

## Connectivity: an essential element in congresses

Congresses connect large communities of professionals who, for a few days, exhibit, connect, communicate their ideas and innovations to their industry. And as you may have noticed, communication has changed and always involves the vital wifi networks: presentations, registration, presentations, stands... and more generally, communication between attendees and their access to documents. This represents a new challenge for large venues, in the implementation, management and administration of the wifi service since demand for bandwidth increases every year and gets more complex. Our appetite for data never decreases. IFEMA has dedicated the highest attention to issue and innovated in its services. Carlos Lamers, director of IT services of IFEMA, tells us how the service has evolved in its facilities and how IFEMA has managed to offer improvements and innovation in this respect.

**Coverage.** The hiring of a basic Wi-Fi connection is an intrinsic service offered by IFEMA, and is customized to the size of the congress and the flow of attendees. “We offer a standard service through a fixed line with the telecom operator with a 1GB bandwidth, offering a standard flow of 300MB which we can extend to 1GB for an important congress” says Carlos Lamers. For congresses with a large number of simultaneous users, temporary lines of up to 1GB of bandwidth are usually hired to separate the Wi-Fi service from the wired network. How about the access points? “By default we have 260 located in all halls, although everything depends on the number of users attending the congress”, says Carlos.





**Large congresses.** The service offered by IFEMA is a great attraction for large international conferences. The latest challenge was the huge ESMO congress: peaks of 21,000 concurrent users, for 25,000 attendees. “It is very difficult to provide all users the right connectivity at the same time, although we have already reached 15,000 simultaneous users at conferences, a level that a few years ago was unthinkable.” How do you control the number of connected users? “There are specific monitoring programs: we receive online information about the number of users on traffic, bandwidth consumption... It is very important to extract reports and assess if the connection service is meeting the demands of our customers”, says Carlos.

**Expansion of service.** IFEMA hosts congresses of 10, 15, 20.000 delegates. How to manage so much need for connection? To meet those needs, IFEMA has expanded its Cisco-based technology connection service. “For the EULAR congress last June, 135 access points of reinforcement were enabled and the bandwidth was increased to two lines of 1GB each for the 112,500m2 of the congress.” This technology allows to increase the speed, optimizing the user experience, and facilitating multimedia demands. In addition, Cisco switching solutions apply authorized access policies to protect network traffic.

**Back and front office.** Back-office services ensure that everything is well-configured and monitored: network, system and security specialists constantly monitor the use of networks and systems and apply the necessary corrections online. On the other hand, the front office team is in charge of the verification and on-site maintenance of the telecom services. They are the visible face of the service, very important since personalized attention is fundamental for such an important component of congresses.

**Cable vs wifi.** Depending on the type of activity, one service or another is preferable. According to Carlos, for example, “for demonstrations to delegates or for connections of the speakers presentations, the cable service is habitual. For critical services, wifi may be unstable, affected by interference and it could fail at some point, so it is preferable for critical services, not to take risks and to contract cable services.”

**Next challenge.** IFEMA has just finished in July upgrading its telecommunications infrastructure, changing all its network equipment, switches, firewalls, bandwidth managers, wifi controllers, etc. In parallel, a study of wifi coverage for high-density scenarios has been carried out in all areas of the site. This stage II is now being implemented, modifying the number, model and location of access points, from the current 260 to more than 1,000, allowing the provision of Wi-Fi services to a greater number of users, without the need to implement as many booster access points, which will substantially improve the quality of service.





**Equipment.** Even more important than new services, new human resources! “We have a permanent team, a dedicated and specific department of telecommunications to cover new demands and continue to develop connectivity at fairs and congresses. In addition, we have several collaborating companies, for service management, cabling installation and access lines”. For large congresses? “A special telecommunication team is formed, with specialized technicians on site, increasing the number of technicians of maintenance / personalized attention if necessary”.

**Fairs.** The management of the Wi-Fi connection in fairs is a more complex issue. A fair is composed of a certain number of stands, where different Wi-Fi networks can be produced by the exhibition teams themselves for their various participants. According to Carlos, this can create significant interference problems, mainly in the 2.4 GHz frequency. In congresses it is easier to provide an adequate Wi-Fi infrastructure, since the exhibition area is usually smaller.

**Free WIFI?** IFEMA has certain free Wi-Fi zones for visitors to trade fairs and congresses. They are located in Puerta Sur, Puerta Norte, Central Avenue, Meeting Point, Club Feria and Business Center areas, as well as the Press Club. The rest of the site offers “IFEMA Wifi Premium” coverage, a modality where exhibitors and visitors pay according to their needs, with rates recently revised downwards to facilitate access. Carlos predicts that “faced with an immediate future, and when the infrastructure deployed so allows, the idea is to expand these areas of free access, especially for certain frequencies of access.”

