

Aerial stand

glassfibre profile

plastic

Aerodynamic design

Side view

SECTOR REVIEW

November 2001

The Consulting Engineering and Architectural Groups.
A Swedish and International survey.

The charts published in this Sector Review relate to figures from Annual Reports for 2000 and 2000/2001.

profile

place for Spectrometer and other equipment

Support inside of stainless steel poles. (1.1m)

1.67 meters



STD Svensk Teknik och Design

ARKITEKT-TEKNIK- OCH INDUSTRIKONSULTFÖRETAGEN I SAMVERKAN

Swedish Federation of Consulting Engineers and Architects

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Cover:

Areal stand onboard Assa Abloy Racing Team's VO 60,
Designed and developed by Semcon AB from the same
aerodynamical principles as used for designing aircrafts.



Foreword

Our sector creates values that last. Our sector has a direct influence on the planning, function, finances, technology and aesthetics of some 90 per cent of the physical investments that are made in the urban and regional development that takes place in Sweden. Our sector is playing an increasingly important and more extensive role in the development of industry. Not only through planning and design for investments in the process and production apparatus but also as an increasingly important player in research and development work.

Publication of the Sector Review is part of our endeavour to bring the sector and its companies more into view. With this Swedish and international survey we hope to be able to shed more light on our sector, with its architectural firms, engineering consultancies and industrial engineering consultancies.

The Sector Review, which with its successively variable form is now being published for the 16th year, is distributed to members of the Swedish Federation of Consulting Engineers and Architects and to all other firms that take part in the survey. It is also distributed to leading client firms, periodicals, people who assess the economic situation, corporate analysts, etc. both within Sweden and in the other Nordic countries, as well as to Swedish embassies and export offices. An English version is distributed not only to the companies that have taken part in the survey but also to international development banks, development organisations and administrations within the EU, international journals, etc.

Our common new trade and employers' association, the Swedish Federation of Consulting Engineers and Architects, which was established in January 2001 within the ALMEGA Business Service Association, has acquired the level of representation we hoped it would achieve, and has every chance of becoming even more effective. Market information of the type you are holding is part of the organisation's externally-oriented activities.

The Sector Review is dependent for its existence on the participation of a large number of companies both within and outside Sweden. We should like to take this opportunity to thank all those who have helped to make this review possible.

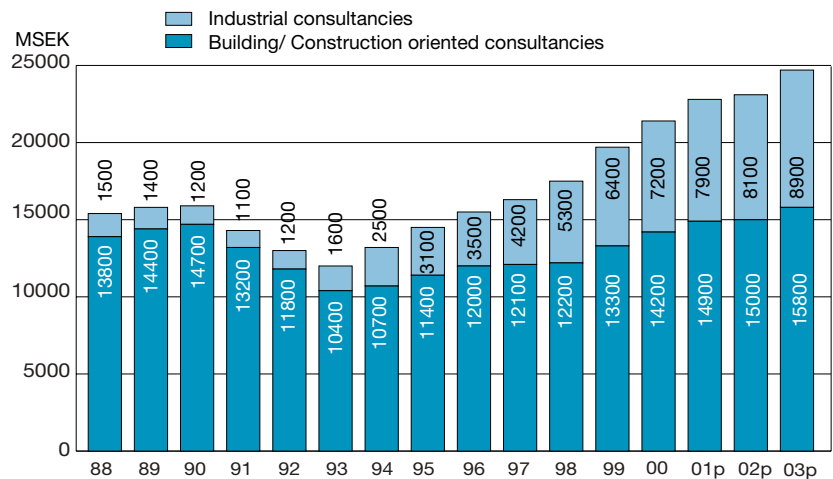
Thomas Erséus, Managing Director of J&W
Chairman of the Swedish Federation of Consulting Engineers and Architects

Short-term downturn in Sweden



Bengt O. Andreasson
Swedish Federation of Consulting Engineers and Architects (STD)

Turnover in the Sector, MSEK

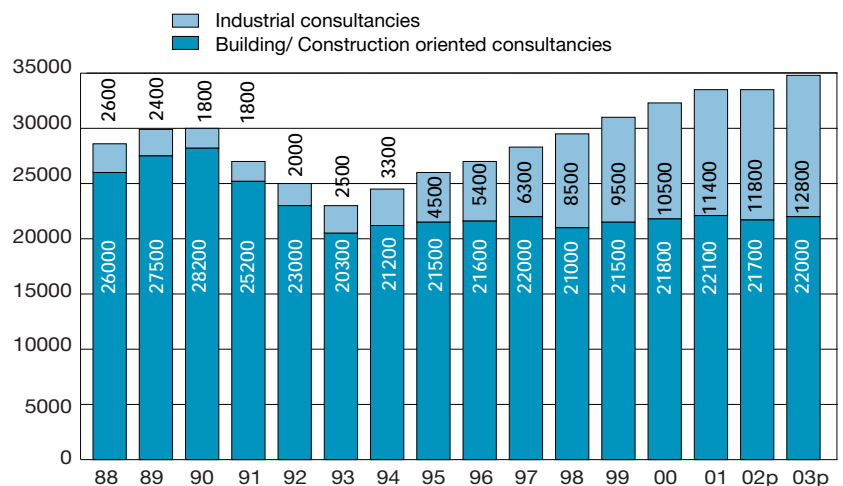


Source: Swedish Federation of Consulting Engineers and Architects (STD)

The Sector

	2000/2001	(1999/2000)
Turnover, billion SEK	21.4	(19.7)
Average number of employees	32300	(31000)
Number of groups	ca 5000	(5000)

Average number of employees in the Sector



Source: Swedish Federation of Consulting Engineers and Architects (STD)

Robust sector defies harsh business climate

The market situation in the late autumn of 2001 is marked by uncertainty – uncertainty about the first six months of 2002, or even the entire year. The consulting firms, or rather their customers, are obviously not unaffected by either the real economic situation or by the outpouring of negative predictions about the future that is flowing, and perhaps above all has flowed, over us. Nevertheless, many of the architectural and consulting firms have a surprising and pleasing amount of work on hand, even though lead times are shrinking somewhat. We must also remember that our sector is now much stronger than it was only two or three years ago. In the case of the building and civil engineering-oriented consultancies, profitability is now at a new higher level and the long-term trend is positive. The industrial engineering consultancies have formed a notably large segment of the sector and continue to demonstrate good growth potential. The entire sector is also attracting more public and media attention than previously.

Economic trends

In 1998, and above all in 1999 and 2000, the Swedish economy was unusually healthy and combined strong growth with low inflation. However, 2000 ended on a less positive note. Since then, growth has declined considerably and unexpectedly sharply. The steep decline in the American manufacturing industry at the start of the year had a major impact in Europe, where the same pattern was repeated. Despite aggressive cuts in interest rates internationally – the Federal Reserve from 6.50% at the start of the year to 2.00% in November, the European Central Bank from 4.75% to 3.25% and the Swedish Central Bank (Riksbank) from 4.0% (via a peak of 4.25%) to 3.75% – this decline remains dramatic. As recently as the summer, however,

economists predicted that growth would increase as we approached the end of the current year. The horrific acts of terrorism committed on 11 September in New York and Washington, and the subsequent unrest, have of course steepened the downturn in the global economy and set back the date on which we can expect recovery to begin.

At the moment, however, all of the forecasts indicate that the Swedish economy will bottom out in 2001, move slightly upwards in 2002 and accelerate in 2003. Sweden's GNP grew by approximately 3.8% in 1999, and by 3.6% in 2000, and the latest forecasts are in the range of 1.2-1.4% for 2001, 1.5-1.6% for 2002 and approximately 2.6-2.8% for 2003. This includes the forecasts of the European Commission and the OECD. Invest-

The development within the Sector

	Turnover per employee, kSEK						Result after financial items per employee, kSEK					
	1998	1999	2000	2001p	2002p	2003p	1998	1999	2000	2001p	2002p	2003p
The major groups	735	764	815	838	845	865	38	40	39	38	38	48
of which												
building construction oriented	740	787	837	867	890	920	29	39	45	43	43	54
of which												
architect firms	761	854	863	860	865	895	32	55	46	41	37	50
engineering consultancies	737	775	832	869	895	925	29	36	40	44	44	55
industrial consultancies	724	747	774	788	780	790	61	44	34	29	30	40

(the figures for 2000 and 2001 are excl SPP/AP)
Source: Swedish Federation of Consulting Engineers and Architects (STD)

ments will also fall somewhat in 2002 but increase significantly in 2003, and a lot of planning and design will of course be required before then. Even the stock exchanges, which normally discount development some six to twelve months in advance, have begun to move upwards.

Turn around in autumn 2002

A reasonable scenario given the usual pattern of the economic cycle is thus as follows: The industrial engineering consultancies will begin to notice an upturn at the beginning of the second half of 2002, after which the architectural firms will see an increase in the number of surveys and investigations for the early stages of projects etc. and, finally, growth will begin to increase again for the engineering consultancies – which, on the other hand, will have coped with the downturn best due to the broad range of their services.

Uneven growth

The major improvements for the construction and civil engineering-oriented consultancies and Architectural firms that began in 1999 continued this year. 2000 was a somewhat better year than was originally expected. Turnover in the segment increased in 2000 by approximately 6% (9% in 1999). The increase in the number of man-years worked (average number of employees) was just under 1% (2%). Within the segment itself, the turnover of the architectural firms increased by just over 10% and that of the engineering consultancies by approximately 5%. The forecast for 2001 is a further 5%.

At present, this segment of the sector accounts for 22 000 man-years. There are additional planning and design resources of

approximately 1 000 man-years in the form of autonomous units within a number of public utilities and the largest construction companies. Numerical growth on the Swedish market in the foreseeable future will, in traditional market areas, be limited to very small figures. Dynamism will instead have to be created through restructuring programmes, consolidation, changes in market shares, nicheing and differentiation – more about this later.

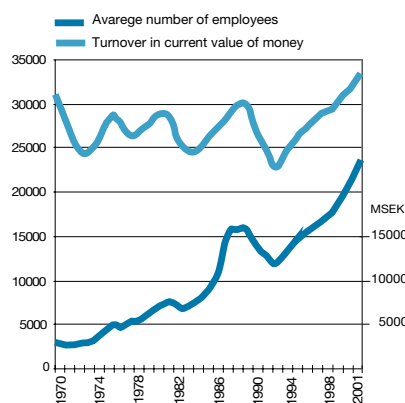
The industrial engineering consultancies, on the other hand, face entirely different market conditions. Turnover in 2000 increased by approximately 13%, and the number of man-years by around 11%. The estimate for 2001 is that turnover will increase by 9% and that the number of employees will increase by about the same figure. It is likely that 2002 will be an average year due to the downturn in industry, but subsequently this part of the sector has the potential to grow by around 10% for a number of years to come.

. and profitability trends

The engineering consultancies experienced the greatest improvements in profitability in 2000, and this will also be the case in 2001. Profits after financial items (excluding refunds from Alecta, formerly SPP) increased last year for the largest companies by 11-12% to approximately SEK 40 000 per employee. During 2001, profits will probably increase by a further 10%. The architectural firms, which in recent years have had a higher level of profitability than the engineering consultancies, are now experiencing a declining trend, but still reached a level of SEK 46 000 per employee in 2000. This decline has continued in 2001.

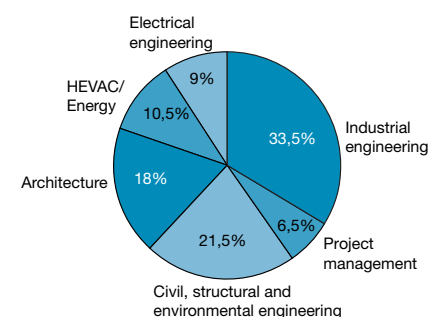
Overall profits, excluding repayments from Alecta and Arkitekternas Pensionskassa (AP), in the construction and civil-engineering segment amounted in 2000 to approximately SEK 700 million and are also expected to reach this level in 2001.

The development of the Sector



Source: Swedish Federation of Consulting Engineers and Architects (STD)

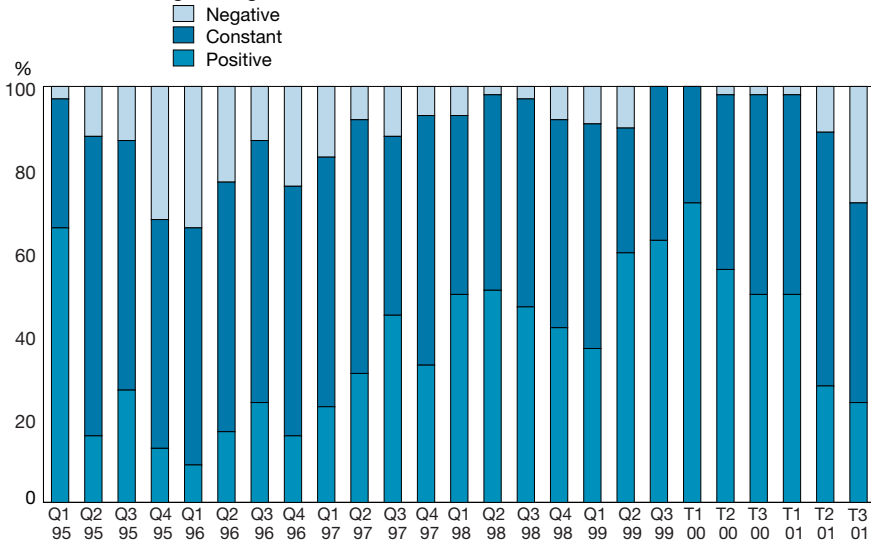
Share of the Sectors turnover within different sub-sectors



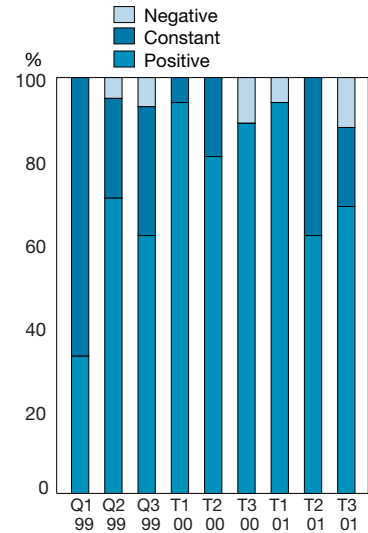
Source: Swedish Federation of Consulting Engineers and Architects (STD)

From the "Investment Signals" – Order forecast

Architects and engineering consultancies



Industrial consultancies



The bar chart shows the forecasts made by architectural and consulting engineering firms at each measuring point, of what the firm's order situation will be in six months' time.

Source: Swedish Federation of Consulting Engineers and Architects (STD)

The profitability of the industrial engineering consultancies declined in 2000 and profits after financial items (excluding refunds from Alecta) amounted to SEK 34 000 per employee for the largest companies. The major downturn in the industrial sector in combination with the major expansion of the industrial consulting segment are the main reasons for this. We expect to see a further decline in 2001 before profits begin to climb again.

Major repayments

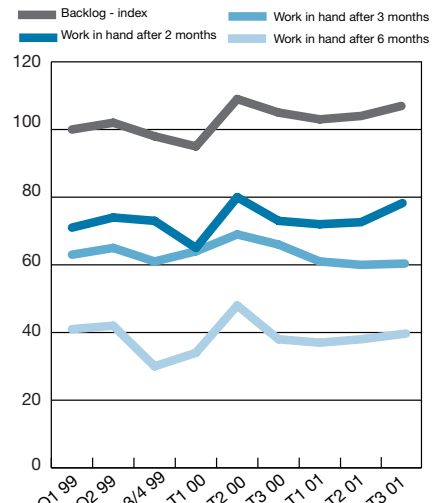
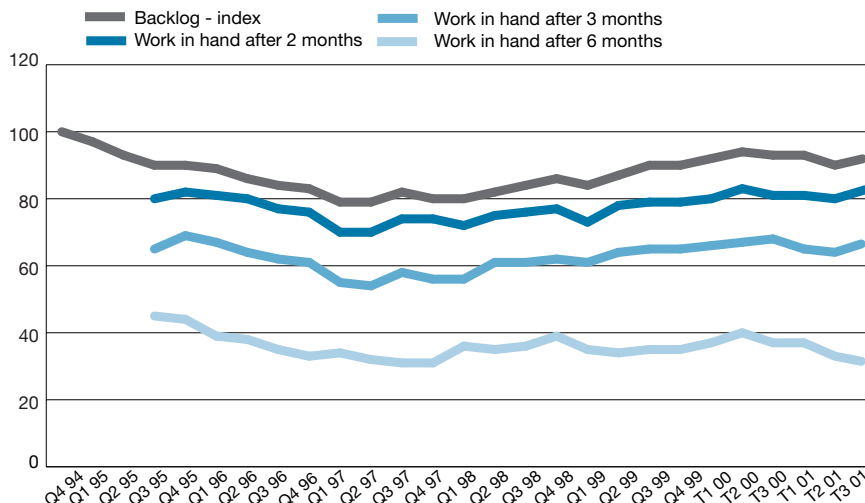
We estimate, following complex present value calculations, that the reported total repayment of surplus pension funds to the sector by Alecta and AP amounts to approximately SEK 3 400 million. Almost SEK 3 000 million of this has gone to the engineering consultancies and the architectural firms. If the upward trend on the stock exchange continues, it is probable that Alecta will decide to repay additional over-consolidated funds next year. In the media, there has been speculation that these repayments could

amount to between SEK10 and 30 billion, as compared to the SEK 77 billion that was re-allocated to business and industry in 2000.

Price potential for the most qualified services

The price situation for the services offered by the companies is improving across the board. If we attempt to draw a parallel between the price level and turnover per employee, then in 2000 the level for engineering consultancies increased by just over 7 %, for industrial engineering consultancies by

Backlog of orders – index and work in hand



Source: Swedish Federation of Consulting Engineers and Architects (STD)

approximately 3.5 % and for the architectural firms by only 1 %. There are clear indications of a more customer-value based pricing of the most qualified services. However, given the good market the sector has had, it should be moving away from its extremely flat pricing structure at a much faster rate. Awareness of the importance of a more value-based pricing structure is, however, increasing in the companies. The companies must devote greater resources to highlighting the value of the most qualified services. It is in the pricing of these services that our sector differs most markedly from other and closely-related knowledge sectors. It is therefore interesting to compare our sector with a number of other knowledge sectors where a similar level of education and training is required. The table below presents data from the 30 to 50 largest companies in several sectors. The data is mainly taken from the business journals *Affärsvärlden* and *Veckans Affärer*.

However, a lot of work remains to be done – internally and externally- to explain the necessity of more differentiated pricing to company managements. The potential is probably considerable, and it should be possible to increase rates for the most qualified services from the current level of SEK 800-900 per hour to SEK 1 100-1 400 per hour. We also hope that the companies in the sector do not, in a "poor year" in terms of market development in the near future, give in to the temptation to demolish the price structure that has nevertheless been developed over the last two to three years – history has shown that this can be done all too quickly.

Labour costs a matter of concern

On the basis of a calculation that comprises approximately 40% of the sector, we estimate that the sector's labour costs increased by

approximately 6-6.5% per employee in 2000. The term labour costs also includes other forms of payment (but not social security contributions) that have to be covered by pricing measures or measures aimed at improving efficiency. Seen over the course of the year, this also covers any effects arising from the employment of more qualified personnel, the employment of younger personnel and the retirement of older personnel etc. The above increase is almost 1 % more than the corresponding increase in 1999. Both the architectural companies and the engineering consultancies are somewhat above the mean value, while the industrial engineering consultancies are slightly below.

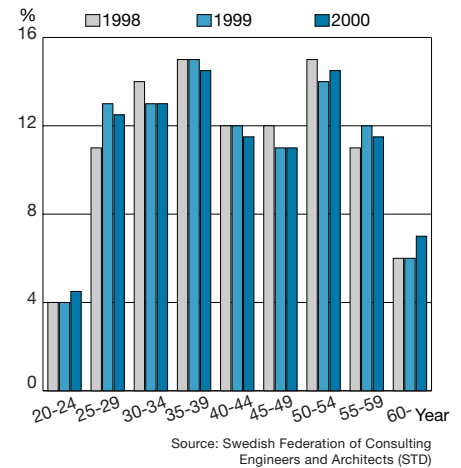
Only the engineering consultancies have been able to cover this increase in costs in their pricing, the architectural companies have not kept pace despite an increase in volumes. With this in mind, and considering that the market is now falling off, the signals we have received from the pay negotiations in 2001 are worrying.

Positive trend for added value

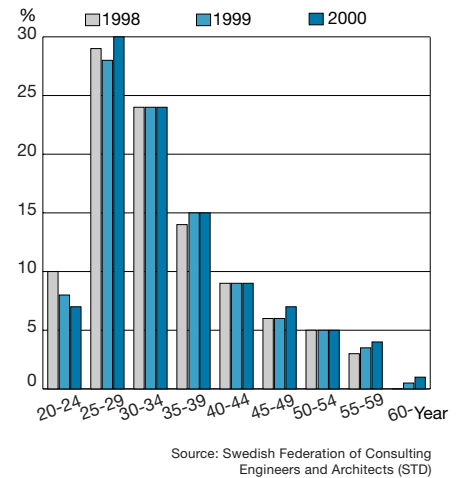
In simple terms, a company's added value can be said to be a measure of the customers' valuation of the company's services. Here, added value is measured as the sum of all the salary and other payments, the payroll overheads and the net operating income after depreciation – including goodwill.

The weighted average for the 200 largest companies in our survey for 2000 was as we forecast in the Swedish Federation of Consulting Engineers and Architects sector communiqué in June, i.e. approximately SEK 505 000 per employee (SEK 485 000 in 1999). Among these 200 companies, the architectural firms increased added value to approximately SEK 523 000 per employee,

Age distribution – Architectural firms and building/civil work-oriented consultancies



Age distribution – Industrial Consultancies

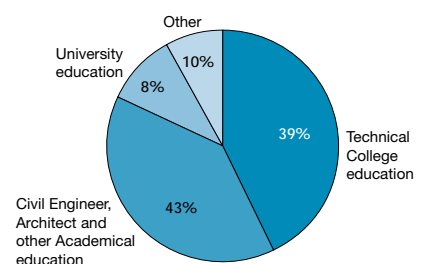


Turnover/employee

(in SEK thousand)	2000	1999	1998	1997	1996
Management consultants	1825	1830	1600	1380	1200
IT consultants	1020	1075	1050	1160	1090
Lawyers' offices	1300	1225	1200	1150	1150
Market surveyors	1035	895	830	860	1070
Public relations and communication	1350	1085	990	960	970
Auditors	885	880	800	750	760
Industrial engineering consultants	779	755	726	797	730
Architects/building engineering consultants	823	768	730	674	680

Source: Swedish Federation of Consulting Engineers and Architects (STD)

The level of education in the sector is increasing



Construction and industrial investments

The companies in the sector are involved at an early stage of the investment cycle, and the direct construction or industrial investment is, on average, not made until 1 -1.5 years after the survey, planning and design work. The "Investment Signals" market survey conducted by the Swedish Federation of Consulting Engineers and Architects in October led the organisation, to stick to its previous forecast that construction investments in 2002 will increase by 4-5%. This forecast is also based on the fact that the development of the 3G network will begin during the year, and this accounts for 1.5-2% of the increase.

The reduction in incoming orders for the architectural firms in the office and commercial premises sector indicates that there will be a significant decline in 2002. On the other hand, investments in this area increased dramatically both this year and last year. We also expect to see a small increase in public investments in care and education. Housing will once again be the largest investment area, but the rate of investment will fall somewhat from this year's +15% to approximately +10%. The fact that the infrastructure bill, which has been delayed for two years, has now been presented to parliament means that there will be a new start for road and rail investments. Construction-related energy investments and investments in other plants and facilities (including 3G) will increase. Industrial construction will decline somewhat.

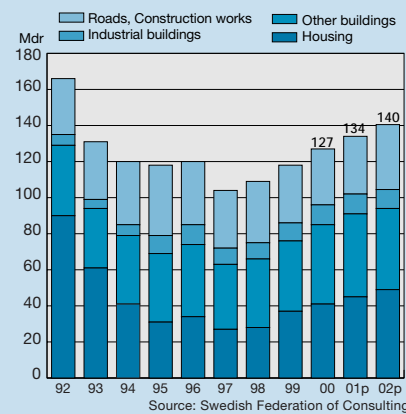
Industry investing in product development

The expansion of capacity for the basic industries has, with the exception of a few areas, stagnated. On the other hand, industry is continuing to invest in measures to improve the efficiency of the production apparatus and in increasingly frequent system and model replacements. The growth in the volume of work for the industrial engineering consultan-

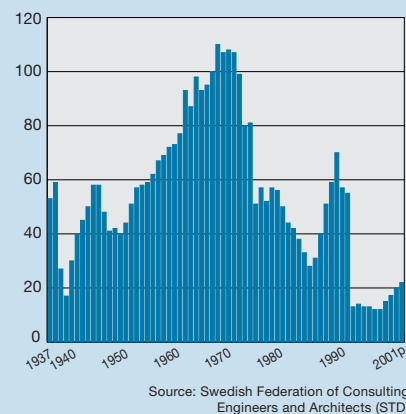
the engineering consultancies experienced a dramatic increase to around SEK 518 000 per employee, while the added value of the industrial engineering consultancies fell to approximately SEK 460 000 per employee. For the latter group of companies, however, this change does not really reflect true value given the dramatic expansion of the segment during the year.

This added value is the contribution that our sector makes to the Gross National Product. The overall contribution is of course rela-

Investments in the construction sector
(Billion SEK in 2000 value of money)



Housing construction in Sweden
– thousands of commenced apartments



cies is increasingly based on the R&D budgets of industrial companies. It is estimated that industrial investments in 2001 will amount to SEK 58-60 billion, over SEK 5 billion of which will be in applied IT. Our assessment is that these investments will increase by 2% in 2002. In addition, there will also be production-related energy investments of approximately SEK 14 billion.

tively small, but the increase for our sector was 4.1%, i.e. somewhat greater than the general GNP increase of 3.6%.

A growing number of women

The age structure in the construction and architectural-oriented segment remains relatively unchanged with an average age of around 43, while the average age in the youthful industrial engineering segment remains at around 34.

A calculation that covers approximately half of the employees in the sector indicates that the percentage of women in the sector has increased somewhat since the previous calculation was made in 1998 – from around 24.9% to 25.3%. This means that more than 30% of those now being employed in the sector are women. Nevertheless, the sector must do more to attract women.

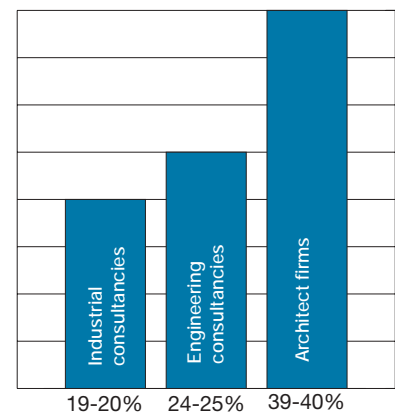
The sector must also be able to meet the demands of the younger generation for more flexible forms of work. These are demands that are often at odds with outmoded, rigid trade union demands that promote neither individual freedom nor the development of the companies.

Stable export volumes

Export volumes in the consulting firms in the private sector have remained stable in 2000 and 2001. A decline in the volume of work stemming from the Swedish International Development Co-operation Agency (Sida) has been compensated for by an increase in the assignments received from other international financing bodies. Sida's 1% target now raises hopes that there will be larger projects in the future, but also raises concerns about greater competition from foreign consulting firms.

Swedish consulting firms are still experiencing problems in connection with EU projects. With the exception of the Tacis programme, these projects are regarded as unprofitable and the companies often feel that they have no choice but to turn down invitations to tender.

Slight increase in percentage of women



The percentage of women in the sector is increasing somewhat. There has been a 0.4% increase since the last survey in 1998. In 2000, the percentage of women in the sector was approximately 25-26%.

Increasing co-operation and greater understanding between private consulting firms and the so-called "Swed Companies" (marketing companies for Swedish state-owned companies) offers potential for the future. However, it is still of interest for the firms to co-operate with other, foreign players in order to derive mutual benefit from each other's experience and contacts.

In comparison with our Nordic neighbours, Swedish exports of consulting services are still at a relatively low level.

Project management functions in demand

The demand for project management functions, in the widest sense, is continuing to increase and it is the "traditional areas" that are expanding most. This is the picture internationally too. However, project control or, to use a more modern term, project piloting, increasingly comprises extensive elements of competence in the fields of financing, information and PR/marketing, for example in relation to permit and acceptance processes for major physical investments. This is a very clear trend internationally and we are experiencing movement in this direction in Sweden too. Modern project management can be applied in a wide range of areas. One interesting example is an aid assignment currently being conducted by Hifab to develop the banking system in Moldova.

The industrial engineering consultancies are also becoming active in the field of project management and are establishing companies or units that have their own identity. Semcon and, most recently, Rejlars, with a staff of around 30, are examples of this.

An area that is growing steadily is the environmental adaptation of buildings and other investment projects. Energy utilisation in existing buildings is an area that will attract a lot more attention. Environmental impact assessments are being carried out in connection with a wider variety of new investment projects – not only those involving large plants. The Environmental Code now places a greater responsibility on property and plant owners. This means that in connection with a sale, if not before, existing buildings and plants must be surveyed with regard to the environmental load that they represent in a process that is usually referred to as EDD – Environmental Due Diligence.

IT-oriented operations, such as GIS applications, are developing rapidly in a variety of fields – including mobile applications. One

Key ratios per 2000-12-31

Group	Average number of employees	Turnover/employee kkr	Result after financial items*/employee	Net margin %	Förädlingsvärde**/anställd	Total Stock/value/employee kkr	*** P/e	P/s
Sigma ¹⁾	2811	879	58,3	6,6	553	2892	80	3,29
Semcon	1504	670	19,9	3,0	476	1441	105	2,15
ÅF	2191	797	41,4	5,2	537	321	11	0,40
SWECO	2132	824	43,3	5,3	529	403	13	0,49
Scandiaconsult	1732	781	60,3	7,7	499	442	10	0,57
J&W	1540	772	41,6	5,4	515	396	13	0,51
INAC	207	666	neg	neg	–	145	neg	0,22

¹⁾ During spring 2001 divided into Epsilon, Teleca and (new) Sigma
* Excl. repayments from Alecta (former SPP) and AP
** the total salary costs and salary overheads plus operating result after depreciation (excl. Alecta/AP)
*** Calculated excl. Alecta/AP

Source: Swedish Federation of Consulting Engineers and Architects (STD)

A comparison with some international listed Consultancies Key ratios per 2000-12-31

Group	Employees	Turnover/employee kkr	Result after financial items/employee kkr	Net margin %	Total Stock/value/employee kkr	P/e	P/s
Jaakko Pöyry Group	FIN 4717	850	53,9	6,3	443	12,8	0,52
Etteplan Oy	FIN 455	500	73,5	14,7	427	9,4	0,86
WS Atkins plc	UK 12843	727	47,5	6,5	880	26,0	1,21
High-Point plc	UK 355	1060	116	11,0	976	10,5	0,92
Waterman Partnership	UK 676	699	59,7	8,5	430	11,2	0,62
White Young Green	UK 877	727	52,2	7,2	590	16,7	0,81
WSP Group	UK 2300	831	52,4	6,3	868	25,7	1,04
Arcadis	NL 7657	857	35,2	4,1	191	8,4	0,22
Fugro	NL 5492	1097	99,4	9,1	1350	19,1	1,23
Grontmij	NL 4200	950	45,9	4,8	246	24	0,26
Bertrandt AG ¹⁾	DE 2807	580	5,8	1,0	277	>100	0,48
Rücker AG	DE 1681	579	54,0	9,3	521	20,1	0,90
Unweighted average Europe		788	58,0	7,4	600		
URS Corp.	US 15600	1297	53,8	4,2	156	5,3	0,12
Michael Baker Corp.	US 3700	968	26,5	2,7	153	11,5	0,16
Tetra Tech Inc.	US 6000	1214	102,7	8,5	1704	27,6	1,40
SNC-Lavalin	CAN 8200	1430	80,4	5,6	607	13,9	0,42
Unweighted average North America		1227	65	5,3	655		

The figures above regarding turnover, result and stock value have been converted into Swedish thousands SEK. Some exactitude is lost in the process.

¹⁾ Stock value per 2000-09-30

Source: Swedish Federation of Consulting Engineers and Architects (STD)

interesting example is a SWECO Position assignment, in which Scania has asked the company to develop solutions for determining the position of its vehicles. The telecom field is also expanding rapidly, even though development of the 3G network will take place later than expected. New and old players are growing in this field. Several of the larger companies are sharpening the focus of their resources in this area.

Architecture and design, in the widest sense, are still "hot" areas. Industrial design is becoming increasingly pronounced. At the same time, these are areas that are perhaps affected more than most by the state of the economy. Any decline, however, will begin from a much higher level than was the case only a few years ago.

Potential for industrial engineering consultancies

The market for industrial engineering consultancies has the potential for major growth over the next few years. The fact that the current trend is for industry to focus on its core areas – and to outsource other major operational areas – is creating many service conglomerates of a considerable size throughout the world. This is particularly noticeable in the energy, chemical, automotive and telecom sectors. Many of the most qualified tasks are still assigned directly from a core unit at a company to a consulting firm, although it is also quite common for assignments to be awarded to one of the rapidly-developing service conglomerates together with other less-qualified assignments. The service conglomerates, however, have a much lower level of added value in their operations, even though their volume of work is often very high. It is also quite common for service companies to acquire consulting firms in the hope of integrating them into their operations. There is a recent example of this in the Netherlands, where Landis has bought the industrial and telecom consultant Detron.

A factor that is of even greater importance to the industrial engineering consultancies is, however, that they are becoming increasingly involved in industry's R&D operations. According to an EU report, just under 2% of Europe's GNP is invested in research and development. As much as three-quarters of the total in the EU is accounted for by Germany, England, France and Italy. In Sweden, R&D is said to amount to 3.8% of GNP, a relatively high figure. This corresponds to SEK 80 billion, and industry's share of this

is probably considerable. The trend internationally is also to try to improve the efficiency of R&D operations by means of outsourcing. This is providing the industrial engineering consultancies with large volumes of work. There is of course an upper limit for what industry regards as the optimum level, but we are a long way from reaching this level in Sweden as yet.

Obviously the industrial engineering consultancies are affected by fluctuations in the economic situation for industry in general, and R&D investments are also cut when times are bad, but there will nevertheless be considerable expansion in this segment over a period of several years. Efficient businesses have understood that it is best to move as far away from self-subsistence as possible.

Restructuring underway

It is increasingly clear that expansion is primarily taking place in the large companies. In 2000/2001, the turnover of the 200 largest companies reached SEK 17 300 million (16 000 million) and the average number of employees amounted to 21 300 (20 700).

Despite the many large players, competition is still fierce among the approximately 5 000 active corporate groups. Although there has been a large number of mergers and acquisitions the degree of concentration is still low, particularly in the construction and civil engineering-oriented segment. Consolidation will continue, partly because the primary supplier concept is now being applied on the customer side in the construction and civil engineering sector too. The thinking and approach adopted by industry is now being widely emulated, and in an attempt to upgrade the quality of projects the large property companies, for example, are increasingly selecting their consultants (and other suppliers) from a tighter circle in which large and small companies are mixed. The central feature is that companies are selecting those consultancies that they feel are most competent or most suitable for different types of operations. The signal is that all of the firms are not mutually interchangeable, which one could easily be led to believe when studying the many public procurement processes that focus on price alone. The sector is becoming differentiated, and this is probably a precondition for the development of the sector as a whole. The best competence should be found in structures where it can develop and where the proper prices can be charged for the services provided.

The degree of concentration is somewhat higher in the industrial engineering segment, but here the consulting firms are still competing to at least the same extent with the customers' own engineering and R&D departments, and with other suppliers, as they are with each other. The percentage of the total engineering/development volume that industrial customers purchase externally is much smaller than the equivalent percentage in the construction sector, despite the very clear trend mentioned above.

Important company events

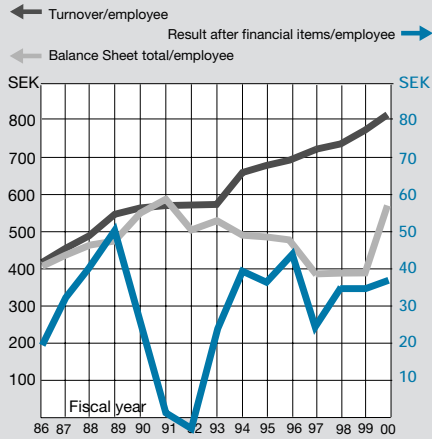
At the beginning of May 2001, one year after J&W's acquisition of KM in the spring of 2000, the English company WSP Group plc made a bid of SEK 1 058 million for J&W. WSP, which is expanding rapidly, has considerable operations in England, the USA, Africa and Asia, and also has operations in Poland, France and Germany. WSP/J&W will be an important player in Europe. The deal represents a merger between two relatively equal companies. The deal arose out of J&W's efforts to find a collaborator for international assignments. WSP has been listed on the London Stock Exchange since 1987. Based on the figures for 2000, WSP/J&W has 5 000 employees and a turnover of approximately SEK 3 200 million, which makes it one of the largest in Europe.

The disadvantage from the Swedish point of view is that the company was delisted in Stockholm on 20 July and that the company and the sector as a whole will thus have somewhat fewer opportunities to attract the attention of the business media. J&W increased its architectural operations through the purchase of Christer Blomqvist Arkitekter AB in Malmö, which has some 16 employees and is now being co-ordinated with J&W Architecture och Design.

Sigma, which expanded dramatically during the year, made major changes in June. In simple terms, the group divided into three separate listed companies that largely correspond to the previous business areas – (new) Sigma e-solutions, Teleca and Epsilon. In this *Sector Review*, we only take up the two companies that have a direct industrial application.

Teleca works in the telecom, pharmaceutical, automotive and other fields and has 43% of its operations outside Sweden. Teleca was originally the name of an English telecom consultancy that Sigma bought in 2000. At

The top 30 Swedish groups



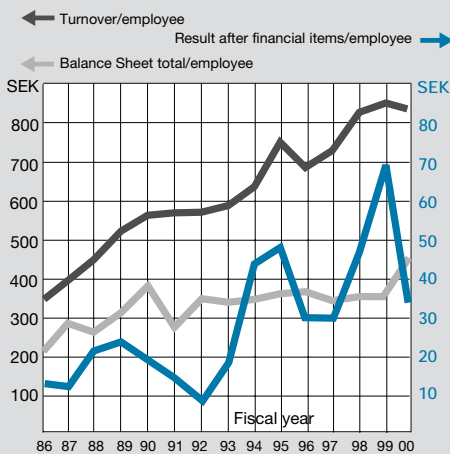
Source: Swedish Federation of Consulting Engineers and Architects (STD)

	Turnover per employee, kSEK				Result after fin.items/employee, kSEK			
	2000/01	1999/00	1998/99	1997/98	2000/01	1999/00	1998/99	1997/98
The top 30	805	764	729	707	38	34	34	24
groups of which								
building/construction oriented	823	768	730	674	39	29	23	6
industrial	779	755	726	797	35	44	61	73
The top 200	815	774	735	710	39	40	38	27
groups of which								
building/construction oriented ¹⁾	837	787	740	685	45	39	29	13
industrial	774	747	724	791	34	44	60	70

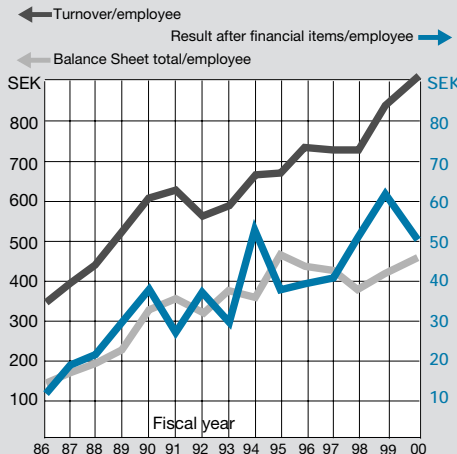
¹⁾ Of which the architectural groups had a turnover per employee of SEK 863 000 (854) and the consulting engineering groups SEK 832 000 (775). The result after financial items per employee was SEK 46 000 (55) for the architectural groups and SEK 40 000 (36) for the consulting engineering groups.

Source: Swedish Federation of Consulting Engineers and Architects (STD)

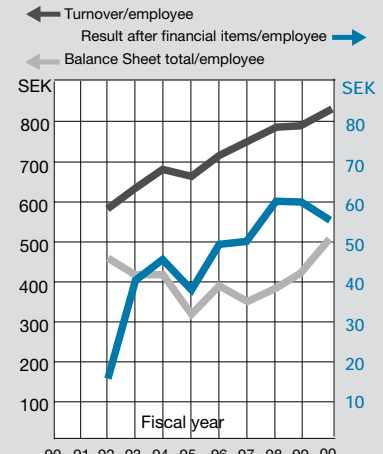
Group nr 31-50



Group nr 51-100

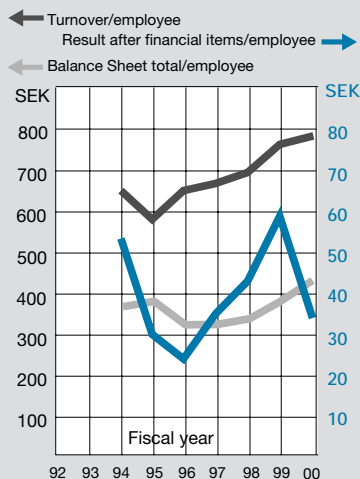


Group nr 101-150



Source: Swedish Federation of Consulting Engineers and Architects (STD)

Group nr 151-200



Source: Swedish Federation of Consulting Engineers and Architects (STD)

Consulting companies on the Stock Exchange

Market value, MSEK	2001-10-31	2000-10-31	99-10-29	98-10-30	97-10-30
Sigma	**195	8769	2218	1508	594
Epsilon	237				
Teleca	1700				
Semcon	583	2060	1023	1170	598
ÅF	862	690	604	684	655
SWECO	1081	873	554	*296	977
Scandiaconsult	956	813	550	245	278
J&W	***	641	506	242	195
INAC	34	29	26	35	-

* For this comparison, the market value of Humlegården, SEK 933 million, has been kept separate.

** The new Sigma e-solution AB. (Old) Sigma divided into three listed companies – Epsilon Group AB, Teleca AB and Sigma e-solutions AB.

*** After the merge with WSP Group plc was J&W delisted from the Stockholm Exchange the 20th of July (market value 1 050 MSEK).

Source: Swedish Federation of Consulting Engineers and Architects (STD)

The top 20 groups within Industrial Engineering

Group	Annual Report	Turnover MSEK	(previous year)	Em- ployees	
STD 1	*1	ÅF-bolag	00	*1075,0	* 1350
STD 2	3	Semcon AB	00	1007,2	863,5 1504
STD 3	*	Teleca AB	*00	932,4	* 1005
(STD) 4	*	WM-data Total Design	00	700,0	* 895
STD 5	*	Epsilon AB	*00	626,1	* 924
STD 6	6	J&W Systems	*00		136,1
STD 7	7	Xdin AB	00	139,3	121,8 177
STD 8	11	Jaakko Pöyry AB (sv. koncernen)	00	138,3	131,7 160
	9	Inac Instrumenteringar AB	00	137,9	108,5 207
STD 10	10	Gesab Engineering AB	*99/00	134,3	106,7 149
STD 11	8	SWECO Industriteknik AB	00	124,9	113,8 139
STD 12	5	Rejlerkoncernen AB (del av)	00	*110,0	148,9 160
STD 13	13	Ingemansson Technology AB	00	105,4	86,7 116
	14	Rücker Nord AB			
		(fd Nord-Consulting AB)	*00	95,6	65,9 76
STD 15	12	Wermtec Consult AB	00	93,5	86,5 87
STD 16	20	ProTang AB	*00	77,4	46,7 109
STD 17	16	IKG IndustriKonsultGruppen AB	00/01	76,8	62,0 110
STD 18	17	JA Produktutveckling AB	00	74,4	49,9 120
	19	Consat Engineering AB	00	61,7	47,9 84
	20	Condesign AB	00	50,8	45,7 90

STD = Member of the Swedish Federation of Consulting Engineers and Architects. In the 2000/2001 the top 20 groups had a turnover of 5 920 MSEK, the number of employees was 7 660 and the turnover per employee was SEK 773 000 (756). Among the multidisciplinary Consultancies also among other the Flygfältsbyrå has a considerable volume of industrial engineering.

Source: Swedish Federation of Consulting Engineers and Architects (STD)

the time of publication, Teleca has made bid for the IT/telecom consulting firm AU-System AB. Bure Equity is also to become a major shareholder.

Epsilon has also expanded dramatically. At present, only 10 % of the turnover stems from operations abroad, but the company has its sights set on Germany. Germany is a huge market with a major motor industry, high investment and R&D budgets and an industrial philosophy that increasingly involves consultants and other subcontractors in development work.

SWECO is putting its GIS operations, which have been developed within VBB VIAK, into a separate company called SWECO Position. Other IT operations are being gathered together under the name SWECO Connect. The group has relinquished its holdings in SwedPower International, which is now wholly owned by the state-owned company Vattenfall.

SWECO Bloco has, together with Tyréns Byggkonsult and the Finnish risk capital company SITRA Oy, invested in the recently-founded IT company Enterprixe Software, which is developing a new (advanced) web-based 3D/4D system for the construction sector.

In July 2001, SWECO bought Traction's 13 % holding in ÅF, and on 24 September, SWECO presented a bid of SEK 970 million for the rest of the shares in ÅF. The bid also contained a special formula for the exchange of A shares which was directed, among others, at the major shareholder, ÅF:s

The top 20 Project Management groups

Group	Annual Report	Turnover MSEK	(previous year)	Em- ployees	
STD 1	1	HifabGruppen AB	00	379,1	345,3 346
STD 2	3	J&W Management	*00	176,9	74,0 191
STD 3	2	SWECO Projektledning	00	108,2	94,6 109
STD 4	4	SCC Projektledning AB	00	84,8	61,3 105
STD 5	8	Tyréns Projektledarna AB	00	54,0	36,5 60
STD 6	(-)	SwePro Gruppen AB	*99/00	53,4	48,6 36
STD 7	7	ScandPro AB	00	52,3	39,9 42
STD 8	6	TP Gruppen AB	00	51,5	43,8 60
	9	EBAB Byggadministration AB	00	50,3	48,0 51
	10	Temaplan AB	00/01	49,9	32,8 38
STD 11	(-)	Semcon Technology Management	00	44,5	24,2 *55
STD 12	9	Bygganalys AB	00	39,9	34,5 45
STD 13	*	CA consult-koncernen	00	37,6	24,6 40
STD 14	14	Project Coordinatorbolagen (White)	00	*29,0	24,0 30
	15	Entreprenadbesiktningar Harald Olsson AB	00	29,0	20,7 19
	16	(-) Forsen Projekt AB	00	27,9	15,2 19
STD 17	19	Widmark & Platzer AB	00/01	26,2	11,1 26
STD 18	12	Tema Projektledare	00	25,3	26,0 35
	19	Alfakonsult AB	00	20,2	18,0 19
	20	Projektbyrå Roland Korsén AB	00/01	17,4	26,0 16

STD = Member of the Swedish Federation of Consulting Engineers and Architects. In the 2000/2001 the top 20 groups with wide and compared to each other somewhat different fields of services had a turnover of 1 357 MSEK (previous year 998 MSEK) and the average number of employees was 1 342 (1 015). The turnover per employee was SEK 1 011 000 (983).

The top 20 groups within electrical, building services installation and energy

Group	Annual Report	Turnover MSEK	(previous year)	Em- ployees		
STD 1	1	ÅF-bolag	E,M,Enr	00	*600,0	* 750
STD 2	3	J&W Systems	E,M,Enr	00	*320,0	*265,0 400
STD 3	2	SWECO Theorells	M,Enr,E	00	293,5	267,2 411
STD 4	4	Sycon Energikonsult AB	Enr	00	263,9	264,0 327
STD 5	6	Scandiaconsult (enhet)	E,M,Enr	00	*130,0	*120,0 200
STD 6	7	Bengt Dahlgren AB	M,Enr,Env	*00	126,4	*108,3 190
STD 7	12	FVB-Fjärrvärmebyrå AB	Enr	00	88,4	60,6 91
STD 8	8	SwedPower International AB	Enr,E	00	86,0	88,9 36
STD 9	11	Energio AB	M,E	00	82,2	66,3 87
STD 10	10	PIC Consulting AB	Enr,Env	*99/00	57,9	70,4 109
STD 11	*5	Rejlerkoncernen AB (del av)	E, Enr	00	*50,0	* 65
	12	18 Teleplan AB	E	00	48,2	33,2 50
STD 13	14	INCOORD AB	M	00	46,0	45,5 45
STD 14	16	Helenius Engineering AB	M	00	36,9	34,2 29
STD 15	19	CLC Installationsconsult AB	M,E	00/01	36,3	31,7 52
STD 16	17	FLK F Larssons Konstruktionsbyrå AB	M	00	35,7	33,3 60
STD 17	24	LEB Gruppen AB	M	00/01	28,5	24,6 40
	18	21 Per Schönbeck Elprojekt AB	E	00	27,0	26,4 46
STD 19	20	TEAM TSP Konsult AB	E	00	25,9	26,8 28
STD 20	23	TQI Consult AB	M	*99/00	24,8	24,4 18

STD = Member of the Swedish Federation of Consulting Engineers and Architects. In the 2000/2001 the top 20 groups had a turnover of 2 470 MSEK, the number of employees was 3 030 and the turnover per employee was SEK 795 000 (730).

Source: Swedish Federation of Consulting Engineers and Architects (STD)

The top 50 architectural groups

Group				Annual Report	Turnover (previous year) MSEK	Em-ployees	Group				Annual Report	Turnover (previous year) MSEK	Em-ployees		
STD	1	1	SWECO FFNS	00	346,7	349,1	361	STD	25	34	Åsberg Wångstedt				
STD	2	2	White arkitekter AB	00	265,2	262,3	330				Lotström Arkitekter AB	00/01	21,7	13,9	20
STD	3	4	Temagruppen Sverige AB	00	101,9	96,1	143	STD	26	22	A5 Arkitekter & Ingenjörer AB	00/01	21,5	17,9	29
	4	5	Sandell Sandberg AB	*00	70,5	63,5	54	STD	27	*	Arkitekthuset Monarken AB	00/01	21,2	*	24
STD	5	7	J&W Arkitektur & Design	*00	66,1	*54,0	75	STD	28	30	Archus Arosia Arkitekter AB	00	20,2	14,6	26
STD	6	8	Tengbomgruppen AB	00	64,8	47,0	74	STD	29	23	HUS&PLAN arkitekterna AB	00	19,9	17,8	29
STD	7	*3	Wingårdh-koncernen	00	56,4	65,9	63	STD	30	35	Rosenbergs Arkitekter AB	00	19,1	13,4	24
STD	8	6	NYRÉNS Arkitektkontor AB	00	56,0	51,6	72	STD	31	24	BSK Arkitekter AB	00	19,1	16,7	23
STD	9	11	Brunnberg & Forshed Arkitektkontor AB	00	51,9	35,9	52	STD	32	33	Lindberg Stenberg Arkitekter AB	00	18,3	14,0	27
STD	10	10	AIX Arkitekter AB	00/01	39,8	34,8	51	STD	33	41	FL Arkitekter AB	00/01	17,8	11,5	19
STD	11	12	Liljewall Arkitekter AB	00	38,8	28,8	49	STD	34	28	Arkitektgruppen GKAK AB	00	17,6	15,0	21
STD	12	9	Erséus, Frenning & Sjögren Arkitekter AB	00/01	32,8	41,4	45	STD	35	50	MAF Arkitektkontor AB	00/01	17,6	9,7	13
STD	13	13	Scheiwiller Svensson Arkitektkontor AB	00/01	32,6	26,7	34	STD	36	59	Arkitekturkompaniet SI AB	*00/01	17,1	8,9	17
STD	14	16	AROSgruppen Arkitekter AB	00/01	30,2	26,9	36	STD	37	20	Berg Arkitektkontor AB	*00	16,7	20,6	15
STD	15	19	Arkitektkontoret Fräne Hederus Malmström AB	00	26,6	23,6	27	STD	38	36	BAU Arkitekter AB	00	16,5	13,3	19
	16	38	Bjurström & Brodin Arkitekter AB	*99/00	26,2	12,5	22	STD	39	37	Pyramiden arkitekter i Göteborg AB	00	15,6	12,8	24
STD	17	27	Equator Stockholm AB	00	26,1	16,0	33	STD	40	39	Mikael Dunge Arkitektkontor AB	00	15,2	12,3	17
STD	18	14	Thomas Eriksson Arkitektkontor AB	*99/00	25,9	25,9	27	STD	41	31	BSV Arkitekter & Ingenjörer AB	00	14,3	14,6	23
STD	19	21	FOJAB Arkitekter AB (koncernen)	00/01	25,5	20,1	30	STD	42	48	Semrén & Månsson Arkitektkontor AB	*99/00	14,2	10,1	17
STD	20	17	Lund & Valentin Arkitekter AB	*99/00	24,2	24,2	35	STD	43	46	Studio 1.11 Arkitekter AB	00/01	14,2	10,7	16
STD	21	26	Anders Bergkrantz Arkitekter AB	00	24,1	16,5	10		44	43	Claes Dahlgren Arkitektkontor AB	00	13,9	10,9	14
STD	22	32	AQ Arkitekter i Eskilstuna AB	00/01	23,1	14,3	17	STD	45	29	HLLS Arkitekter AB	00/01	13,8	14,9	21
	23	18	Arkitektbyrån AB i Göteborg	00	22,7	22,8	30	STD	46	42	AG Anders Gunnedal Arkitekter AB	00	13,8	11,0	14
STD	24	15	SAMARK Arkitektur & Design AB	00	22,1	25,1	28		47	67	Södergruppen Arkitektkontor AB	00	13,6	7,7	16
								48	(-)	Strategisk Arkitektur AB	00	13,6	6,7	16	
								STD	49	72	Christer Blomqvist Arkitekter AB	*00	12,5	7,5	16
									50	49	ABAKO Arkitektkontor AB	00	12,3	9,7	20

The above chart only covers those groups in which architectural operations predominate. It doesn't, for example, include the architectural departments within, Stockholm Konsult, GF Konsult and Creacon, which also are of considerable size. In the 2000/2001 the 50 largest groups had a turnover of 1930 MSEK compared with 1 775 MSEK the previous year (not identical companies) and the average number of employees was 2 220 (previous year 2 060). The turnover per employee was SEK 861 000 (previous year SEK 852).

Source: Swedish Federation of Consulting Engineers and Architects (STD)

Forskningsstiftelse, a research foundation that holds 47% of the votes. SWECO's intention was to create a leading industrial engineering and engineering consulting firm in the Nordic region, with an international perspective in the long term. Despite a somewhat improved offer, ÅF:s Forskningsstiftelse, and also the Board of ÅF, rejected the bid. SWECO then withdrew its bid. In the media, the Finnish industrial consulting giant Jaakko Pöyry was commenting these events with interest.

SWECO later acquired 20% of the shares in the Danish architectural firms Skaarup & Jespersen A/S, which has 30 employees, while the Norwegian company Theorells AS bought the installation consultancy Axlander og Rosell. It also emerged recently that SWECO has acquired VAI VA-Projekt AB, a company with 100 employees.

ÅF has signed a co-operation agreement with the Finnish industrial consultancy CTS En-

gineering Oy, which has a workforce of 230, on joint marketing and collaboration on assignments in forest industry projects throughout the world. ÅF-IPK will buy up to 33 % of the shares in CTS, which in turn will have an option to buy up to 9.9 % of the shares in ÅF-IPK. Together, ÅF and CTS offer a European consulting network that also consists of ÅF-QPS in England, Chleq Froté in France, INCEPAL in Spain and Maier Papiertechnologie in Germany.

ÅF has also bought Eltekniska Projekteringsbyrån in Borås, which has 8 employees, and the IT consultancy Arjano Data AB which works with business systems. An interesting example of a company broadening its range of services is that ÅF can now offer its customers American management training in cooperation with Springfield College in the USA (part of a group that includes the famous institutions Yale and Harvard).

In January 2001, Sycon acquired the Danish companies Knudsen & Sørensen Rådgivende Ingeniörsfirma AS and Frigo Consult, with over 30 employees and offices in Copenhagen and Vilnius. Sycon followed thus up almost immediately with the acquisition of another Danish company, Steensen & Varming A/S, which has 140 employees and operations abroad.

In September, Bure Equity purchased Nordea-owned Unibank's shares, and a number of other shares, in the Danish company Carl Bro A/S, a company burdened by some heavy losses. This deal, which is said to be worth approximately SEK 250 million, gave Bure almost 2/3 of the shares in Carl Bro, and was partly intended to make it easier for Carl Bro to fulfil its international ambitions. The next major deal came in November. Carl Bro bought all the shares in Sycon from the Sydkraft Group, which in return received 11% of the shares in Carl Bro. This left Bure owning 51% of Carl Bro. The sec-

ond largest owner is now Danish Lönmodtagernes Dyrstidsfond, which also has a 15% holding in Scandiaconsult. The deal means that Carl Bro/Sycon now has a turnover of around DKK 2 000 million and approximately 3 200 employees.

Also in September, Bure, which has previously been involved in the restructuring process among IT consultancies, bought 35 % of the IT-oriented industrial consulting firm Xdin AB, which focuses on the automotive area. Bure already owned six or so other small companies in the same segment, and in October it added the electricity and telecom consultancy Retea AB.

Scandiaconsult is focusing its telecom resources in SCC Network Services. SCC has had telecom assignments in more than 25 countries since the 1980s, although the technology has of course developed and the concepts that apply today were unheard of in the past. The company has a framework agreement with Ericsson and was recently awarded a major order from Hi3G worth approximately SEK 20 million. In May, SCC bought, through its Norwegian company, Arkon AS in Bergen with some 22 employees.

The Hifab Group is also concentrating its project management services in the telecom and data network development fields and is setting up a subsidiary, Hifab Netcom AB, under Hifab Byggprojektledaren. Hifab has acquired Bottnia Konsult, while Hifab-owned Swedish Geological has acquired the remaining 50% of Envipro Miljöteknik.

The project management companies ScandPro and SWEPRO have merged to form SwePro Project Management AB, with a workforce of 100.

Tyréns has set up operations in Gothenburg and is also growing in Malmö, partly through the acquisition of Centrion, with 8 employees. In the spring, Tyréns Infrakonsult bought Väg & Transporttjänst AB (VTT) in Falun, Petro Bloc in Gothenburg and Rock Team in Stockholm.

Bjerkings Ingenjörbyrå broadened its range by buying up Illes Arkitekter in Uppsala, with some 7 employees. GF Konsult AB bought Schuer & Sundstrand Arkitektkontor AB.

FOJAB arkitekter has formed a joint company together with Diener & Diener

Architekten in Basle. The background to this is that Diener & Diener won the international architectural competition concerning a new university on Universitetsholmen in Malmö.

White Arkitekter is reorganising, decorporatising and integrating all its project management operations into the business units White Project Management and White Strategy.

NVK VVS-konsult has bought DeltaTe, and VVS Energi i Borås AB has acquired Boråskonsulten MP VVS-konsulter AB. The Helenius Group also acquired two new companies – R3 Design, specialists in clean room solutions, and the electrical engineering consultant El Concept.

Kadesjös Ingenjörbyrå AB is further developing its EPCM operations and is to become a partner in Local Presence Sweden AB in order to develop, design and build data centres at various sites in Sweden.

Rejlers is planning to go public in order to enable expansion in the Nordic region. The Rejler Group has bought 20% of the shares in Rejlers Invest Oy (which was part-owned by Rejlers until 1998) and has plans for a complete merger within the next 3 years.

Semcon, which celebrated its 20th year of operations, is involved in the development work for the Think electric car, which is being carried out at Ford-owned Think Nordic in Norway. Semcon is monitoring selected markets in the USA and Japan (together with Gadelius) and has expressed the ambition to set up business in Germany.

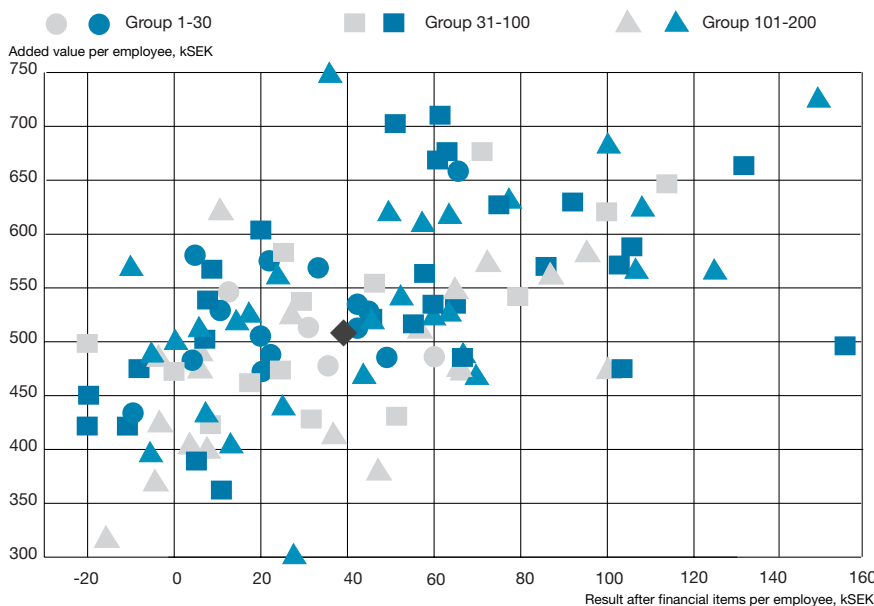
WM-data Total Design, with almost 1 000 employees, is playing an increasingly independent role within the WM-data Group. Caran, Knight, Embeddo and Pronima are part of the company and the latest acquisition is the English company TC Design Ltd, which has some 35 employees who work with product development for the automotive industry.

INAC Instrumenteringar AB acquired the Malmö-based development company Iniris Mobile Internet AB. The group is now sharpening its focus and INAC Instrumenteringar and HITAB Industriteknik are being merged to form one company.

Nord Consulting AB in Gothenburg has been acquired by the German company Rucker AG.

Value added increases

The coloured spots indicates firms which have shown an expansion with more than 7% during the last two years.



The value added, measured as the sum of a company's total salary costs and salary overheads, and operating result after depreciation, is for the service industry its contribution to GNP. In our calculations, goodwill depreciation has also been applied in the calculation of value added, something that not all companies do in their own accounts. In somewhat simplified terms, it can be said that the higher a company's value added per employee, the higher the customers' valuation of the services. For 2000, the average value added among the larger companies amounted to approximately SEK 505 000 per employee compared to approximately SEK 485 000 the year before.

The top 200 Swedish consulting engineering and architectural groups

			Group with major subsidiaries	Services	Annual report	Turnover MSEK	(Previous year)	Average numbers of employees	Result after financial items MSEK	Total Balance sheet MSEK	CEO/ Managing director per October 2001
STD	1	1	SWECO AB	MD	00	1756,7	1631,2	2132	500,0	1186,3	Wigon Thuresson
			SWECO FFNS	A		346,7	349,1	361			Eva Nygren
			SWECO Theorells	M,E,Enr		293,5	267,2	411			Åsa Söderström Jerring (fr jan 01)
			SWECO BLOCO	CE		114,6	92,5	138			Hans Olson
			SWECO Projektledning	PM		108,2	94,6	109			Bo Carlsson
			SWECO VBB VIAK	Env,CE		767,0	702,4	840			Mats Pålhlsson
			SWECO Industriteknik	I		124,9	113,8	139			Ulf Gustafsson
			SWECO Energuide	Enr		90,7	79,5	84			Erik Severin
STD	2	2	ÅF-koncernen	I,E,M,Enr	00	1746,9	1612,1	2191	330,9	1388,5	Gunnar Grönkvist
			EI & Instrument	I,E		522	498	752			-
			Energi, Miljö & Process	Enr,I,Env		442	391	558			-
			VVS	M,Enr		191	186	240			-
			Data, Elektronik & Mekanik	E,M,IT		462	390	377			-
			Kontroll & Besiktning	E,M,I		115	108	155			-
			Utbildning & Management			136	140	83			-
STD	3	5	Scandiaconsult AB	MD	00	1352,4	1444,6	1732	286,6	841,2	Torbjörn Torell
			Teknisk konsultverksamhet Sverige	MD		802,2	771,4	905			Torbjörn Torell
			Scandiaconsult Sverige AB	MD							Gunnar Samuelsson
			SCC Projektledning AB	PM							Stina Mossberg
			SCC Natura AB	Env							Jan-Ove Holmen
			Scandiaconsult AS (Norge)	MD		287,9	264,8	363			Jaakko Heikkilä
			Viatek Oy (Finland)	MD		261,7	252,5	448			
STD	4	4	J&W AB	MD	00	1188,6	807,9	1540	223,0	964,6	Thomas Erséus
			J&W Arkitektur & Design			66,1	*	75			Åke Nilsson
			J&W Byggprojektering			282,8	*264,0	345			Rikard Appelgren
			J&W Energi & Miljö			101,8	*95,3	133			Ole Paus
			J&W Management			176,9	*133,4	197			Mickey Johansson
			J&W Samhällsbyggnad			444,6	*422,2	508			Eskil Sellgren
			J&W Systems			478,5	*483,9	613			Lars Janson (fr jan 01)
STD	5	6	Semcon AB	I	00	1007,2	863,5	1504	49,5	435,9	Hans Johansson
			Semcon Industrial Design			485,4	360,2	-			-
			Semcon e-Design			416,9	323,7	-			-
			Semcon Complecence Development			60,4	55,4	-			-
			Semcon Technology Management			44,5	24,2	-			-
(STD)	6	*	Teleca AB	I	*00	932,4	*	1005	95,6	1176,7	Nick Stammers
(STD)	7	*	WM-data Total Design	I	00	700,0	*	895	-	-	Håkan Frick
STD	8	7	Sycon AB	MD	00	633,8	549,2	857	81,2	389,7	Bernt Lindén
			Sycon Energikonsult AB	Env		263,9	263,9	327			Alf Gustavsson
			Sycon Teknikkonsult AB	Env		245,1	249,8	340			Alf Carlsson
			Sycon Stockholm Konsult AB	MD (6mån)		87	*	164			Per-Arne Gustavsson
STD	9	*	Epsilon AB	I	*00	626,1	*	924	27,6	350,8	Staffan Andersson

These tables present the companies' profits after financial items including any repayments from Alecta (formerly SPP) and Arkitekternas Pensionskassa. Our ambition was also to be able to present profits excluding these repayments, as this would give a clearer picture of the companies' own earning capacity. However, we have not been able to present such data, mainly because it has often been difficult to calculate the correct figures. On this occasion, therefore, the tables do not provide any help in assessing an individual company's earning capacity. We do, on the other hand, have all the data required to calculate key ratios. Everywhere else in this *Sector Review*, the profit figures presented in connection with key ratios exclude the repayments mentioned above. The companies that have received such repayments have in principle presented them in their financial statements for 2000 or, if the company concerned has a split financial year, in the financial statements for 1999/2000.

The total profits of the 200 largest companies, including repayments, amounted to approximately SEK 2 650 million, while the figure excluding repayments is approximately SEK 780 million.

STD = Member of the Swedish Federation of Consulting Engineers and Architects. (*) = lack of conforming figure/proforma/assumed
 - = missing figure
 PM = Project Management, A = Architecture, CE = Civil/Structural Engineering, Env = Environment, Enr = Energy, E = Electrical,
 M = Mechanical/HEVAC, I = Industrial, MD = Multi Disciplinary

			Group with major subsidiaries	Services	Annual report	Turnover MSEK	(Previous year)	Average numbers of employees	Result after financial items MSEK	Total Balance sheet MSEK	CEO/ Managing director per October 2001
STD	10	9	Tyréns Förvaltning AB	CE,PM	00	386,2	266,0	441	90,7	615,0	ingen vd
			Tyréns Byggkonsult AB	CE,PM		165,6	123,2	180			Håkan Blom
			Tyréns Infrakonsult AB	CE		159,6	106,6	188			Jan Colliander
STD	11	8	HifabGruppen AB	PM	00	379,1	345,3	346	54,7	176,8	Ola Månsson
			Hifab Byggprojektledaren AB	PM		187	*152,0	210			Jan Boija
			Hifab International AB	PM		132	*134,0	110			Jan Skoglund
			In Develop Uppsala AB/Sodeco AB	PM		31	38,0	-			Adam Lagerstedt
			Swedish Geological AB	PM,Env		20	*21,0	-			Hans Carlsson
STD	12	11	Flygfältsbyrån AB	CE,I,E	00	270,8	245,0	358	28,5	125,7	Anders Rydberg
STD	13	10	White arkitekter AB	A,PM	00	265,2	262,3	330	71,0	230,2	Magnus Borglund
			Project Coordinatorbolagen	PM		29,0	*24,0	30			Thomas Samuelson/ Owe Swanson
			White Design AB	A,(IA)		5,6	4,7	6			Torbjörn Eliasson
STD	14	13	Rejlerkoncernen AB	E,I	00	169,9	148,9	245	40,9	109,1	Peter Rejler
STD	15	17	Xdin AB	I	00	139,3	121,8	177	-2,2	114,1	Hans Norén
	16	16	VA-Ingenjörerna AB	Env	*00	138,8	125,0	77	-4,5	58,8	Per-Olof Karlsson
STD	17	15	Jaakko Pöyry AB (sv. koncernen)	MD	00	138,3	131,7	160	17,4	69,5	Pekka Eskelinen
	18	18	Inac Instrumenteringar AB	I,E	00	137,9	108,5	207	-7,3	66,7	Magnus Falkman
STD	19	20	Gesab Engineering AB	I	*99/00	134,3	106,7	149	3,3	33,5	Vigleik Bolneset
STD	20	19	Bengt Dahlgren AB	M,Enr,Env	*00/01	126,4	*108,3	190	10,3	60,2	Christer Nyberg
			Bengt Dahlgren Stockholm AB	M/Enr		23	17,0	30			Lars Kjellgren
			Bengt Dahlgren Linköping AB	M/Enr		9	6,0	12			Leif Viking
			Bengt Dahlgren Malmö AB	M/Enr		9	-	12			Håkan Jerkstrand
STD	21	24	VAI VA-Projekt AB	CE, Env	00	106,0	89,1	110	7,0	37,2	Christer Andersson
STD	22	27	Ingemansson Technology AB	I (Ak)	00	105,4	86,7	116	17,0	61,2	Klas Brännström
STD	23	33	Kadesjös Ingenjörbyrå AB	CE,M	00/01	102,5	73,5	42	11,7	59,5	Håkan Kadesjö
STD	24	22	Temagruppen Sverige AB	A,PM	00	101,9	96,1	143	25,9	55,8	Håkan Persson
			Tema arkitekter	A		83,0	73,0	100			Laila Strunke
			Tema projektledare	PM		25,3	26,0	35			Gunnar Gedin
	25	36	Rücker Nord AB (fd B Nord-Consulting AB)	I	*00	95,6	65,9	76	35,8	94,8	-
STD	26	26	Wermtec Consult AB	I	00	93,5	86,5	87	-0,6	45,4	Curt Pehrson
	27	28	GF Konsult AB	CE,Env,A	00	92,4	84,5	126	33,6	76,6	Leif Olsson
	28	39	FVB-Fjärrvärmebyrån AB	Enr	00	88,4	60,6	91	6,1	23,5	Björn Andersson
STD	29	25	SwedPower International AB	E,Enr	00	86,0	88,9	36	6,8	58,4	Jan-Inge Gidlund
STD	30	35	Energio AB	M,E	00	82,2	66,3	87	10,6	35,3	Östen Innala
STD	31	48	ProTang AB	I	*00	77,4	46,7	109	6,7	29,8	Tom Andersson
STD	32	38	IKG IndustriKonsultGruppen AB	I	00/01	76,8	62,0	110	0,8	24,7	Lars Hellström
STD	33	32	ELU Konsult AB	CE	00/01	76,0	74,4	87	10,2	34,8	Lars Olov Karlberg
STD	34	43	JA Produktutveckling AB	I	00	74,4	49,9	120	-2,5	27,2	Ulf Aiff
	35	37	Sandell Sandberg AB (Resco)	A,Info	*00	70,5	63,5	54	15,7	51,8	Joakim Uebel
STD	36	47	Tengbomgruppen AB	A,IA	00	64,8	47,0	74	19,6	49,4	Bo Eiserman
	37	29	SweRoad AB	CE	00	63,8	81,7	57	9,2	53,4	Roberto G. Baudicco
STD	38	23	Golder Associates AB	CE, Env	00	63,4	94,1	70	-5,0	28,7	Sven Hultsjö
	39	*	Wikmar & Sone Konsult AB	MD	00/01	62,5	58,1	54	6,4	38,8	Rolf Sone
	40	46	Consat Engineering AB	I	00	61,7	47,9	84	5,5	19,4	Jan-Bertil Johansson
STD	41	41	Bjerkning Ingenjörbyrå AB	CE,M	00	60,6	52,6	93	12,1	48,0	Johan Bill
STD	42	34	PIC Consulting AB	Enr,Env	99/00	57,9	70,4	109	-4,8	42,3	Håkan Lillsjö
STD	43	*	Wingårdh-koncernen	A	00	56,4	*65,9	63	4,3	32,6	Gert Wingårdh
STD	44	40	NYRÉNS Arkitektkontor AB	A	00	56,0	51,6	72	13,7	31,9	Johan Nyren
STD	45	44	SwePro Gruppen AB	PM	*99/00	53,4	48,6	36	10,7	22,6	Christer Ytterstene
STD	46	57	Scand Pro AB	PM	00	52,3	40,2	42	7,6	19,5	Miguel Guirao
STD	47	68	Brunnberg & Forshed Arkitektkontor AB	A	00	51,9	35,9	52	8,0	26,8	Bengt Hellström
STD	48	52	TP Gruppen AB	PM	00	51,5	54,8	60	8,8	21,8	Bo Sundberg
STD	49	51	Nitro Consult AB	CE	00	51,3	44,1	52	7,2	42,0	Donald Jonson
	50	49	Condesign AB	I,E	00	50,8	45,7	90	2,5	19,5	Kenth Bergström

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	51	45	EBAB Byggadministration AB	PM	00	50,3	48,0	51	0,9	30,8	Tommy Werre
	52	66	Temaplan AB	PM	00/01	49,9	32,8	38	3,2	17,2	Andreas Philipson
	53	65	Teleplan AB	E	00	48,2	33,2	50	8,9	22,2	Thomas Ohlsson
STD	54	50	INCOORD AB	M	00	46,0	45,5	45	0,7	20,5	Olle Edberg
STD	55	53	VBK	CE	00/01	45,3	45,2	58	1,6	30,1	Leif Gustafson
STD	56	62	Bygganalys AB	PM	00	39,9	34,5	45	6,3	19,5	Anders Kivijärvi
STD	57	61	AIX Arkitekter AB	A	00/01	39,8	34,8	51	8,1	18,4	Erik Källström
STD	58	69	Liljewall Arkitekter AB	A	00	38,8	28,8	49	5,4	21,0	Leif Blomkvist
STD	59	*	CA consult-koncernen	PM	00	37,6	24,6	40	3,8	14,5	Jan Landmark
	60	70	Evolator Group AB	I	00/01	37,3	27,4	49	-0,3	22,0	Bo Claesson
STD	61	63	Helenius Engineering AB	M	00	36,9	34,2	29	5,8	22,6	HerjeWahlberg
STD	62	67	CLC Installationsconsult AB	M,E	00/01	36,3	31,7	52	4,0	20,4	Lennart Svantesson
STD	63	64	FLK F Larssons Konstruktionsbyrå AB	M	00	35,7	33,3	60	9,8	31,4	Anders Thomasson
STD	64	56	Erséus, Frenning & Sjögren Arkitekter AB	A	00/01	32,8	41,4	45	1,3	10,4	Peter Erséus
STD	65	71	Scheiwiller Svensson Arkitektkontor AB	A	00/01	32,6	26,7	34	1,5	10,8	Herbert Scheiwiller
	66	60	Intek AB	I	*00	31,3	34,9	47	0,1	8,9	Chris Schyttberg
STD	67	86	Bergsäker Konsult AB	CE	00	30,7	23,8	18	1,9	9,4	Göran Karlsson
STD	68	81	AROSgruppen Arkitekter AB	A	00/01	30,2	26,9	36	4,3	19,9	Jan-Ove Fogelberg
STD	69	80	BK Beräkningskonsulter AB	CE,I	*99/00	29,3	25,2	27	2,7	21,3	Sune Andersson
	70	93	Entreprenadbesiktningar Harald Olsson AB	PM	00	29,0	20,7	19	2,0	11,8	Per Olsson
STD	71	85	LEB Gruppen AB	M	00/01	28,5	24,6	40	4,9	19,6	Lars-Erik Bengtsson
	72	74	Svea Teknik AB	I	00	28,2	26,3	34	2,6	19,7	Rune Lindberg
	73	(-)	Forsen Projekt AB	PM	00	27,9	15,2	21	2,8	9,8	Jan Ahlinder
	74	73	Per Schönbeck Elprojekt AB	E	00	27,0	26,4	46	3,2	24,8	Per Schönbeck
STD	75	87	Knut Jönson Ingenjörbyrå AB	CE	00/01	26,8	23,0	28	7,4	15,3	Per Arne Näsström
(STD)	76	(*)	Eurocon Consulting AB	I	00	26,6	23,5	37	2,5	27,7	Christer Svanholm
STD	77	91	Arkitektkontoret Fråne Hederus Malmström AB	A	00	26,6	23,6	27	2,0	7,4	Roland Fråne
STD	78	156	Widmark & Platzer AB	PM	00/01	26,2	19,5	26	1,7	8,8	Per Fladvad
	79	149	Bjurström & Brodin Arkitekter AB	A	*99/00	26,2	12,5	22	5,8	10,7	ingen vd
STD	80	121	Equator Stockholm AB	A	00	26,1	16,0	33	3,9	10,5	Johan Mörling
STD	81	72	TEAM TSP Konsult AB	E	00	25,9	26,8	28	4,6	28,2	Göran Berg
STD	82	78	Thomas Eriksson Arkitektkontor AB	A	*99/00	25,9	25,9	27	3,2	10,3	Thomas Eriksson
STD	83	95	FOJAB Arkitekter AB (koncernen)	A	00/01	25,5	20,1	30	3,6	14,8	Björn Wigelius
STD	84	82	TQI Consult AB	M	*99/00	24,8	24,4	18	4,2	9,3	Björn Thörnqvist
STD	85	84	Lund & Valentin Arkitekter AB	A	*99/00	24,2	24,2	35	2,3	9,9	Bo Karlberg
STD	86	112	Anders Bergkrantz Arkitekter AB	A	00	24,1	16,5	10	1,3	6,3	Anders Bergkrantz
STD	87	(*)	Structor Hulthén-Stråth AB	CE	00	23,9	*	28	3,2	5,9	Jan Stråth
STD	88	77	NVK VVS-Kontroll AB	M	00/01	23,3	25,9	35	0,4	9,3	Stefan Pettersson
STD	89	133	AQ Arkitekter i Eskilstuna AB	A	00/01	23,1	14,3	17	1,7	9,8	Bengt Strandberg
STD	90	(-)	Avalon Technology AB	I	00	*22,9	-	24	3,5	10,1	Peter Mattisson
STD	91	90	Centaur Design AB	I	*99/00	22,7	21,3	37	0,8	10,3	Sten Roger Törnqvist
	92	88	Arkitektbyrån AB i Göteborg	A	00	22,7	22,8	30	0,0	13,9	Lars Iwdal
STD	93	105	Ingenjörbyrån Andersson & Hultmark AB	M	00	22,4	18,3	34	4,0	12,1	Håkan Elfström
STD	94	106	Sören Lundgren Byggkonsult AB	CE	00/01	22,4	18,0	20	2,5	9,7	Kjell Nordin
STD	95	79	SAMARK Arkitektur & Design AB	A	00	22,1	25,1	28	4,1	13,8	Tomas Walberg
STD	96	89	Creacon AB	A,PM,Env	00	21,7	22,1	33	4,2	10,1	Torsten Fribert
STD	97	136	Åsberg Wängstedt Lotström Arkitekter AB	A	00/01	21,7	13,9	20	4,5	12,0	Tomas Åsberg
STD	98	108	A5 Arkitekter & Ingenjörer AB	A	00/01	21,5	17,9	29	1,5	5,4	Ulf Åstrand
STD	99	75	Svensk Konstruktionstjänst Kervefors AB	I	00	21,4	26,1	24	-0,4	8,6	Lennart Kervefors

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STD	100	*163	Arkitekthuset Monarken AB	A	00/01	21,2	*10,7	24	0,3	11,0	Anders Burman
	101	(-)	Ergonomi Design Gruppen AB	I	00	21,0	21,1	20	2,3	14,8	Krister Torsell
STD	102	102	Creacon Halmstads Konsult AB	CE	00	20,6	18,5	32	5,4	11,8	Göran Feldt
STD	103	130	Archus Arosia Arkitekter AB	A	00	20,2	14,6	26	2,9	15,5	Johnnie Pettersson
	104	107	Alfakonsult AB	PM, MA	00	20,2	18,0	19	0,7	10,7	Peter Cedergårdh
STD	105	109	HUS&PLAN arkitekterna AB	A	00	19,9	17,8	29	2,2	8,7	Kurt Axelsson
STD	106	103	Riba Röringenjörsbyrå AB	M	*99/00	19,7	18,5	28	2,4	9,7	Bo Granström
STD	107	129	TM-Konsult AB	CE,I	99/00	19,5	17,7	33	1,8	35,9	Lars Holmgren
	108	147	IMEK VVS Rådgivande Ingenjörer AB	M	00	19,4	12,8	17	4,7	16,7	Tomas Kvistmo
STD	109	139	Rosenbergs Arkitekter AB	A	00	19,1	13,4	24	4,5	12,6	Inga Varg
STD	110	110	BSK Arkitekter AB	A	00	19,1	16,7	23	10,0	16,4	Anders Marking
STD	111	99	Geosigma AB	CE,Env	00	18,9	18,7	28	1,5	8,8	Åke Eliasson
STD	112	101	KNSS Gruppen AB	CE,E	00/01	18,6	18,7	25	1,7	-	Björn Svensson
STD	113	135	Lindberg Stenberg Arkitekter AB	A	00	18,3	14,0	27	2,2	6,2	Dag Lindberg
STD	114	104	Rintekno AB (ägt av Rintekno Oy)	I	00	17,9	18,4	24	2,0	13,6	Lars-Ove Olsson
STD	115	125	Electro Engineering AB	E	00/01	17,8	15,1	19	1,5	6,7	Arne Hilton
STD	116	154	FL Arkitekter AB	A	00/01	17,8	11,5	19	1,6	6,4	Christer Eriksson
STD	117	126	Arkitektgruppen GKAK AB	A	00	17,6	15,0	21	1,4	6,5	Bengt Groschopp
STD	118	174	MAF Arkitektkontor AB	A	00/01	17,6	9,7	13	1,5	5,5	Mats Jakobsson
STD	119	(-)	VAP VA-Projekt AB	Env	00/01	17,5	13,8	20	1,2	8,4	Mikael Melin
	120	124	Arne Hill AB	CE	00	17,5	15,7	16	7,6	17,6	Owe Svensson
	121	76	Projektbyrå Roland Korsén AB	PM	00/01	17,4	26,0	16	2,3	6,4	Jonas Hellström
STD	122	117	SKAPI/Pantektor AB	A,CE,PM	00	17,3	16,2	18	0,4	42,3	Bertil Hägg
	123	116	Projektkompetens AB	PM	00/01	17,2	16,3	19	-	6,2	Anders Borggren
STD	124	192	Arkitekturkompaniet SI AB	A	*00/01	17,1	8,9	17	3,3	10,8	Bibbi Olsson
STD	125	(-)	Timatec AB	I	00	17,1	16,0	21	2,0	6,4	Anders Magnusson
STD	126	151	Mats Strömberg Ingenjörsbyrå AB	E	00	17,0	12,2	14	2,0	6,1	Mats Strömberg
	127	100	PRC Konsult AB	I (S)	00/01	16,8	18,7	23	0,7	9,5	Hasse Tingström
	128	166	Brandkonsulten Kjell Fallqvist AB	M	00	16,8	10,6	13	1,1	7,7	Kjell Fallqvist
STD	129	122	Svenska Energhuset AB	E,M,Enr	00/01	16,7	15,8	20	1,8	6,5	Roland Winsell
STD	130	94	Berg Arkitektkontor AB	A	*00	16,7	20,6	15	-0,2	4,4	Svante Berg
STD	131	140	BAU Arkitekter AB	A	00	16,5	13,3	19	2,5	6,9	Per-Eric Sundby
STD	132	113	EKAB Elkonsulter KB	E	*99	16,4	16,4	21	4,8	13,0	Carl-Olof Wallin
	133	123	Gröner Veritech AB								
			(ägt av Statkraft Gröner AS)	I	00	16,1	15,7	22	1,1	8,3	Mikael Utberg
	134	120	IP Industri & Projektconsult AB	I	00	15,9	16,0	30	-0,1	2,9	Anders Holm
STD	135	146	Pyramiden arkitekter i Göteborg AB	A	00	15,6	12,8	24	4,0	8,5	Dan Nyström
STD	136	119	Rördesign i Göteborg AB	I,M	99/00	15,6	16,1	23	3,5	8,0	-
	137	115	Reinertsen Engineering AB	CE	00	15,5	16,3	21	0,01	6,3	Ljot Strömseng
	138	150	Mikael Dunge Arkitektkontor AB	A	00	15,2	12,3	17	1,3	7,4	Mikael Dunge
STD	139	144	Prows Industri & Management AB	I,PM	00/01	14,8	11,7	23	0,5	9,4	Kjell S. Andersson
STD	140	141	Kjellmans Ingenjörsbyrå AB	CE	00/01	14,8	13,2	21	0,4	7,2	Pål Kjellman
STD	141	128	Mekaniska Provningstanstalten MPA AB	M	00	14,8	14,9	15	2,7	8,4	Torbjörn Olsson
	142	155	Hedström & Taube Projektledning AB	PM	00/01	14,6	10,5	6	1,8	7,6	Erik Taube
STD	143	131	BSV Arkitekter & Ingenjörer AB	A, CE	00	14,3	14,6	23	1,3	9,4	Kjell Thulin
STD	144	169	Semrén & Månsson Arkitektkontor AB	A	*99/00	14,2	10,1	17	3,7	9,8	Magnus Månsson
STD	145	164	Studio 1.11 Arkitekter AB	A	00/01	14,2	10,7	16	0,9	8,0	Jan Hardenborg
	146	137	Kemakta Konsult AB	Env	00	14,1	13,7	19	1,6	8,2	Bertil Grundfelt
	147	159	Claes Dahlgren Arkitektkontor AB	A	00	13,9	10,9	14	5,4	4,9	Claes Dahlgren
STD	148	127	HLLS Arkitekter AB	A	00/01	13,8	14,9	21	3,6	21,5	Bengt Linder
STD	149	97	P O Andersson Konstruktionsbyrå AB	M	00	13,8	19,6	17	0,9	10,3	Arne Berggren
STD	150	157	AG Anders Gunnedal Arkitekter AB	A	00	13,8	11,0	14	2,5	5,3	Anders Gunnedal
	151	213	Södergruppen Arkitektkontor AB	A	00	13,6	7,7	16	2,0	5,8	G.Herdevall, H.Bäckström
	152	(-)	Strategisk Arkitektur AB	A	00	13,6	6,7	16	-0,1	4,8	Göran Ekeröth, Andreas Fries
	153	184	Byggplanering i Norrbotten AB	PM	00/01	13,4	10,5	7	0,4	5,6	Sven Svensson

The top 200 Swedish consulting engineering and architectural groups

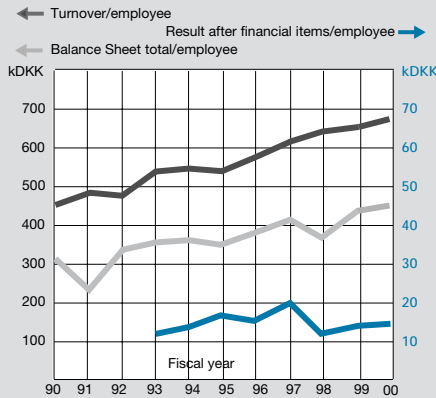
		Group with major subsidiaries	Services	Annual report	Turnover MSEK	(Previous year)	Average numbers of employees	Result after financial items MSEK	Total Balance sheet MSEK	CEO/ Managing director per October 2001	
STD	154	145	Projektteamet Västsvenska AB	CE	00	13,3	12,9	19	1,4	4,7	Lars Howander (SO)
	155	(-)	KFS Anläggningskonstruktörer AB	CE,PM	00/01	13,3	10,4	11	1,0	6,2	Hans Klingenberg
STD	156	92	Centerlöf & Holmberg AB	CE	00	12,9	21,6	32	2,9	22,2	Bengt Andersson
STD	157	178	Byggkonsulter Hans Hansson & Co AB	CE	00	12,9	9,5	17	4,2	7,1	Kurt L Rådlund
STD	158	167	SISU Stockholm AB	M,E	00	12,8	10,5	17	0,8	4,6	Ronnie Bergman
STD	159	158	AB Hagerud Elteknik	E	00	12,7	10,9	16	1,9	6,2	Leif Jalmerud
	160	183	AB Teknoplan	E	*99/00	12,7	9,3	13	4,3	9,3	Bo Jakobsson
	161	212	Devellum Design & Development AB	I	00	12,7	7,8	12	0,9	4,3	-
STD	162	143	IBA Ing.byrå Bygginstallationer AB	M	00	12,5	13,0	20	2,0	9,8	Mikael Sundell
STD	163	220	Christer Blomqvist Arkitekter AB (J&W 2001)	A	*00	12,5	7,5	16	2,0	4,7	Christer Blomqvist
STD	164	(-)	BEKAB Bergströms Konstruktionsbyrå AB	I	00/01	12,5	12,9	13	0,9	6,0	Tord Hägglund
STD	165	171	STIBA AB	CE	00	12,4	10,0	17	0,9	9,1	Rune Dalmyr
	166	175	ABAKO Arkitektkontor AB	A	00	12,3	9,7	20	0,9	4,7	Bengt Wallin
STD	167	(-)	Vatten och Samhällsteknik Gotaland AB	Env	00/01	12,2	11,5	14	0,6	7,3	Lars Kylefors
STD	168	(¹)	Reflex Arkitekter AB	A	99/00	12,1	2,0	12	1,0	3,2	Johan Linnros
	169	186	Claes Kock Arkitekter AB	A	00/01	12,1	7,5	6	0,5	3,5	Claes Kock
STD	170	142	Ingenjörgruppen Ståhlkloo AB	M	00	*12,0	13,0	25	0,4	3,2	Christer Ståhlkloo
STD	171	152	BLP Arkitekter AB	A	00/01	12,0	12,1	16	3,9	8,9	Sven-Olof Larsson
STD	172	211	Atrio Arkitekter i Kalmar AB	A	00	12,0	7,8	15	2,6	6,5	Olof Utterback
STD	173	(-)	Integra Engineering AB	PM,CE	00	12,0	5,9	15	1,9	4,5	Anders Skoglund
STD	174	170	Rolf Tellstedt -koncernen AB	CE	00	11,9	10,0	24	-	-	Björn Tellstedt, T. Östergren
STD	175	*	Lassen & Co AB (Byggteknik o E.Uddvik)	CE	00	11,9	*	20	-0,1	1,7	Christian Lassen
STD	176	(-)	Automations Partner AB	I	00	11,9	9,6	9	0,6	4,1	-
STD	177	177	Landskapsgruppen AB	A	99/00	11,8	*14,0	17	0,5	6,1	Bo Wiklund
	178	165	Uulas Arkitektkontor AB	A	00/01	11,8	10,6	12	0,7	5,3	Sten Liljedahl
STD	179	98	SZ Konsult AB	CE	00	11,7	19,3	18	1,7	8,1	Arpad Szakaly
	180	200	Megaron Arkitekter AB	A	00	11,2	8,5	10	2,1	5,1	Anders Högberg
STD	181	173	Rockstore Engineering AB	CE	*99/00	11,1	9,8	10	1,5	4,3	Stig Myhré
STD	182	176	PIAB PI i Göteborg AB	CE	00	10,9	9,6	18	1,2	5,4	Stefan Bengtsson
	183	223	Samcon AB	CE	00/01	10,8	7,2	16	0,2	3,2	Cenneth Jonsson
STD	184	138	CERTUS Elkonsulter AB	E	00/01	10,7	13,6	10	0,7	5,3	Per-Ove Murstad
	185	272	Retea AB	E,I	00	10,7	5,4	10	*	19,5	Bengt Lundgren
STD	186	185	Sundell Arkitekter AB	A	00	10,3	9,2	11	1,7	4,4	Jan Sandberg
STD	187	(-)	Process- och Industri teknik i Kristianstad AB	I	99/00	10,2	11,9	15	1,1	4,9	Bengt Sturesson
	188	160	Allmänna Maskinkonstruktioner AB	I	00	10,2	10,8	15	2,4	8,8	-
STD	189	288	Hans Murman Arkitektkontor AB	A	00	10,2	7,0	13	0,8	4,4	Hans Murman
STD	190	(-)	AROS Industri konsult AB	I	00/99	10,2	9,0	9	2,9	-	-
STD	191	168	Consultec Arkitekter & Konstruktörer AB	A,CE	00	10,1	10,3	14	1,4	4,7	Allan Forslund
	192	233	Arkitekterna AB Krook & Tjäder	A	00	10,0	6,8	12	1,9	4,3	Bengt Ove Krook
STD	193	201	Carlstedt Arkitekter AB	A	00	9,8	7,6	15	1,5	9,0	Kurt Feldman
STD	194	179	Fredblad Arkitekter AB	A	00/01	9,8	9,5	14	0,4	5,2	Leif Jönsson
STD	195	162	LBE arkitekt AB	A	00	9,7	10,7	16	0,9	5,8	Mats Elgström
STD	196	*	BM Arkitekter AB	A	99/00	9,6	*	10	0,9	3,0	Ulla Nordström
STD	197	214	Jan Lundqvist Arkitekter AB	A	00	9,6	7,7	9	2,3	5,6	Jan Lundqvist
STD	198	187	BJ-Konsult i Visby AB	CE,A,PM	00	9,5	9,0	16	2,4	11,5	Birger Jörnhammar
	199	172	ENT Energiteknik AB	Enr,E	00	9,5	9,9	11	1,1	5,4	ingen vd
	200	182	Olle Rex Arkitektbyrå AB	A	00	9,2	9,4	7	0,3	2,6	Olle Rex

STD = Member of the Swedish Federation of Consulting Engineers and Architects. (*) = lack of conforming figure/proforma/assumed
- = missing figure

PM = Project Management, A = Architecture, CE = Civil/Structural Engineering, Env = Environment, Enr = Energy, E = Electrical,
M = Mechanical/HEVAC, I = Industrial, MD = Multi Disciplinary

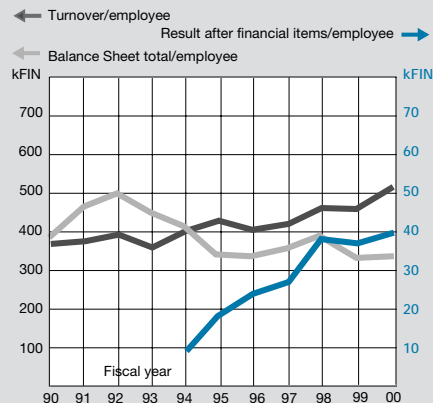
The Nordic market

The top 30 Danish groups



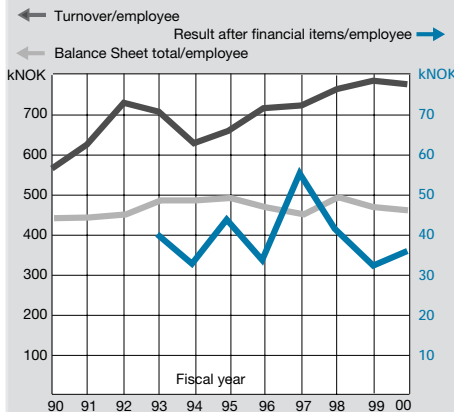
Source: Swedish Federation of Consulting Engineers and Architects (STD)

The top 30 Finnish groups



Source: Swedish Federation of Consulting Engineers and Architects (STD)

The top 30 Norwegian groups



Source: Swedish Federation of Consulting Engineers and Architects (STD)

The downturn in the global economy has affected most national economies along the same lines. There are only slight differences in nuance between the Nordic countries in this respect.

In 2000, GNP growth in the Danish economy – with is regarded as a typical small-business economy – was approximately 3.2%, which was somewhat better than the figure forecast by the OECD. In the current year and in 2002, GNP is expected to be approximately 1.3% but to increase sharply in 2003 to around 2.3%. Construction investments have fallen steeply since 2000. It is highly uncertain whether the new Danish government will wish to stimulate the economy by increasing the level of public investment. The construction of housing remains at the relatively constant level of 16 500 new apartments per year.

The Norwegian economy has considerable revenues from the oil industry and is thus less affected by global events than the economies of the other Nordic countries. In 2000, GNP grew by around 2.3% and is expected to grow by 1.7, 2.1 and 2.2% in the next three years. The market is relatively sound. The public sector is expected to increase its level of investment, although civil engineering investments and, above all, infrastructure investments, are declining somewhat. Sharp pay rises, a slightly higher rate of inflation and relatively high interest rates are, however, threats to the economic development of business and industry. Housing construction is, in comparison with Sweden, at quite a high level, and the construction of 21 000 new apartments began in 2000.

The Finnish economy, which is highly dependent on its export industry, had the highest GNP growth of all the Nordic economies in 2000, reaching as high as 5.7%. The deceleration of the economy is also expected to be dramatic, however, and it is estimated that GNP in 2001 will not increase by more than 0.5%, after which a gradual upturn will follow in 2002. Infrastructure and other public investments are expected to be at a stable and relatively high level, while the construction of offices and commercial premises will decline. The level of housing construction is relatively stable and, in Swedish terms, fairly high. The construction of over 30 000 new apartments is begun each year.

Swedes stirring things up in Denmark

Apart from Carl Bro's purchase of Crone & Koch in 1999, no major structural changes

have taken place among the Danish consulting companies in recent years. However, 2001 began with a surprise when the Swedish company Sycon crossed the water to Denmark and bought both Knudsen & Sørensen/ Frigo Consult and Steensen & Varming A/S. An even more sensational deal was made in the autumn, when Bure Equity from Sweden bought a majority shareholding in loss-burdened Carl Bro, mainly from Unibank (see also page 13). Two months later, Carl Bro in turn bought Sycon from the Sydkraft Group. In its efforts to clear its debts and focus on profitability, Carl Bro began to sell off property and also sold its share in the testing and inspection company Non-Destruction Testing. At the same time, the company increased its holding in the IT consultancy Sintas A/S to 56% and in NaviCom Holding to 51%. Together, these companies have over 100 employees.

The Swedish company SWECO also purchased a 20% holding in the architectural company Skaarup & Jespersen during the autumn.

RAMBØLL managed to reverse its fortunes and had a profit margin of over 4%, which is a good result in the light of what large Danish companies have managed in the past. The share of the company's business attributable to foreign operations fell by 2% to 21% of the turnover, but this was more than compensated for by the company's successful operations on its domestic market.

WS Atkins from England bought Scan Rail Consult in Denmark before other Danish consultancies seemed to realise what was happening, and is now setting up an office in Denmark with almost 300 employees under the name Atkins Danmark AS.

Shortly after this, COWI concluded its negotiations on the purchase of 80% of European Transport Consultants (ETC) in Berlin from Deutsche Bahn and Lufthansa. ETC has some 100 employees and its current assignments include railway projects in China. COWI is once again the largest consulting firm in Denmark, mostly thanks to the increase in its foreign operations which now account for 52% of the turnover.

Kampsax is expanding its international operations, but is at the same time slimming down the group by selling off its CAD/CAM and IT operations. The company has acquired the energy consultancy Viggo Folmer A/S.

NIRAS has bought CSC's department for geographical information systems and AEC

Rådgivende Ingenjører A/S, which has cutting-edge competence in the field of concrete structures. NIRAS, unlike many others, has done fairly well on the tough Polish market, and NIRAS Polska now has almost 60 employees.

Birch & Krogboe A/S, which is owned by a foundation, has had a record year and has formed an interesting strategic alliance with the English company Arup involving, among other things, co-operation on competence development.

On the architectural side, Arkitekterne Andresen has merged with APL-Arkitekter. The name of the new company, which has some 55 employees, is AA Arkitekter A/S. There are also corporate splits from time to time. Staermose og Isager in the architectural firm of the same name have decided to go their separate ways. A new company to bear in mind is S&I Arkitekter K/S.

Danish architectural firms, for example C. F. Møllers Tegnestue, have previously been very successful in Norway. The expanding company Schmidt, Hammer og Lassen has now gained a foothold on the Norwegian market through its involvement in a development project in Bodö.

Dissing+Weitling, one of the leading firms in the world when it comes to bridge architecture, has also had a good year. Apart from projects in Sweden, the company has attracted attention internationally in connection with the Nelson Mandela Bridge in Johannesburg and the longest fixed link in the world so far, the 45-kilometre long link between Qatar and Bahrain, where COWI is also involved.

Finland

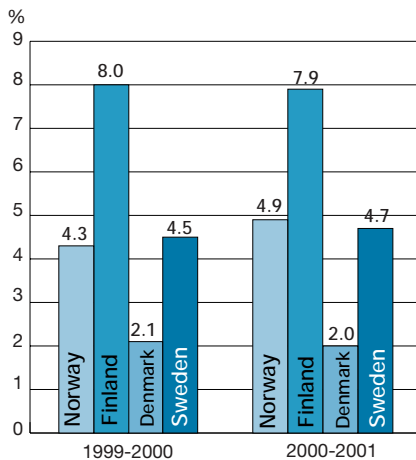
The large Finnish consulting firms have generally had a good market and have expanded rapidly. The giant Jaakko Pöyry Group has, however, mainly expanded on the international market – almost 70% of its turnover is attributable to markets outside the Nordic region. The most expanding areas are the energy and forestry sectors. Jaakko Pöyry is also setting up business on the world's third largest market for forest products, Japan. In alliance with the Japanese management consultancy CDI (Corporate Directions, Inc.) the company is now offering the Japanese forest industry project management and investment banking services.

PI-Group and Mecanova Oy are establishing a new company, PI-Mecaplan Oy, with a

The top 50 Nordic architectural groups

			Group	Annual Report	Country	Em- (previous year)		Turn-over	
STD	1	1	SWECO FFNS	00	SE	361	406	346,7	msek
STD	2	2	White arkitekter AB	00	SE	330	309	265,2	msek
	3	4	Arkitektfirmaet C.F. Møllers Tegnestue	00	DK	185	165	125,9	mdkk
	4	3	KHR AS Arkitekter	00/01	DK	*175	170	120,0	mdkk
STD	5	5	Temagruppen Sverige AB	00	SE	143	125	101,9	msek
	6	11	Arkitekterne Schmidt, Hammer & Lassen K/S	00	DK	101	72	59,5	mdkk
	7	6	Dissing + Weitling Arkitektfirmae A/S	00	DK	100	102	52,0	mdkk
	8	7	Vilhelm Lauritzen AS	00	DK	100	90	48,5	mdkk
	9	14	Arkitektgruppen i Aarhus K/S	00	DK	97	70	56,4	mdkk
	10	8	Henning Larsen Tegnestue	00/01	DK	88	82	76,0	mdkk
STD	11	12	J&W Arkitektur & Design	00	SE	75	71	66,1	msek
	12	16	PLH Arkitekter A/S	00	DK	75	65	45,0	mdkk
	13	47	Nielsen, Nielsen & Nielsen A/S	00/01	DK	75	30	30,0	mdkk
STD	14	18	Tengbomgruppen AB	00	SE	74	61	64,8	msek
STD	15	9	NYRÉNS Arkitektkontor AB	00	SE	72	75	56,0	msek
	16	13	Niels Torp AS Arkitekter	00	NO	71	71	61,1	mnok
	17	19	Narud-Stokke Wiig A/S	00	NO	65	52	46,5	mnok
STD	18	17	Wingårdh koncernen	00	SE	63	63	56,4	msek
	19	20	Årstiderne Arkitekter A/S	00	DK	62	50	29,0	mdkk
	20	10	EVATA Finland Oy	00	FIN	58	75	47,1	mfim
	21	*44	AA Arkitekter A/S (fd Andresen + APL)	00/01	DK	55	30	48,0	mdkk
	22	22	Mangor & Nagel Arkitektfirma A/S	00/01	DK	55	48	30,0	mdkk
	23	23	Friis & Moltke A/S	00	DK	55	48	27,0	mdkk
	24	42	Sandell Sandberg AB	*00	SE	54	32	70,5	msek
STD	25	31	Brunnberg & Forshed Arkitektkontor AB	00	SE	52	38	51,9	msek
STD	26	21	AIX Arkitekter AB	00/01	SE	51	48	39,8	msek
	27	26	Arkitehtitoimisto Helin & Co Oy	00/01	FIN	50	45	33,0	mfim
	28	*15	S&I Arkitekter K/S	00/01	DK	50	68	30,0	mdkk
STD	29	36	Liljewall Arkitekter AB	00	SE	49	33	38,8	msek
	30	25	Erik Møllers Tegnestue	00/01	DK	47	46	36,4	mdkk
	31	24	Hvidt & Mølgaard A/S	*99/00	DK	47	47	24,4	mdkk
	32	32	LINK arkitekter AS	00	NO	46	36	45,9	mnok
	33	29	Holm & Grut A/S	00/01	DK	45	43	35,8	mdkk
STD	34	30	Erséus, Frenning & Sjögren Arkitekter AB	00/01	SE	45	43	32,8	msek
	35	27	DARK Arkitekter AS	00	NO	45	45	30,0	mnok
	36	28	Arkitektkontoret Hille+Melbye A/S	00	NO	43	45	29,7	mnok
	37	57	Arkitehdit Tommila Oy	00	FIN	42	28	23,5	mfim
	38	33	Aarhus Arkitekterne A/S	00	DK	39	35	20,0	mdkk
	39	41	Arcasa Arkitekter AS	00	NO	37	32	37,6	mnok
STD	40	35	AROSgruppen Arkitekter AB	00/01	SE	36	34	30,2	msek
	41	38	Eliassen og Lambertz-Nilssen Arkitekter AS	00	NO	35	33	25,0	mnok
STD	42	34	Lund & Valentin Arkitekter AB	*99/00	SE	35	35	24,2	msek
	43	43	Arkitehditoimisto Larkas & Laine Oy	00	FIN	35	32	11,3	mfim
STD	44	61	Scheiwiller Svensson Arkitektkontor AB	00/01	SE	34	27	32,6	msek
	45	(-)	Medplan AS Arkitekter	00	NO	34	-	21,0	mnok
STD	46	66	Equator Stockholm AB	00	SE	33	25	26,1	msek
	47	48	Per Knudsen Arkitektkontor AS	00	NO	31	30	21,9	mnok
	48	62	Tage Nielsen Tegnestue A/S	00	DK	31	26	17,2	mdkk
STD	49	59	FOJAB Arkitekter AB (koncernen)	00/01	SE	30	27	25,5	msek
	50	56	Arkitektbyrå AB i Göteborg	00	SE	30	28	22,7	msek

Finland tops profitability league



The Finnish consulting firms are more profitable than consulting firms in the other Nordic countries. The diagram shows profit margins, measured in terms of pre-tax profit in relation to turnover, for the 30 largest groups.

focus on electromechanics and project management. PI has signed co-operation agreements with the English industrial consultancy Millwide Engineering Ltd in the cellulose field, and with the Finnish energy company Empower Oy. PI has also moved into Sweden with the purchase of 35 % (with an option for the rest) of PIC Engineering AB. In addition, PI has bought Konsul Engineering Oy, a company with 30 employees and cutting-edge competence in the field of 3D CAD technology. Together with the Austrian consultancies TB Piesslinger GmbH and Fischer

+ bhm, PI is setting up a joint venture company, PAB Engineering, in Germany. The focus will be on customers in the paper, energy and chemical sectors.

Etteplan is investing in a new EMC laboratory and has acquired the Swedish industrial consultancy Itoma AB, Ralf Winkelhardt Konstruktionsbüro in Germany and Raskon Oy in Finland.

Some 75% of the work of Deltamarin, a rapidly-expanding company that focuses on ship design in the broadest sense, comes from export assignments. The company opened an office in Florida, USA, during the year.

CTS Engineering and the Swedish company ÅF have begun collaborating on projects in the paper sector. ÅF-IPK has secured 33% of the shares in CTS, which in turn has an option for a 9.9% holding in ÅF-IPK.

Rejlers Oy has once again established a Swedish-Finnish connection. The Rejler Group in Sweden has bought 20% of Rejlers in Finland and the group is striving to expand in the Nordic region.

EVATA is the new name of Finland's largest architectural firm (formerly Equator Finland Oy). The company, which previously collaborated with Equator Stockholm in Sweden, has entered into partnership with other architectural firms in Europe under the name EVATA. Together with the American company ADD iNc. and the Adrian Group in Asia, EVATA has formed a global alliance called e2aGLOBAL which offers both architectural and engineering expertise.

Norway

The largest Norwegian consultancy, Norconsult, is involved in one of Europe's largest road projects, the construction of a motorway in Greece scheduled for the period 1995-2004. An interesting alliance that demonstrates the broad range of the operations of several large companies has been formed in order to meet the increasing degree of open competition in the Norwegian public sector. This alliance between Noraudit, Cell Network and Completo has led to the creation of a resource that has some 350 financial advisors and accountants throughout Norway.

Statkraft Grøner is involved in what is currently the largest BOT project in the world – the planning, construction and 35-year operation of a 345-kilometre long, double-track, high-speed railway in Taiwan (the contract sum is approximately SEK 80 billion). In co-operation with the Danish company Kampsax, Grøner has inspection assignments for a large number of tunnels in two of the 12 turnkey contracts. The company is also working on new forms of implementation for customers in the industrial and health care sectors.

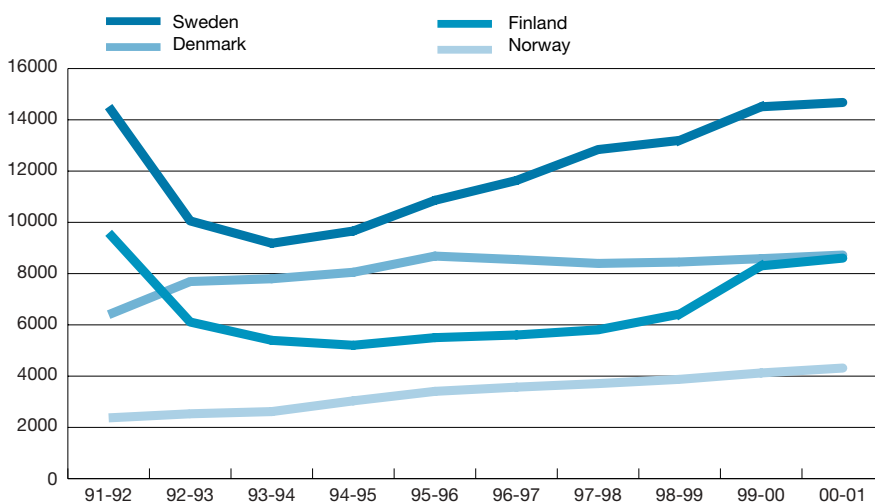
Scandiaconsult AS is gradually developing its operations. At the end of 2000, the company bought Norman AS, with some 50 employees, and this year Arkon AS in Bergen, with around 20 employees, has been acquired.

Multiconsult has slimmed-down its organisation and the company made a record profit on a dramatically increased turnover in 2000. The company, which to 29% was owned by J&W, but is now owned by WSP, has purchased the Norwegian company Concon AS (50%) and opened an office in Denmark (Herslev). The group already has offices in Sweden through Kustlinje Arkitekter in Strömstad – which was bought by Multiconsult GEAS several years ago. Architectural operations have now been expanded with the purchase of Arkitektkontoret Veine & Karlsen AS in Fredrikstad.

The second largest Norwegian consulting company, InterConsult Group AS (ICG), has acquired NORGIT AS, which works in the GIS field, and NORSAS AS, which works in the waste management field.

E-Co Partner AS (formerly Oslo Energi Konsult) acquired the HIVAC consultancy Kåre Haukås & Co AS in the summer. The Swedish – or rather Danish – company Sycon owns 20% of E-Co Partner.

Average number of employees in the top 15 groups



Source: Swedish Federation of Consulting Engineers and Architects (STD)

The top 50 Danish consulting engineering and architectural groups

Group	Services	Annual Report	Turn over MDKK	(Previous year)	Average numbers of employees	Tot. Balance sheet MDKK	CEO/ Managing director per October 2001	
1 2	COWI Consulting Engineers & Planners AS	MD	00/01	1537,7	1383,9	2203	994,6	Klaus H. Ostenfeld
2 1	Carl Bro Gruppen A/S (6 mån)	MD	*00	1436,0	1445,7	2024	1006,0	Jesper Rasmussen
3 3	Rambøll Group	MD	00	1273,0	1205,6	1863	779,0	Flemming Bligaard Pedersen
4 5	NIRAS A/S	MD	00/01	358,7	325,3	544	200,2	Carsten Toft Boesen
5 4	Kampsax Gruppen	MD	00	323,6	392,4	444	278,4	Michael Peytz
6 6	Birch & Krogboe concernen	CE,PM	00	241,2	218,5	380	159,1	Lars Holten Petersen
7 8	Arkitektfirmaet C.F. Møllers Tegnestue	A	00	125,9	86,4	185	-	ingen vd
8 7	KHR AS Arkitekter	A	00/01	120,0	120,0	*175	-	Jesper Lund
9 9	ISC - koncernen	MD	00	82,0	83,7	155	55,0	Kjeld Thomsen
10 14	Mogens Balslev Rådgivende Ingeniører A/S	MD	00/01	78,8	65,0	153	105,8	Bent Holvert
11 11	Moe & Brødsgaard A/S	MD	00	77,8	69,4	120	56,2	Ole P. Mortensen
12 13	Henning Larsen Tegnestue	A	00/01	76,0	67,0	88	-	Bo Boje Larsen
13 12	Erik K Jørgensen A/S	CE,M,Enr	00/01	70,8	67,9	121	56,1	Henning Puggaard
14 (-)	O.B.H-Gruppen A/S	MD	00/01	*65,0	-	130	-	Børge Danielsen
15 15	Bascon Arkitekt-og Ingeniørfirma A/S	CE	00	64,7	57,5	104	28,2	Ole Bisgaard
16 *	DAI Gruppen A/S	MD	00	64,1	59,0	113	45,3	Jørgen Therkelsen
17 19	Arkitekterne Schmidt, Hammer & Lassen K/S	A	00	59,5	42,6	101	40,5	Bjarne Hammer Rasmussen
18 10	Sycon Steensen & Varming A/S	MD	00	56,7	71,5	130	18,2	Poul Brogaard Sørensen, Ole Pedersen
19 23	Arkitektgruppen Aarhus K/S	A,PM	00	56,4	36,8	97	-	Per Feldthaus
20 16	Dissing + Weitzing Arkitektfirmae A/S	A	00	*52,0	51,2	100	-	Pouli Hoffgaard
21 17	AN Industry Consult A/S	I,Env, PM	00	51,4	50,6	75	16,6	Aksel Nielsen
22 18	Vilhelm Lauritzen AS	A, PM	00	48,5	44,2	100	33,5	Svend Erik Ladefoged
23 27	AA Arkitekter A/S (fd Andresen +APL)	A	00/01	48,0	31,8	55	-	Wilhelm Berner-Nielsen
24 22	PLH Arkitekter AS	A, PM, CE	00	45,0	42,0	75	23,5	Torben Hjortsø, Jan Sander Fredriksen
25 (-)	Jørgen Wessberg A/S Rådgivende Ingeniører	MD	00	45,0	24,7	40	-	Stig Wessberg
26 (-)	Søren Jensen A/S Rådgivende Ingeniører	MD	00/01	*45,0	-	70	-	Erik V. Jensen
27 20	Leif Hansen Rådgivende Ingeniører A/S	MD	00	48,9	40,6	60	21,9	Flemming Leif Hansen
28 28	Dines Jørgensen & Co A/S	CE	00/01	37,4	31,0	55	16,7	Arne Peter Jørgensen
29 29	Erik Møllers Tegnestue	A	00/01	36,4	29,5	47	15,9	Jens Fredslund
30 30	Hansen, Carlsen & Frølund A/S	CE	00/01	36,0	28,0	55	8,5	Rene Almind
31 31	Holm & Grut A/S	A	00/01	35,8	28,3	45	13,6	Lars Coling
32 24	Hansen & Henneberg, København KBHA/S (ÅF 25%)	PM	00	33,0	34,0	50	17,6	Jens Gudum
33 48	Nielsen, Nielsen & Nielsen A/S	A	00	30,0	14,9	75	14,5	Kim H. Nielsen, Lars F. Nielsen
34 33	Mangor & Nagel Arkitektfirma A/S	A	00/01	30,0	25,0	55	14,4	Torben Nagel
35 21	S&I Arkitekter K/S	A	00/01	*30,0	41,1	50	-	-
36 32	Årstiderne Arkitekter A/S	A	00	29,0	26,0	62	-	Per Lausten
37 34	Friis & Moltke A/S	A	00	*27,0	25,0	55	-	Palle Hurwitz
38 (-)	Strunge & Hartvigsen, Rådgivende Ingeniører A/S	MD	00/01	24,6	19,4	40	10,4	Kjeld Hartvigsen
39 36	Dominia AS, Rådgivende Ingeniører	CE	00	24,6	26,4	39	13,6	Erik R Bendixen
40 35	Hvidt & Mølgaard A/S	A	*99/00	24,4	24,4	47	-	Peter Holsoe, Henrik Hvidt
41 25	Hundsbaek & Henriksen A/S	MD	00/01	23,5	23,5	50	-	Niels L. Sørensen, Jesper Madsen, Jens Hundsbaek Pedersen
42 41	Aarhus Arkitekterne A/S	A	00	20,0	18,0	39	13,7	Tommy Falch
43 (-)	Nielsen & Risager A/S	MD	00	19,7	18,4	35	13,9	Knud Risager
44 38	A/S Pentra, Rådgivende Ingeniører	E,I	00/01	37,4	19,4	55	-	Mogens Nielsen
45 39	Skude & Jacobsen A/S	MD	00	19,1	19,1	44	-	Jørn Hørdum Larsen
46 47	Torkil Laursen ApS Rådgivende Ingeniørfirma	CE,M,PM	00/01	18,5	15,0	28	15,9	Jørgen Dueholm
47 37	William Hansen & Co A/S	I	00/01	18,1	21,0	34	8,7	Kristian Ellersgaard
48 52	Tage Nielsen Tegnestue A/S	A,PM	00	17,2	12,6	*31	5,5	Ole Anstrup
49 (-)	Sloth-Møller A/S	CE	00	16,9	16,6	30	-	Jørn Plauborg
50 26	Semcon Knud E. Hansen A/S (ågt av Semcon AB)	PM, I	00	16,6	32,1	35	11,1	Niels Prip

PM = Project Management, A = Architecture, CE = Civil/Structural Engineering, Env = Environment, Enr = Energy, E = Electrical, M = Mechanical/HEVAC, I = Industrial, MD = Multi Disciplinary

Key figures	for the top 30 groups	(previous year)
Turnover/employee	675' DDK	650' DDK
Result after financial items/employee	14' DDK	14' DDK
Balance Sheet/employee	443' DDK	442' DDK

The total turnover for the top 30 groups increased with some 7 % during 2000/2001 (previous year 2 %).

The top 50 Finnish consulting engineering and architectural groups

Group	Services	Annual Report	Turn over MFIM	(Previous year)	Average numbers of employees	Tot. Balance sheet MFIM	CEO/ Managing director per October 2001	
1 1	Jaakko Pöyry Group -koncernen	MD	00	2821,0	2350,8	4 717	1845,0	Erkki Pehu-Lehtonen
2 2	PI-Consulting Ltd	I,MD	00	234,3	202,1	633	131,4	Lauri Hintikka
3 5	Deltamarin Oy	I	00	181,7	141,3	299	100,8	Jukka Laiterä
4 3	SCC Viatek-koncernen (Scandiaconsult AB)	CE,A,PM	00	177,9	174,8	448	83,7	Jaakko Heikilä
5 6	Elomatic Group Oy	I	*00	173,4	136,8	414	148,3	Olli Manner
6 7	Etteplan Oy	I	00	160,1	123,0	455	101,3	Heikki Hornborg
7 9	Suunnittelukeskus Oy (PlanCenter Ltd)	Env	00	106,5	101,0	260	135,0	Antti Nousiainen
8 8	Rintekno Gruppen	MD	00	96,1	103,1	179	60,1	Olli Gerdt
9 11	CTS Engineering Oy	I	00	91,0	80,0	235	41,0	Timo Juvonen
10 10	Ingenjörbyrå Olof Granlund AB	E,M	00	88,4	80,8	247	54,7	Reijo Hänninen
11 12	Finnmap Consulting Oy (inkl Narmaplan Oy)	CE	00	84,4	70,3	240	87,9	Lars-Olav Sebbas
12 14	Air-Ix Consulting Engineers	Env,M,I,PM	00	65,0	52,5	190	39,0	Jorma Törönen
13 15	LT-Konsultit Oy	MD	00	53,5	50,4	97	25,6	Pentti Murole
14 13	Oy Omnitele AB	PM(tele)	00	52,3	69,1	60	28,1	Timo Mustonen
15 16	A-Insinöörit koncernen	CE	00	50,2	43,2	130	29,9	Toimi Tarkiainen
16 *4	EVATA Finland Oy (fd Equator Helsinki)	A	00	47,1	22,7	58	12,3	Tommi Tuominen
17 19	Suomen Talokeskus Oy	CE,Enr,E,M	00	38,9	34,1	70	-	Markku Salminen
18 18	SITO-Suomalainen Insinööritoimisto Oy	CE	00	37,8	36,6	99	42,1	Erkki Jännes
19 23	Polartest Oy	I, Enr	00	36,0	38,0	80	12,6	Matti Andersson
20 21	Enmac Yhtiöt Oy	I	00	35,0	32,0	111	-	Martti Ala-Vainio
21 20	Oy Vesi Hydro	CE,Env	00/01	34,0	32,3	95	-	Pekka Perttula
22 17	Projektkonsultit Oy	PM	00	33,2	40,6	61	24,6	Petri Rignell
23 35	Arkitektbyrå Helin & Co AB	A,CE	00/01	33,0	27,0	50	28,0	Pekka Helin
24 22	Rejlers Oy	I	00	31,6	29,2	105	12,1	Heikki Kilpeläinen
25 31	Insinööritoimisto Mikko Vahanen Oy	CE	00	30,7	22,7	75	12,6	Risto Vahanen
26 27	Paavo Ristola Consulting Engineers Ltd	Env	00	30,0	25,0	73	-	Pentti Manninen
27 25	Jyvästek Oy	I	00	29,8	25,8	79	15,0	Matti Vuorio
28 32	FTP International Oy	PM	00	26,7	22,4	41	38,2	Tapio Järvinen
29 28	Insinööritoimisto Pöysälä & Sandberg Oy	CE	00	24,2	24,5	80	6,3	Jouni Mörttinen
30 *4	Aaro Kohonen Oy	PM,CE	00	24,0	*	76	13,7	Mauri Suuperko
31 33	Projectus Team Oy	E,M	00	23,9	21,8	74	14,4	Juha Pihlajamäki
32 38	Consulting KORTES Group Ltd	CE	00	23,7	19,7	73	18,1	Esko Järvenpää
33 40	Arkkitehdit Tommila Oy	A	00	23,5	19,7	42	-	Mauri Tommila
34 26	RAMSE Consulting Oy	Enr,I,PM	00	23,2	25,3	36	8,3	Juha Lamberg
35 37	AX-Konsultit Oy	Env,Enr,I	00	23,0	20,5	62	18,0	Börje Hagner
36 34	Ingenjörbyrån Oy Avecon AB	MD	00	22,8	21,4	65	-	Martti Marjamäki
37 30	Magnus Malmberg Oy	CE	00	21,9	19,8	65	-	Aarne Hollmén
38 (-)	Chematur Ecoplanning Oy	I,Env	00	21,0	*	22	-	Antti Raitakari
39 29	Laitila Arkkitehdit Oy	A	00	16,8	23,4	28	11,9	Hannu Laitila
40 60	Arkkitehti- ja insinööritoimisto SARC Oy	A	00/01	16,1	8,1	30	15,0	Sebastian Savander
41 41	Niemi & Co Oy	E,M	00	14,8	14,2	43	12,6	Matti Niemi
42 46	Geopalvelu Oy	CE	00	14,5	13,0	50	-	Toivo Ali-Runkka
43 54	Suomen IP-Tekniikka Oy	CE, Env	00/01	14,4	10,6	35	10,3	Jouko Petäjä
44 49	EP-Logistics Oy	I,PM	00	13,0	12,2	27	-	Jussi Jalanka
45 (-)	LCA Engineering Oy	MD	00	12,6	9,9	40	7,5	Vesa Juntila
46 51	YS-Konsult Ab	CE	00	12,4	11,4	38	4,3	Hannu Hilli
47 45	Hepacon Oy	M,E	00/01	12,4	13,6	35	5,0	Matti Renes
48 42	Insinööritoimisto Tauno Nissinen Oy	CE	00	12,0	14,0	40	-	Tauno Nissinen
49 50	Insinööritoimisto Lausamo Oy	E	00	12,0	12,0	37	-	Timo Tenninen
50 47	Insinööritoimisto Matti Ollila & Co Oy	CE	00	12,0	12,8	30	-	Matti Haaramo

PM = Project Management, A = Architecture, CE = Civil/Structural Engineering, Env = Environment, Enr = Energy, E = Electrical, M = Mechanical/HEVAC, I = Industrial, MD = Multi Disciplinary

Key figures

	for the top 30 groups (excl. JP)	(previous year excl. JP)
Turnover/employee	505' FIM (419)	458' FIM (397)
Result after financial items/employee	40' FIM (39)	37' FIM (41)
Balance Sheet/employee	334' FIM (277)	328' FIM (247)

The total turnover for the top 30 groups increased with some 15% during 2000/01 (previous year 6%). If Jaakko Pöyry Group is excluded the turnover increased with some 4,5% (previous year 7%).

The top 50 Norwegian consulting engineering and architectural groups

Group	Services	Annual Report	Turn over MNOK	(Previous year)	Average numbers of employees	Tot. Balance sheet MNOK	CEO/ Managing director per October 2001	
1 1	Norconsult AS-koncernen	MD	00	612,8	569,0	850	525,1	Jon Sivert Nielsen
2 2	InterConsult Group ASA	MD	00	460,3	418,9	658	228,6	Frode Kvaerneng
3 4	Multiconsult - koncernen	MD	00	316,6	296,5	426	221,4	Håkon Sannum
4 3	Statkraft Grøner AS	MD	00	286,1	333,6	357	149,8	Dag M. Solberg
5 6	Scandiaconsult AS - koncernen	MD	00	270,2	249,8	363	140,7	Jan Ove Holmen
6 7	Asplan Viak koncernen	MD	00	263,5	219,2	378	111,6	Per Arild Garnåsjordet
7 5	Reinertsen Engineering ANS	MD	00	205,0	270,0	265	-	Erik R Reinertsen,Torkild Reinertsen
8 8	Teleplan AS	E	00	154,7	148,5	126	64,6	Asgeir Myhre
9 10	Techpower Gruppen	MD	00	132,0	*89,2	280	57,6	Erik Devold Eidsvig
10 14	Hjellnes COWI AS	MD	00/01	111,1	99,1	129	62,2	Ivar O. Schjetlein
11 11	Barlindhaug - gruppen	MD	00	102,9	100,0	110	129,0	Johan Petter Barlindhaug
12 16	NVK Gruppen AS	CE,Enr,Env	00	101,1	79,2	73	47,1	Bo Wingårdh
13 15	Dr. Ing. Aas-Jacobsen A/S - koncern	CE	00	98,0	95,0	75	50,0	Trond Hagen
14 12	OPAK A/S	PM,Env,Enr,E	00	91,1	90,5	110	25,0	Hans Jacob Hansen
15 9	HolteProsjekt - koncernen A/S	PM,CE,Enr	00	87,4	120,0	115	37,0	Jan Helge Østensen
16 13	Techno Consult -gruppen	M,Env,Enr,I	00	87,1	90,2	104	41,0	Christian Nørgaard Madsen
17 18	Niels Torp AS Arkitekter	A	00	61,1	51,0	71	26,2	Niels A. Torp
18 19	Erichsen & Horgen A/S	M, Env, PM	00	51,2	45,8	69	29,7	Erik Erichsen
19 21	Unico AS	MD	00	47,1	47,0	63	36,9	Tom Christian Bredesen
20 20	Narud-Stokke Wiig A/S	A	00	46,5	43,4	65	21,8	Ole Wiig
21 31	LINK arkitekter AS	A	00	45,9	24,2	46	16,1	Svein K. Halleraker
22 29	PTL, Prosjekt- og Teknologiledelse AS	PM	00	44,5	29,5	57	28,8	Sven Erik Nørholm
23 24	SCC Norman AS koncernen (SCC 2001)	A,CE,PM	00	39,8	36,1	49	24,7	Tom Arne Olsen
24 25	Theorells AS (Sweco)	M, Enr	00	38,9	34,8	60	18,3	Øyvind Mork
25 26	Arcasa Arkitekter AS	A	00	37,6	32,4	37	18,6	Per Erik Martinussen
26 *17	ViaNova Plan og Trafikk AS	CE	00	37,5	66,3	35	24,8	Stein M Slaatsveen
27 27	Dr. techn. Olav Olsen A.S	CE, PM	00	36,6	31,9	52	19,9	Tor Ole Olsen
28 23	JP Engineering AS	I	*99	36,5	36,5	50	-	Otto von Ubisch
29 22	Instanes A/S	MD	00	32,8	37,0	50	28,3	Tor Helge Indebro
30 42	A.L. Høyer Gruppen	PM, CE	00	*30,0	17,5	50	-	Odd Grøthe
31 28	DARK Arkitekter AS	A	00	*30,0	30	45	-	Odd M. Degnaes
32 30	Arkitektkontoret Hille+Melbye A/S	A,PM	00	29,7	25,2	43	12,0	Melvin Eiesland
33 36	Thunes Partners AS	M, E	00	29,4	20,2	42	14,6	Ole-Petter Thunes
34 39	Eliassen og Lambertz-Nilssen Ark. AS	A	00	25,0	19,1	35	15,5	Jens-Johan Boysen
35 32	PABAS Ingeniør P.A. Bakkejord A.S	CE	00	24,2	23,8	20	9,1	Ketil Bakkejord
36 34	Myklebust AS	CE, PM	00	24,1	21,9	36	9,2	Per Skjaeveland
37 48	VBB Samfunnsteknik AS (Sweco)	MD	00	22,6	15,3	28	1,6	Odd Magnus Lillevold
38 49	Per Knudsen Arkitektkontor AS	A	00	21,9	19,8	31	11,2	Per Knudsen
39 33	Monstad AS	E	00	21,4	22,4	26	15,3	Oddvar Mjelde
40 35	Vest-Consult A/S	M	00	*18,0	21,2	18	-	Svein Lars Monsen
41 44	Ingeniørselskapet ALFACON A.S	E	00	21,1	16,5	25	7,8	Ole Øiaas
42 (-)	Medplan AS arkitekter	A	00	*21,0	-	34	-	Arvid Ottar
43 38	KRITT Arkitekter AS	A	00	*20,0	20,0	30	-	Thore J. Elton
44 40	Lars Myhre AS	M	00	19,2	18,4	25	8,5	Tore Fredriksen
45 50	ÅF- Nielsen og Borge AS (ägt av ÅF)	E	00	18,7	15,0	27	13,8	Arnold Risa
46 (61)	HRTB Arkitekter A/S	A	00	18,5	*	25	7,1	Ketil Moe
47 51	Byggcon AS	CE,Env,PM	00	18,4	12,5	26	8,3	Kjell Nyvold
48 37	Snøhetta AS	A	00	*18,0	20,0	25	-	Ole Gustavsen
49 41	Arkitektene Astrup & Hellern AS	A	00	16,8	18,2	20	10,1	Åke Letting
50 (-)	Heggelund & Koxvold Arkitekter AS	A, PM	00	16,3	12,3	22	-	Jon Heggelund

PM = Project Management, A = Architecture, CE = Civil/Structural Engineering, Env = Environment, Enr = Energy, E = Electrical, M = Mechanical/HEVAC, I = Industrial, MD = Multi Disciplinary

Key figures	for the top 30 groups	(previous year)
Turnover/employee	767' NOK	775' NOK
Result after financial items/employee	38' NOK	33' NOK
Balance Sheet/employee	454' NOK	467' NOK

The total turnover for the top 30 groups increased with some 12% during 2000/01 (previous year 17%).

The international market

Sights set on 2003

The global economic situation has changed dramatically in the course of 2001. The downturn began already in the autumn of 2000 in the USA, which up to that point had experienced an exceptional rate of growth over a period of several years. The energy crisis in California sent shock waves not only through the American power industry but also through the banking system. When clear signals emerged that the manufacturing industry in the USA was plummeting, economic growth fell dramatically in almost all parts of the world. The Japanese economy was already in a deep trough. Aggressive cuts in interest rates followed in many countries – the USA's Federal Reserve has reduced the key interest rate from 6.50% at the beginning of 2001 to 2.00% in November. Despite this and an aggressive American finance policy – such measures are more difficult to implement in Europe due to the EU's stability pact – the global economy is now at a very low point. The terrible acts of terrorism committed in New York and Washington on 11 September, and the subsequent unrest, have of course steepened the downturn in the global economy and set back the date on which we can expect recovery to begin.

A recent assessment by the OECD indicates that we must look to 2003 before we can expect a relatively strong recovery. The GNP growth forecast for the entire OECD area in 2003 is approximately 3.2%. In the year that is now drawing to a close, however, and in 2002, GNP growth is expected to be no more than 1% – and in the USA it may even be somewhat lower.

Greater globalisation

The wave of globalisation that has swept over several other knowledge-based sectors caught up with our sector a few years ago – more or less in parallel with the globalisation of law firms. The accounting and management consultant sector has already experienced a (first) real transformation. The Nordic region is still somewhat on the periphery, but the ongoing creation of new, large players is increasing interest in playing a serious role on the international market, as well as the possibility to do so. The major players are in the USA, England and the Netherlands.

The downturn in the global economy means that few regions can be said to be "hot", with the possible exception of China where, on

the other hand, it is fairly difficult to establish a foothold. China must be regarded as a beacon in the current economic gloom. Most experts believe that growth will continue to be good here over the next few years, despite the fall in share prices for Chinese companies. An increasing number of privatisation programmes and the greater inflow of foreign capital are raising expectations. Examples of foreign consultancies that have established operations in China include MWH Montgomery Watson Harza, which in co-operation with the Chinese company Boda is also beginning to take on assignments throughout Asia.

There has not been any real growth in the global total for investments in construction and civil engineering projects, even though the sum of USD 3 500 billion may seem gigantic. On the other hand, a lot of interest, primarily European, has been directed at the civil works market in the USA. This will be kept going for at least a year or so by TEA 21, the enormous federal financing package for the development and maintenance of the infrastructure with investments of approximately USD 200 billion in the period 1998-2002. It is also likely that there will be a continuation, although in a somewhat slimmer form. A similar programme is AIR-21, which has funds of USD 45 billion for investments in, and improvements to, airports.

Collecting brand names

The American company AECOM, which has acquired several major, well-known American consultancies, recently crossed the Atlantic to buy the major English consultancy and infrastructure specialist Maunsell Ltd and the English construction planning company Oscar Faber Ltd. The market in the USA has been suffering from a certain lack of capacity, and several large Dutch and English consultancies are setting up business or expanding in the USA. WS Atkins' earlier purchase of Benham has been followed by Mott MacDonald's set up of a company jointly owned with Hatch. Whitby Bird has also established an American operation. WSP's purchase of Cantor Seinuk and Flack+Keutz are other examples. Following organic growth over the last few years, ARUP now has almost 500 employees in the USA.

Another factor that affects our sector is the competition from other sectors. For example, the Kingsley Group, an American management consultant that specialises in the

areas of transport/infrastructure and logistics, has invested in Estonia. The Kingsley Group owns most of the consortium that bid EEK 1.7 billion for 2/3 of the shares in the Estonian railway company Rail Estonia and that now wants to invest in the upgrading and development of the Estonian railways.

Dissatisfaction with Stock Exchanges

Another interesting factor of note during the year has been the number of companies bought out, or delisted, from the falling Stock Exchanges. One example of this was when the investment company American Capital Strategies, together with some members of the management of Roy F. Weston, bought out Roy F. Weston from the Nasdaq exchange. The management of the STV Group also recently bought out the company from Nasdaq with the help of a financial institution. The reason for these transactions is said to be the lack of interest in these companies, which are relatively small on the exchanges, on the part of investors. Earnings trends have not been spectacular and stock exchange values have been low. In other cases, risk capital companies have bought up consulting firms in the hope that these firms will perform better under a new management, a parallel to the Swedish company Bure's acquisition of holdings in Danish and Swedish consulting firms.

Corporate developments in Europe

England

Mott MacDonald and the Australian firm Conell Wagner are forming a partnership within construction-oriented operations from offices in 50 countries. The new company will be called Conell Mott MacDonald. Through its American business partner Hatch Mott MacDonald, active primarily within infrastructure, Mott has purchased the Killiam Group, with some 450 employees.

Oscar Faber, which had a good year in 2000, purchased energy consultants EPD Ltd in June and has also increased its involvement in NVOF, an engineering consultancy in Malaysia. During autumn 2001, Oscar Faber was also incorporated with the US company AECOM. They intend to increase their European presence with a consulting firm focusing on building construction as a complement to their previous major acquisition of Maunsell.

The European top 200 consulting engineering and architectural groups

(EURO per 00-12-29)									
Group	Services	Country	Annual Report	Number of employees	(Last year)	Turnover M EURO	CEO/President Managing Director October 2001		
1	1	WS Atkins plc	MD	England	00/01	12843	11633	1099	Robin Southwell
2	(-)	Altran	I	France	00	12823	8665	900	Frederic Bonan, Michel Friedlander
3	2	Arcadis Group	MD	Netherlands	00	7657	7217	776	Harrie L. J. Noy
4	3	Fugro N.V	CE	Netherlands	00	5492	4910	713	Gert-Jan Kramer
5	4	Ove Arup Partnership	MD	England	00	5037	4850	448	Bob Emmerson
6	*22	WSP Group plc/ J&W	MD	England	*00	5000	*2000	362	Christopher Cole
7	6	Jaakko Pöyry Group inkl intressebolag	MD	Finland	00	4717	4461	475	Erkki Pehu-Lehtonen
8	5	Groupe Egis	MD	France	00	4500	4600	555	Gilles Leservot
9	9	Grontmij Group	MD	Netherlands	00	4134	3451	472	Jan W. Hillege
10	10	DHV Group	MD	Netherlands	00	3613	3300	267	Hans C. Huis in't Veld
11	*7	Mott MacDonald Group	MD	England	00	3490	*3296	360	T J Thirlwall
12	11	Halcrow Group Ltd	MD	England	00/01	3296	3203	244	Derek Pollock
13	8	AECOM Maunsell Ltd	MD	England	00	3168	3300	283	David Odgers
14	(-)	Alten Group	I	France	00	3012	2145	193	Simon Azoulay
15	13	Babtie Group	MD	Scotland	00	3000	2790	198	William G. Mitchell
16	(-)	Bertrandt AG	I	Germany	00	2807	2378	193	Dietmar Bichler
17	12	Hyder Consulting Group Ltd	CE	England	*00/01	2538	3012	207	Tim Wade
18	14	Scott Wilson Ltd	MD	England	00	2487	2500	179	Bob McGowan
19	21	Royal Haskoning	MD	Netherlands	00	2300	2044	159	J. Bout
20	18	COWI Consulting Engineers and Planners	MD	Denmark	00/01	2203	2087	206	Klaus H. Ostenfeld
21	16	ÅF-Group	I,E,M,Enr	Sweden	00	2191	2222	202	Gunnar Grönkvist
22	17	SWECO AB	MD	Sweden	00	2132	2188	203	Wigon Thuresson
23	20	Carl Bro Group	MD	Denmark	*00	2024	2059	193	Jesper Rasmussen
24	(*)	PB Holdings	MD	England	00	*2015	*1700	187	David Mc Alister
25	24	Oranjewoud group	CE,Env,PM	Netherlands	00	2013	1969	182	Jan Reneman
26	23	Tebodin, Consultants & Engineers	MD	Netherlands	00	2000	2000	133	H. Hegger, J.Bout, T van den Velden
27	25	Rambøll Group	MD	Denmark	00	1863	1961	171	Flemming Bligaard Pedersen
28	26	Scandiaconsult Group	MD	Sweden	00	1732	1935	156	Torbjörn Torell
29	(-)	Rücker AG	I	Germany	00	1681	1450	115	Wolfgang Rücker, J. Vogt, H. Burst
30	28	Tecnicas Reunidas, S.A	MD,I	Spain	00	1655	1500	249	José Lladó Fernandez-Urrutia
31	30	Binnie Black & Veatch	MD	England	00	*1558	1500	134	Lawrence Hughes
32	29	JacobsGIBB Ltd	MD	England	00	1510	1500	103	Peter D. Brettell
33	35	Semcon AB	I	Sweden	00	1504	1173	116	Hans Johansson
34	31	MWH Montgomery Watson UK	MD	England	00	1475	1025	96	Ron Cole
35	40	EC Harris	PM,QS	England	00/01	1400	1007	132	Richard Clare
36	33	Mouchel Group Ltd	MD	England	00/01	1282	1200	90	Jim Harding
37	45	Parkman	MD	England	00/01	1200	866	55	Richard Archer
38	36	URS Europé	MD	England	00	1185	1130	132	John Alexander
39	(-)	SYSTRA Group	MD	France	00	1150	-	160	Thierry Ossent
40	37	Tauw Group	CE,Env	Netherlands	00	1124	1124	73	A. T. de Borst
41	38	Sener Group	MD	Spain	00	1100	1100	165	Jorge M. Sendagorta
42	50	Obermeyer Planen+Beraten GmbH	MD	Germany	00	1100	760	68	Leonard Obermeyer
43	39	PCG-Profabril Consulplano Group	MD	Portugal	00	1093	1034	47	Ilidio de Ayala Seródio
44	44	White Young Green	MD	England	00/01	1028	940	86	Richard Brayson
45	*	Teleca AB (former part of Sigma AB)	I	Sweden	00	1005	*	108	Nick Stammers
46	41	SETEC Group	MD	France	00	1000	1000	*85	Claude Neraud
47	42	Lahmeyer International GmbH	MD	Germany	00	1000	1000	242	Martin Bay
48	(-)	Gleeds	PM	England	00	1000	800	70	Richard Steer
49	43	Fichtner Group	MD	Germany	00	950	958	72	George Fichtner
50	*	Epsilon Group AB (former part of Sigma AB)	I	Sweden	00	924	*	72	Staffan Andersson
51	*	WM-data Total Design	I	Sweden	00	895	*	81	Håkan Frick
52	34	Symonds Group	MD	England	00	890	1200	78	Cristopher Booy
53	47	Sycon AB	MD	Sweden	00	857	794	73	Bernt Lindén
54	51	Norconsult AS	MD	Norway	00	850	758	71	Jon Sivert Nielsen
55	46	Oscar Faber plc	M,E,CE,S	England	00/01	818	825	70	Ken Dalton
56	49	Safege Consulting Engineers	Env,S,CE	France	00	800	800	61	Bernard Saunier
57	52	BDP Building Design Partnership*	MD	England	00	773	744	63	Roy Adams
58	53	Waterman Partnership	MD	England	00/01	750	715	65	Robert H. Cambell

PM = Project Management, A = Architecture, CE = Civil-IS = Structural Engineering, Env = Environment, Enr = Energy, E = Electrical, M = Mechanical/HEVAC, I = Industrial, MD = Multi Disciplinary

	Group	Services	Country	Annual Report	Number of employees	(Last year)	Turnover M EURO	CEO/President Managing Director October 2001	
59	48	Siepe Group /RRI/Agiplan	MD	Germany	00	729	817	86	Karl Heinz Siepe
60	54	Knight Piésold Ltd	MD	England	00	700	680	49	Peter Garratt
61	58	AHT Group	MD	Germany	00	690	600	46	Gerardus van Wissen
62	65	Buro Happold	MD	England	00	680	536	47	Padriac Kelly
63	56	InterConsult Group ASA	MD	Norway	00	658	640	57	Frode Kvaerneng
64	57	Witteveen+Bos Consulting Engineers	MD	Netherlands	00	639	638	59	Jaap van Der Graaf
65	59	PI-Consulting Ltd	MD	Finland	00	633	594	39	Lauri Hintikka
66	55	Turner & Townsend Group	PM,QS	England	00	*629	600	-	Tim Wray
67	79	Owen Williams Group	MD	England	00	622	400	44	Richard O. Williams
68	61	Coteba Management	PM	France	00	610	579	77	Alain Bentejac
69	62	OTH Omnium Technique	MD	France	00	610	570	71	Pierre Boursican
70	(-)	Franklin + Andrews Ltd	PM	England	*99/00	599	-	43	Guy Leonard
71	63	Drees & Sommer	PM, S	Germany	00	590	565	98	Hans Sommer
72	60	TYPSA, Tecnica y Proyectos S.A	MD	Spain	00	573	*582	44	Pablo Bueno Sainz
73	67	H.P.Gauff Ingenieure GmbH	MD	Germany	00	557	530	106	Dieter B. Gauff, Gerhard H. Gauff
74	69	Foster & Partners Ltd	A	England	00	555	500	57	Norman Foster
75	68	NIRAS A/S	MD	Denmark	00/01	544	509	48	Carsten Toft Boesen
76	66	CBP Cronauer Beratung Planung GmbH	MD	Germany	00	530	530	42	A.Cronauer, H.Brockmeyer, J.Feix, L.Hofmann, M.Schieg
77	78	Sogreah	MD	France	00	500	410	46	Jacques Gaillard
78	70	Pell Frischmann Group	MD	England	*99/00	500	500	32	Wilem W. Frischmann
79	71	ILF Consulting Engineers Munich & Innsbruck	MD	Germany/ Austria	00	460	470	49	Adolf H. Feizlmayr, Pius Lässer
80	93	Etteplan Oy	I	Finland	00	455	352	30	Heikki Hornberg
81	74	Kampsax Group	MD	Denmark	00	444	449	43	Michael Peytz
82	89	Tyréns Group	CE,PM	Sweden	00	441	369	45	Håkan Blom, Jan Colliander
83	72	IGH Gruppe	MD	Germany	00	440	460	31	Dieter Seegers
84	75	RMJM	MD	England	00/01	*440	448	26	David Dolan
85	77	Multiconsult-group	MD	Norway	00	426	419	39	Håkan Sannum
86	91	Hoare Lea & Partners	E,M,Enr, Env	England	00/01	425	360	39	David Walicec
87	98	Abbey Holford Rowe	A, PM	England	00/01	420	350	25	James A. Handley
88	83	Elomatic Group Oy	I,M,Enr	Finland	00	414	387	29	Olli Manner
89	106	Broadway Malayan Ltd	A	England	00/01	410	330	34	Peter Crossley
90	99	Bullen Consultants	MD	England	00	410	347	23	Richard Taylor
91	73	Penspen Ltd	Enr,PM,CE	England	00	*408	450	33	John E. Hutt
92	177	Enviros Aspinwall Ltd	Env,PM	England	00	400	199	42	Keith Webster
93	(-)	RKW Architekten GmbH	A	Germany	00	394	-	39	
94	94	Aspen Consulting Group	CE	England	00/01	383	352	24	Kenneth R. Greenland
95	85	Assmann Beraten + Planen	MD	Germany	00	381	381	33	Jochen Scheuermann
96	102	Birch & Krogboe group	CE,PM	Denmark	00	380	344	32	Lars Holten Petersen
97	88	Asplan Viak Group	MD	Norway	00	378	370	32	Per Arild Garnåsjordet
98	117	W.A.Fairhurst & Partners	MD	Scotland	00	*376	290	21	Ken Smith, Neil McNeil
99	100	Flygfältsbyrån AB	CE,I,E	Sweden	00	358	345	31	Anders Rydberg
100	86	Statkraft Grøner A/S	MD	Norway	00	357	380	35	Dag M. Solberg
101	84	High-Point Rendel Group plc	CE,S,PM	England	*00	355	366	44	Kelvin W. T. Hingley
102	(-)	Chapman Taylor	A	England	00	350	-	-	Henry Herzberg
103	96	Golder Associates Ltd	Env,CE, PM	England	00	350	350	36	Pietro Jarre
104	90	GKW Group	Env,CE	Germany	00	350	360	29	Bernd Kordes, Marcus Herrman
105	109	Hifab Group	PM	Sweden	00	346	324	44	Ola Månsson
106	101	BGS Ingenieur GmbH	CE,Env,PM	Germany	00	342	370	32	F.Steiger,K.Marten, R.Hofmann, E.Franke
107	107	Gifford & Partners	MD	England	00	341	330	19	Edmund Hollinghurst, Geoffrey Clifton
108	82	Charles Haswell & Partners	CE	England	00/01	339	387	26	Malcolm Nunn
109	122	Peter Brett Associates	MD	England	00/01	334	278	22	Francis Conolly
110	105	Spiekermann GmbH & Co - Beratende Ingenieure	MD	Germany	00	330	330	-	H.Wanner,G.Scherrer, M.Borowski, S.Koch

The European top 200 consulting engineering and architectural groups

Group	Services	Country	Annual Report	Number of employees	(Last year)	Turnover M EURO	CEO/President Managing Director October 2001	
111 104	Schmidt Reuter Ingenieur GmbH	E,M,Enr,Env	Germany	00	330	330	31	Axel - V. Jaeger
112 112	White Architects AB	A,PM	Sweden	00	330	309	31	Magnus Borglund
113 155	TPF	MD	Belgium	00	320	220	34	Thomas Spitaels, Christophe Gilain
114 134	Whitby Bird & Partners Ltd	MD	England	00	320	250	20	Mark Whitby
115 (-)	MC O'Sullivan & Co Ltd	CE,Env	Ireland	00	306	-	25	KJ O'Sullivan
116 115	Bung Beratender Ingenieure GmbH	PM,CE	Germany	00	300	300	-	Manfred Keuser
117 103	GOPA-Consultants Group	PM,I,Env	Germany	00	300	330	46	Martin Gueldner
118 80	ETV-Erötter Rt.	I,PM	Hungary	00	300	393	24	Veikko Anttila
119 25	PRC Bouwcentrum B.V	PM	Netherlands	00	300	267	24	D.J. Kras
120 119	Deltamarin Oy	I	Finland	00	299	283	31	Jukka Laiterä
121 121	Wardell Armstrong	MD	England	00	297	280	16	A Jeffrey Smith
122 110	Krebs und Kiefer Beratende Ingenieure	CE,S,PM	Germany	00	283	320	21	Dr. Kiefer
123 120	von Gerkan, Marg+Partner	A	Germany	00	*280	280	-	Meinhard von Gerkan, Volkwin Marg
124 139	IV-Groep	MD	Netherlands	00	280	245	22	R. van de Waal
125 140	Techpower Group AS	I, MD	Norway	00	280	245	16	Erik Devold Eidsvig
126 162	Prointec S.A	MD	Spain	00	279	215	23	Cesar Canedo Argüelles Calvo
127 123	CDM Consult AG	CE	Germany	*99/00	275	275	24	Peter Jordan
128 142	Dolsar Engineering Ltd	Enr,MD	Turkey	00/01	275	245	8	H. İrfan Aker
129 (-)	Aukett Group plc	A	England	00	271	205	30	Andrew Lett
130 124	Ebert-Ingenieure GdbR.mbH	MD	Germany	00	270	270	-	Ernst Eber
131 157	Cameron Taylor Group	S,CE	England	00	*270	220	26	John Horgan
132 128	Reinertsen Engineering ANS	MD	Norway	00	270	260	25	Erik R. Reinertsen, Torkild Reinertsen
133 132	PBR Planungsbüro Rohling AG Architekten u Ingenieure	MD	Germany	00	263	254	16	Ralf Hesse
134 148	Iberinsa, Ibérica de Estudios e Ingenieria S.A	MD	Spain	00	261	238	20	Jesus Contreras
135 129	INBO Architects/Consultants	A,PM	Netherlands	00	*260	260	-	T. E. J. Joosten
136 131	Geoconsult	CE,PM,Env	Austria	00	260	257	27	Klaus Mussger
137 (-)	Emch + Berger Ingenieure und Planer	MD	Switzerland	00	260	252	26	Frank Walther
138 127	Suunnittelukeskus Oy (PlanCenter Ltd)	Env	Finland	00	260	262	18	Antti Nousiainen
139 130	Dopravoprojekt a.s	CE,S,A	Slovakia	00	260	260	8	Dusan Samudovsky
140 (-)	Tegema Group	I	Netherlands	00	250	-	-	-
141 64	HPC Harress Pickel Consult GmbH	CE,Env,PM	Germany	00	250	550	25	Hans-Jürgen Pickel
142 114	HL-Technik AG	MD	Germany	00	250	300	25	Bernd Neumaier, Dieter Leipoldt
143 145	Olof Granlund group	E,M	Finland	00	247	241	15	Reijo Hänninen
144 150	Rejler Group	E,I	Sweden	00	245	220	20	Peter Rejler
145 (-)	Cundall Johnston & Partners	MD	England	00/01	245	220	16	-
146 175	Temelsu International Engineering Services Inc.	MD	Turkey	00	245	200	14	Demir İnözü
147 144	IBE Consulting Engineers	MD	Slovenia	00	243	242	11	Uros Mikos
148 160	Basler & Hofmann	MD	Switzerland	00	241	219	27	Alfred J. Hagmann
149 133	Baur Consult GmbH	MD	Germany	00	240	250	-	Günter Baur
150 136	Roger Preston International	Enr,E,M	England	00	240	250	-	Derek Tuddenham
151 147	Sheppard Robson	A	England	00	240	240	-	Richard Young
152 (-)	Union Control Ltd	CE	Bulgaria	00	240	-	-	Marin Paskov Bakalov
153 167	Finnmap Consulting Group	CE	Finland	00	240	210	14	Lars-Olav Sebbas
154 164	IPROPLAN Planungs GmbH	MD	Germany	00	240	215	13	Jörg Thiele
155 137	Llewelyn-Davies Ltd	A,IA	England	00	240	250	-	K. Cooke
156 146	Metropolitana Milanese S.p.A	MD	Italy	00	236	240	10	Giulio Burchi

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Group	Services	Country	Annual Report	Number of employees	(Last year)	Turnover M EURO	CEO/President Managing Director Oct. 2001
157 149	COBA S.A.	MD Portugal	00	235	235	19	Ricardo Oliveira
158 158	CTS Engineering Ltd	E,I,M Finland	00	235	220	15	Timo Juvonen
159 (-)	Aeter Architects	A Greece	00	234	-	-	Harry Bougadellis
160 180	Roughton Group	MD England	00	229	194	13	Michael A Ross
161 166	Eurostudios S.A.	MD Spain	00	228	210	16	Juan Herrera Fernandez
162 152	Planungsgruppe M+M AG	E,M,PM, Enr Germany	00	227	225	19	Guido Irion
163 118	CES Consulting Engineers Salzgitters GmbH	MD Germany	00	226	289	-	Detlef Hügin
164 154	Ernst Basler & Partner Ltd	MD Switzerland	00	225	224	28	Hansjörg Hader
165 153	INYPSA Informes y Projectos SA	MD Spain	00	225	225	16	José Maria Pineda Rovira
166 169	Brink Group	CE Netherlands	00	225	202	11	Hans de Jonge
167 156	IFB Dr. Braschel AG	MD Germany	00	220	220	20	Reinold Braschel
168 194	SGI Consulting SA	MD Luxemburg	00	220	169	17	Michel Nardin
169 161	Deerns Consulting Engineers	CE Netherlands	00	220	219	18	J.C.Huyghe
170 174	E.G.Pettit & Company	MD Ireland	00	215	200	13	Gerald O'Sullivan
171 97	SRP Schneider & Partner Ing.-Consult GmbH	MD Germany	00	212	350	11	H.Schneider, O.Hartel, H-J.Brandt
172 229	Inac Instrumenteringar AB	I Sweden	00	207	120	16	Magnus Falkman
173 185	Curtins Group	CE,PM England	00	207	179	13	Paul N Metcalfe
174 163	RAPP AG, Ingenieure+Planer	MD Switzerland	00	205	215	21	Peter Rapp
175 172	Scholze Ingenieur GmbH	E,M,I,Enr Germany	00	205	200	14	Gerd Scholze
176 195	GETINSA S.A.	CE, Env, PM Spain	00	203	166	15	Pedro D. Gomez Gonzales
177 (-)	Uvaterv Engineering Consultants Ltd	MD Hungary	00	202	-	7	Gyula Bretz
178 165	SEIB Ingenieur-Consult GmbH	MD Germany	00	200	210	-	Hans Seib
179 176	Roberts & Partners Ltd	E,M,PM England	00	200	200	-	Merlyn Roberts
180 181	Cumae Group	MD Netherlands	00	*200	185	-	Joseph M. Kuling
181 170	NACO, Netherlands Airport Consultants B.V.	MD Netherlands	00	200	200	19	H.P. Van Piggelen
182 168	Pick Everard Ltd	CE,A England	00	200	203	15	David Brunton
183 135	Kocks Consult GmbH	MD Germany	00	200	250	13	Jürgen Kocks, M.Leinhos, U.Sprick
184 141	Centroprojekt Zlin A.S	MD Czech Republ.	00	200	245	4	Vladimir Kudela
185 192	Gwent Consultancy Ltd	CE England	00	198	170	11	Graham Cogswell
186 159	HENN Architekten Ingenieure	A Germany	00	192	220	-	Gunter Henn
187 116	ABT Consulting Engineers BV	CE Netherlands	00	190	293	-	J.G.Huisberger
188 191	Steer Davies Gleave Ltd	CE England	00	190	170	*20	Jim Steer
189 186	Bengt Dahlgren AB	M,Enr Sweden	00	190	175	15	Christer Nyberg
190 (-)	EGM architecten bv	A,PM Netherlands	00/01	190	-	14	J. Van Middelkoop AvB
191 198	Air-Ix Consulting Engineers	E,M,I,PM Finland	00	190	165	11	Jorma Törönen
192 196	Arkitektfirmaet C.F.Møllers Tegnestue	A Denmark	00	185	165	17	no MD
193 179	Köhler + Seitz Beraten u Planen GmbH	CE,S,A,PM Germany	00	185	195	14	Wilhelm Köhler, Günther Seitz
194 187	Ferguson & McIlveen	CE,A,Env England	00/01	*185	173	11	Roger Bennett
195 178	Elektroprojekt Consulting Engineers	MD Croatia	00	180	196	-	Kruno Galic
196 113	Weidleplan Consulting GmbH	MD Germany	00	180	300	35	Behnam Sadeghian
197 182	Rintekno Group	I Finland	00	179	182	16	Olli Gerdt
198 207	Xdin AB	I Sweden	00	177	158	16	Hans Norén
199 189	Leonhardt, Andrä u Partner Beratende Ing GmbH	S Germany	00	175	170	17	Holger S. Svensson
200 190	KHR AS Arkitekter	A Denmark	00/01	*175	170	16	Jesper Lund

Top European consultancy WS Atkins is involved in a number of pfi projects, one example being their engagement together with construction company Wates Construction in the design, construction and management, for 25 years, of two schools in Swanscombe. Atkins has also increased its risk taking in privately-financed road projects. Together with contractors Balfour Beatty, the company has purchased the German company Philipp Holzmann's share in Connect Roads, which was set up for the purpose of pfi projects. Atkins is increasingly breaking new ground. Through its partnership in TS4i Power Resources, they are involved in two combined heat and power plants that serve a number of food processing, paper and packaging plants. During the course of the year, Atkins has also purchased Scan Rail Consult from the Danish Government. Atkins is at present reorganising the group into a global structure with greater market orientation.

In January, Hyder Consulting was purchased by (MBO) corporate management from Hyder plc (formerly Welsh Water).

ARUP has restructured its organisation and established, together with its Australian partner, Arup Group Ltd with some 6 250 employees and approximately GBP 385 million in turnover.

WSP Group, which during 2001 acquired Swedish consultancy J&W with a total of some 2 000 employees, had during the previous year purchased US consultants Flack + Kurz Group, with approximately 300 employees and Cantor Seinik Group. 2001 also saw the acquisition of UK urban development consultancy Marcial Echenique & Partners Ltd.

White Young Green plc has purchased "14001 Ltd", a quality assurance consultancy, and Cassels Group active in the fields of health, safety and the environment, and with some 20 employees.

High Point Rendel has formed a strategic alliance with the Indian firm STUP Consultancy with over 600 employees. The company is enjoying a strong expansion of its activities in Asia. High Point has established close co-operation with several trading houses and an alliance with US consultancy R.W. Beck. The company has also acquired Vantagepoint Management Ltd, which specialises in ppp projects.

The UK section of Gibb, or rather the LAWGIBB Group's international part Gibb, has been acquired by expansive NYSE-listed

engineering/construction company Jacobs. Two years ago, Jacobs purchased the consulting firm Sverdrups and has an interest in the French company Serete.

AMEC plc is a service conglomerate that has purchased the listed Canadian company Agra Inc. After a certain amount of reorganisation, Agra has now been renamed AMEC Inc. and is responsible for the service giant's North American operations.

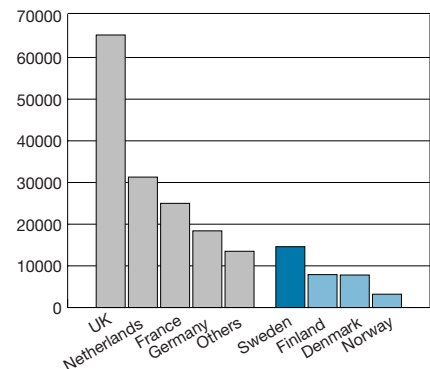
Babtie, which previously acquired Allot & Lomax, has through its partnership with BEAR Scotland been awarded a five-year assignment for the planning and maintenance of an approximately 2 300 km road network in the northern part of Scotland. Major undertakings are backed by the company's co-operation with the Bank of Scotland. A joint-owned company has been set up together with the Irish firm E G Pettit aimed, among other things, at infrastructure projects. At home, Babtie has purchased Inverness Engineering Consultants with some 40 employees.

Export-oriented Dutchmen

The largest Dutch consulting firm Arcadis is also expanding in the USA. The end of 2000 saw the acquisition of Texas-based infrastructure consultants WSBC Civil Engineers, Inc. with some 70 employees, which was slotted in under Arcadis Geraghty & Miller. Arcadis – market leader in the area of infrastructure – has no less than 56% of its turnover abroad. In the new area of infrastructure, Arcadis has signed an agreement with Siemens for service throughout Germany in connection with 3G development.

DHV has acquired Netherlands Airport Consultants (NACO), a leading firm of consultants in airport design with some 200 employees. DHV has also purchased Blesgraaf Consultancy and increased its share in ELTA J Claas to 80%. Co-operation with the UK company Halcrow is being increased. DHV has 40% of its operations outside Holland. DHV's partner in South Africa is Stewart Scott. The company has strengthened its environmental profile through the acquisition of a specialist unit from Jacobs Conprimo (previously Stork Engineering).

At the beginning of 2001, Fugro – with its sound and stable profitability level – purchased Canadian consultancy Sial Geosciences Inc, Montreal with some 35 employees and five aircraft, thereby strengthening its operations in North America. Via US



The European top 200 consulting engineering and architectural groups have some 187 000 employees of which the UK Companies account for near 35%. Together the top 200 groups had a turnover of some 16,5 billion Euro during the year 2000.

subsidiary Fugro GeoServices Inc., Fugro is forming a partnership with Boeing Oceanering International for underwater services within GIS operations focused primarily on oil and gas exploration and the telecom market. Fugro has also purchased Geologic Consulting Services BV of Holland and Canadian Spectra Exploration Geosciences Corp. A new business area was established – Geoscience – with the purchase of Robertson Research Ltd and the Rotterdam-based company Jason Information System B.V.-leaders in the computer-based 3-D modelled analysis of oil and gas deposits.

Tebodin belongs to the group of major companies that form international networks. During 2000, a joint venture was established with US consultants Lockwood Greene. During the year, Tebodin has acquired Cebeco Consulting Engineers with 45 employees and a focus on clients in the pharmaceutical industry.

Tauw Group increased its foreign operations through the purchase of a 45% share in Italian environmental consultants EcoAppraisal SRL and a 70% interest in the French firm Ophrys SARL.

Rapidly expanding Detron Group NV, within areas that include telecom and industrial consulting, was acquired after a certain amount of resistance by the service/automation service company Landis Group. This marks the disappearance of one of the consulting groups on the Amsterdam Stock Exchange.

The expanding consultancy Grontmij has purchased AquaSens (70%), Technical Management, Vanderbroek International and MAP Environmental Research.

The World's top 100 consulting engineering and architectural groups

(USD per 00-12-29)									
	Group	Services	Country	Annual Report	Number of employees	(Last year)	Turnover M USD	CEO/President Managing Director October 2001	
1	1	URS Corporation	MD	USA	00	16000	15700	2206	Martin M. Koffel
2	2	WS Atkins plc	MD	England	00/01	12843	11633	985	Robin Southwell
3	(-)	Altran	I	France	00	12823	8665	807	Frederic Bonan, Michel Friedlander
4	*24	AECOM	MD	USA	00	12000	12000	1600	Ray Holdsworth
5	3	Parsons Corporation	MD	USA	00	11000	11000	*2300	Jim F. McNulty
6	4	CH2M Hill Companies, Inc.	MD	USA	00	10494	9846	2107	Ralph R. Peterson
7	6	Parsons Brinckerhoff	MD	USA	00	9200	7870	1157	Thomas J. O'Neill
8	5	Black & Veatch	MD	USA	00	8500	8300	2358	Leonard C. Rodman
9	9	SNC-Lavalin Group	MD	Canada	00	8200	6500	1142	Jacques Lamarre
10	7	Arcadis Group	MD	Netherlands	00	7657	7217	713	Harrie L. J. Noy
11	8	AMEC Inc.	MD	Canada/UK	*00	6000	6500	886	Peter Janson
12	*18	MWH Montgomery Watson Harza	Env	USA	00	5500	3750	721	Robert B. Uhler
13	10	Fugro N.V.	CE	Netherlands	00	5492	4910	655	Gert-Jan Kramer
14	17	Tetra Tech, Inc.	PM,Enr,CE	USA	00	5400	3800	795	Li-San Hwang
15	11	Ove Arup Partnership	MD	England	00	5037	4850	402	Bob Emmerson
16	47	WSP Group plc /J&W	MD	England	*00	5000	*2000	325	Christopher Cole
17	13	Jaakko Pöyrö Group	MD	Finland	00	4717	4461	436	Erkki Pehu-Lehtonen
18	12	Groupe Egis	MD	France	00	4500	4600	498	Gilles Leserot
19	16	Hatch Group	MD	Canada	00/01	4400	4000	262	Ronald R. Nolan
20	21	Grontmij Group	MD	Netherlands	00	4134	3451	434	Jan W. Hillege
21	19	Berger Group, Inc.	MD	USA	00/01	3722	3531	378	Derish M. Wolff
22	20	Michael Baker Corporation	MD	USA	00	3700	3500	391	Donald P. Fusiui
23	23	DHV Group	MD	Netherlands	00	3613	3300	240	Hans C. Huis in't Veld
24	15	LAWGIBB Group	MD	USA	00	3500	4000	304	Bruce C. Coles
25	14	Mott MacDonald Group	MD	England	00	3490	*3296	323	T J Thirlwall
26	27	Camp Dresser & McKee	CE,PM	USA	00	3400	3000	458	Thomas D. Furman, Jr
27	25	Halcrow Group Ltd	MD	England	00/01	3296	3203	218	Derek Pollock
28	(-)	Alten Group	I	France	00	3012	2145	173	Simon Azoulay
29	29	HDR, Inc.	MD	USA	00	3000	2560	*360	Richard R. Bell
30	22	Lockwood Greene Inc.	MD	USA	00	3000	3400	288	Fred M. Brune
31	28	Babtie Group	MD	Scotland	00	3000	2790	177	William G. Mitchell
32	(-)	Bertrandt AG	I	Germany	00	2807	2378	173	Dietmar Bichler
33	35	Stantec Inc.	MD	Canada	00	2800	2300	174	Anthony P. Franceschini
34	34	PBS&J	MD	USA	00/01	2775	2320	*263	H. Michael Dye
35	26	Hyder Consulting Group Ltd	CE	England	*00/01	2538	3012	186	Tim Wade
36	59	Carter+Burgess, Inc.	CE,A	USA	00/01	2500	1780	314	Jerry Allen
37	33	ERM, Environmental Recourses Managemnet	Env	USA	00	2500	2400	306	Peter Regan
38	31	Sinclair Knight Merz Pty Ltd	MD	Australia	*99/00	2500	2500	173	Paul P. Douglas
39	30	Scott Wilson Ltd	MD	England	00	2487	2500	161	Bob McGowan
40	42	Royal Haskoning Group	MD	Netherlands	00	2300	2044	142	J. Bout
41	83	MACTEC/Harding, Inc.	MD	USA	00	2300	2300	325	Robert L. Castello
42	39	COWI Consulting Engineers and Planners	MD	Denmark	00/01	2203	2087	185	Klaus H. Ostenfeld
43	45	ENSR International*	MD	USA	00/01	2200	2000	240	Robert C. Petersen
44	46	Golder Associates Inc.	CE	Canada	00	2200	2000	220	Frederick W. Firlotte
45	37	ÅF-Group	I,E,M,Enr	Sweden	00	2191	2222	181	Gunnar Grönkvist
46	38	SWECO AB	MD	Sweden	00	2132	2188	182	Wigon Thuresson
47	43	RITES	MD	India	*99/00	2030	2034	36	K.P. Singh
48	41	Carl Bro Group	MD	Denmark	*00	2024	2059	173	Jesper Rasmussen
49	50	Oranjewoud group	CE,Env,PM	Netherlands	00	2013	1969	163	Jan Reneman

PM = Project Management, A = Architecture, CE = Civil/IS = Structural Engineering, Env = Environment, Enr = Energy, E = Electrical,
M = Mechanical/HEVAC, I = Industrial, MD = Multi Disciplinary

	Group	Services	Country	Annual Report	Number of employees	(Last year)	Turnover M USD	CEO/President Managing Director October 2001	
50	44	Hellmuth, Obata + Kassabaum, Inc.	A	USA	00	2000	2000	*342	Jerome J. Sincoff
51	36	Gensler	A	USA	00/01	2000	2285	343	Edward Friedrichs
52	48	Tebodin, Consultants & Engineers	MD	Netherlands	00	2000	2000	119	H. Hegger, J.Bout, T van den Velden
53	(-)	Chiyoda Corporation	Enr,I	Japan	00	1964	-	122	Masato Kitagawa
54	49	Nikken Sekkei Group	MD	Japan	00	1942	1996	363	Kunihiro Misu
55	53	Gannett Fleming Engineers & Planners	MD	USA	00	1926	1900	191	Ronald J. Drnevich
56	58	Sargent & Lundy LLC	Enr	USA	00	1900	1800	317	Paul L. Wattleit
57	51	Rambøll Group	MD	Denmark	00	1863	1961	153	Flemming Bligaard Pedersen
58	56	HNTB Companies	CE,A,Env	USA	00	1850	1845	*405	Harvey K. Hammond, jr
59	57	Dar Al-Handash Consultants (Shair & Partners)	MD	Egypt	00	1850	1810	346	Kamal A. Shair
60	52	Scandiaconsult Group	MD	Sweden	00	1732	1935	140	Torbjörn Torell
61	(-)	Rücker AG	I	Germany	00	1681	1450	103	Wolfgang Rücker, J. Vogt, H. Burst
62	67	Tecnicas Reunidas, S.A	MD,I	Spain	00	1655	1500	223	José Lladó Fernandez-Urrutia
63	62	Roy F. Weston, Inc.	MD	USA	00	1650	1650	270	William L. Robertson
64	63	Nippon Koei Co, Ltd	MD	Japan	00/01	1612	1617	550	Katsuyoshi Wada
65	61	Pacific Consultants Group	MD	Japan	00	*1600	1664	510	Tamio Araki
66	72	Burns & McDonnell*	MD	USA	00	1600	1400	215	Dave G. Ruf, Jr.
67	(*)	JacobsGIBB Ltd	MD	USA/England	00	1510	1500	92	Peter D. Brettell
68	84	Semcon AB	I	Sweden	00	1504	1173	104	Hans Johansson
69	69	Development Consultants Private Ltd	MD	India	00	1500	1500	10	S. C. Dutt, S Ghosh
70	65	Conell Wagner Pty Ltd	MD	Australia	00	1486	1600	87	Robert Squire
71	(-)	Consulting Engineering Services Ltd	MD	India	00	1469	-	-	Srikumar Ghosk
72	76	Kleinfelder, Inc.	Env, CE, PM	USA	00	1400	1300	140	Gerald Salontai
73	92	EC Harris	PM, QS	England	00/01	1400	1007	118	Richard Clare
74	88	Africon Engineering International Pty	MD	South Africa	00/01	1400	1100	33	M.P. Cilliers
75	73	Gutteridge Haskins & Davey Pty Ltd	MD	Australia	00	1400	1300	89	Ken Conway
76	71	OYO Corporation	CE	Japan	00	1367	1405	448	Takeshi Ohkubo
77	60	Kokusai Kogyo Co, Ltd	CE, Env	Japan	00/01	1346	1687	390	Tanaka Kiyota
78	74	Development Design Consultants Ltd	MD	Bangladesh	00/01	1337	1325	6,6	A.K.M. Rafiquddin
79	77	Malcolm Pirnie, Inc.	Env, CE	USA	00	1300	1255	204	Garret P. Westerhoff
80	79	Mouchel Group Ltd	MD	England	00/01	1282	1200	80	Jim Harding
81	87	STV Group	MD	USA	00	1200	1100	150	Dominick M. Servedio
82	(-)	The Dewberry Companies	CE	USA	00	1200	-	149	Sidney O. Dewberry
83	80	Beca Carter Hollings & Ferner Ltd	MD	New Zealand	00/01	1200	1200	*50	Richard H. Aitken
84	106	Parkman	MD	England	00/01	1200	866	49	Richard Archer
85	(-)	SYSTRA Group	MD	France	00	1150	-	143	Thierry Ossent
86	101	Kimley-Horn & Associates, Inc.	CE, SE, Env	USA	00/01	1149	950	174	Robert G. Wright
87	86	Tauw Group	CE, Env	Netherlands	00	1124	1124	65	A. T. de Borst
88	75	Pasco Corporation	CE, S	Japan	00/01	1116	1300	384	Shohei Kimura
89	86	Sener Group	MD	Spain	00	1100	1100	148	Jorge M. Sendagorta
90	97	Tecsult Inc.	MD	Canada	00	1100	1000	75	Luc Benoit
91	125	Obermeyer Planen+Beraten GmbH	MD	Germany	00	1100	760	61	Leonard Obermeyer
92	91	PCG-Profabril Consulplano Group	MD	Portugal	00	1093	1034	42	Ilidio de Ayala Seródio
93	89	Meinhardt Group	MD	Australia	00	1080	1000	80	Shazad Nasim
94	90	CTI Engineering Co, Ltd	MD	Japan	00	1056	1077	*280	Yumio Ishi
95	103	White Young Green	MD	England	00/01	1028	940	77	Richard Brayson
96	(-)	Dessau-Soprin, Inc.	MD	Canada	00	1012	-	56	Jean-Pierre Sauriol
97	(*)	Teleca AB (former part of Sigma AB)	I	Sweden	00	1005	*	97	Nick Stammers
98	95	Lahmeyer International GmbH	MD	Germany	00	1000	1000	217	Martin Bay
99	139	RTKL International Ltd	A, M, E, SE	USA	00	1000	657	131	David C. Hudson
100	(-)	Sear Brown, Inc.	MD	USA	00	1000	-	96	Michael Triassi

German industrial consultants in Sweden

In July 2000, expansive industrial consultants Rucker AG purchased B Nord Consulting AB in Gothenburg. This gives Rucker a bridgehead into Scandinavia for their efforts to acquire customers in, above all, the vehicle industry.

France

Groupe Egi, a rapidly expanding group with several well-known consulting names such as the German company Dorsch Consult, has a turnover of approximately EUR 500 million. Other well-known subsidiaries include Scetaroute, BCEOM, Italconsult and Hydroprojekt i Tjeckien. Egis, who are infrastructure specialists, are also involved in major ppp projects, including a 155km-long motorway project with a toll system in north-east Portugal.

We have for the first time noted industrial consulting giants Altran. Established in 1982 and listed on Second Marché in 1987, it is now an enormous enterprise with over 12 000 employees. The company focuses its operations on assignments within the industrial R&D sector.

Sogreah, which was formed as a result of an MBO from Alcatel in 1999, has this year taken a step across the Channel and purchased UK building consultancy BEST.

USA

Infrastructure giant Parsons Brinckerhoff is setting up a management consultancy unit. The Group has purchased PPK Environment & Infrastructure Pty Ltd in Australia.

As already mentioned, AECOM has in a very short period grown into a major enterprise through the acquisition of a number of well-known consultancies, including DMJM, Holmes & Narver, Frederick R. Harris, CTE Engineering, the relatively recently acquired UK companies Maunsell and Oscar Faber, as well as US consultancy Metcalf & Eddy. The restructuring of several companies is under way, and DMJM+HARRIS has been formed and named on the basis of the constituent companies, as well as Holmes & Narver. Through AECOM Technology Corp, Los Angeles, AECOM has also purchased the infrastructure consulting unit within KPMG, Fairfax, VA with some 30 employees.

During the course of the year, the investment company American Capital Strategies has,

together with members of Weston's management, purchased Nasdaq-listed Roy F. Weston, with 1 650 employees, from the Weston family and staff foundations with several private owners for approximately USD 66 million.

The dissatisfaction with the stock exchange valuation by infrastructure consultants STV Group has meant that the principal owners bought the shares in the company on the Nasdaq stock exchange, only a limited percentage of which were owned by external shareholders, thereby delisting it. The company thereby reverted to being a staff-owned company.

In exactly the same way as in Europe, the educational system is becoming an increasingly important customer for consulting firms. US giant URS Corp has in co-operation with a medium-sized architectural firm DNK Architects been commissioned to plan, design and implement a schools programme in Cincinnati for some 43 000 pupils in 75 schools. As with several of the other large consulting firms, URS has a growing market in the installation of mobile communication systems. Following the consolidation of Dames & Moore, URS now has over USD 2 billion in turnover and as many as 16 000 employees.

The focus of rapidly expanding Tetra Tech, Inc. operations is on engineering and management within the environment, infrastructure and communications fields. In the infrastructure area, the group has purchased FHC, Inc., Rizzo Associates and Edward A. Sears, and in the communications area eXaert Wireless Solutions, LC Inc., HFC Technologies.

CH2M Hill has, through its Hanford Group, been awarded an extensive commission in connection with the safety, replacement and decontamination of large subsurface repositories for radioactive wastewater for reactor installations in Hanford. The contract is going to the year 2018 (!)

LAWGibb Group, which sold its international section – Gibb UK – to Jacobs Engineering, has in turn purchased the Texas operations of Maxim Technologies, Inc. LAWGibb is now focusing its operations on the North American Continent and is also developing an IT department.

Staff-owned HDR has acquired Edward Consulting Inc. within the electrical engineering and industrial area as well as Brown Intertech in the environmental area.

ENSR International is purchasing certain segments of McLaren-Hart/Jones Environmental Consultants and 25% of the UK company RSK Environment.

Canada

The Canadian company Hatch has purchased the business unit for mining, metallurgy and industrial engineering from Kaiser Engineering and has in this way gained an additional 600 employees. In the infrastructure area, co-operation with Mott MacDonald is growing through, among other things, acquisition of the BAC Killiam Group.

Otherwise, project management activities are enjoying the fastest expansion, and the number of employees is at present 600.

Stantec, listed on the Toronto stock exchange, has undergone significant expansion, mainly as a result of a heavily increased presence in the USA. Through its purchase of EWP Engineering Inc., P.R. Fletcher & Associates, Enviro Net, Tipton and Kalmbach Inc. and DS Atlantic Corporation, the number of staff in the USA has increased by over 700 and the company now has a total of 3 000 employees.

Canadian SNC-Lavalin Inc. has purchased Titan Projects Ltd with significant competence in the oil and gas sectors. SNC has a substantial holding in the pfi company Highway 404 – a project that has so far, however, been a strain on SNC's margins.

Acres International has purchased Nordic Engineering with 100 employees in the oil and gas sectors, and the successful EPCM operations.

Swedish consultancies hold their position

In our World Chart, there are this year 5 Swedish consulting firms among the 100 largest, ranked according to number of employees – ÅF is number 45 (37), SWECO number 46 (38), Scandiaconsult number 60 (52), Semcon number 68 (84) and Teleca number 97 (*). We have given J&W a pro forma ranking together with WSP – otherwise J&W would have been number 67.

Among Europe's 200 largest consultancies there are no less than 16 (17 if J&W is included) Swedish companies, which bears witness, on an international scale, of the relatively large and concentrated Swedish consulting sector. We have two of Europe's absolutely largest architectural firms –

SWECO FFNS and White Arkitekter – and one of the largest project management consultants – HifabGruppen. The charts also contain extensively-developed Swedish industrial consultancies, for example ÅF, Semcon, Teleca and Epsilon.

The US journal ENR's ranking of the largest global contracting companies now contains the French Vinci Group (SGE renamed Vinci and merged with GTM) in first place with a turnover of USD 16.1 billion. Last year's chart topper, the Japanese company Taisei Corporation, has now dropped to second place followed by another French contractor Bouygues SA (approximately USD 12.7 billion). The Swedish company Skanska has advanced to 9th place (10) and NCC is ranked 28th. If consideration is only given to international operations, Skanska has achieved an impressive 2nd place following German contractors Hochtief.

To conclude

In addition to our members, we have contacted over 800 companies in Sweden and abroad. Most of them have sent us their annual reports or have responded to our questionnaire in some other way. We have also been able to benefit from their increasingly detailed websites. For some of the companies from whom we have not received a direct response, we have anyway been able to acquire information from elsewhere, such as journals. We have marked these in our charts with “*” in front of the information in question. Even though in certain cases we may not have exact information, we intend to show the market's main players.

Our Sector Review does not contain firms or groups that are regarded as design units within public sector operations, contracting companies or industrial conglomerates. However, with the type of development that is in progress on the market, it will be increasingly difficult, despite our Nordic definition of consulting firm, to draw the boundary for inclusion in our Review.

We should like to thank everyone who has contributed to our Sector Review and would be grateful for any tips about companies that we may have missed or any other comment.

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The Swedish Federation of Consulting Engineers and Architects is the trade and employers' organisation for Sweden's architects, engineering consultancies and industrial consulting firms. With over 800 member companies, which together employ almost 20 000 staff, the Swedish Federation of Consulting Engineers and Architects thus represents almost two thirds of the resources available in the sector.

The Swedish Federation of Consulting Engineers and Architects endeavours to create benefits for its member firms on today's free market for knowledge development and the sale of services. Sector and employer issues are coinciding and interacting to an increasing extent. Forms of remuneration and working conditions for members working in the companies are changing, and depend on how the companies' services are valued and priced. In order to achieve strength and the power for development, it is important to maintain a broad perspective as far as the sectoral affiliation of the companies is concerned.

The Swedish Federation of Consulting Engineers and Architects is both a pro-active representative of sectoral policy and a service organisation for the member companies. Operations are focused on the core issues of architectural and consulting firms – visibility, consulting assignments, salary and employment issues, as well as competence development and renewal – and are conducted within three main areas:

- Economic policy/consultancy business
- Employer issues
- Competence development and renewal

The Swedish Federation of Consulting Engineers and Architects is part of ALMEGA, which is the largest group of employers' associations in the Swedish business sector.

On an international level, the Swedish Federation of Consulting Engineers and Architects is a member of the global engineering consultancy organisations FIDIC (Federation Internationale des Ingenieurs-Conseils), the European counterpart EFCA (European Federation of Engineering Consultancy Associations), together with SAR in the European association for architects ACE (Architects' Council of Europe) and on the employer side through ALMEGA in UNICE (Union of Industrial and Employers' Confederations of Europe).



STD Svensk Teknik och Design

ARKITEKT- TEKNIK- OCH INDUSTRIKONSULTFÖRETAGEN I SAMVERKAN

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