ICT[1] and Poverty-reduction in Urban African Societies

BACKGROUND

ICT as a Solution in Development

Throughout the past decade the international development community has seen and initiated an increasing array of projects to give populations around the globe access to Information and Communication Technologies (ICT). In the light of the recent World Summit on the Information Society (WSIS) 2003, there is great enthusiasm and expectations to what ICT can offer humanity as a whole. Several representatives from the WSIS process believe that ICT can function at the core of human progress and well being, improve the quality of life of all and promote dialogue among people, nations and civilizations. They believe that ICT can be a powerful instrument in increasing productivity, job creation, employability and economic growth. They think that ICT can facilitate learning, lead to creation, accumulation and dissemination of knowledge and diversity in media and content. They trust that ICT can form an enabling environment for *good governance* and facilitate that citizens and developing countries get increased access to participate in global decision-making. And they believe, that ICT might provide enormous opportunities for vulnerable groups, youth, women, migrants, refugees, unemployed, minorities, underprivileged, nomadic peoples etc.[2] Apparently, if the development process is properly conducted, *"all individuals can soon build a new Information Society based on shared knowledge and founded in global solidarity."* [3]

ICT as a Challenge or Deterioration in Development

However, there are many sceptical voices in the choir of ICT for development. Several academics, IGOs, NGOs and grass-root organisations are worried that the expanding access to ICT in the North is relatively excluding people of the South. They believe that the so-called digital divide[4] is a consequence of deeply rooted structural and economic global inequalities and that the digital divide itself can perpetuate and exacerbate existing inequalities and hierarchical power-relations. They contemplate that when people gain access to ICT it is mainly as consumers, rather that owners and creators. They criticize growing concentration of ownership and control of ICT, which is excluding the already marginalized and limiting potentials for social empowerment. And they fear – contrary to the discourse on a more egalitarian distribution of wealth and power – that ICT will introduce even new forms of exclusion and increase the gap between rich and poor. From a Southern perspective, they problematise resource and capacity limitations (including education and learning environments), development of electricity and telecommunications infrastructure, setting of rates, tariffs on equipment and software taxes. In this perspective, there is general scepticism that ICT can solve deeply rooted socio-economic problems at all. However, these voices also call for cross-sector co-operation to create the conditions needed for people to benefit from ICT through access and relevant use.[5]

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[1] Information and Communication Technology. *"The OECD defines ICTs as "the means of generating, processing, transporting information." ICTs enable people to share information and communicate with each other"* (APC: Involving Civil Society in ICT policy, The world summit on the information society 2003, p. 7).
[2] IDEA 2001, UNDP 2001, OECD 2003, InfoDev 2002, WSIS 2003, Curtain 2001
[3] WSIS Declaration of principles, 2003
[4] The term "digital divide" refers to the gap between those who have access to and can use ICT, and those who either have no access or cannot use ICT (www.digitaldividenetwork.org)
[5] APC 2003, Benton Foundation, IICD 2003, Panos 1998

PURPOSE OF RESEARCH

The purpose of the study is to investigate whether ICT can play a role in processes of community building and poverty reduction in urban societies in Southern Africa. The research **contemplates, questions and problematises** ICT as a *panacea* in Africa's socio-economic development, and at the same time it seeks to **highlight possibilities** that may exist with ICT implementation targeted at *poor* urban youth.

The fieldwork of the study takes place in 3 Computer Clubhouses[6] in South Africa. South Africa represents a development-engine in Southern Africa and during the past 5 years especially, South Africa has functioned as a role model for other African countries concerned with ICT for socio-economic development. Beyond and during the World summit on the Information Society (2003), DANIDA[7] partner-countries such as Ghana, Uganda, Kenya and Mozambique have expressed interest in the Computer Clubhouse model, partly due to preoccupations about *underserved* youth and a desire to build national computational skills and creativity. The study will investigate how ICT is enmeshed in global market forces. How ICT has been dispersed through international networks and integrated in national development strategies, and how ICT has been implemented in specific institutions with specific end-users, needs and circumstances. In that sense, the research will point out dominant imaginations of powerful development bodies and put these to a test in the local realities of the young African end-users. It will pay special attention to local priorities, local content and interpersonal relations (including gender), and highlight the economic, social and institutional structures in which these are embedded.

Thereby, the study provides **a grid for understanding** the complexity of ICT for community building and/or poverty-reduction, which may be very useful when targeting ICT to low-income or *poor* populations in urban Africa. Notwithstanding that urban African societies vary and have their own unique compositions, the study will offer **relevant knowledge** and can function as a comprehensive **contemplation tool** for African and international development bodies who formulate development policies and strategies on ICT, capacity building, youth empowerment and poverty-reduction. The target group is multilateral, national governmental and non-governmental development bodies, the ICT business community, academia and local project-managers. Furthermore, the study can facilitate beneficial knowledge sharing between involved institutions: Learning Lab Denmark[8], International Development Studies/Roskilde University, Danish Ministry of Foreign Affairs/DANIDA, Council for Scientific and Industrial Research[9] in South Africa (CSIR/Icomtek), governmental Department of Education, Department of Science and Technology and Department of Labour in South Africa, MIT Media Lab, Centre for International Development at Harvard and Intel Corporation, USA.

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[6] Computer Clubhouses are innovative informal learning environments where youth experiment and work with ICT and media production (See below).
[7] Danish International Development Assistance under the Royal Danish Ministry of Foreign Affairs.
[8] Learning Lab Denmark is an independent Danish research and development centre with a vision to expand public awareness of the role of learning in the transition to the knowledge society (www.lld.dk)
[9] The CSIR is a technology and research organisation in Africa committed to innovation, supporting sustainable development and economic growth. CSIR co-operates with the SADC countries and selected niche markets in Africa and is involved with the New Partnership for Africa's development (NEPAD). I networked with CSIR researchers through ICT4D platform, WSIS 2003, and CSIR researchers are aware of my research plans.

PROBLEM FORMULATION

The main question is:

- **Can institutional ICT implementation spur *at-risk youth* engagement in community building and entail poverty-reduction in urban African societies? If no, why not? And if so, how?**

Definitions:

Institutional ICT implementation: The ICT learning environment Computer Clubhouse (See below)

At-risk youth: Youth living at or below the poverty level. Also referred to as *underserved youth*. Low self-esteem and decreased motivation for self-improvement are characteristics for at-risk youth living in poverty. In many urban, inner city areas, gang involvement replaces their sense of family, community and belonging.

Community building: The 'binding matter' that gives young people a sense of belonging in their locality. Ownership and local buy-in in the Computer Clubhouse and establishment of partnerships between Computer Clubhouses, community centres, schools and workplaces.

Poverty-reduction: At a local level: Generation of skills, individual possibilities for employability and established partnerships and contracts with workplaces. At a national level: Prospects for a skilled South African ICT labour pool.[10]

The answer to the main question partly emerges through the following questions:

1) How is the Computer Clubhouse member engaged in learning with computational equipment and how is the reality of the individual reflected in the local content that s/he produces?

2) Do synergies and partnerships happen between Computer Clubhouse members, their media productions (animations, music, photography, video, websites) and their community (families, community centres, schools and workplaces). If so, how?

3) In what ways does gender influence the process? Is there a difference in the way girls vis-à-vis boys approach the Computer Clubhouse facility and engage in the learning process and media production? And, how do girls and boys respectively share their media productions and establish partnerships?

4) Are there potentials for increasing a sense of connection in the community for *at-risk youth* who engage in learning processes at the Computer Clubhouses? Or, do the changing possibilities, through the Computer Clubhouse, lead to incoherence and disintegration in the local community, resulting in ICT-skilled individuals leaving the community and adding to the increasing figures of brain drain in South Africa?

5) Do the building of competencies and the establishment of partnerships and networks conduce to poverty-reduction? If so, how?

CASE: Computer Clubhouses in the Johannesburg Area

The study includes site visits at 3 Computer Clubhouses of greater Johannesburg. These clubhouses are members of the Intel Computer Clubhouse network, which is an international network of innovative, informal learning environments, where young people can explore their ideas and practice their skills in ICT and multimedia.

[10] Following the South African National Skills Development Act of 1998

The young members are offered an opportunity to become active creators rather than mere consumers of media. They receive guidance on developing their own concepts and producing them, for example: texts, Power Point presentations, home pages, music, comics, animations, videos, robots, computer games, multimedia presentations, computer-mediated art etc. This supposedly empowers the learners to participate in their local communities and societies by contributing to public discourse with their respective productions.[11] At the same time the Computer Clubhouse functions as a capacity-building unit where learners build competences and qualifications for future educations and careers.[12] Computer Clubhouse staff consists of regular staff and mentors, who support the creative efforts of the members. Anyone between the ages of 9 and 18 is welcome in a Computer Clubhouse, but the primary target group is adolescents, who are termed *at-risk* and/or *underserved* youth. This includes youth from low-income families, *tough guys*, school dropouts, immigrants and girls who would not otherwise use ICT.

The three Computer Clubhouses, forming basis for the research, are located in so-called *disadvantaged* neighbourhoods: Newton-Johannesburg, Orlando West-Soweto and Etwatwa-Benoni. The neighbourhoods have grown out of segregation politics of Apartheid-rule and an ongoing migration to the city, especially after pass-laws were abolished in 1986. The Newton Clubhouse is situated in inner city Johannesburg. During the late independence process[13] the area experienced an over-crowding in inner-city apartment blocks, with 'sub-tenants' who moved in due to escalating rentals. In recent years the inner-city apartment stock has deteriorated, 'whites' have fled the area, and poor underemployed and unemployed black people now constitute the local population. The area is today infamous for its high crime-rates. The Soweto Clubhouse is located in downtown Soweto, app. 15 kilometres west of central Johannesburg. Soweto is the most metropolitan and populous black township in the country. Even though Soweto, during the recent years, has attracted considerable investments and many development projects, a substantial part of the township still suffers from poor housing, overcrowding, high unemployment, poor infrastructure and it is considered to be a seed-bed of criminal activity. The Etwatwa Clubhouse is located in Benoni, east of central Johannesburg, and shares characteristics with the other locations.[14] Prior to establishing Computer Clubhouses in greater Johannesburg, the sponsoring company Intel has worked in conjunction with the South African Association of Youth Clubs (SAAYC) to identify those neighbourhoods, which could benefit the most from the Computer Clubhouse concept.

The Computer Clubhouse project started in collaboration between the MIT Media Lab and Boston Museum of Science. The first Computer Clubhouse opened in USA in 1992, funded in part with seed-money from the Intel Foundation.

[11] Center for Children and Technology 2001 and 2001, Resnick 2002
[12] Benton Foundation 2001 and 2002.
[13] The process towards democracy and majority-rule – as a response toward the injustice of British and Boer colonialism and the Apartheid system – blossomed already in the 1950s with e.g. the Freedom Charter adopted by a coalition of anti-apartheid organisations. Freedom struggles intensified in the mid 1970s partly with the Black Consciousness movement and uprisings in Soweto. South Africa's first democratic election was held in April 1994 under an interim Constitution. The Constitution of the Republic of South Africa was adopted on 8 May 1996.
[14] Beavon 1997 and South African Yearbook 2003-04

In February 2000, Intel Corporation[15] announced an additional $20 million investment to establish the Intel Computer Clubhouse Network of a preliminary 100 clubhouses worldwide. Today, close to 90 Computer Clubhouses exist under the umbrella of the Intel Computer Clubhouse Network and another 20 clubhouses will be established worldwide over the next years (at present there are clubhouses in USA, South Africa, India, Mexico, Columbia, Brazil, Palestine, Philippines, China, Australia, Holland, Denmark, Germany etc.). The clubhouses become members of the global network and this membership opens up for cultural exchange and partnerships where young people exchange artwork and *know how* on the international intranet "The Village".[16]

METHODOLOGICAL APPROACH

During the past 50 years development intervention has been a complex arena of combating ideologies, methodologies and applied technologies. In a very rough outline; From the early post II World War period where there was a great belief in modernisation and economic growth via so-called top-down approaches, to the decade of the 1970s where there was an increased focus on *the poor* and a recognition of a more community-centred, so-called bottom-up approach. Passing over the 1980s with structural adjustment programs. And throughout the 1990s until today, where good governance and participatory development, through inter/national development clusters' co-operation with civil society, are central issues in strategies for socio-economic development and poverty-reduction.[17] The arena has both inspired and been inspired by development research. From 'traditional' quantitative empiricism and deductive positivism, towards qualitative, iterative and inductive approaches and salient post-colonial and post-modern criticism, there has however, over the last decade, been a growing recognition that global and local forces are coextensive and intertwined. And that within the new globalised economy there is still a certain materiality of life conditions, which is preoccupying and demand attention.[18]

The approach adopted in this study takes the stance, that sustainable development is not so much about fast (technical) solutions from 'the top', but rather about long-term social organising at a local level, where successful projects arise from local peoples' interests, needs, participation and community of practice.[19] However, local realities are both informers of and informed by complex, interrelated global patterns. Hall states: "*Globalisation and localisation unite at all spatial scales. There is little, and maybe nothing, that is global that does not have some sort of local manifestation. And each local manifestation changes the global context."* Hence, in order to study what ICT can do for poverty reduction – and the positive and/or negative outcomes different populations have experienced due to ICT implementation – it is relevant to investigate the cohesiveness of global and local forces and look into how ICT has been targeted to and adopted by specific populations. Therefore, the methodology of the study incorporates both micro and macro perspectives, where globalisation, actor-network, discourse and performativity theory will be integrated.

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[15] *" Intel introduced the world's first microprocessor in 1971. Today, Intel supplies the computing and communications industries with chips, boards, systems and software building blocks that are the "ingredients" of computers, servers and networking products"* (http://www.intel.com/pressroom/corporateinfo.htm)

[16] www.computerclubhouse.org, Center for Children and Technology 2000 and 2001

[17] United Nations 1951, Schech and Haggis 2000, Slater 1993, Martinussen 1999 in Larsen 2002 p. 20-24

[18] Appadurai 1990, Mikkelsen 1995, Escobar 1995, Hannerz 1996, Hall 1997, Rosenau 2003

[19] Chambers 1987, Moser 1993, Wenger 1998

The empirical research operates at an international, national and local level. It incorporates an archaeological approach inspired by post-structuralism (including review of historic archives forming basis for decisions, and interviews with instigators in USA and South Africa), and ethnographic method (including participatory observation, techniques of conversation, issues of performativity and qualitative interviews with local Computer Clubhouse youth, staff and other stakeholders).

THEORETICAL POINTS OF DEPARTURE

Globalisation Theory

To create a conceptual framework for discussing the socio-cultural and technical 'merger' between the instigating actors of Computer Clubhouses in the USA and the end-users in greater Johannesburg, the study will discuss globalisation theories put forward by e.g. Appadurai, Hannerz and Castells.

In order to understand some of the complexities of globalisation Appadurai proposes, that it is valuable to investigate the relationships between five dimensions, which he terms: *Ethnoscapes, mediascapes, technoscapes, financescapes and ideoscapes.* He sees these scapes as "*landscapes* [which] *are eventually navigated by agents who both experience and constitute larger formations, in part by their own sense of what these landscapes offer."*[20] He refers to the *scapes* as building blocks of 'imagined worlds' that are constituted through individuals and groups around the globe. The study will question how these *scapes* change meaning in local contexts and if they are even there? Furthermore, Hannerz believe that: *"One fundamental fact about flows must be that they have directions. In the case of cultural flows, it is true, what is gained in one place need not be lost at the source. But there is a reorganisation of culture in space."*[21] By drawing on Hannerz' notions of the *transnational* (cultural flows, boundaries and hybrids) the study will discuss directions of flows, imagined boundaries and the meaning of so-called cultural hybrids.

According to Castells, the combination of new ICTs and socio-economic restructuring is reshaping cities and regions, and deepening existing patterns of socio-spatial segregation. He sees these trends as rooted in powerful processes of economic globalisation and capitalist restructuring, which create new spaces of flow and further marginalize other spaces. He states: *"The space of flows links up valuable spaces at the same time that it separates and isolates devalued spaces in the inner city, and sometimes the suburbs* [with] *trapped low-income communities, run-down schools and the shop-floors of criminal economy."*[22] To avoid a continued segregation and empower low-income neighbourhoods, Castells calls for community-action against segregating forces. The study will investigate whether local communities that seek to fight segregation with the use of ICT, might be contributing to exactly what they are resisting.

[20] Appadurai 1990, p. 100. My insertion.
[21] Hannerz 2002
[22] Castells (?) p. 3. My insertion.

Actor-network and Performativity Theory

The theoretical point of departure when analysing the local level and what happens when *at-risk* youth engage in ICT based learning processes, media production and (possible) community-building, is actor-network theory (ANT). ANT is often adopted within a specific branch of social science named Science and Technology studies. What the theory seeks to reveal is how actantiality is not only what an actor does, but what provides actants with their actions, with their subjectivity, with their intentionality and with their morality.[23] Besides discursive and bodily practices, ANT studies often include artefacts as crucial 'agents' in the shaping of peoples' scopes of action. Latour states: *"Our collective is woven together out of speaking subjects, perhaps, but subjects to which poor objects, our inferior brothers, are attached by all points. By opening up* [social science] *to include objects, the social bond would become less mysterious."*[24] Furthermore, ANT is not rooted in binaries (micro vs. macro, individual vs. society, agency vs. structure etc.). Actor-network theory seeks to incorporate the movements and transmogrifications between and within subjects and objects. Latour expresses it this way: *"Maybe the social has the bizarre property not to be made of agency and structure at all, but to be a circulating entity* […] *ANT is a theory of space in which the social has become a certain type of circulation."*[25] It is this circulating entity of processes, subjects and objects (computers, programs, media and other artefacts) that the study seeks to grasp.

Supplementing ANT with microanalysis at the individual level, I will utilise theories of Butler on gender, speech-acts and performativity. According to Butler, speech acts are those utterances that actually *do* something rather than merely *represent* something. An example could be the 'I pronounce you man and wife' of the marriage ceremony. In making that statement, a person of authority changes the status of a couple within a collective setting; those words actively change the existence of that couple by establishing a new marital reality. The words *do* what they say. As Butler explains, *"Within speech act theory, a performative is that discursive practice that enacts or produces that which it names."*[26] Butler's theories are incorporated into the study, especially in relation to how the Computer Clubhouse setting works on the subjectivities of the young girls and boys. How do they talk about what they do, themselves and others and how/do their status and subjectivities change through practices and performance with computational equipment and media-production? By including speech-acts and performativity the study might highlight how, what some deem as macro-force, is transformed and transfigured through the individual body.

PLANNED FIELDWORK

At an international level: I will review literature and archives about the Computer Clubhouse model and the current state of research on ICT and underserved urban youth. I will make qualitative interviews with key-informants in USA: MIT Media Lab, Boston Museum of Science, Intel Corporation and relevant organisations and individuals involved in South Africa.

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[23] Latour 1998
[24] Latour 1996, p. viii. My insertion.
[25] Latour 1997, "Actor Network and After", Workshop at Keele university, http://www.comp.lancs.ac.uk/sociology/stslatour1.html
[26] Butler 1993, p. 12

The study will include a description of the development of the Intel Computer Clubhouse Network and how objectives and visions for human, economic and technological development were imagined and related to youth in a South African setting. It will examine how and why rationalities and practices stemming from the international network transformed and transfigured when they merged with a national-cum-local setting.

At a national South African level: I will review literature on ICT development strategies in South Africa, co-operate with the research-institution CSIR Icomtek in Pretoria, South Africa and study ICT related research- and development projects. I will review South African development strategies for youth engagement, community building, crime- and poverty-reduction, including gender-sensitive aspects.

At the local level: My first task will be to understand the different neighbourhoods, the different conditions in which practices and experiences take place, study characteristics of the different locations and socialize with Computer Clubhouse (CC) permanent staff, mentors and members. I will examine the rationalities embedding the establishment of the local clubhouses and how the projects were implemented (by whom and why) in certain urban settings, and not others.

In the respective Computer Clubhouse: I spend 5 weeks in each CC. If existing, I will review and include already carried out quantitative and qualitative research from the respective CC. I will use participatory observation to understand how the young members are engaged with the learning-processes, how they interact and their general activities. The study will describe the institutional framing and include, quantitative data on the location, host organization of the CC, computational and other equipment, number of members, ages and gender, qualifications and number of permanent staff and mentors. I will interact with and make qualitative interviews with CC staff and mentors.

At an individual level: I will make explorative qualitative interviews with female and male CC members and investigate into understandings and definitions of their everyday-lives, struggles and dreams. As far as possible, I will interact and socialize with them and visit their friends and families. I will relate their statements on their personal lives, to the context of the Computer Clubhouse and focus specifically on their own descriptions, actions and judgments of learning with computational equipment and engaging in media-production. Adopting a gender-sensitive approach, I will study groupings of girls and boys (15-18 years old) in each CC and examine how individual girls and boys, and the two groups respectively, indulge into the learning process. Here I am especially interested in, what preoccupations and objectives they have with their activities, and how they plan to demonstrate and/or share what they make with other individuals and institutions.

In the community: The study will map relevant institutions of the local community with which CC members interact **(**families, youth clubs, schools, community-centres, shops, workplaces, galleries etc.). Established networks and events, which have taken place or take place, in order for the CC members to demonstrate their work to others (concerts, exhibitions, presentations, co-operations etc.) will be included. I will make semi-structured qualitative interviews with relevant stake-holders (e.g. parents, teachers, community-workers, volunteers, police, entrepreneurs, business-owners) who have shown and/or show an interest in the work and activities of CC members, and inquire into whether youth engagement with CC activities can sustain possibilities for further education, employability and/or actual work.

APPLICABILITY & DISSEMINATION

The research findings will be published in a report or a book, including an elaborate summary and a CD-rom with relevant links and initiatives related to the subject. The research findings can contribute with important and relevant knowledge to all development clusters involved in decision-making, policy-formulation and strategy planning and implementation regarding ICT for youth empowerment and poverty-reduction in urban Africa. Dissemination of paper and electronic copies of the research will take approximately two weeks and be targeted:

Project-partners* and other involved parties:
The three local Computer Clubhouses in greater Johannesburg, South Africa*
Department of Education, South Africa
Department of Science and Technology, South Africa
Department of Labour, South Africa
The Council for Scientific and Industrial Research in Southern Africa
The International Network of Intel Computer Clubhouse Network, Boston, USA*
MIT Media Lab, Boston, USA (former partners of Learning Lab Denmark)*
The network of Learning Lab Denmark.* Here a conference will be held.
The network of IDS, Roskilde University, Denmark.* Here teaching will take place.
Centre for International Development Studies, Harvard, USA
The Council for Development Research and Department for Development policy, Ministry of Foreign Affairs, DK

Relevant contacts at:
Schoolnet Namibia (http://www.schoolnet.na/)
AJUDE, Youth Association in Mozambique (http://www.ajude.org/)
Association for Progressive Communication, South Africa
UNDP in New Delhi, India, and UNDP Nordic Office in Copenhagen, DK
Centre for Children and Technology, NY, USA (http://www2.edc.org/CCT/)
International Youth Foundation, USA (http://www.iyfnet.org/)
Institute of Communication, Roskilde University, Denmark
Dep. of Intercultural Communication & Management, Copenhagen Business School
Danish Broadcasting Corporation, DR Undervisning (educational unit)
Computer Clubhouse Network in Denmark (Copenhagen, Ringsted, Aarhus, Viborg)

Furthermore, co-operation is planned with **Danish development assistance NGOs**: Danish Association for International Cooperation (Mellemfolkeligt Samvirke), DanChurchAid (Folkekirkens Nødhjælp), IBIS and Operation Day's Work. Through personal contacts within these organisations, seminars will be arranged, where the findings will be presented. These organisations will all receive a paper- and electronic copy of the final PhD report, for dissemination in their international networks and for the interest of their partners in respective countries.

Dissemination of the project findings is planned through the **WSIS network**. The Danish WSIS network was established in connection with the Foreign Ministry's stand at ICT4Development platform, World summit on the Information Society, Geneva 2003. Among others it includes:

1) Representatives from the Danish-supported private sector program and companies such as Danish ICT Management. It is already agreed with Danish ICT Management that the findings of the study can be disseminated through their network. This includes bilateral as well as multilateral actors in development assistance activities. E.g. The World Bank and daughter companies co-owned with local partners in Uganda, Kenya and Zambia.

2) Representatives from the Danish United Nations Association, who are active in the international WFUNA Task Force.[27] WFUNA Task Force is working to empower organisations and provide them with knowledge, capacity and experience within the fields of organisation, planning, negotiation and networking.

3) Representatives from The Danish Institute for Human Rights, Danish Forum for IT - Developing Countries and Wire.less.dk.

Dissemination is planned through the network of the Danish-Supported **International Institute for Democracy and Electoral Assistance** (IDEA) in Stockholm. IDEA's network includes: 21 member-states, multilateral organisations such as UNDP, World Bank and African Union and several large international NGOs and IGOs (International Press institute, Parliamentarians for Global Action and Transparency International).

Articles based on the findings of the PhD project will be submitted to relevant international journals and publications, e.g.:

- Information Technologies and International Development (ITID) MIT Press
- Electronic Publications of GLOBELICS (Global network for Economics of Learning, Innovation and Competence building Systems) www.globelics.org
- Social Studies of Science, International Review in the Social Dimensions of Science and Technology, Sage Publications
- Theory, Culture and Society, Sage Publications
- Organization, the critical journal of organization, theory and society, Sage Publications
- Reflections, The SOL journal, On knowledge, Learning and Change, MIT Press

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[27] Information of WFUNA Task Force: http://www.una.dk/wsis/about.htm

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