

TEROTECS ACTIVITIES IN THE SECTOR OF FACILITY MANAGEMENT

Terotec is the "Laboratory for the Innovation of Urban and Real Estate Patrimony Maintenance and Management" (www.terotec.it), an Italian "association-laboratory" of national importance, having as its institutional aim the promotion, development and propagation of innovation in the field of the maintenance and management of urban and real estate patrimonies, developing for this aim services of research, experimentation, training, the study of new standards, advice, information and promotion. The promoting partners of Terotec are the top Associations and Companies of the sector in Italy.

The market sector of Facility Management (FM) is distinguished by complex characteristics of innovation, dynamism and embraces a variety of disciplines. These features, which are somewhat more marked in Italy with respect to other European countries, make it possible that the correct development of FM requires, before the necessary answers in terms of technological, management and organisational solutions ("problem solving"), indispensable concrete support and contributions in terms of methodo-logical-scientific, fact-finding, education, information and normative infrastructures ("problem setting").

This premise is at the basis of all the initiatives that Terotec has promoted, coordinated and realised since it was founded in 2002.

With the objective of giving tangible contributions in this direction, five innovative instruments are presented in which Terotec has played a key role as promoter and creator:

- **"CenTer", the first on web FM document centre;**
- **the "Facility Management Lexicon & Glossary";**
- **the UNI 11136 standard "Global Service for the maintenance of real estate patrimonies";**
- **the "Global Service Guidelines";**
- **"Censiform", the first census on the FM education offer.**

The document concerns the presentation and description of the above mentioned instrument for the purposes of giving sufficient publicity in the European context and of formulating possible scenarios of synergy with other institutions operating in the area of FM innovation.

1. "CenTer", the first on web FM document centre

What is CenTer?

"CenTer" is the first and until now the only on web document centre on the management and maintenance of real estate and urban patrimonies (Facility Management) realised in Italy and Europe.

The CenTer project was started by Terotec in 2004 and is an instrument/service aimed at the research, collection, analysis, systematisation and the redistribution of the national and international information and document patrimony on processes, models, services, technologies and innovation in the Facility Management culture and market.

CenTer is an innovative on web service given exclusively to Terotec partners and to date contains hundreds references to Conferences, Books, Articles, News, unpublished Documents, Internet Sites, Regulations and Standards, Specifications and Education/Professional Training Courses.

Context of reference

CenTer is closely linked to a new market context - Facility Management services for real estate and urban patrimonies - which over the last few years has been growing rapidly, but which however has not been matched by what has now become an indispensable and constant increase, consolidation and up-dating of the common basis of specialist knowledge of the sector.

In this ambivalent situation, the operators involved in the offer and demand have repeatedly expressed the need for a parallel development process of the sector in terms of information, knowledge and documentation so as to acquire the fundamental supports and contributions for the improvement of their own know-how and for a discipline that can be orientated towards their respective activities to the best advantage.

Methodological approach

Within this framework, the methodological approach that has been adopted for the design, realisation and the running of CenTer is modelled on the one used in the Anglo-Saxon world for "competitive intelligence" support, through the selection and transformation of the material collected in the different formats available and accessible (publications, papers, research, regulations and standards, articles, conference proceedings, internet sites, database etc.) in "systematised informative documents" that can be used directly via internet.

Operative development and user interface

CenTer has been developed by a special Terotec operative structure by means of the gradual development of two phases, respectively the design phase, the construction and experimental implementation (2004-2005), and the starting up phase, the running, updating and widening of the on web service (since 2006).

CenTers user interface, which can be accessed by a special link (www.center.terotec.it), is made up of a system of web pages to access the service, in ASP/HTML, by which the "systematised information documents" that are managed by an on web database and selected with the help of a special search engine for multi-parametric queries can be accessed.

Types of documents and consultation modality

The documents to be found in CenTer are related to nine specific areas of interest:

- Conferences: conference programmes; conference proceedings; papers in conference proceedings;
- Books: books; essays/chapters in books;
- Articles;
- News;
- Unpublished documents;
- Internet sites;
- Regulations and Standards: voluntary regulations; compulsory regulations;
- Specifications;
- Education/professional courses: university courses; extra-university courses.

Once identified, selected and collected by Terotec, the documents (published or unpublished) of scientific and/or common interest are reviewed, systematised and reproduced (when allowed) by means of special records that can be consulted at three different consultation levels:

- start-up consultation (synthetic list with essential information coordinates);
- basic consultation (file with all the information coordinates);
- in-depth consultation (file with information coordinates + abstract + attachment/index and/or extract and/or whole document).

- CenTer Responsible: Arch. Manuele Balducci
- CenTer Database Coordinator: Arch. J. Stefano Bondesan
- Scientific Supervisor: Prof. Arch. Silvano Curcio

2. The "Facility Management Lexicon"

What is the Facility Management Lexicon?

In the rapidly expanding and highly dynamic and complex market of the services of integrated management and maintenance of public and private real estate patrimonies, the "Facility Management Lexicon", promoted by Terotec and edited by S. Curcio and published by Il Sole 24 Ore, represents an important instrument for the promotion, development and diffusion of the culture and innovation of the sector, the formulation of a common terminological and lexical basis and for the standardisation of the technical-specialist language.

Contents and users

The lexicon is the result of an articulated ad hoc project involving the leading Italian experts in the sector (representatives of public clients, services companies, universities, scientific research, standardisation bodies), and is divided up into five closely related and complementary sections:

- the "Glossary of Terminology" (over 250 definitions taken from Italian and foreign literature and sets of regulations and standards concerning the sector);
- the "thematic concepts" (26 key concepts given in detail by means of monographic essays);
- "normative list" (an updated, annotated and edited list of national legislative regulations and technical standards);
- the "Bibliographical list" (a series of "bibliographical concepts" with annotated national and foreign references);
- the "market surveys" (three CRESME reports on the Facility Management market in Italy and Europe).

The potential users are all those who are interested in the market of the services of integrated real estate management and maintenance: public and private clients, services companies, building companies, consultancy companies, investment companies, professionals and technicians, researchers, university lecturers and students.

3. The UNI 11136 standard "Global Service for the maintenance of real estate patrimonies"

What is the Global Service Standard?

The result of two years work, the UNI 11136 standard "Global Service for the maintenance of real estate patrimonies", published in September 2004, is an articulated normative initiative promoted and coordinated by Terotec (coordinator of national work group, Prof. Silvano Curcio) in the context of the SC3 of the UNI (president: Prof. Claudio Molinari), with the active participation of experts in the public clients sector (in particular the Department of Instrumental Resources of the Presidency of the Council of Ministers, the Municipality of Bologna, the Municipality of Modena and the Italian Postal Services), of companies working in the Facility Management sector (among which the associations and companies in partnership with Terotec) and of the university world (in particular the Polytechnic of Milan, the University of Brescia, the Polytechnic of Turin and the IUAV University of Venice).

Contents and users

The 11136 standard represents a fundamental "guideline" for the definition of the Global Service maintenance processes aimed at public and private real estate patrimonies, for the standardisation of these processes according to a common basis of methodological-operational reference, both on the part of the client and the contractor.

The standard is centred on the following key-phases of the Global Service process:

- the phase of the preliminary definition (by the client);
- the phase of the definition of the request for an offer (by the client);
- the phase of the definition of the project offer (by the potential contractor).

The standard represents the first guideline on Global Service passed at a European level and, together with the other standards produced by the SC3 of the UNI, places Italy at the frontline in the field of the technical standardisation of the sector.

The users include all the operators involved in commissions and the companies interested in a shared system for the regulation of the Global Service market.

4. The "Global Service Guidelines"

What are the Global Service Guidelines?

In Italy the enormous increase in the new market of the Facility Management sector is accompanied by today's boom in Global Service, the innovative system of an integrated contract for the services of management and maintenance based on "results", which over the last few years has been increasingly used by public and private clients for their real estate and urban patrimonies.

However, the clients (especially the public ones) and companies have not yet developed and metabolised an adequate and widespread level of maturity/awareness in their approach to the complex processes of planning, running and control involved in Global Service (in fact the most extreme form of externalisation of Facility Management services).

In this particular market context, besides the promotion and the coordination of the "UNI 11136 Standard", Terotec has also promoted the publication of the volume for "Il Sole 24 Ore" "Global Service. Guidelines for the externalisation of Facility Management services for real estate and urban patrimonies".

The Global Service "guidelines" promoted by Terotec represent a methodological and operational instrument for an ad hoc, fully conscious approach to the complex processes of planning, running and control involved in this new and increasingly widespread form of externalisation of the integrated services of management and maintenance of real estate and urban patrimonies, in the context of the articulated range of Facility Management services.

Contents and users

The volume is the result of an articulated ad hoc project involving the leading Italian experts in the sector (representatives of public clients, services companies, universities, scientific research, standardisation bodies), and is divided up into three closely related and complementary sections:

- the "Global Service Focus", a collection of monographic papers which clearly set out the Global Service "phenomenon", analysing its most important characteristics/focal points/problems;
- the "Global Service Case Studies", the professional experience of public clients in important Global Service operations carried out on real estate and urban patrimonies;
- the "Global Service Specifications", the first systematic collection of technical specifications (the same used for the Global Service operation in the "Case Study") which is directly and entirely accessible to operators and experts in the sector.

The potential users are all those who are interested in the market of the services of integrated real estate management and maintenance: public and private clients, services companies, building companies, consultancy companies, investment companies, professionals and technicians, researchers, university lecturers and students.

5. "Censiform", the first census on the FM education offer

What is Censiform?

Both the demand and offer of services in the sector have for some time now been highlighting the problem of the lack/absence of specific figures and technical and professional competences dedicated to the management of technical-running and maintenance services.

This, especially recently, has led to a progressive spread of initiatives for professional training in the sector of various types and quality (degree courses, specialization courses, 1st and 2nd level masters, workshops etc.) promoted by universities and extra-university structures.

In this context, "Censiform" is the first census and monitoring service of the national and European education offer in the sector of the management and maintenance of real estate and urban patrimonies, realized by Terotec in parallel with "Terotec & University"

Operational development

Terotec records and monitors the education/professional training initiatives in the sector both at a university level (public and private), and at an extra-university level (professional training establishments, related associations etc.) by means of:

- special "Education and professional training Reports", containing comments on the quality-quantitative features and on the lines of development of the national and European offer in the sector;
- the "Education and professional training courses" sector of "CenTer, Terotec's on web Document Centre", containing standardized lists of "detailed data files" and "didactic-training syllabuses" relative to the single specific education initiatives in the census.

- Responsible: Arch. Manuele Balducci
- Scientific supervisors: Prof. Arch. Silvano Curcio, Prof. Arch. Claudio Molinari.