

Department of Communications

National Integrated ICT Policy Green Paper



A Submission By:



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Introduction

ABT is a black-owned electronics design and manufacturing company based in Centurion, Tshwane. The company welcomes the opportunity to make inputs, comments and specific submissions to the National Integrated ICT Policy Green Paper (“the Green Paper”) as published in Gazette No. 37261 on 24 January 2014. We also thank the Department of Communications (“DoC”) for providing leadership and guiding the ICT sector specifically and the nation at large through the Green Paper process.

Some of ABT directors and shareholders come from the background of having been involved in the post-apartheid formation of the ICT regulations and have a benefit of having knowing where we have come in the last twenty years as a country as well as an economic sector. As such, ABT believes that, based on our past South Africa needs a well-coordinated ICT Policy. Good coordination will mean that we do not only adapt –but we also afford – to stay ahead of the global ICTs’ curve. We believe that the review of the country’s ICT policy framework is necessary to bring South Africa to leapfrog and catch-up with those countries ahead of us like China, Taiwan, Malaysia, and South Korea and, to a lesser extent, our own continental countries like Kenya.

As ABT we summarise South Africa’s policy problems as emanating from lack of implementation by the industry that chases profiteering, lack of or poor compliance and weak or delayed monitoring. As we review this Green Paper, the industry is facing a stalemate of policy in two separate but key sectors, the telecommunications and broadcasting/digital migration. We argue that if it were not for our industry’s three mentioned pitfalls, there would be no operator taking the regulator to court for the reasons cited. Also, the digital migration process would not have been bogged down for whimsical reasons as furnished. We believe strongly that policy and regulatory enforcement are key to the advancement of South Africa’s ICT.

Our country, South Africa, needs to urgently engage in crafting our broad ICT Vision. Other countries of the world boast clear ITC goals, objectives, Visions and or Mission statements. We need to emulate these by defining our circumstance in the context of the converged ICT services. Such policy clarity will result in long term positive impact of convergence on current ICT.

Again, by looking back (and knowing) where South Africa’s ICT comes from one can easily tell our sectors and government department have neither been coordinated nor focused to any common Vision. We saw how the mobile and broadcasting operators have zigzagged the business models sometimes entering into each other’s territories without any regulatory, punitive consequence. We have also seen how radio operators would carry video broadcast without appropriate licensing and without suffering any regulatory reprimand.

There are fewer resources that can be used as industry stimuli or for purpose of economic transformation. The imminent procurement of radio frequency spectrum otherwise known as the digital dividend that will result from the digital migration is but one of few remaining opportunities. As such, ABT will lobby hard for spectrum allocation that is sensitive to the economic transformation objective. We are firmly opposed to the notion of allocating the spectrum to existing mobile operators. We shall support that only emerging business and enterprises get the spectrum and be able to do with it what mobile operators were to do with it. This pro-SMME approach ensures generation of new businesses, new jobs and new innovations far outweighing what established operators would attain.

We note the lacklustre performance from established operators to creating enterprises and their penchant of being gatekeepers. We equally observe that established operators would not change

the status quo as they need to remodel their businesses. Whilst there is nothing wrong with such remodelling, these operators must accept that they have had been allocated licenses and had sufficient time to exploit those licenses for the full benefit of their shareholders and growth of their businesses.

They have not impacted on normalising the South African ICT market forces and cannot be trusted to do so in the years to come if they were prioritised for the digital dividend. We emphatically propose that the digital dividend be allocated such that it propels new vibrant entrepreneurs and emergent businesses. ABT submits therefore that policy tackle the spectrum issue carefully and tactfully in favour of small business. It must provide mechanisms that will effectively and clearly grow ICT business to absorb the unemployed, create new skills. Doing what was done before will most likely give us the result.

The RF spectrum allocation must catered for in the policy in clear, measurable and non-equivocal means. The Green Paper must take the sector further and build upon the principles and directives set out in existing legislation (such as the ECA), regulations and policies (such as the Broadband Policy) and not duplicate or ignore them. Further, the policy reforms must address South Africa's universal service obligations.

ABT submits that the transition from the current status quo to an improved global ICT competitiveness position will contribute to our broader national economic Agenda, as articulated in the National Development Plan (NDP). This draft policy development process must be anchored on the current NDP values and reflect the prevailing discourse in the country. ABT submits that our national documents like the Constitution, the NGP, the NDP and all the current laws and regulations must be binding whilst they are dynamic in reflection of the global nature of our relationships and the times they regulate in. This will mean we continually review and adapt what are already documents of high quality.

ABT advocates that the policy must strengthen the role played by the private sector in the deployment of broadband and in ensuring South Africa meets its set broadband objectives, goals and targets. In this regard, ABT believes that private sector need to be incentivised appropriately and the Green Paper process must include the cooperation between the established business and the emerging business.

ABT SUBMISSION AND COMMENTARY ON CHAPTERS OF THE GREEN PAPER

Our inputs and comments specific to the Chapters of the Green Paper are found here-below.

Chapters 1, 2 and 3 of the Green Paper

The Green Paper: Green Paper for Public Consultation

ABT appreciates and welcomes the consultative approach pursued by the Green Paper process. This process will assist in informing the general public and create awareness of the development of the policy. At the same time the consultation process will enable people an important opportunity to make inputs, influence the policy and voice concerns, if they have any. We have heard allegations – rightly or wrongly– of lack of public consultation in other non-related processes and have seen the damage such allegations may render the Green Paper process; hence our support for it.

Section 2.5 of the Green Paper: Changing ICT Environment

The last twenty years saw convergence taking place at an unprecedented and unforeseen speed. South Africa has become both a victim and a benefactor of the said changing ICT environment. The country has pioneered some changes whilst we fell behind other ICT developments. ABT believes South Africa must prepare for even more changes in the ICT space as more convergence will take place and no sector will be spared. In the last 10 years we have seen how over-the-top services impacted the means of communication and information exchange. The internet which was conceived to carry data has encroached the broadcast and voice arenas thus necessitating change in how we communicate and access broadcast services.

The infrastructure that could have been originally designed for one service is today used to carry other service/s not originally intended for that infrastructure. Customers who might have signed up with a specific service provider to access specific services today have freedom to change their service provider and type of service/s. No service provider can claim either “customer loyalty” or control of their customer. The ICT changes ahead will compel us to start attaching new (current) meaning to words we use.

3.1.2 of the Green Paper: Growth and Outlook

The mobile sector of the ICT has dictated the growth patterns for almost the entire industry. As the mobile-voice telephony reaches its saturation point at 136% penetration, mobile operators are looking to diversifying to the finance sector with such offering like mobile money (MTN) and MPESA (Vodacom). For the same reasons they are investigating retail and broadcast as channel providers. Precisely because of these developments ABT believes that there needs to be a re-definition of many words and expressions in the industry including: customer/client, service, service-provider, broadcast, etc. have all lost their original meanings and will continue to as ICTs pervade and change our lives. As the anticipated future changes in ICT promise to bring along new types of challenges, opportunities and solutions, they will equally bringing about new enterprises and business opportunities. These opportunities and challenges raise the vexed question of ready is South Africa for the changed ICT in terms of human resource skills pool, regulation and capital. ABT offers that this Green Paper be crafted such that all the aspects and elements that make the ICTs be subjected to necessary review. We propose that a colloquium on definitions and statistics be planned to determine that we say what we mean and we use words and jargon with “common meaning” as we go about our respective businesses.

Section 3.4.2 of the Green Paper: Growth and Outlook of the commerce market

South Africa’s e-Commerce growth has been of a stellar type; sadly it caught the country almost unawares or unprepared for it. ABT proposes that research and academic institutions must cooperate in researching and collating credible, quality work for the industry to delve in and use to determine the size of e-commerce and determines plan its future. ABT proposes a generation of data as we note the vastly dissimilar and in some cases contradictory research outputs. The country needs one reliable, premium quality data house/institution.

Chapter 5 of the Green Paper: Enabling environment for Electronic Communications

The Green Paper raises poignant policy questions which we deal with in the following pages:

Section 5.2 of the Green Paper: Regulatory Environment

ABT submits that one of the weakest aspects of South Africa's ICT is –rightly or wrongly– our regulatory environment. Whilst ICASA is renowned for its regulations it unfortunately has a reputation for lacking gravitas in policing to deal with. The policy must intervene and ABT believes that it should be benchmarked with other regulators for best practice in implementing regulation and policing. Regulator's weaknesses and limitations are always exploited by private sector operators who usually have big budgets to delay or otherwise frustrate policy implementation through legal court delays. In this light, the Green Paper process must capacitate the regulator as the case is developed countries such as South Korea.

The Green Paper must enunciate codes that will inculcate cooperation and collaboration by all industry players; this will lead to an environment of mutual respect for all, but more especially for the regulator.

Section 5.2.3 of the Green Paper: Licensing

ABT would like the Green Paper to ensure that licensing of ICT services, products, and service providers (operators) prioritizes (i) Convergence, (ii) Industry transformation and increasing competition (iii) as well as that South Africa's prevalent licensing regime is not consistent with the theory of convergence in the ICTs; it is rather rigid, archaic and was not conceptualised with much forward vision. The Green Paper must correct these errors by making way for our licensing regime to adapt speedily, be forward-looking and extra-sensitive to the converged ICTs. As an example of licensing being antiquated, the ECN/ECS and Broadcast licenses definitions have drastically lost meaning since even the most recent licenses were issued. These licenses will need to be reviewed against the dictates of convergence which impacts them adversely.

ABT believes that Licensing has to all classifications and definitions will need to be changed and adapted to the converged environment. In the same breath we need a licensing regime makes no difference between the first network operator and SNO. Rather let us have seamless service provision by all operators in a converged NGN future.

The traditional definition of "Broadcast service" is outdated and, at least, misleading. ABT offers that this Green Paper process is most suitable for ushering in or proposing major shifts in thinking about the national ICT sector. The Green ICT Paper process must not assume everyone understands its pronouncements and propositions; as such, the process must be accompanied and followed by public education/awareness campaigns.

Section 5.2.4 of the Green Paper: Competition Issues

On the competition issues of and within the ICT industry ABT urges for managed competition. Whilst we are all for competition, we caution against leaving it entirely to the market forces; this will not be good for new start-ups and emerging players as established players are generally prone to protect their markets and thus prevent new entrants from prospering. On this point ABT submits that as the ICTs move towards a "converged" competitive environment there needs to be a clear intervention that is biased in favour of new players.

As it is, competition issues happen to be topical in South Africa as we review and discuss the Green Paper. We say this would not have been necessary in a "managed competitive environment". A lot of policy clarity for a converged ICT ecosystem is required to prevent some of the deadlocks that pitch established operators against new entrants, as well as against the regulators.

Another classic proof of our out-dated ICTs is the now-tired issue of the LLU which is outdated and requires intervention at the access and infrastructure layer of data operators. Also, access to local Internet Protocol (IP) transit providers must not be more expensive than that of international IP transit providers. Access to Fibre, micro-fibre ducts, ducts, etc. must be allowed and enforced, self-provisioning at hotels of operators with SMP must also be allowed where third parties services can be used. Off-net and on-net services must therefore be equal in price.

Section 5.2.4.1.1 of the Green Paper: Interconnection

ABT submits that the Green Paper has to usher in the interconnection framework for transit network operators as it currently is absent in the system. Local licensees require transit operators to route their traffic. This makes it imperative that national roaming services must be affordable –as compared– to current highly priced interconnection rates. We concur that interconnection agreements must be filed with the regulator and suggest that seamless handover clauses of these agreements must be enforced by regulation.

Section 5.2.4.1.3 of the Green Paper: Market Concentration and the Significant Market Power

We urge for monitoring and management of the market dynamics and where necessary the regulator must intervene. In a normal world Significant Market Power would be welcome; but South Africa still struggles with the vestiges of an unbalanced market. ABT is therefore concerned with the abuse of market dominance and anti-competitive behaviour as currently displayed by some ICT player. In a more stable country, things can be left to the market forces.

The Green Paper must prepare for implementation of open access/wholesale network availability interventions. The policy should be emphatic in empowering the regulator to make future determinations that will discourage and prevent established operators to threaten legal action at the drop of a hat. A clear policy objective will assist as it provides a basis for interventions. ABT submits that regulatory environment must have the capacity to pro-actively deal with anti-competitive behaviour by entities with Significant Market Power (“SMP”) as we see it happening in South Africa at this very moment.

Section 5.2.4.1.4: Numbering Section

We have seen in the past 10 years an increase in customers for voice (South Africa’s mobile telephony is saturated with operators having more 100% SIM subscriptions). Based on this situation ABT submits that policy must ensure sufficient capacity for internet protocol addresses having no distinction between fixed, mobile numbers and Voice over Internet Protocol (“VoIP”) numbers. This will also enhance customer confidentiality as numbering will not be changed according to the service. We call for one number per person for everything. Numbers must belong to people not organisations or business; in future, number portability must be across all number ranges. We further submit that policy must learn from International Telecommunications Union (“ITU”) regulations and/or proposals on new schemes.

Section 5.2.4.1.5: Spectrum

The scarce radio frequency spectrum is one of the few lasting opportunities to give effect to ICTs transformation. ABT agrees that spectrum must be used as an incentive to operators to cover non-profitable areas but must not be procured by incumbents on a winner-takes-all basis or in an auction form as this will prevent new, SMMEs to take part of the spectrum. We say the allocation of

spectrum must reflect an intent to enhance South Africa's socio-economic agenda. We propose that the spectrum be allocated in more than one scenario including (i) 30% of the spectrum be sold on auction basis to only local operators (ii) 40% be used for new emerging players and (iii) 20% be retained for government optional use.

If paid for, the revenues generated from sales of the radio frequency spectrum must be used to create and offer ICT services in the rural areas. The fees must be balanced with the cost of Universal Service Obligations. The total cost of the two should not be to the detriment of the costs of providing the service to the public. Spectrum sharing, trading, leasing should also be considered. ABT concurs that spectrum management should reside with an ad-hoc entity which will ensure efficient use thereof and public sector entities who are assigned spectrum must be charged the same fees as private sector participants to ensure that they use only what they need efficiently.

Spectrum Pricing

Spectrum assignment, pricing and management should also include clear policy statements about a desired market structure. Socio economic objectives to be considered in the chosen Spectrum management approach should be clearly stated. This should without doubt, include the introduction of new entrants as a direct boost to competition in the market. A clear policy on spectrum management is all that is required to enable the regulator to be effective in this role. Current regulatory weaknesses on this issue do not necessarily point to a need for institutional reform or the need to establish a new/separate management agency

Section 5.3.3 of the Green Paper:

Mobile

In the converged legislative environment the policy must provide for multiple MVNO's and multiple MVNE's.

Section 8.12.1 of the Green Paper:

Promoting access to public interest content in a converged environment

Global experience suggests that any attempts to control content delivery in this manner in a converged environment, is doomed to failure. The plethora of sporting events streamed over the internet from developing countries whose regulators and policy makers turn a blind eye to exclusivity and IP of most popular sporting events is a glaring example of this phenomena.

ABT submits that entrepreneurs and innovators from developing countries and communities who provide such online streamed content should not be discouraged by rigid national laws that cannot control foreign streamed content (including local programs and events).

Section 8.14:

Signal Distribution

The present environment and the current thinking must fit into a fully converged future environment. This is where open access broadband infrastructures provide unlimited distribution channels, enabling for example, geographically dispersed common interest communities, even in the global diaspora, to access content of their choice. Smart TVs, or smart STBs, can already access any online programming without depending on national signal distributors, with last mile access via any of the growing number of access technologies (ADSL, Wi-Fi, etc.). There needs to be a seamless way in which traditional broadcasters migrate to such low cost distribution mechanisms without severely "disrupting" the existing business and institutional models which retain great value even during the transitional phases.

Chapter 9 of the Green Paper:

The whole section of Universal Access and Service, including the questions that follow, addressed in a single comment

There are far too many parallel strategies underway that address these stated or implied concerns e.g. the ongoing discussions and regulatory developments concerning cost to communicate across the whole ICT sector, the standards for STBs that will target poor families and individuals, etc.

The well-documented and researched failures of South Africa's UAS strategies, including its key points of intervention such as the e-rate mechanism, telecentres, USALs etc., suggest a complete review of the national strategy. Such a review can and should be part of the sector review made necessary by the migration to converged ICTs. Convergence can in principle give rise to potentially invaluable new ways of achieving UAS objectives.

It is interesting to note that some developing countries are in the process of abandoning their traditional UAS philosophies altogether and are seeking alternative ways of addressing the challenge, including tax incentives with state funding that encourages entrepreneurs and innovators, instead of "crowding them out" as traditional USF mechanisms tend to do. The opportunities presented by the Green Paper's focus on convergence must be seized, but it should be seized after proper definition of convergence, and when implementation strategies and plans have been developed.

Chapter 10 of the Green Paper:

Promoting Investment in the ICT Sector

The Green Paper provides an excellent background to both the successes and failures (actual or perceived) of the ICT investment scenario in South Africa. There are however few key observations/questions that arise from the Chapter:

National investment in ICT is measured in monetary terms – South African Rands. This may not be appropriate. The indicator may be masking inefficiencies in the investment model, its measurement, or its meaning/significance. There may be too much focus on supply side investment achievement and too little on demand side impacts of such investments.

The policy development process may be informed by an attempt to benchmark South Africa's investment effectiveness against similar peer developing countries, using indicators such as total investment in ICTs as a ratio of say broadband penetration or its growth, or other indicators published locally or internationally. Policy focus should not only be on improving the quantity of investment in the national ICT industry, but also on how effective that investment is.

Section 10.2.6 of the Green Paper:

Electronics manufacturing

The Green Paper must seize the opportunity presented by migration towards convergence to address this critical issue.

Open access, infrastructure sharing, and other related long outstanding policy adjustments will encourage both foreign and local investments. In the ICT sector, South Africa has in recent years steadily lost its position as top destination for direct foreign investment, replaced by emerging economies such as Angola, Ghana, the East African countries (especially Kenya).

Nearly all Latin American countries portray high ICT growth - the tendency is to actively seek foreign partners for local ICT industries, with significant government financial investment in the resulting partnerships. The big question should be "what are these emerging economy peers doing that attracts both foreign and local investment into the ICT sector"?

Numerous answers to this question have been proposed over the years - open access, local loop unbundling, infrastructure sharing, rapid infrastructure deployment guidelines, standardization and easing of way-leave approvals, spectrum allocations, etc. Previous answers and recommendations still remain on the table and can be used to attract and sustain investment.

The recent broadband policy development process highlighted many barriers that lead to a satisfactory response to this question. One major barrier is the national focus on supply side interventions at the cost of demand side developments. A focus on our core local values and opportunities, rather than an external focus on issues like international trade agreements, or worse still, a top-down focus on policy issues that undermine direct actions that lead to job creation and revival of South Africa's excellence, is necessary in this policy development process.

ABT is aware that innovation comes before IP protection, and the question suggests that IP must be protected even before the intellectual property that needs protection is developed. Policy focus must be on innovation processes first, followed by IP protection concerns. The related concept of "Disruptive Innovation" needs to be examined closely in the context of innovation, IP and convergence: innovation in this concept is not IP dependent or sensitive, but has the potential of challenging highly successful and stable industries by innovating new lower cost products that compete with the high cost products of existing industries. The competitive and structural changes that are necessary to achieve full ICT convergence have a direct bearing on the disruptive innovation principles.

As ABT we submit that IP protection provides much-needed incentives for innovation and creativity by enabling enterprises to recoup their investments in research and development and to fund future innovation. There is no less true for SMEs than for larger enterprises. Indeed, many of today's most successful IT companies began their existence as SMEs, and were able to grow only because IP protection allowed them to commercialize their inventions. Therefore ABT believes that IP is not a barrier but a bridge that enables an innovator to share an innovation with other companies that pass the innovation to their customers – and that pay a license fee to the innovator.

SMME development is seldom successful if approached in a top-down manner. Numerous issues impact the development of SMMEs, especially those at the BoP. Issues such as the cost to communicate and regulatory provisions in both the ICT and general economic sectors that impose barriers to SMME entry are well known, studied by nearly all academic institutions located in South Africa and abroad. The solution is not to seek new re-engineering solutions to replace well-known and well-researched solutions by South Africa's own significant intellectual capacity, but to apply those solutions with the help of visionary policy supporting instruments.

Contrast in respect of China: ICT SMEs contribute 69% to GDP; employ 76% of the workforce; contribute 69% of all exports. The Green Paper must capture and promote the global recognition that it is SMME IST users more than SMME ICT providers that dominate the contribution that SMME/ICT makes to national development.

Chapter 11 of the Green Paper: Skills Development for the Future

ABT suggests that, historically, the Regulation and Policy has always been lagging behind the ICTs and playing catch up with products and services. Going forward, we believe this is untenable. Policy must lead, anticipate and at best be vaguely in touch with future trends. The opposite is too ghastly to contemplate. If we are to write a policy or a regulation when, for example, a technology development has already pervaded the market we shall be playing catch-up, wasting time our resources and ultimately retaining the status quo of the last two decades. For regulation or policy to

work it needs a strong sense of anticipation. We need intrinsic knowledge of the ICT industry, deep skill-sets to foresee the changes in the industry and these attributes comes education. ABT proposes that South Africa creates an ICT University with branches at provincial level.

Conclusion

ABT is grateful for the opportunity to comment on the National Integrated ICT Policy Green Paper and believes this public consultation process will ensure that the end result is shaped by all interested parties and that it is supported by a shared vision for a thriving ICT sector which promotes universal broadband access. ABT hereby thanks the DoC for this opportunity to make a submission on the Green Paper. We would be available to present oral submission if this will be part of the process.