These are the decades that will give rise to the future empires of Africa and probably some of the greatest corporations the world has ever seen. This might have seemed incomprehensible just 10 years ago, given the stunted growth in technology on the continent, bequeathed by the lack of fibre connectivity.

Getting Africa connected to the global grid has largely been facilitated by expensive and congested satellite connectivity, but while it has opened doors it by no means compares to the almost unimaginable bandwidth that became available with the laying of the fibre optic cables along Africa’s east and west coasts.

For Chris Wood, CEO of WIOCC, one of the companies that made this possible, it is a revolution of dynamics that will change forever the ability of Africans to live better lives and realise dreams. ‘The growth of this industry is explosive,’ says Wood. ‘It’s in a constant state of flux, and developing so fast that you have to stay on top of the curve and be immediately reactive to change. One cannot overstate the impact of bandwidth, how much it can do; even how much bandwidth could be used if say, it were free and unlimited, which of course it is not. ‘But imagine streaming live TV, being able to download and watch instantly any film from anywhere in the world, superfast and from your home. It’s possible and it happens. In South Korea for example the average connectivity to the home is between 50-100 megabits per second, and the good news is that Africa is headed there.’

What convinces Wood of this potential is that Africa has already developed world-firsts in the use of bandwidth. For instance, M-PESA in Kenya has succeeded where the rest of the world has failed in developing technology that allows for mobile phone based money transfers.

This success is being replicated by operators in the region with services such as Orange Money and Zantel’s Ezy Pesa. European and US companies have been visiting the region to understand why the M-PESA model is so successful and to take those learnings into their own home environments.

Similarly WIOCC may be just as intriguing as its achieved something unique by creating a single company from 14 different operators across 13 countries, a mix of both private and national shareholders. Those shareholders are U-COM and Orabet in Burundi; Botswana Telecommunications Corporation; Djibouti Telecom; Telkom Kenya Orange; Lusatia Communications Authority; LPTIC in Libya; TDM in Mozambique; Gialt Satcom Nigeria Limited; Seychelles Cable System Company; Dalkom Somalia; Uganda Telecom; Zantel in Tanzania; and TelOne in Zimbabwe.

In combining the networks of these organisations, WIOCC has enabled an enormous fibre footprint across the continent that allows the organisation to offer ISPs and telecoms companies, a seamless end-to-end one-stop product of access to international bandwidth. Much of this is built on its 30% ownership of EASSy (East African Submarine System), which went live in 2010.

EASSy is one of the new generation of African submarine cable systems. It runs from South Africa to Sudan, connecting nine coastal countries into the global submarine fibre network. Current total capacity of EASSy is 4.72 terabits per second, which Wood says is enormous. ‘It’s hard to imagine using all that. To put it into perspective, the total usage on the east coast is currently considerably less than 200 gigabits per second. Our design capacity now allows us to take 20 times the total volume of traffic coming out of East and Southern Africa.’

Further WIOCC investments include EIG (Europe India Gateway), which runs from India to Europe picking up EASSy in Djibouti; and WACS (West African Cable System) which runs from South Africa to Europe.
‘What I really enjoy is being in at the prime end of development because by learning so much from the past, you can anticipate what’s happening in the market’

‘Essentially we’ve created a high-capacity ring around Africa, which was our prime objective,’ says Wood.

There is, in other words, more than enough capacity to cater to the forthcoming and inevitable growth of Africa.

‘It is largely because of the fibre rollouts in African nations, combined with the higher speed of local access technologies like 4G, that we expect to see the enormous growth in submarine cable requirements,’ explains Wood.

There are, however, still issues.

‘Prior to the submarine cable systems, satellites created a bottleneck of poor, and yet expensive, delivery. The coastal submarine cables removed that bottleneck but then congestion was experienced in the terrestrial backhaul.

‘In solving that problem most countries built out fibre from the coast to the major inland cities but now we sit with a challenge in what we call “the last mile”, which is to get that capacity and the fibre tentacles into local homes and businesses.’

This is not a unique problem, even outlying areas in England and the US experience connectivity problems where access speeds are slower than what is currently being experienced in the Masai Mara in Kenya. Building local access is a huge infrastructural task requiring fibre roll-out to not just buildings and homes in cities but outlying rural areas too, and the infrastructure investment required therefore is huge.

WIOCC’s future growth will be in investing in fibre networks in areas where it does not already have a shareholder network so that its fibre footprint will comprehensively cover the entire southern and eastern territories, thereby turning one man’s vision into a reality.

That man is John Siha, WIOCC’s chairman and a Kenyan now living in Ireland, who believed that by accessing a cable like EASSy, small operators would find independence from the then dominant South African operators, but only if they were united as a single force.

It was Siha who found the global financial investors for WIOCC and thereafter entrusted Wood in 2008 with starting and growing the company.

‘I was, in effect, employee number one, and I promised Siha I wouldn’t fail him,’ Wood says. With enormous revenue growth of 200% this year, Wood certainly hasn’t failed to show his mettle.

It’s been a journey of unusual education and experiences for Wood, who arrived in Kenya in 2008 to face the shell that was to become WIOCC’s office, which he had to oversee in terms of architectural design firstly and then source the legal and administrative support required to establish the company. With a BA Honours from Leeds University and an early career in finance, Wood’s foray into telecoms was incidental, but he found himself fascinated with the industry and has since acquired incredible experience having worked for some of the most prominent players in the field over the past 20 years.

‘What I really enjoy is being in at the prime end of development because by learning so much from the past, you can anticipate what’s happening in the market. That’s probably where I add the most value to WIOCC because you have to realise that what is happening in Africa has already occurred elsewhere in the world. Being able to identify similar patterns allows you to drive success.’

It’s utterly remarkable that WIOCC’s success is being achieved with just 25 employees, eight manning the service desk and 10 driving the business forward, inclusive of local employees who understandably had little to no knowledge of fibre on joining the company.

WIOCC has begun to service Wood’s own dream, that of becoming the industry benchmark in Africa, proving that even a few can make the biggest impact.

Just one more fibre cable laid stirs imaginations to dreams and dreams, as WIOCC has proven, can become reality. You just need to be connected.