

Annual Report 1999 • 2000



COWI



The Danish stand at EXPO 2000 in Hannover consists of a central pavilion and three glass-clad theme pavilions with the form of a pyramid, a hemisphere and a cube. The concept was developed by the architects Bysted A/S. COWI was responsible for the construction, installations, calculations and approval by the German authorities.

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Executive Management Report

Growing markets

The Danish market for consultancy assignments developed well during the year. Declining activity in major, conventional construction projects was countered by the increasing demand for consultancy expertise in Operations and Maintenance, major building projects and feasibility studies. We are also seeing growth in IT, management, environmental and planning tasks.

The volume of international assignments is now growing faster than that of Danish assignments, a development which is in accordance with our corporate strategy.

Much improved financial performance

The Group's financial development in 1999/00 has been turned around and is considerably better than in the previous financial year. Both operating profit and profit before and after taxes showed noticeable improvement. Group profit for 1999/00 was a surplus of DKK 19 million before taxes and DKK 6 million after taxes. The Board of Directors recommends that a 10% dividend be paid and that the remainder be transferred to next year.

The financial result for 1999/00 is regarded as satisfactory, taking into account the resources spent during the year on the internal rationalisation project, Project Profitability, the implementation of a new administrative framework system based on SAP-R3, and the extensive modernisation of the organisation. Growth in the parent company and some subsidiaries was positive, though certain subsidiaries, regrettably, reported a loss.

Group turnover rose to DKK 1,377 million, with that of the parent company rising to DKK 1,148 million. Group turnover outside Denmark represents half of the total turnover.

Major Danish assignments

Among the most important major assignments in Denmark is the completion of the Øresund Bridge between Denmark and Sweden. There is still a high level of activity in the construction supervision of the Copenhagen Metro and projects are continuing on the Copenhagen waterfront.

In the field of energy, we are designing incineration plants at Esbjerg and Århus in Denmark, together with the architects Friis & Moltke.

The new head office of DR, the Danish Broadcasting Corporation, in Ørestad, Copenhagen, and the new National Archives are among the most important building assignments during the year.



COWI's head office in Lyngby is growing. The Executive Management at the building site: from left, Henning Therkelsen (Executive Director, International Operations), Keld Sørensen (Financial Director, CFO) Knud Østergaard Hansen (Executive Director, Danish Operations) and Klaus H. Ostenfeld (Managing Director, CEO).



The Øresund Bridge between Denmark and Sweden, opened on 1 July 2000, is one of COWI's most visible assignments. COWI carried out the detailed design together with SWECO. More than 100 COWI employees were involved.

Broad spectrum of international assignments

Efforts to win more assignments abroad have proved succesful—we now have a broad spectrum of projects in the fields of environment, urban development and major civil works. Among these are the design in Sweden of the 7 km Malmö City tunnel, together with SWECO, and the Årstavik railway bridge. We also implemented an extensive multi-disciplinary assignment to reorganise the Kiev Water and Wastewater Enterprise in Ukraine, involving plans for renovation, extension and operation of its facilities. At the other

end of the scale, we planned and executed international marketing for the CAT Alliance formed by COWI, Enviros Aspinwall and Tauw, which offers environmental risk assessment in connection with clients' acquisitions of facilities.

In the course of the year, we were increasingly successful in winning locally-financed assignments abroad against tough competition. One of these was the tender design of a very large double suspension bridge across the Chacao Channel in Chile.

	1995/96	1996/97	1997/98	1998/99	1999/00
Turnover	1,224.3	1,324.6	1,354.1	1,328.5	1,377.3
Profit before tax	70.1	62.8	40.9	-19.8	19.0
Profit after tax	36.9	42.3	25.0	-4.5	6.0
Total assets	813.8	935.7	934.3	900.7	1,004.4
Equity capital	239.1	277.9	299.5	295.0	297.5
Equity capital %	29.4	29.7	32.1	32.8	29.6
Profit ratio %	4.1	3.2	1.5	-2.8	0.3

Key Group
figures
DKK million

Executive Management Report

New market-oriented approach Project Profitability, an extensive internal project with 18 sub-projects, has created the basis for broader and more direct contact with the clients and better project management, with a new, efficient organisation.

We expect that this new market-oriented and specialised organisation, together with new work processes and more extensive use of IT, will improve performance and enhance profitability.

We have introduced a new career system by which project management and technical specialisation will become independent career paths on a par with line management. This will provide a good position from which to retain our image among students as one of the most preferred potential employers. A survey conducted by Universum among engineering students shows that COWI is once again rated as a worthy number two.

Group staff numbers now total 2,087, with 1,455 based in Denmark and 632 abroad.

Bright prospects for earning power

The order book at year end showed the same satisfactory situation as last year.

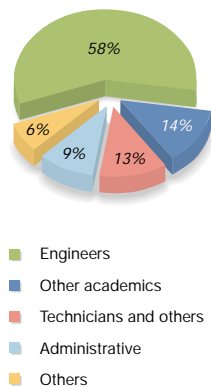
Project Profitability and the new organisation will enable us in the coming year to raise our earnings to the level of the global leaders in the international consulting business. In financial year 2000/01, we expect a turnover similar to that of 1999/00 with an improved profit.

A financially sound business is a prerequisite for creating the right working conditions for creative employees, the necessary specialist development and expansion into new and promising markets.

Work on implementing a new offensive strategy for communications and sales, and the development of the Group's Intellectual Capital Accounts, will continue.

As part of a coordinated campaign for the globalisation of the COWI Group, we will implement, in the course of the coming financial year, a corporate strategy with the active participation of the subsidiaries. This strategy will create the

1,455 parent company staff by training (Denmark)

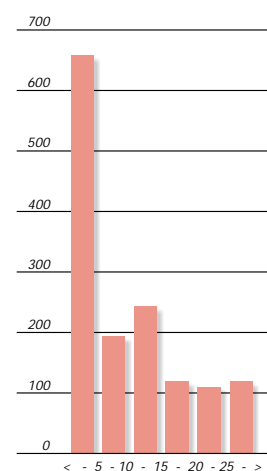


COWI has introduced a new career system with project management and technical specialisation on a par with line management.

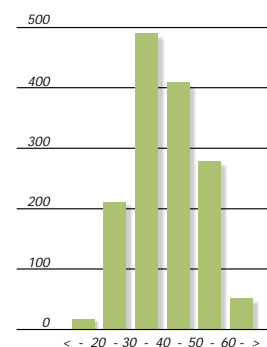




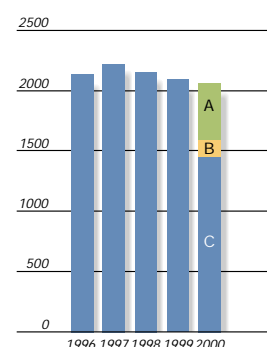
The largest nature restoration project in Danish history—Vest Stadil Fjord in Jutland. COWI has been lead consultant from concept to implementation.



1,455 parent company staff by seniority (Denmark)



1,455 parent company staff by age (Denmark)



COWI Group staff members 1996-2000 (year end)

- A: 516 in subsidiaries
- B: 116 in parent company abroad
- C: 1,455 in parent company in Denmark

basis for the companies' future business plans. We will concentrate on improving earnings, rather than increasing turnover, through continued development of activities in already profitable sectors and consolidation in others.

Prospect for market growth
We expect the Danish market to develop even further, particularly in tendering of services in close collaboration with our clients. New models for cooperation between public and private companies, combined with refinement of specialist skills in IT and management, are presenting exciting new opportunities.

We also predict slow improvement on the European market. In Russia and other Eastern European countries, we expect the market to develop and grow. Activities in North America have increased considerably in 2000 and are expected to remain at the same high level in the coming financial year.

With the successful combination of development and specialist skills, efficient execution of assignments and a sound and healthy business, the COWI Group is well equipped to face the challenges of the future on the competitive national and international markets.

Knowledge and Development



We have analysed the risk of fire in the storage rooms of the new National Archives in Ørestad, Copenhagen. The analysis included security measures, escape routes and choice of materials. Steel shelving systems and concrete elements were fire-tested.

Development at the practical level

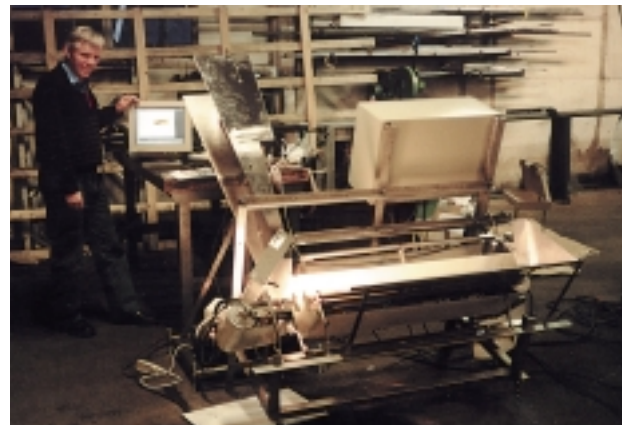
Our consultancy has two overall objectives—it must meet the needs of the clients and it must bring about innovation. Only when both these objectives have been fulfilled through practical collaboration between clients and staff will we create development. In COWI, we have a tradition for development, which we support through knowledge management. This puts the client and the employee at the focal point and will lead to better consultancy and greater job satisfaction.

We are taking part in a development project on Intellectual Capital Reports with the Danish Agency for Trade and Industry, 16 other Danish companies and a number of researchers. This year, we have concentrated on the form and structure of the Intellectual Capital Report and worked towards making knowledge management an integrated part of COWI's daily work.

Development projects

To ensure innovation, we have started up 23 development projects from a special central development pool on a trial basis. They all involve inter-disciplinary and cross-organisational issues such as:

- natural degrading of contaminated soil
- economic assessment of all aspects of building and construction projects
- evaluation of what changes mean to the individual and to society
- mechanical and electrical installations on major bridges
- development of secretarial skills and qualifications
- sustainable development.



The fishing industry is interested in using its resources in a sustainable manner. We developed robots based on vision technology, by which skippers can see what kinds of fish are being caught, and in what quantities. This ensures that their catch will be within quotas and by-catch regulations.

Specialist networks are nerve centres

The ability of the staff to provide increasingly qualified consultancy is highly dependent on their relations with each other and with external experts. We therefore regard inter-disciplinary networks as nerve centres. During the year, we have strengthened these by establishing additional networks in project management, IT development, GIS systems, graphic design and telecommunications, as well as environment, health and safety. The networks act as forums for specialist dialogue and development of Best Practices, a vital factor in our sharing of knowledge.

Inter-disciplinary specialisation a keyword

Specialist knowledge and inter-disciplinary collaboration are integral elements of consultancy services today. Inter-disciplinary contact ensures broader understanding and is the key to creating holistic solutions to complex challenges.

We have conducted workshops, in which specialist groups of engineers, biologists, economists and others worked closely together to develop new services. One example of an inter-disciplinary project is the modernisation of Kiev Water and Wastewater Enterprise, which serves 2.6 million people. Many departments and specialist groups have studied the organisational, financial, socio-economic and technical aspects and consequences of the modernisation process.

Geographic view of the environment

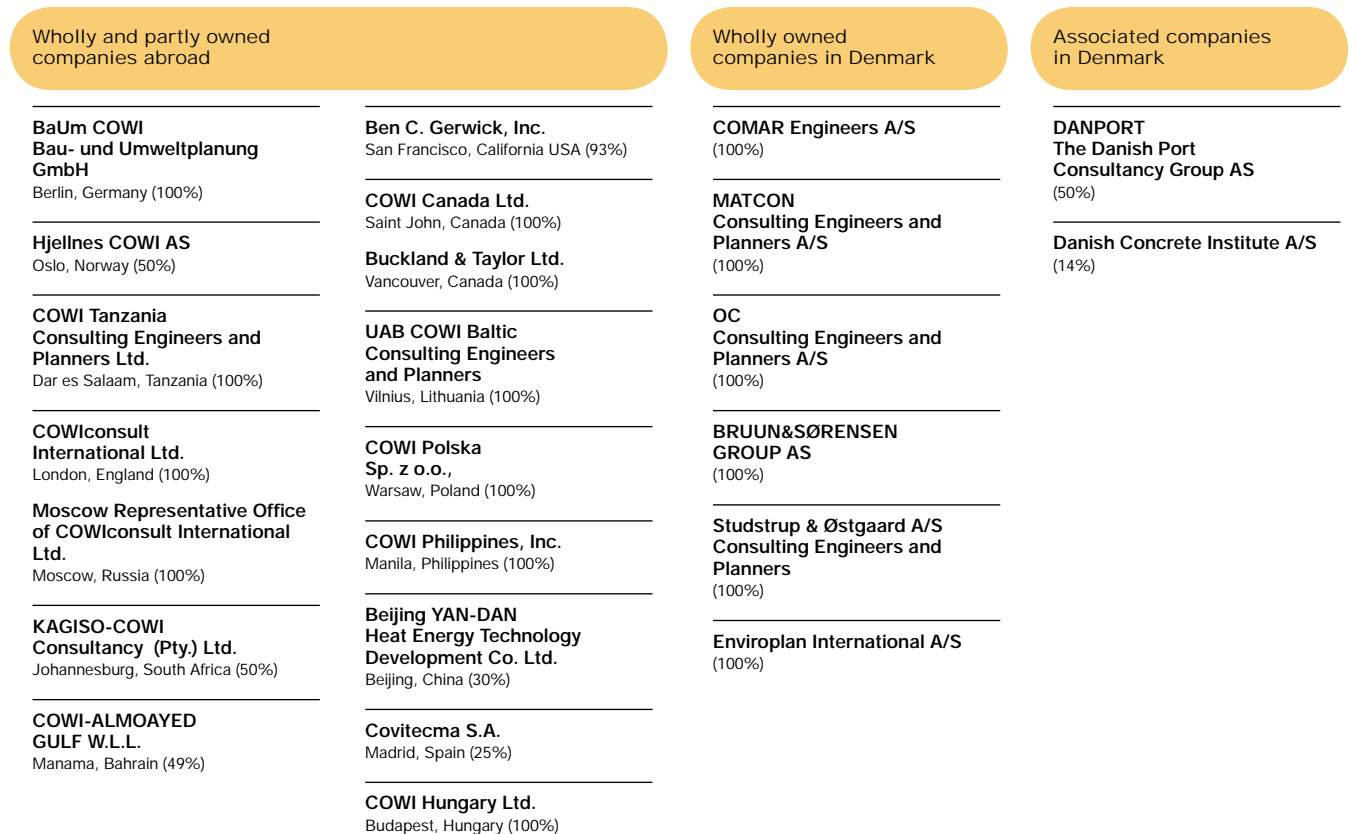
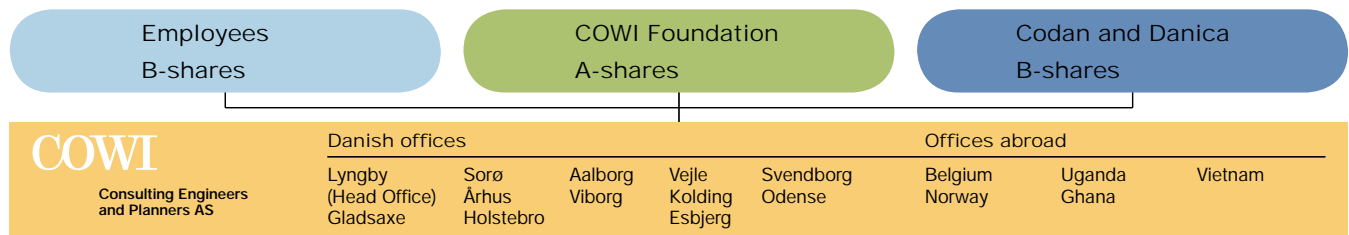
Another result of the inter-disciplinary collaboration is the environmental tool EDMAP, Environmental Data Management and Presentation, which combines environmental knowledge with understanding of sophisticated information technology. It is a tool that can digest environmental data and present it on the Internet from any geographical perspective required. It was developed in close cooperation with several COWI Group members.



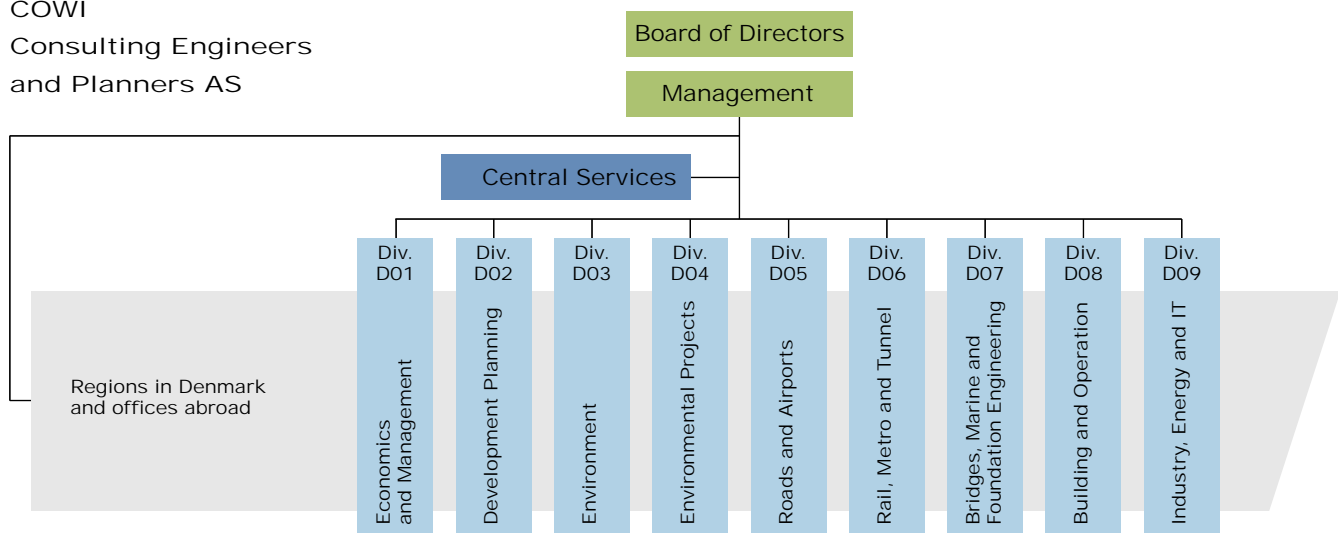
Poor quarry workers in India. More than one billion people live under the UN's poverty threshold. COWI is at the forefront of developing methods to help alleviate poverty. We include the poor themselves as active participants in the process of formulating strategies.

We are studying the possibilities of stabilising local road materials using natural pozzolans, some of which come from this deposit of volcanic ash at Arusha in Tanzania. This will support local industry and reduce costly transport of raw materials.

The COWI Group



COWI
Consulting Engineers
and Planners AS



The Management

The company COWI was founded in 1930 by Chr. Ostenfeld, Dr. Techn. Sc. He was joined three years later by Wriborg Jønson, M.Sc. In 1935, the company undertook its first assignment outside Denmark.

From 1946 to 1973, the company operated as a partnership under the name Chr. Ostenfeld & W. Jønson. In 1973, the company became the foundation-owned limited company COWIconsult, Consulting Engineers and Planners AS, a name which was shortened to COWI Consulting Engineers and Planners AS in 1995.

COWI is economically independent of any producer, supplier or contractor.

Ownership

The company's share capital amounts to DKK 34.75 million.

The A-shares, with a value of DKK 20 million, are owned by the COWI Foundation, which supports research and development associated with Danish consultancy activities.

The B-shares are owned by three groups: the insurance companies Codan and Danica each own DKK 4 million, COWI employees own DKK 6.15 million; and the Foundation and COWI own the remaining DKK 0.6 million.

Subsidiaries and associated companies

On 31 August 1999, we sold our 49% share in Alrabiah COWI in Saudi Arabia to our former partner, Dr. Abdul Rahman Al Rabiah, who is continuing the company

under the name A. Al Rabiah & Partner. At the same time, we also sold our 75% share in Covitecma SA, Spain to the company Europroject s.a., Barcelona, Spain. The company continues as an associated company in the Group.

Organisation

From 1 January 2000, we have implemented an extensive modernisation of COWI's organisation.

The former structure, with three divisions and eleven market areas, has been replaced by nine specialised divisions operating as independent business units. A new career system has also been introduced, with equal status for project and line managers, and technical specialists. There will be more focus on broader and more direct contact with clients and enhanced staff development programmes.

The directors of the nine divisions will report to the Executive Management—Managing Director, CEO Klaus H. Ostenfeld; Executive Director, Danish Operations Knud Østergaard Hansen; Executive Director, International Operations Henning Therkelsen; and Financial Director, CFO Keld Sørensen.

Regional marketing in Denmark will be carried out by four Regional Directors, who are responsible for market development in their respective regions on behalf of all nine business divisions. International business will be managed directly by the divisions in Denmark and through the COWI Group members abroad.

Board of Directors

Jørgen Madsen
Chairman

Jørn Schønnemann
Deputy Chairman

Ole Steen Andersen

Henriette Bundgaard*

Ida Tom Garre*

Peter Michael Steen Jacobsen*

Carsten Kærgaard

Torsten Mølgaard

Niels Christian Nielsen

Carsten Digman Stig*

* *Staff representatives*

Management

Klaus H. Ostenfeld
Managing Director, CEO
(until 30 April 2000
Eigil Steen Pedersen)

Henning Therkelsen
Executive Director, International Operations

Knud Østergaard Hansen
Executive Director, Danish Operations

Keld Sørensen
Financial Director, CFO

Economics and Management



Director, Economics
and Management
Stig P. Christensen

- Environmental and resource economics
- Environmental management and legislation
- Transport and commercial economics
- Welfare and labour market
- Market and consumer analyses
- Financing and BOT
- Public and private service development
- Public transport and organisation
- Traffic planning and informatics
- Traffic environment and safety

We provide consultancy to public authorities and private companies—and often cooperate with several interest groups at the same time. Our core skills in economics, law, the environment, transport and management are important elements in inter-disciplinary projects. Together with our clients, we develop new skills, such as specialist process consultancy, financing, communications and IT consultancy.

We are developing our position as management consultant from the sectors in which we are particularly strong—environment and transport. Our international network has been considerably strengthened through the establishment of the new offices in Budapest and Brussels, and through the development of strategic alliances with prominent European consultants.

Global economy and the environment

Globalisation is creating new demands for global answers to many environmental and public health issues. We are providing assistance, particularly in Russia, Central and Eastern Europe and the Far East, in the development and implementation of new environmental policies and strategies. We advise authorities and utilities when legal and institutional frameworks are to be developed with consideration for the socio-economic possibilities and consequences. We are taking part in the phasing out of so-called POPs (Persistent

Organic Pollutants) and in the sustainable development of towns and coastal regions.

We advise authorities and investors on new tax, financial and institutional reforms. One example is our assistance to the Environment for Europe process, including the Ministerial Consultation of environment and finance ministers in Almaty, Kazakhstan in the autumn of 2000.

Welfare and knowledge

The rules of the welfare state are changing in the 'new' economy as it changes the technological and institutional frameworks of the labour market. Global competition in developing skills and retaining staff are central issues. We prepare and evaluate intellectual capital reports; we analyse retirement policies and integration opportunities for ethnic minorities; and we take part in the development of the labour market in the Baltic States and in the preparation of EU employment statistics. Evaluations of market trends and Best Practice are significant inputs to private sector development.

Service in a market economy

The private sector is now more closely involved in the development of public services, also in the social sector. We prepare tender processes, establish the basis for quality assessments and agreements, conduct market analyses and evaluate consumer willingness to pay for out-sourced services. We assess the service

Visions, concepts, planning
and financing of tram
systems in Aarhus, Denmark





productivity of potential suppliers with benchmarking and financial and costs analysis. We have analysed options for private financing of a possible planned Fehmarn Belt link.

Mobility and congestion
With greater mobility and congestion now so important, new IT and telematics technology has given a new socio-economic significance to traffic, terminals and users. We are contributing to reducing the negative impact of transport and congestion through efficient use of new technologies and new forms of organisation and financing.

We take part in the development of traffic systems and infrastructure, including public transport, and participate in EU

research on the road pricing systems of the future.

We are also helping to formulate technical, financial, social and political measures to define traffic policy, both in Denmark and abroad. We have headed an important area in the preparation of the EU support programme, ISPA, for the development of transport infrastructure in Eastern Europe and are taking part in its future development through the EU's Global Infrastructure Framework Contract.

Conference on the environmental impact of transport and transport duties levied.

Danish municipalities are outsourcing services such as meals-on-wheels. We are reporting on experience gained for the Ministry of Trade and Industry.



Development Planning



Director,
Development Planning
Jan Mosbech Kieler

- Urban management and local government
- Water resources management
- Water supply and sanitation
- Agriculture and natural resources management
- Health and social development
- Training and education
- Institutional analysis and capacity building
- Human rights and democratisation

In northern Niger lies one of the world's few reserves for the protection of biodiversity in desert areas. We have prepared the next phase of a three-year nature management project in close cooperation with native pastoralists.

Activities in our core competence areas primarily involve assignments abroad in which we work together with bilateral and multilateral organisations, developing countries, Central and Eastern Europe and the CIS (Commonwealth of Independent States). We are a key partner in the development and implementation of Danish foreign aid. Apart from Danida, DANCED and DANIDA, our most important clients include the EU, the World Bank, EBRD (the European Bank for Reconstruction and Development) and the Asian Development Bank. Our activities in Denmark are developing particularly strongly in the fields of groundwater protection and urban development.

Holistic urban development
An increasingly large proportion of the world's poor live in urban areas. For more than 20 years, we have been working with integrated urban development. We combine an understanding of social processes, environmental aspects and the need for a new approach in public management with extensive technical expertise in such fields as waste management, traffic planning, water supply and sanitation. Our assignments are carried out mainly in Asia, Africa, Eastern Europe and the CIS. In Ukraine, we are assisting the authorities in Kiev with the reform and modernisation of water supply and wastewater management for the city's 2.5 million residents. And in South Africa, we are advising the authorities on the development of local

management capacity, enabling them to assess the environmental impact of urban development.

Policy development

A growing share of our assignments involves analysis and policy development in inter-disciplinary issues. They address issues such as the relation between emergency aid and development, and the plethora of sector support programmes for water supply and sanitation currently financed by Danish and international organisations.

We provide consultancy services in the economic and political reform processes that Denmark is supporting in Vietnam and Albania. We are also taking a very active part in the evaluation of Danish humanitarian aid, bilateral health sector aid, promotion of democratisation and



Danida is supporting the water supply and sanitation sectors in Egypt. COWI assisted with the preparation of a long-term sector programme.





respect for human rights. Our cross-cutting evaluations contribute significantly to the development of Danish foreign aid policy in these fields.

Natural resources

We are active in the mapping, protection and management of natural resources both in Denmark and abroad. As a result of the tightening of Danish legislation on water supply and environmental protection, we have mapped groundwater resources and analysed their vulnerability for the Danish counties and municipalities. In other countries, we provide consultancy services at many levels from grassroots organisations to ministries.

Among other things, we are assisting ministries to develop national strategies.

In Tanzania, we are assisting the authorities to develop a programme in which the local residents are to take an active part in forest management. In Nicaragua, we are assisting the Ministry of the Environment and Natural Resources to decentralise its tasks and are currently developing a water resources plan for the Esteli River basin. And in Cambodia, we have prepared a project to develop the capacities of five ministries to manage environmental and nature conservation programmes.

A low-income and ethnically mixed suburb in Denmark. We have analysed the social and ethnic aspects and prepared an integrated plan for its development.

Environment

The largest nature restoration project ever in Denmark—Vest Stadil Fjord, inaugurated in 1999 by the Danish Minister for Environment and Energy.



Director,
Environment
Mogens Heering



- Chemicals in the environment
- Nature restoration and conservation
- Environmental impact assessment
- Environmental management
- Pollution prevention in industries
- Soil and groundwater contamination
- Occupational health and indoor climate
- Noise abatement
- Environmental due diligence
- Safety management

Solutions to environmental problems are becoming more varied and subtle—because there are more interest groups and because administrative regulations for cleaning and cleaning up alone do not give full value for money. Every level of management and group of employees in a company has a role to play. As consultants, therefore, we have to master an increasingly broad spectrum of relevant disciplines at the same time as combining them suitably into integrated and inter-disciplinary advice. In the Environment Division, we believe strongly in a flexible project organisation based on in-house expertise in all disciplines. Breadth demands depth.

National and international legislation and standards will drive this development even further forward in the coming years.

EIA—new directive applies to more types of plants
The new EIA (Environmental Impact

Assessment) directive from the EU, which came into force last summer, extends the number of companies and activities that must be screened to determine their need for a full-scale EIA. Our lengthy experience in EIAs gives us a decided competitive edge in the implementation of such screenings.

Environment, health and safety
—EHS

Consumers, authorities and customers expect companies and organisations to adapt to the environmental demands of the day. We work at every organisational level with the introduction of environmental and occupational health management, green accounts, training, cleaner technology and environmental assessments of relevant products. Our environmental management tool, Envision, supports this work and has just been upgraded.

To strengthen the integration of environment and safety, we have merged our Safety Management unit with our industrial environment and occupational health activities.

EU approximation in Eastern Europe

The Danish Government and international organisations are supporting the EU approximation of environmental legislation and practice in Eastern European countries. COWI is actively participating in this process. In this context, we also assist in-

COWI, together with DHI Water & Environment, is advising the World Bank on an integrated water quality project for Lake Victoria and its catchments.



Cleaning up trichloroethylene using a combination of groundwater cleaning, steam heating, vacuum ventilation and air cleaning at a factory site in Denmark, together with NCC Denmark A/S.

dustries in meeting the requirements stipulated by the EU IPPC directive. Through inventories, investigations and remediation of contaminated sites we facilitate the privatisation of state-owned enterprises, and we support the local administration with tools for managing contaminated sites.

Environmental demands affecting sale and purchase of companies
Environmental economic risk evaluation has become an established part of the preparatory work of mergers and acquisitions. We have many years of experience in such risk evaluations. To strengthen our resource base and geographical coverage, we have allied ourselves with two leading consultancy firms in England and the Netherlands—Enviros Aspinwall and Tauw—forming the so-called CAT Alliance. The alliance covers more than 50 countries with established subsidiaries or working partnerships.

EU has put noise abatement on the agenda
The EU is currently engaged in drawing up a policy on noise. We are taking an active part, both in developing techniques and determining the most cost-effective noise abatement methods.

COWI is assisting the Elsam group (an alliance of major Danish power plants) in introducing an environmental monitoring system to ISO 14001 standards before the end of 2001.



Environmental Projects



Director,
Environmental Projects
Leif Winther

- Urban wastewater management
- Wastewater infrastructure rehabilitation
- Wastewater and stormwater collection
- Wastewater treatment and sludge management
- Solid waste management and recycling
- Hazardous waste management
- Institutional and regulatory aspects
- Environmental accounting
- Supervisory Control and Data Acquisition (SCADA)
- Operation and Maintenance

Solid waste sorting in Russia. We have carried out a detailed solid waste study in Novgorod for the Danish Environmental Protection Agency.



We have continued our internationalisation with projects in 23 countries, representing 55% of our workload.

Urban wastewater management
There is a growing demand for our services in Eastern Europe and the CIS, where we are assisting local authorities in water and wastewater strategic planning. As part of the large infrastructure investments in the EU accession countries, we have carried out project preparation and wastewater master planning for such major cities as Warsaw, Budapest and Prague.

Wastewater and stormwater collection

We have planned and designed several stormwater retention basins and new collection systems in Danish municipalities as well as in Poland and Romania.

Wastewater treatment and sludge management

Our main activities in Central and Eastern Europe comprise upgrading and rehabilitation of treatment facilities in Poland, Romania, Estonia and Russia. Improved sludge handling facilities have been designed and implemented in a number of Danish municipalities. In Ireland, we have assisted with the design of wastewater treatment plants for the towns of Shanganagh-Bray and Portlaoise.



Renovation of the anaerobic digesters at Luberetskaya wastewater treatment plant in Moscow.

Solid waste management and recycling

Environmentally safe handling and disposal of solid waste must go hand in hand with the efficient utilisation of resources. We have continued our work with the preparation of integrated waste management plans for several Irish counties, as well as certain large towns in Syria. We have also carried out the planning and design of modern landfills in Bulgaria, Russia, the Philippines and Lithuania.

Hazardous waste management

If viable and cost-effective results are to be attained, hazardous waste management requires development of integrated strategies that take into account actions at source and not merely final handling and disposal.

Based on this tenet, we have prepared the National Strategy Plan for Hazardous Waste Management in China. We have also rendered assistance to several projects in Central and Eastern Europe. We are currently engaged in several projects in Mozambique, Ukraine and Belarus for the elimination of risks caused by stock-piled obsolete pesticides.

Institutional and regulatory aspects

The organisational, administrative and legislative aspects of solid waste and wastewater require efficient integrated



We have assisted in extending wastewater treatment capacity at a plant in Poland. The project, implemented by the Danish EPA and Nysa Municipality in Poland, boosted capacity to cope with wastewater from 125,000 people.

management systems. We have been involved in developing cooperation on wastewater management between Danish municipalities. And in Ireland, Lithuania and Bulgaria, we have participated in similar cooperation on a regional basis for the handling and disposal of solid waste. In Lithuania, we assisted in drafting new waste legislation to approximate national legislation to that of the EU.

Environmental accounting

We have prepared environmental accounts for Danish wastewater treatment plants that quantify annual resource consumption, production (i.e. volume of wastewater treated and nutrients removed, and volume of biogas produced) and the environmental impact of effluents, air emissions, and sludge and ash disposal.

Supervisory Control and Data Acquisition (SCADA)

We have designed and implemented computerised SCADA programmes for entire wastewater systems for several municipalities in Denmark and abroad. This has significantly improved day-to-day operations and provided a decision-making basis for planning the construction of retention basins and rehabilitation of sewers.



Roads and Airports



Director,
Roads and Airports
Michael Gautier

- Urban roads
- Highways
- Airports
- Pavements
- Operation and Maintenance
- Surveying and mapping
- GIS - Geographical Information System

Roads for less money

The demands for efficiency in public operation and service tasks are increasing as costs increase. Many public authorities are showing greater interest in new forms of organisation that make use of market mechanisms and contract management. The aim is to achieve best value for money in the form of service enhancement or cost cutting. They are working to reach their objectives by either modifying the framework of existing organisational structures or entering into contracts with external partners.

We strive to be a good partner in the field of operations for public authorities by training our staff to focus on the interplay between specialist knowledge, organisational development and understanding of the reactions to change. In the course of the year, we worked on operations projects for government organisations in Denmark and abroad. We also took part in the EU-financed development project, RIMES, which, among other things, will define the standards for maintenance of traffic infrastructure.



Master planning and design of rehabilitation works on six provincial airports in the southern Philippines.

Improvement of urban environment

Public awareness of traffic safety, the environment and aesthetic values in towns and cities is growing and is making its mark on many of our municipal assignments.

In Århus, the second largest city in Denmark, we participated with great success in a competition for the development of the area between the harbour and the city by addressing the highly complex traffic issues involved. For the Port of Århus we completed the challenging task of solving infrastructure problems arising from the expansion of the harbour. This project involved traffic management, railways, roads and container parks.

Pavement repair in Zambia on the 590 km Lusaka-Mongu road, running through the Kafue National Park—the biggest game reserve in Africa.



We have advised a number of Danish municipalities in the operation and maintenance of roads and parks



Airports at home and abroad

The global significance of air traffic is increasing and many airports need upgrading. We are working on the extension and rehabilitation of international airports in Latvia, the Philippines and Guyana. We are also analysing and evaluating the condition of apron and taxiway pavements at Copenhagen Airport and preparing proposals for repairs.

Durable pavements

The market is demanding greater efficiency in road operation—this means better quality pavements, with longer lifetimes and less periodic maintenance. We have been working for a number of years on developing new types of pavements and improved specifications to meet this demand. We are arranging pavement seminars for the World Bank and Danida, dealing with stabilisation of local materials, recycling of pavements, and asphalt pavements with extended service life.

We are also working with tender of resurfacing contracts based on functional requirements, which we believe will be used increasingly.




Surveying, mapping and GIS

Inexpensive and efficient methods are being developed quickly. As part of a nature restoration project in Denmark, we have surveyed an area of 350 ha by combining laser scanning from helicopters with GPS surveying. This method enables us to produce high-resolution terrain models.

Geographical information and the use of GIS tools are now integrated in many of our projects. They assist us in making good and valid presentations of data for use in land acquisition, condition assessment, environmental evaluation and maintenance planning.

GIS being used for land acquisition plans in a nature restoration project in Denmark.





Rail, Metro and Tunnel



Director, Rail, Metro
and Tunnel
Arne Steen Jacobsen

- Railway planning
- Infrastructure design
- Bored tunnels
- Immersed tunnels
- Cut-and-cover tunnels
- Stations
- Project and construction management
- Upgrading and maintenance
- Infrastructure management

We are involved in the modernisation of the railway networks in Hungary and several other Eastern European Countries.



Test runs of metro trains are under way on the completed infrastructure at Ørestad, the new neighbourhood of Copenhagen.

Our work in the field of railways and metros continued with success. Early in the year, we transferred our specialist tunnel skills into the Division. We are working to further expand our existing knowledge with even greater emphasis on meeting all the needs of railway and metro companies from planning to economical operation. The Copenhagen Metro is still the largest single project in our current portfolio, but there are other major assignments at home and abroad through which we have once again made our mark as an international railway and tunnel consultant.

Copenhagen Metro

We are responsible for the Owner's construction management of the Copenhagen Metro and, over the year, can report satisfactory progress with the civil works. Boring of the 8 km twin tunnel is progressing faster than expected and the above-ground structures in Ørestad, the new neighbourhood of Copenhagen, are virtually complete. Our focus has now turned to the progress of the safety approval procedures between the supplier, Ansaldo, and the Railway Inspectorate for the driverless train systems.

There is still a considerable amount of planning and design work at the drawing board stage. Among forthcoming projects are the tracks and stations between Frederiksberg and Vanløse and the next

phase from Lergravsparken to Copenhagen International Airport. Together with the municipal authorities, we have devoted considerable resources to the detailed design of the forecourts of all metro stations.

Progress on the Malmö City tunnel

Together with SWECO, we are the Owner's consultants on the Malmö City tunnel. Design of the 5 km bored tunnel and the new underground stations, Malmö Central and Triangel, which are to be constructed as cut-and-cover and NATM tunnels respectively, is under way. Our initial task is to provide the basic data for environmental approval by the environmental and railway authorities. The work includes evaluation of tunnelling method, hydro-geological and durability assessments and risk analyses.

Eastern Europe on the rails

Through the ISPA programme, the EU is investing € 1 billion per year for seven years in the candidate countries in Central and Eastern Europe, divided equally between transport and environmental projects. We have already completed many assignments under this programme, with activities that have included feasibility studies, environmental studies, design, design supervision, preparation of tender documents and assistance with preparing applications. We have assisted railway





organisations in Lithuania, Estonia, Poland, Slovakia and Hungary with the design of new railways and upgrading of infrastructure. The challenging assignments were completed together with local and international consultants.

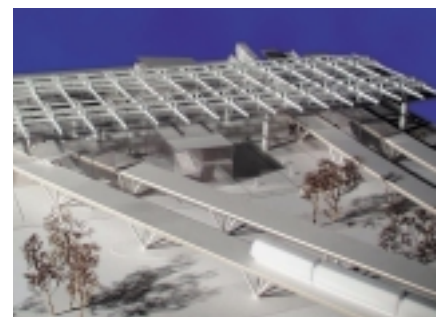
Systems for railway maintenance
Together with the Danish National Railway Agency, we have developed Maintenance Management System (MMS), a user-friendly tool that will ensure efficient maintenance of the Danish railway network. The Agency has put the first part-systems of MMS into operation whilst further development continues. During the year, we were awarded a similar contract for Jernbaneverket in Norway. Both projects are being implemented in joint venture with the consultancy division of the Danish National Railway Agency

and, in Norway, also with the company ViaNova. We are now marketing MMS outside Scandinavia.

Durable tunnel design

As a result of our EU-financed research project, DuraCrete, we have been involved in assignments to determine the loads on, and reliability of, tunnel constructions by applying probabilistic analysis methods. Using this technique, we checked the calculations of the Green Heart Bored Tunnel, the largest-diameter tunnel in the world, for High Speedline South in Holland. We have also continued 50 years' work with immersed tunnels in Ireland, Poland, Norway and Greece, and in Scandinavia have been involved in the Øresund link and feasibility study on the Fehmarn Belt link.

The experience we gained from the metro tunnel running through the limestone under Copenhagen is being put to use in the design of the Malmö City tunnel.



Flintholm Station, which will be the third busiest station in Denmark, is at the tender stage after a project we have prepared.

Bridges, Marine and Foundation Engineering



Director,
Bridges, Marine and
Foundation Engineering
Anton Petersen

- Major bridges
- Bridges
- Geotechnics
- Coastal protection
- Marine engineering
- Management systems
- Operation and Maintenance
- Risk analysis
- Aerodynamics
- Safety assessment

We have combined bridge engineering, geotechnics and marine engineering into one division, so that we now have expertise in all these fields.

In the coming year, we will maintain and strengthen our international position as one of the world's leading consultants in the market for suspension bridges and cable-stayed bridges. In the field of Operation and Maintenance, we are seeing an increasing demand for our services in a market that is still growing and we have set ourselves the goal of being among the European leaders. The demand for our services is also growing in the field of marine engineering and geotechnics and we intend to be one of the top five companies in Europe within the next three years.

World class bridges

One of the most momentous events of the year was the opening of the Øresund Bridge between Denmark and Sweden on 1 July 2000. In joint venture with SWECO, we prepared detailed design of the bridge for the main contractor, Sundlink. We have completed the feasibility studies for the Danish and German Ministries of Transport on a fixed link between Denmark and Germany. Against tough international competition, we were awarded, together with INCUATRO, the feasibility

study and design contracts for two major suspension bridges in Chile for the Ministry of Public Works. For the Highway Department in Hong Kong, we have conducted, together with Ove Arup, a number of studies on Stonecutters Bridge.

Bridge maintenance

Our expertise and specialist knowledge in the field of operation and maintenance of bridges are increasingly in demand. We are to undertake a complete rehabilitation of the Aquitaine suspension bridge in Bordeaux, France, together with the French company, SETEC. In Argentina, we have replaced the main cables of two major cable-stayed bridges and in Sweden we are assisting Vägverket (the Swedish Road Directorate) with an assessment of the condition of suspension cables on a bridge in Gothenburg.

Marine and foundation engineering

We have prepared a pilot project for the Port of Copenhagen for a new terminal for the Oslo ferry and been awarded new



We have developed the cable-stayed bridge option for the Fehmarn Belt fixed link.



One of the bridges in El Salvador on which we carried out hurricane damage assessment.





The Port of Durrës in Albania. We are repairing and upgrading the harbour.

major projects for the World Bank and the EU for the repair and upgrading of the Port of Durrës in Albania.

We prepared the tender documents and supervised the dredging of an 11 km long navigation channel in a Danish fjord for Statoil.

We have completed a coast protection project and a sand replenishment project on two Danish coasts.

In Saudi Arabia and the United Arab Emirates, we have carried out several major power station projects—the design of in and outfall structures for cooling water.

Important risk analyses

Risk analysis is becoming an increasingly important element in the decision-making process of complex construction projects. Our specialists have carried out analyses of the construction and operation of the Åsta Bridge for Banverket, Swedish Railways. We have also assisted in a number of other projects, such as the new Danish National Archives and the Viking Cable between Norway and Germany.

Management creates overview

Yet again this year we have seen growth in our involvement in operation consultancy and bridge management. Our bridge management system is about to be implemented in Uruguay for the management of some 800 bridges. We are already classifying a number of bridges that make up the corridors from Uruguay to Brazil and Argentina to monitor heavy traffic in particular.

We are providing specialist consultancy on the Seo-Hae Grand Bridge in Korea. The cable-stayed bridge is 7.4 km long with a main span of 470 m. Our involvement is chiefly concerned with consultancy on bridge inspection, heavy traffic methodology and monitoring of bridge constructions.

In El Salvador, we have assisted the national road authority with assessing damage caused by hurricane Mitch to several bridges. An existing bridge management system for the registration and evaluation of the bridges has been upgraded.

Øresund Bridge was opened on 1 July 2000. We detail designed the bridge, together with the Swedish company, SWECO.



Building and Operation



Director,
Building and Operation
Niels Aude

- Industrial and administration buildings
- Sports centres and cultural buildings
- Housing, schools and universities
- Hospitals, sheltered housing and nursing homes
- Urban development
- Operation and Maintenance
- Owner and tenant consultancy services
- Project development
- Life cycle costs

We have created a good indoor climate in the Psychiatric Department of the County Hospital on Funen, Denmark. The project was implemented in cooperation with the architects Stærmosø & Isager K/S.



We create the basis for the efficient functioning and operation of buildings in cooperation with our clients. We have worked with several concepts for energy-efficient and environment-friendly buildings using a new model for life cycle costs.

Healthy indoor climate

The focus on indoor climate in homes and offices is sharpening. A survey shows a high level of resident satisfaction with our CASA NOVA environmentally and energy-correct timber-based residential buildings. We are at present involved in four new CASA NOVA building projects.

COWI's new offices for three branches in Denmark are now in use and the new head office extension is well under way. Our concept for the Office of the Future, supporting the organisational development of companies, is being evaluated in these offices.

New forms of partnership

We are testing a new form of collaboration with NCC Danmark on a new office complex at Langelinie in Copenhagen. We have further refined a model of partnership where building owners, contractors, architects and engineers work closely together, with common goals and criteria for success. The first partnership project, for a Danish municipality, is for the extension of a school.

Insurance concept

On 3 December 1999, a hurricane hit Denmark, leaving a trail of destruction in its wake. We have assisted several insurance companies in assessing some 1,500 damage claims from both private and public sectors.



The new administration offices for the Danish wind turbine manufacturers, NEG Micon, designed together with the architects C.F. Møllers Tegnestue.

In close cooperation with our clients, we quickly mobilised a nationwide team of experts and created efficient communication channels with customised reporting and follow-up systems.

Consultant to DR

We are consultants to Marriott International Inc. and the financial institution Nykredit with an international 5-star hotel with 395 rooms on the Copenhagen waterfront.

In the autumn of 1999, we won the competition for consultancy services for the relocation of the Danish Broadcasting Corporation, DR, to its new home in Ørestad. Plans for the complex comprise 100,000 m² of modern, flexible buildings and a concert hall of international standards seating 1,600 persons. The concept for the project has now been created in close collaboration with the DR project group and PLH architects in Denmark, DEGW from the UK and DS-Plan from Germany.

The first building for Copenhagen University Amager is now under construction. The 41,000 m² project was designed in collaboration with the architects KHR A/S.

Operational development

We have been closely involved in the operational development of public service sectors, concentrating on rationalisation and business procedures. We have conducted analyses and subsequent EU tendering of building management at Rigshospitalet, the National Hospital of Denmark.

Our computerised building management system, Caretaker, has been introduced in many organisations and has provided a firm foundation for our building operations consultancy.

The Danish State Railways, DSB, puts highest priority on operational safety. Together with COWI and MARINTEK, DSB's component workshop has embarked on a project embracing reliability centered maintenance. The programmes will ensure the highest possible operational efficiency, meeting the requirements of safety, the environment and costs.

Assignments in the Baltic States

Together with COWI Baltic, we have completed the extension of the Radisson SAS Hotel in Vilnius, Lithuania. Our services included installations, particularly those for indoor climate and intelligent energy-saving systems.

We were awarded the design contract for the extension of Riga Airport in Latvia, together with the architects Arhis. The airport will be able to serve 1.3 million passengers a year, instead of the present 500,000. The project includes a new finger with five airgates, new aprons and a comprehensive renovation of the terminal buildings. New technical installations, with intelligent control systems, will bring the airport up to international standards.



Industry, Energy and IT



Director, Industry, Energy and IT
Bjarne Henning Jensen
(Until 30 September 2000
Jørgen Grundtvig)

- Industry
- Energy
- Oil and gas
- IT and management



COWI is consultant to
Danida for a 30 MW wind
farm in Egypt.

Cooperation with both private and public clients has become more differentiated, with the focus on cost-effective solutions.

The ability to utilise and combine our disciplines together with the client has therefore assumed even more importance in our role as consultants.

Almost half the turnover was generated by projects outside Denmark for both public and private clients.

Energy

The market is demanding integrated services combining stringent project management with specialist knowledge in energy production and distribution, renewable energy and waste incineration.

In Denmark, we are main consultants for a new incineration plant with a capacity of 24 t/h. We are also increasing the incineration capacity of another plant by 16 t/h. Both projects were designed in cooperation with the Danish architects Friis & Moltke A/S Arkitekter MAA.

Together with Copenhagen Energy and A/S Rørbyg, we have designed and built the first Danish district cooling plant based on absorption cooling, with district heating as the primary source.

We were consultants for the construction of a 3.8 MW diesel power plant in Burkina Faso for Danida.

Industry

We have combined all our industrial disciplines and pooled our expertise within plant layout, automation, process and product development, optimisation and cleaner technology.

We assisted Coca Cola Tapperierne A/S in Denmark with the extension of their bottling capacity.

We have prepared a project proposal for DUMEX-ALPHARMA A/S for a new sterile department for bulk production of antibiotics.

The Danish pharmaceutical company, Chr. Hansen A/S, has asked COWI to prepare a project proposal for a new production plant for natural colour additives.

In China, COWI has been in charge of the project management for the extension of a pump factory for Grundfos Pumps (Suzhou) Ltd. And in France, work has begun on the extension of a factory for carding of non-woven products for Jacob Holm Industries (France) SAS.

Oil and gas

We will continue to operate within all phases of exploitation of oil and gas reserves, from petroleum engineering to offshore and onshore facilities. Reservoir engineering, risk and safety assessment, and



The winning project for the capacity extension of the Århus Nord incineration plant in Denmark.

By putting the spotlight on energy consumption, a DKK 5 million saving has been achieved in the annual operating costs of Danpo A/S' new poultry factory.

environmental impact assessment are among our specialist services.

We carried out reservoir simulation assignments for several oil companies and participated in a Joint Chalk Research Project sponsored by 12 oil companies.

We are designing a harbour terminal for import/export of crude oil and refined products for Azzawiya Oil Refining Company of Libya, together with Port Consult.

Offshore we have prepared a de-bottlenecking study for Amerada Hess of the process facilities in the Danish Syd Arne Field and are currently engaged in studies for ELF Petroleum Norge AS of the decommissioning of the steel and concrete platforms of the large Frigg Field.

IT and management

Our ability to combine expertise with multi-disciplinary experience makes a solid platform from which to implement IT projects. We have gained experience in adjusting business processes and finding optimum solutions together with the end users. We possess specialist knowledge in document handling, Geographical Information Systems, data and telecommunication and the development of customised solutions.

Eight municipalities in the Copenhagen area will soon have an Internet-based professional information system designed to generate synergy by the dissemination of public information and business-to-business information.

We are elaborating a new system for information integration for the Hungarian Railway Company, MAV, which will give it access to information on international freight traffic via the European railway communication network HERMES.





Subsidiaries



Matcon has been commissioned to design the fish handling systems for the extended fishing harbour at Killybegs in Ireland.

Matcon Consulting Engineers A/S, Denmark

Matcon has continued its work in the fishing industry in Vietnam for Danida, with consultancy services to 25 companies in the upgrading of their production facilities.

The fishing harbour at Killybegs in County Donegal, Ireland, is to be extended with a new 130 m quay. We have been commissioned to design the fish handling systems.

We have been engaged in Latvia and Estonia with the restructuring of the fishing industry as a result of the problems that have arisen in Russia, an important sales market for these two countries.

We have continued our work with Irvin and Johnson in South Africa with the design of new production lines and product optimisation.

On the Faeroe Islands, we are designing a new prawn processing factory and assisting in the detail design and fitting out of production halls.

Finally, we have prepared a status report for the Danish Environmental Protection Agency on the lead content of fishing gear.

Studstrup & Østgaard A/S Consulting Engineers and Planners, Denmark

We have constructed 65 homes for students at a Danish University and 24 homes for retired people in a Danish county. Together with the architects Brøgger-Arkitektfirma, we have completed construction projects for the Ministry of Ecclesiastical Affairs, involving the extensions and rebuilding of

a church and various parish halls in Denmark.

We have provided consultancy to several Danish municipalities in advising pensioners on how to apply for grants for energy-saving improvements. And in the school sector, we have begun a DKK 20 million project for the extension and rebuilding of a Danish school and several other minor rebuilding projects.

In the future, our activities will be particularly directed towards assignments in the management and maintenance of existing buildings. We will intensify our efforts to win more assignments in the field of energy management.

Bruun & Sørensen Group AS, Denmark

With the focus on optimising operations and supply reliability, we have carried out extensive hydraulic analyses of the district heating network for Randers Municipal Utilities in Denmark. This is a particularly complex network as it covers a large geographical area with considerable differences in elevation. A number of hypothetical incidents have been simulated. In addition, two new heat exchange stations have been established, as well as a brand new SCADA system that monitors and controls the network, the heating plants, and the new exchange stations.

Throughout 1999, we worked for Aarhus Municipal Utilities in Denmark on the establishment of a 17 km district heating main consisting of two 800 mm pipes between the power plant Studstrupværket and Aarhus. The project budget amounts to DKK 223 million. The involve-



Studstrup & Østgaard were responsible, together with the architects Dall & Lindhardsen, Denmark, for the extension of a Danish teacher training college with an auditorium and teaching facilities.

Aarhus Municipal Utilities is about to lay a 17 km district heating pipeline between Studstrupværket and Aarhus in Denmark. Bruun & Sørensen is the Owner's consultant.





Green tree frog, numerous in wetlands in and around the Białowieża National Park, Poland

ment of COWI civil engineering and soil engineering specialists played a decisive role in the implementation of this project.

COWI Polska Sp. z o.o., Poland
COWI Polska is developing into new business areas and new client groups.

The main sectors are: sustainable development and physical planning, environmental protection and energy. Of late, environmental work has been the largest source of growth, with projects for private industry as well as bilateral financing agencies.

In association with COWI Denmark, we are currently working on a sustainable forest management and income generation project for the Białowieża Forest area. This year, we have also worked on the emergency flood recovery projects in Wrocław.

We are one of the few companies in Poland specialising in environmental due diligence, serving a large national market for buying and selling industrial plants and real estate.

The other facet of COWI Polska is energy systems and energy planning, in which there still is a stream of work for established clients.

During the past year, we have also dedicated resources to building up our organisation to enable us to take our place in the developing transportation market in Poland.

Hjellnes COWI AS, Norway

It has been an extremely active year with a multitude of projects. Among these, three in particular should be mentioned: The construction of a new regional hospital (RIT 2000) in the city of Trondheim is now well under way. The new hospital is being built on the same grounds as the existing one and is to be completed by 2008. As part of the development, 70%

of all buildings currently in use are to be demolished. We were recently awarded the assignment of preparing tender documents for the third stage of the demolition process. Our main objective for this assignment was to develop and incorporate stringent environmental criteria, in line with the Owner's general environmental policy, specifying that 90% of all demolition waste is to be reused or recycled.

The Uddevalla Bridge on the Swedish coast is part of the E6 motorway between Oslo and Gothenburg. It was completed in May 2000. The bridge is a high-level bridge with a total length of 1,712 m, carrying four traffic lanes—the longest motorway bridge in Sweden. The central cable-stayed section has a main span of 414 m and provides a navigation clearance which is 190 m wide and 52 m above the Sunninge Sound. The contractor was SKANSKA, Sweden; the detailed design was carried out by Johs. Holt A.S. (a wholly-owned subsidiary of Hjellnes COWI) and SKANSKA Teknik AB.

The new international airport for the Oslo region was opened at Gardermoen in October 1998. In April 2000, the Norwegian Government and Parliament decided that the former airport at Fornebu should be developed into a knowledge and innovation campus owned by the company IT-Forneby AS, with the Norwegian Government as shareholders. Through our associated company, Aviaplan AS, we are the main consultant on this project. The first phase includes the redesign of the terminal complex to accommodate an IT technology centre. We are to further design the conversion of three main hangars into commercial buildings.

Demolition and materials reuse, RIT 2000 Hospital, Norway





Subsidiaries



Prior to EXPO 2000, BaUm COWI has taken part in the development of the Rummelsburger Bucht area of Berlin.

BaUm COWI

Bau- und Umweltplanung GmbH,
Germany

Despite the recession in the German market, BaUm COWI has managed to continue activities on many large projects, mainly in the Berlin area, which is BaUm COWI's home base. This has brought the firm out of the decline we have been experiencing in recent years because of the market depression in public sector investments in Germany.

We therefore targeted our efforts to develop a market for new services to new clients, particularly private sector clients and clients outside Berlin. Our regional office in Dresden is developing very well, with work in hand on the inland harbour on the river Elbe and construction management for city road projects.

The development of the Rummelsburger Bucht area in Berlin is one of the EXPO 2000 projects—BaUm COWI has prepared the comprehensive planning and design of its infrastructure. We have also supervised the construction of the Danish EXPO pavilion.

BaUm COWI has extensive records of public infrastructure facilities in former East Berlin. We have therefore developed a database and computer modelling tools to enable us to assist in rehabilitation and site development at short notice. As one of the first results of this investment, we were commissioned to prepare plans for rearranging the Alexander Platz area in the centre of Berlin. This major infrastructure project includes an underground car park with space for 1,200 cars.

UAB COWI BALTIC

Consulting Engineers and
Planners, Lithuania

In 1999/2000, COWI Baltic successfully completed the most challenging project in the company's history—the renovation of the Radisson SAS Hotel, situated in the very centre of the Old Town of Vilnius. It is the only hotel in Lithuania currently equipped with Building Management System (BMS), a system designed in collaboration with COWI Denmark.

We also prepared a number of conceptual and tender designs of ventilation, air conditioning and heating installations of administrative buildings, hotels and breweries.

We prepared feasibility studies and investment plans for several regional municipalities. As a part of an international team, we also prepared a feasibility study for the World Bank on the rehabilitation of the district heating network in Vilnius City.

Our activities in the environmental field continued to expand. Together with COWI Denmark, we are engaged in the preparation of Waste Management Planning Guidelines for regional Lithuanian authorities.

We continued working on the project of introducing cleaner technologies in slaughterhouses—the project has already reached the technical installation phase.

Together with COWI Denmark, we are assisting the Lithuanian Ministry of Environment to introduce modern IT facilities at regional environmental agencies.

COWI Baltic has extensively renovated the Radisson SAS Hotel in Vilnius, Lithuania





The Volga River in Russia.
Ice fishing in winter.

Transport projects related to rehabilitation and upgrading of railway structures and harbour facilities are becoming the target for future activities and further expansion of the company.

Moscow Representative Office of COWIconsult International Ltd., Russia

The main activities of COWIconsult International via its Moscow Representative Office were in the fields of environmental economics and water sector studies.

Work continued with our client GEF/WB (Global Environmental Facility/World Bank) on the implementation of Ozone Depleting Substances (ODS) phase-out sub-projects for the remaining Third Tranche Enterprises in aerosol and refrigeration sectors in Russia. We are responsible for the hydrocarbon and cyclopentane installation safety audit in several enterprises. Recently, together with the Danish Technological Institute, we have been awarded the ODS Production Closure Monitoring and Verification Project.

In close cooperation with COWI Denmark, we have successfully completed a major TACIS project on institutional support to the Russian State Committee on Environmental Protection, and World Bank financial and institutional studies for two major water utilities in Belarus (Minsk and Gomel). We have contributed to several projects financed by Dancee on upgrading wastewater treatment plants. Sludge disposal and solid waste management projects are under implementation in north-west Russia.

We are also contributing to TACIS Environmental Management Training Project in the Volga Basin—a project aimed at developing 13 training courses. Some 165 Russian co-trainers are to attend the courses—the target for the

future is to train some 30,000 Russian managers.

Together with COWI Denmark, we have started a very exciting project on environmental financing strategies, environmental expenditure and use of economic instruments in the NIS (Newly Independent States), with COWI Moscow providing input on the development of regional financing strategies in the municipal water sector for Pskov and Novgorod in Russia and national financing strategies for Moldova, Georgia, Kazakhstan and Ukraine. The project is aimed at the Ministerial Consultation on “Water Management and Investments in the NIS” in Almaty, Kazakhstan in October 2000. The Consultation is organised by the OECD Environmental Action Plan Task Force and the ministers of environment and finance of OECD and Central and Eastern European countries are invited.

COWI Hungary Ltd., Hungary

COWI Hungary Ltd. was established in May 1999 and founded on the long experience gained in a COWI project office for a PHARE-funded technical assistance project. We started as a small company, with special focus on environmental economics, financial analysis and environmental policy consultancy.

COWI Hungary developed dynamically and has now been involved in more than 30 national and international projects.

Together with COWI Denmark, we are involved in several projects covering environmental policy consultancy in Central and Eastern European countries and the NIS. One of our major projects is our participation in developing methodology for environmental financing strategies and environmental expenditure estimates for the NIS. We applied the



Flooding of the Tisza River, Hungary

Subsidiaries

methodology in Georgia and assisted the Ministry of Environment in preparing a financing strategy for the water and sanitation sector. This project is financed by the Danish Ministry of Environment and Energy.

We are also working on the project “Impact of retainment and development of railway transport in the Southern Trans-Danubian Region” of Hungary, which is being implemented under the PHARE Framework Contract in the transport field. The general objectives of the project are to assess the economic viability of selected railway lines and draw up plans, including measures to implement these plans. We also aim to ensure that any relevant experience gained in this project is transferred to other similar railway networks.

The share of revenue from Hungarian-funded projects is increasing. Our major domestic clients are ministries and the State Property Agency. We have had several projects for the Ministry of Environment focusing on water, particularly groundwater. Our involvement is to carry out economic impact assessment of proposed new legislation, a task which will assist the Ministry in developing new EU-compatible legislation and implementation plans.

We have also worked for the Ministry of Environment to develop guidelines on



COWI Almoayed Gulf W.L.L., Bahrain, has completed the preliminary design of the Al Saffar five-storey office building.

cost efficiency for a clean-up programme. We have recently won a contract to assist in drafting the law governing protection against agricultural nitrate-pollution as a step towards EU harmonisation, and the development of an impact study on the work necessary in bridging the gap between current Hungarian practice and the requirements of the new law.

COWI Tanzania Consulting Engineers and Planners Ltd., Tanzania

COWI Tanzania continues to be the market leader in the road sector, having successfully won projects funded by Danida, the EU and the World Bank. Our strategic working relationship with local consultancy firms plays an important role in securing our position in the market. With the steady increase of local and foreign investment, demand for passable-all-weather roads, especially in the rural areas, is becoming more and more of a priority for all sectors.

COWI Tanzania has been instrumental in introducing and implementing successful, cost effective labour-based techniques for the construction and maintenance of rural roads, with documented cost reductions of up to 50% of total costs compared to machine-based techniques. In that respect, our road maintenance and capacity-building initiative in

Road maintenance in the Rufiji District, Tanzania



the Rufiji District Coastal Region continues to be a great success, thanks to the implementation of these techniques, development planning and the introduction of a 'spot improvement' approach to low volume road engineering (construction and maintenance). With both government and the local community very impressed with the development of the district, Danida, the funding source of the project, has approved COWI for the next phase of the project.

We are also seeing an increase of activity in the building sector. Again with Danida as the funding source, we recently won the contract to rehabilitate the 100-year-old Magistrate Court Building. Other noteworthy projects include The Pozzalan Study, which is attracting increasing attention, both politically and in terms of technical expertise.

COWI-Almoayed Gulf W.L.L.,
Bahrain

In the past year we have provided engineering and architectural consultancy services to our traditional government clients as well as some of the large industries, contractors and other private clients.

The first neighbourhood of the Zayed Housing Project for the Bahrain Defence Force is in the final stages of construction, with the 273 two-storey buildings expected to be handed over to the client during the summer of 2000.

We have prepared a preliminary design scheme for Gulf International Bank B.S.C. for the replanning and refurbishment of the bank's main entrance area, conference and office support facilities, cafeteria and multi-storey car park.

We have designed and supervised the replanning of the Dealing Room and meeting room facility for the Bahrain Monetary Agency.

Preliminary design has been completed for the Al Saffar five-storey office building and the A.K. Almoayed (Gulf) warehouse facility to house the Jotun Paints distribution centre.

We have assisted contractors on the structural design of various concrete structures, the Ad Dur Desalination Plant for Ahmed Mansoor Al A'Ali and the ALBA new Coke Calcining Plant for the Mannai Engineering Company.

Design of a 190 m dual highway bridge with six lanes has begun for the Ministry of Works and Agriculture.

Our ad hoc assistance to Cunningham Lindsey Middle East on insurance matters includes design checks for decennial insurances for buildings, as well as investigation and assessment of structures damaged by fire or impact.

Concrete repair works continue to be one of our specialities and have been carried out on a number of building structures. We are providing consultancy services on maintenance work on reinforced concrete structures at the Arab Shipbuilding and Repair Yard.

COWI-ALMOAYED GULF W.L.L.,
Dubai, U.A.E.

We have recently completed the supervision of the re-roofing of four large sports centres in Dubai, and the Dubai Municipality has taken possession of the completed Ghubaiba car park and commercial facility. We were lead consultant for both design and construction supervision of these projects.

We are currently providing site supervision services to the Dubai Ports Authority for the repair and rehabilitation of wharves and quay walls at the port of Jebel Ali.

Ghubaiba Car Park—
design and construction
supervision by CAG, Dubai





Subsidiaries



COWI and Partners L.L.C. is involved in the pre-concept design of a new tourist complex and theme park, and the refurbishment of a large shopping mall, shown here in model form.

COWI & Partners L.L.C., Oman
Our image as leading architects and consulting engineers has been enhanced this year by the award of the “Oman Civil Order—Third Class” to our Chief Architect Ole B. Larsen by His Majesty Sultan Qaboos. The award was given in recognition of the architectural design of the headquarters of the Central Bank of Oman and Ole’s contribution to architecture in Oman over the past 24 years.

We are currently involved in pre-concept designs for a new tourist complex and theme park, the refurbishment of a large shopping mall, a number of resort hotels and various land use studies.

Other established projects include a new hotel in Al Ghubra, an office building in Al Khuwair, and a number of exclusive residences.

Within our specialist field of investigation and rehabilitation, we are presently involved in a tunnel investigation for a power and desalination plant, an investigation of a large seawall for the Diwan of the Royal Court and a multi-phase rehabilitation project for Oman Oil Refinery.

Ben C. Gerwick, Inc.

Consulting Engineers, USA

We have continued to provide expert consultancy services for durability assessment and repair of concrete structures. Over the years, the Gerwick staff has utilised its expertise in this area to support numerous major civil projects worldwide, such as the prestressed lightweight Concrete Island Drilling System (Super CIDS), Hibernia GBS platform, the Eurotunnel and currently the Olmsted Dam and Braddock Dam.

To meet the demands of the market, we have applied and refined specific construction methods: “in-the-wet” construction techniques utilising offsite prefabrication

of large precast concrete shells; identifying casting facility requirements, launching, transport, placement and anchorage methods for “in-the-wet” construction; use of large-diameter steel-encased concrete cylinder piles for over-water bridges, wharves and piers; innovative uses of tremie concrete, including mix design and placement procedures; test studies for concrete durability under ice loading, ice abrasion studies, improved concrete shear resistance and punching shear capacity; detailed inspection and revitalisation evaluation for deteriorated concrete structures.

The Olmsted Dam on the Ohio River was engineered to be built using lift-in concrete shells weighing up to 4,500 tons. As part of a joint venture, we have taken the lead in areas of innovative marine construction methods, marine foundation design and construction, tremie concrete construction techniques and seismic design.

The Braddock Dam, on the Monongahela River, was designed to be built using float-in concrete shells, up to 100 m long, fabricated offsite, floated into place over pre-installed foundation caissons, set down, grouted in-place, and then infilled with concrete. The construction methods we developed for this project provided the advantages of less disruption to river navigation and flow, lower construction cost, shorter construction time, less environmental impact and better quality control.

We have participated in studies regarding the use of off-site prefabrication technology for inland waterways for the U.S. Army Corps of Engineers, including: widening of Lock 4 on the Monongahela River for the Pittsburgh District; increasing lock capacity on the Ohio River Main Stem for the Louisville District; increasing lock capacity on the Upper Mississippi



River for the St. Louis, St. Paul and Rock Island Districts; a new lock for the Inner Harbor Navigation Canal for the New Orleans District; studies for the Waterways Experiment Station regarding such topics as heavy-lift equipment, tremie concrete technology and precast concrete.

Buckland & Taylor Ltd.
Bridge Engineering, Canada
Buckland & Taylor Ltd. specialises in bridge engineering, including design, both new and seismic retrofit, and construction engineering. During the past year, we have continued to pursue work in the US resulting in contracts for redesign of an alternate temporary bracing system for the stiffening truss diagonals of the West Bay Bridge, San Francisco, CA; analysis and design of temporary supports for bridges at San Francisco Airport; prebid work on the seismic retrofit of Richmond San Rafael Bridge, CA, including the conceptual study of access platforms and installation of micro-piles; seismic retrofit of a lifeline bascule bridge in Alameda County, CA; and alternate design for the Owner and erection engineering for the Contractor for the Turtle Bay cable-stayed pedestrian bridge in Redding, CA—this bridge is 220 m long and has a striking inclined tower 58 m high.

International work has included final design of the 300 m main span, single tower cable-stayed Rama 8 Bridge in Bangkok, Thailand; design check of the Rion Antirion cable-stayed bridge in Greece, with three central spans of 560 m and two flanking spans of 305 m; and feasibility design of the second Incheon Bridge in Korea.

We continue to work on major contracts in Canada. We are the Owner's engineer for the complete suspended span replacement of Lions' Gate Bridge,

Vancouver, Canada—the rehabilitation will be conducted to our design. The bridge is a three-span suspension bridge, with a 472 m main span and steel viaducts, totalling 1.6 km.

We have completed the final design, with construction now under way, to add one lane to the existing four-lane, 366 m main span, 3-span tied arch, Port Mann Bridge in Vancouver, BC. The five lanes will fit between the main arch members with the sidewalks located outside. Seismic retrofit design of the main span and approach spans is also under way.

We prepared alternate design/build designs for the St. John and Jemseg Bridges on the New Fredericton-Moncton Highway, New Brunswick. Both bridges are being constructed to our design using continuous composite steel girders, and are comprised of twin, two-lane, high level crossings.

A review of the existing Skytrain Guideway in Vancouver was required to ensure its capacity to carry new, heavier vehicles. The review has been completed and we are now designing the upgrading for some sections of the guideway and the cable-stayed SkyTrain Bridge.



Rama 8 Bridge
Buckland & Taylor Ltd.'s scope of work includes both the design of the cable-stayed bridge and provision of construction engineering for its erection. The bridge is scheduled for completion in 2001.



Intellectual Capital Accounts 1999/2000

The Intellectual Capital Accounts are intended to reveal whether our present knowledge management strengthens our strategies and policies.

- these Accounts cover only the parent company, COWI Consulting Engineers and Planners AS
- these Accounts are not audited externally
- the accounts for 1999/00 are structured in the same way as last year. In 1999/00, no external or internal image survey was conducted

Competence profile on a trial basis

It is the individual staff member's professional and personal knowledge that creates value in COWI. Each employee develops his or her own knowledge base through working with clients, partners and colleagues in the company's organisation and networks.

We have developed a pilot project for producing competence profiles of some

100 members of staff. The profiles are then refined to form the basis for the employees' annual review interviews, at which personal development is discussed on an individual basis.

Intellectual Capital Accounts at all levels

COWI is a project-oriented company in which responsibility is delegated to the individual organisational unit, the individual project manager and the individual employee.

We will compile decentralised Intellectual Capital Reports for each department and division. They will form the basis for evaluating to what degree a business unit or manager lives up to the values that are not expressed in the financial accounts. To optimise the final form of the Accounts, we are now carrying out trials with decentralised Intellectual Capital Accounts for all divisions.





The clients should know what we know

We are striving to become more visible in society and to promote our skills and knowledge to the client. The Accounts therefore include a number of indicators that reveal the division of turnover by client and their perception of us.

Our specialist skills are of great importance to our visibility and the number of articles published, and lectures given, is satisfactory.

International activity

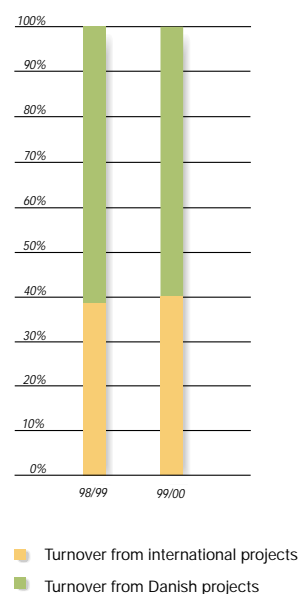
We must increase the share of international assignments—both for the sake of the development potential it gives our staff and because a sound economy and healthy employment demand a broad market and a diversified portfolio of projects and clients.

Parent company international activity rose from 39% in 1998/99 to 41% in 99/00, measured in turnover from international projects. This puts COWI in a favourable position in terms of globalisation.

Client profile

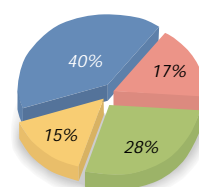
We foresee a stagnant market for public sector assignment and a growth in demand for consultancy services on the private market. Part of our corporate strategy, therefore, is to strengthen our position in the private sector. In 1999/00, the private sector share of our activity fell from 33% to 28%. This is a trend we are striving to change by becoming more visible and attractive to private sector clients.

International activity

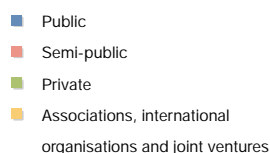


Parent company share of international activity measured in turnover is still rising and represented 41% in 99/00.

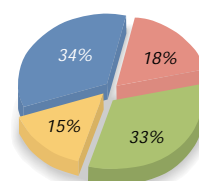
Client profile 99/00



Year's projects by sector measured by direct salary expenses



Client profile 98/99





Intellectual Capital Accounts

Staff satisfaction is essential. The employees are the company's single greatest asset, as stated in our staff policy. We make great demands on all our staff and managers—we expect good business acumen, professional competence, good people skills and the ability to adjust and develop. In the career system, each manager's performance is assessed by indicators such as the employee's educational level, project and managerial experience, international experience and flexibility. These figure in the Intellectual Capital Accounts.

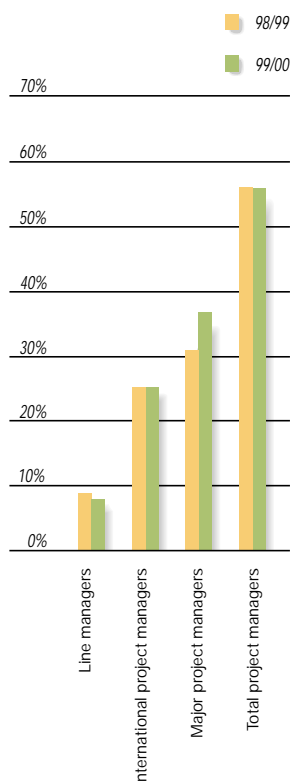
The year saw a high turnover of staff—12% inflow and 14% outflow. Outflow was highest among those over the 35-40 age group, whilst there was considerable net inflow of people under 30. There has been a relatively high inflow of IT specialists and employees with Masters degrees, whilst administrative personnel, secretaries and multi-lingual secretaries account for the bulk of those leaving.



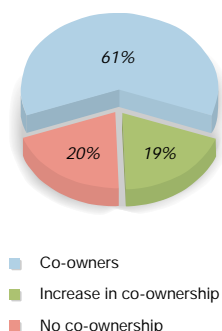
Management capacity
Project management is important for COWI. We are therefore delighted with the noticeable increase in capacity to manage major projects. 37% of all employees now have some experience with managing major projects and 56% general project management. This is a development that will be of great benefit to our future clients.

COWI's fundamental business policy states that the company is to develop as the employees' company and be an interesting and challenging place to work. This goal is being attained through staff influence, insight and information—and through co-ownership. The number of employees owning COWI shares has risen, so that 80% of all staff are now co-owners. This is a situation with which we are highly satisfied, as 80% is the maximum attainable, with staff having to be employed for at least one year before they are eligible to buy shares.

Project management capacity
COWI staff members with managerial experience



Co-ownership
Staff owning shares





Specialist networks

Our employees are the most important part of the production system, which is fuelled by knowledge and commitment. The organisation, therefore, must form the framework that gives the staff the chance to maintain, build on and share their knowledge with their colleagues. One way of doing this is through cooperation across organisational boundaries, a tenet we are supporting by strengthening our specialist networks.

Learning on the job is important and can be promoted through the sharing of knowledge and dialogue in well-structured and dynamic specialist networks. At the present time, we have 33 professional networks, an increase compared to last year. Such networks promote knowledge sharing between colleagues and make visible our spectrum of in-house skills and expertise.

In a move to maximise benefit of the knowledge and experience present in the company, we are building up an efficient system that continuously records Best Practices within our specialist skills and project management. So far, we have registered about 700 Best Practices on the Intranet.

Development

Self-financed development has fallen by 1.4% of total man-hours. This is a result of the completion of last year's major IT development.

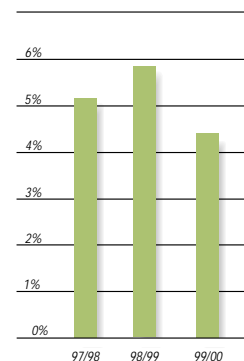
Time spent abroad

Time spent abroad rose from 8.5% of total man-hours in 98/99 to 8.9% in 99/00. This is a step in the right direction which we are striving to further—partly through trainee and exchange schemes with our subsidiaries—because international experience is important to the realisation of our strategies.

External access to IT facilities

Our staff must be able to make the most of IT technology wherever they may be—at the clients' offices, travelling or at home. Staff now have direct access to 41% of all our IT facilities via external connection. We want to see far greater flexibility in our work processes and are therefore intensifying our efforts make more IT facilities available to our staff, irrespective of time or place.

Development



Share of total man-hours used on self-financed development





Intellectual Capital Accounts

Notes

Clients

- 1 Share of annual turnover measured against direct salary expenses. Others include international organisations, associations and joint ventures.
- 2 Share of annual turnover measured against fee.
- 3 New method of data collection. Figures for this year are therefore not comparable with last year's.
- 4 Based on 190 answers from clients early 1998.
- 5 No image surveys were conducted in 1999/00.

Staff

- 1 Staff composition (year end).
- 2 Gross outflow and inflow in % of staff at the beginning of the financial year.
- 3 Average duration of education including high school. The original value is written off with 50% over 35 years.
- 4 100% is achieved 30 years after education has been completed. The annual increased value is highest during the early years. On average, employees have almost 17 years' experience since finishing their education.
- 5 100% is achieved after 5 years of employment in COWI. Average length employment in COWI is almost 9 years.
- 6 Fraction of all staff with project management experience, divided into three levels of complexity. Major projects are those with a fee of more than DKK 1m.
- 7 Fraction of staff with department management experience in COWI (year end)
- 8 100% is achieved after 200 days of travelling (per employee) since recruitment. The figure is 24%, incl. duty travel before employment in COWI. 17% of employees have been posted abroad for more than 6 months before or whilst employed in COWI.
- 9 Overtime is calculated in % of the annual total sum of working hours, with and without time off in lieu.
- 10 Weighted average of 22 questions given all staff in connection with the climate survey conducted in May 1999. Reply percentage: 74%.

Clients and market

1999/00 1998/99

Resources		
Client profile ¹		
Public clients	40%	34%
Semi-public clients	17%	18%
Private clients	28%	33%
Others	15%	15%
International turnover ²		
Projects abroad	41%	39%
Processes		
Professional profiling ³		
Lectures per 100 employees	19	(3.5)
Pro. papers per 100 employees	17	(6.2)
Results		
Clients' impression of COWI		
Total image index	- ⁵	65% ⁴
Media exposure		
Press cuttings per employee	1.0	0.6

Staff

Resources		
Staff profile ¹		
Total number of staff	1514	1544
Average age	42.3 y	42.3 y
Share of women	33%	33%
Staff turnover ²		
Inflow	12%	10%
Outflow	14%	13%
Education ³		
Length of education	6.0 y	5.9 y
Written-off value	4.4 y	4.2 y
Experience ⁴	72%	74%
Seniority ⁵	71%	71%
Project manager capacity ⁶		
All projects	56%	56%
Major projects (> DKK 1m)	37%	31%
International projects	25%	25%
Line manager capacity ⁷		
Experience	8.7%	9.1%
International experience ⁸		
Travelling activity	20%	20%
Staff co-ownership		
Staff owning COWI shares	80%	61%
Processes		
Flexibility ⁹		
Overtime (gross)	5.7%	3.9%
-Deducted time off in lieu (net)	3.5%	1.4%
Results:		
Staff satisfaction		
Total satisfaction index ¹⁰	-	64% ¹⁰
Sick leave		
% of total working hours	2.5%	2.5%

Intellectual Capital Accounts

Organisation

1999/00

1998/99

Notes

Resources		
Professional networks		
Total	33	29
Degree of organisation ¹	7.5%	7.4%
Best Practices (BP) ²		
Number of BP on the Intranet	699	612
External data access ³		
in relation to internal line switching	41%	42%
Processes		
Project activity ⁴		
- Technical consulting	-	48%
- General consulting, R&D	-	24%
- Planning/survey/analysis	-	24%
- Other	-	4%
Assignments/Staff ⁵	19.5	18.2
Development activity ⁶		
Total	>4.8%	7.3%
On client projects	-	1.4%
Internal financed	4.4%	5.8%
- R&D projects	-	0.6%
- Supplementary education	0.8%	0.5%
Inter-organisational collaboration ⁷		
Own activity	31%	34%
Colleagues from:		
- Own department	36%	32%
- Own division	12%	12%
- Other division	21%	23%
Inter-disciplinary collaboration ⁸		
All disciplines	30%	30%
- Technical science	27%	28%
- Social science	26%	26%
- Natural science	38%	39%
Overseas stays ⁹		
Short stays	4.9%	4.1%
Posting	4.0%	(1.8%)

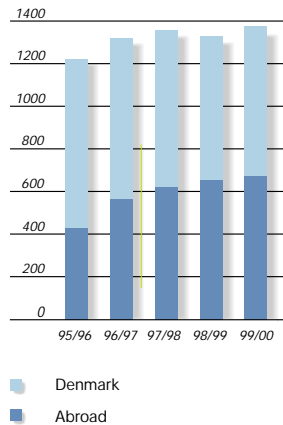
Organisation

- Staff involved in professional networks, indicated in % of total number of employees (year end)
- Number of registered Best Practices (year end).
- Weighted indicator for share of IT facilities accessible via external connection (year end).
- Distribution of the year's project activities measured in working hours by type of consulting services. Not registered in 99/00.
- Average number of external projects that each employee on average has worked on during the year.
- Development activity's share of the total number of working hours. Activities consist of R&D, supplementary education and internally financed specialist development.
- Comparative figures of average cross-organisational collaboration.
- Inter-disciplinary collaboration on projects (in relation to maximum attainable), where the composition of all project teams reflected the specialist group's share of the total number of staff.
- Share of the year's total working hours spent on overnight travelling and periods abroad of more than 6 months. The figure for foreign postings has been revised. The figure for 98/99 has been adjusted accordingly.

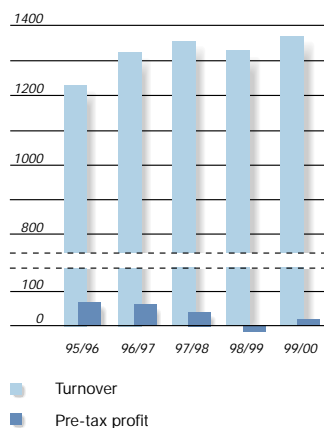


Accounting Report

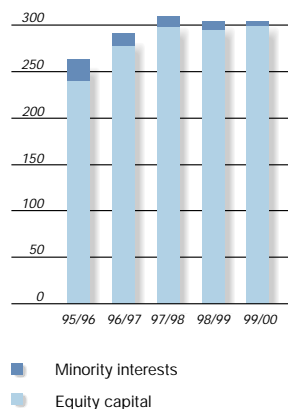
Annual turnover of the Group distributed between Denmark and abroad, DKK million



Turnover and profit DKK million



Equity capital DKK million



The Group's financial development during 1999/00 showed significant improvement on the previous year. Operating profit and profit before and after taxes were considerably improved.

In accordance with Group strategy, turnover is now shared equally between the Danish and foreign markets. Turnover amounted to DKK 1,377.3 million, an increase of 4%. The Danish contribution rose by 2%, whilst the contribution from abroad rose by 5%.

Overall costs, exclusive financial and extraordinary items amounted to DKK 1,378.4 million, much in line with the previous year. Expenses, exclusive payroll costs, fell by 3% to DKK 317.1 million, sundry external expenses rose by 4% to DKK 184.1 million, whilst staff expenses rose by only 1% to DKK 831.0 million.

Depreciation fell by 6%, that is DKK 2.6 million.

The Group improved its operating profit, excluding subsidiaries and financing, by DKK 41.7 million. Compared to the loss the previous year of DKK 35.9 million, the result this year was a profit of DKK 5.8 million.

The net result on financial income and expenses was a profit of DKK 15.1 million against DKK 17.7 million the previous financial year. Financial income amounted to DKK 32.4 million, compared to DKK 25.5 million the previous year. The improvement was due primarily to exchange rate adjustments as a result of the strengthening of several currencies against the Danish krone. Financial expenses amounted to DKK 17.2 million, compared to DKK 7.8 million the previous year. This change was mainly due to bond discount of DKK 8 million, against DKK 1 million the previous year. DKK 5 mil-

lion of this financial year's bond discount is unamortised.

The overall result before taxes and minority interests is a profit of DKK 19.0 million, compared to a loss of DKK 19.8 million the previous year—an improvement of DKK 39.8 million.

The year's result after provision for taxes and minority interests is a profit of DKK 6 million, against a loss of DKK 4.5 million last year.

Total assets rose from DKK 900.6 million to DKK 1,004.4 million.

The most noticeable development on the assets side is a rise in accounts receivable from services rendered—an increase from DKK 68.1 million to DKK 364.8 million. This rise is due to a delay in invoicing to April, the last month of the financial year, as a result of the introduction of a new administrative framework system. The most troublesome problems encountered have now already been solved.

On the liability side, equity capital rose from DKK 295 million to DKK 297.5 million. In addition, there is a considerable rise in bank debt from DKK 5.0 million last year to DKK 77.3 million, a change which should be seen in the light of the aforementioned delay in invoicing. Accounts payable to suppliers of goods and services rose from DKK 22.9 million to DKK 65.7 million.

Equity share fell from 32.8% to 29.6%.

Board of Directors Positions in other Danish companies

Jørgen Madsen
Chairman

Chairman of the Board of:
Denka Holding A/S
On the Board of:
Thando A/S

Jørn Schønneman
Vice Chairman

Ole Steen Andersen

Danfoss A/S - Executive Vice President, CFO

Niels Christian Nielsen

On the Board of:
Den Danske Bank A/S, Grundfos A/S,
Dampskibsselskabet TORM,
Ejendomsselskabet Norden A/S,
Otto Mønsted A/S, Oticon-Fonden

Carsten Kærgaard

Torsten Mølgaard

Henriette Bundgaard*

Ida Garre*

Peter Michael Steen Jacobsen*

Carsten Digman Stig*

* *Staff representatives*

Management

Klaus H. Ostenfeld
Managing Director, CEO

Knud Østergaard Hansen
*Executive Director,
Danish Operations*

Henning H. Therkelsen
*Executive Director,
International Operations*

Keld Sørensen
Financial Director, CFO

Positions in other Danish companies

On the Board of:
Danish Standard Association

Auditor's Report

We have audited the consolidated accounts and the annual accounts of COWI Consulting Engineers and Planners AS for 1999/00 prepared by the management.

Audit Work Performed

In accordance with generally accepted auditing principles, we planned and performed the audit to obtain reasonable assurance as to whether the annual accounts are free from material errors or omissions. Based on an assessment of materiality and risk, our audit includes examining evidence supporting the amounts and other disclosures in the consolidated and annual accounts. We have assessed the accounting principles used and estimates made by management, and evaluated the adequacy of the presentation of information in the consolidated and annual accounts.

The audit did not give rise to any qualifications.

Conclusion

In our opinion, the consolidated and annual accounts have been properly prepared in accordance with the accounting provisions of the law, and give a true and fair view of the financial position of the company, the assets and liabilities, and the result of its operations.

Copenhagen, 29 June 2000
PricewaterhouseCoopers

Hans Primdal,
State Authorised Public Accountant



Consolidated Accounts

1999-2000

Accounting policies

The main characteristics of the accounting policies—which are essentially the same for all companies of the group—are as follows:

Profit and Loss statement

The turnover of the parent company includes the invoiced amounts of the year from the Danish offices for domestic and international jobs. It has been adjusted for changes in work in progress and amounts invoiced in advance.

In all cases, linear depreciation is computed over the estimated economic lifetime of the investment. The principles are described in the notes.

The subsidiaries' and associated companies' incomes are included in the parent company's profit and loss statement according to percentage of ownership. The company's activity exercised through joint ventures is included in the company's turnover. Conversion of income from foreign companies is calculated at the rate of exchange ruling at the end of the fiscal year.

Interest income and expenses are calculated according to the accruals concept. Exchange adjustments for accounts receivable and debts in foreign currencies as of 30 April 2000, are calculated at rates of exchange on the same date.

In the case of securities, realised capital gain is entered as income, while both realised and non-realised capital loss are entered as expenditure.

Taxes have been preliminarily calculated and appear on the profit and loss statement.

Balance sheet

As a main rule, the assets of the group have been entered at the initial cost or the cost price with deductions of accumulated depreciation.

Capital in subsidiaries and associated companies is included according to the parent company's percentage of the individual company's equity. The share in joint ventures is included in the receivables with associated companies.

Securities are entered at purchase price or at market price as per 30 April 2000, whichever is lower.

Work in progress consists of the cost price of work not yet invoiced based on an evaluation of salaries and job expenses on each job. Under project expenses, project costs are entered in the same way as other expenses. Comparative figures for last year for work in hand and advance invoicing have been changed, though with no effect on the profit for the year.

Provision for general reserves for risks abroad etc. is based on an overall evaluation of foreign accounts receivable and other risks.

Accounts receivable and debts in foreign exchange have been entered at the rate of exchange ruling at the end of the fiscal year.

Principles of consolidation

The consolidated accounts are made up on the basis of the accounts of the individual companies of the group by adding corresponding items and eliminating income and expenses and accounts between the companies of the group.

In the consolidated accounts, the difference between the acquisition price of percentages of subsidiary companies and that part of their equity capital which the traded capital interests represent at the time of acquisition, is treated as goodwill. The amount is written off over a five-year period.

Profit and Loss Statement

	Parent Company			Group		
	Note	99/00 DKK 1,000	98/99 DKK million	Note	99/00 DKK 1,000	98/99 DKK million
Turnover	¹	1,147,583	1,119.1	²⁰	1,377,337	1,328.5
Sundry income		0	0		6,565	8.3
		1,147,583	1,119.1		1,383,902	1,336.8
Direct job expenses		309,989	309.8		317,063	325.8
Net turnover		837,594	809.3		1,066,839	1,011.0
Sundry external expenses		133,760	128.0		184,097	177.8
Staff expenses	²	664,110	668.4	²¹	831,036	818.9
		39,724	12.9		51,706	14.3
Depreciations	³	29,184	32.0		39,206	41.8
Sundry expenses		4,796	7.6		6,688	8.4
Operating profit excluding subsidiaries etc.		5,744	-26.7		5,812	-35.9
Profit from associated companies		2,949	1.5		0	0.1
Loss from associated companies and subsidiaries		11,700	11.5		267	0.0
Profit before financing		-3,007	-36.7		5,545	-35.8
Financial income		31,802	24.2		32,364	25.5
Financial expenses		13,397	4.2		17,218	7.8
		15,398	-16.7		20,691	-18.1
Extraordinary income		0	0.0		1,188	0.1
Extraordinary expenses		0	0.0		2,860	1.8
Profit before taxes		15,398	-16.7		19,019	-19.8
Adjustments in tax in respect of prior years	⁴	0	+7.5		0	+7.5
Taxes	⁴	9,357	+4.7	²²	12,177	+7.1
					6,842	-5.2
Minority interests				²³	801	+0.7
Profit of the year		6,041	-4.5		6,041	-4.5

Assets

	Parent Company			Group		
	Note	99/00 DKK 1,000	98/99 DKK million	Note	99/00 DKK 1,000	98/99 DKK million
Fixed assets						
Intangible assets						
Leasehold improvements		14,767	8.6		15,565	9.8
Goodwill		3,488	6.0		15,221	19.1
Deposits		22,964	21.8		23,549	22.0
Software		14,581	19.3		14,581	19.3
Total intangible assets	⁵	55,800	55.7	²⁴	68,916	70.2
Tangible assets						
Land and buildings		5,496	5.7		61,719	61.8
Plant and equipment		37,212	46.1		48,708	59.5
Total tangible assets	⁶	42,708	51.8	²⁵	110,427	121.3
Financial assets	⁷			²⁶		
Shares in subsidiaries	⁸	48,687	56.5		-	-
Shares in associated companies	⁹	931	0.3	²⁷	2,726	0.4
Amounts owed by subsidiaries		22,418	13.2		-	-
Other equities and shares of capital		206	0.3		346	1.2
Total financial assets		72,242	70.3		3,072	1.6
Total fixed assets		170,750	177.8		182,415	193.1
Current assets						
Work in progress, net	¹⁰	88,479	75.1	²⁸	108,430	93.1
Accounts receivable						
Rendering of services		301,988	223.7		364,791	296.7
Subsidiaries		28,648	33.2		-	-
Associated companies		527	0.0		12,963	8.5
Others		34,336	33.1		49,784	38.8
Total accounts receivable		365,499	290.0		427,538	344.0
Own shares	¹¹	474	1.1		474	1.1
Bonds and equities	¹²	214,078	206.3	²⁹	214,078	206.3
Cash funds		30,272	37.8		71,456	63.0
Total current assets		698,802	610.3		821,976	707.5
Total assets		869,552	788.1		1,004,391	900.6

Liabilities

	Parent Company			Group		
	Note	99/00 DKK 1,000	98/99 DKK million	Note	99/00 DKK 1,000	98/99 DKK million
Equity capital						
Company capital		34,750	34.8		34,750	34.8
Share premium		5,881	5.9		5,881	5.9
Legal reserves:						
Reserve for own shares		474	1.1		474	1.1
Profit brought forward		256,413	253.2		256,413	253.2
Total equity capital	¹³	297,518	295.0		297,518	295.0
Minority interests					6,893	8.5
Provisions						
Deferred taxes	¹⁴	124,830	115.6		124,610	119.7
Provisions	¹⁵	7,000	7.0	³⁰	13,871	13.6
Total provisions		131,830	122.6		138,481	133.3
Long term liabilities						
Mortgage loan	¹⁶	0	0.0	³¹	6,975	10.6
Other long term liabilities					9,213	7.8
Total long term liabilities		0	0.0		16,188	18.4
Current liabilities						
Mortgage loan	¹⁶	9	0.0	³¹	347	0.4
Bank debt		58,936	0.0		77,294	5.0
Debts to subsidiaries		6,080	5.7		-	-
Accounts owed to associated companies		0	0.0		22,414	14.2
Accounts payable suppliers		53,144	35.1		65,713	42.8
V.A.T., PAYE		55,428	57.9		55,428	57.9
Accounts payable other		20,444	25.0		38,189	44.7
Invoiced in advance	¹⁷	150,314	159.3	³²	166,685	172.6
Accrued holiday allowance		92,374	87.5		112,886	105.6
Accrued tax		0	0.0		2,880	2.2
Dividend for the year		3,475	0.0		3,475	0.0
Total current liabilities		440,204	370.5		545,311	445.4
Total debts		440,204	370.5		561,499	463.8
Total liabilities		869,552	788.1		1,004,391	900.6
Fee to auditor appointed in Annual General Meeting	¹⁸					
Contingency liabilities	¹⁹			³³		

Cash Flow Statement

	Parent Company		Group			
	Note	99/00 DKK 1,000	98/99 DKK million	Note	99/00 DKK 1,000	98/99 DKK million
Profit of the year		6,041	-4.5		6,041	-4.5
Depreciation of the year		29,184	32.1		39,206	41.7
Provision for tax		9,200	-12.7		4,912	-18.1
Provisions		0	0.0		291	-5.7
Adjustment of:						
Receivables, services		-78,231	-8.1		-68,076	-16.2
Receivables and debt, subsidiaries, etc.		4,347	1.2		-4,429	-8.1
Work in progress and invoiced in advance		-22,322	18.8		-21,228	26.3
Other receivables		-1,189	-5.7		-10,984	-4.8
Own shares		618	2.2		618	2.2
Suppliers of goods and services		18,063	-8.6		31,090	3.1
Other debt		-2,202	-29.7		1,645	-26.1
Corporation debt paid		0	0.0		672	1.0
Cash flow from operating activities		-36,491	-15.0		-20,242	-9.2
Acquisition of intangible fixed assets		-10,552	-9.3		-12,800	-24.5
Acquisition of tangible fixed assets		-9,705	-18.2		-14,191	-23.8
Acquisition of financial fixed assets		-1,913	-15.5		-1,483	0.0
Cash flow from investment activities		-22,170	-43.0		-28,474	-48.3
Dividend paid/acquisition of minority shareholdings		0	0.0		-5,129	-1.5
Repayment of investment loan		-35	0.0		-3,636	-10.7
Repayment of investment loan		0	0.0		1,417	6.7
Repayment of non-trade creditors and bank debt		58,936	0.0		72,337	4.3
Cash flow from financing activities		58,901	0.0		64,989	-1.2
Movements of the year in net liquid funds		240	-58.0		16,273	-58.7
Liquid funds 1 May		244,110	302.1		269,261	328.0
Liquid funds 30 April		244,350	244.1		285,534	269.3

Liquid funds include securities and cash at bank and in hand.

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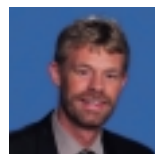
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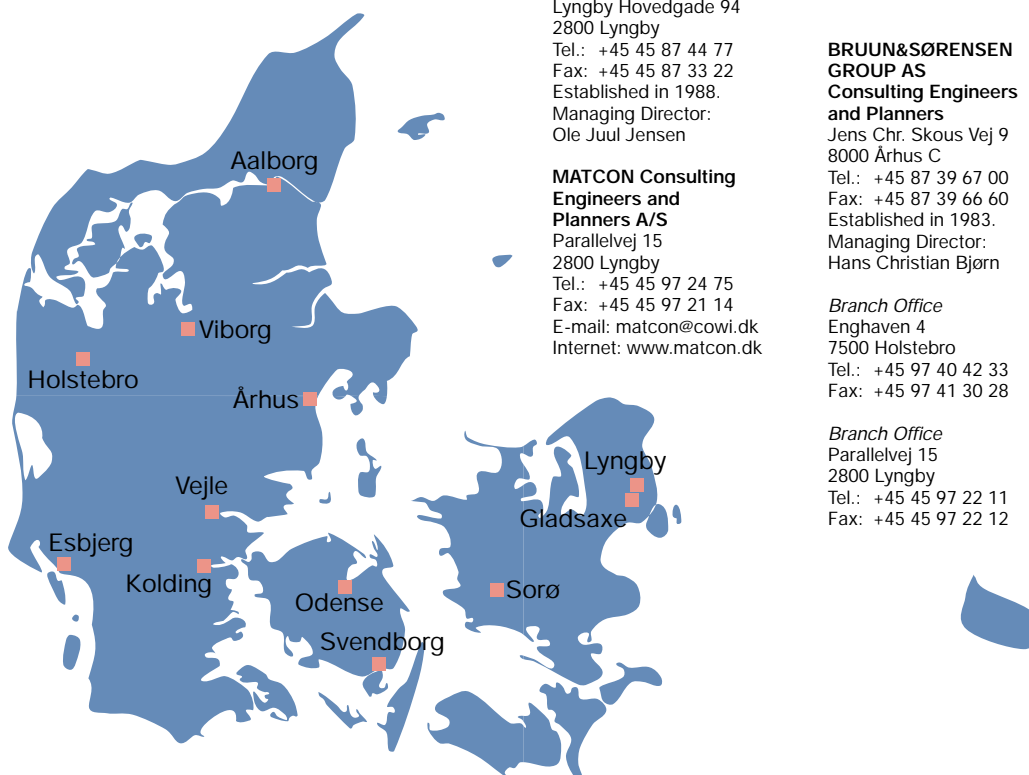
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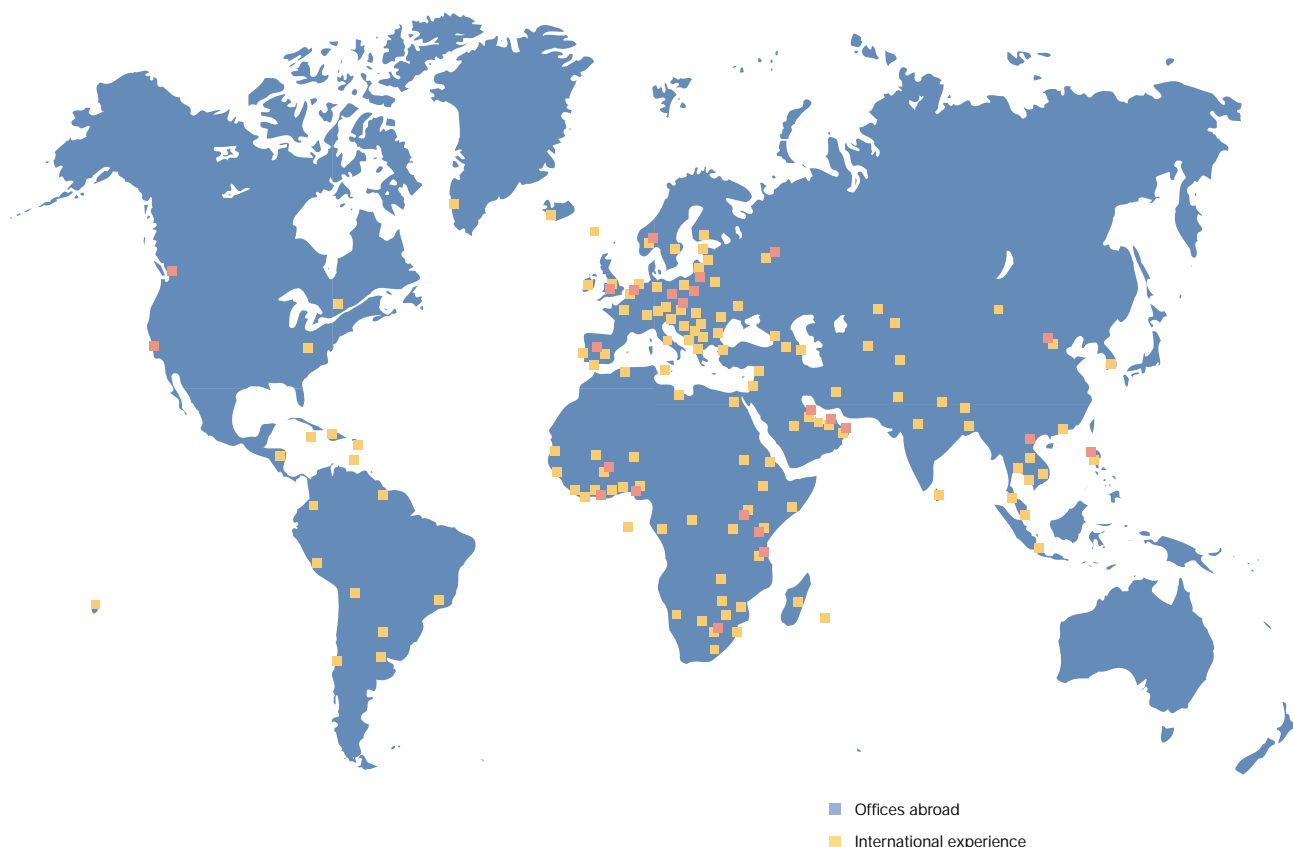
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