Freenet's dialup users, most of the INTERNET communication is done "Off-line". Kyiv Freenet users can compose their electronic mail messages as well as postings to Usenet news groups using a special mailer program that is designed to operate on the Kyiv Freenet system. Then, when they are ready to send an INTERNET message, another program is used which automatically dials the Kyiv Freenet until a stable connection is established. The user's name and password is sent to the Freenet operating system and afterwards all of the user's messages are uploaded and any messages that are addressed to the users are downloaded to their own computer. Once all of the electronic mail messages are completely sent, the Kyiv Freenet automatically disconnects the user and they are once again "off-line".

Depending on the quantity of electronic mail messages that are to be uploaded or downloaded from the Kyiv Freenet and the transmission speed of the modem, the time which a user is connected "on-line" to the Kyiv Freenet can be as low as one minute. The United Nations INTERNET project office provides software for "off-line" operation on the Kyiv Freenet for both IBM and Apple computer systems. The mailer software also operates in either English or Russian and the messages can be composed in English, Ukrainian or Russian. Since English is the most commonly used language on the INTERNET, most of the users choose to compose their messages in English. It is also more practical to compose electronic mail messages in English because messages that are composed in Ukrainian or Russian can only viewed by people who have the specialized software that is required to perform this task.

The Ukrainian Academic Research Network (UARnet)

The Ukrainian Academic Research network or UARnet is operated from the Institute of Condensed Matter Physics in Lviv. The UARnet gets its funding from several sources including the governments of Poland and Austria. The UARnet has a goal to create an INTERNET quality computer network linking all of the major centres throughout Ukraine. The UARnet also designs the computer network to connect to the INTERNET via countries in the

SOME UKRAINE-ORIENTED HOME PAGES ON THE INTERNET

- Kyiv FreeNet. Information about Ukraine's academic institutions, government organizations, professional associations, non-governmental orgs. (NGOs) and the public at large, and global access to a vast network of unique Ukrainian INTERNET resources. No commercial use is permitted. URL: http://www.freenet.kiev.ua
- United Nations Kyiv INTERNET site. Information about the United Nations
 Office in Ukraine as well as the INTERNET project for Ukraine and the Kyiv
 Freenet.

URL: http://www.un.kiev.ua/

 Ukrainian Parliament (RADA) home page. Information from the government of Ukraine.

URL: http://www.rada.kiev.ua/

 Kyiv-Mohyla Academy University. Information about the Kyiv Mohyla Academy.

URL: http://www.ukma.lviv.ua/

 City of Lviv Home page. Information about the City of Lviv. Maintained by the Institute of Condensed Matter Physics.

URL: http://www.icmp.lviv.ua/

- Archdiocese of Lviv. The Ukrainian Greek Catholic Church. Information about the Ukrainian Catholic Church in Ukraine. URL: http://www.ugkc.lviv.ua/
- Home page for the Ukrainian Canadian Professional and Business
 Federation. Created by Andrew Ukrainec & constructed by Michael Kostiuk.
 URL: http://soma.crl.mcmaster.ca/~kostiuk
- Oleh Baran's Home Page at McGill University. The most comprehensive sit for Ukrainian-related information and links on the INTERNET. URL: http://www.physics.mcgill.ca/WWW/oleh/ukr-info.html (note the upper case letters WWW)
- "Ukes" home page at McMaster University. Created and maintained by Andrew Ukrainec. A large database of files and graphics. URL: http://soma.crl.mcmaster.ca/ukes/
- Ohio Super Computer, Central and Eastern Europe (CEE), Ukrainian Server.
 Created and maintained by Max Puzier. Extensive listing of various areas of interest such as business, NGOs, education and government.
 URL: http://www/psc/edi/ukraine.html

"west" as opposed to the traditional Soviet system when communication systems centred on Moscow. At this time, there are no plans to create a direct link from the UARnet to computer networks in the Russian Federation. Electronic mail that originates from a site in the UARnet would exit Ukraine into the European INTERNET system, allowing Ukraine to integrate its research and academic community to the rest of the

world.

Currently, the UARnet has a direct line from Lviv to Kyiv with another line going from Kyiv to Kharkiv. There is also a direct line from Lviv to Kharkiv as well as a direct line from Kyiv to Donetsk. The UARnet is connected to the INTERNET through a line that connects Lviv to Warsaw. INTERNET traffic to Europe then travels through the Polish network to the Europa Network in Vienna. INTERNET