# 1. PUBLISHABLE SUMMARY



### **Project Objectives**

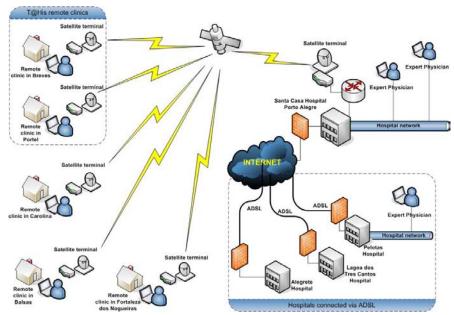
During the second year of the project two Work packages were fulfilled. The Work package 5 objectives were the development and the implementation of an integrated operation plan focusing on:

- The training and the preparation of the personnel and
- The development of a coherent plan for the maintenance of the network in preparation for the system deployment.

The Work package 6 objectives were to set up and deploy a fully functional telemedicine network integrating the European standards and techniques in the medical applications and satellite communications:

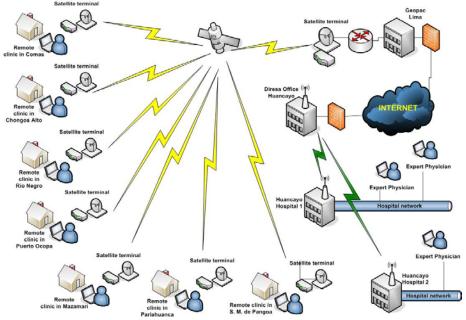
- Deployment of the platform to Peru and Brazil.
- Deployment of the satellite terminals.

For Brazil the objectives of Work package 5 were totally fulfilled. Two workshops were performed in Maranhao and in Rio Grande do Sul in order to train the physicians and the technical people of the sites. The objectives of Workpackage 6 were fulfilled in all of the sites. There is only one problem to be resolved in Fortaleza dos Nogueiras where the PC is ready for teleconsultation. It is installed, configured and acquiring images from the ultrasound. However in Brazil, two of the 8W BUC and 1 LNB installed turned out to be defective; there has been a hard work behind this issue from HISPASAT side in order to identify the technical problem and to solve it. The installers together with specialized people from HISPAMAR/HISPASAT have been travelling to the different sites in order to re-test and verify each of the equipment installed at the health centres. Finally the BUC installed in Balsas and LNB installed in Carolina were replaced by new ones and the BUC in Fortaleza will be replaced as soon as the new remain BUC is delivered to the site. At the moment the installation in Balsas and Carolina are working properly. These problems are still under investigation as the equipment malfunctioning could be caused by the local environment (power supply, atmospheric conditions, etc.) In Brazil many teleconsultations were performed in Rio Grande do Sul and in Maranhao.



**Brazil Deployment** 

For Peru the objectives of Work package 5 were totally fulfilled. The workshop in Huancayo was a good opportunity for the medical staff from the remote sites, together with representatives of the local community and local government to meet the MEDNET consortium partners, learn more about the project and actually see a demonstration of teleconsult. The objectives of Workpackage 6 were not totally fulfilled. The sites already have the equipment and the software, but they still missing the US devices in some of the sites. An other issue which still remains outstanding is lack of internet at the remote sites. In Peru there are no teleconsultations yet. A very important factor caused this delay in Peru was the death of Floiran Callupe from GEOPAC where he was killed in a bus accident travelling from Lima to Huancayo to check on the status of the satellite connection at Chongos Alto. The accident occurred on the 20th July, exactly one week after the satellite terminal had been installed in Chongos Alto – the first of the 7 remote sites in Peru to be connected. Floiran had over 30 years of experience as a telecommunications engineer and the loss of this knowledge is very hard to replace.



### Peru Deployment

# Work Performed

During the first year, the work performed by MEDNet consortium are:

- WP1- Project Management Guidelines (D1.1)
- WP5 Organizational and technical preparation. Workshops performed in Peru and Brazil in order to train and prepare the personnel. First teleconsultations in Brazil performed.
- WP6 System deployment. All the sites equipped with the satellite equipment. In the most sites the software were installed.
- WP8 Dissemination (D8.1): participations in Congresses and Seminars.

### Main results achieved in 2009

- 1. A technical meeting in Madrid organized by HISPASAT and TAS-E. It was addressed to Brazilians, Peruvians and Spanish technicians, in order to present the capabilities of the DVB-RCS supported by AMERHIS system;
- 2. Installation and configuration of the Jabber server at Santa Casa Hospital, Porto Alegre RS and DIRESA in Huancayo;
- 3. Installation and configuration of Teleconsult 2.6 application at Santa Casa Hospital, Porto Alegre RS and DIRESA in Huancayo;
- 4. Installation and configuration of the PCs for the remote sites, according to the project requirements of software and hardware;
- 5. First tests using Teleconsult 2.5 version were done;
- 6. Laboratory and field tests using Teleconsult 2.6;
- 7. Workshop presented at Santa Casa Hospital, Porto Alegre RS;
- 8. Workshop presented at UniBalsas, Balsas MA;
- 9. Workshop presented in Huancayo;
- 10. Comodato contracts for the PCs were signed by the partners from the remote sites:
  - a. Referral hospital:
    - i. After the change of the referral hospital from Lima to Huancayo, the satellite network configuration is up and running in Huancayo's DIRESA office.
    - ii. Connectivity between referral hospital and remote clinics is OK, up and running.
    - iii. However, the complete deployment is partially OK as it is still pending from Telefonica's help on the router which provides the access to internet.
    - iv. Teleconsultations demos were successfully run by GEOPAC on Dec 7<sup>th</sup> 2009 in spite of the difficult agendas of the political partners involved and of the difficulties found at installing the Jabber Server in Peru.

# b. Remote clinics:

- i. Pangoa: installed and running for MEDNET purposes
- ii. Mazamari: installed and running for MEDNET purposes

- iii. Puerto Ocopa: installed but not running yet
- iv. Rio Negro: installed but not running yet for MEDNET purposes (pending maintenance operations of MEDNET's equipment at their clinic).
- v. Chongos Algo: installed but not running yet for MEDNET purposes
- vi. Comas: installed but not running yet for MEDNET purposes
- vii. Pariahuanca: installed but not running yet for MEDNET purposes
- 11. Installations in Rio Grande do Sul (CETA SENAI/SACA-HISPASAT)
  - a. Lagoa dos Três Cantos concluded;
  - b. Alegrete concluded;
  - c. Pelotas concluded;
- 12. Installations in Maranhão (CETA SENAI/SACA) concluded;
  - a. Carolina concluded;
  - b. Balsas concluded;
  - c. Fortaleza dos Nogueiras PC is ready to work. It is installed, configured and acquiring images from the ultrasound. However the satellite link is not available;
- 13. First show cases in Maranhão (satellite) and Rio Grande do Sul (ADSL) in Brasil;
- 14. Attendance of FRIDA meeting. April 22th 23th, Montevideo Uruguay.
- 15.A presentation of Mednet project has been given to some South American companies for their interest on Telemedicine in Rio de Janeiro and Washington by THALES.