

for Democracy

Media and the post-war reconstruction of Angola

Chris Armstrong

Metherlands Institute for Southern Africa

ICTs for Democracy

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Author: Chris Armstrong (LINK Centre, University of Witwatersrand Johannesburg) Editor: David Alexander

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Contents

Preface	5
Introduction	7
1. So what exactly are ICTs?	10
2. Radio with a Mission	13
3. Going Wireless Huambo	37
References & Bibliography	53
Acknowledgements	55
List of Abbreviations	57
Internet Sources on Angola	58



Map Courtesy of ReliefWeb (2002), http://www.reliefweb.int/w/map.nsf



View from the roof – **Rádio Ecclésia** headquarters, at the offices of the Catholic Church, Luanda.

Preface

The NiZA Media Programme

The Netherlands Institute for Southern Africa (NiZA) is a non-profit organisation established in 1997 as a result of a merger of three Dutch anti-apartheid organisations. NiZA has a record of supporting liberation movements and various other groups in southern Africa for over 40 years.

NiZA is committed to structurally fighting poverty, injustice and inequality in southern Africa. To attain this objective, it primarily collaborates with organisations in the Southern African Development Community (SADC) region that promote freedom of expression, media freedom, human rights, peace building and economic justice. Together with and on behalf of these organisations, NiZA works towards strengthening their capacity and influencing the policy-making process in the south as well as in the north. Furthermore, it promotes awareness of the Dutch public by collecting and disseminating documentation and information and by informing the press on issues concerning the region.

In 2000, NiZA's Media Programme and roughly forty partner organisations from twelve SADC countries embarked on an ambitious effort aimed at improving media diversity, access to media, freedom of expression, the quality of journalism and media sustainability. NiZA gave support to media outlets, media training institutions and media advocacy groups. Rádio Ecclésia and Development Workshop, the two Angolan organisations that feature in this study, are both partners of the NiZA Media Programme.

This book was commissioned by NiZA to record some of the valuable activities some of its Angolan partners are doing with old and new Information and Communication Technologies (ICTs) and to give some idea of the impact, or probable impact, that the projects are having or will have in Angola. While this book demonstrates the positive impact of ICTs in a post-war context, we do not pretend that they are the answer to Angola's information and communication challenges. We are optimistic however, about the outcomes of the use of ICTs in the two projects examined in these pages, the Rádio Ecclésia Expansion and the ANGONET (i.e. Angolan NGO NETwork) Wireless Internet Project. We believe that by strengthening the capabilities of the people who work on these two projects, that Angola's media and information sector will be improved, in turn strengthening Angolan civil society and ultimately the lot of ordinary Angolans.

We thank PSO for making funds available for the writing and publication of this book.

5 - Preface -



The Dishes of Luanda – Satellite TV receivers atop apartment blocks in the downtown core.

Introduction

Media access: getting what you pay for

Luanda is a city that pays tribute to the satellite TV dish.

Mushroom-like, dishes sprout out of the sides and roofs of most of the buildings in the core of Angola's capital city. If you're clever, you can even use them as a compass. Most of them – the ones still functioning – point north, towards the Equator, where the world's geostationary satellites orbit at a height of 37,000 kilometres: the precise height at which the satellites can match the earth's rotation and appear stationary in the sky. Some point northeast to an Intelsat satellite, others point northwest to a Eutelsat "bird."

The dishes of Luanda come in two main sizes. First there are the 3.5-metre-wide ones, which have a translucent, mesh-like appearance. Representing an older technology than their smaller counterparts, most of them pick up C-band signals (mainly Portuguese and Brazilian TV) from Intelsat.

Then there are the newer dishes, the opaque ones, which mostly pick up ku-band transmissions (South Africa´s MultiChoice DStv service) from Eutelsat – featuring the BBC, CNN, Discovery, sports channels, Jerry Springer. In other words, all the best and worst that TV has to offer.

But you shouldn't be fooled by the satellite dish culture of central Luanda. The majority of Angolans – even the majority of Luandans – are not in the market for satellite TV. Most people having difficulty scraping together a single US dollar, let alone the several hundred necessary to get a dish. (The local currency is the *kwanza*, but the currency that really talks here is the US dollar.)

The majority of Luandans live on the outskirts of town, far from the dish-covered high-rise buildings. They live in the peri-urban *musseques*, a name that comes from the words mu and seke, meaning "area of sand." The *musseques*' densely-packed shantytown structures of mud and concrete, usually with corrugated iron roofs, are separated by paths of sandy soil. They stretch for kilometres around the city, even out around Luanda's airport.



Rainy season, Luanda – vehicles struggle through flooded potholes. The city has 3 million people, 65 percent of them living below the poverty line.

With a population of about three million people, Luanda has doubled in size over the past ten years. During the 27 years of civil war that lasted from 1975 to 2002, about a million people migrated to the city. Most ended up in the *musseques* zone, much of which does not have the basic services of pipe water, sewers, refuse collection or telephones.

Though rich in diamonds and second only to Nigeria in oil production in sub-Saharan Africa, Angola is ranked among the poorest nations on earth. In 1999, it had the world's second-worst infant mortality rate (Le Billon, 2001). A recent IMF report found that 65 percent of the urban population of the country lives below the poverty line of \$1.68 per day, with an estimated one quarter of the urban population living below the extreme poverty line of 75 cents per day. (IMF, 2003)

Thus, for most Angolans, TV ownership is out of the question, let alone ownership of a satellite dish. And because literacy levels are low, newspapers are primarily for the urban elite. This leaves the majority of Angolans reliant on word of mouth and radio broadcasting, for most of their information needs. So what do *they* get?

The radio broadcasting sector features only one national service (state-owned), and only four cities have an extra private commercial service. The sixth Angolan radio broadcaster, the church-run Rádio Ecclésia, currently only reaches two of eighteen provinces, and is struggling to get government approval to go national. Rádio Ecclésia's National Expansion Project – featuring a mix of new and old communication technologies – is one of the two projects covered in this book.

The other project, the ANGONET Wireless Internet Access Project in Huambo City, is also aiming to improve the flow of information in post-war Angola. ANGONET (i.e. Angola NGO NETwork, a project of Development Workshop) has established a satellite Internet link in Huambo, one of the cities hit hardest during the war. In an area such as this, reliable Internet access has the potential to greatly improve reconstruction work.

Examination of these two projects – the Rádio Ecclésia National Expansion and the Development Workshop/ANGONET wireless link in Huambo – provides some insights into the challenges of recovery in Angola, particularly the political, material and practical challenges those in the media and community-based communications sectors are facing. Much more modestly, these examples also help NiZA to evaluate the success of its Media Sector Plan, the implicit raison d'être of this book.

1. So what exactly are ICTs?

Take the "IT" from Information Technology, and put a "C" in the middle for Communication. And there it is: Information and Communication Technology, or ICT.

The "C" creates an important difference – an important departure from the world of IT. To talk of IT is to talk primarily about the hardware, the systems, the platforms, the infrastructures. To talk of ICT is to talk also about what *animates* the IT – the communication, the content, the stuff flowing through the pipes.

It's hard to know when exactly the expression "ICT" first came into being, but, whenever it was, it has been spreading like a virus ever since. There is now a huge development assistance industry – and a huge number of academics and consultants – spending all-day-every-day theorising about, and trying to implement, "ICT for Development." Never mind that very few attempts seem to be succeeding outright; the search for the perfect marriage between communication technology and human empowerment continues.

Essentially, the notion of "ICT for Development" is, like most things that are "for development," born of the humanitarianism – or, more cynically, the guilt – of the world's powerful. The world's well-off nations are being utterly transformed by communications technologies such as the Internet and cell phones, and so, the logic goes, efforts must be made to ensure that *all* the world's peoples can enjoy the bliss of these transformations. Because life in the developed "West" just keeps getting faster and more efficient, the "South" must not be allowed to remain behind in the slow lane – the slow lane of the so-called "information highway."

And thus, no development strategy document is complete these days without reference to the role of ICT. Just as "gender" got "mainstreamed" in the world of development in the late 1980s and early 90s, "ICT" got mainstreamed in the late 90s and the new Millennium. The expression has become so fashionable that, as with most fashions, it is often misunderstood. Some people use it to mean only "new" technologies, such as the Internet, satellite-based communications, cellular phones and computer systems. Others, wisely, prefer a broader definition, because, in reality, information and communication technologies have been around a long, long time - since long before the first satellites were put up into orbit, and long before the computer was invented.

The telegraph, invented in 1840, was probably the earliest ICT. Or maybe the printing press of the 1400s was the first one. And then let's not forget smoke signals and talking drums. And the human voice for that matter. When the caveman or cavewoman yelled at his or her friend to watch out for the big stone rolling towards them, surely he or she was using a kind of communication technology – the vocal chord – applied to a medium (air) to create a transmission (sound waves) in order to communicate.

But to return to more recent history, the telephone, invented in 1876, would seem to be a key ICT. And radio communication, first tested across the Atlantic between Newfoundland and England in 1901 – more than 100 years ago – is still probably the greatest of all ICTs. Radio waves continue to be the most-used vehicle for mass media distribution on earth today, via AM, FM and short-wave. And many of the sexy "new" technologies such as cellular phone systems, satellites and wireless "WiFi" Internet also use radio waves to carry information through the air.

This simultaneous *oldness* and *newness* of radio becomes apparent in our examination of the two Angolan ICT projects, the Rádio Ecclésia National Expansion Project and the ANGONET (Angolan NGO NETwork) Wireless Internet Pilot. Rádio Ecclésia is combining *FM* (*frequency modulation*) radio broadcasting – a technology invented in the 1930's – with the latest in satellite technology (also radio-wavebased) and Internet audio streaming. Meanwhile, to deliver wireless "WiFi" Internet access, the ANGONET project in Huambo – an internet access project for NGOs, set up and run by Development Workshop, one of NiZA's NGO partners in its Media Programme – is using high-frequency *microwave* radio signals, also in tandem with satellite and Internet platforms.

So, to speak of ICTs only in terms of the "new" technologies does not do the concept justice. For the purposes of this book, *any* means of communication will be called an ICT, and the relatively recent incarnations shall be referred to as "new ICTs" – which means that *all* of the following are, for the purposes of this book, ICTs, or elements of ICTs:

- The Internet and Internet/e-mail technologies/platforms
- Satellites, satellite receivers/uplinks and satellite technologies/platforms (analogue and digital)
- Phone handsets, telephone infrastructures (wired and wireless), telephone technologies/platforms (analogue and digital) and cellular SMS (short message service)
- Computer hardware and software, computer printers, scanners, disks, and "flash drives"
- Fax machines, facsimile technology (analogue and digital)

- Cameras (still and video, analogue and digital), television sets, and TV broadcasting systems (analogue and digital), film, cinemas
- Radio receivers and radio broadcasting/transmission systems (analogue and digital)
- Morse code
- Telegraph, telex
- The printing press
- Paper with ink or carbon
- The human voice
- Smoke and smoke signals
- Drums, musical instruments
- Facial expressions
- Body movements/gestures

And, perhaps the greatest methods of human communication invented so far:

- Smiling
- Laughing

2. Radio with a Mission

Angola has only one national radio service, the publicly funded Rádio Nacional de Angola, whose editors, if not their journalists, are usually loyal to the governing party, the MPLA (People's Movement for the Liberation of Angola). There are four commercial radio stations – in Luanda and three other cities. While these often provide both good journalism and free exchanges of opinion during phone-in programmes, their owners also tend to be influenced by their party affiliations.

The only other radio service is Rádio Ecclésia, which was set up by the country's Catholic Church in 1954. In its very early years, this was widely seen as an extension of the colonial regime – largely the reason the MPLA government forced it off the air in 1977, shortly after the country's independence from Portugal, when Catholic schools and other Church assets suffered corresponding fates.

Due perhaps to the fact that the Church became increasingly vocal on pro-peace issues in the early 1990s, Rádio Ecclésia was allowed back onto the airwaves in 1997, albeit with a licence restricting it to broadcasts to Luanda and its surrounding areas. Since then, it has gone on to establish itself as one of the few truly independent voices in Angolan broadcast media. Based at the headquarters of the Catholic Episcopal Conference of Angola and Sao Tome (CEAST) in central Luanda, Rádio Ecclésia programming on FM can currently be heard throughout Luanda and Bengo Provinces, and in parts of Zaire Province. Ecclésia's religious programming caters to all Christian denominations, but the real heart of its programming is its news and current affairs. The station has a reputation for telling things as it sees them, and for letting the people's voice be heard – through phone-ins and panel discussions that take on the huge problems the country faces.

Now, with the Angolan war over and the country trying to rebuild, Ecclésia is preparing to return to a national broadcast footprint. With financial assistance from a coalition of donors, and with technical and training support from the NiZA Media Programme, the station has put together an ambitious plan to begin re-broadcasting its Luanda/Bengo FM signal in all of the other 16 provinces, and to set up local programming operations in several provincial capitals. A key to the plan is a dynamic use of old and new ICTs – the latest in satellite and Internet platforms combined with FM broadcasting.

NiZA Media Programme founder Bob van der Winden identified the Ecclésia project as a key intervention point in the late 1990's, and NiZA has been sending expert missions ever since – to carry out feasibility studies, conduct training in journalism and ICT skills, and to set up the ICT systems. The key driver since 2001 has been NiZA's broadcast ICT specialist Rene Roemersma, who has been working with Ecclésia's local technical staff to develop a completely computerised news operation, plus new satellite and Internet audio links; and FM transmission infrastructure in the provinces.

But the project is not without its problems – not the least of which is resistance from the government. Rádio Ecclésia wants to have its national service up and running in time to cover elections scheduled for 2005 or 2006, but the government is making Ecclésia's task as difficult as possible – through customs hassles, regulatory delays and political pressure.

Ecclésia's move to national broadcasting was supposed to begin on 8th December, 2003, just a few days after the site visit conducted for this report. But the launch was called off after pressure from the Office of the President and the country's telecommunications regulator.

In January 2004, there were high-level talks between the Catholic Church and the Angolan President, Jose Eduardo dos Santos, on a number of areas involving "cooperation" between the Church and the State in the reconstruction of the country. The Rádio Ecclésia National Expansion Project was prominent in the talks.

Neither war nor peace

One proof of a media outlet's independence in Angola during the nearly 30 years of civil war was to be shut down by the government, and Rádio Ecclésia earned that distinction when the MPLA "nationalised" the Ecclésia studios and transmission equipment in 1977. To date, no compensation has been paid. The MPLA said it closed Ecclésia down because the station was pro-UNITA (National Union for the Total Independence of Angola), the rebel grouping MPLA was at war with.

Ecclésia was kept off the air until the 1994-98 lull in the fighting – the period of "neither war nor peace," as some have called it – that followed the Lusaka Protocol of 1994. During this pause in the war, the government granted Ecclésia a new licence (in 1997), to broadcast in and around Luanda Province.

The war started up again in 1998, but Ecclésia was allowed to stay on air, and it has been on air ever since – not without difficulties, however. The station and its journalists have been subjected to frequent harassment and threats, and even abductions. A station editor was kidnapped in Luanda in 2000 and driven to the outskirts of the city. The kidnappers' car got stuck in a dirt track, and the editor escaped.

Even today, two years after the end of the war in early 2002, and with the government preaching democracy, the station is still subjected to threats and intimidation. During the site visit for this report, officials from a company owned by MPLA generals arrived at Ecclésia headquarters to complain about a report in the previous day's news – a report about claims, by former presidential security guards working at the company, that they were not getting paid. The generals were not pleased with the report, and they wanted the names of the workers who had complained on-air. The Ecclésia editor on duty refused, and the matter was left at that.

Transparency and media freedom

These days, the government is in a bind. It is loath to give up its power over the flow of information in the country, but at the same time it must be careful not to overplay its hand in the areas of media freedom, government transparency and democratic rights. To reconstruct the country, it needs the help of the international community, and the international donors and lenders have been alarmed by reports of millions of dollars in oil revenue and bilateral assistance funds going unaccounted for. In the new Angola, "transparency" is thus a buzzword.

On the political front, the government is under pressure to hold national and presidential elections as soon as possible. The war ended in February 2002 with the death of UNITA leader Jonas Savimbi; 45 days later, the MPLA and UNITA signed a peace deal. In June 2003, the once-feared UNITA guerrilla movement, known for its brutal "bush war" methods and military support from the US and apartheid South Africa, surprised the world by holding an orderly, transparent congress, and democratically electing a new party leader. UNITA and a grouping called the Coalition of Political Parties in the Opposition (POC) are pushing for the election date to be announced as soon as possible (ACTSA, 2003).

The government needs to be seen – by ordinary Angolans and by the international community – as an enthusiastic partner in democracy and reconstruction. It has promised elections in 2005 or 2006 and the IMF has forced it to let the auditors KPMG go through its books, to find out where all the oil revenues are ending up. These are therefore, nervous times for the country's vested interests.

The latter, it should be added, cannot be seen solely in party terms. Though the MPLA machine was once all-powerful, presiding over a patronage system that rewarded only the party faithful, matters are now less clear cut. The party has gained a reputation for successfully co-opting people from other parties, including UNITA and another key anti-colonial movement at the time of independence, the Frente Nacional de Libertação de Angola, or FNLA. The current Minister of Information, for example was formerly a member of the FNLA.

The plan by Rádio Ecclésia to start broadcasting nationally, has become yet another element in the pressure mounting on the government to allow greater transparency. Ecclésia's plan is proving to be a crucial test of the government's willingness to permit greater freedom of expression and media freedom.

Baby Ecclésias and the coming elections

At the time of its closure by the MPLA in 1977, Rádio Ecclésia was a national 24-hour service, using all three of the main analogue radio broadcast technologies – AM, FM and short-wave. Via short-wave, it reached beyond the country's borders into neighbouring Zambia and Zaire (now the Democratic Republic of Congo). There, in a time of anti-colonial struggle, it competed for the attention of Angolan refugees with MPLA radio, which was broadcast from Brazzaville; and with FNLA radio, which was broadcast from Kinshasa.

Since its return to the airwaves, Ecclésia's 24-hour signal, on 97.5 FM, has only consistently been reaching Luanda and Bengo Provinces, leaving listeners in the other sixteen provinces out of the potential audience.

Starting in 2001, Rádio Ecclésia has been working together with NiZA and the Irish NGO Trocaire – with funding from church organisations and the U.S, British, Swiss, Swedish and Dutch governments – to increase the station's coverage area and to source content from all the provinces. With assistance from NiZA's Rene Roemersma, Ecclésia re-launched a national short-wave service in 2000, but only with a one-hour daily slot, from 20.00-21.00 hrs.

This programming is packaged each afternoon at Ecclésia's Luanda studios, using digital audio editing software, and is then sent over the Internet, via file transfer protocol (FTP), to Sentech, the main broadcast signal provider in South Africa. Sentech beams the programming back into Angola on short-wave. But short-wave signals are notoriously unreliable – susceptible to weather patterns and time of day – and Ecclésia's one national feed, for one hour per day, of re-packaged Luanda content, is hardly enough to test the government's professed commitment to a free flow of ideas.

Ecclésia's master plan – developed in close collaboration with NiZA's Roemersma – is to "repeat" the 24-hour Luanda/Bengo FM signal, live, in the capital cities of each of the sixteen other provinces, and in many other small towns, using "FM repeaters" – essentially re-transmitters that put the signal out on local FM frequencies. At time of the writing of this book in February 2004, nine of the FM repeaters were already in place, in the capitals of nine provinces – Uige, Cuanza Norte, Cuanza Sul, Malanje, Lunda Norte, Lunda Sul, Benguela, Huambo and Cunene.

To get the Ecclésia programming out to the provincial repeating stations, the signal is being uploaded, from the roof of the Catholic CEAST building in Luanda, to a digital satellite channel on the PanAmSat-10 (PAS-10) satellite. Each of the FM repeater stations has a dish to downlink the satellite signal and transfer it onto the

FM transmission platform.



Rádio Ecclésia FM repeater station in Huambo, with satellite receiving dish linked to FM transmitter tower.

Thus the project brings together a cost-effective mix of old and new ICT platforms – a "hybrid solution" in techie-speak – that can deliver a powerful, easily-receivable FM signal to the end-users.

Eventually, the plan calls for more than 40 FM repeaters – one for each of the sixteen provincial capitals outside Luanda and Bengo, and about 30 lower-power "minirepeaters" for small towns. It is hoped that some of the mini-repeaters will run on solar power. Once all the repeaters are rolled out, 90 percent of the country's territory will be covered by the FM transmissions, reaching a majority of Angola's 13 million people.

To provide for local programming production, including programming in local languages (currently, Ecclésia broadcasts only in Portuguese), production and broadcast studios are to be installed in several of the provincial capitals, creating a network of "Baby Ecclésias." These affiliate stations will then be able to broadcast a mix of national and local programming, and even feed some of their local programming to other capital cities in the same region and back to the national hub in Luanda for inclusion in national feeds. In February 2004, two of the provincial studios were in place, in Malanje and Benguela.

Another element of the expansion plan has generated a growing network of local, provincially-based Ecclésia correspondents, subsidised by the Irish NGO Trocaire since 1998, and provided with training and support through NiZA missions since 2001. These correspondents are already feeding stories into the national broadcasts produced in Luanda. Under the expansion plan, they will become key reporters and producers based at the "Baby Ecclésias".

In the eyes of the people at Ecclésia, a national presence is essential to the opening up of Angolan society. "We need to help civil society to be conscious of its responsibility in the country," says Father Antonio Jaca, the Catholic priest who is co-ordinator of the Rádio Ecclésia National Expansion Project. "Until now, almost all the things have been done by the parties, and civil society is not organised. It is not conscious of its own rights, in the sense of asking the government to do what it should do."

"And also, before the election," Father Jaca continues, "we need to make people more conscious of how to vote and why to vote, and make available to the people the programmes of the parties, so that they can make conscious choices and not just vote on emotions."

Angolans *did* have the chance to vote in 1992, with the MPLA winning a UN-monitored national election as part of the Lisbon (Bicesse) peace plan signed in 1991. UNITA disputed the outcome and, led by Savimbi, returned to the bush to continue the war. But, says Father Jaca, that vote was carried out in a restricted media environment. "In 1992, you had just one radio station [Rádio Nacional de Angola], and one television station, both controlled by the government."

This does not mean there was a complete information vacuum in 1992: short-wave radios are relatively common in Angola, and even during the period before Ecclésia's re-opening in 1997, people could – and did – listen to VORGAN (UNITA's short-wave station), the Voice of America, the BBC, and South Africa's SABC, which has programming in Portuguese.

But the government certainly continues to try to limit the flow of media, particularly outside the main cities. This is evidenced by the official resistance Ecclésia has encountered in its current plans for going national. Bureaucrats and officials have used a series of subtle, and not-so-subtle, tactics to stop Ecclésia from going ahead, including blocking shipments of equipment, or imposing excessive duties at ports of entry. Most crucially, the government has been delaying approval of the new FM frequencies that Ecclésia needs to use in the provinces.

This has created something of a diplomatic stand-off between the government and the Angolan Catholic Church, with the church *claiming* both a right to broadcast nationally – by virtue of the national service it had from the 1950s to 1977 – and at the same time *asking* for the government's acceptance of the plan.

The FM frequencies that Ecclésia will use in the provincial capitals and other towns have already been allocated by the country's communications regulator – the Angolan Institute of Communications (INACOM) – but the Minister of Social Communication has not yet signed the new frequency plan into law. This is the same Minister, Hendrik Vaal Neto, who called Ecclésia a "terrorist radio" in February 2003, saying that it was a "vehicle of offences, defamation and false propaganda against Angolan individuals and institutions." Vaal Neto said Rádio Ecclésia was trying to provoke reaction from the government, in an effort to paint the government as hostile to media freedom. (IRIN, 2003)

When Ecclésia first mooted the idea of going national a couple of years ago, the Social Communication Ministry said that it would not be possible, as Ecclésia's current licence allowed it to transmit from Luanda only. The Ministry then referred the matter to the regulator, INACOM, which, to the surprise of Ecclésia management and many others, approved a set of new FM frequencies for Ecclésia all over the country in October 2003. The Ministry then started delaying the signature needed to make the frequency plan law.

In late November 2003, at the time of the NiZA site visit for this report, the Ecclésia expansion team was gearing up for "experimental transmissions" on eight of Ecclésia's provincial FM frequencies. The transmissions were to begin on 8th December – the anniversary of Ecclésia's first transmission back in 1954. At the time, Ecclésia Expansion Project head, Father Antonio Jaca, said that he hoped the government would feel less threatened by the idea that the station was merely "test-

ing" its infrastructure. "This is also the way to push things ahead," he said, "and have a quick answer from the authorities [on the licensing issue]."

But Father Jaca got his "answer from the authorities" sooner than he expected. In early December, even before the launch of "experimental transmissions," the Office of the Social Communication Minister went over Jaca's head, sending a letter to the current Director-General of Rádio Ecclésia, a top Catholic bishop, urging the church to stop the station from going ahead with national coverage. The Office of the Angolan President, Jose Eduardo dos Santos, also got involved, writing to the regulator INACOM to question the validity of the new national frequency plan. INACOM called Father Jaca into an emergency meeting on 6th December, 2003 – just two days before Ecclésia was due to begin provincial broadcasting – and warned him that it would be unlawful for Ecclésia to go ahead. The regulator was clearly feeling the pressure from above.



NiZA's Rene Roemersma and Rádio Ecclésia's Father Antonio Jaca: two of the main drivers of the National Expansion Project.

Father Jaca then sent the word out to the Catholic bishops in the eight provincial capital cities where FM repeaters were in place to begin broadcasting – Uige, N´dalatando, Sumbe, Malanje, Lucapa, Suarimo, Benguela and Huambo – asking if any of them were willing to go ahead with the broadcasts and test the mettle of the regulator and the government. None of the provincial bishops were willing to risk it. So Jaca put the broadcasts on hold.

The drama continued into 2004. In January, President Dos Santos convened a meeting with the head of the Catholic CEAST and the new Archbishop of Luanda. The official reason for the meeting was the need for the CEAST to formally introduce the new Archbishop to the President, but according to reports – reports aired on Rádio Ecclésia – the issue of the station's National Expansion Project was high on the agenda.

So, more than three years after the plan was developed, with the elections steadily approaching, and with the new transmitters and studios continuing to be rolled out in the provinces, the church and the government were still dancing around the issue of a launch date.

NiZA's Rene Roemersma, the Interim Project Manager for the Expansion at the time of this report, said the project was now in a "very tricky" situation. Until the most recent series of events, the communications regulator INACOM had been very accommodating to Ecclésia, helping it to identify the necessary additional frequencies in the provinces. The main stumbling block had been the Social Communication Ministry. But now the regulator was also putting the brakes on the project, and the Presidency was directly involved. After three years, "the project is more fragile than ever," Roemersma said. "I'm waiting to see what will happen."

This was not the first time Roemersma has experienced the vagaries of media-wary governments and fickle regulators. He began his work in radio and ICT in Central America during the civil strife of the 1980s, and spent much of the 1990s based in Ecuador, co-ordinating technical operations at ALRED, a network linking community radio stations all over Latin America, where governments have not always been comfortable with independent media operations.

The other main driver of the Ecclésia Expansion Project, Father Jaca, is also no neophyte when it comes to dealing with serious obstacles. Within a few months of returning to Angola from Canada in 1999 to take over the directorship of Rádio Ecclésia, he was arrested, along with four Ecclésia journalists, after the station re-broadcast a Voice of America interview with UNITA leader Jonas Savimbi.

"We were released at midnight," Jaca recalls. "It was a bad experience, a very, very bad experience." During that evening of interrogation, the authorities demanded that the station go off-air, but the journalists still working at Ecclésia head-quarters refused. "It was a big problem, it was a very difficult time," Jaca says, "but we resisted. It was very important at that time that we did not give up. This also helped civil society and independent media too... we were in that time the only one who had the possibility to resist."

Jaca says Ecclésia's ability to resist comes from its ties to the Catholic Church. "In this society, the church is very strong – it is not easy for the government to control. The way we find we can maintain the radio is by having me as its head, the priest, because it is more difficult for them to control, and to intimidate and corrupt. This is why I am head of the radio. This helps a lot, to deal with these kinds of situations."

Jaca heads a national evangelical Catholic congregation called the "Divine Wards Missionaries," and it looks as though he will have to use all his skills of persuasion to make the Ecclésia expansion happen in time for the elections. He says he is determined to make it a reality.

"Luanda is different," Jaca says. "Here we are living more democratically. Out of Luanda, people are not aware of what is going on in the capital. I don't think they know that here people can speak freely, that they can call the radio station, that they can participate in the programme. What we are saying is that this thing, the liberty of expression, is not just for the people who live in Luanda. This should be available for all the population of the country. This is why this project is so important."

The 2002 report of the Media Institute of Southern Africa (MISA), another NiZA partner in the region, supports Jaca's view that media repression is much more severe in Angola's outlying provinces. "The situation of the various correspondents within the various media houses in the provinces has not improved to the same level registered in the capital," the MISA 2002 report said, giving details of the police interrogation of one of Ecclésia's correspondents in the southern Huila Province. The correspondent had been interrogated for reporting on alleged deaths in "demobilisation camps" for former UNITA combatants (Mello, 2002).

At the same time, it would not be correct to suggest that there is absolutely no freedom of speech outside Luanda. As Carlos Figueiredo, Country Programme Manager at the NGO Development Workshop (see Chapter 3) points out, "Several Ecclésia people have previously worked on other stations, including TV, where various professionals at different stations – very good people – have been exerting overall pressure for more independent activity. This means that good, very open

debates with listeners' input are also common, not just in the capital, but also at [private commercial stations] Rádio 2000 in Huila and Rádio Morena in Benguela. These people are often doing good journalism, and not just acting as a mouthpiece for their bosses."

"They will not stop the project"

The dance between the church and the government around the future of Ecclésia is an intriguing one, with myriad complexities.

According to some interpretations, the Catholic Church needn't be so polite about the matter of Ecclésia going national. NiZA's Roemersma believes that the Lusaka Accord of 1994 – which led to the temporary peace between the MPLA and UNITA and created the conditions for Ecclésia to be allowed back on air – essentially gave Ecclésia the right to broadcast on a national basis. "The Accord stated that everybody who had a national frequency on short-wave prior to the agreement was still entitled to it, to avoid a situation where only [state-run Rádio] Nacional would have the exclusive right to national broadcasting. Because of the evolution of technology, the logical thing [instead of short-wave] is to start an FM network with satellite distribution."

But, says Roemersma, the government got around this argument by saying that, according to International Telecommunication Union (ITU) rules, a whole new national frequency-planning process was needed, to ensure allocation of a frequency spectrum for all telecommunications/ICT operations – including radio, television, cellular phones, satellite transmissions and military and scientific frequencies. The government was justified in its claim: national frequency-planning has become increasingly important over the last decade due to the proliferation of different telecommunications devices operating at different frequencies. Frequency-planning is essential to prevent spectrum interference and "pollution" of this valuable natural resource.

But "the government was stalling with the argument that they were making up a national frequency plan, on the basis of the ITU," says Roemersma. "So we went through the process, and we presented all the technical documentation, for every transmitter, and that was accepted by the Institute [INACOM, the regulator]."

INACOM, which falls under the Ministry of Post and Telecommunications, then passed the plan on to the Ministry of Social Communication, where it has languished ever since. "Nobody knows when it will be dealt with on a government level," says Roemersma, "because if it's not convenient, then everybody expects it to be after the elections."

This delay can be contrasted with the speedy awarding of frequencies to the private commercial radio broadcasters that have ownership links to the government. "They were never legalised, never officially granted licences, but they got frequencies." The same is true for Rádio Nacional's national FM frequencies, which have never been legally constituted. "When you're with the government, you have a frequency and there is no problem, but if they don't like you, then they start regulating."

And then there are the customs duties. At the time of the site visit in November 2003 for this report, there was a container of transmission equipment from Europe about to arrive in the port of Luanda, but customs officials were requesting payment of duties at huge percentages.

"This government is actually, I would say it bluntly, making money out of poverty," Roemersma said of the customs procedures, "because they only consider things free of customs if they're direct humanitarian emergency goods. But if they're anything that doesn't go with that definition, they block it, and they are asking 40 percent customs duties, which is prohibitive for any kind of project. This project is dependent on international donors, which, in their contract, state that this money cannot be used for taxes. So what do you do? This is one of the logistical nightmares we have with this project."

Father Jaca shares these frustrations. "We have a lot of difficulties to get the equipment into the country," he says. "We know now that they [the government] are doing all they can to block this project, and one of the ways to block this project is to block the equipment."

But Jaca is undeterred: "We'll find other ways to deal with the situation. It's just one part of the problems. One has to be very careful with politicians. There's a kind of marriage between politics and journalists... we need them, and they need us... and we have to be very careful. [Now] the government is just trying to gain more time. They will not stop the project."

Technological revolutions – and personal ones, too

Regardless of when Ecclésia gets the go-ahead – from the government and/or the Catholic Church – to extend its broadcasting footprint via a mix of satellite and FM-repeater technology, the new-ICT revolution has already hit the station. Since 2001, Ecclésia's Luanda News and Current Affairs operations have gradually moved to a completely computer-based, "paperless" radio production system.

Pre-recorded programming is now edited using digital audio software, and it is then played during live broadcasts using an automated computer "play out" system. Scripts are typed into the computers in the newsroom on the second floor, and the presenters then read the scripts directly off the computer monitor in the on-air studio down in the basement, which is connected to the newsroom via a Local Area Network (LAN).



Rádio Ecclésia Technical Co-ordinator Vanda de Carvalho: "I am very, very proud of this radio, because it's the only radio working in this way."

NiZA expert missions have provided much of the technical training that has gone into building this new-ICT capacity, with Roemersma and another Dutch media/ICT veteran, Peter van der Laar, as the main trainers.

"It was very exciting," says Ecclésia's Technical Co-ordinator Vanda de Carvalho, one of the trainees. "The first day, we came to the workshop and Peter [van der Laar] had broken a computer, we saw every piece, and he explained how it works and how to rebuild the computer. After two days, Peter rebuilt the computer himself. But then we had to do it, and it was very, very good."



Paperless Radio: Ecclésia news bulletin, read live from the monitor, in the on-air studio, Luanda.

De Carvalho is now the top ICT person at Ecclésia. She has mastered digital audio editing and play-out software, and uses file transfer protocol (FTP) over the Internet to send the daily short-wave programming package to South Africa for transmission.

De Carvalho has been at the station for six years, ever since it came back on air in 1997, and has witnessed Ecclésia's ICT revolution first-hand. "When the radio started in 1997, everything was analogue, and it was very difficult because we were working with cassette or reel-to-reel," she says.

The old system was labour-intensive, and De Carvalho or one of the other technicians had to be on hand at all times, to oversee technical production and to record programming for the archives. "One of us had to stay there until programming finished, to record everything." The station's broadcast hours were only 6 a.m. to 9 p.m. then, to allow the small technical staff some down-time. These days, the dubbing of programming is automated, and pre-produced programming can be put into the system ahead of time and played directly into the programme by producers with no help from technicians. Programming has been extended to a 24-hour-schedule.

Use of the MAR4Win automated play-out programme means that only one technician needs to be on duty during the busy morning shift. "We used to need three technicians every morning," says De Carvalho, "but now I am working alone from 6 a.m. to 1 p.m. It's enough – I can do it perfectly. And journalists can do their own programmes upstairs in the newsroom." Meanwhile, the Vegas sound-editing package has increased the efficiency of advertising spot production. "We can now produce 20 adverts in one day," says De Carvalho."

The new-ICT training has also had a positive gender-empowerment dimension. Two of the station's main technicians are women, including De Carvalho, who says woman-friendly technical environments are difficult to find. She has turned down other job offers because of it. "Like many of my colleagues here at this radio, I also was asked by Rádio Nacional, or TV, or another radio, to go there and work for them, but I still said no, because I like my job here. I like the freedom I have here to produce, to work. And because I have some friends working in other media, I know that it's not very easy [at other media], especially for women technicians."

De Carvalho says Ecclésia is the most technologically-advanced radio operation in the country – a leader in new-ICT use for radio. "I am very, very proud of this radio, because it is the only radio working in this way, and I have a privilege as one of the few people who knows how to use these things," she says. "All this equipment is no longer a 'monster with seven heads,' and I feel very comfortable using it."

De Carvalho is now keen to become a trainer. "Two years ago, I had to call Rene [Roemersma], or send an urgent e-mail to Peter [van der Laar] to try to resolve problems, but now I am completely independent. I know how to do everything. So now it is time for me to be a trainer, and to do workshops for my colleagues in the provinces." She would also like to work with the new mobile production unit. "We are planning to have a mobile unit to go to the provinces or here in Luanda to do projects outside of the radio. This will be a very good idea, because it means another way to do the job."

During the entire one-hour interview for this report, De Carvalho was sitting in the technical control studio, occasionally checking the levels on the software as it made a dub of the live programme taking place on the other side of the glass partition. The programme's presenter – doing his weekly show on peace and justice – was producing his programme with no technical assistance.

"This is what we're intended to do"

Meanwhile, in the second-floor newsroom, one of the two news co-editors, Antonio Sousa, was busy at a computer terminal, bringing in a sound clip from the spokesperson of a teacher's union. The teachers were out on strike, and Sousa, who had the spokesperson on the phone, was dubbing the man's comments directly from the phone line into the computer, using the Sound Forge software.

After the interview was over, Sousa thanked the union man for his comments and hung up the phone. He then went into the sound file directory on his PC and played the clip back, to check the sound quality and the content. "He was explaining why they have to go on strike," said Sousa, translating the clip from the Portuguese. "The government is not paying full subsidies. Teachers are claiming the subsidies for examinations, clothing, and a professional subsidy according to their profession."

Sousa is one of Ecclésia's top journalists, and has travelled extensively outside Angola for work and training. He has participated in some of NiZA's training courses at the station, and says the new technologies introduced to the newsroom since 2001 have had a positive impact.

"It makes things easy," he says. "We have to edit audio in a very short time. We would take much longer if we didn't have such facilities. Also it has improved the quality of our final product, the sound quality. We write and at the same time we listen to the clip. So there is no need to call the technician, and you can do both, writing, editing. It's not just the technician's concern, audio stuff."

The newsroom also has relatively good access to the Internet, with a satellite download and dial-in upload connection to a local Internet Service Provider (ISP), installed as part of the ICT upgrade since 2001. Sousa says the Ecclésia journalists use the World Wide Web a lot, particularly for their feature programmes. "Most of us are producers [as well as reporters and editors]," says Sousa. "We have our own programmes, and we get our content through going out on field work and doing on-line research. We have several topics – health, education, environment, science – so through the Internet we can get a lot of stuff."



Digital Audio: News Co-Editor Antonio Sousa plays back an audio clip with Sound Forge audio software, in the Rádio Ecclésia newsroom, Luanda.

"I think the Internet is helping people here to get engaged to the work," says Sousa, "to do things seriously, in terms of finding out more knowledge, new knowledge, and trying to enrich their work. Because we lack sources, we lack also some experts to talk about any new issue, new discoveries, and that's why we have the Internet."

Sousa recalls using the Internet to compile historical information for programming he did on the importance of $25^{\hbox{th}}$ April, the day celebrated every year as the anniversary of the Portuguese Socialist takeover of Portugal in 1975 – the event that led to Portuguese de-colonisation in Africa, and the independence of Mozambique, Cape Verde and Angola.

"I was talking about the importance of 25th April," Sousa explains. "People forget the impact of that date, so I just carried out research on-line. I got the importance of the date, the background information of the date, and how it is linked to our countries, African countries which were Portuguese colonies, and I could make a linkage. I could take my Angolan context and the information I got via the Internet. It worked, I could do an analysis."

Sousa says he has also made good use of the Internet to get information on important issues such as HIV-AIDS research, and peace-building. "On peace-building, we got information on that committee created in South Africa [the Truth and Reconciliation Commission], led by Archbishop Desmond Tutu. We also got the experience from Mozambique, too, and how the priests could help to solve the conflict there, to mediate the conflict. "

Sousa is well-known in Luanda for his work with Ecclésia. And this is not always such a good thing. He sometimes gets threats from people who don't appreciate the station's independent line. "By telephone, and in letters, people say 'you're talking about this, this is a very serious issue, and are you sure that you are going to go home, that you are going to arrive home safely?" You know, threats like that," says Sousa.

But he says he is willing to accept the risks. Though he says he is not a religious person, he does believe in God's will. "Sometimes people ask, 'Do you feel secure here, talking badly about the government, don't you care about your security?... Do you feel comfortable talking about this issue and going home without feeling scared about that? And most of you walk – you don't have cars, you don't have guns, you don't know how to defend yourselves.' We say, okay, we put our lives in God's hands, and he will protect us, he's always with us, and if we're doing something wrong, he will judge us, and so, let's just forget about human judgement on these issues. We're just doing our jobs, we're journalists, [and] this is what we're intended to do."

And even though it will bring more exposure, and probably more controversy and threats, Sousa is keen for the radio to go national as soon as possible. "We want to reach all of the country, we want to be heard. Not just in Luanda, because Angola is not just Luanda. We have 18 provinces."

The importance of the Internet

NiZA has also supported expert missions to Ecclésia by journalism/ICT trainers, who have provided courses in journalism and ICT, investigative journalism and general research skills. Blanca Diego, a Spanish journalist with extensive community radio experience in Latin America, has been one of the NiZA trainers, working with Ecclésia producers and reporters on their skills.

One of the Ecclésia staff who has received training from Diego and other NiZA trainers in investigative journalism, research and digital audio editing (using the Sound Forge and Editor Plus softwares) is programme producer and presenter Marcia Nigiolela.

"These days I use Sound Forge to edit my programmes," says Nigiolela, who is also studying for a law degree at a Luanda university. "Now I am an independent journalist, doing my own programmes as I want, as I have in my mind. I don't need a technician, so it is very, very important."

Nigiolela says the research course gave her good exposure to Internet resources. "For me it was also very important. Because now I know how to use the Internet, and my programmes now are good programmes with more information. I am now better as a journalist. I know more about the world, and more about Angola."

Land-lines versus satellites

Rádio Ecclésia also hopes, in the future, that it can use new ICT platforms to help with the distribution of programming produced at the provincial "Baby Ecclésia" stations. Once the studios are set up in the provinces, the first priority will be the building of local programming capacity – building a cadre of local producers, with the current Ecclésia provincial correspondents forming the nuclei of these units. Once the local programming starts up, there will be the technical challenge of getting some of the provincially-produced programming back to the national Ecclésia hub in Luanda, for use in national feeds and for re-distribution to other provincial production centres for use in regional programming.

The existing live audio link going up onto the PAS-10 satellite for re-broadcast in the provinces is an expensive up-link – too expensive to be replicated in each provincial centre. A more cost-effective way will have to be found for the provincial producers to get the programming back to Luanda. One likely method will be Internet audio "streaming" – using the Internet to send audio digitised in Internet Protocal (IP) format. Another even-higher-tech option will be to set up "studio-to-studio" links (SSLs) using "point-to-point" systems over the Internet, allowing for two-way, interactive programming.

Angola's land-line telecommunications infrastructure is in bad shape – because of decades of neglect and damage during the war – and it will be many more years before the parastatal telephone utility, Angola Telecom, is able to upgrade the lines for high-quality Internet between all the cities. The best way to get around this problem – the method being adopted in many parts of Africa – is with Internet over VSAT (very small aperture terminal) satellite systems. These allow for wireless high-speed uploading and downloading at relatively affordable prices.

Another NiZA Media Programme Partner, the NGO called Development Workshop, has started piloting a VSAT Internet link in the central province of Huambo. Ecclésia is hoping that its provincial Huambo affiliate will be able to make use of Development Workshop's Huambo VSAT link, and that Ecclésia can piggy-back on other satellite Internet roll-outs planned by Development Workshop in more provinces.

Rádio Ecclésia and ICTs: a brief impact assessment

On the basis of the site visits to Rádio Ecclésia that took place in late 2003, this section briefly assesses the individual and institutional impacts of ICTs on Rádio Ecclésia. It also examines Rádio Ecclésia's own impact on the Angolan media sector and on civil society in Angola.

Individual impact: the Impact of ICTs on workers at Rádio Ecclésia

The site visits established that the incorporation of new ICTs in the operations of the Rádio Ecclésia Luanda newsroom and studios, and the planned National Expansion of the Ecclésia broadcast footprint via satellite audio and FM repeater technologies, were having the positive impacts on the station workers.

Firstly, journalists and editors now had increased control over sound clip content, and no longer needed assistance from technical staff. Together with presenters, they were able to process stories more quickly; performing quick computer-based sound clip editing. Similarly, presenters in the on-air studio could use the Local Area Network (LAN) to read their scripts directly off the screen. The breadth of their stories was also being improved by Internet research.

Next, by taking lead roles in operating the new ICT infrastructure, some women had successfully broken the gender bias towards technology as a male preserve.

Finally, the staff interviewed said they were proud to be working for the country's most technically-advanced radio operation, and that they were acquiring highly-transferable ICT skills. The latter was evidenced by the frequent job offers made to Ecclésia staff by other electronic media operations. The same interviewees added that the National Expansion of the station's broadcast coverage – via satellite and FM repeaters – would increase the impact of their work, thus increasing job satisfaction.

However, the interviewees expressed one concern related to the ICT-related enhancements at the station. While the technical-ICT infrastructure had been greatly enhanced over the past three years, insuf-

ficient attention had been paid to working conditions (e.g. salaries and compensation packages) of the staff. Several Ecclésia workers had already been "poached" by more lucrative offers from government-controlled Rádio Nacional de Angola – representing a loss of valuable human resources just when Rádio Ecclésia was preparing to expand its operations.

There were also concerns that the National Expansion, while technically innovative and exciting, would place even greater strain on the existing human resources at the station, in terms of the operation, management and maintenance/servicing/repair of the new infrastructure.

It was clear that once Ecclésia went national, it would need more staff – for the provinces, and probably also in the Luanda offices – to help manage the flow of programming coming in from the provinces. This would increase Ecclésia's already heavy reliance on donors. Even with a national service, Ecclésia could not expect to generate significant amounts of new advertising. According to Expansion Coordinator Antonio Jaca, the station was having difficulty generating significant advertising revenue, because most businesses did not want to compromise their relationship with the ruling party.

Institutional impact: The impact of the ICTs on the institutional capacity of Rádio Ecclésia

There was no doubt that the incorporation of new ICTs in the newsroom and studios had increased Ecclésia's institutional dynamism. This would be further enhanced by the mix of old and new ICTs that would characterise the imminent National Expansion of the Ecclésia broadcast footprint.

It was clear that Ecclésia's use of digital audio recording and editing systems had led to a number of improvements. Not only had it improved the sound quality of the programming, it had also increased the speed of audio editing, as the audio software now allowed for rapid cut-and-paste audio editing, which is significantly quicker than the traditional audio editing technique (i.e. the physical cutting of quarter-inch reel-to-reel tape using razor-blades).

Similarly, the speed of the production process had also been increased, because audio clips, once edited, are immediately present in the system; which, via the Local Area Network (LAN), can be accessed in the on-air studio, thus eliminating the need to put the sound clips onto an intermediate medium (traditionally reel-to-reel tape) in between production and broadcast.

Not only had the use of these systems decreased the number of staff needed to produce a programme – both on the journalistic and technical sides – it had also made it simple to archive programming.

Use of the Internet had brought two main advantages: improved programming research and costeffective transfer (via File Transfer Protocol - FTP) of the daily package of short-wave programming to South Africa, for short wave transmission, back into Angola by the Sentech broadcast signal provider.

Thanks to the use of the satellite audio platform, it would now be possible for the Rádio Ecclésia Luanda FM signal to be distributed throughout the country for download and re-broadcast on local FM frequencies.

FM "repeaters" (re-transmitters) would also bring advantages. It would be possible for Ecclésia's programming to be heard in provincial capitals and secondary towns via high-quality FM signals receivable on any standard, inexpensive radio receiver. This programming would also be able compete directly with the programming of the government-controlled Rádio Nacional in most parts of the country.

Sectoral impact: the impact of Rádio Ecclésia on the Angolan media sector

Since its inception in 1955, and particularly since its re-opening in 1997, Rádio Ecclésia has been a strong force in support of the ideals that are central to the NiZA Media Sector Plan (MSP). Apart from a few weekly newspapers – which are not widely read – Ecclésia is the only Angolan media outlet that can claim any great degree of independence from government pressure. Thus, Ecclésia has been, and continues to be, a strong force in Angola for both media freedom and media diversity.

Also, by being the pioneer in Angola in the use of radio programming formats that allow for direct listener participation through live call-ins and debates, the station has been, and continues to be, a force for media access and medial quality.

Paradoxically, Ecclésia's status in the Angolan media sector has been enhanced by the obstruction and harassment it has received from the government, whose current blocking of Ecclésia's National Expansion is further confirmation of Ecclésia's importance in the media landscape.

The support provided to Ecclésia by NiZA, Trocaire and other organisations, has now brought the station to the threshold of National Expansion – an expansion which promises to greatly expand Ecclésia's influence in the Angolan media sector. Expanding the Ecclésia service to a national scale will end the current dominance of radio broadcasting by government-controlled or government-aligned stations in most parts of the country.

Government-controlled Rádio Nacional covers the entire country, and the four commercial radio stations – in the cities of Luanda, Benguela, Lubango (Huila Province) and Cabinda – are controlled by government-aligned companies (even though stations such as 2000 in Huila, Rádio Morena in Benguela, and Luanda Antena Comercial (LAC) in Luanda provide good some journalism that does not automatically serve as a mouthpiece for their owners).

While the National Expansion will, as already outlined, bring many challenges and stresses to Ecclésia at the institutional and individual human resource levels, there can be no doubt that the expansion is a worthy endeavour with great potential to positively impact the Angolan media sector.

Societal Impact: the impact of Rádio Ecclésia on Angolan society

Rádio Ecclésia has had a prominent place in Angolan society ever since it began operation in 1955. Though initially a project aligned with the colonial interests of the Portuguese settlers, the station has, since its re-opening in 1997, managed to carve out an important, somewhat unique, space in the Angolan media landscape.

During the final five years of the war, from 1997 to 2002, it not only provided information on the movements, victories, defeats and atrocities on both sides of the war between the MPLA and UNITA, but, at a time when all elements of national life were dominated by war, it also provided a pro-peace perspective. At the same time, it tested the government's commitment to a free flow of information in society, and revealed the government's hostility to certain types of information being made public.

Since the end of the war in 2002, it has continued to test the government's commitment, not only to the free flow of information, but also to anti-corruption and transparency. It has also focused consistently on providing information on the course of reconstruction: e.g. mine-clearing, the demobilisation of soldiers, the resettlement of internally-displaced people (IDPs), and social reconstruction

in the areas of health, education, and housing. Equally, it provides Angolans with voices of peace reconciliation, and with a vehicle for the emergence of the voices of the civil society that is trying to establish itself in the post-war period.

In the interim, a key role for Ecclésia will be to provide coverage of the presidential and National Assembly elections expected in 2005 or 2006. The station will have an important role to play in informing voters and parties about the rules of electoral politics, and in giving voters a balanced perspective on the campaigns waged by the MPLA, UNITA and smaller parties. Exposure will also need to be given to non-party, non-business, non-governmental civil society perspectives on the main election issues.

In the next chapter we look at the Development Workshop (DW) Huambo VSAT project, which serve's DW's Internet access project, Angola NGO NETwork, ANGONET.



Charred remains of a former high school building in central Huambo City.

3. Going Wireless in Huambo

Like Luanda, Huambo City also felt the harsh effects of the 27-year Angolan civil war. While Luanda struggled with the overcrowding and associated problems created by people fleeing the war, Huambo felt the *actual* war – the mortars, the street-by-street gun-battles, the supply shortages and the civilian deaths.

The city, which is the capital of Huambo Province, has been strategic, as a key stop and repair station for the Benguela Railway, ever since the Portuguese colonial era. Situated in the central highland plateau of Angola, Huambo Province was seen by the Portuguese as the agricultural heartland of the country, with Huambo City as a good location for the country's capital – its cooler, dryer climate preferable to humid Luanda. But Huambo's days of glory never materialised. Upon independence in1975, the Portuguese settlers departed *en masse*, and when the civil war began between UNITA and the MPLA, Huambo's strategic location became a curse. During the war, the MPLA and UNITA fought fierce battles in and around Huambo City.

When the MPLA declared Angola's independence in November 1975, the city was in the hands of UNITA militants. In early 1976, the MPLA, assisted by Cuban forces, won control, but throughout the 1980s, UNITA, backed by American money and South African Defence Force (SADF) troops, attacked and captured towns and areas near the city. The MPLA hung onto control until what came to be known as "the siege of Huambo" in 1993.

The siege, during which the city was under direct attack for 55 days, ended in UNITA victory. But then, in the late 1990s, MPLA troops re-took the city, keeping control until the end of the war in 2002.

Walking the streets of Huambo City today, one sees the signs of war everywhere. There are bullet holes in almost every structure. Many of the buildings are burned out, including a large former high school building, standing empty, its classrooms gutted by fire. But slowly, since the end of the war, things have started coming back to life. Yamaha has just opened an assembly plant in the city, and the buzz of motorcycles is now bringing more activity to the potholed streets. So, too, is the rumble of the 4X4s driven by the UN and NGO workers.

A key barrier to Huambo City's reconstruction, and reintegration with the rest of the country, is telecommunications. The nearly thirty years of war put a freeze on any modernisation or extension of the telephone network. Most of Huambo is either

not connected to the fixed telephone system, or connected via poor-quality, dilapidated copper cabling.

The poor state of the city's fixed-line phone infrastructure makes Huambo ripe for a "wireless revolution." And Development Workshop, a NiZA Media Programme Partner operating in the city, is determined to be part of this revolution.

"DW", as it is known, is a non-profit organisation working to improve living conditions for the poor. It runs programmes in four areas: Water and Sanitation (Sustainable Services), Micro Finance and Gender (Livelihoods), Shelter and Urban Settlement, and Civil Society Building. Under the latter, it runs the media-oriented ANGONET Wireless Internet Access Project and a community publishing project, each focusing on improved communications and information exchange.

As part of these activities, DW set up a VSAT (very small aperture terminal) satellite Internet link to enhance ANGONET, giving Huambo's NGO community reliable, broadband Internet access for the first time. The link was established in mid-November 2003, on the basis of feasibility study and installation assistance from NiZA's Rene Roemersma. By early 2004, nearly fifty NGOs and UN agencies in Huambo City were connected to the service, which provides a 24-hour two-way broadband Internet connection directly into the city.

Until recently, the technology behind the VSAT satellite system was too expensive for deployment in small-scale projects. Instead, it was used mainly in large private-sector projects and by big parastatal telecommunications companies that needed to handle huge amounts of data and voice traffic in remote areas. Now, thanks to improved technological efficiencies in digital satellite operation, costs have come down (both for the equipment and for the monthly service fees), and VSAT projects are now springing up all over Africa – in places, like Huambo, where poorquality or non-existent fixed-line telephone systems block broadband data access.

Starting in 1990, ANGONET was in fact the pioneer in Internet access for Angolan civil society. But due to a combination of poor phone lines and the lack of Internet Service Providers (ISPs) and local dial-up Points-of-Presence (POPs), it has always been a struggle for ANGONET to provide Internet access to NGOs outside Luanda. Places like Huambo, with very few reliable phone lines and no ISPs, have been virtually cut off from the Internet.

Before the VSAT link was installed in November, the only way for ANGONET users in Huambo to connect directly to the Internet was to dial long-distance to a POP in Luanda – at great expense, and over phone lines that often cut out when it rained. Two years ago, under ANGONET, an e-mail-only server was set up in Huambo – a

server that would dial into a Luanda ISP a few times a day to upload and download e-mail traffic. But this system was not reliable, again because of the poor telephone land-line infrastructure between Huambo and Luanda.

The installation of the ANGONETVSAT Internet link in November 2003 is an example of African telecommunications "leapfrogging" – jumping from no-tech to high-tech, neatly skipping the stages in between.



Dishing up the Internet – the ANGONET VSAT satellite system, sending and receiving broadband for NGOs in Huambo.

Not as "romantic" - but a big step forward

"It's unbelievable," says Fernando Arroyo, head of Huambo's UN Office for the Coordination of Humanitarian Affairs (UNOCHA), one of the first users of the new ANGONET VSAT link. "Suddenly we're into a very modern system of communication...this is very unique."

When Arroyo arrived in Huambo four years ago, the war was still on, the centre of the city was under the control of government soldiers, and UNITA fighters were launching hit-and-run attacks from the city's outskirts. "There would be heavy shooting every night," he remembers. "Heavy machine guns, or long-range guns, inbound, outbound, and then, during the day, life would start again. Conditions were really tough."

Arroyo, a Spanish national, recalls having a horrible time trying to co-ordinate the activities of the UN agencies operating in the area – the World Food Programme (WFP), the World Health Organisation (WHO), the Food and Agriculture Organisation (FAO), UNICEF and others. "Bringing anything into Huambo was enormously complicated," he says. "We had the WFP passenger air service, once a week. Because of anti-aircraft guns it was really quite dangerous. Those WFP planes had to spiral down before landing."

And communications logistics were extremely difficult. The only reliable communications channel was two-way High Frequency (HF) radio. Arroyo, an architect by training, but also an amateur radio operator, set up an HF radio antenna on the roof of his house/office in Huambo. This allowed him to communicate with all the UN and other NGO vehicles in the area. And this was also how he would talk to his head office in Luanda, several hundred kilometres away.

But there was only so much Arroyo could accomplish via two-way radio, and he was responsible for co-ordinating myriad UN relief efforts in a volatile and everchanging situation. The Huambo area experienced some of the largest movements of displaced peoples during the war. He needed better communication – and the ability to exchange data and documents – with his head offices in Luanda and Geneva.

He ended up using a – very slow – HF-radio "wave mail" system linked to UN head-quarters in Geneva. His e-mails to Luanda would travel all the way to Geneva first, via low-bandwidth radio signals, before entering the Internet and bouncing back down to the Angolan capital. He connected eight other NGOs in Huambo to this "wave mail" system. Arroyo laughs when he describes the system. "It was romantic" he says, "but not sufficient."

Two years ago, the copper phone line to Arroyo's home was restored by Angola Telecom, but the call charges to Luanda were expensive, and the bandwidth wasn't reliable.



"Wave mail" central: UN worker Fernando Arroyo in his High-Frequency (HF) radio control room, Huambo City, from where he and other development aid workers used to have to send their e-mail via a slow, low-bandwidth HF "wave mail" connection to Geneva

For Arroyo, the ANGONET VSAT link is a revelation. "It's something nobody could have dreamed of just two years back," he says. "It's not going to be half as romantic, of course, but in terms of efficiency, this is another big step forward."

Arroyo was the first ANGONET client in Huambo to get a direct, wireless, "WiFi" link to the ANGONET server connected to the VSAT dish. NiZA's Rene Roemersma installed Arroyo's link, which runs between an antenna on the UNOCHA roof and an antenna on a tower behind the ANGONET VSAT hub 200 metres away. The link, providing Arroyo with 24-hour broadband Internet, costs UNOCHA about \$200 US dollars a month. Compared to the various costs he had previously been incurring on long-distance calls to Luanda and Europe, he said, this was now very cheap.

Arroyo's UNOCHA office in Huambo is a key client for ANGONET, says ANGONET co-ordinator Olivia Augusto, who eventually needs to get enough users to cover the sum of roughly \$1,000 that is paid to the VSAT signal provider each month. The VSAT equipment, installation and initial monthly costs are being covered by IDRC of Canada.



A towering achievement – NiZA's Rene Roemersma makes adjustments to the "microwave" radio transmitter that sends broadband Internet data signals between this tower behind ANGONET's VSAT downlink station and an antenna on the roof of the UN Humanitarian Affairs office a few houses away.

In early 2004, Augusto had three other broadband microwave customers willing, like UNOCHA, to spend \$200 a month for 24-hour high-speed connectivity. And she had more than 40 dial-up clients – a mixture of local and international NGOs – who were getting lower-bandwidth connections through copper phone lines connected to the ANGONET VSAT hub. These customers were paying about \$15 a month.

"We think we can be sustainable [covering all costs through monthly client fees] in two or three years," Augusto said. "We also want to have a telecentre, with phone and fax services, because some local NGOs don't have phone and fax."

In the long-term, Augusto hopes the Internet connection can be used directly by the people of Huambo, but in the short-term, with the city's infrastructure in ruins and most local people focusing on the bare necessities, the ANGONET Huambo VSAT project will primarily be a service to members of the NGO community, many of whom are not even Angolans.

But the UN's Arrroyo says the project will, indirectly, be of great benefit to the people of Huambo. "It will make assistance in Huambo more efficient," he says. "And the fact of having this kind of loudspeaker to the world will give other people better knowledge of what is going on here. Have you ever tried to 'Google' and find pictures of Huambo on the Net? It's not easy, really."



New ICTs, new challenges – ANGONET co-ordinator Olivia Augusto (right) with one of her trainees, at the Huambo VSAT hub.

For Arroyo's office in particular, the easy communication with Luanda and Geneva will help UN agencies respond more quickly to the movements of people that still occur in the areas around Huambo, as internally-displaced people (IDPs) and demobilised soldiers return to their home areas or occupy resettlement zones. In early 2004, there were about 400 thousand people receiving food from the WFP in Huambo Province, out of population of 1.9 million. The FAO distributed seeds and tools to 154,000 families in the area in 2003. And there are still hundreds of un-cleared minefields in the province, with only ten percent of roads verified as safe by early 2004.

Development Workshop hopes to increase the use and sustainability of its Huambo ANGONET project by partnering with the local Rádio Ecclésia affiliate station when Ecclésia begins national operations (see Chapter 2). The Ecclésia Huambo producers will eventually need to send live and pre-recorded programming back to the National Ecclésia newsroom in Luanda, and the cheapest method will be to use audio "streaming" via Internet Protocol (IP). If the right amount of bandwidth became available, live audio links could be established via Internet between the Huambo and Luanda Ecclésia studios. As Angola Telecom is unlikely to be able to roll out the high-quality fixed lines needed to carry this kind of traffic in the near future, VSAT is the next best option.

"The more integrated you are the better," says Carlos Figueiredo, Country Programme Manager for Development Workshop. "We are aware that NiZA is supporting Rádio Ecclésia, and we see that it would be good to do more joint work with Rádio Ecclésia to provide joint services." Figueiredo would like to see DW's ANGONET VSAT Internet access project, working together with Ecclésia, extended to six of the other under-served provinces in Angola.

But both Figueiredo and ANGONET co-ordinator, Olivia Augusto, are aware of the need to build DW's technical support capacity. "I think we are developing that capacity," says Figueiredo, "but we are still dependent at this stage, on assistance from outside people. We don't have the capacity to address all the problems. We have people in the organisation that have some skills, and we are talking about bringing in more Angolans who are experts in this field - this hardware field."

Augusto, who is based at ANGONET headquarters in Luanda but is responsible for learning some of the intricacies of the Huambo VSAT installation and passing on skills to local ANGONET staff, says the task is daunting. "It's very new technology," she says, "so it's also a bit difficult for me. I, too, need some training." Augusto says she is trying to source more donor funding specifically for technical training for herself and her local staff in Huambo. "Right now we don't have enough donors supporting this area," she says. "Now we're learning as we work, but to have proper training we need more resources."

NiZA's Roemersma agrees that technical capacity-building will now be the big challenge for the ANGONET Huambo VSAT initiative – as with all ICT "leap-frogging" projects in under-served parts of Africa. "The level of ICT we're using here [in Huambo] is higher than in NGOs in the north," says Roemersma. "But there's no local or national support structure, and no small businesses providing access to parts or materials. So when it breaks, it breaks, and it just stops working! In South Africa or Europe, you pick up the phone and call for support, or you go to the store and buy the parts and do it yourself."

Roemersma says the big challenge for NGO workers using new ICTs in developing countries is "that they need to know everything, because there's nobody else to help them out. So there's a lot of pressure on the level of skills that need to be developed to make this sustainable."



Carlos Figueiredo, Country Programme Manager at the NGO Development Workshop, NiZAs' partner in Huambo, sees the need to share Internet resources with Rádio Ecclésia.

He believes the ultimate sustainability of new ICT projects in a country such as Angola rests on the country's broad skills development strategy. "Every kind of technology needs a support structure of at least four or five different disciplines." "And that's where you go wrong with countries like the DRC (Democratic Republic of Congo) or Angola or Mozambique. If you don't work on that support structure, to build it up, at the structural level, then you don't have a national capacity, and you don't really have a national ICT policy, either."

But he is quick to point out that even in the so-called "developed" world, there are shortages of the necessary technical support skills. "One of the biggest complaints [over] the last couple of years [in the North] has been that that there are hardly any qualified engineers coming from the schools. They're all software programmers, they're all web programmers – sophisticated end-users. So the whole question of "what's development and what's not development" is as relevant for the north as it is for the south."

Such dilemmas are typical of the whole "ICT for Development" game. Each new technology solves old problems and creates new ones. But ANGONET Co-ordinator Olivia Augusto says it is worth the trouble: "I personally feel quite good with this big step. In Angola, the telephone lines are so bad. Development Workshop needs to do this satellite project – it's important. Despite all these difficulties, we have to do this."

Cyber C@fe

Augusto and her colleagues at ANGONET are not the only ones grappling with the wireless revolution in Huambo. The provincial government is also getting in on the action, having opened an Internet café a few months ago. The centre, called "Cyber C@fe" is housed in a former conference venue on one of Huambo City's main roads. It, too, is using a VSAT system – set up by a South African company commissioned by the Angolan Office of the President – to get its Internet connectivity. It has half a dozen PCs connected to the Net, as well as two televisions connected to the South African-based MultiChoice satellite TV platform, and a café-bar serving espresso, beer and cocktails.

On the Saturday afternoon of our visit to the Internet cafe in November 2003, it was all but empty. Three expatriate aid workers were drinking beer and watching a rugby match on the satellite TV, and two locals were sitting at Internet terminals. The manager on duty said the café's Internet business was slow, that some of the PCs were in need of repair, and there were no relevant technicians in Huambo. Viruses were a problem too, and some of the machines were getting clogged with porno-

graphic downloads. A notice on the wall warned of a \$1,000 fine for anyone caught on a porn site. The manager said most users e-mailed friends and relatives in Brazil and South Africa. Others did word-processing and printing. Still others were coming to the café just to drink beer and watch the TV. The most popular show was a Brazilian soap opera, followed by MTV and soccer matches. So far, he said, in the first four months of operation, the alcoholic beverages and coffee had brought in more money than the computer services.



Surfing in Huambo – the Cyber C@fé, owned by the provincial government.

Going mobile - all the way to the edge of town

Another key feature of the "new Huambo" has been the arrival of the mobile cellular phone. In early November 2003, just a few days before the ANGONET VSAT installation, the country's two main cellular operators, Movicel (Angola Telecom's cellular arm) and private commercial operator Unitel, started competing for market share in the city. Unitel had been the first to start putting up its cellular antenna towers in the city, and this had spurred the state-owned provider, Movicel, into action. A flurry of activity had ensued over a period of several months, with both companies hurriedly putting up their towers. A new "siege of Huambo" was underway.



The new "siege of Huambo" – a Unitel cellular service billboard in Huambo City, with a war-wrecked building in the background. Unitel and Angola Telecom's Movicel raced to be the city's first mobile providers.

Angola Telecom's Movicel operator won the infrastructure race, rolling out its service just two days before Unitel's. In late 2003, however, Unitel was proving to be the more popular of the two services, because it uses GSM technology, the same cellular platform used throughout Africa, Europe and most of the rest of the world.

Movicel's phones run on the CDMA platform used mostly in the United States and parts of Asia.

The cheapest cellular handsets available in Angola, imported from Portugal, use GSM. In fact, so popular were Unitel's GSM SIM cards in Angola in November 2003 that they were in short supply. When Unitel's Huambo service started up, rumour has it that most of the SIM cards were bought up immediately by the government for distribution to its civil servants in the capital Luanda (the government showing a distinct lack of loyalty to the state-run provider Movicel). And Luanda entrepreneurs were said to be taking the 45-minute flight to Huambo to buy up Unitel cards and then re-selling them back in the capital.



Trying not to be outdone – Angola Telecom brands itself amidst the rubble of Huambo. The company's cellular subsidiary, Movicel, launched its service in the city just two days before Unitel, but its CDMA technology is not as popular as the GSM platform used by Unitel.

But the initial Huambo cellular transmission footprints of Unitel and Movicel did not extend beyond the outskirts of the city, meaning that the region's development workers would continue to rely on their time-honoured two-way HF radios for communication when they were on the road.

Such are the ironies and contrasts of the modern world of ICTs: in Huambo, the very latest in satellite technology sits side-by-side with a radio transmission method first tested early in the last century. This contrast in ICT platforms is mirrored in the widely differing material conditions faced by the people of Huambo. UN and NGO workers – not to mention top government officials – drive 4X4s and Yamahas, eat well, and earn nice packages in US dollars. Meanwhile, many of Angolans in and around Huambo eke out an existence on less than a dollar a day, dependent on handouts from the UN and focused on the basic reality of where the next meal is coming from.



Radio Days – NGO vehicle in Huambo with its HF radio aerial –the "old ICT" of two-way voice communication via HF radio is still an essential part of development work in Angola.

ANGONET/Huambo and ICTs: a brief impact assessment

On the basis of the site visits to the ANGONET project in Huambo that took place in early 2004, this section briefly assesses the individual and institutional impacts of ICTs. It also assesses the impact of ANGONET on the NGO and UN Sector in Huambo, and on wider Angolan society.

Individual impact: the impact of ICTs on workers at ANGONET

At the time of the site visit for this report, the ANGONET VSAT link was only two weeks old, but it could already be deduced that the installation of the VSAT Internet link was providing ANGONET staff with a valuable opportunity to develop new skills – skills related to managing a satellite-based broadband Internet connection. It was also clear that using VSAT technology put the ANGONET Huambo staff at the forefront of new-ICT use, and that the skills they developed would be highly transferable.

On the downside, however, three things were clear. Firstly, the VSAT Internet system was very sophisticated technology, challenging even to highly-experienced technical people; and the wireless microwave linkages between the VSAT hub and some of the Huambo NGO clients were also highly complex to maintain – meaning that it would be very difficult for the ANGONET staff to become entirely self-reliant in managing and troubleshooting the systems. (This problem is not unique to Angola, or indeed to the developing world: all over the globe, new ICT systems tend to increase organisations' reliance on highly-specialised support services.)

Secondly, the ANGONET Huambo VSAT installation was not accompanied by a thorough, systematic training programme for ANGONET workers, thus making the ANGONET staff extremely dependent on outside technical assistance in the short-term. (In the meantime, this assistance was being provided primarily by NiZA's Rene Roemersma.)

Thirdly, the VSAT service provided to ANGONET was configured in such a way that it did not allow for remote access. In other words, technical support and configuration could not be provided from another location, but had to be provided on-site in Huambo.

More positively, both the ANGONET Co-ordinator and the Development Workshop Country Programme Manager acknowledged that new-ICT skills development of ANGONET staff was an urgent priority – so that local staff would be able to do basic troubleshooting and some configuration for new clients.

Institutional impact: the impact of the ICTs on the institutional capacity of ANGONET

It was clear that the VSAT satellite Internet link had greatly expanded the scope of the ANGONET Huambo project which, before the link was installed, was able to offer its NGO clients little more than an unreliable, occasional, e-mail-only service. Before the VSAT, NGOs wishing to send or receive urgent e-mails, or to surf the World Wide Web, had been forced to use expensive, unreliable long-distance dial-ups to the ANGONET Luanda Point-of-Presence (POP).

The VSAT connection now made it possible for ANGONET to offer its Huambo NGO clients two different services: 1. local-call-tariff, dial-in Internet, at speeds of around 24 Kilobits per second (Kbps), depending on the number of users at any given time; or, 2. wireless "WiFi" Internet, at speeds of around 64 Kbps, depending on the number of users at any given time. And now that its clients had regular Internet access, ANGONET could also start to provide Web page and other on-line content development services to local NGOs.

At the time of the site visit there were no commercially-available Internet Service Provider (ISP) local dial-ups in Huambo, making ANGONET's service unique and thus very attractive to its target clients.

Sectoral impact: the impact of ANGONET on the Huambo NGO/UN Sector

While the project is still very new, the ANGONET VSAT Internet service being provided to NGOs and UN agencies operating in Huambo can be expected to have a range of impacts on NGO/UN operations. In short, it is expected; 1. to reduce the cost and increase the frequency of organisations' communication with their head offices and partners in Luanda and overseas; 2. to increase the volume of information flow between Huambo NGO/UN offices and their head offices and partners in Luanda and overseas; 3. to improve the planning and co-ordination of development resource inputs from Luanda and overseas; 4. to improve the national and international publicity given to conditions and developmental needs in Huambo; 5. to improve donors' reporting and accountability; 6. to improve fundraising; and 7. to improve the quality of life of NGO UN workers wanting to stay in touch with family and friends in Luanda and overseas.

Societal impact: the Impact of ANGONET Huambo on Angolan society

As ANGONET Huambo was still a very new project during the site visit in early 2004, it is currently impossible to say anything definitive about its impact on society.

In the short-term, however, the project should be measured on the basis of its ability to impact society indirectly, as an enabler for the UN/NGO development assistance component of Huambo's emerging civil society.

Given the large role currently being played by Huambo-based NGOs and UN agencies in the resettlement of displaced peoples and in the rebuilding of agricultural, health, housing and education resources, ANGONET's potential contribution to increased efficiency of information management by these organisations has the potential to greatly impact society.

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List of Abbreviations

ACTSA Action for Southern Africa ALRED América Latina en Red ANGONET Angolan NGO NETwork

CDMA Code-Division Multiple Access

CEAST Catholic Episcopal Conference of Angola & Sao Tome

DRC Democratic Republic of Congo

DW Development Workshop

FAO Food & Agriculture Organisation

FNLA National Front for the Liberation of Angola

FTP file transfer protocol HF High Frequency

ICT Information & Communications Technologies

IDPs internally-displaced people

IDRC International Development Research Centre
INACOM Angolan Institute of Communications

ISP Internet Service Provider

ITU International Telecommunication Union

LAC Luanda Antena Comercial
LAN Local Area Network

MISA Media Institute of Southern Africa Movicel Angola Telecom's cellular arm

MPLA Popular Movement for the Liberation of Angola

MSP Media Sector Plan

NGO Non-Governmental Organisation

NiZA The Netherlands Institute for Southern Africa

POP Point-of.Presence

SABC South African Broadcasting Corporation

SADF South African Defence Force

SMS Short message service SSLs Studio-to-studio links

UNICEF United Nations Childrens Fund

UNITA National Union for the Total Independence of Angola UNOCHA UN Office for the Coordination of Humanitarian Affairs

VORGAN UNITA's short-wave radio station
VSAT Very small aperture terminal
WFP World Food Programme
WHO World Health Organisation

Wifi Wireless Fidelity

Internet Sources on Angola

General

Africa south of the Sahara: Angola

Palo Alto, USA: Stanford University

Good annotated index of selected internet sources, searchable by topic. Maintained by Karen Fung, Stanford University Library, Africa Collection.

http://www-sul.stanford.edu/depts/ssrg/africa/angola.html

Angonet

Luanda, Angola

Portuguese/English on-line library, updated regularly.

Includes Angola Peacebuilding Programme, news, documents, case studies and links.

http://www.angonet.org/

Chr. Michelsen Institute

Bergen, Norway

Social science research and advisory work on development and human rights issues in developing countries.

Includes links, summaries of publications, some full-text etc. CMI maintains also a special Page on Angola, with links, literature, institutions.

http://www.cmi.no/

Ebonet

Luanda, Angola

homepage of Angolan internet provider with access to the various organisations on it.

Includes Flash de Noticias, daily news in Portuguese from Angolan newspapers as Jornal de Angola, Agora, Angolense, Comércia, Folha 8 en Actual Faxa. http://www.ebonet.net

Internal displacement in Africa

Geneva: Global IDP Project/Norwegian Refugee Council Compilation of the information available in the Global IDP database on internal displacement in various African countries, among which Angola, Burundi, DRC, Liberia, Rwanda, Sierra Leone, Uganda, Zimbabwe. Regularly updated. http://www.idpproject.org/regions/Africa_idps.htm

National Information and Communication Infrastructure (NICI)., Africa Information Society Initiative (AISI), Addis Ababa

http://www.uneca.org/aisi/nici/Angola/angola.htm

Relief Web - latest news and documents on Angola

New York, Geneva, Kobe: UN OCHA

List of the latest major documents added to ReliefWeb pertaining to the humanitarian situation, including refugees, and assistance to Angola. http://www.reliefweb.int/w/rwb.nsf/vLCE/Angola/

Republic of Angola official homepage

Washington, USA: Embassy of Angola

Very extensive, and searchable, information on Angola: (UN) documents, politics, economy, frequently updated news, legislation etc.

Includes information on the relations between Angola and the United States. http://www.angola.org/

UNDP Angola

http://mirror.undp.org/angola/index.htm

News sources

Action for Southern Africa

London, Great Britain

ACTSA, former Anti-Apartheid Movement (AAM). Member of the European Network for Information and Action on Southern Africa (www.eniasa.org). Campaigns on Angola, debt, HIV/AIDS, trade etc.

Includes publications; amongst which all issues from April 1995 of the Angola Peace Monitor. In English and Portuguese.

http://www.actsa.org

AfricaFiles

Toronto, Canada

Canadian network on the promotion of human rights, economic justice and alternative analyses. Includes Africa InfoServ; a free e-mail information service with reports drawn from various sources on Angola, AIDS, economic justice, gender, human rights, and resource exploitation.

http://www.africafiles.org/

allAfrica.com - Angola

Mauritius; Washington: AllAfrica Global Media

News portal on Angola. http://allafrica.com/angola/

AngolaPress

Luanda, Angola Angop, official website of the Angolan news agency. With daily news in Portuguese, French and English. http://www.Angolapress-Angop.Ao

Cabinda: notícias

Braga, Portugal: Jornal Digital.com

Jornal Digital canal special on Cabinda: new and archives. In Portuguese.

http://www.jornal-digital.net/noticias.php/6/99/

IRIN Angola

Nairobi, Kenya

IRIN - UN Office for the Coordination of Humanitarian Affairs: daily news, background.

With free e-mail service.

http://www.irinnews.org/

Jornal Apostolado

Angola: Luanda

Independent Roman Catholic newspaper. In Portuguese.

http://www.apostolado.info

Jornal de Angola

Luanda, Angola State-owned Angola's daily newspaper. In Portuguese. http://www2.ebonet.net/jornaldeangola/

Rádio Ecclésia

Luanda, Angola Roman Catholic radiostation with independent news. http://www.recclesia.org/

Non-Governmental Organisations

ADRA

Luanda, Angola

Acção para o Desenvolvimento Rural e Ambiente / Action for Rural Development and Environment. Angolan NGO.

http://www.adra-ao.org

Angonet

Luanda, Angola

Portuguese/English on-line library, updated regularly.

Includes Angola Peacebuilding Programme, news, documents, case studies and links.

http://www.angonet.org/

British Angola Forum

London, Great Britain

The British-Angola Forum (BAF) aims to bring together organisations, companies and individuals in Europe concerned with affairs in Angola.

With seminars, links, photographs and book reviews.

http://www.britishangolaforum.org/

Development Workshop

Luanda, Angola

DW, NGO working to improve living conditions for the poor in less-developed communities in Angola.

Includes its programme focus areas; shelter, peri-urban settlement upgrading, water supply and sanitation, primary health care, small enterprise development and disaster mitigation.

Contains annual reports since 1999, programme, listing of publications. In English and Portuguese.

http://www.dw.angonet.org/

Fundação Eduardo dos Santos

Luanda, Angola

FESA, foundation for development of the Angolan president.

With information on organisation, activities etc.

http://www.fesa.og.ao/

Global Witness

London, Great Britain

British NGO focusing on the relation between human rights and natural environment.

GW campaigns and does research about the effects of the exploitation of natural resources on countries and their inhabitants. It publishes research reports (all on-line, including on countries such as Angola, DRC, Zimbabwe) and lobbies at governments, international organisations and corporations, and mobilises public opinion.

http://www.globalwitness.org

Ondaka

Huambo, Angola

Website of a NGO based in Huambo, an inland city in Angola. Contains news (starting from January 2002), information, stories, and photographs from the local community. An initiative supported by Development Workshop (http://www.dw.angonet.org/).

http://www.ondaka-angonet.org/journal/ondaka.aspx

Ordem dos Advogados de Angola

Luanda, Angola

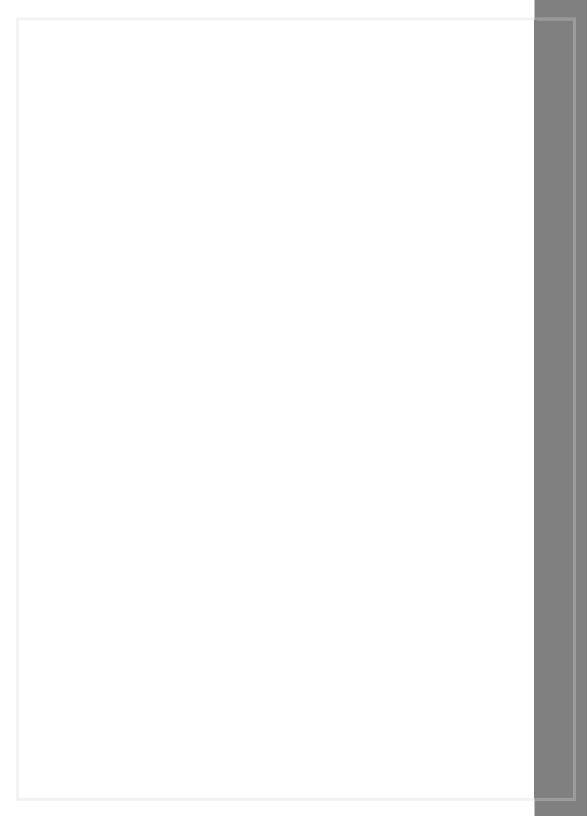
Angolan Bar Association.

With information on the constitution and other legislation, human rights, press clippings, etc. In Portuguese only.

http://www.oaang.org/

União dos escritores Angolanos

Luanda, Angola UEA, Angolan union of writers With news, cultural agenda, etc. In Portuguese. http://www.uea-angola.org/



ICTs for Democracy

The Angolan civil war lasted from 1975 to 2002 – twenty-seven years that turned a resource-rich country into one of the poorest nations in Africa.

As reconstruction proceeds, there is an essential role for media and communications projects. But in a country whose last elections were held in 1992 – where oil, diamonds and vested interests can all pull against transparency and accountability – communications work is by no means easy.

On behalf of the Media Programme of the Netherlands Institute for Southern Africa (NiZA), Chris Armstrong examines two projects in the media and communications sector in Angola. In Luanda, he studies Rádio Ecclésia's use of cutting-edge technology as it prepares to take its dynamic and independent programming nation-wide. Then, in Huambo, he reports on the ANGONET Wireless Internet Access Project, which holds out the hope of bringing advanced yet affordable communications to a region isolated by years of war.

Exploring the political, material and practical challenges faced by those wishing to use open and independent information as a tool for building a new Angola, Armstrong assesses the projects' potential, not just in terms of technology, but also in terms of people and the society they are helping – or hoping – to shape. B

