

REPORT EuroFM RESEARCH WORKSHOP "FLEXIBILITY - WORKSPACE - OFFICE BUILDINGS"



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- What is the business need for flexibility?
- What kind of flexibility is required?

Themes:

- Adaptability as a strategic approach
- Flexibility in production workspace
- Generality - flexibility in office buildings
- Flexibility as a business strategy
- Benchmarking - FM services
- Flexible office systems
- Development of office space in Copenhagen





Euro FM Network

Introduction

Flexibility related to workspace has been on our agenda for a long time, and research and development projects have been carried out, focusing on either the physical flexibility of buildings and floor plans, or functional flexibility, as seen from the organisational level and according to business needs. We have also been touching on the fact that greater financial flexibility is needed to cope with the rapid changes in real estate and facilities management. And when we act on new requirements for life cycle planning and management, related to economical and environmental issues, there is a need for greater knowledge, both in theory and practice, related to workspace flexibility.

Euro FM has previously been in charge of the Work Space project, where flexibility in production facilities was one subject. This project is now in its final stages, but the network behind the project will remain, and some of the people involved will start a new network project on Flexibility – Production Facilities. This was part of the reason for setting up this workshop. Another factor was that we in Scandinavia have been working on several research projects on adaptability, flexibility and generality issues related to office buildings, and we have good examples of implementation of new office solutions in practice.



DFM- Danish Facilities Management Network

This formed the program, where we also had presentations about the “booming office market” in the greater Copenhagen area.

The Research workshop was arranged in connection with the EuroFM network member meeting the following day. We would like to thank DFM, with chairman Ole Emil Malmström, who kindly agreed to host the workshop, and co-operated in the planning of the workshop. We want to thank all speakers for their presentations, and all participants for attending the workshop. We would also like to thank SES -Palaces and Properties Agency- for inviting us to their main offices, remodelled into activity based open workspaces. Karen Mosbech and her colleagues gave us an inspiring presentation about the challenging process of going from an old organisation into a dynamic new way of working.



Center for Real Estate and Facilities Management

The EuroFM Research Network Group aims to arrange one or two workshops/ seminars annually, in connection with conferences or member meetings in different countries.

A summary of the goals and task activities for the Research Network Group is found in the appendix.

The work has been supported by The Research Council of Norway, under the programme: NIN - National Information Networks.

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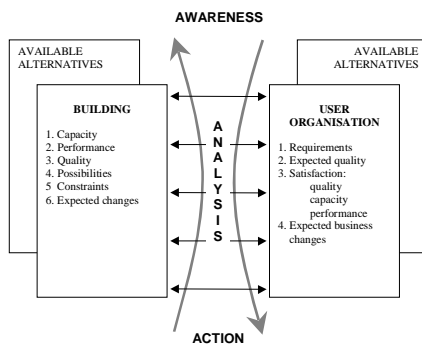
A Strategic Approach to Adaptability

Siri Hunnes Blakstad, PhD student, NTNU, Trondheim, Norway

The main message of the presentation is that there is a relationship between buildings and user organisations, and that, due to changes over time, there is a mismatch between what organisations need and what buildings can provide. A Strategic Approach is suggested as one way of managing this mismatch. The Strategic Approach is based on a strategic decision-making process.

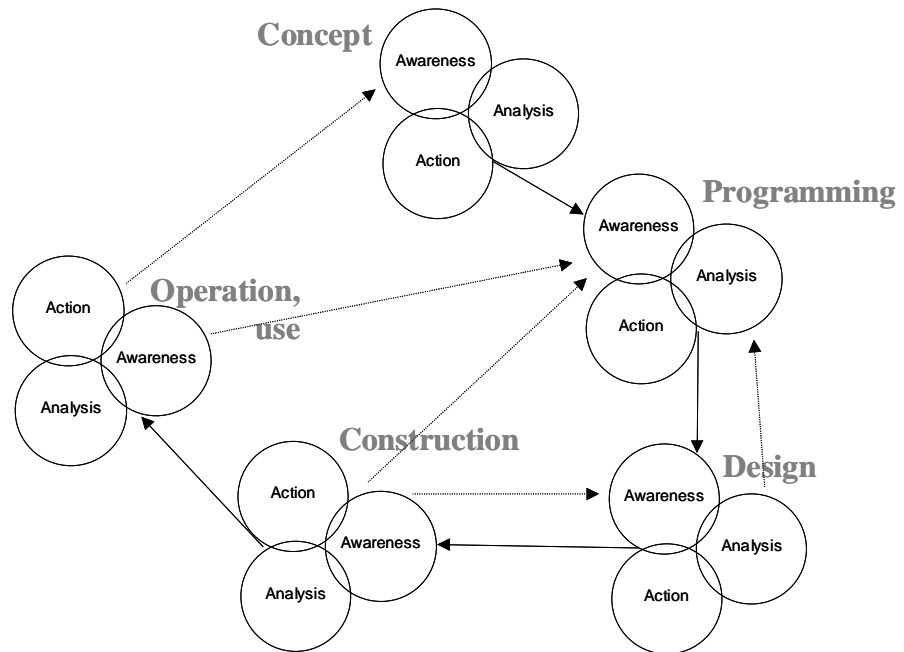
Office work has changed during the last decade, from small offices to large open plan offices, landscapes, cellular offices, and combi-offices. Today we are facing a variety of possible solutions, and the shifting trends and requirements remind us that we have to consider how different solutions can be accommodated within the office building. This means that the buildings must be able to adapt to changing needs and trends.

Adaptability is described as the ability to change, responding to internal or external changes; in the process, in the building, in the use of a building, in contracts, and in finance. Adaptability is the capacity of answering unexpected changes, while flexibility is described as the possibilities of change within a limited set of alternatives. Different ways of enhancing physical adaptability in the building are presented: Multi-functionality, flexibility, partitionability, and extendibility.



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The Strategic Approach in the building's life cycle



The Strategic Approach to adaptability is presented and exemplified through the different phases of the building's life cycle and in the management of the mismatch. One tool; layering, is described in more detail. The last part of the presentation presents four cases and the main issues related to adaptability in those cases.

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Production workspace – improving the quality of production via workspace design.

Keith Alexander, professor, CFM, Salford University, UK



The project – Production Workspace – has been the largest research and development project carried out by Euro FM, and is now in its final stage. The project was initiated in 1993, and has gone through an exploratory phase during 1996-1997 and through implementation in 1997-2000. The European Community under the Industrial and Materials Technology Program (Brite-Euram III) has financed the project.

The project network consists of 13 partners from four countries; the Euro FM network, eight industrial partners and four academic partners. The network of companies that has joined it will continue the co-operation even after the closure of the project.

The objectives for the project has been to achieve a better understanding of how production workspace decisions are currently made in European industry, and to produce an outline of a general workspace decisions model. It has also been a goal to provide the industrial partners with methods for production workspace audits for their existing space, as well as introducing facilities management ideas and techniques into production workspace decisions.

The focus in the project has been put into organisation and production in order to achieve better workspace. All the partners in the network have gone through smaller or bigger organisational changes throughout the project period. This has been both structural changes within the organisation as well as an organisational transformation.

Gaining flexibility is one result of the workspace project. The flexibility can be divided into three different kinds.

- The technical flexibility handles the equipment.
- The organisational flexibility.
- The building flexibility handles the physical workspace.

For an industrial organisation it is important to ask themselves two major questions about flexibility;

- What is the business' need for flexibility?
- What kinds of flexibility are required?

Altogether 11 reports from the project are published by Arko Publishers on the different case studies.

Information:

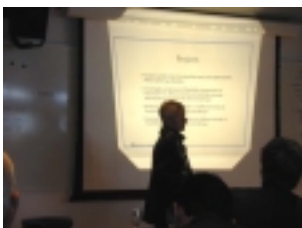
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Generality – flexibility in office buildings.

Kirsten Arge, senior researcher, Norwegian Building Research Institute, (NBI)



NBI has been working with office buildings and flexibility for the last three years in a strategic research project. The PhD work by Siri H. Blakstad has been part of this project.

The “Generality – flexibility” project means flexibility issues down to practical approaches. A group of public and private companies from real estate and construction, plus the Norwegian Research Council, finance the project.



The main objective of the project is to develop a model for a comprehensive and systematic assessment of functional, environmental and economical effects of resources (money) invested into making buildings flexible. In this work the focus is on;

- Physical flexibility – the layout of buildings
- Functional flexibility – what kind of activities are going to be supported
- Financial flexibility – cost/ benefits for different solutions

(Ref. functional flexibility: Virginia Gibson – University of Reading, UK.)

The activities/ outputs are:

1. A catalogue of different properties with principal layouts on different levels of investments in generality/ flexibility. The catalogue will be used as a basis for analysing costs and benefits for different levels, and for analysing what kind of flexibility is needed by different organisations and companies.

2. Case studies together with different clients for four buildings:

- New office buildings for own use by a telecommuting company (Telenor).
- New office buildings for renting by a private real estate developer (Avantor).
- New office buildings for renting by a public real estate developer (Entra Eiendom).
- New office buildings for sale by a private real estate developer and builder (NCC Eiendom & Bygg).



The case studies will form a background for analysing flexibility in relation to different stakeholders, telling about:

- what kind of market
- what kind of customers

The first part, the catalogue, is published (in Norwegian), and the progress of the second part will depend on the willingness of stakeholders to submit data about G&F in their building portfolio.



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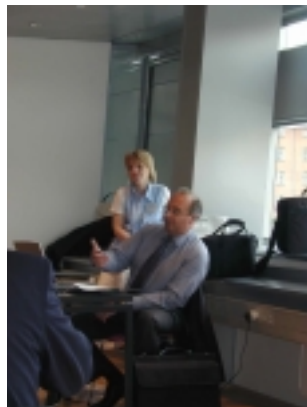
Questions and discussion

This is a summary of the questions and discussion after the presentation made by Kirsten Arge. The main points and themes are described here. The participants in the discussion were Kirsten Arge, NBI, Andreas van Wagenberg, CFM, Olav Egil Sæbøe, Celexa, Jan Bröchner, Chalmers, Alexander Redlein, IUCCIM and Lionel Prodggers, Euro FM.

In the case studies done by NBI, there is a difference between Telenor and the other companies. Telenor owns their own buildings, while the others rent their premises. NBI found that 80 % of the investment in flexibility done by Telenor, was into functional flexibility, in terms of both space and infrastructure. They need workspace that they can reconfigure groupwise or workwise, and they have to be able to do this in a quick and easy way. What they don't know yet, is if Telenor's investment and choice of flexibility is connected to what they actually do as a business, or whether it is connected to the fact that they are both owner and user of their premises. NBI thinks that both are important. Telenor has put a lot of emphasis into financial flexibility too, which mean that they are behaving as professional renters within their own company and organisation. They can in fact sell or rent parts of the buildings, or the whole building if they need to, to other companies.

The difference between professional real estate developers and companies, who own their buildings, are getting smaller. They still don't invest as much money into the functional flexibility, but they are starting to realize the need for these considerations.

In 1999 Kreditkassen, a large bank in Norway, took over two new buildings that were



added to the existing headquarter of the company in Oslo. Altogether they had 2500 workplaces in these buildings, of which 1500 were new. They realized already in the construction period of the building that there was a mismatch in it. It will always be a mismatch in a building. During the construction phase the organisation and the business concept changed, creating new demands for workspace. Financially this meant a 40 mill. NOK higher investment for Kreditkassen from the originally plan and budgets. Not because of “bad” planning, but because things had been going on within the organisation during the construction period.



So there is always a mismatch, and it prevails and changes during the stages from construction through moving in, to the use of the building. In the future this has to be handled by the facilities manager and the real estate manager in a strategic way.

The success factor number one for a facilities manager is to always be in front of the business strategy, to be able to predict or be aware of the changes to come.

In the Netherlands today there is a growing tension between the demands from the organisational side and what the market is offering. This won't change in the near future, simply because the demand for space is higher than what can be offered at the moment. The real estate developers are not innovative enough. They still do the same things they have always done, instead of developing new ways of thinking regarding flexible office solutions. There is a lack of strategic insight in the market. 80 % of the office buildings in the Netherlands are rented or leased, so the market is an important force in all this.



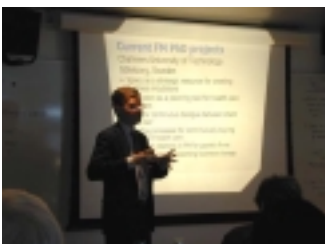
Office buildings and office space are getting more and more standardized, as well as the market. Jan Bröchner raised the thought of an index of office buildings that indicates in what degree the building is flexible or not. Is it possible to agree on an international measurement for this? This would force the developers to think in new strategic ways, and finally lead to better work space for the users. As long as there is no such index, the developers will focus on short-term investments, not the long-term, as it should be. Today they don't focus on the usage of buildings, creating sustainable and flexible buildings. The developers are not forced by the market to build in a long-term view. Even the users are not aware of this difference in thinking.

Higher investment costs will give lower future cost for changes/ modernisation. Telenor is an example of this. They used 12000 NOK. a year pr. workspace in changing the infrastructure of the workspace, moving walls etc. This is a lot of money, and in a long-term perspective not a sustainable solution. There should be a way of showing that in the long-term, a high first investment will pay off. If you rent a “non-flexible” office, you should be aware of, and the market should inform you about, the higher long-term costs.



The market is hopefully changing around Europe, although it changes slowly. In Britain they have put a lot of focus into this matter, and it is starting to pay off. Also in Norway and Denmark the developers are starting to consider these questions, but the pay off from the higher investment in flexibility is still not to be seen.

Office buildings supporting business changes **Jan Bröchner, professor, Chalmers University of Technology, Sweden**



Chalmers University of Technology has started a new project together with NCC Property Development. “Office buildings supporting business changes” is a project that is intended to provide systematic insights into robust principles for providing new office space that will accommodate current and expected patterns of change. The objectives of this project are to develop and evaluate principles for the layout and structure of adaptable office buildings. The emphasis is placed on new office buildings for commercial purposes, situated in prime locations in Sweden, and there is a focus on



buildings with multiple tenants that often hold lease contracts for a 3-5 year term.

The focus will be on creating flexibility, based on initial investment in robust, generic and adaptable design and technology, leading to higher rents over a succession of uses and users, and lower costs for adaptation and refurbishment.

The research will be based on POE- analysis of buildings, in addition to technical analysis of structures, and of technical analysis of refurbishment undertaken since construction.

Other FM PhD projects at Chalmers University of Technology, Sweden:

- Space as a strategic resource for creating business incubators
- Simulation as a planning tool for health care premises
- Tool for continuous dialogue between client and user
- Briefing processes for continuously buying clients in health care
- Interfirm relations in FM for growth firms
- Office buildings supporting business change

The project is supported by BFR Competitive Building Programme (<http://compbuild.lth.se/pdf/06.pdf>).

Information:

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FM research in the Netherlands and Europe **Andreas F. Wagenberg, Professor, CFM, Centre of Facility Management, the Netherlands**

The dominant Dutch FM paradigm is that FM= a new function, in between core business and facility production.

CFM, the Netherlands, has 26 allied companies supporting their research. Projects are carried out in co-operation with the companies and Wageningen University and Research.



FM cost indicators – NEN 2748

The Dutch standard to calculate FM cost indicators (NEN 2748) gives a structure for gathering information and classifying cost and cost factors for FM. This is the basis for a Dutch “Facilitaire Kengetallen” – a benchmarking club of 80. The project shows that there is diversity in FM terms, concepts and definitions in EU, and that there is a lack of EU scientific research in all FM arenas. There is a need for more analysis and learning across national borders and the EU level.

Indicators of the Dutch FKG project in 2001 are:

- Accommodation
- Terrain maintenance
- Building maintenance
- Energy consumption
- Services & means of production
- Restaurants and catering
- Risk management
- Post
- Waste
- Central archive function
- Furniture and plants
- Facility management function
- Safety and well being



CFM, the Netherlands, is also active in the European Flexible Office Systems project A

detailed study of the consequences of ICT on administrative organisations; demand now and in the future (report in Dutch available) has been carried out. It consists of a project group of FM professionals and FM industry. The project will start research in fall 2001.



Euro FM Benchmarking Project

The purpose and objectives of the Euro FM benchmark project are to develop a common set of FM indicators for the EU area. The project is to be neutral, objective, not-for-profit and driven by FM benchmarking needs, and should foster networking between FM professionals.

The participants in the Euro FM project are:

- DFM, Denmark
- FKG, the Netherlands
- ATGA, Austria
- EBC, Austria

The project has consisted of two phases, ¹⁾ a survey of common benchmarking indicators based on different European systems, and ²⁾ the development of a systematic approach to the comparison of benchmarking in five EU countries.

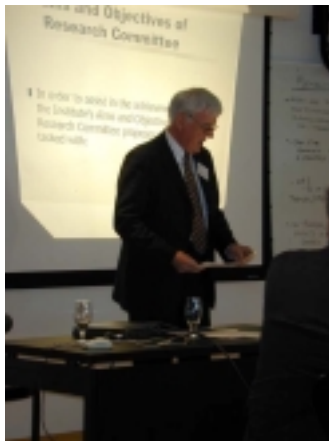
Information:

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Current Facilities Management Research in the UK **David Rees, Director/ Chairman, BIFM Research Committee**

The Mission Statement for the BIFM Research Committee is to Develop the Facilities Management Profession within the United Kingdom and Internationally through the Innovation, Promotion and Dissemination of Research that is relevant to the Interest of Members

Current Programme - BIFM

- Survey of Members 2001 - This will be completed by 2001 and will compare the findings with those of the 1997 and 1999 surveys. For the first time the questionnaire will be on-line on the BIFM web site and the survey report will be in the new "Members only" section of this site.
- Research Directory - The aim of this is to enable students and researchers to know if someone else is undertaking work in their area of interest and thus encourage collaboration and avoid duplication. The previous edition is being updated with new entries of current projects. EuroFM entries are very welcome, the target is to have the Directory on the open section of the BIFM web site by the October conference.
- Futures Forum (October 2001) A sub group of the committee is working on the research programme of the October conference.
- Support for Joint Projects The committee co-ordinates volunteer members contributing FM knowledge into research projects that are being conducted by other organisations
- Links with Other FM Organisations The system is being set up for a network whereby individual members of the Committee will act as links with other relevant professional organisations and Special Interest Groups.
- Proactive Programme of FM Research The Committee is currently seeking the views of BIFM members on the most pressing research needs. It considers that there is a window of opportunity, with the new government to be proactive and seek experienced research partner(s) to work with in applying for research grants.



FMGC's Work in Facilities Management

FMGC is one of the UK's leading University FM Academic Centres. It has 16 "Flexible" Academic and Admin Staff who work in two "clusters". One of these delivers the Post-

graduate Education programme of MBA & MSc in FM and PhDs, together with a new undergraduate (for experienced FMs in full time employment). The other cluster runs the research programmes for its public sector Fora (University, Health Trusts and Local Government) together with other commissioned research projects. Both clusters work together on Consultancy projects.



Range of Research Projects

Contributions to the annual output of FM research from FMGC come from the ongoing work of its PhD Students (6 plus 3 staff), approx. 20 3rd Year Masters Students and three projects for each of the 4 Research Fora. Hence a total of over 30 small projects per year.

Current Projects Include:

- Impact of Multi-Skilled (Hospital) Ward Staff This project includes evaluating patient satisfaction between different types of systems for providing Ward support staff. Its findings will be fed into the NHS Executive “Ward Housekeeper” team
- FM Factors Student Choice of University A project that investigated the factors - academic, social and FM, that influence UK students in the choice of which University offer they accept
- Motivation of Low Waged FM Workers A PhD study exploring the elements that motivate (and de-motivate) FM workers in the public sector
- Hospital Patients’ Experience of FM Services Surveys of patients’ satisfaction with the various elements of FM services. The objectives of the project include the development of a suitable measurement technique
- Gazelle Organisations. A Masters student’s project into the factors surrounding organisations that “jump” quickly to a new (additional) location

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Modern office – acoustic environment Bjørn Berthelsen, Ecophon, Denmark

Ecophon is a Swedish company, and operates worldwide via subsidiaries in Europe and in North America. Some years ago Ecophon made a decision that they would sell their knowledge instead of products. This knowledge is based on creating a good working environment for the eye, the ear and the mind.

In offices, acoustics influences the office worker’s psychological and physical wellbeing and, by that, productivity. The different designs in flexible office buildings demand different solutions for the acoustic environment. This is what Ecophon deals with. They focus on the need for communication and concentration in the office. People need to have the opportunity to work and rest in areas that are “free” from disturbing sound.

An office can be a complex matter that consists of different kinds of rooms, where each room has different demands regarding to the indoor climate. A well planned office supports the activities of the organisation as a whole, and secures good conditions regarding the employees wellbeing and their capacity of producing what is expected of them.

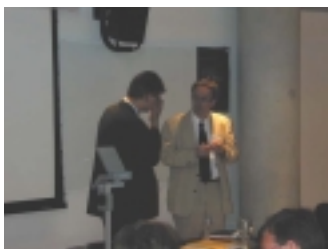
The Modern Office expression is an expression of Ecophon’s initiative to collect and spread important information about the modern office. In cooperation with customers, advisers and experts they integrate the needs of the users into the acoustic solutions of the building. The main objective for Ecophon is to create a greater knowledge about how to make a good working environment in the office. To do this Ecophon uses different forums; Seminars and virtual meeting places.

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New developments in Copenhagen and the Øresund region Lau Melchiorson, IDRC, Denmark

After the opening of the bridge between Copenhagen and came, this area has had a great development, with a lot of new business and organisations settling in. Both Mercedes and the University of Copenhagen have established themselves in this area.

The development of office buildings in the area has a high focus on;

- Efficiency
- Architecture
- Floorplan solutions
- Prestige
- People
- Infrastructure
- Economy



The new developments started some years ago when the new elected mayor of Copenhagen opened the door for new construction and establishments in attractive areas in the city. This is mainly in the old harbor area, with a potential for large, new development projects.

Everything in this area is already lent out, so there is no typically speculation office building. This gives focus on the building and how to make it work for the users.

10 mill m² floor area of new offices will be built in this area. Copenhagen is an attractive area for foreign investors to invest in, and the first investments from foreign companies are already made.



Relocating DR to the new Ørestad development

- new workspace, user participation, management.

Per Anker Jensen, Deputy Project Manager, DR's Ørestad Project

DR, Danish Broadcasting Corporation is a large organisation, fully financed by license fees. It is an independent public institution, which provides public service broadcasting, through two TV-channels and four radio-channels in addition to online services.

Today DR has about 150.000 m² of workspace within the Copenhagen area. They have the general administration and TV headquarters in Gladsaxe ("TV-town"), and the concert hall and radio headquarters near Copenhagen city. The radio has also got a regional radio centre on Østerbro. In addition, DR has regional centres and they use 12 rented places around Copenhagen.

The background for relocating this large institution, is the great changes within the broadcasting field. The technology gives the broadcasters new opportunities for their products. The focus on the web is growing, together with new digital technology, as computer based editing of sound and video. This also leads to a new division of labour. Major parts of technical editing tasks are now taken over by non-technicians, as the journalists themselves. The new technology gives new products as on-line services, multimedia, on-demand programs, as well as new organisations where Radio, TV and Online services are integrated.



The totally space for the new project is 130.000 m² gross area, with a budget on 3,0 billion DKK or 0,4 billion EURO. DR plan to move in around year 2005-2006. To make this a success, user participation is necessary. By user participation you secure a building that meets user needs and intentions, and utilise the knowledge and experience of the staff. It is also important that the users are allowed to participate in the process to create a positive attitude towards the relocation. The organisation of user participation will depend on the corporate culture. For DR the process of user participation started out as project with plans for radical changes, lead and controlled by the



management. This spread scepticism and mistrust among the staff, which finally turned into a confrontation with a stop to all formal collaboration with management. By negotiation between staff and management, they reached a new platform for collaboration, and since this was achieved, there has been an extensive and positive user involvement.

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SES – Activity Based Open Workspaces Karen Mosbech, Director, SES, Palaces and Properties Agency



SES as a public agency started early (1997/ 1998) with new office layouts/ activity based workspaces within their old main offices in Copenhagen. They remodelled their traditional hierarchical office structure with the real large offices for the bosses, and more normal for the clerks, into activity based open workspaces.

Initially no one should have a permanent workspace, and the layout were based on typical “new office thinking”, with a service centre, informal meeting facilities, project rooms, a cafe and quiet rooms. The idea is that the individual worker chooses the work place most suited for the current tasks/ projects the person is working with. All employees are equipped with lap-tops. The activity-based workspace creates a totally different leader and management style.

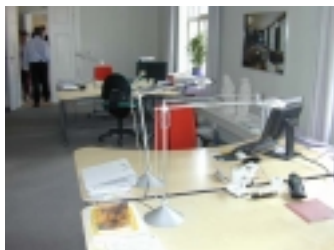
SES with their dynamic motivator Karen Mosbech in charge of the project has experienced:

- The productivity the first year was low; everyone was “running around” and they suffered from a lack of co-ordination.
- The leader-team was not well co-ordinated, and as a consequence the employees decided that the leaders should sit together. They will be allowed to move around again when the employees think they are “healthy and well co-ordinated”.
- The process of totally changing the work style is very demanding for the management, and SES has practised weekly evaluation meetings with all employees.
- The most popular workspaces are the open, informal meeting places and the cafe and the quiet rooms are less needed.
- The process of changing the physical layout was rather short, but to change the work pattern has been a challenging process for 1-2 years.



Today they see an increase in productivity and a very good working environment, and no one wants to go back to the old office solution.

SES has used their experiences and knowledge in developing guidelines and assists other public companies in changing their workspace. Karen Mosbech was recently granted a scholarship to write a book about the experiences related to changing the management workspace.



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Appendix:



Euro FM RESEARCH NETWORK GROUP

REV. 2001-07-13/TIH

STRATEGY PLAN

Background

EuroFM – the European Facility Management Network is based on the interaction between research, education and practice in forming and developing the knowledge base of FM in Europe.

The EuroFM network has been active in a 10 years period from the first conference in Glasgow in 1990, developing the facility management research and education into a mature activity. The EuroFM research activities have been:

- Collaborative research network with FM Centres in the UK, The Netherlands and Sweden, and with other research organisations and educational institutions working in the FM area
- European funded research like the "Office" and the "Workspace" projects and the EuroFM "Benchmark" project
- Annual forum at the conferences presenting national activities and collaborative research work

There have been three major EuroFM publication channels for research: International Journal of Facility Management, EuroFM practice books 1996-1999 and EuroFM reports. During this 10-year period, we have seen a shift both national and international, from a major focus on buildings and technology to a focus on management of facilities in a dynamic life long perspective.

New research programs and projects in several European countries reflect this change.

This plan is an input to the EuroFM strategic plan started with the Vienna strategy workshop in August 1999. The overall team for the workshop was "*Where do we want to be in 5 years time*". At the workshop the participants agreed on a goal system, enabling EuroFM: "*To be the hub of FM research*".

The Research Network Group have most members from research organisations and educational institutions, but input and close co-operation with practice are vital for an adequate and high quality research and development work.

FM research & development projects are typically focusing on the integration of all support activities; in time; with the core business. FM research is about organisational processes (maintenance and operation of the FM service) and about the development and change of facilities as an integrated service.

Relevant research topics/ issues in FM:

- FM strategy (mission, business)
- FM structure (organisation, process)
- Work space design and management
- Facility development and innovations, facility concepts for accommodation
- KPI / Benchmarking in FM
- Asset management (corporate level)

- Operation and maintenance management
- Service management / quality
- Outsourcing – outtasking
- FM and e-commerce, FM marketing
- TQM – total quality management
- Information and communication technology in FM
- Life cycle value / life cycle profit
- Environmental strategies in FM
- POE – Post Occupancy Evaluations

OBJECTIVES

- Be recognised as a major research network in Europe reflecting the integration of education, research, and practice.
- Be active in formulating the future agenda for FM research in EU
- Be active in generating and co-ordinating FM research and development projects in the EU
- Secure the documentation and information exchange between scientific / academic research and research / development in practice
- Create a forum together with the Educational Group for collaboration between graduate FM-programmes
- Form a link between Euro FM members that are national organisations and the Research Group Projects

ROLE

- The role, or function, of the Research Group within EuroFM is to enable EuroFM to be the leading international think tank and international knowledge base on FM in Europe.
- Establish an active research network in Europe reflecting the integrated approach to FM-research, -practice and -education
- Formulate a European FM research program for the coming 5 years
- Arrange the annual research forum as part of the EuroFM conference
- Be a generator of European research projects in co-operation with Euro FM Business Forum

SUCCESS CRITERIA

- The participation and quality of the annual research forum
- The number of research projects granted and carried out by EuroFM or by EuroFM partners
- The establishment of new and recognition of the existing “Centres of Excellence in FM”
- The number of collaborative activities between members of EuroFM regarding research projects, student exchange, meetings, symposiums etc.

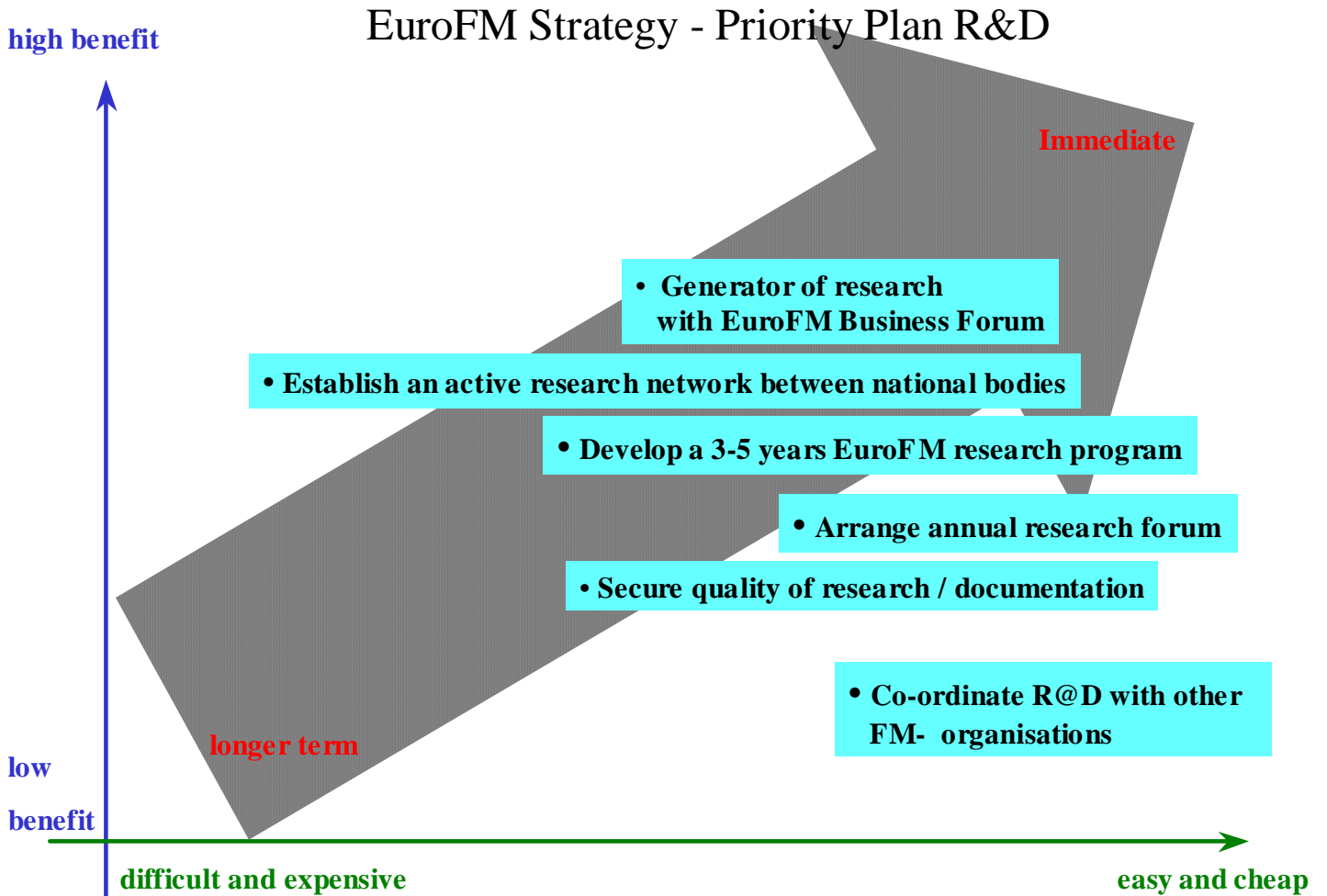
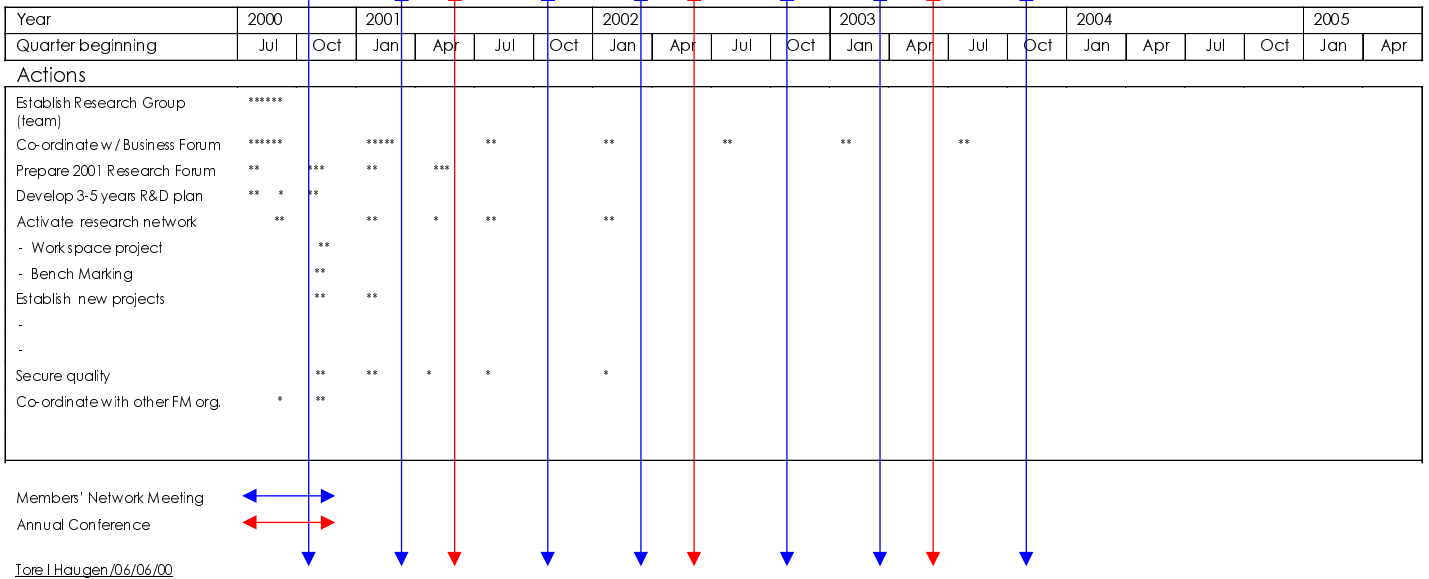
Information:

Prof. Tore I. Haugen, NTNU, Norway

Tore.Haugen@ark.ntnu.no

EuroFM Strategic Plan
Gantt Chart showing the proposed time scale of initiatives

For: Research Group (Forum) - Main activities



Friday 8 June 2000 09.30 - 17.00

Location : The Royal Library - The Black Diamond (<http://www.densorteddiamant.dk>)

Meeting room - Blixen

Soeren Kierkegaards Plads 1, Copenhagen



EuroFM Research Workshop "Flexibility - Work Space - Office buildings"

Program

- 09.00 **Coffee – registration**
- 09.30 **Introduction to research workshop "Flexibility – Workspace"**
Tore I Haugen, NTNU, Norway
- 09.45 **A strategic approach to adaptability**
Siri H. Blakstad, NTNU, Norway
- 10.15 **Flexibility and workspace - a new research initiative for EuroFM**
Keith Alexander, University of Salford, UK
Jan Åke Granat, Chalmers, Sweden
- 10.45 **Flexibility and adaptability – from strategic to operational level**
- round table discussion related to the previous presentations
Chair: Tore I Haugen
- 11.45 **Ongoing and future FM-research and development – around Europe**
Andreas F. van Wagenberg, Centrum voor FM, The Netherlands
David Rees, BIFM / Sheffield Hallam University, UK
+ others
- 12.15 **Lunch**
- 13.15 **Modern office – acoustic environment**
Bjørn Berthelsen, Ecophon, Denmark
- 13.45 **New developments in Copenhagen and the Øresundregion**
Lau Melchiorsen, IDRC, Denmark
- 14.30 **Relocating Denmark Radio to the new Ørestaden**
- new workspace, user participation, management
Per Anker Jensen, Denmark's Radio, DK
- 15.15 **Visit to Slots- og eiendomsstyrelsen - New flexible offices**
Karen Mosbech and Kim Vindbjerg, SES
- 16.30 **Refreshments**

Workshop fee (for non EuroFM-members) : 100 EUROS

Registration to: Annette Sørensen, DFM dfm-net@teknologisk.dk or phone 0045 72202262

Information: Tore.Haugen@ark.ntnu.no or Ole E. Malmstrøm smalmstrom@vip.cybercity.dk

REPORT EuroFM RESEARCH WORKSHOP "FLEXIBILITY - WORKSPACE - OFFICE BUILDINGS"

Summary

Euro FM Research Network Group arranged a one-day workshop in Copenhagen on the eight of June 2001. The main objective was to present recent and ongoing research on flexibility related to office planning and management, plus other related research issues, within the EuroFM network. In addition we had presentations related to the market development of offices and office planning in the greater Copenhagen area, and a visit to SES – Slots og Eiendomsstyrelsen, who has been a driving force in adopting new office solutions in the public sector in Denmark.

The workshop gathered around 45 participants, of whom 15 were members in the EuroFM network. The workshop was hosted by DFM – Danish Facility Management Network, and organised by chairman Ole Emil Malmström, DFM, and professor Tore I. Haugen, chairman Euro FM Research Forum.

The presentations focused on:

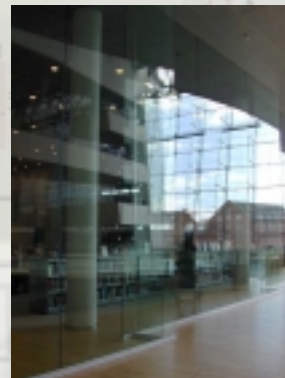
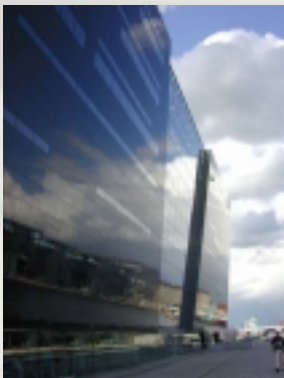
- Adaptability as a strategic approach
- Flexibility in office layout from a practical level
- Flexibility in production workspace
- Flexibility as a business strategy

There was a general agreement that increased focus and knowledge on flexibility is needed, related to offices and production- and health care facilities. An index for flexibility is necessary, and a change in attitude has to come.

Future issues:

- What is the business need for flexibility
- What kind of flexibility is required

EuroFM Research Network Group will continue to work on flexibility issues related to offices, production workspaces and health care facilities.



This publication is produced by Center for Real Estate and Facilities Management, NTNU, Norway, by Tore I Haugen, Helge Martens and Kjetil Tennebø.

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