



GSR

2009

Discussion Paper

Comments are welcome and should be sent by 20 November 2009 to GSR09@itu.int



Work in progress, for discussion purposes

Please send your comments on this paper at: gsr@itu.int before 20 November 2009.

The views expressed in this discussion paper are those of the author and do not necessarily reflect the opinions and official positions of ITU or of its Membership.

Impact of Effective Regulation on Investment: an Investor's Perspective

*Author: Lynne Dorward – Chief Regulatory Officer and Hal Peters- Manager
– Group Business Development – Zain Group*

1. Introduction

This paper is intended to address two major areas of interest for telecommunications regulators and other interested stakeholders, namely: 1) the impact of the current economic crisis on the potential investments that may be considered by telecommunications operators and other interested parties and 2) the way in which effective regulation impacts these investors' consideration and assessment of potential telecommunications investments. The paper examines why telecommunications became a major investment focus in the latter half of the twentieth century and then further expands on critical factors and key issues related to telecommunications investments both before and during the current financial crisis. In general terms, the first three sections of the paper lay the groundwork for and focus on providing an understanding of the effect of economic conditions and regulation on telecommunications investment. After the initial overview of the evolution towards telecommunications investments, the paper then examines recent developments in investment activity, including current investment environment trends, followed by an analysis of the impact of regulatory frameworks and policies on such investments. Prior to concluding remarks, in the second to last section, the focus is on raising regulators' awareness of the best practices and financially prudent approaches that must be considered and applied by telecom operators and investors during the current global economic downturn.

1.1 *Why Did They Invest?*

Since the late 1980's when the concepts of telecommunications liberalization and privatization first started to take hold in a noticeable way outside of North America, investment in the ICT sector has attracted many interested parties around the globe. At the outset of this investment trend, the most active investors were other existing players in the ICT sector¹ as incumbent telecom operators (who were both network operators and service providers) saw subscriber and revenue growth rates stagnating in their home markets and were also faced with the prospect (in many cases, for the first time) of competition on their home turf. Consequently, such ICT operators sought to increase their market and revenue base by investing overseas and by capitalizing on the operating experience that they had already acquired. In general, global investment activity in the ICT sector started in Latin America (late 1980s to early 1990s), subsequently followed by many parts of Asia and then, subsequently, Europe, basically in line with liberalization developments around the globe. With a few exceptions, Africa and the Arab States were the last regions to adopt liberalization in the ICT sector and, as such, investment was delayed until the liberalization phases had commenced.

Despite some initial hurdles with respect to often poorly structured transactions, unforeseen political and social problems as well as unstable and sketchily defined or even non-existent regulatory environments in some of the countries, prospective investors embraced the initial investment opportunities with enthusiasm if not always with finely honed investment skills. Although the investment returns of some of

the telecom privatization investments yielded mixed results, with very few exceptions, greenfield mobile licences at the time (analogue and, subsequently, 2G) were extremely successful with positive returns on investment often being achieved in 18 to 36 months². Such initial successes spurred others on to investment and the resulting investment trend took place in lock step with the liberalization of the various national ICT markets and regulatory frameworks.

As global ICT investment progressed throughout the 1990s, some of the initial incumbents that had been privatized, when faced with concerns similar to those of their own original investors regarding possible limitations in their own now much more developed home markets, also elected to undertake investments in the ICT sector of other countries, thereby contributing to foreign direct investment in those markets.³

1.2 *Implications of Recent Developments on Investment Activity*

The seemingly precipitous appearance of a global financial crisis at the end of the third quarter of 2008 has had a serious impact on both the overall appetite for international investment in the ICT sector and the manner in which such investments are evaluated and subsequently carried out. The World Bank recently stated on its web site that: “the effects of financial turmoil on developing countries increased in step, as risk aversion sent spreads soaring, equity markets tumbling, exchange rates falling and capital flows into decline. In this climate, growth prospects for both high-income and developing countries have deteriorated substantially, and a movement of global growth from 2.5 percent in 2008 to 0.9 percent in 2009 appears to be in the cards”. Many of the telecom operators that had once again heartily embraced growth through expansion after the dry spell that followed the bursting of the telecom bubble in 2001/2002, have found themselves yet again in the position of examining this expansion strategy in light of the new global downturn and general scarcity of funds. Such operators have been forced to examine the impact of the crisis not only on their international investment strategy but also on the profitability of the operations in which they have already invested. The overall result is that there appear to be two major reactions to the current investment challenges: 1) those operators that have either completely retrenched from investing or that have severely scaled back their investment targets; or 2) those who view the current crisis as an opportunity to invest in selected markets at a significantly reduced premium. This paper focuses on the factors that affect the latter group and attempts to examine these factors and others by addressing the following key elements:

1. The current investment environment and trends
2. The impact of regulatory frameworks and policies on investment
3. Investment regions and approaches
4. Securing investment in the current economic crisis

It is important to emphasize that this paper is not intended to be an in-depth analysis of the global economic crisis, but rather, a perspective on how the crisis has directly impacted overall investment approach to the ICT sector and how the regulatory environment (and effective regulation) can help to shape and drive this approach.

2. Current Investment Environment and Trends – Then and Now

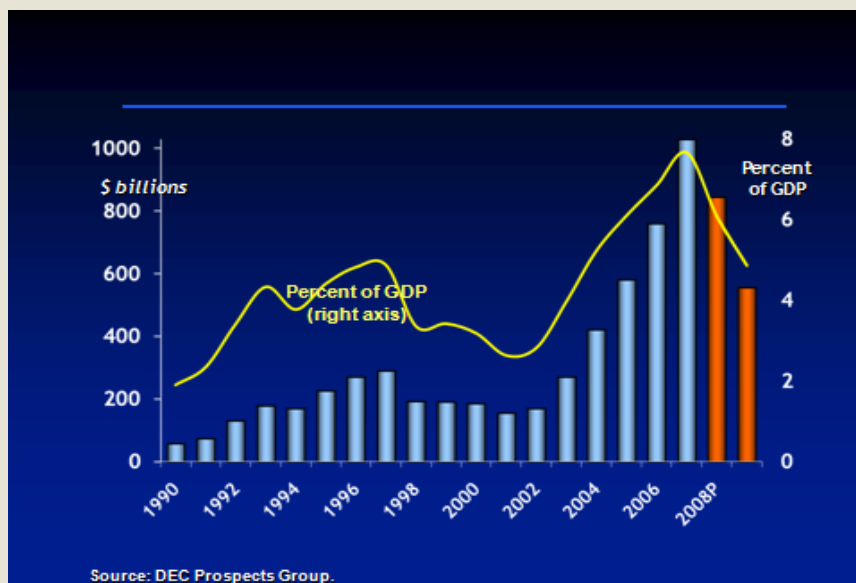
2.1 Then

In the years immediately leading up to the current crisis, access to financing was relatively straightforward, provided that there was an adequate return on investment supported by well conducted due diligence and clearly articulated risk identification and mitigation plans. A variety of investment banks was available to solicit and assist both potential investors and investees and these bankers were complemented and bolstered by a wide variety of financing agencies, local and international banks and numerous investment funds. In fact, it was not uncommon for major banks to actively approach international telecom investors in order to offer unsolicited financing assistance in a variety of highly competitive packages as many financiers competed to get a suitable portion of the investment advisory work as well as the opportunity to access attractive investment opportunities via the financing structures provided.

2.2 Now

The current ICT investment environment has experienced a startling transformation in the past year and this sector is experiencing a radical metamorphosis. According to the World Bank, a sharp pullback in syndicated bank lending has occurred as commercial banks and other financial institutions in the high-income countries aggressively attempt to shore up capital ratios by limiting new lending or by calling in existing lines of credit. In addition, initial public equity offerings from key emerging markets have dried up just as stock markets have collapsed. Exchange rates have also been severely affected. All of these developments contribute to a very uncertain investment market, including the ICT sector, fraught with potential pitfalls and volatile conditions. Clearly, the collapse of major investment banks such as Lehman Brothers has only added to the overall uncertainty and turmoil. The following chart illustrates the global net private equity and debt flows for all sectors for the period 1990 – 1997 followed by the projections for 2008 and 2009. As can be seen, there is a sharp downturn in private capital flows. This is illustrated by the bars which show the peak being reached in 2007 with the sharp downturn commencing immediately thereafter. Please refer to **Box 1** at the end of this section for a glossary of pertinent financial terms.

Figure 1: Private Debt and Equity Flows



Source: DEC Prospects Group

Of course, there are still some limited sources of funding and financing available, but such sources are drastically reduced from the numbers available even one year ago and the conditions for accessing these sources have become much more stringent. Furthermore, the conditions associated with any of the limited financing and funding available are much more stringent as the reduced ranks of bankers and funds seek to ensure much less risky and potentially more lucrative investments. In fact, in a recent presentation to the Zambia International Business Economic (ZIBEC) forum, the World Bank stated that the global level of investment capital had fallen from \$US 900B at the beginning of 2008 to just over \$US100B in 2009⁴. (The impact of the financial crisis on telecom investment is also addressed in the recent ITU report (http://www.itu.int/osg/csd/emerging_trends/crisis/report-low-res.pdf)⁵. These restricted conditions translate into the need for previously active investors to closely re-examine and/or redefine overall investment strategy. In some cases, this has meant either a drastic cutback in investment activity or a completely new definition of what the strategy should be as a limited number of ICT investors view the economic crisis as an ideal time to invest at significantly reduced market rates. However, even those investors who continue to pursue investment opportunities are doing so more cautiously and with an even greater emphasis on risk analysis and risk mitigation.

The impact of the economic crisis extends beyond just new investments: planned network expansions and upgrades are also impacted as many operators have postponed such activities in light of financial constraints and the dearth of financing. This situation is explored in more detail in Section 4.

Box 1: Glossary of Financial Terms

Borrowers/Issuers: Companies that issue debt securities to the debt market. A company can also be an issuer of equity securities such as common or preferred shares. When a company borrows from banks, a company generally is considered a “borrower” among a bank loan syndicate.

Debt Market: Market for trading debt securities such as commercial paper, bonds, notes, convertible debt and high-yield debt. In a broad context, the debt market also includes the secondary trading of bank loans to companies (borrowers).

Equity Market: The market in which shares are issued and traded, either through exchanges or over-the-counter markets. Also known as the stock market, it is one of the most vital areas of a market economy because it gives companies access to capital and investors a slice of ownership in a company with the potential to realize gains based on its future performance.

IRR (Internal Rate of Return): The discount rate often used in capital budgeting that makes the net present value of all cash flows from a particular project equal to zero. Generally speaking, the higher a project's internal rate of return, the more desirable it is to undertake the project.

Private Equity: Equity capital that is not quoted on a public exchange. Private equity consists of investors and funds that make investments directly into private companies or conduct buyouts of public companies that result in a delisting of public equity. Capital for private equity is raised from retail and institutional investors, and can be used to fund new technologies, expand working capital within an owned company, make acquisitions, or to strengthen a balance sheet.

Ratings Services: Moody's, Standard & Poor's (“S&P”) and Fitch are a few of the most well known debt rating agencies in the world. The debt ratings provided by these agencies assess the creditworthiness i.e., the safety of a corporation's debt issues. The higher the rating (i.e., AAA), the lower the risk of default and therefore, the lower the cost of borrowing. Most corporations that issue notes in the debt market are investment grade, which have S&P ratings of AAA to BBB. Ratings below that range are regarded as non-investment grade (speculative issues) and therefore have a greater risk of loss and thus are ascribed a higher cost of capital. The ratings range and meaning may be found on each of the agency's websites.

Source: Investopedia (www.investopedia.com)

3. The Impact of Regulatory Frameworks and Policies on Investment

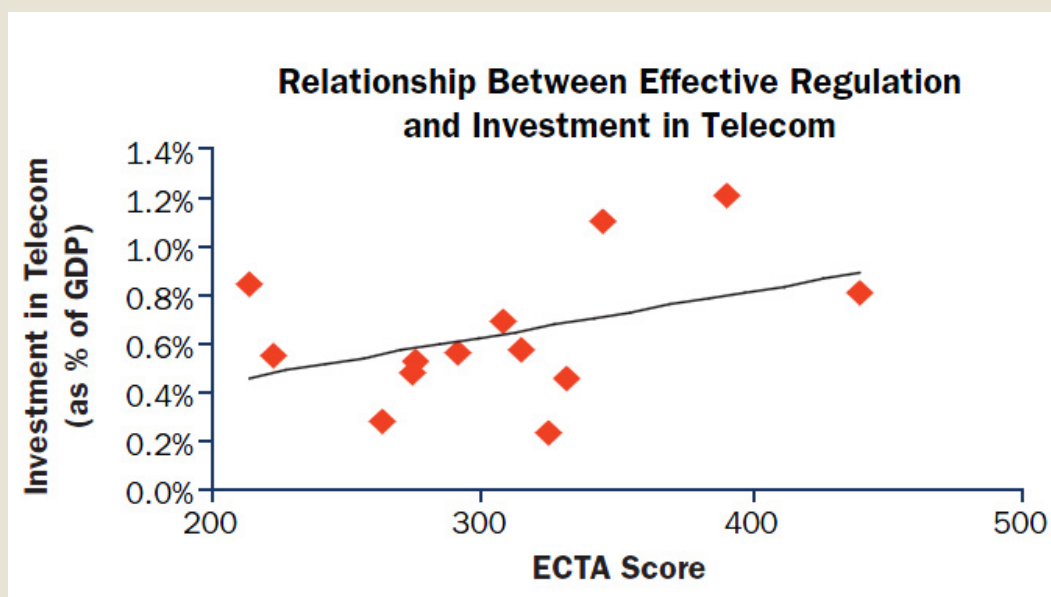
It is important to note that the investment criteria explored in this section are applicable whether or not there are challenging economic conditions

3.1 *Investment Criteria*

Along with careful judgement about potential risks and returns, any prospective investment obviously requires thorough due diligence. In the ICT sector, one of the critical aspects of due diligence is to analyze in detail the existing and future regulatory environment and to identify any elements of risk that may exist. In general terms, an investor in the ICT sector will be inclined to focus on the independence of the regulator from the government; the transparency of the regulatory process; the legal processes for regulation; and whether in general the framework achieves the correct balance between sustaining a fair competitive environment (and one that encourages and stimulates investment) and ensuring that there is not excessive competition/over-licensing. In principle, these investment criteria are paramount irrespective of the state of the financial markets and the availability of funds for investment. It is the **weighting** of the regulatory risk in this current environment that is more likely to change, based on the investor's appetite for risk in the face of scarce capital markets. The higher the perceived regulatory risk, the less likely is the appetite for investment. Logically, the opposite also holds true as has been identified by analyses conducted by the European Competitive Telecommunications Association (ECTA).

In its 2005 publication, the ECTA attempted to determine how well each of 16 European countries promoted investment and competition by measuring the overall effectiveness and performance of the National Regulatory Authorities in that country following the introduction of the New Regulatory Framework in mid 2003. The assessment took into consideration general NRA powers, effectiveness of the dispute settlement body, general market access conditions, and availability of key access products. These four items were given a maximum total score of 518 points with different weighting applied to the four principal criteria. The relationship between the effectiveness of the regulatory environment in each of the Member States surveyed and the level of telecommunications investment in that country was assessed, based on OECD data. The economic analysis conducted in this regard shows that effective regulation continues to have a strong and positive impact on the level of investment in telecommunications networks and services. The study clearly demonstrated that the higher the overall effectiveness of the regulator, the greater the investment. In other words, if one examines the scores on the bottom of the graph, this indicates the score for overall effectiveness of the regulation with 500 indicating the highest regulatory effectiveness level. The percentage investment in telecom as indicated on the left hand axis shows that investment is higher when the regulatory effectiveness is higher.

Figure 2: Effective Regulation and Telecom Investment



Source: ECTA 2005 Regulatory Scorecard⁶

The ECTA study, which obviously focused on European regulation and investment has been further corroborated in other regions with Asia being just one such example. In addition to this **Figure 2** above, **Box 2** below explores another scorecard analysis that examined effective regulation and its effect on ICT investment.

Box 2: Telecom Regulatory Environment Survey regarding Impact on Investment Climate

In the second half of 2008, LIRNEasia, a non profit research organization, conducted a survey in eight emerging Asian economies: Bangladesh, India, Indonesia, the Maldives, Pakistan, Philippines, Sri Lanka and Thailand. The study scored stakeholder perceptions regarding investing and operating in the markets in question based on the regulatory framework for mobile, fixed and broadband networks. The regulatory framework was defined by seven major dimensions namely: market entry, access to scarce resources, interconnection, tariff regulation, anti-competitive practices, universal service obligations and quality of service. Pakistan scored the highest in four of the seven dimensions with all environments being viewed unfavourably with respect to dealing with anti-competitive practices. These high scores with respect to the regulatory environment translated into significant investment in Pakistan’s ICT sector, where, according to LIRNEasia, the country attracted over \$1.4B US in the 2007 – 2008 time period. This represented approximately 27 % of the total country’s FDI. Indeed, during the survey period, Orascom increased its ownership stake in Mobilink (a mobile operator) to 100%; China Mobile acquired 100% of Paktel (the incumbent); OmanTel bought a 60% stake in World Call, a Pakistani telecom and multimedia services company; and SingTel acquired 30% of Warid, a mobile operator.

Source: GOLDBOOK 2009 – Weighing Regulatory Risks

3.2 *The Implications of Regulatory Risk*

In many cases, if not appropriately mitigated, regulatory risk has the potential to seriously harm the financial viability of an ICT investment. There are only a limited number of ICT investment environments in which there is little or no regulatory risk and thus, great care must be taken in considering the potential risks associated with the ICT framework in any given country. As would be expected, the degree of risk varies from country to country and not all regulatory risks and their specific financial impact on an investment valuation are easily quantifiable (nor does this paper attempt to do so). In addition, there are many risks that cannot be exclusively classified as regulatory as they could be a combination of legal and financial risks, amongst others. For instance, if the regulatory environment is not complemented by a robust legal framework, the regulatory efficacy is compromised.

Therefore, this section will focus on those risks that are considered to be primarily regulatory. Every potential investor in the ICT industry is likely to have a slightly different view as to how regulatory risks should be prioritized, but the following should serve to summarize the principal regulatory concerns that would be foremost in an ICT investor's due diligence list. Where practical, the possible impact on the investment valuation is explored, but to reiterate, this is not always a straightforward issue. The risks that are primarily regulatory include the parameters listed below. Although these are listed in a possible order of priority, it is difficult to present any hard and fast rules as to how these risks should be ranked since it is often more the case of how they are inter-related rather than the impact that each of these risks may have individually. It is clear, however, that in the early days of ICT investment, the absence of properly enacted telecommunications laws as well as the almost complete lack of interconnection regimes (the absence of the latter totally blocking a new operator's ability to launch service) were likely the two greatest elements of regulatory risk at the time. As telecommunications markets have evolved and as regulation has unfolded to some degree in most jurisdictions, the issues have become more intertwined and interdependent and thus more complex, making it more difficult to single out one specific regulatory risk factor as the most critical. Nonetheless, irrespective of the variances in the risk weighting, the majority of ICT investors would likely consider the following elements to be the most critical. Each of these elements is explored in detail below. It is important to note that the lists below are not exhaustive but designed to give the reader an appreciation of the major risks and concerns that must be taken into account. Even within the individual regulatory risk categories examined, it would be difficult to prioritize each issue identified given the different risk perceptions based on the market environment and the orientation and priorities of the different ICT investors.

1. Overall transparency of the regulatory framework
2. Existing and planned ICT/telecommunications laws
3. Licensing regime
4. Interconnection regime
5. Spectrum management
6. Competition safeguards framework
7. Tariff regulation and controls
8. Regulatory fees and taxation
9. Universal service fund

3.2.1 Overall transparency of the regulatory framework

The overall transparency of the regulatory framework is one of the most important considerations when assessing an ICT investment opportunity. Fundamental to the transparency of a regulator is that body's level of independence and autonomy and the degree to which policymakers, ministries and legislative bodies are able (or better said – unable) to intervene in the day to day operation of the regulator. Indeed, independence and transparency are inextricably intertwined and are the basic underlying factors contributing to the overall regulatory risk in any given country.

When assessing the level of regulatory transparency, some of the key considerations/weighting factors are listed below. Once again, each ICT investor may weight the individual elements differently. It is a matter of priority within the company's own investment criteria but generally, it is the combination of factors as a whole that needs to be taken into account.

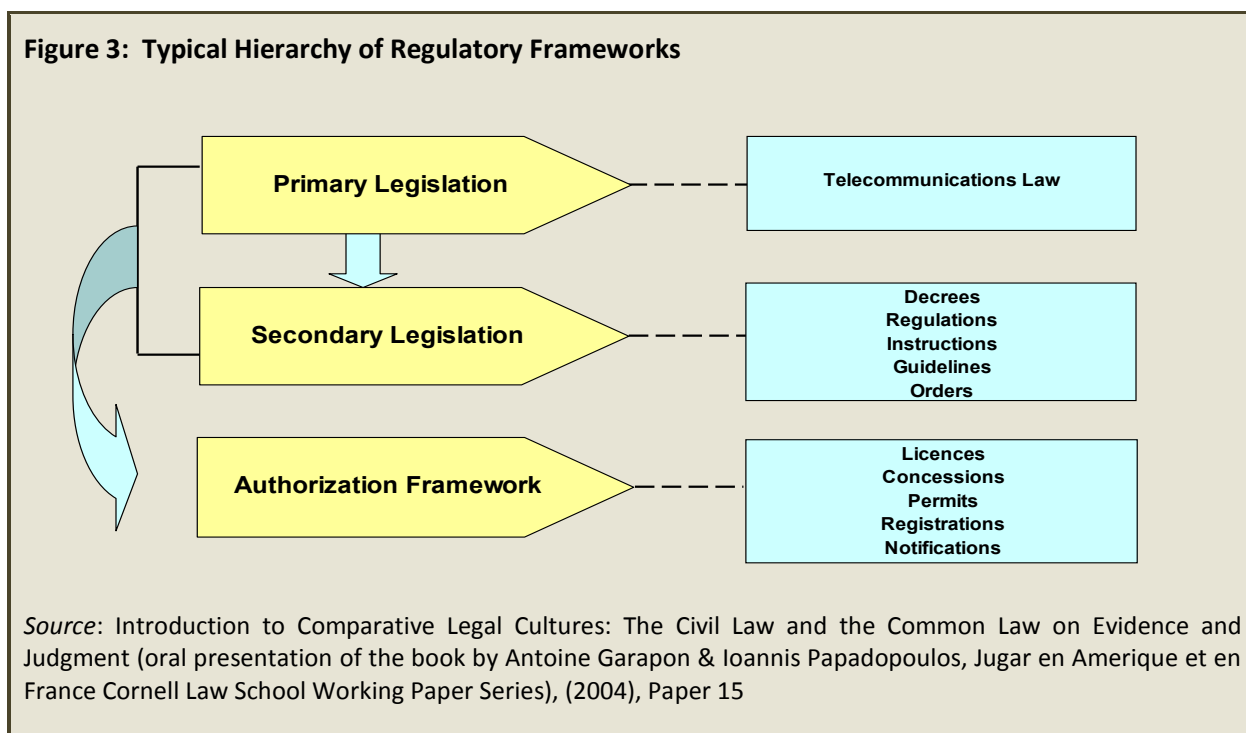
- Are standards for the public use of telecommunications clearly defined and accessible (e.g., tariffs, consumer protection, technical standards, etc.)?
- Does the regulator conduct public consultations in an effort to seek input from all interested parties prior to introducing new elements of or initiating changes to the regulatory framework?
- Does the regulator promptly publish or make otherwise available its regulatory decisions, measures and any international agreements to which it is party. In other words, is the decision making process clear to all?
- Are there any indications that the regulator sees his primary responsibility as being one of protecting the incumbent monopoly operator?
- Are there clear guidelines in place in terms of the appointment of the regulator and his tenure in office? Do such guidelines extend to defining potential conflicts of interest and how such matters can be resolved?
- Is staff appointed based upon merit and experience with the regulator having the political autonomy to discipline and remove staff as well as determine their conditions and terms of service?
- Is there cohesiveness and predictability between the seemingly transparent framework and processes as published and the actual execution and respect of the published framework?

In instances where the transparency of the regulator is questionable based on the factors identified above, this should serve as a warning signal that the prospective investor cannot necessarily count on the reliability and consistency of the framework, no matter how well articulated. The implication is that the regulatory environment would be unpredictable in these circumstances and that any investor would need to: 1) take this unpredictability factor into account in the overall valuation and; 2) where practical, include financial contingencies in anticipation of unforeseen events (although this may equate to something akin to crystal ball gazing).

3.2.2 Existing and planned ICT/telecommunications law

The design of legal instruments used to regulate the telecommunications sector typically varies in accordance with the legal tradition of a country. Nonetheless, the legal framework generally follows a hierarchy beginning with primary legislation, such as laws and decrees, from which secondary legislation such as regulations, determinations and guidelines follow. In turn, this legislation provides the legal basis

for the regulator or the relevant ministry to issue authorization instruments such as licences, concessions, and permits to operators. This relationship is demonstrated in the figure below.



- The degree to which there is a clear hierarchy and framework is one element of the regulatory risk to be considered in the area of telecommunications law, the other being the overall coherence, logic and content of the draft or existing ICT/telecommunications law. The basic elements (content) in existing or proposed telecommunications or ICT legislation should include the following: creation, mandate and role of the regulatory authority
- distinction and relationship between policy and regulation
- procedures and mechanisms related to the appeal of regulatory authority decisions and regulatory accountability
- remedies and penalties
- overall market objectives

In addition, fundamental regulatory issues such as interconnection, licensing, resource allocation (i.e., numbering and spectrum management) and universal service should be addressed or referenced in the telecommunications or ICT law or as a part of subordinate regulations.

Lack of clarity in any of these elements would be a major contributing factor to lack of regulatory certainty and thus, an added element of regulatory risk.

3.2.3 Licensing regime

Typically, although licensing is one of the primary functions of the regulator, the responsibility sometimes falls under the jurisdiction of the sector ministry or may even be shared between the regulator and the ministry. Many governments use licensing as one of the principal mechanisms to implement policies aimed at opening the market, providing services to underserved areas, modernizing telecommunications infrastructure and supporting other ICT policies. If the entity responsible for licensing does not act in a

transparent, timely and impartial manner, the business and operations of the operators/investors may suffer.

Licensing responsibilities generally include: preparation and publication of model licences; development of licence application guidelines and evaluation criteria; and establishment of licence fees and renewals. Regulators are beginning to re-examine their licensing practices as a result of increasing technology convergence, and a number of countries have already moved towards unified or converged licensing/authorization models⁷. In addition, there is a general trend to try to reduce the overall length and complexity of licences, to simplify the administrative procedures, so that the licences do not become outdated and ineffectual during their effectiveness period especially in light of the rapid technological changes with which the industry is faced. This means that many regulators have opted to enrich and enhance their overall regulatory framework to address new considerations as they arise rather than attempting to incorporate everything conceivable into the licence. Although this is a very desirable evolution, an additional risk factor can arise when the potential investor is faced with only a general licensing regime and the supporting regulatory framework has either not yet been developed or has not kept pace with the telecom industry developments and evolution. Therefore, it is extremely critical to make sure that there is adequate coordination and cohesiveness between the licensing regime, the telecommunications law and the overall regulatory framework just as it is important to evaluate whether the regulator has both the authority to licence **and** is equipped to deal with licensing procedural issues. Some of the fundamental risk considerations are:

- How many licences are there?
- What are the categories of licensing (e.g., individual, class, authorization, declaration, registration, open entry)? What activities fall each category?
- Has the country moved to a system of general authorization instead of licensing? What are the reasons given for individual licensing (e.g., public order, use of scarce resources)?
- Does the law provide for exceptions for certain activities?
- Are licences service specific, or do they cover large categories of facilities and/or services?
- Has the concept of unified licensing been introduced? Are licences technology-neutral?
- Is there a separate frequency licensing requirement?
- Is the detail of the legal and regulatory texts copied verbatim in the licences or do the licences refer to the relevant legal provisions without copying text of regulations?
- What happens when legal framework changes – any provisions in licences?
- Do the licences reflect a gradation of rights and obligations according to specific situation (e.g., obligations just applicable for operators with SMP, obligations linked to use of numbers or spectrum)?

Other critical risk factors to consider and ones which have a more tangible financial impact are:

- The regulator's tendency to impose ad hoc one time licence fees or the track record in applying new or increasing annual licence fees
- The position with respect to licence renewal fees: are the fees clearly defined or simply "subject to negotiation"

3.2.4 Interconnection regime

Given its fundamental impact on the overall operation of competing telecommunications networks, interconnection is often the most contentious regulatory issue and one which can significantly affect the perceived value of an investment. Interconnection is one of the most crucial issues for operators as it allows their customers to have ubiquitous access to all other customers – whether on the same network or a different one. Usually, the role of the regulator is to review relevant economic principles regarding pricing; analyze and propose interconnection costing approaches; develop common cost models to be utilized by all operators; and develop guidelines and regulations. Without a well-defined interconnection framework, potential investors can be exposed to significant risk through the application of below cost interconnection payments by operators or the imposition of punitive or unreasonable rates by regulators. In addition, unlike the regulatory risk categories related to overall transparency and telecommunications laws, it is much easier to quantify the serious financial risk associated with a poorly designed and implemented interconnection regime. Therefore key factors to evaluate with regards to an effective interconnection framework and the inherent risks are as follows:

- Is there an obligation to interconnect networks? If so, what category of operator does it apply to (all)?
- Is interconnection mandated for fixed and mobile voice services? Is it also mandated for other services (e.g., data transmission services)?
- Must interconnection be cost-oriented, transparent and offered on a non-discriminatory basis?
- Is the interconnection negotiation process regulated including interconnection contracts and/or prices approved by the regulator?
- What is the regulated timeframe to negotiate interconnection?
- Can the regulator impose interconnection if the parties do not reach an agreement? What is the timeframe?
- Is there an obligation to publish a standard interconnection offer (Reference Interconnection Offer, RIO)? If so, what category of operator does it apply to (all) and must the RIO be approved by the regulator?
- Is passive infrastructure (poles, ducts, etc.) sharing mandated? If not, is it allowed?
- Is there an infrastructure sharing standard offer? If so, what category of operator does it apply to (all)? Are mobile towers included in infrastructure sharing provisions/offer?
- Is there an obligation to offer access to local loop unbundling? Does this obligation apply only to the “major supplier” or to other operators?
- Is there an obligation to provide national roaming? Does this obligation apply only to the “dominant operator r”? or to other operators?
- Is access to international gateways (including submarine cable landing stations) included in the standard interconnection offer/agreements?
- Is there a specific dispute resolution process and timeframe for disputes and does the regulator have the authority to resolve these disputes?

3.2.5 Regulatory fees and taxation

An important and frequently detrimental factor in the regulatory framework, particularly in emerging markets, is the number and level of fees and taxes imposed on operators. Although any investor recognizes that taxes are important sources of revenue for most governments, excessive fees and taxation in the telecommunications industry can significantly constrain competition and discourage technological development and investment. Excessive fees and taxes also increase the overall cost which must then unfortunately be passed on to the consumer. (The fees imposed on operators can range from non-recurring/one-time fees (such as licence fees), to recurring/annual fees (such as spectrum management and usage fees; network usage fees; numbering fees; research and development fees). In addition, the operator must contend with some or all of the following taxes: import taxes on ICT equipment such as handsets, network equipment and computers; value-added tax (VAT) on products and services, excise tax on communications services corporate income tax and taxes on energy use. Furthermore, there are often unique tax categories that are applied from country to country (e.g. sector specific health tax, pollution tax, etc.).

Key factors when reviewing fees and taxes are on each of the above mentioned fees and taxes are:

- Who determines the fee (regulator, minister or government or a combination thereof)? How is the fee determined? Is the fee mandated in the law or in a regulation?
- What is the fee amount and the associated payment scheme (full payment, split payment and/or equal periodic instalments)?
- What is the payment schedule and to whom is it paid?
- What other taxes is the operator subject to (e.g., such as income taxes, VAT, import taxes, taxes on terminals, taxes on minutes, etc.)?

One of the more difficult aspects when assessing the risks associated with a fee and tax regime is to predict which government entity will prevail in the event of a disagreement/conflicting objectives as to whether to apply a fee or tax. For instance, the regulator will typically have a goal of making sure that telecommunications service is as accessible to and affordable by as many people as possible. In the mobile industry, for example, the regulator would then wish to ensure that operators provide low cost handsets to improve overall penetration, yet the finance ministry or other government organization may wish to apply a specific excise tax on those handsets to boost the government coffers. There is no easy rule for assessing this from a risk perspective; it is more a matter obtaining an accurate reading of how the government inter-departmental dynamics will play out. This often presents dilemmas as operators seek to reduce costs to customers particularly when their ability to spend is curtailed by economic conditions such as those at present whereas governments are actively seeing ways to increase sources of funds to finance government activities.

3.2.6 Existence or planned introduction of Universal Service Funds (USF)

A primary goal of any telecommunications regulator is to ensure that telecommunications services are accessible to the widest number of users at the lowest cost. A common mechanism used to help achieve this goal is the creation of universal service funds. These funds are often used in competitive markets to supplement market-based policies, and to address access gaps and market failures in remote and under-served locations. In addition, regulators are often using regulatory reform as the first step in achieving universal access. This includes developing policies, regulations and practices that create incentives for the private sector to extend universal access to ICTs. Nonetheless, there are growing question marks both from operators and regulators about the practicality and efficacy of using USFs to achieve universal access and given the number of countries in which USFs have been created and monies collected, yet few or

none of the funds have been disbursed. Therefore, in the case of USFs, a prospective ICT investor must consider the potential regulatory exposure of contributing funds with the possibility of having no viable or trustworthy mechanism to subsequently access a portion of these funds to achieve universal access goals. With this in mind, key factors when assessing the universal service/access framework are:

Universal service/access policies

- Is there a law/legal mandate to support or address the concept of universal service and industry funding?
- If such a law/legal mandate exists, is there a distinction drawn between universal service and universal access?
- Does the law/legal mandate direct the regulator to develop a universal service/access policy?
- Are there key principles or goals for universal service defined in the law or any other document (e.g., government policy)? If so, what are they?
- Does the law establish some sort of financial mechanism to support provision of universal service?
- Does it establish an explicit funding arrangement or does it assume implicit funding through fees and other indirect sources?
- What are the specific services that must be provided and to whom? Are there build out requirements? Are there coverage obligations (in terms of population or geographic area covered or other)?
- Are there specific criteria for determining which operators have or are subject to universal service obligations? If so, do the obligations vary from operator to operator, such as a distinction drawn between dominant and non-dominant operators?
- Are there monies taken from a general government budget to support universal service goals?
- Is there rate setting above cost to provide some mechanism of “support”? If so, which services have above-cost rates or social tariffs? Which services or infrastructure receives the support from these above-cost revenues?
- If the operator fails to meet its universal service obligations, or contribution requirements, what enforcement mechanisms are in place to address?

Universal service fund

- Does the law provide for the establishment of a fund?
- What types of entities must contribute to the fund? How often must an operator pay into the fund (annually or monthly)? Must the operator file revenue reports that the fund manager uses to calculate contributions?
- What are operators expected to contribute and what is the percentage, flat fee or other formula used to calculate an operator’s contribution to the fund?
- What mechanism is used to distribute the funds? Are there specific criteria for who can benefit from the subsidies and which services or infrastructure is eligible for subsidies?

- What track record, if any exists regarding the distribution of existing funds?
- Are any subsidies provided directly to consumers or governmental or educational institutions? Do they receive discounts? If so, are operators reimbursed for the difference?
- Is there is a formula to calculate the support that operators receive? If so, what is the formula and which operators are eligible?
- Which entity or government body is charged with day to day management of the fund?
- Is there an entity oversight entity/body, or requirement for the fund manager to report to the regulator or ministry? Is there a requirement for review or re-evaluation of services captured under universal service obligations?
- Are there regular reviews of fund operation to determine changes that may be warranted as a result of shifts in the marketplace?

3.2.7 Competition policy and framework

When assessing regulatory risk as a potential new entrant, one of the principal concerns is to assess the level of regulatory involvement in place to provide new entrants with a level playing field when attempting to compete against well-established incumbent operators. Normally, incumbent operators have significant advantages and they may choose to unfairly use these advantages to curtail competition. Regulators try to develop adequate regulatory protections so that the incumbent operators will not be permitted to engage in anticompetitive behaviour or abuse their dominant position. However, it is important to note that not only is this a fundamental regulatory element that is frequently overlooked in immature regulatory environments but the tendency amongst some regulators is to consider this requirement only after competition has struggled to develop in the face of unfair competition.

Key factors requiring risk assessment in the evaluation of a competition framework include the following:

- Does the telecommunications legislation specifically address competition safeguards for the sector? For example, are competitive practices and/or enforcement processes clearly specified in the telecommunications law?
- Are competition law principles used for the purposes of regulating the sector? Is regulation based on the prior definition of relevant markets, and the subsequent finding of significant market power? Can asymmetric regulation be imposed on dominant providers based on these findings?
- What authority controls competition related issues in the telecommunications sector (e.g., regulator, competition authority, a court, another authority)?
- Have there been any relevant cases of anticompetitive conduct investigated in the telecommunications sector (last three to four years)?
- Does the regulator, the competition authority, or both have authority to review competitive effects of mergers within the telecommunications sector?
- Do the regulator and/or competition authority have autonomy in making decisions in competition related issues?
- Does another government entity have authority to overturn competition related decisions?
- What is the mechanism for appeals of decisions made on competition-related issues?

- In terms of general competition law, has competition legislation been adopted? If so, when was the law adopted? If no specific competition law has been adopted, how, if at all, is anticompetitive conduct dealt with?
- Are anticompetitive practices and processes to investigate/prosecute them clearly defined in the legislation?
- Is there a specific authority responsible for safeguarding competition? If so, when was it created?
- If no specific competition authority exists, does another government body (e.g., ministry, the courts) have authority over competition related issues?
- Have guidelines or regulations on competition analysis been adopted (e.g., policy guidelines on horizontal and non-horizontal mergers, on remedies, on joint ventures, etc.)?
- What are the sanctions applicable to parties found to have engaged in anticompetitive conduct (e.g., fines, imprisonment, damage awards, functional separation, etc.)?

3.2.8 Tariff regulation and controls

Effective and transparent tariffing regimes are required to facilitate the orderly and measured evolution to competition in a developing telecommunications sector. However, as markets become more competitive, tariff regulation should become less important except in a case of a clearly dominant player that has the ability to harm the market through its tariff policies (for). When the regulator establishes tariffs these should be set formally through the issuance of rules and other regulatory instruments.

Key considerations when assessing regulatory risk with respect to the application of tariffs are as follows:

- Does the regulator have a tariff policy in place? Is this supported by a legal mandate/law/regulatory initiative to dictate establishment of a tariff policy?
- If a policy is in place, does it address key legal and economic principles to sustain and support long term goals for the market?
- Are carriers required to provide very detailed information both in their tariff filings and in all supporting documentation accompanying any tariff filing? Does the regulator then provide this information to the public for review and comment if appropriate?
- Is there a procedure that enables a regulator to post all information that is not of a confidential nature on a website or in a reasonable location that will enable access?
- Is there a specific process for tariff review and comment by interested parties?
- Is there a time frame established for review of tariff filings, if so, what is it?
- Does the review process include carrier requirements for submission of description and justification documents for tariff changes? In the absence of such an approach, what are the specific guidelines for tariff review?
- If tariffs are not approved, are there requirements for the regulator to provide specific information to the carrier as to why the tariff was not approved and what modifications and changes are necessary in order for approval to be granted?

- Do tariff revisions, either changes to rates or modifications to existing services, require the operator to make a submission with the regulator of the proposed revisions and reasons for changes?
- Are there different tariff regulations for non-dominant operators versus dominant operators? If a distinction exists are the non-dominant operators still subject to the same tariff requirements as the dominant operator?
- Is a cost model utilized in determining tariff rates?
- What costing approach does the model employ – historical costs, current costs, or long run market based benchmark cost?
- Is there a mechanism in place by which an operator can request the removal of tariff regulation?

3.2.9 Other factors to consider

One of the most complex and challenging elements in assessing the regulatory risk associated with ICT investment in emerging markets, particularly with the added constraints of the current financial crisis, is the overall suitability and applicability of the regulatory framework. This spans across all of the regulatory risk factors discussed in this section. Because the regulatory environment in many of the emerging economies has lagged behind those of the more mature economies, there is often a perfectly natural tendency by legislators and regulators alike to attempt to leapfrog the gradual regulatory development and evolution that was experienced in these economies and to introduce a ‘ready made’, even a ‘cookie cutter’ approach, to regulation. Whereas on the surface, a sophisticated regulatory framework may seem appealing and lower risk, if that framework is completely unsuitable for the economy in which it is implemented, then this adds yet another element of regulatory risk. Some possible examples would be:

- Introduction and use of an interconnection regime that treats newly licensed operators in a newly liberalized market as mature rather than brand new entrants, potentially resulting in the application of interconnection rates below cost
- Using an excessive number of market segments in a newly liberalized environment to define players with significant market power resulting in new entrants being treated in the same manner as an incumbent monopoly service provider (e.g., imposition of retail price regulation for new players)

4. Investment Approaches

A separate and lengthy treatise could be written concerning various investment approaches and methodologies, but in the interests of brevity, the following sections provide a high level overview of some of the most pertinent aspects of investment approaches and considerations, written from the ICT investor perspective.

4.1 *Developing versus Developed Economies*

There is really no right or wrong answer when faced with the question of whether it makes more sense to invest in developing versus developed economies as this is very much dependent on the ICT operators/investor’s strategy and rationale vis a vis investment in the sector. Some investors are seeking growth by investing in under-penetrated and underserved regions whereas others are seeking investments in developed economies with populations having significant acquisition power where revenues can be increased through the introduction of untested or newly developed revenue enhancing, feature-rich, usage-based services. Nonetheless, in general terms, there has been an increasing

investment focus on emerging markets. According to a report prepared for the 2008 World Economic Forum⁸, telecom industry growth in mature markets such as Japan, United States and Western Europe was expected to drop from the six percent average annual growth experienced between 1998 and 2005 to a mere one percent from 2006 and 2011. Conversely, prior to the current economic crisis, emerging markets were predicted to grow at an average of six percent per year from 2006 to 2011 with higher growth of 19 percent in the broadband sector and eight percent in mobile. Such growth predictions were no doubt some of the underlying factors for the level of investment activity in Latin America, Africa, the Middle East and Asia despite the regulatory challenges and uncertainties that existed in many countries in these regions. In other words, for some investors, the market growth potential outweighed the perceived regulatory risk at the time.

4.2 *Does One Model Fit All?*

There is never any such thing as “One Model Fits All” when it comes to investment. Irrespective of the existence (or not) of financial crises, investor profiles, investor objectives and investment criteria will continue to vary from investor to investor and that tendency is no different in the ICT sector. For some investors, majority control is critical with many safeguards to protect against share dilution. For others, a minority investment stake is suitable provided that there is adequate protection of minority rights with opportunity to participate to some degree in strategic management decisions. The model will also vary in accordance with the investor’s principal mission. In the case of a telecom operator in the role of investor, the investment could be for one or more of the following reasons:

- growth through expansion rather than simply home market focus and growth
- purely strategic to increase the operator’s regional or global footprint thus capitalizing on scale
- protective/pre-emptive measure to stave off competition in adjacent operating territories
- additional revenue streams generated by management services and appreciation of brand equity
- establish large customer base and create customer’s profile in the hope of marketing new services

On the other hand, a purely financial investor is more likely to focus on straightforward rate of return objectives and ease of exit on the individual investment.

4.3 *Examples of Investment Approaches*

4.3.1 *Business as usual*

Irrespective of the existence (or not) of changes in investment appetite or negative capital market conditions because of financial crises, the size of the investor universe and the diversity of investor objectives, investment styles and criteria will ensure that the ICT sector will always enjoy robust and varied investment activity. The telecom, and information technology industry is highly capital intensive that comprises a meaningful proportion of the global equity and debt markets. For those reasons, there will always be investors in the sector. Furthermore, the ICT sector is generally associated with slightly higher than average growth which is another investment feature. Nonetheless, the degree of robustness and the frequency of investment activity will still be driven by economic conditions and perceived regulatory risk. In other words, ICT investment will continue but not necessarily in the same volume or at the same pace.

For some investors and operators (in general, these are times rife with opportunity since investment multiples have been beaten down so far that internal rates of return (IRRs) are much more compelling now than they were when they were two years ago. At that time, the thriving debt market provided investors with the underpinning to make the equity IRRs achievable. Today, investors that are less

dependent on the debt capital markets for the investments have the ability to not only buy at more favourable prices but also to formulate transactions with healthy proportions of equity capital. Other investors who are not as flush with cash may rely on the debt markets and therefore, may be constrained to take advantage of the lower multiples evident today.

In these challenging times when access to funding may hamper the growth ambitions of operators and investment funds alike, innovative investment approaches often emerge. One way to make the best of this period is to consider making minority investments in entities such as foreign mobile operators, service providers, specific markets, etc. Minority investments are made into specific companies that may target certain regions. While this may not satisfy requirements of operators wanting a majority stake in order to consolidate a target's earnings, this approach can satisfy the corporate development initiatives. Fund managers who may be more comfortable with taking minority positions may not find this approach that different from what they normally do. Nevertheless, investors who require control could employ a method where a reasonable minority interest could be negotiated with pre-emption rights that may enable a path to control over time. This also requires considerable negotiation around a shareholders' agreement which may also be difficult for some to relinquish the governance features they may be used to. The key advantage of this approach is that one may be able to do more with less in these tough times.

Although there are often discussions about PPP (Private Public Partnerships) and state investment, limited activity has actually taken place in this regard. In general, private investors may have some concern regarding the likelihood of success of such arrangements given previous investment performance of state owned companies and, on the other hand, state investors may well have concerns regarding the compatibility of objectives between private and public entities in such potential undertakings. Instead, such PPP arrangements may be more practical in future by making use of unutilized universal service funds to ensure the deployment of broadband and NGN technologies.

Box 3: The Zain Wana Deal – Morocco

An interesting example of a revised investment approach is the recent Zain investment in Morocco. In March 2009, Zain formed a 50/50 partnership with Al Ajial Investment Fund Holding ("Al Ajial") for the purpose of investing MAD 2.850 B (USD 324 M) through a newly established joint venture "Zain Al Ajial". In return, the partnership garnered a 31% ownership in Wana Corporate SA ("Wana"), the third mobile telecommunications operator in Morocco*. This new investment by Zain and Al Ajial was structured so as to provide Wana with both the funding requirements and operational contributions needed to continue with its growth plan, including the launch of a new GSM licence in Morocco in the latter half of 2009. This significant minority investment structure was a bit of a departure for Zain in relation to its other investments over the last seven years in that it chose not to take a majority shareholding. Nonetheless, it allowed Zain to gain a significant foothold in Morocco with minimum investment, further extending its African footprint and allowing it to provide development, products (including the One Network and Zap) and services under a services framework agreement.

* Wana is an integrated telecom operator offering fixed and restricted mobility wireless services (branded as "Bayn"), full CDMA mobility services (branded as "Wana") and Internet and data services throughout Morocco.

Source: Zain Group

Another typical approach to conserve cash for operators in these times is to formulate transactions where an operator's currency (i.e., shares) may be exchanged for the shares of a target. These share swap structures often also include a portion of cash to either induce the target's shareholders to approve the deal and/or to provide cash to shareholders should the structure provoke a taxable gain that would require cash to settle the tax liability. These transactions are generally custom tailored and therefore, can

be complex given the subtleties with an exchange ratio based on the respective valuations of the acquirer and the target. With these transactions each party attempts to structure a “win-win” deal that is accretive to both the acquirer and target.

One such recent example was the Lattelecom/TeliaSonera share swap deal, in which the need for any cash or financing packages was eliminated. More detail on this transaction is provided in Box 4.

Box 4: The Lattelecom/TeliaSonera Share Swap Deal

In April 2009, after several years of grappling with the sale of Lattelecom, the national fixed line operator, the Latvian government approved a complex deal in the form of a share swap with TeliaSonera that was expected to net up to EUR 380M). Prior to this share swap agreement, the Latvian government owned 51 percent of both Lattelecom and LMT, a successful mobile telecommunications operator, with TeliaSonera owning the remaining 49 percent in both operators.

This approval to move forward was given after several failed attempts to arrive at other forms of divesting shares in Lattelecom. Amongst the aborted sale attempts were a proposed management buyout from a U.S. group, an auction of 100 percent of the company’s share to a strategic investor and an offer from TeliaSonera to purchase the government’s 49 percent stake in both the fixed and mobile operators. The government declined this latter offer due to concerns that such a deal would give TeliaSonera too much of a grip on the local telecommunications market.

In accordance with the swap, the government will retain its 51 percent stake in Lattelecom, while TeliaSonera’s stake will first be purchased by the Latvian State Radio and Television Centre– and then sold to a strategic investor. In exchange for handing over its stake in Lattelecom, TeliaSonera will receive the both the state’s 28 percent in mobile operator LMT as well as Lattelecom’s 23 percent stake. There are still internal approvals required for the transaction to be concluded but the Latvian government stated that it hoped to conclude the transaction before the end of 2009.

Source:www.reuters.com; April 14, 2009

5. Securing Investment in the Current Economic Crisis

Although this section addresses key considerations primarily for Chief Financial Officers and other finance personnel when dealing with a potential ICT investment, it is also both useful and important for regulators in the telecom industry to have a basic appreciation of the financial parameters that must be taken into consideration and the challenges that may be faced when attempting to carry out such an investment. Therefore, the following sections address not only some of the painful lessons learned as a result of the economic crisis, but also highlight the best practices to be followed in the hope of avoiding such difficult conditions in the future.

5.1 Lessons Learned

The current environment has not spared most operators in this capital hungry industry. This crisis, like any previous recessionary period, keeps chief financial officers (CFOs) awake, management teams tuned to costs and board members extra cautious regarding strategic intentions. Unless an ICT operator has a good balance sheet, this is a period that provokes management introspection about ways to maximize financial flexibility in an environment where credit and equity markets are temporarily closed.

Since July 2007, debt markets have suffered dramatic turmoil that has affected all borrowers and issuers regardless of credit rating. At the onset of the credit crisis, generally both high-quality and low-quality

issuers were affected with a substantial rise in borrowing costs. Ratings lagged the sudden rate of change that occurred in mid-2007. Ratings are updated periodically based on historical and projected financial where possible. In early 2008, the severity of the capital constraints became increasingly difficult as financial institutions significantly reset their return expectations given the higher allocation of equity capital needed to support their ongoing activities to comply with regulatory and corporate requirements. Investment grade issuers with debt ratings provided by Moody's or Standard & Poors within a minimum of "Baa" or "BBB" respectively or better, were often the most negatively impacted by the changed credit environment. Baa (Moody's) and BBB (S&P) in this context means where many corporate ratings usually fall. (While there is some doubt as to whether the rating agencies fully understood the complexities and nuances of securitized mortgage-backed market that had some new credit enhancement features such as credit default swaps and credit wrappers provided by Ambac⁹, etc., the market is still confident that rating agencies provide value for the usually bond/note commercial paper issuances).

For these issuers, overall borrowing costs approximately doubled through a combination of higher base rates and credit spreads. Equity markets were not more sanguine than the debt markets through this period as the general nervousness of the market stymied new issuances of shares for almost all but a few issuers due to declining valuations coupled with lacklustre demand from institutional and retail investors for all but a few. The uncertainty and volatility during this period effectively closed access to raising equity capital for most issuers, unless they were issuers in the high-flying metals and oil and gas commodity markets. After September 2008, complete seizure in the debt and equity markets hastened a worldwide response by governments and central banks to potentially avert the depth of a looming global recession. While the many reasons for the crisis have been well publicized and analyzed, there is general consensus that spendthrift credit standards and loose oversight have contributed to a result that will take years to rectify to establish an improved foundation.

The telecom sector has been severely affected by this maelstrom in two ways: – 1) access to debt and equity capital has been temporarily closed, and 2) valuations have been halved from those enjoyed in 2007 and early 2008. For those ICT operators that have enjoyed the benefits of ample capital availability from relaxed credit structures and an overwhelming demand for equity products from influential institutional investors including the enormous appetite of private equity before the capital spigot closed, they have likely achieved some of their strategic objectives without constraints. Other well funded operators may not have been as lucky since their capital raising plans depended on the continuation of the robust and finely priced issuers market that existed just two years ago.

Regardless of which part of the capital curve an ICT operator enjoyed, the following lessons resonate for any senior management team setting and implementing strategies in this uncertain and capital market:

1. **Markets are cyclical:** While this glimpse of the obvious is readily accepted, it is easily dismissed especially when the run-up in market asset values continue unabatedly for a long period before the market suddenly chooses a high-speed elevator rather than a gradual escalator ride to the bottom floor.
2. **Focus on strategic capital raising plan:** Careful scrutiny of future cash requirements entails consideration of a multi-year plan, appreciation of prevailing market conditions and close attention to the impact of fund raising on implied valuations. This strategic task requires issuers to have a clear view of their needs and understanding of the market conditions. Those issuers that did not take advantage of the "good-times" while the capital markets were charitable could well be suffering today, especially if the clearing price of new capital is two to three times higher than previously enjoyed. The "beyond the company" perspective requires that senior management have an established view of their own requirements that are a product of close consultation with advisors and a challenge of their own

assumptions about their business and shareholder value enhancing programmes. Scepticism of market conditions may be an effective antidote to being caught by sudden closure or tepid market demand.

3. **Ongoing focus on cost and efficiencies:** This is easier to fulfill by management than the previous “lesson” because it is known and controllable. It requires disciplined strategy and an ongoing commitment to extract costs where appropriate to improve financial flexibility in anticipation of choppy market conditions. Adherence to this precept is difficult especially during profligate market periods when capital availability is easy and market capitalizations are lofty.

4. **Doubtful market capitalizations:** Market prices should not be confused with implied valuations. Despite the systemic reduction in trading levels and the resultant deflation in valuation metrics based on multiples of sales, net earnings, earnings before interest, taxes and depreciation (EBITDA) or free cash flow (FCF), good operators will always enjoy access to capital, provided they are amenable to costs of capital reflecting the periods where capital supply is diminished. The last nine months have been particularly severe for issuers in this sector simply because capital is the lifeblood of the industry – issuers with constrained access suffer an insidious devaluation of enterprise and equity values. Fortunately, there are signs that the demand for debt issues is currently regaining strength.

5.2 *Best Practices*

In order to ensure the best possible chance of success in securing access to capital and financing in the midst of these extremely challenging market conditions, adherence to demonstrated best practices will not guarantee financing but should improve the likelihood of success. As listed below, there are five key practices that should be considered when attempting to secure an investment. These are:

1. Transparency of disclosures
2. Go-to-market readiness
3. Stay close to key advisors
4. Careful scrutiny of cash flow
5. Attempt cash saving transaction structures

Although ICT regulators obviously cannot be expected to be fully conversant with each potential investor’s investment criteria and approach, it is certainly desirable that the regulators in the ICT sector contribute wherever and whenever possible to the minimization of regulatory risk so as to encourage continued investment in and development of the sector. As such, careful consideration of the risk elements described in Section 3 should be undertaken with the view that the more transparent the framework, even if still a work in progress, will go a long way to ensuring that regulatory risk does not weigh too heavily in the investment decision.

5.2.1 *Transparency of disclosures*

Regardless of economic cycle, successful capital raising depends on accurate, comprehensive, consistent and timely financial and operational disclosure for advisors, analysts, bankers, syndicators and investors to digest. For public issuers, there is a fine balance between revealing proprietary information and the minimum information required to comply with regulatory and financial market practices regarding the financial and operational disclosures to fairly represent the position of the business at the time. Management of non-public companies have the advantage of not having to second guess the depth and

range of material information to present to outsiders since they are typically expected to provide fulsome disclosures to satisfy the close oversight and governance that private equity investors typically expect from their investees.

The breadth and depth of information presented allows third parties not only the ability to understand the nature of the business but also some nuances of how the company generates its FCF. For larger debt and equity syndications, clear information goes a very long way to enable intermediaries to compare a company's performance with its peers. A debt or equity syndication means that more than one investment bank would arrange a debt or equity financing for an issuer. Generally larger issues require more banks to sell the securities into the market. Even if an ICT operator is among the lower performers among its peers, the depth of information disclosure is often the distinguishing difference between a committed syndication and a best-efforts fund-raising.

5.2.2 Go-to-market readiness

Management's nimbleness to take advantage momentary market windows depends heavily on the quality and availability of information at the time and readiness of intermediaries and financiers to raise new financing. In the second half of 2007 and throughout the first nine months of 2008, both debt and equity markets demonstrated only certain months and quarters where stability in credit spreads and hence valuations supported fund raising. If those windows shut, it meant that financings would have to be postponed indefinitely until markets stabilized. For companies burning cash (cash burn is a colloquial way of saying the company is operating at a cash loss and depends on outside debt or equity financing to cover the losses until the business is at a stage where it is cash flow positive) as occurs when they are in growth mode, such an environment could manifest into disaster unless the funding supply can reasonably weather such funding cyclicality. Managers of larger ICT issuers i.e., the management teams of larger telecom operators, generally do not suffer such potentially debilitating problems, but nevertheless would be faced with higher capital costs when an appealing market window is missed.

5.2.3 Stay close to key advisors

Financial advisors can be particularly helpful in these choppy markets. They are a useful sounding board to management regarding the state of the capital markets and the potential success of a new issue. Their advice and market knowledge can give management wise counsel with respect to arranging financing structures that may have greater or lesser success with investors and banks based on comparable transactions that have either gone or are about to go to market.

Financial advisors can be especially helpful to assist with ways to create saleable structures that satisfy a CFO's objective of minimizing capital costs while maximizing the universe of potential investors that would be prepared to take-up such financings. The market view that investment and commercial bankers can offer is exceedingly useful in these unsteady times.

5.2.4 Careful scrutiny of cash flow

Uncertain market conditions naturally motivate management teams to make the most of the revenues they are earning. While cost savings and attention to working capital are de rigueur during economic downturns, the implementation of these measures needs to be anticipatory rather than reactive in order to effectively provide the greatest impact on flexibility. Since new or more rigorous cost saving measures generally take several months to implement and take hold, management's view early on of the impending market conditions can be extremely beneficial both from the perspective of enhancing cash flow generation and bolstering profitability. Early implementation to anticipate the effect on strategic and tactical plans is a very attractive proposition for stakeholders inside and beyond a company to keep the business nimble in order to sustain profitability trends and/or exploit opportunities to grow the business.

5.2.5 Attempt cash saving transaction structures

As previously noted in Section 4, unsteady financial markets should not stifle growth strategies. Where possible, acquisitions could incorporate share swaps and reverse mergers where they make sense, especially if the acquirer has sufficient currency to extract premium valuations where dilution to ownership and earnings per share is minimized through the trade. While these transactions generally can be complex because of the negotiations required to align interests, agree on management and governance structures, anticipate the tax-impacts on selling shareholders and develop confidence in the collective vision to have the selling parties accept an exchange of shares, they can provide a cash conserving avenue to keep growing in periods of uncertainty. For those businesses with the clout to complete such structures, they are an effective way to acquire distressed businesses at good valuations, provided that acquiring managers feel comfortable that selling shareholders would comprise a meaningful block of the post-acquisition ownership of the acquiring business. For many reasons, such structures also include some cash consideration, but the amount is considerably less than if the transaction were an “all-cash” deal.

6. Conclusion

There is little doubt that investment activity in the ICT sector has been constrained and challenged as a result of the present financial crisis. Most investors, be they telecom operators, banks, hedge funds or other forms of investment funds, have been more cautious and more selective as they seek to maximize their investments using the scarce capital available. For the most part, the availability or scarcity of capital is not likely to have a dramatic effect on the basic methodology of assessing regulatory risk; indeed, the risks remain the same. However, what it is more likely to be affected is the degree to which the regulatory risks are factored into the overall investment process in terms of prioritizing investments, overall valuation and discount factors to be applied. In fact, realizing that financial risk is generally the foremost priority in any potential investment assessment, it is likely that regulatory risk is not far behind in the list of critical considerations. Presumably, the investment activities that unfold throughout the remainder of 2009 and 2010 will provide more quantifiable evidence as to the overall impact and weighting of regulatory risk in this era of financial challenges.

¹ Some of the earliest ICT investors were from the US and Europe e.g., Bell Canada , GTE Corporation; SBC: Cable and Wireless UK, Telefonica de España, STET (now Telecom Italia) and France Telecom

² This was the case in the award of regional mobile licences in Mexico, Venezuela, Argentina and Chile, to name but a few.

³ Some examples are Maroc Telecom and Sudatel,

⁴ Zambia International Business Economic Forum – May 2009

⁵ Please refer to page 41 of the ITU report.

⁶ Report on the Regulatory Effectiveness of the Regulatory Frameworks for Effective Communications in Austria, Belgium, Czech Republic, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, The Netherlands, Poland, Portugal, Spain, Sweden and United Kingdom; Dec. 1, 2005

⁷ e.g., India, Malaysia, Tanzania, Uganda, EU, etc.

⁸ Rethinking Regulation in Emerging Telecommunications Markets – McKinsey and Co.; The Global Technology Report 2007-2008.

⁹ Ambac specializes in financial guarantees and credit enhancement for issuers, asset managers, financial institutions and insurance companies.