WITH A MERE 18 000 INTERNET USERS OUT OF A POPULATION OF SIX MILLION, AND MOBILE SUBSCRIPTIONS YET TO REACH THE ONE MILLION MARK, SIERRA LEONE'S ICT INDUSTRY MAY APPEAR BLEAK. YET, AS KERRY DIMMER DISCOVERS, COLLECTIVE EFFORTS TO DEVELOP THIS MAY SOON BEAR FRUIT

Mohamed Sidibay and Paul Komba Pessima are

two young men on the threshold of Sierra Leone's

## developing ICT industry. Their futures are bright, yet

both have endured the darkest, most horrific of childhoods: Sidibay as a child soldier and Komba Pessima as a 'blood diamond' child miner during a decade-long war. Their rehabilitation was made possible by iEarn (International Education and Resource Network), a non-profit organisation enabling project collaboration via the internet to change the lives of children worldwide.

In Sierra Leone, iEarn has been rehabilitating youths exploited by war, providing them with the skills needed to transform their lives, communities and country. One such iEarn initiative was instigated by Mohamed Dabo, a regional youth co-ordinator, who focused on Koidu Town in the Kono District, known for its diamond-rich land.

Dabo's Child Miners Project uses ICT exchanges, discussion forums and workshops that enable children to become ambassadors of Sierra Leone's provinces to the rest of the world. 'Now children engage on positive issues instead of the negative ones that affected their lives," says Dabo. 'They are getting in touch with ICT as a means of bridging the digital divide, thereby connecting and encouraging the youth to make a difference in our post-conflict nation.'

When the war in Sierra Leone ended in 2002, the country's telecoms infrastructure was in disarray and its regulatory functions were controlled by Sierratel, an independent telecoms authority that had its own interests at heart. When the Ministry of Transport and Communication (MoT&C) assumed regulatory responsibility, significant private industry investment was realised, resulting in the formulation of an ICT policy. Following this, the Telecommunications Act of 2006 provided for the establishment of the National Telecommunications Commission (Natcom) in 2007, responsible for licensing and spectrum management. Its mandate included protecting the interests of consumers through price regulation while ensuring high-quality standards, and promoting competition among emerging operators/service providers.

In its first year the MoT&C collected US\$1.6 million in licence fees from mobile, internet and VSAT providers and radio operators, despite ongoing complaints about high prices and poor service quality. Although Sierratel remains the only fixed-line telecoms operator, its position is somewhat precarious. It has lost a substantial portion of its market to mobile operators and has less than 10% of its 250 000 fixed lines actually in service.

Moreover, its equipment is either old, damaged or obsolete. To be fair, the company is owed substantial amounts of money by customers (including the government) while also suffering from the limiting extent of the national electricity grid that restricts Sierratel's service to the provincial areas, leaving the rural population somewhat stranded. However, the company is implementing CDMA (Code Division Multiple Access) with financial assistance from the Chinese government. This will provide Sierratel with a platform to enter the mobile market, currently dominated by Celtel (a Zain Group subsidiary), Comium and Africell.

These three providers (and other players Datatel, Tigo and Cellcom) control the country's basic telecoms, with 95% of telephone connections in the country being achieved via mobile handsets on a prepaid basis.

Considering mobile telephony only reached Sierra Leone in 2000/01, it is significant that this technology has expanded way beyond the fixed-line infrastructure in meeting the hungry demand for telecoms services. But from 12 000 subscribers in 2000, mobile penetration is still relatively low at 14% (869 000 subscribers). The Core Welfare Indicators Questionnaire survey of 2007 revealed that 26% of respondents claimed to have a mobile phone, suggesting joint ownership or usage.

Operating under licence in Sierra Leone is expensive, Despite the 10% sales tax on calls from both fixed lines and mobile phones, subscribers also bear the brunt of the operators' high running costs which include high annual licence fees, mobile site erections in outlying areas and fuel for powering site generators.

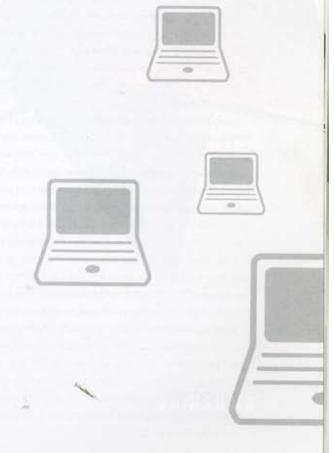
In an attempt to address these and other crucial ICT issues, the government is looking for US\$20 million to fund the ICT task force (NICT-TF), officially launched in February this year, to provide strategic recommendations on ICT-enabling policies. In collaboration with the UN Development Programme (UNDP), it is hoped that the NICT-TF will go a long way to improving Sierra Leone's socio-economic status globally.

Minister of Information and Communication, Alhaji Ibrahim Ben Kargbo believes that the launch of the task force is a landmark event in the history of this country: 'ICT is a vital component in the administration of the All People's Congress (APC) government,' he says. 'We need the collaborative efforts of everyone for it to be successful.'

Support for the task force has been considerable.

Boc, an internet society, is heavily involved in driving

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ICT initiatives, including the creation of an internet exchange point and a network information centre. Isoc has also focussed on usually 'silent' rural adolescent girls by allowing them to connect via the internet with their peers countrywide to discuss problems such as teen pregnancy and marriage, sexual abuse and HIV/Aids.

Evelyn Lewis, president of the Sierra Leone ICT Companies Association, says the use of ICT will be felt in areas such as tourism and agricultural development. He believes that ICT policies will attract investors because their security will be guaranteed when developing sustainable profitmaking ventures, particularly given that the task force has a mandate from government to encourage ICT growth.

Telecoms analysts anticipate the number of internet users in the country to reach 250 000 by 2010, growing to over a million by 2015. Some of this growth will be as a result of a memorandum of understanding between 20 African countries (of which Sierra Leone is one) for the installation of a crucial 12 000 km Glo-1 submarine fibre-optic cable, called ACE (Africa Coast to Europe).

Sierra Leone has been dependent on satellites for international connectivity with Sierratel, operating an Intelsat satellite earth station, while other service providers have been using their own VSAT links to North America or Europe. Glo-1 will help reduce internet bandwidth costs which should mean equal access for the people of Sierra Leone and broader internet usage, which will help improve the country's 35% literacy rate. Furthermore, the government intends to make ICT part of the school curriculum and has been providing funds to establish internet learning centres.

It remains, however, that Sierra Leone cannot grow its ICT market without aid and healthy competition. Kargbo has said that the people of Sierra Leone need to commit to national development and that the latest communications strategies will seek to address the problems confronting. In particular, the rural population, youth and women. He wants to see a continued effort to sustain the peace-building process.

ICT penetration rates may well be below market average, and catching up is going to mean a long-term commitment by serious investors, government and service providers. However, all this translates into the potential for ample future growth. While Sierra Leone's ICT market may be young, it is certainly not naïve!