## A HIGH STANDARD OF TECHNOLOGY

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brief description of the most important technical aspects of the project. 8 October 1986.

When TV3-Televisió de Catalunya began broadcasting in September 1983, the prospects facing it were anything but straightforward. Aside from overcoming the problem of getting viewers accustomed to seeing Westerns and popular international serials in Catalan, TV3 had to compete against the wide range of television programmes produced in Castilian (Spanish) by Televisión Española with its powerful technology, its almost thirty years of experience and resources adapted to an audience of almost thirty million.

To avoid making the task of attracting viewers even more difficult, TV3 had to reach a high standard of technology comparable with other European television services.

Another factor was all-important in determining the technical aspects of the project. TV3 wanted to create a truly viable alternative to the programmes already available and this meant investing in a large amount of mobile equipment, establishing resident correspondents in differents parts of Spain and Europe, and having studios suitable for the production of drama, music programmes, light entertainment and so on.

A further consideration was that TV3, while called upon to compete with a television service designed for a country with forty million inhabitants, was itself to dispose of the resources consonant with a population of only nine million. Technical and organization solutions that would enable it to overcome this difficulty had to be found.

At the same time TV3 enjoyed one unusual advantage: that of being able to

build a complete television centre from scratch in only two years. This enabled it to formulate a coherent project taking into account the latest available technological innovations and to train a staff to make use of these innovations. Over 90 % of TV3's eight hundred current employees had never worked for a television station before. Obviously this involved a certain risk, but on the other hand the job of training staff was not hampered by habits adverse to the adoption of the new techniques.

Progress in television technology moves at a breathtaking pace and choosing between different options involved many difficult decisions. Sometimes the equipment chosen had only just come onto the market and major broadcasters still had reservations about it. One such case was the Betacam format for ENG equipment prior to its endorsement by the EBU technical commission. In other instances the choice of one solution meant rejecting better alternatives that were just beginning to emerge but were not yet readily available.

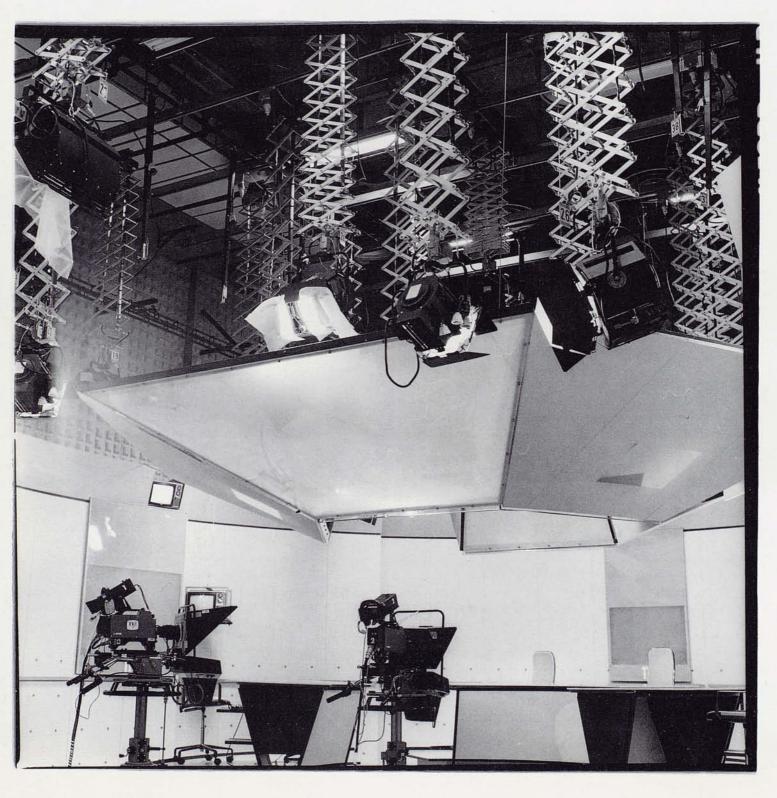
The new television centre was officially opened on 22 April 1986, less than three years afer a team of engineers, reporters, cameramen and others had put together the first broadcast from the temporary centre on 10 September 1983. This first broadcast, using a single transmitter installed on Mount Tibidabo, was only seen by the 64 % of the Catalan population who live in the Barcelona area. It lasted just one day, and was followed by a series of similar trials until regular programming began on 6 January 1984.

While work was proceeding on the new centre and fifty hours a week of programmes of all types were being built up at the temporary centre, TV3 had to set up a complete transport and transmission network (no collaboration whatever was forthcoming from Televisión Española). Now TV3 has five main transmitters linked by a relay network and connected to the French TDF network, in addition to over seventy small relay transmitters, and its programmes reach 95 % of the Catalan population. Thanks to other relay stations, built as a result of local initiatives, TV3 programmes can also be picked up in the Balearic Islands and part of the Valencian Country, where slightly different forms of Catalan are spoken.

70 hours of programming a week are currently going out from the new centre, over half of which are original TV3 productions. Total investment in the project –production centres, outside broadcast units, resident correspondents and the transmission and transport networkhas been 9,000 million pesetas and the annual running costs are about 7,000 million pesetas, approximately 70 % of which is generated by advertising while the rest comes from grants voted by the Catalan parliament (there is no television licence fee in Spain).

The new studios at Sant Joan Despí have made TV3 into the largest producer of television programmes in Catalonia with one of the most modern and complete all-purpose television centres in the world. The new centre will enable TV3 to offer its viewers programmes up to international standards of quality and at the same time provides a technological infrastructure that will lend new vitality to the field of Catalan audiovisual media.

The new centre at Sant Joan Despí houses TV3's production and broadcasting equipment, as well as auxiliary services. The size of the centre was determined



## DOSSIER (TV3)

by the present needs of TV3, though there is room for additional facilities. Technological innovation, economy and functional architecture are the three keynotes not only of the design of the new centre but the whole operational structure of TV3.

TV3 has tried to economize, not at the expense of quality or through the adoption of third-rate equipment, but by automation, computerization and optimum use of human and technical resources. Thus, for example, special stress has been laid on staff polyvalence and team work, with a view to increased versatility. The use of new technology is obvious in all fields: ENG equipment, switching matrix, electronic graphics, computerized documentation system, microprocessor-regulated temperature control, and the result has been both higher-quality services and savings in energy and operational expenses.

The design and lay-out of the building respond to functional criteria: movement of staff, easy access and adaptability.

The TV3 complex is located in the borough of Sant Joan Despí, 100 metres from the A-2 motorway. The site was chosen on account of its proximity to Barcelona, rapid access to the motorway, the existence of an urban infrastructure and the possibility of microwave links with the central node of the TV3 transmission network on the top of Mount Tibidabo. The complex is made

up of four buildings each housing different services: the Centre d'Emissió i Informatius (CEI), Centre de Producció d'Audiovisuals (CPA), Centre de Serveis i Energies (CSE) and Centre d'Accés i Control (CAC). The buildings occupy a total area of 30,648 sq. metres.

Three buildings were put up to ensure a rational distribution of services. The architects tried to group all services fulfilling the same purpose together and to separate those with little relation to each other.

Thus the CEI comprises everything necessary for the preparation and transmission of news programmes: news rooms (150 sq. metres), all-purpose studio (330 sq. metres), and a continuity studio (40 sq. metres), all related technical facilities, editorial staff for daily news-programmes, current affairs programmes and sports news, documentation services and graphics, and the infrastructure required for the operation of the twenty ENG units.

The CEI also houses the administrative staff, computer and engineering services, and top management. The internal organization of the CEI is such that the three zones of the building correspond to different functions: the technical staff occupy one, the editorial and administrative staff another, while the offices of top management, reception room, lobby and cafeteria are located in the third

The CPA (Centre de Producció d'Audio-

visuals) is the largest of the three buildings and houses all the facilities required for more elaborate productions: drama, music and light entertainment. It contains a studio measuring 800 sq. metres and equipped for live audiences, three studios of 400 sq. metres each, an area for film and tape editing, a props store (3,300 sq. metres), scenery department and a full range of paint, ironwork and carpentry workshops.

Another whole floor in the CPA is given up to perfomer services such as dressing-rooms, hairdressing and make-up departments, and costume and dressmaking facilities. Yet another, comprising offices, preview rooms, rehearsal rooms and so on, is occupied by the production staff.

Mobile equipment includes five outside broadcast units and eight Electronic Field Production units in addition to the twenty ENG units for news coverage.

All this powerful, top quality equipment, which has only recently come onto the market, poses a great challenge to those responsible for creating and producing programmes and gives an idea of the extent of TV3's ambitions and p l a n s .

When TV3 went on the air, broadcasting entirely in Catalan, it lived up to the expectations aroused by so much innovation and we feel confident it will prove capable of meeting the everhigher standards of the future.

