



FAC
26,13/14

490

Received December 2007
Accepted July 2008

The origin and constitution of facilities management as an integrated corporate function

Per Anker Jensen

*Department of Management Engineering,
Technical University of Denmark, Lyngby, Denmark*

Abstract

Purpose – To understand how facilities management (FM) has evolved over time in a complex public corporation from internal functions of building operation and building client and the related service functions to become an integrated corporate function.

Design/methodology/approach – The paper is based on results from a research project on space strategies and building values, which included a major longitudinal case study of the development of facilities for the Danish Broadcasting Corporation (DR) over time. The research presented here included literature studies, archive studies and an interview survey.

Findings – The analysis shows that the building related and service related functions have developed separately for a long period starting at operational level and with the tactical and strategic levels being introduced at later stages, when the organisation had grown considerable. Only within the last 20 years have integrations occurred starting with a vertical integration of the operational, tactical and strategic levels separately for the building related and service related functions. Later on a horizontal integration of building related and service related functions takes place and a fully integrated corporate Facilities Management function are established.

Research limitations/implications – The paper presents empirical evidence of the historical development of FM from one case and provides a deeper understanding of the integration processes that are crucial to FM and which can be an inspirational basis for further research on the organisation of FM.

Practical implications – The results provides an insight in principles for the organisation of FM, which is important for managers within FM.

Originality/value – This is probably the first in depth study of the origin and constitution of FM in a complex public corporation.

Keywords Facilities, Services, Strategic management, Integration, Denmark

Paper type Research paper

Introduction

This paper deals with the constitution of facilities management (FM) as an integrated corporate function in a cultural diverse and technological complex public corporation. It looks at how the different functions, which today constitutes a corporate FM function, have originated and developed over time; The purpose is to understand the origin and constitution of FM and the reasons and circumstances behind this historical development of FM.

The paper is based on a longitudinal case study of DR (Danish Broadcasting Corporation) during the 80 years of the corporation's existence. DR is an independent but politically controlled public service institution. The focus is the origin and development of the internal functions of building operation and building clients and the related service functions have developed over time to become an integrated corporate FM function. In the analysis distinctions are made on one side between a



horizontal division in building related and service related functions and on the other side between a vertical division in operational, tactical and strategic functions. The constitution of an integrated corporate FM function involves the integration between those distinct and former separated functions.

The research was part of a project on space strategies and building values, which involved a major case study of the development of facilities for DR. The paper starts with a description of the research methods applied and the research aim, followed by a presentation of theory in relation to the constitution of FM. Afterward the case study is presented as well as the major findings and finally the results are discussed and conclusions are drawn.

Research methods and aim

The data collected are based on literature studies, archive research and an interview survey. The literature studies has included theoretical literature on FM organisation, literature on the historical development of FM and Corporate Real Estate (CRE), and publications related to DR's history from 1925 and onwards including 80 years of annual reports. The archive research have supplemented the empirical literature studies and have include studies of archives at DR's internal library and archive as well as archives on some of DR's major building projects at the Danish National Archive (Rigsarkivet).

The interview survey has involved 12 interviews with four former managers in DR and eight former consultants for DR. The former managers in DR included managers at four different levels: a finance director, the head of building coordination and building administration, the head of the administration office and a head of a machine department. The former consultants included three architects from two different companies and five engineers from two different companies.

The interviews were semi-structured with a duration of approx. two hours and took place from April to November 2005. The general interview guide had the following seven groups of questions:

- (1) The interview person (background, relation to DR's buildings, etc.).
- (2) Generally about DR's building client and building operational functions (distribution of responsibilities, competences, changes over time, etc.).
- (3) Internal management of major building projects (organisation, relations to building operational and technological functions, staff involvement, differences between projects, etc.).
- (4) External collaboration on major building projects (choice of consultants, project organisation, briefing procedure, internal and external competences, conflicts, project changes, etc.).
- (5) External collaborations in relation to building operation (functions in-house/external, distribution of internal and external competences in different areas, choice and management of external partners, correlations to building projects, changes over time, etc.).
- (6) Characteristics of DR's building (requirements from broadcasting production and technology, architecture, quality, image, building innovations, influential persons and factors, etc.).
- (7) Other sources (proposal of written source material and other persons to interview).

The general interview guide was adapted according to the position of the specific interviewee. Minutes were produced from each interview and sent to the interviewee for comments and approval. The preliminary results of the research projects were sent to the interviewees for comments and discussed with them at a seminar.

The research is based on a huge amount of empirical material. This paper only includes a brief summary of this. In the analysis, the theoretical distinctions between building and service related functions as well as operational, tactical and strategic functions have been applied to structure the data and define different phases in the historical development.

The research is an explorative case study and aims to contribute to the development of a theoretical and empirical understanding of the origin and constitution of FM as an integrated corporate function.

Theory on constitution of FM

There are only a few other in depth studies of the origin and constitution of FM and not much theoretical literature to support such studies. An anthology on *Workplace Strategy and Facilities Management – Building in Value* (Best *et al.*, 2003) includes in part 1 two chapters by Ilfryn Price on “Facilities management as an emergent discipline” (Price, 2003a) and “The development of facilities management” (Price, 2003b). However, they are mainly concerned with the history of the term FM, which is dated to around 1970, and the chapters investigate the academic and professional development since then mostly based on secondary sources, but they do not include an investigation of the origin of the practices which has come to constitute what we today call FM.

Bröchner (2001) has made an interesting historical study of FM about how the Roman empire managed activities related to facilities although no unified concept of FM or single profession of facilities managers existed at the time. The study provides an interesting parallel about the use of outsourcing and contracts in different historic periods but it does not provide an understanding of the constitution of today’s corporate FM functions.

In the related field of CRE there are some examples of investigations of the historical development (Jorof *et al.* 1993, Dewulf *et al.*, 2006, Krumm, 1993, 2001). These include the PhD thesis of Peter J.M.M. Krumm, who has investigated the development over time in CRE in Dutch multinational corporations. One of the general findings is, that the management of CRE in the early phases of typically family run companies was carried out by the owners, but most of today’s Dutch multinational corporations established professional CRE units around the 1920s after the companies had expanded to become large corporations. The main task of CRE was to acquire sufficient building space to accommodate the growth of the corporation both nationally and increasingly also internationally.

There are some attempts to explain why FM has developed in a specific period of time. Becker (1990) points to global competition, development in IT, increasing cost of office space and quality defects as well as increased expectations from staff as the reasons for the development of FM as a new discipline. The theories of Porter (1985) on value chain and distinctions between primary and support functions and Hamel and Prahalad’s (1994) concept of core competence is often seen as important management theories driving companies to focus on their core business and outsource support functions like FM.

From military thinking and general management theory it has become commonplace to distinguish between operational, tactical and strategic levels of FM. The new European standard on FM, Terms and definitions, from 2006 includes a model of FM in an appendix with these levels. It is explained that they are levels of interaction between FM and the primary processes in order to synchronize FM provisions with the mission and vision of the organisation and its objectives. At the strategic level it is in order to achieve the objectives of the organisation in the long-term and at the strategic level it is to implement the strategic objectives in the medium-term. At the operational level it is to create the required environment to the end-users on a day-to-day basis.

According to Barrett and Baldry (2003), it is crucial that FM and corporate strategic management mesh and the aim of strategic FM is to achieve a strategic fit between core business needs and the provision of FM. With adaptation from Barrett and Baldry (2003) and Becker (1990) four possible relationships between FM and corporate strategic planning can be described:

- (1) Integrated strategic FM with a fully integrated relationship, where a dynamic, ongoing dialogue – both formal and informal – takes place between the corporate strategic planning and strategic FM planning.
- (2) Proactive strategic FM with a two-way relationship, where the strategic planning takes place in parallel and interdependent at corporate level and in FM with mutual exchange of information.
- (3) Reactive strategic FM with a one-way relationship, where FM reacts but does not influence the corporations' strategic initiatives.
- (4) Passive non-strategic FM with only an administrative relationship, where FM provides support but is not involved in the strategic planning process.

Jensen (2007) concludes in a study of the organisational relationship between support functions and core business, that the relationship between core business and strategic support is identified as primarily a general business orientation, while the relationship between core business and non-strategic functions is identified as mainly a specific customer orientation. It is concluded that a market relationship – internally or externally – is appropriate for non-strategic functions, while it is important to create a kind of coalition between the core business and the strategic support function.

Within FM it is common to distinguish between building related and service related function. Another similar distinction is between hard FM and soft FM. The new European FM standard expresses that the field of FM can be grouped around client demands, which can be summarized under two main headings – the first being Space and Infrastructure and the second being People and Organisation. This distinction resembles the distinction between building and service related functions.

Case study findings

The results of the analyses are divided in the period before and after 1993. That year the integrated FM department was established.

Figure 1 gives a summary of the development of the functions in DR during the period from 1928 to 1993, which are related to FM of today. The explanation of the table starts at the bottom and is mostly chronological.

Year	1928	1940	1964	1970	1974	1988	1993
Building Committee	Established by the Danish Government for Royal Theatre building, Radio House and TV City						
Internal Client				Building Coordination			
Integrated Management						Building Administration	
Strategic			Administration Office	Building Coordination		Planning and Execution Unit	
Tactical				Administration Office			
Operational		Machine department				Operational Units	
Various Services	Handling Office etc.					Service Administration	

Figure 1.
FM-related functions in
DR from 1928 to 1993

During the first years after the start in 1925 DR was located in various rented places around Copenhagen and the organisation was very small. The service staff at that time was limited to two messengers (the beginning of a Handling Office) and one telephonist in the evenings. Soon after a new building was built next to the Royal Theatre including a new hall for the theatre and the remaining space designated for DR was occupied with DR as owner in 1931. This created a need for more service staff with one gatekeeper, two orchestra assistants, one caretaker and to the technical installations one boilerman and one assistant. DR has never had its own cleaning staff and the caretaker was responsible for the management of cleaning provided by an external company.

The decision on the building project was taken by the Danish government based on a proposal from an architect. The government established a building committee to manage the building project, and the committee was chaired by an administrative head of a ministry. Although DR was represented in the committee, DR did not have much influence on the project. The new building turned out to be a major scandal as it was too small for DR's expanding organisation and the acoustic insulation between the theatre hall and the radio studios was insufficient.

After a few years it was decided to build Radio House just outside the old city centre in Copenhagen and a new building committee was established by the government, but this time DR's chairman of the board also became chairman of the building committee and DR had much stronger control of this project. Radio House was occupied by the beginning of World War II in 1940-1941 and caused a strong increase in technical staff

for building operation with four persons including an engineer. DR also employed a car mechanic in 1938 to maintain the vehicles.

In 1949 the total staff in DR was 234 people and 96 of those were in DR's orchestras. The service staff included 16 people with nine service related (three office assistants, three messengers, two gatekeepers and one watchman), four building related (three engineers and one stoker) and three car mechanics. Radio House was planned to be heated by oil, but because of the war it was changed to turf and coal. In the 1950s this was changed to district heating with steam during a major building extension.

The building related function became a separate Machine Department in 1951. In the 1960s a separate Machine department was established in the new TV City in a suburb north of Copenhagen, and another was established in Jutland when a combined Radio and TV-centre was built in Århus in the 1970s.

DR did not have any separate functions on tactical or strategic level before the early 1960s. At that time DR's organisation had increased considerable to about 1.000 people after having started a second radio channel and not least TV broadcasting during the 1950s. Because of this expansion a special rationalisation unit from the Ministry of Finance was given the task to analyse DR's internal processes and organisation. The general recommendation was a need to delegate and decentralize the organisation.

It was also recommended to establish a new department responsible for activities related to buildings, including maintenance and acquisition of furniture, etc. This new Administration Office was established in 1964 and a manager with a background as TV technician in DR was appointed head of the office. Because of an extreme expansion in DR in the 1960s caused by the big success of TV broadcasting the office got a lot of new tasks. Among these were renting offices and to establish temporary buildings to create workspace quickly enough to accommodate the needs of the expanding organisation. The Administration Office was responsible for tactical and strategic building related activities, but it also expanded in service-related activities. It had the responsibility for cleaning and took over the responsibility for office supplies, copying machines, internal printing centre, relocation of staff, etc. Earlier DR's staff association had been responsible for a staff canteen in Radio House, but the responsibility for canteens in all DR's main centres was passed over to the Administration Office.

The Administration Office was also involved in developing new buildings in Jutland which were needed because of DR's policy to be present around Denmark, but the office was not directly involved in the major new TV City development. Like for earlier building projects, a building committee was established by the government to manage this huge development. In 1972, the government changed policy on management of state building projects, and this meant that DR got the direct responsibility for their building project.

Around the same time DR had established an internal building client function called the Building Coordination. The new function took over the responsibility for all new buildings in DR and was also responsible for a long-term planning of DR's real estate. As such it was a truly strategic building related function. It meant that the Administration Office lost its involvements on the strategic level.

This Building Coordination became part of a unit for planning and rationalisation placed at corporate strategic level under the director general. The reason for creating the Building Coordination was to align the building planning – from identification of needs to beginning of construction – with the long-term corporate planning. The head

of the Building Coordination was educated as MSc in electronic engineering and had been managing a TV technical department as well as been involved in the TV City development from the beginning.

This division of responsibility between the Building Committee and the Administration Office resulted in some rivalry and competition between the units. Both units worked together with the same architects, but the architectural firm had to have different contact persons to the two units in DR.

A major change in the organisation occurred in 1988 which coincided with the time DR lost its monopoly on broadcasting national TV in Denmark. This had been on the way for some years and the expansion of DR had stopped in the same period. The change was partly triggered by the head of the Administration Office reaching the retirement age. The result was the creation of two separate departments for building and service related functions called Building Administration and Service Administration.

The former organisation of the building related activities with separate functions on operational, tactical and strategic level was changed to the united and integrated Building Administration. This new department included the three former Machine Departments, which were changed to Operational Units with upgrading of the professional and managerial competences. The Administration Office was split into the Building Administration and Service Administration. In the Building Administration a new Planning and Execution Unit was established on strategic and tactical level with responsibility for real estate planning, building projects, space management and planned maintenance and this unit was upgraded by supplementing and replacing former staff with a general administrative background with three building engineers, one architect and two technical assistants. The Service Administration was formed by the former Handling Office and the other part of the Administration Office.

This development for the first time introduced specific positions to manage the integration of several related functions on different levels. This position is in Figure 1 called Integrated Management. In the Building Administration the former head of the Building Coordination was appointed as manager and in the Service Administration the former deputy manager of the Administration Office was appointed as manager. Both managers were supplemented by an administrative secretariat.

Table I gives a summary of the development of DR functions related to FM during the period from 1993 to 2005. The explanation of the table goes from the left to the right.

The years after losing the monopoly on national TV turned out to be challenging for DR. The new TV2 established by the Danish government as a separate and competing TV station partly based on income from commercials became very successful and managed to get more TV viewers than DR's TV. This caused a major restructuring of DR's organisation in 1993 and involved an identification of the core business and support functions in DR. The number of directors under the director general was reduced from five to two, leaving only a director for TV and a director for radio while the former directors for economy, staff and technology were abolished.

As part of this process a new shared support function called DR Service was established which integrated the former Building Administration and Service Administration. Again a specific position for managing the integration was established with the title of service manager. An externally recruited person was appointed as service manager and supplemented by an administrative secretariat. The former decentralized Operational Units were kept under the new name Service

Table I.

FM related functions
in DR from 1993 to 2005

Year	1993	1997	1999	2005
Building committee			Established by DR's board for DR city	
Internal client			Client organisation for DR city	
Integrated management	DR service	DR service	DR internal service	DR service and administration (SA)
Strategic	DR real estate administration	DR real estate	DR buildings	DR SA real estate
Tactical		Service units		DR SA estate operation
Operational	Service units		Service units	Distribution, Reception. etc.
Various services	Distribution, reception, etc.	Distribution, reception, etc.	Distribution, reception, etc.	

Units together with various specialized service units for Distribution, Reception, Catering and Procurement. The former Planning and Execution Unit was changed to an extended Real Estate Administration on strategic and tactical level.

The reorganisation in 1993 included the introduction of an internal market for a number of service provisions. Catering in two out of three canteens were outsourced after an EU tendering process. Cleaning was also put out for EU tender. Although cleaning always had been provided by external companies, the provision had never before been in a real competition.

In 1997 a minor adjustment of the organisation took place. This involved changing DR Real Estate Administration to a clear strategic function called DR Real Estate and to upgrade the service units as part of preparing them for possible outsourcing.

A major change occurred in 1999 when DR decided to start a relocation of all functions in Copenhagen to a new headquarters and media centre called DR City in a new town development in Copenhagen. An internal client function was created as a separate unit at strategic level constituted by the former head of DR Real Estate and two others from this unit. DR's board established an internal building committee with members from the board and the director general and the resource director. The remaining part of FM was reorganized as DR Internal Service under a new service manager.

In 2005, the organisation was adjusted as part of a general reorganisation of the support function as a preparation for the relocation in 2006. As part of this process a major outsourcing of service functions was carried out.

Discussion

In the editorial introduction to Price (2003a) it is stated that FM originates from the function as caretaker. The case study presented here provides evidence that this is very much a simplification in relation to a complex public corporation. FM on one side originates from a diverse number of operational functions, for instance the building or technical related functions as engineers, boiler man, stoker, and car mechanics and the service related functions as telephonist, office assistants, messengers, orchestra assistants, gatekeeper and watchman. On the other side FM originates from the building client and corporate real estate functions, which from the outset was carried out by building committees established by the government.

It is remarkable how the first group of functions develop over time from being purely operational towards becoming steadily more important on tactical and strategic levels. This is particular the case for the building related functions. From 1970 to 1988 there even is a situation where DR has separate functions on operational, tactical and strategic level. This can be seen a strong vertical division.

This finished in 1988 with the establishment of the Building Administration and the Service Administration which united and integrated the different building related and service related functions, respectively. This coincided with the end of DR monopoly on national TV broadcasting and DR's long period of almost constant expansion had stopped. The new organisation in 1988 involved a vertical integration of functions on operational, tactical and strategic level and introduced for the first time a specific position for integration management. This development could be seen as an aim to create more professional organisations.

The separation of the building related and service related functions that existed from the beginning was reinforced in 1988 and can similarly be seen as a strong horizontal division. These developments and divisions are illustrated in Figure 2.

The main change occurred when the integrated corporate FM function was established in 1993. This involved a horizontal integration and the continuation of the vertical integration from 1988 supplemented by a new integrating management function with an externally recruited service manager. The background for this was a overall change of the corporate organisation into core business and support functions and the aim was to make the support functions more customer oriented and to reduce cost, for instance by outsourcing. This situation is illustrated in Figure 3.

The reason for establishing the first internal building client function in DR in 1970 was to align the building planning with the corporate long-term planning, and the new function was placed as part of a strategic corporate unit. This was a clear example of integrated strategic FM and took place during DR's long-period of expansion. When the expansion stopped this integrated relation was replaced by a mostly one-way relation and change to reactive strategic FM.

During the planning of the relocation and the new headquarters DR City from 1999 the relation has changed again. Particularly in the early stage of the planning a very integrated relation was established. When the decision for the new building projects was taken, DR's board of director's launched a comprehensive strategic corporate

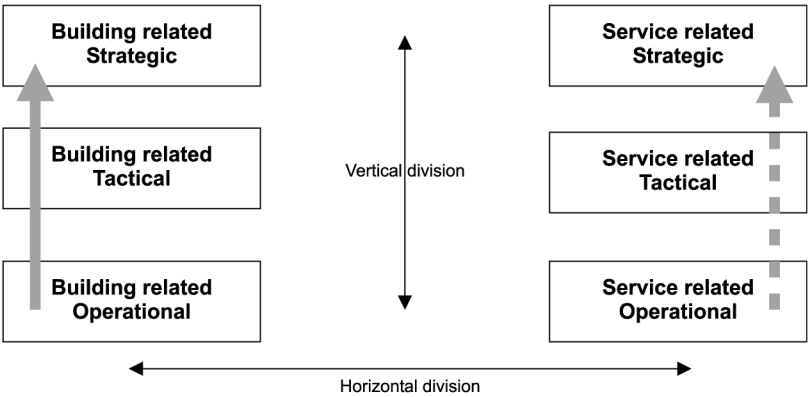


Figure 2.
The development in
building and service
related functions
1928-1988

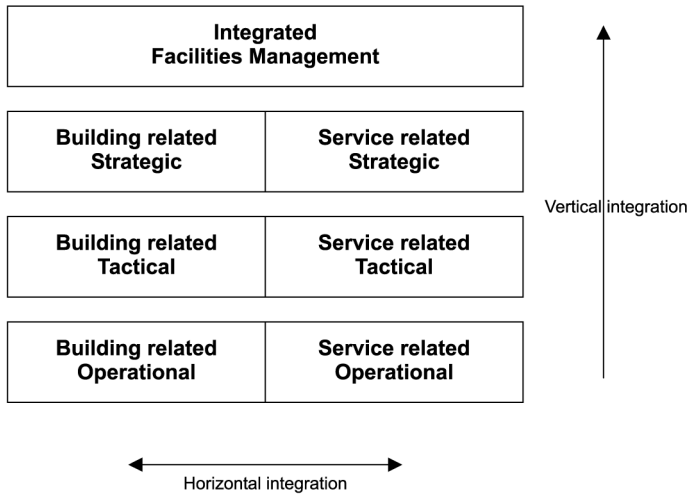


Figure 3.
The integrated corporate
FM function

planning process – the so-called Five Finger Plan – and it involved a strategic briefing of the building project together with projects about DR's future products, production, technology and organisation. This was again truly integrated strategic FM. Later during the building process the relation became more like a two-way relation with proactive strategic FM. This caused some problems with the timely coordination of the changes in DR's production and organisation in relation to clarify the needs for the interior layout planning for the building project.

Conclusion

The development in DR shows that FM functions both originate from a number of diverse operational support functions and from the strategic functions as building client. Tactical support functions gradually emerged with the growth of the organisation and after a huge expansion the function as building client changed from being carried out directly by the owners to become the responsibility of a professional internal building client function. Later on a vertical integration was made of the building related and service related functions to make the organisation more coherent and professional. The last step to create and integrated corporate FM functions was the horizontal integration of the building and the service related functions and establishing an integrating management position as service manager in 1993. This took place as part of an overall change of the corporate organisation in core business and support. The integrated FM function was established to make the organisation more customer oriented and to reduce cost for instance by outsourcing.

The development clearly shows the need for a coherent strategic planning of the development of the corporation and of the corporate facilities. This is important both for the corporation to achieve its objectives and for the FM function to act proactive and professional. This implies that building client function in general should be an integrated part of the FM function. In the case of a major relocation it can be appropriate for managerial reason to establish a separate, temporary client function, but in that case it is important to create strong relations between the client organisation and the FM function.

References

- Barrett, P. and Baldry, D. (2003), *Facilities Management – Towards Best Practice*, Blackwell Publishing, London.
- Becker, F. (1990), *The Total Workplace – Facilities Management and the Elastic Organization*, Van Nostrand Reinhold, NY.
- Best, R., Langston, C. and de Valence, G. (Eds) (2003), *Workplace Strategies and Facility Management – Building in Value*, Butterworth Heinemann, Oxford.
- Bröchner, J. (2001), *Facilities Management 2000 Years Ago, Proceedings from World Workplace Europe 11-13 June 2001. Glasgow.*
- Dewulf, G., Krumm, P. and De Jonge, H. (Eds) (2006), *Successful Corporate Real Estate Strategies*, Arko Publishers, Nieuwegein.
- Hamel, G. and Prahalad, C.K. (1994), *Competing for the Future*, Harvard Business Scholl Press, Boston, MA.
- Jensen, P.A. (2007), *The Organisational Relationships between Support Functions and Core Business, Proceedings from 6th EuroFM Research Symposium. EFMC 26-27. June 2007. Zürich.*
- Joroff, M., Louargand, M., Lambert, S. and Becker, F. (1993), “Strategic Management of the Fifth Resource: Corporate Real Estate”, Report No. 49 Industrial Development Research Foundation.
- Krumm, P.J.M.M. (1999), *Corporate Real Estate Management in Multinational Corporations – A Comparative Analysis of Dutch Corporations*, Arko Publishers, Nieuwegein.
- Krumm, P.J.M.M. (2001), “History of Real Estate Management from a Corporate Perspective”, *Facilities*, Vol. 19 Nos 7/8, pp. 276-8.
- Porter, M.E. (1985), *Competitive Advantage – Creating and Sustaining Superior Performance*, The Free Press, New York, NY.
- Price, I. (2003a), “Facility management as an emergent discipline”, Chapter 3 in Best, R., Langston, C. and de Valence, G. (Eds) (2003), *Workplace Strategies and Facility Management – Building in Value*, Butterworth Heinemann, Oxford.
- Price, I. (2003b), “The development of facility management”, Chapter 4 in Best, R., Langston, C. and de Valence, G. (Eds) (2003), *Workplace Strategies and Facility Management – Building in Value*, Butterworth Heinemann, Oxford.

Further reading

- CEN (2006), “Management – terms and definitions”, *EN*, p. 15221.
- Jensen, P.A. (2006), *Ejendomsstrategier og bygningsværdier (Real Estate Strategies and Building Values)*, Research report R-138, BYG-DTU.

About the author

Per Anker Jensen hold the degrees of MSc in Civil Engineering, PhD and MBA. I am an Associate Professor at the Technical University of Denmark with Facilities Management as my primary field of research and teaching. Since New Year 2008 I am director of a new research centre called Centre for Facilities Management (CFM) at the Technical University of Denmark and financial supported by the private Danish foundation Realdania. Besides, I am member of the board of EuroFM and chairman of EuroFM's Research Network Group. Per Anker Jensen can be contacted at: pje@byg.dtu.dk