



5. Olympic Games: Effective Management of Radio Communications

During the 2004 Olympic Games, EETT will execute significant tasks, particularly critical for the success of the Olympic Games.

Having as a primary goal the smooth and unimpeded operation of radio communications, EETT planned and implemented a total of actions that includes all sectors under EETT's responsibility, presented in detail in the following Sections.

5.1. Assignment of 2G Mobile Communications Spectrum

In 2003, EETT proceeded to the temporary spectrum assignment of 2G Mobile Communications to mobile telecommunications providers who expressed interest, in order to face their increased network coverage needs, in the area of Attica during the Olympic Games.

To this end, EETT carried out a Public Consultation, where the mobile telecommunications providers were invited to express their opinions concerning:

- The procedure that should be implemented for the temporary assignment.
- The spectrum bandwidth that could be assigned to each provider.
- The duration of the temporary assignment.
- The geographical area, where the use of spectrum could take place.
- The usage fee, which they would have to pay.

Taking the Consultation's results into consideration, EETT proceeded to the adoption of the following procedure for the temporary spectrum assignment.

Given that the available spectrum for the provision of 2G mobile services was 2x20 MHz in the spectrum area of DCS 1800, EETT divided the spectrum into four parts of 2x5 MHz, in order to proceed to the temporary assignment of one part to each mobile telecommunications provider, provided it was requested. The spectrum would be assigned for the time period from 1st June 2004 – 30th September 2004 and could be used only in the area of Attica. The spectrum usage fees, which the undertakings would pay for one part of spectrum DCS 1800 2x5 MHz, would amount to 344,000 euros.

Following the above, interest was expressed and the providers COSMOTE S.A., VODAFONE and STET HELLAS S.A. were assigned spectrum. In the beginning of 2004, the sealed tenders' auction for the assignment of the remaining part, is expected to take place.

5.2. Frequency Assignment

The increased demands for frequency assignment, which, as already mentioned, are expected to arise during the Olympic Games, mainly result from the following:

- A particularly important part of the infrastructure used, consists of systems for the wireless transmission of data, voice and image, due to the flexibility, ease and deployment speed characterising them.
- The users of the aforementioned systems will be many and diverse. We indicatively mention television/radio organisations and stations crews, Olympic Games security teams, the ATHENS 2004 Olympic Games Organising Committee (ATHOC), security bodies that will accompany foreign officials and dignitaries, emergency services.



- The systems will be used for the coverage of events that will be held in various areas, so most of the system's equipment will be transported wherever needed.

Until the beginning of the Games, 9,000 applications for frequency assignments are expected to be submitted, supporting a wide range of services and covering the whole area of Attica and the four Olympic cities. The main services provided during the Games are:

- Portable – Mobile Radios.
- Land Mobile Service.
- Wireless Microphones.
- In ear monitor devices.
- Talk back services.
- Translation – Guiding Services.
- Fixed "Point-to-Point" Links.
- Telemetry – Telecommand Services.
- Wireless systems for production and transmission of radio-television signal and satellite communications (ENG/ OB).
- Satellite communications (SNG, Fly away).
- Wireless Local Networks.

In order to service the users, EETT designed and ATHOC implemented the "e-spectrum" network application. Through this application, interested radio frequency users can obtain information on the current radio frequency licensing status for the Olympic Games, submit their applications and monitor their progress via the Internet. This application is already available on the Internet (http://services.athens2004.gr/espectrum/home_page.asp).

EETT received a large number of frequency assignment applications, through "e-spectrum" in the time period from August – December 2003, due to the holding of Test Events. All these applications were successfully examined and processed.

5.3. Spectrum Monitoring Preparation for the Olympic Games Needs

EETT has set as its primary goal, the continuous and uninterrupted monitoring of the radio spectrum, during the Olympic Games. This goal is particularly important, taking into consideration that unimpeded spectrum usage must be safeguarded for the security of the Games, as well as for the transmission of the television signal all over the world.

It is worth mentioning the technical difficulty of the undertaking, taking into consideration the extensive use of wireless devices (portable radios, wireless microphones, microwave links, wireless cameras, satellite links etc) concentrated within restricted areas (Olympic facilities). This fact increases the possibility of interferences. It is indicatively mentioned that during the opening ceremony, thousands of wireless devices will be operating in the Olympic Stadium, in hundreds of different frequencies, while at the same time, the television signal will be directly transmitted all over the world.

EETT, in order to achieve the aforementioned goal, proceeded to the following actions based on the Business Plan drafted in 2002:

- EETT drafted the Monitoring Guide, which defines in detail the spectrum's legal use monitoring and interference problems management procedures, as well as the responsibilities of each involved body.
- Drafted the Organisation Guide for the implementation of the aforementioned procedures, which includes the organisational structure and staffing of EETT's units, the time schedule and location planning of monitoring units in the Olympic facilities, the organisation of support operations and the detailed schedule of its implementation.
- Initiated the personnel recruitment procedure.