

Excerpt from “Green Paper - The Private Sector and ICT for Development”

The role of the private sector in ICT for Development and how DANIDA can involve Danish companies the WSIS process from 2003 to 2005.

PART II: Case Story on Metrocomia and the DANIDA Private Sector Development Programme

The joint venture projects initiated by Danish ICT Management (Metrocomia) and DANIDA is a very good example of the type of Private-Public Partnerships that are required to implement some of the action plans mentioned in the former Part I of this Green Paper. Not the least because the Metrocomia joint ventures are considered the most successful projects yet conducted by the PSD-programme with relationship to ICT and Development, according to the PSD office¹.

This part of the Green Paper will after a short introduction to the PSD programme and Metrocomia look into the economic and social perspectives of Metrocomia's strategic engagement as well as the business achievements and social impact of the first Metrocomia joint venture - Metrocomia East Africa Ltd. in Uganda – which by now have completed the Project Training Programme financed by DANIDA.

1.1 About the DANIDA PSD programme

The Private Sector Development Programme (PSD Programme) aims at developing the private sector in DANIDA's 15 programme countries by supporting the establishment of long-term and mutually committing partnerships between Danish companies and companies in developing countries.

The PSD Programme makes it easier for Danish companies to move into new contexts seeking to establish international relations. In this way, Danish trade and industry will be better prepared for the challenges posed by globalisation, and the involved companies will reap experience on new markets. In developing countries, the PSD Programme contributes to creating workplaces, financial and social growth and advances in technology and management. The Programme offers consultancy and grants for all phases of partnership establishment.

The PSD Programme encompasses all DANIDA's programme countries: Bangladesh, Bhutan, Nepal and Vietnam in Asia; Benin, Burkina Faso, Egypt, Ghana, Kenya, Mozambique, Tanzania, Uganda and Zambia in Africa; and Bolivia and Nicaragua in Latin America.

¹ With reference to Head of Secretariat Henrik Wind-Hansen.

1.2 About Danish ICT Management (Metrocomia)

Danish ICT Management (Metrocomia) was one of the first web development companies founded in Denmark back in 1994 when the Internet and the World Wide Web started to be used for commercial purposes.

In 1998 a local technology entrepreneur from Uganda, Robert Wakabi, had talks with the Danish Embassy in Kampala about finding a Danish partner and eventually a contact was established and a feasibility study was carried out under the PSD-programme.

In 1999 Metrocomia in Denmark and MailNet Communication² established the joint venture Metrocomia East Africa Ltd., and initiated a 3-year knowledge transfer programme under which Danish experts lived and worked with their local colleagues to transfer technical expertise and leverage the company.

The joint venture project quickly showed to be very successful and DANIDA consequently approved an additional feasibility study in Bangladesh, leading to a new joint venture with Grameen Software Ltd.³ in Dhaka.

At this point Metrocomia was recognized by an international group of investors who bought the company and provided large amounts of long term venture capital to continue the expansion in countries outside the PSD programme, including Kenya and Malaysia.

In 2003 the company was taken over by Danish Energy Management A/S (DEM), a development consultant company with extensive experience in working in development countries with infrastructure projects and policies.

DEM secured additional feasibility studies in Tanzania, Vietnam and Nepal, again with co-financing from the PSD Programme. Formation of joint venture companies in these countries is currently in process.

1.3 Economic and Social perspectives behind Metrocomia's strategy

The background for a company like Metrocomia to engage in a strategy to expand its business in the emerging markets of some of the poorest countries in the world, must be seen both from a business perspective and a social perspective:

Business perspectives

Being a business, the most important perspective for launching the venture in developing countries was the business opportunities, which were recognized by the management and the board. These are in short the following:

- To become first movers and market leader as the new markets will emerge.

² MailNet Communication is 100% owned by local Ugandans including Robert Wakabi (50%) and another 5 stakeholders.

³ Grameen Software Ltd. is majority owned by Grameen Foundation

- To create cost effective outsourcing units for Danish clients.
- To provide localized services to multinational corporations and donor organisations.

The underlying assumptions for these opportunities is first of all that even the poorest countries have a client base in both the private sector (large exporters and multinationals), the government sector and the donor community, of which the latter in many cases are some of the largest investors in new technology and infrastructure in the development countries.

A second assumption is that the markets for ICT-services in developing countries over time will experience the same growth as has been seen in the North, and thus create an increased demand for local suppliers of ICT-applications and services.

Finally an assumption is that the markets for outsourcing of ICT services will see significant growth in the years to come, and that long term working relationships and experience will be important to be a player in this market.

Social perspectives

In addition to the business perspectives Metrocomia in Denmark also launched its emerging markets strategy due to a commitment amongst its owners to do its business in an area with impact on society and specifically the digital divide between North and South. The three most important social perspectives of the strategy are in short the following:

- To bridge the digital divide by building a local Internet industry to international standards, through leveraging local talent.
- To counteract the 3rd world “brain drain” by offering skilled people good job opportunities and co-ownership of the new joint venture businesses.
- To strengthen export opportunities for 3rd world industries through the use of Internet.

The Internet industry in Europe and America was created by a large number of entrepreneurs, encouraged by a culture of innovation. Governments played only a minor role in this revolution, because the necessary infrastructure was already available to businesses, and because the spread of knowledge took place so fast that it took universities several years to catch up.

The same dynamic will be seen in emerging economies. That is why starting new entrepreneurial businesses and creating a supportive knowledge sharing culture is the most significant contribution a company can make to bridge the digital divide, and ensure that these markets are not left behind as seen during the industrial revolution.

Concerning the brain drain, a major barrier to growth of the Internet industry in emerging economies is that many of the most skilled people leave their countries for better job opportunities abroad, and do not come back. The only way to effectively prevent this trend is by creating attractive and profitable companies locally. To achieve that end Metrocomia has aimed to create sound corporate cultures and growth opportunities for employees, including

effective training efforts by Metrocomia in Denmark and equity ownership to key employees co-ownership through stock options.

In relation to using ICT for strengthening exports from developing countries a large number of business-to-business industries have demonstrated significant gains utilizing the Internet to improve their customer relationships, strengthen their supply chains and to get in touch with brand new customers in the global marketplace. By building skills in consultancy and implementation, businesses in the emerging economies will be able to deliver similar efficiencies.

Moreover, when smaller export industries are able to reach the global marketplace, this might also presents an unparalleled opportunity to bypass middlemen who, in many areas, control the trade and larger part of the profit.

1.4 The business achievements of the joint venture

Revenues and growth

From the outset there was no expectations to make a quick short-term profit on the joint venture in Uganda. Rather the strategy from the investors was to slowly build a market leading profitable business over the next 5 to 10 years, but with a break-even within the first 2 years.

The company in Uganda is now at a break-even stage, but did require more financing than expected throughout the first two years. This was mainly because of the dot-com crash, which over a few months heavily reduced the demand for web solutions in Europe, and thereby the opportunities for outsourcing projects from the parent company in Denmark.

Fortunately the company had a dual strategy of serving both the international and the local market so it never was completely dependent on contracts from the North, and within the local market revenues exceeded USD 100.000 the second year, which is quiet satisfying for a start-up company in East Africa.

Market share and clients

The uniqueness, but also the major challenge, of Metrocomia's strategy was to go into the poorest countries of the world where the markets were also the least developed. In 1999 the awareness of the World Wide Web was probably 5 years behind Europe, and only very few business had websites and e-mail contact information on their business cards.

At this point in time there was only a few companies in the country working with Website development and no company was larger than 4 people. Metrocomia East Africa therefore immediately took the leading position of the market in terms of size, by employing 10 people, who entered the training programme supported by DANIDA.

A discussion related to foreign support to private companies is whether this has elements of unfair competition towards companies that does not get such support. In this regard it should

be noted that in the case of the DANIDA PSD-programme, the support is neither given to operations, acquisition of assets nor other kinds of financial contributions. The support is only given to capacity building in terms of training of the staff, and over time this capacity development will benefit the whole industry.

Another aspect of the discussion is that due to the dominant role the donor community plays in the economy, very many companies are directly or indirectly getting support because development projects are very often subsidised by the donors or development banks.

In terms of clients Metrocomia East Africa was targeting four segments in the country being 1) the large exporters, 2) the multinationals, 3) the government and 4) the international donors. Examples of solutions produced are listed in the table below:

Table 1: Key ICT solutions produced by Metrocomia in Uganda during first 3 years of operation:

Segment	Client name	Solution	Website
Exporters	Uganda Fish Processors and Exporters Association	Fish Exporters National Portal	www.lakevictoriafish.com
Multinationals	British Airways	Online E-commerce Solution	www.britishairways.co.ug
Government	New Vision	Newspaper Content Management System	www.newvision.co.ug
International donors	UNDP	Information portal	www.undp.org.ug

Awareness and branding

Having an international professional brand is very important in a country like Uganda, where many business owner and government representatives (unfortunately) seems to have a preference for working with international companies and people from abroad.

Therefore Metrocomia in Denmark had put resources into developing an international brand, which would also stand out in a country like Uganda, where most local companies signs are hand painted, and professional printed materials like business cards of high quality can only be produced in South Africa.

Hence Metrocomia immediately positioned itself as an international player on the first occasion of public appearance, which was when an advertisement was put in the leading daily to recruit around 10 people. This ad was designed with the corporate identity, and very much stood out from the usual ads in the paper that most commonly share the same typography. Also the ad resulted in more than 300 applicants for the very few positions available in the company.

Development of proprietary software and use of Open Source software

On the production side an important business achievement has been that the company successfully has developed its own proprietary software⁴, and not just implemented software applications developed in the North. This is an important indicator for the competences of the

⁴ This software includes the public information portal called EnterUganda and the Content Management system for the leading daily newspaper in Uganda (New Vision).

staff and future income opportunities, because the business of customizing software developed in the North or doing simple data entry is not nearly as attractive.

As for the productions process itself and internal systems Metrocomia East Africa have used a large amount of Open Software, including fileserver applications, HTML-developing tools and graphic design applications.

Foreign investments and regional expansion

A final business achievement in Metrocomia East Africa is that the company based on the results in Uganda managed to attract foreign investors. As Metrocomia in Denmark at this point was acquired by an international group of investors the capital put into the company in Uganda effectively came from investors in London, San Francisco and Hong Kong. These investors also provided capital for starting a sister company in Kenya without support from DANIDA, to pursue the strategy of Metrocomia covering all of East Africa, which today has been fully implemented.

1.5 Social impact of the joint venture

As any other sector program within DANIDA, the purpose of the PSD programme is to reduce poverty. In this respect the starting of sustainable and long-term profitable businesses is a very important development initiative because of the positive effects such businesses have on society. The economic and social impacts in society of the Metrocomia projects can be categorized in four main areas:

- 1) Creating job opportunities for IT-graduates, including women.
- 2) Building capacity for export of IT-services.
- 3) Reduction of economic and social poverty by strengthening use of IT in society.
- 4) Influencing attitude in society towards ICT, entrepreneurship and more.

1) Creating job opportunities for IT-graduates including women

The total numbers of people who have been employed in Metrocomia East Africa and taken part in the knowledge transfer program have grown from 10 to around 25 in the first 3 years of operation as seen in the table below:

Table 2: Total number of people who have been employed with Metrocomia East Africa* for shorter or longer time during the year.

	1999	2000	2001	2002
Number of employees	10	33	26	17
Number of women	4	12	11	8
Pct. of women	40%	37%	43%	47%

*Including the subsidiary EnterUganda Ltd.

The table shows that the project has created jobs in Metrocomia East Africa amounting up to 33 people a year, plus probably a similar amount of jobs in the companies who have bought products and services from Metrocomia, and started to use the Internet in their daily business.

The number of women in the workforce has on average been around 40%, which is actually equivalent to many IT-companies in Europe, or even higher. The background for this relatively even gender distribution has simply been that a management of a young company in Uganda sees the same advantages in equal gender distribution as most CEOs in northern companies does.

In terms of flow of employees, the company has during the first three years suffered from some employees leaving their positions to work independently or even in other companies. This is problematic on a micro-level for the company, who have spend resources on educating this staff, but on the macro-level Metrocomia have in this way contributed to the spread of competent IT-workers in society.

In regards to the social impact of preventing brain drain, it is hard to measure whether the job opportunities in Metrocomia have kept some employees from seeking job opportunities abroad. However it seems likely that Metrocomia's success in the market has encouraged the establishment of competing companies by entrepreneurs who might had a real opportunities for using their competence in foreign countries. The table 4 further below contains estimated numbers for this.

In conclusion it seems reasonable that the Metrocomia joint venture have contributed to create between 75 and 100 workplaces in the IT-industry if both direct and indirect jobs are considered. These are jobs that all generates incomes that many family members benefit from, as it is not uncommon in Africa that one income pays for food, medicine and school for maybe ten other family members.

2) *Building capacity for export of IT-services*

In addition to the number of jobs created a very important measure for economic and social impact is the capacity for export that the joint venture creates. In particular the export of IT-services is something that developing countries increasingly sees as an opportunity, and many presidents, including President Museveni in Uganda, have declared that their nation should become a centre for IT-services.

Even in its first years Metrocomia East Africa has contributed to national exports, even if this has of course been on a very small scale. The relative size of exports from Metrocomia East Africa is shown in the table below:

Box 3: Metrocomia East Africa [U] Ltd. exports as percentage of revenue

	1999	2000	2001	2002
Export in pct. of revenue	0%	5%	10%	15%
Pct. of sales to local multinationals	80%	40%	30%	30%

The table demonstrates that the exports have grown to a level of 15% of the revenue in 2002. A special case of exports is sales to local multinational companies. As the table above indicates this sale amounts to an average of around 40% the first three years.

At this point in time the export has primarily occurred through subcontracting through Metrocomia in Denmark. The main reason for this has been the dramatic decreases in the IT-market in the north, which have made potential international clients in the IT-industry spend excess internal capacity before considering outsourcing at a lower price. Consequently there is still a large unexploited market potential, which Metrocomia East Africa increasingly is getting qualified to serve.

However Metrocomia East Africa have also taken part in technology transfer to other developing countries. The best example of this is when parts of a Newspaper Content Management Solution developed to the leading daily in Uganda⁵ was used by Metrocomia's sister company in Bangladesh to produce a similar solution to a daily newspaper in Dhaka. Such a project is a small example of south-south technology collaboration, where concepts, design and source code are shared or traded to mutual benefit.

3) Reduction of economic and social poverty by strengthening IT in surrounding society

In the ICT for Development discussion there is increasing scepticism about using ICTs directly for impacting the poorest of the poor. Therefore, it should be considered how ICT could reduce poverty and poverty related problems by strengthening the institutions and organizations in *the society that surrounds the poor*. To be cost effective and have volume this must be done by local ICT-companies rather than the donors.

For Metrocomia East Africa the focus has been on producing web-systems to share and distribute information. However such systems also have some indirect impact on economic or social poverty (inclusion). Some general ways that websites matters to people and supports the change in society are:

- Social inclusion by enabling participation
- Transparency in government and democratisation
- Promoting exports and creating jobs
- Providing education and awareness

Examples of selected websites made by Metrocomia East Africa in these different categories are listed in the tables below.

⁵ The New Vision

Box #: Websites produced by Metrocomia East Africa that matters to Transparency and Social Inclusion

Website:	Value/impact:
Uganda Human Rights Commission http://www.uhrc.or.ug Online services to the Public	UHRC is an independent Constitutional body established to promote and protect human rights. UHRC had a need to ease the access of UHRC's publications, reduce costs incurred in printing, and the creation of awareness of UHRC. The website have enabled the Ugandan community to send their complaints and inquiries online and get responses more quickly and easily (improved social inclusion).
The New Vision Publications http://www.newvision.co.ug An online News paper	The New Vision Online is providing timely news to the Ugandan community beyond the boundaries of the country. The newspaper hosted real time election results as the process of voting for the President of Uganda was going on. In a very great way this was a significant contribution to making the process open, democratic and accountable to the public (increasing transparency).

Box #: Websites produced by Metrocomia East Africa that matters to Export

Website:	Value/impact:
Star Café is a leading Coffee Exporter in Uganda. http://www.starcafe.co.ug A basic information and order website	This web solution has transformed the way orders are being made with the company. The website has also indirectly contributed to the continuous confidence building among the buyers of Ugandan coffee world-wide (improving export).
The Uganda Fish Processors and Exporters Association http://www.ufpea.co.ug A one-stop information center.	The Uganda Fish Processors and Exporters Association (UFPEA) is the voice of all factories in Uganda's fish processing industry. The objective of going online is to enable industry stakeholders to increase commerce by establishing a one-stop email point to reach all fish exporters with a click of a button, and has attracted the overseas buyers segment (increasing export).

Other examples of products from Metrocomia is a Web Discussion Board, which is creating an enabling environment for more social dialogue and has been used for the Constitution review dialogue in Uganda.

4) Influencing attitude in society towards ICT, entrepreneurship and more

One of several barriers for the IT-industry to develop in a country like Uganda is the lack of *role models* for young entrepreneurs, who by their example can inspire and encourage others to start similar businesses. When Metrocomia was started in 1999 only 2 web development companies could be found in Kampala, - a number that in 2001 had exceeded 5 new companies, as shown in Table 4 below:

Table 4: Total number of people employed with new ICT entrepreneurs

	1999	2000	2001	2002
Number of new competitors	2	3	5	5
Est. number of employees	6	9	20	20

The table furthermore shows that an estimate of 20 people has been employed in web agencies in Uganda following the launch of Metrocomia. The entrance of new players in the industry can actually be very positive for the existing players in an emerging market, because more companies take part in the creation of awareness amongst the customers.

Another way Metrocomia East Africa have contributed to the awareness of using ICT in the country is by a number of symposia for leading managers from the private and public sector, as

well as conducting the first Ugandan survey on use of the Internet and World Wide Web, which was quoted by NUA Internet Surveys⁶.

One measure that can give an indication about the amount of impact of such activities is the media attention in terms of published articles in the national papers:

Table 5: Media attention around Metrocomia

	1999	2000	2001	2002
Number of articles in newspapers	2	5	9	6

Finally a different field, in which Metrocomia might have made a small contribution in terms of influencing attitudes, is in the field of corporate social responsibility (CSR) in the workplace. Here Metrocomia has been an example to society and employees of a culture of less authority and transparency is promoted along with a number of employee benefits that are not usually seen in Ugandan companies (including medical insurance, free food for lunch and continuous training programmes).

⁶ See www.nua.com, September 12, 2001: "Only a third of Ugandan firms online".

2 PART III: Action Proposal for Private Sector involvement in the WSIS-process

In the preparations to the WSIS process the WSIS secretariat, backed by the political system in most countries⁷, have urged to engage the private sector in the debate about the future of the information society in general, and how to use ICT for development in particular.

The background for doing this is a general agreement that the resources and technical competence of the private sector can be very useful, or even necessary, for some development activities. This is also why the concept of Private-Public Partnerships is being discussed in relation to many development initiatives.

Danish companies can be involved in ICT for development in 3 principles ways:

- 1) As suppliers or service providers to DANIDA, other donors or the development banks.
- 2) As investors in developing countries as partners in the Private Sector Development Program or with co-funding from other investment bodies.
- 3) As participators in the public discussion including councils, working groups and international conferences like WSIS.

This section will look into these three ways in which Danish companies can engage in development activities, as well as their incentives and barriers in doing so. An important starting point here is to recognize that in relation to private-public partnerships the private sector will, and should, enter such collaboration with the prospect of making short-term or long-term profit.

This is what businesses do best – rather than engaging in political activities, which should remain with the politicians - and therefore the involvement of private sector naturally depends on the incentives that exist or are created.

2.1 The private sector as supplier

The primary interest of the private sector in relation to ICT and Development is most often to work with government as a supplier of goods or services or as a consultant. Such partnerships happens when companies are getting directly contracted or are taking part in tender processes of contracts offered in Denmark, by the European Commission or other international donors.

In the area of ICT only a limited amount of Danish companies are successfully working with the international donor community and the development banks. This is most likely because of the slow, time-consuming and somewhat complicated process to engage in this market. However The Danish Trade Council is doing a good effort to engage more companies in this

⁷ Some countries, e.g. Pakistan, have expressed strong disagreement in involving both the private sector and civil society in the discussions.

market through Business Delegations to the World Bank⁸ as well as various information and training activities.

One way to further engage Danish companies would be to put additional resources into the work of the Danish Trade Council and maybe by giving financial support to Danish SMEs who do not have the resources required over a long period of time to establish a working relationship with the development banks.

⁸ In December 2003 a Danish Business Delegation with eight Danish IT companies, including Danish ICT Management (Metrocomia) was visiting the World Bank in Washington.