



The History of

ITeC

ITeC was set up in 1978 when it was considered necessary to find a tool to enable progress to be made in the construction sector. From the outset, it was decided to give the institute a legal status of non-profit-making private foundation, supervised by a board representing different professional associations, Catalan Government departments related to the sector, as well as the world of business and universities. This framework is still recognisable in the current ITeC board, although over the years the range of represented agents has been broadened.



ITeC

THE BEGINNINGS



At that time, the offer of postgraduate training was practically inexistent; as such, one of the first tasks of ITeC consisted in specialised graduate training, such as the construction site manager course, one of the most successful proposals. As the various technical colleges began correcting these deficiencies, the Institute gradually withdrew from the area of teaching, which is nowadays limited to BREEAM certifier training courses and for ITeC TCQ software users and methodology.

Another important concern of that time was the normalisation of the Catalan language in the construction sector. ITeC promoted a lexicographical commission, which led to the publishing of a Catalan dictionary of construction vocabulary. In addition to this example, publishing at ITeC has followed an intense rhythm, with over 600 books produced throughout its history.

INFORMATION

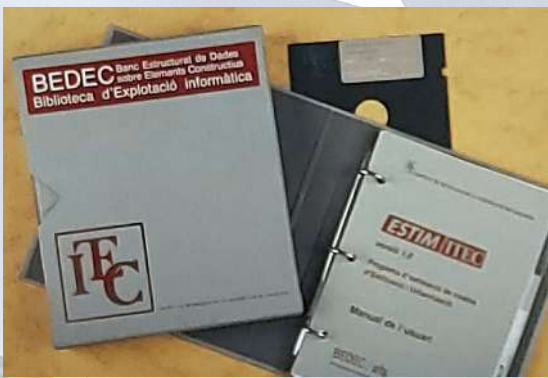
Among the classic points of conflict in the construction process are project prescription and budgeting. ITeC contributed by developing data bases which would act, in the first place, as a reference point for extremely precise definitions of materials, construction elements and building works and as an attempt to find a balance between common practices in the sector and regulatory requirements. Secondly, prices were assigned to all these elements to provide additional reference points for costing.

The first operative data base dates from the year 1983 and was designed specifically for the building work promoted by the Barcelona City Council. A year later, the first book of building and town planning costing was published under the name of BEDEC (Structured Data Bank of Construction Elements) and since then ITeC has been committed to extending, updating and perfecting the contents.

What at first was merely a data base of definitions, prices and specifications, restricted to the area of building and town planning, has now expanded to completely cover all of the different market niches. Since 2004 it has also been possible to consult both the volume and type of waste materials associated with each element of the data bank as well as CO² emissions and energy costs, with a view to planning administrative procedure..

During the nineties decade, it was soon evident that the growing complexity of BEDEC along with the popularisation of PCs, underlined the limits of using books as consulting material and, as a result, more powerful computerised versions began to be developed. Since 2001, the BEDEC bank can be consulted from ITeC's website and has become the most visited digital resource specialising in construction throughout the country.

The data base is currently expanding the environmental sector as a way of facilitating the application of eco-design criteria in projects. This is the intention of the new web site created in 2016 offering consultation on [environmental product and system information](#) with more useful parameters for life cycle analysis, and where to find specific data provided by each manufacturer permitting the drawing up of a more precise and environmentally more responsible prescription.



DIGITAL WORK

PCs reached maturity at more or less the same time as ITeC itself, the Institute recognising a valuable opportunity for the sector.

Prior to CAD software taking its place in the sector, ITeC was already marketing software for budget preparation and took advantage of all the details contained in the budget to provide follow-up of the building work in real-time.



The performance of this software and data base could be put to the test during the building work for the Barcelona Olympics in 1992. This methodology was transferred in 1997 to the new TCQ application, designed in modular form with specific tools for the stages of project design, contracting, planning and follow-up. The methodology has been adapted to the new collaborative tools with the inclusion of BIM, first in the budgeting phase and subsequently in the certification phase with the possibility of communicating to the BIM model the real progress being made in the work and developing a graphic follow-up of the budget units completed.

The latest tool being developed is TCQi, which will enable users to work in a virtual space in the cloud from any medium. As this is a virtual tool it will enable work documentation and management to be accessed at all times and will form an even more integral part of BIM collaborative environments.

REHABILITATION

If nowadays rehabilitation is seen as playing an overly secondary role to new building work, in the eighties the situation was even more extreme. In 1983 ITeC was already aware of the potential of this market and organised the first rehabilitation symposium in Spain. Furthermore, in 1989, ITeC moved to a new head office as a result of the renovation of an old factory next to the Poble Nou district in Barcelona.



During the nineties, ITeC developed different protocols for the identification and repair of building pathologies, particularly structural elements.

MAINTENANCE

ITeC regarded maintenance as being just one more discipline within the construction sector and therefore included it in their digitalisation strategy throughout a software presented to facilitate technical and economic follow-up not only of corrective maintenance of existing pathologies but also of preventative maintenance planned to minimise future pathologies.

Further on, the successor to this program led to the developing of the Building Book. Currently, further steps have been made in improving all the building and town-planning maintenance tool supports and transferring them to cloud computing with the new TCQi MNT application.

REGULATIONS

At one time, Spanish building regulations were notoriously out of step. Prior to the necessary modernisation by the CTE, various Catalan governments had attempted to patch some of the most urgent regulatory gaps as far as their authority permitted. And ITeC acted as a neutral reference point with regard to the interests of professionals, companies and the administration itself, taking an active part in the drawing-up of several regulations.

Another line of work was related to the promotion of waste recycling which was not initially permitted by on-going regulations.

As we have said, the Technical Code has proved to be a wide-ranging reform for the sector, and as such, ITeC could not fail to contribute to its preparation. Between 2001 and 2003, the Institute intervened in a series of workshops dealing with different topics and After its publication, collaboration has continued by addressing the unresolved question of the inclusion of rehabilitation in the CTE.

MARKET INTELLIGENCE

ITeC's main role is to provide technical services but we are fully aware that the sector is affected by market forces: the reason why some are growth areas and others are not, what is to be expected in the future and what makes a construction product successful.

In the eighties, the tools used to measure the financial progress of the construction sector were very modest. It was in this context that in 1983, ITeC was given the assignment of drawing up a census of construction sector companies in Catalonia.

In 1990, ITeC entered into collaboration with Euroconstruct, an interesting opportunity to view the reality of the construction market in other European countries (currently 18) and to compare analysis methods with those of other experts. Through Euroconstruct, ITeC has been able to explain to the rest of Europe the extraordinary cycle of the sector's growth and decline, which has understandably been the main topic of the last fifteen years.

Throughout its history, ITeC has measured and analysed different market niches both for private and public clients, and has also participated in drawing up the Catalan Input-Output Tables of 2001 and 2011 with regard to estimating inputs within the construction sector.



QUALITY AND INNOVATION

Before the European Construction Product Directive came into effect, innovative products found it difficult to demonstrate their worth, but in 1996 ITeC received authorisation from the European Commission to award certifications, being part of the EOTA a year later.

In 2002, ITeC was authorised to issue the DAU, directed towards non-standardised products and manufacturers who wished to formalise the construction solutions which they considered optimum for product output, and also the ApTO, directed to installation companies

who wished to accredit their technical ability when developing a specific construction system.

The very nature of ITeC's certification work, specialising in innovative products, meant that the Institute had acquired substantial experience in the process of transferring research results to the marketplace. As a result, the Institute has offered counselling and consultancy to companies to identify the strong points of their new products, clarify their legal and regulatory status and, in short, to reduce time and costs in marketing.



In 2006, ITeC promoted the creation of iMat, a technological centre specifically designed for the development of new products and construction techniques, which has currently been integrated into Eurecat.

The substitution of the previous European Product Directive for the new 2011 Regulation has produced changes in the certification procedure and naming. As a result, ITeC now issues European Technical Assessments, provides advice for the CE marking and for the Performance Declarations and services for the Assessment and Verification of Constancy of Performance.

