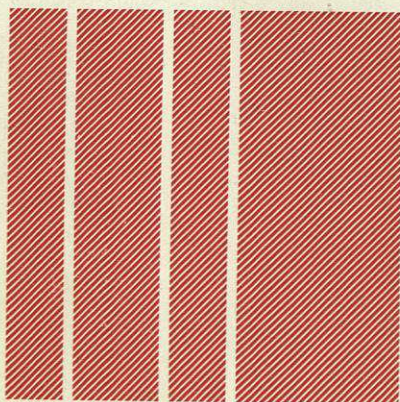# Conference Programme

Management Conference

Den Haag, Nederland

23-26 November 1981

The Butler Cox Foundation

Management Conference
Kurhaus Hotel, Den Haag, Nederland
23-26 November 1981

Contents

Introduction

The tenth Butler Cox Foundation management conference will be held at the Kurhaus Hotel, Scheveningen, Den Haag, between 23 November and 26 November 1981. This document describes the overall conference programme that we have organised. It also provides a synopsis of each presentation that will be made and a biography of each speaker.

The purpose of this conference is to enable member organisations to explore in more detail the findings of two Foundation reports. At this conference we shall focus on the management implications of:

Report No. 25 **System development methods**
Report No. 26 **Voice communication systems**

Both reports will be distributed to members before the conference.

The conference will consist of two full days of presentations, with the first day being devoted to voice communications systems and the second day being devoted to systems development methods. David Butler, the author of Report No. 26, will make the keynote presentation on the first day, and Elisabeth Somogyi, the author of Report No. 25 will make the keynote presentation on the second day. Other personnel from Butler Cox & Partners who were involved in the research work for the two reports will also be at the conference, and they will be available to answer any detailed questions about the reports.

Following the two days of presentations, several workshop sessions will be held during the morning of the final day of the conference. These sessions will enable delegates to meet the report authors and researchers and the speakers in an informal environment that will enable delegates to explore the issues raised by the reports and the presentations in greater detail.

From the programme set out in this document you will see that we have arranged for several well-known experts from the fields of voice communications and system development methods to participate in the conference. We are confident that the programme will be of value both to senior executives responsible for your organisation's information systems function, and to those with detailed responsibility for the areas covered by the two reports.

Each member organisation is entitled to send up to five delegates to the conference. Each delegate pays only for the accommodation and meals at the Kurhaus Hotel, and we have arranged a special conference package with the hotel which covers all of these items for the duration of the conference. At the back of this document you will find details of the package and a registration form for the conference. Please complete this form and return it to us as soon as possible.

The Conference Programme

Monday 23 November

1800-1900	Registration
1930-2030	Cocktail party
Dinner	No formal arrangements have been made for dinner. The conference package includes table d'hôte dinner at the Kurhaus Hotel.

Tuesday 24 November

0830-0900   Registration

Session A
0900-0945   Conference opening
Voice communication systems   David Butler,
Butler Cox & Partners Limited

Session B
0945-1045   **Developments in voice communications**   Karl Kozarsky,
Butler Cox & Partners Limited

1045-1115   Coffee

Session C
1115-1230   **Communications in the home of the future**   Mike Aysan,
Manitoba Telephone System

1230-1400   Lunch

Session D
1400-1500   **INSIS as a test market for ISDN in Europe**   Georges Anderla,
European Economic Commission

1500-1530   Tea

Session E
1530-1615   **Telecommunications strategy in large companies**   Roger Pertuiset,
Renault

Session F
1615-1730   **Information technology and management patterns**   Herb Grosch,
Independent Consultant

Dinner   No formal arrangments have been made for dinner. The conference package includes table d'hôte dinner at the Kurhaus Hotel.

Wednesday 25 November

Session G 0900-0945	**System development methods**	Elisabeth Somogyi, Butler Cox & Partners Limited
Session H 0945-1045	**The ISAC approach**	Marilyn Mehlmann, Statskonsult AB
1045-1115	Coffee	
Session I 1115-1230	**System prototyping**	James Sharkey, CSS International (UK) Limited
1230-1400	Lunch	
Session J 1400-1515	**The Warnier structured approach**	Michel Koutchouk, Infotel
1515-1545	Tea	
Session K 1545-1700	**Socio-technical approach to systems analysis and design**	Christiane Floyd, Technical University of Berlin
1700-1720	Conference conclusion	David Butler, Butler Cox & Partners Limited
2000 for 2030	Conference dinner	

Thursday 26 November

0900-1030	Workshop sessions*	*Three workshop sessions will run concurrently. The actual workshop sessions will be determined by the preference of delegates attending the conference.
1030-1100	Coffee	
1100-1230	Workshop sessions*	
1230-1400	Lunch	
1400	Delegates depart	

Session A Tuesday 24 November: 0900-0945
Voice communication systems

David Butler Butler Cox & Partners Limited

The telephone industry is experiencing a phenomenon which might be described as 'senile adolescence'. Over 100 years old, it nevertheless manifests a high degree of instability as a result of profound changes in its technology, market structure and regulatory environment. During this session examples will be given of the new products and services currently on offer and just about to reach the customer. Applications of optical fibre links, communication satellites, stored program control switches and intelligent telephones will be described. The experience of some prime users of such systems will also be evaluated. Meantime, the regulatory authorities in a number of countries are trying to strike a delicate balance: how can the flow of new products and services from competing suppliers be encouraged without creating total anarchy on the public networks of the world?

The shape of the global market for voice and other services has already been forecast (for example by AT&T) for the remainder of the present decade. But how accurate will this forecast prove? The answer will be the sum of all the purchasing decisions taken by customers. The session will close with a consideration of the factors influencing such decisions.

David Butler is Chairman and co-founder of Butler Cox & Partners Limited and of its research group the Butler Cox Foundation.

After attending Mill Hill School Mr Butler won an open scholarship to Keble College, Oxford, where he read Greats.

He entered data processing in 1962 as a trainee programmer. After working as a systems analyst and programmer he joined the Urwick Group as a consultant/researcher. From 1970 to 1976 he filled a number of senior posts with a well-known American consulting firm. Butler Cox was set up in early 1977.

He is a Vice-President of the British Computer Society and has won two national prizes for essays on computing. He has published over a hundred articles in magazines and newspapers and is an occasional radio and TV broadcaster. He has lectured widely in Britain and abroad and led the UK team which presented viewdata at the White House, Washington D.C. He is the author of "Britain and the Information Society", to be published shortly.

Session B Tuesday 24 November: 0945-1045
Developments in voice communications

Karl Kozarsky Butler Cox & Partners Limited

During this session, Karl Kozarsky will review the three most significant aspects of the voice/telecommunications markets of the 1980s. First, there will be a renewed emphasis on voice communications after a decade of concentration on data communications. This change is heralded by the proliferating voice message offerings, including centralised systems directed either to the business or to the residential market, and distributed systems with the prime capability lodged within terminals. In addition, voice recognition and voice response sub-systems are becoming standard elements in configuring man/system interfaces.

Second, the scope of the private switching exchange is being substantially broadened via a variety of architectures built into integrated voice/data exchanges. Those architectures that are retrofits to existing exchanges contrast poorly with some of the flexible new products appearing in the marketplace which promise to penetrate deeply into the data terminal interconnection market.

The third aspect will be the emergence of a huge, competitive enterprise out of AT&T — the Bell Unregulated Subsidiary. The BUS is taking a very broad view of the markets it will pursue, both from a product as well as a geographic perspective. "Convergence" may be nowhere more evident than in this BUS with its mixture of telephone company personnel and ex-data processing industry personnel.

Karl Kozarsky is a senior consultant, normally resident in the United States. He specialises in market research, and business and product planning for major telecommunications companies. Assignment areas have included integrated voice/data communications systems, acquisition analyses, and studies of the implications of the forthcoming Bell Unregulated Subsidiary.

Non-proprietary activities include seminars on future PBX characteristics, voice processing, executive work stations, and contributing editor to a monthly newsletter on competition and strategy in the telecommunications industry.

Prior experience includes Director of telecommunications for RCA, product planning manager for RCA's computer division, and Vice-President, business and product planning of Formation Inc.

Session C Tuesday 24 November: 1115-1230
Communications in the home of the future

Mike Aysan Manitoba Telephone System

The Manitoba Telephone System has several projects currently underway that address the "new services" needs of the home, farm and office of the future. In this session Mr Aysan will describe the facilities offered by each of these projects.

The Ida Project involved the building of a coaxial cable network for 100 residents in South Headingley (a suburb of Winnipeg). The project integrates digital telephone, television, videotex, meter reading and alarm reporting services over a single cable.

The Elie St. Eustache Fibre Optics Field Trial will link 150 homes, farms and businesses with a fibre optic network — not just trunking, but all the way to the home. The cost of the project is $9.3 million and its sponsorship is shared by the Federal Department of Communications, Canadian Telecommunications Carriers Association and Manitoba Telephone System, in co-operation with Northern Telecom and Infomart. Telephone, television, Telidon and FM radio services will be offered over the fibre optic network.

Grassroots is the world's first commercial Telidon service, now available in Manitoba. Telidon sets can be leased from Manitoba Telephone System and users pay a flat rate of 5c per minute to access the data base via the telephone network. The data base includes thousands of pages of agricultural information including up-to-the-minute world weather and market reports — and it is growing rapidly.

FAST is a recently announced alarm signal carrier service that uses the existing paired wire telephone network. FAST is an acronym for Fast Action Safety Team. The service is available from MTS to alarm companies who in turn offer alarm services to homes and businesses. FAST promises to save lives, reduce property losses, cut insurance premiums and change the way we think about public safety.

Mr Aysan will stress that MTS involvement in "new services" is not driven by the technology, but by the need to generate greater revenue as an alternative to raising the basic telephone rate. Manitobans currently enjoy one of the lowest telephone rates in North America.

Mr. Aysan came to the Manitoba Telephone System in 1974 as its Manager of Data Processing. In that position, he introduced a number of administrative systems which continued to support the operations of the company.

Mr. Aysan has served as Manager of Product Development of the Manitoba Telephone System since 1979 in generating marketing opportunities through new products and services. He is also responsible for MTS's international marketing efforts which presently include activities in the Middle East and South America.

Session D Tuesday 24 November: 1400-1500
INSIS as a test market for ISDN in Europe

Georges Anderla European Economic Commission

The future inter-institutional integrated services system (INSIS) is being designed to provide a link between some 16,000 officials of the European Community institutions. These officials communicate regularly in 7 languages by telephone, mail, telex or through face-to-face meetings with over 100,000 civil servants in the key Government departments in the 10 member countries.

INSIS is being created with close co-operation between the European Community and the 10 PTT administrations. Based on advanced digital technology, offering both broad-band and narrow-band channels, INSIS should permit an economically optimal combination of enhanced existing services, (especially in voice communication) and of new services yet to be implemented (such as electronic mail, facsimile, videotex, large-volume data transfers, and teleconferencing).

INSIS should help the European PTTs to define an overall development strategy for integrated services digital networks (ISDN). It should help the PTTs in demonstrating the advantages of standardized services, high-level protocols and functionally uniform equipment (interconnected via the public telecommunication networks). In addition, INSIS should pave the way for business users to gain speedy access to enhanced telecommunications services. Implementation of a European-wide network such as INSIS (and the associated equipment standards) should contribute decisively to the creation of a continental-size market for a whole range of telematics products.
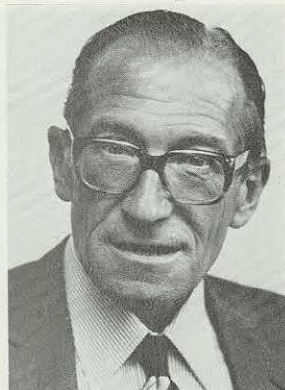
Georges Anderla is presently director for information management at the Commission of the European Communities, in charge of several STI programmes, including the Euronet DIANE network.

Before joining the EEC in 1974, he held a number of executive posts in the French civil service, and was posted successively to Paris, New York, London and Paris again.

He has taught at Paris University, the Institute of Political Science, Paris, and at ILO, Torino, Italy, and he has also acted as a consultant to the OECD and other international organizations.

Georges Anderla holds Ph.D. and M.A. degrees at Columbia University, and the Diplômé d'études supérieures de Droit international, at the Sorbonne.

Session E Tuesday 24 November: 1530-1615
**Telecommunications strategy
in large companies**

Roger Pertuiset Renault

In this session, Roger Pertuiset will examine the changes taking place in technical areas due to the increasing convergence of various technologies; i.e. between information processing, office systems and telecommunications. This convergence leads to a need to integrate resources and services, and to link them by a communications network.

The increasing demand for communications services in a large company (which is caused by, amongst other things, a distribution of information sources) makes it necessary both to integrate and interconnect different systems, and to develop new areas of application.

Communications systems have become an important element of a company's overall efficiency, and the choice of a network must reflect the strategic corporate plan.

The session will present the elements required in selecting a suitable solution to this problem — a solution which must reflect the long-term development of the system and must be flexible enough to react to new developments and tasks.

Since he first started working with Compagnie des Machines Bull, in 1959, as head of studies and research, Roger Pertuiset has continued his career in information technology.

He joined the state-owned Renault group in 1969 to develop industrial information applications, and he is now responsible for telecommunications and information systems.

He also has teaching responsibilities with the Institute of Programming at the University of Paris, Faculty of Engineering, and he is leading research studies at the IRIA (Research institute of information and automation) and at DIELI (Directorate of the electronic and information industries, department of industry).

Session F Tuesday 24 November: 1615-1730
**Information technology and
management patterns**

It is predicted that the next decade will see extensive growth
of computer usage both in business and in the home.
Technological developments are forcing management to re-
evaluate their approaches and strategies so that these new
developments can be encompassed. The developments in
information technology in the 1980s will have a significant
impact on the ways in which business is conducted.
Systems' users and systems' suppliers must be aware of and
prepared for these changes, so that they can exploit the
opportunities for economic and commercial progress
presented by these changes.

This session will examine how the trends in information
technology will affect company management.

The trend to new, more powerful and cheaper hardware
continues, but is counterbalanced by the continuing software
problem. The proliferation of systems will require the
recruitment training and upgrading of personnel, whilst
encouraging the integration of other information functions
with systems' management.

External stimuli are also likely to be significant. Such external
influences will include the interaction of information
technology with government and social pressures, and,
increasingly, the movement away from United States to
Japanese management techniques.

Herb Grosch Independent Consultant
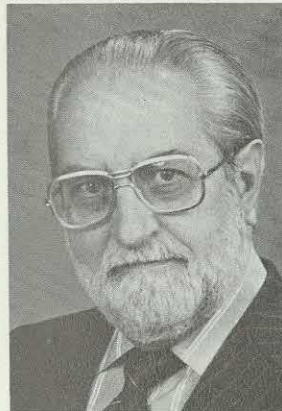
A computer pioneer still active
at the policy level, and very
much concerned about futures
in the computer field, Dr.
Grosch is known for the
relationship between speed
and cost which he discovered
in the early '50s. He has
worked twice for IBM, twice for
GE, and twice for the federal
government — most recently
as director of the Bureau of
Standards Institute which
attempted to improve the
effectiveness of government
data processing.

He lives and works in Europe, and consults for companies
there, in North America and in Japan. Many years ago he
was active in celestial mechanics and in optical design; later,
before becoming manager of IBM's space program, he was
national president of the major aerospace society. He was a
charter member of the Association for Computing
Machinery, and is a former president of that 52,000-member
organization.

Dr. Grosch has been a consulting editor of both the domestic
and international editions of *Datamation*, and for some years
was editorial director of *Computer World*, and has also been
a regular contributor to the British *Computing*. He travels and
speaks widely, both to technical and to popular audiences. In
his speeches as well as in his writings, he is famous for his
insights and notorious for his frankness.

Session G Wednesday 25 November: 0900-0945
System development methods

Elisabeth Somogyi Butler Cox & Partners Limited

In this session Elisabeth Somogyi will discuss some of the basic principles underlying the system development process. The session will argue that managers must understand these basic principles if they are to effectively utilise the various system development methods.

Ms. Somogyi recognises that the important characteristic of information and data processing systems is that they work in close co-operation with people. These complex technological systems are deeply embedded in the human organisation. Their functions are performed within the wider work system of a department or a company.

The session will argue that the view or perception developers have about the nature of these systems profoundly influences their attitude towards all aspects of system development and the use of technology.

In this session, Ms. Somogyi will identify the two very different views that can be held about technological systems: a technology centred, closed view, and the opposite less constrained, open view. The speaker will address the likely consequence of holding either of these views and the resulting differences in attitudes towards the system life cycle (including systems development and systems maintenance) and the use of technology in systems.

Elisabeth Somogyi is a senior consultant with Butler Cox & Partners specialising in computer systems design and the management of systems development. Having graduated in chemical engineering from the Technical University of Budapest, she started her career in 1963 as a design engineer for the Hungarian chemical process industry. In 1967 she acquired a further degree in applied mathematics at the University of Sciences, Budapest. After moving to the UK, she entered commercial data processing in 1968 with Barclays Bank. She then joined the Bentley Group (Engineering) as programming manager and later became systems manager for a merchant bank.

Ms Somogyi entered consultancy in 1975. In this capacity she has worked on a number of technical assignments in banking, commodity broking, manufacturing and the holiday/travel business. She has been involved in feasibility studies and hardware evaluation, negotiated hardware/software contracts on behalf of customers, investigated flaws in various systems and designed both clerical and computerised systems. She has acted as adviser to clients on strategic planning and DP management issues.

She has carried out research in project management, new system development and design methods and techniques, and has lectured on these subjects in the UK and Europe. She is co-author of the book 'A Management Guide to the Structured Methodology' (Langton Information System Series, 1978) and has contributed to the Infotech State of the Art Reports.

Elisabeth Somogyi is a committee member of the British Computer Society's Business Information Systems Specialist Group, a member of the Institute of Bankers and a member of the BIM.

Session H Wednesday 25 November: 0945-1045
The ISAC approach

Marilyn Mehlmann Statskonsult AB

In this session, Marilyn Mehlmann will describe her work on the development of "MT", which is a Swedish model for developing interactive computer systems, based on a top-down development approach. The MT model builds on two related methods developed at the University of Stockholm, known under the collective name of ISAC.

Activity analysis is an ISAC method for charting high-level object flow and information flow.

Information analysis uses a similar technique to describe information sets and their mutual relationships.

These methods use documentation techniques which are formalized, hierarchical (an important requirement with a top-down approach), and non-procedural. That is, they describe objects and their relationships but not the transformation processes involved. This is an important quality of the methods because it enforces concentration on the durable aspects (objects and their relations) and prevents a premature interest in the more ephemeral processes.

A top-down approach also ensures that all requirements really have been identified before major design work is carried out — a significant contribution to planning and control.

In the MT model users actively participate in all phases of development, and important aspects of the user dialogue are decided by them in the analysis phase as part of the input to information analysis and thereby to database design and program design.

Marilyn Mehlmann is employed by the Swedish Company Statskonsult ProjeketStyrning AB as a consultant working in the field of project management. Most of her consultancy work is in the area of computer projects, and it encompasses user participation issues and the effects of introducing computerised systems. Prior to joining Statskonsult she was employed by IBM Sweden.

Her recent publications in English include *When People Use Computers* (published by Prentice-Hall) and *Computer Power to the People: computer-resource centres or home terminals?* (presented as a paper (with Bo Hedberg) to the Nordic computer conference Norddata, and published by the Swedish Centre for Working Life).

Session I Wednesday 25 November: 1115-1230
System prototyping

**James Sharkey** CSS International (UK) Limited

During the last five years there has been a dramatic change in the relationship between computer hardware and computer software. The cost of hardware has fallen considerably during this period broadening the scope of potential applications for computers. As a result, demand for computer software has increased together with its associated costs.

At the same time improvements in hardware technology have greatly increased speed and reliability, yet, software has not undergone significant changes. The programming languages being used today are the same as those used ten years ago and, with some exceptions, programs still take as long to develop as they did then.

The traditional approach to developing computer applications is fast becoming inappropriate for today's dynamic business environment, and, in particular, for middle and upper management. The DP department is under increasing pressure from these levels of management to provide sophisticated, flexible systems which are capable of answering the "what if" question and responding to the rapidly changing needs of the users. In most cases the DP department is simply not equipped to deal with such demands.

This presentation focuses on a new approach to application development known as "prototyping"; a methodology which attempts to alleviate the problems associated with the traditional approach. In particular, the presentation will examine the causes of the "software crisis", the weakness of the traditional approach, the benefits of the prototyping approach, the resources needed for prototyping, and the associated management issues.
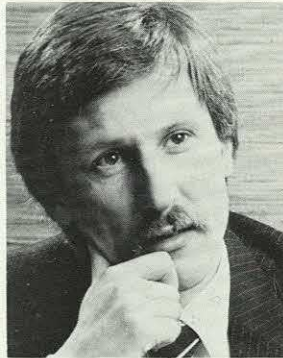
Jim Sharkey is European Marketing Manager for CSS International, one of the leading companies in the remote computing services industry.

Having obtained a M.Sc. in Operations Research and Management Studies at Imperial College, London, he joined Laporte Industries in 1968 as an O.R. Analyst and worked on a variety of operational problems associated with the Chemical Industry. In 1969, he joined the Tunnel Cement Company and became responsible for the development of a company-wide linear programming model.

In 1971 he moved into the field of computer timesharing by joining LEASCO RESPONSE as a technical consultant. During his stay with LEASCO he designed and developed an interactive statistical analysis system and an investment analysis system, both of which are still in use today.

Since 1973 he has been an employee of CSS International and has held the positions of Systems Consultant, Senior Systems Consultant and UK Technical Manager before moving to his current position in 1979.

His responsibilities cover such areas as market research and planning, product marketing and public relations.

Session J Wednesday 25 November: 1400-1515
The Warnier structured approach

Michel Koutchouk Infotel

Jean-Dominique Warnier's work enabled him to develop a coherent system of analysis and programming that can be used to develop information applications that are reliable and easy to modify.

This presentation will describe the logical principles on which Warnier based his approach. It will also describe the methods that are based on the Warnier approach — LCS (system construction), LCP (programme construction) and LDR (definition of requirements).

The advantages and the drawbacks of implementing these methods will be highlighted, and the presentation will conclude with some recommendations for successfully implementing the Warnier structured approach.

Michel Koutchouk studied engineering at the Ecole Nationale Supérieure d'Arts et Métiers and économics at the Institut d'Etudes Politiques in Paris. He began his career in 1970 at Air France, where he was project manager in charge of application development.

In 1980 he became Director of Consultancy at Infotel, with special responsibility for consultancy services based on using the Warnier structured approach to system development.

Michel Koutchouk is a professor at the Ecole Supérieure d'Electricité and at the Institut National d'informatique de gestion. He has published two text books on the methodology of programming.

Session K Wednesday 25 November: 1545-1700
Socio-technical approach to systems analysis and design

Christiane Floyd Technical University of Berlin

In this session, Christiane Floyd will examine methods for developing software that will be embedded in socio-technical systems. When it is used, such software is intricately interwoven with social processes of various kinds. Such software is likely to be long-lived and it will be subjected to continuous demands for changes, to which it must respond gracefully.

As an alternative to the well-known phase-oriented approach to software development, a process-oriented approach will be proposed. The process-oriented approach views software development as a sequence of cycles consisting of design (and re-design), implementation (and re-implementation) and evaluation (and re-evaluation) of successive versions of the software. The approach is based on iterative design, user participation and version control. With the process-oriented approach, the handling requirements of the software are a critical area of foreseeable changes, and this makes it necessary to combine controlled experiments with design.

The specification used in the process-oriented approach serves as a document that defines the software both for the software producer and the user. It describes both what the system does and how the system is to be embedded into its surrounding organisation. To facilitate understanding, the approach decomposes software, through several levels of sub-systems, to modules. The modules communicate through procedures called dynamic units of action. A consistent change will affect strings of connected procedures in various modules. The specification, therefore, must encourage both static and dynamic views of the system.

The ideas and concepts that underlie the process-oriented approach will be illustrated by means of a case study.

Christiane Floyd has been professor of software engineering at the Technical University of Berlin since 1978. Her current interests are in the field of systems design, specification, analysis and in the redesign of existing systems. In the mid-1970s she was a system designer with Softlab in Munich where she participated in several major software projects. At Softlab she was responsible for the development of software engineering methods adapted to industrial production.

Prior to joining Softlab, Christiane Floyd was, for five years, a staff member of the computer science department at Stanford University, California. At Stanford she participated in several research projects on programming languages, and she also taught programming methods.

In addition to her academic career, Christiane Floyd has practised as an independent software consultant.

see over for registration details

Registration for the conference

To register for the conference please complete the form opposite and return it to your local Butler Cox Foundation office (address on the back of this document), preferably by Friday 13th November 1981.

We will acknowledge receipt of each registration.

Accommodation

The conference is to be held at the Kurhaus Hotel, Scheveningen. We have negotiated an accommodation package on behalf of conference delegates which includes accommodation and breakfast for the nights of 23rd, 24th and 25th November. It also includes dinner on the evenings of 23rd and 24th November (the conference dinner will be held in the evening of 25th November).

The conference cocktail party on 23rd November, refreshments during the two and half days of the conference and the conference dinner, are provided by the Butler Cox Foundation as part of the conference.

The total cost of the accommodation package is Hfl678 (including hotel tax). This amount (together with any additional charges incurred by the delegate) should be paid direct to the Kurhaus Hotel at the end of the conference.

Companions

We have also made arrangements for husbands or wives accompanying delegates to the conference. The cost of the companion's package, which covers shared accommodation, breakfast and dinner for the duration of the conference will be Hfl450 (including hotel tax). This amount should also be paid direct to the Kurhaus Hotel.

Companions are invited to join the delegates as the guests of Butler Cox & Partners for the cocktail party on 23rd November, for lunch each day of the conference, and for the conference dinner (on 25th November).

In addition, if there is sufficient demand, we will ensure that a programme of activities is organised for companions.

Registration form

Please register me for the management conference and book hotel accommodation on my behalf to cover the period commencing in the evening of 23rd November and ending after lunch on 26th November.

Please book the companion's package on his/her behalf.

I understand that if this booking is not cancelled on or before 16th November 1981, any resulting costs incurred by Butler Cox & Partners Limited will be invoiced to my organisation.

Member Organisation _____

Delegate Name _____

Position _____

Address _____

_____

_____

_____

_____

Telephone _____

Telex _____

_____

I will be accompanied by: _____

_____

_____

Signature _____

Please return this form
to your local address of the
Butler Cox Foundation
shown on the back cover
of this document.

Butler Cox & Partners Limited
Morley House, 26-30 Holborn Viaduct, London EC1A 2BP
☎ 01-583 9381, Telex 8813717 LNCO

Belgium & The Netherlands
SA Butler Cox NV
Avenue Loiuse–479–Louizalaan,
Bte–47–Bus,
Bruxelles 1050 Brussel
☎ (02) 647 15 53, Telex 61963 BUTCOX

France
La Fondation Butler Cox
Tour Akzo, 164 Rue Ambroise Croizat,
93204 St Denis-Cedex 1, France
☎ (1) 820.61.64, Telex 610789 ASFRA

United States of America
Butler Cox & Partners Limited
216 Cooper Center, Pennsauken, New Jersey 08109, USA
☎ (609) 665 3210

Switzerland and Germany
Butler Cox & Partners Limited
Morley House, 26-30 Holborn Viaduct, London EC1A 2BP
☎ (London) 583 9381, (Zurich) 302 0848

Italy
Sisdoconsult
20123 Milano– Via Caradosso 7–Italy
☎ 86.53.55 / 87.62.27, Telex 311250 PPF MI

The Nordic Region
Statskonsult
PO Box 4040, S-171 04 Solna, Sweden,
☎ 08-730 03 00, Telex 127 54 SINTAB