et al., 2000). When Grinyer; Yasai-Ardekani & Al-Bazzaz (1980) performed a study to test hypothesis related to the links between strategy, structure, environment and the financial performance, they found that strategy and structure, show a very stable relationship and that there was a match. After reviewing the above Fit perspectives, and for the purposes of this study, only the Fit as Matching perspective will be applied. This perspective is more suitable because of the kind of alignment that is required between the legislation in order to ensure compliance (Kyobe, 2010). For instance, as articulated by Grinyer et al., (1980) a match between strategy and structure may result into good performance; therefore this study predicts that creating a match between laws (aligning laws) may result into improved compliance.

Consequently, Alignment can be defined is a fit or match between two elements/laws (Venkatraman, 1989; Chorn, 1991 & Maes et al., 2000). For instance, the match or fit between two elements in this study would be a match between two laws e.g., POPI Act and PAIA.

### 3.5.2.Factors that Contribute to Alignment

Besides a comprehensive and inclusive legislative process discussed in subsection 3.3, the three other areas that guide alignment of legislation as observed in the literature are discussed below and they are: Coherence, Interoperability and Harmonization (Venkatraman, 1989; Agnoloni, Bacci, Francesconia, Petersb, Montemagni & Venturi, 2009; Winn & Jondet, 2009; Chaberek & Karwacka, 2012; Savin, 2013 & Lipton, 2014). The three factors are discussed as follows:

**Harmonization:** According to Moodley et al., (2014, p108) the eHealth regulations can assist developing countries such as SA, Tanzania, to name a few, to “encourage interoperability and harmonization of health information systems”. Isasi (2009) mentions that Harmony is not about uniformity rather it entails diversity, but when elements are in harmony, even though their individual attributes remain, they form a completely fresh feature; and it reduces the possibility of clashes or inconsistencies between related legislation (Zeng, Annamalai & Bhargava, 2000). Koskenniemi (2014) reports on fragmentation of international law (Report of the study group of the international law commission), in his report, he asserts that compatibility and coordination through standardization of rules or laws are some of the key principles of legal harmonization. Therefore, lack of harmonization between laws results into conflicts and lack of alignment, which in turn contributes to noncompliance.

**Coherence:** Weinrib (1988) studies the legal formalism on the immanent rationality of law, and puts forward the view that in order to confirm whether elements of an associated and related element exists or not, a question about whether those elements are coherent must be answered. Balkin (1993) studies the legal understanding and defines legal coherence or coherence of laws as normative coherence. He declares that “coherence is the consistency not of logic but of principle” (Balkin, 1993, p114). Coherence reduces ambiguity or uncertainties (Stadler & Kolbe, 2007); and it means incorporation (Austen-Smith & Riker, 1987). Furthermore, Balkin (1993, p115) asserts that Law is coherent “if the principles, policies, and purposes that could justify it form a coherent set, which in turn means that all conflicts among them are resolved in a principled, reasonable, and non-arbitrary fashion”. This, according to Balkin (1993) is a strong requisite of coherence.

According to De Coning & Friis (2011, p253) “Coherence is pursued because it is assumed to generate increased levels of efficiency and effectiveness” They agree with researchers above that coherence should rather be understood “as a scale of relationships” Similarly with ICT legislation, the present research argues that legislation that is fragmented and in contrast with one another lacks coherence as there is no existing relationship or unity between those laws.



**Interoperability:** Weber (2014) argues that in order to drive economic growth, efforts must be made in terms of achieving legal or policy interoperability. Citing his work, Weber (2014, p6) asserts that “Legal interoperability addresses the process of making legal rules cooperate across jurisdictions, on different subsidiary levels within a single state or between two or more states. Whether new laws should be implemented or existing laws adjusted or reinterpreted to achieve this interoperability, depends on the given circumstances”

It can be deduced that, a mismatch or clash between the two related laws may lead to misalignment. In this subsection that follows, the Research Model is discussed. This model is based on factors that contribute to misalignment, as reviewed in the literature.

### **3.6. The Research Model**

As discussed in subsection above, the existing legislation is not in harmony with the other due to, amongst other things, the inconsistencies in the laws, constant changes that are made in the laws and regulations and thereby causing difficulties to comply (Venkatranum, 1989; Agnoloni et al., 2009; Kyobe, 2010; Bracciali et al., 2011 & Lipton, 2014). The proposed conceptual framework in figure 2 comprises of six constructs that emerged from the literature, and four of these constructs are the factors that contribute to the misalignment in the legislation. They are: lack of harmonization, lack of coherence, lack of interoperability and the defective legislative process. All six constructs are defined and the underpinning principles are discussed briefly.

#### ***i) Lack of Harmonization***

In the context of legislation and for the purposes of this paper, harmonization is defined as the process of ensuring that different laws are in agreement with each other, forming a compatible or well-matched whole, thereby reducing technical issues in the laws and minimizing clashes and conflicts through coordination (Isasi, 2009; Zeng et al., 2000; Koskenniemi, 2014). Lack of harmonization between laws, therefore results into conflicts and misalignment.

#### ***ii) Lack of Coherence***

In this paper coherence is defined as unity in principle of policies and regulations, reduction of ambiguities and fragmentation in order to generate higher levels of effectiveness and efficiency of laws (Weinrib, 1988; Austen-Smith & Riker, 1987 & Stadler; Kolbe, 2007; Dickson, 2010 & De Coning & Friis, 2011).

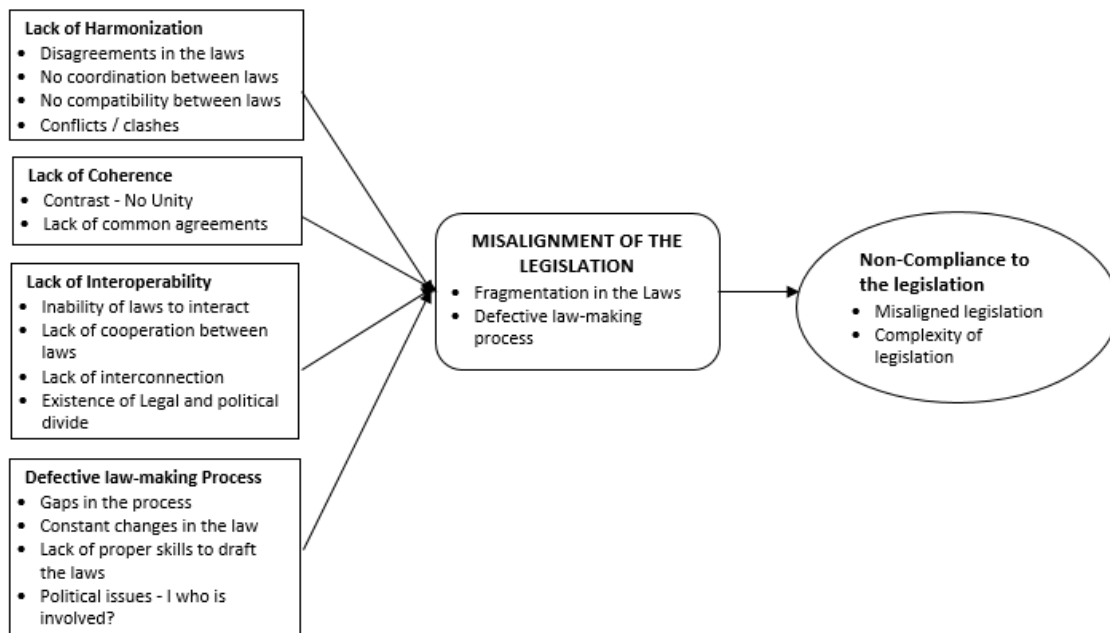
#### ***iii) Lack of Interoperability***

Interoperability is defined as the ability, not only for related laws (e.g. ICT legislation), but also even laws that do not belong to the same family, to interact and operate effectively, through cooperation (Isasi, 2009; Chaberek & Karwacka, 2012; Savin, 2013; Koskenniemi, 2014; Moodley et al., 2014). Based on this definition, ICT laws are seen as the subsystems of the parent system which is the Constitution of RSA. Isasi (2009, p7) purports that “National policies should be written taking into account their potential for discordance given international policy interoperability. As claimed by Isasi (2009), when it comes to Interoperability pertaining to policies, regulations and legislation, the legal and political divide cease to exist.

#### ***iv) Defective Legislative Process***

The major gap that has been identified in the entire process of drafting the Bill is that there is no clearly dedicated clause that shows how the new Bill is to be aligned with the existing related laws. Next, is the technical capacity of policy makers, according to Munatsi (2011), he asserts that capacity must be developed in order for these policy makers to acquire the necessary skills. Drafting legislation requires certain sets of skills (Weems, 2005; Munatsi, 2011), moreover drafting ICT legislation could mean that special skill-set requirement. While Islam et al., (2011) conclude that the act of amending or repealing laws could just be another significant threat to compliance with legislation; Weber (2014) agrees and notes that constant changes in the law also plays a big role.

Consequently, the defective legislative process, lack of harmony, coherence and interoperability between the ICT legislation result into issues of misalignment between these related laws (see model below).



**Figure 2:** Proposed Conceptual Framework: Factors contributing to the misalignment of ICT legislation in South Africa and the Impact of misalignment on compliance with legislation

v) *Misalignment in the Legislation*

Misalignment in this paper is defined as the opposite of alignment. Whereas alignment has been defined as a match or fit between legislation that is in harmony and coherent with each other, with the purpose of achieving higher level interoperability amongst them; contrary, misalignment in the context of this paper is defined as a clash or mismatch between related legislation whereby legislation is disorganised and poses some technical obstacles and conflicts, which leads to lack of unity and poor/no coordination between the laws (Weinrib, 1988; Austen-Smith & Riker, 1987; Venkatraman, 1989; Chorn, 1991; Maes et al., 2000; Zeng et al., 2000; Stadler; Kolbe, 2007; Isasi, 2009; Dickson, 2010; De Coning & Friis, 2011; Chaberek & Karwacka, 2012; Savin, 2013 & Moodley et al., 2014). In this study, misalignment is viewed as a result of the defects that are found in the legislative process, the disintegration in the law and a contributing factor to non-compliance with legal regulations.

vi) *Non-compliance*

As discussed briefly in the previous sections, many factors contribute to non-compliance in the legislation, in general. Some of those factors are: misalignment of related laws, complexity of the laws, the language that is used when drafting the law, process of drafting the law, fragmentation of the law and disregard or misunderstanding (lack of awareness) of the legislation (Zhang, 2005; Kyobe, 2010 & Islam, Mouratidis & Jurjens, 2011). However, in the present paper the emphasis is on the misalignment of the laws which contributes to non-compliance.

**4. Research Methodology**

The purpose of this study is exploratory; and the philosophy to be adopted is positivist as it assumes an observable social reality that can be measured more objectively, whereby there is more reliance on statistics and data can be quantified (Bazeley, 2002; Kaplan & Duchon, 1988; Saunders et al., 2009). Approach to theory will be deductive. Firstly an Alignment model, which is a Classificatory Framework for Mapping the Six Perspectives of Fit in Strategy Research (Venkatraman, 1989) is adopted.

Secondly, based on the reviewed literature, and having considered the adopted definition of alignment for this study, a conceptual framework has been developed and adopted to be used to examine the existing e-legislation in order to identify misalignment in these laws and the contributing factors.

A sampling technique that will be adopted is purposive whereby “informants are selected based on the information they can offer”. Purposive sampling technique will allow the researcher to decide on the most appropriate sample frame that will be able to produce the required results (Saunders et al., 2006). Additionally, this technique is flexible in such a way that the researcher can base the sample frame on factors such as experience and knowledge about the subject matter. Hence this study will be conducted in the Parliament of the Republic of South Africa.

In research, data can be collected using either qualitative or quantitative data collection methods (Saunders et al., 2006; Alexander & Randolph, 1985). Nonetheless both methods can also be combined when collecting data (Bourgeois, 1985). Alexander & Randolph (1985) and Bergeron et al., (2001) use similar methods for data collection when they test strategic fit; however, Bourgeois (1985) employed both qualitative and quantitative methods when he investigates the relationship between strategic goal, perceived uncertainty and economic performance. In the present study, data collection will occur in two phases: first an extensive study of the existing ICT legislation will be done using the conceptual framework in order to identify the gaps and inconsistencies in the laws. Next, questionnaires will be distributed and then follow up interviews with experts, based on participant’s profiles, will be conducted

Once quantitative data has been collected through questionnaires, it will be analysed using any or a combination of quantitative data analysis instruments such as IBM SPSS version 20.2, Statistica, Microsoft Excel or any other software that the researcher will deem suitable. All interviews will be recorded using a digital voice recorder and records will then be downloaded. Interview records will be copied to the transcription tool, these records will be read carefully and analysed several times (Thomas, 2003). Qualitative methods require that data is grouped into different associated themes in the process of analysis (Attride-Stirling, 2001), a method which the researcher will employ.

Using Thematic Analysis, the steps shown in figure 3 below will be followed when analyzing qualitative data that will be collected both from interviews and participants’ comments attached in the questionnaires. See Figure 3 Adapted from Attride-Stirling (2001). This approach (Thematic Analysis), is chosen particularly because it is considered more appropriate and flexible to analyse qualitative data (Attride-Stirling, 2001; Thomas, 2006).

**Step 1. Code Material**

- (a) Devise a coding framework
- (b) Dissect text into text segments using the coding framework

**Step 2. Identify Themes**

- (a) Abstract themes from coded text segments
- (b) Refine themes

**Step 3. Construct Thematic Networks**

- (a) Arrange themes
- (b) Select Basic Themes
- (c) Rearrange into Organizing Themes
- (d) Deduce Global Theme(s)

**Figure 3:** Steps in Thematic Analysis

In order to determine validity of the results, the data analysis methods will be used. For example, Reliability tests and Factor Analysis will be run on STATISTICA software.

## 5. Conclusion

This study investigates the ICT legislation in South Africa and the factors that contribute to the misalignment of this legislation. Throughout the experience of reviewing the limited available literature on this legislation, studying the provisions of the NDP and the MTSF, it became evident that this legislation is complex and it poses some inconsistencies. The NDP and the MTSF give a direction to ensure the removal of those inconsistencies in the laws. Five pieces of electronic legislation have been identified for the purposes of this study. Theory of Alignment has been discussed and adopted, from which a definition of alignment in the context of legislation and regulations is derived and adopted.

Lack of harmonization, lack of coherence, lack of interoperability and the defective legislative process have been found to be the four main factors that contribute to the misalignment in legislation. A conceptual framework is then proposed based on these factors. This framework will then be tested and used as a lens to conduct the empirical research in the Parliament of RSA, following the research methodology outlined in this paper.

## 6. References

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