BRAZILIAN FIELD TRIALS CONFIRM TECHNICAL SUPERIORITY OF COFDM

HDTV & Mobile Reception were Decisive Factors.

Geneva, 14th February 2000: The ABERT/SET Digital Television Group, the official committee charged with testing digital terrestrial television systems for Brazil, has recommended a COFDM modulation scheme for the country’s future digital broadcasting requirements. The findings of ABERT/SET group were submitted earlier this week to ANATEL, the Brazilian Telecommunications Agency responsible for the selection of the country’s digital television system. The report follows an extensive set of carefully performed laboratory and field trials involving ATSC, ISDB-T and DVB-T that began in September last year.

The main reasons cited by the committee for its recommendation were:

- Better delivery of service within the coverage area
- Equal or superior to the current analogue system; higher reception robustness in the presence of multiple reflections, inherent to any off-air reception
- Capability of transmitting HDTV
- The possibility of mobile reception

Theo Peek, DVB Chairman, said “Brazil is a key South American market, and this recommendation represents the first time a 6MHz country outside Japan has recommended COFDM technology. It finally puts to bed all the criticisms about the availability of 6MHz DVB-T equipment and sends a clear message to the entire region and indeed the rest of the world who are presently considering their future DTTV requirements.”

The recommendation is a key victory for a COFDM system such as DVB-T in Brazil where digital terrestrial broadcasting will be faced by a unique set of problems.

DVB testing was well supported by NDS & Tandberg TV who provided DVB-T modulators, receivers and technical support. Nokia and Philips provided set-top-receivers. Continental Microwave Ltd. (CML) and NEC provided transmitters and Rohde & Schwarz provided a test transmitter. In addition, valuable technical support came from NTL.
Background

The DVB Project

The Digital Video Broadcasting Project (DVB) is an industry-led consortium of over 263 broadcasters, manufacturers, network operators, software developers, regulatory bodies and others in over 59 countries committed to designing global standards for the delivery of digital television and data services. The DVB standards cover all aspects of digital television from transmission through interfacing, conditional access and interactivity for digital video, audio and data. The consortium came together in 1993 to create unity in the march towards global standardisation, interoperability and future proofing.

To date, there are numerous broadcast services using DVB standards. There are hundreds of manufacturers offering DVB compliant equipment, which is already in use in Europe, North and South America, Africa, Asia, and Australia. A host of other services are also on-air with DVB-T, including data on the move, high-bandwidth Internet over the air and the possibility to introduce terrestrial Pay-TV services.

Owing to its use of the multi-carrier Coded Orthogonal Frequency Division Multiplexing (COFDM) modulation technique, DVB-T is capable of delivering a crystal clear picture to televisions connected to portable, set-top antennas in hostile reception environments such as city apartments, or even to receivers on the move. DVB-T has been rigorously tested in slow-moving city trams and at speeds in excess of 170 mph.