



# Secretariat snapshots

## Asbestos removal at the VIC

The Vienna International Centre (VIC) based organizations have been in discussion with the Austrian authorities on the removal of asbestos from the offices at the Vienna International Centre since 1998. The actual asbestos removal work began in November 2004 and is scheduled to last until 2008.

The central purpose of the project is to ensure the safety and health of the people working at the VIC. Staff councils are kept informed of the progress achieved through their attendance at the regular working group meetings held

between the VIC representatives and the responsible host authorities.

At the beginning of May 2005, Provisional Technical Secretariat (PTS) staff began moving to the temporary building “L”. Floor by floor, staff will follow with as little disruption to their work as possible. The majority of PTS staff will have moved back to their original office floors by 7 January 2006, with the exception of the On-Site Inspection Division, which is scheduled to move in the summer of 2007. The staff members will be evacuated for

a period of 15 to 19 weeks, before returning to their old location.

PTS staff will notice some changes when they return to their offices. New windows with much better heating and cooling insulation will have been installed. In addition, these windows will have a shatter resistant layer that is intended to protect staff from flying glass in case of external events such as explosions or storms. New floor coverings, blue carpets in the corridors and cork tiles in the offices, considered to be more hygienic than carpets, will have been fitted. ■

## Latest technologies applied in infrasound

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Channel Correlation (PMCC)<sup>1</sup> feature extraction algorithm has proven to be particularly well suited to the analysis of data from IMS infrasound arrays.

Infrasound source location is complicated by atmospheric variability. New generation atmospheric models integrate high-resolution meteorological models in the troposphere and stratosphere with climatological models of the mesosphere and lower thermosphere.

Although great strides have been made in the development of full wave propagation models, infrasound source location is generally performed by simulating the propagation of waves

with the propagation of rays through stratified media, providing speed and flexibility at the expense of rigor. The tau-p model<sup>2</sup>, originally developed for the determination of seismic travel-times, has been applied to the problem of atmospheric sound propagation in the presence of winds. It is under testing in several countries and could provide much improved travel times and azimuths.

Infrasound data has been used to detect and locate an increasingly larger variety of sources. A significant example is the location of the event associated with the big tsunami of 26 December 2004 (see figure 1, page 18). ■

## Security enhancements at the VIC

Since its opening in 1979, adequate security measures have been in place at the VIC to protect the nearly 5000 international civil servants and associated staff working there. Due to the increasing global threat of terrorism, these measures are less viable now and need to be upgraded. The security enhancement project includes measures to protect the building from forced, particularly vehicular, entry; improvement of communications; increased human security levels as well as more stringent entry controls.

All measures are carried out in cooperation with the host Government authorities. Member States have been asked to approve increased budgets to cover the security enhancements. The Preparatory Commission approved a first phase of security enhancement in November 2004. The second phase is currently under discussion and is receiving a positive response. ■

<sup>1</sup>The PMCC algorithm first identifies the arrival of coherent signals across an array by using the consistency of the lag-closure relationship between sets of three sensors. If an arrival is persistent, PMCC then groups coherent packets into families, which are defined by trends in the signal frequency, velocity and azimuth.

<sup>2</sup>The intercept time, tau, is a piecewise continuous, monotonic function of the ray parameter (p), and permits the efficient calculation of the travel time, range, and azimuth deviation for a ray.