# Trip report

Subject:	World Summits for Free Information Infrastructures (WSFII) AirJaldi Conference and Workshops to provide training for people in setting-up Low Cost Community Networks.
Dates:	Conference, October 22-October 25, 1006 Workshops, October 26- November 4, 2007
Place:	Tibetan Childrens Village, Upper Dharamsala (McLeod Ganj), India
Attendance:	Conference, ~125 persons, Workshops ~40 persons from Germany, Holland, Finland, Denmark, Austria, Ghana, Colombia, Canada, USA, India, Afghanistan, Pakistan, Nepal, Philippines, New Zealand, Tibet, Taiwan
Organisation:	<u>Tibetan Technology Center</u> , Upper Dharamsala (McLeod Ganj), India Djursland, Denmark, FreiFunk.net, Berlin, Germany.

## **Executive summary**

The ultimate goal of WSFII is to disseminate the knowledge and skills of how to set up Community Networks for providing Internet Access in developing countries at no or very low cost. The conference and workshop fees were \$145.—(14 days, including lunches and refreshments). There are two PDF publications available for free from the internet.

I obtained many leads into <u>research on Community Initiatives</u>. I also received an indication of other universities doing the same and potentially willing to co-operate.

Some colorful people presented Keynote addresses:

- Dr. Roger Downer, President Emeritus, University of Limerick, Ireland Global perspective on Sustainability
- Dr. Richard Stallman Free Software, human rights, and development
- Lt-Colonel Dave Hughes A Wirelessly Connected World?" How to Deal With Spectrum Regulation
- Vic Hayes The roots of Wi-Fi
- Dr. Eric Brewer, Intel Research Berkeley, UC Berkeley Infrastructure for Emerging Regions

Also of interest are the case studies of some networks for the social and economic impact of the availability of internet at remote communities, normally cut-off from news, medical care and voice communications. All presentations are available on the <u>web</u>.

Streaming videos of the whole conference will be available in future.

#### The most striking issues

The following deserve attention in our Community Initiatives Research plan:

• in many developing countries the regulators do not provide license exempt communications or do limit traffic over public premises, supposedly because of their interest in income from the Telecommunications services.

- South Africa regulation forbids the transmission of signals over public areas, so rural areas cannot be connected to Internet.
- In the US, telephone companies are heavily lobbying against Unlicensed Spectrum.

# Major points of interest:

## Regulations

The fundamental basis for Wi-Fi is the unlicensed use of the spectrum. Licensing is subject to national regulators.

I heard the complaint that many regulators in developing countries have NOT given the spectrum for unlicensed use, or that they do not permit the transmission of data over public areas, respectively beyond the premises of a single owner. Supposedly, the government has too much stake in the income of the telephone companies.

Moreover, I heard that the Unlicensed use of our spectrum in the US is under heavy lobbying pressure from the telephone companies.

To enable Wi-Fi to bring the internet to the people, the regulations shall permit the unlicensed use and the free transmission of data beyond ones premises.

Our Community Initiatives research project should therefore include questions about the national regulations as well as a list of benefits that the Community Initiative brings to the people, preferably with a financial figure to express benefit, so that we can come with good arguments for good regulations.

At the Economist Award Banquette I got word from Sam Petroda (one of the award winners) that he is willing to assist in coercing Administrations from his position in an ITU committee.

## Worldbank

The worldbank has a <u>Study on Local Open Access Networks For Communities and</u> <u>Municipalities</u> It has looked at both Fiber as well as Radio and mentions the following initiatves: "...communities such as Nuenen (The Netherlands), Djursland (Denmark), Akwapim (Ghana), Pirai (Brazil) or Knysna (South Africa)....".

## **Textbooks**

- Wireless Networking in the Developing World
- How to accelerate your Internet

## Community Initiatives:

Southern California, US, Tribal Digital Villages

Southern California, US, Disaster Preparedness

Myagdi, Nepal, Nepal Wireless Networking Project

Mérida, Venezuela, Networks in Mérida

Djursland, Denmark, Djursland International Institute of Wireless Broadband

Ìndia, Drishtee-Connecting India Village by Village

Oulo, Finland, has a network installed mostly with the local University,

I have talked to Prof. Dr. Timo Ojala. He also referred to a report with a framework at www.oplan.org

Dharamsala, India. <u>AirJaldi</u>, a network set-up with donations from the University of Oulo. Connects Tibetan Childrens Village, a number of temples and institutes as well as the Tibetan Government in exile to Internet.

Colorado Magnolia Road Internet Cooperative MRIC Contact Dan Lubar, Relay Services.

### People interested to participate in our research

Hitesh Shetty Bachelor Engineering Mumbai University

Arto Karilla (Oulo, Finland, Wi-Fi community network established by Oulo University and 10 WiMAX stations)

Arun Mehta (India) one of the founders of WSFII)

Joy Tang (US, but involved in OneVillage Foundation initiative for Africa)

#### Other research projects on Community Initiatives

I received the following information from <u>Tracey Lauriault</u>, a PhD student with interest in Community Initiatives.

Canadian Research Alliance For Community Innovation And Networking (CRACIN)

• There are a number of working papers here -

http://www3.fis.utoronto.ca/research/iprp/cracin/publications/workingpapersseries.htm

• Here is a paper on \*community wireless network/infrastructure project Case Studies\* in Canada -

http://www3.fis.utoronto.ca/research/iprp/cracin/publications/pdfs/WorkingPapers/CRACIN %20Working%20Paper%20No%206.pdf

• This is about an how one group is building an ict infrastructure for other community groups in Montreal -\*Hugo Gervais\* - who attended the summit worked for \*Communautique\* -

http://www3.fis.utoronto.ca/research/iprp/cracin/publications/pdfs/WorkingPapers/CRACIN %20Working%20Paper%20No%2010.pdf

• Excellent Annotated Bibliography\* -

http://www3.fis.utoronto.ca/research/iprp/cracin/publications/pdfs/wips/cracin-bib\_bell.pdf

Community Wireless Infrastructure Research Project

http://www.cwirp.ca/about.php

• The Community Wireless Infrastructure Research Project (CWIRP) project brings together an interdisciplinary team of academic researchers and community and government partners to engage in in-depth case studies of public/community-based ICT initiatives in order to document and assess the various models, best practices and benefits of public ICT infrastruc ture provision in Canada.

It is interesting to note, that community wireless groups are claiming status in these types of research projects as community partners, and are beginning to negotiate funding from these projects thus being both research subjects, but also research contributors. This is important to ensure a power balance between organizations that normally gain much from community groups but normally at the community groups expense.

Michael Lenczner, from Iles Sans Fils

(http://www.ilesansfil.org/tiki-index.php)

• in Montreal has been very good at continuously ensuring that community technology and wireless groups are studied in academia but in also claiming academic status for these groups and funding support. Thus creating some excellent collaboration and moving from subject object relationships.

#### Wireless Africa

Sherrin John Isaac of Meraka Institute of South Africa approached me to either join them or recommend people suited to an initiative to connect 450 million people in Africa to Internet through Wi-Fi. The idea is to prepare social, economic and regulatory issues toward a huge network.

Regarding the regulations, he indicated that SA Telecom is obliged to help rural communities under the Universal Service Obligation. They rather give permission to send data over public areas rather than pay the fine.....

#### Mesh networks

http://www.olsr.org/ (Optimized Link State Routing Protocol)

### Next Summit

WSFII 2007 March/April Prepcom August/Sept Workshop (2 weeks) August/Sept WSFII Summit (3 days) Place Winneba, Ghana West Africa Organiser: <u>Kafui Prebbie</u> of OneVillage Initiative