The State of the European Consulting Engineering Sector

BAROMETER spring 2019
The Barometer Task Group of the European Federation of engineering Consultancy Associations (EFCA) has been conducting biannual surveys since 2012 to provide an overview of the consulting engineering sector in Europe, detailing developments for the latest six months and expected trends for the coming six months.

The Task Group has produced this report and analysis based on best available information on the current state of business (April 2019) collected through a survey by the member associations of EFCA for their respective countries. For European averages, national figures have been weighted by full time employees on the market of each country according to Eurostat figures. For the latest Eurostat figures see the appendix.

If you want to contact the Task Group, please contact the EFCA secretariat - efca@efca.be

**Participating Associations in this survey, spring 2019**

* France is represented by both Syntec Ingénierie and Cinov. Their replies are aggregated and presented as one.
Executive summary
State of the European consulting engineering sector, spring 2019

Strong markets, but continuous challenges

The 2019 spring survey of the EFCA-Barometer indicates that European markets for consulting engineering services have increased in strength. While southern countries continue to face difficult market conditions, northern countries tend to have trouble generating profit. Main challenges are low fees, staff shortage and digital transformation.

The current survey indicates that overall, the European markets have increased in strength. The image is reflected in both increasing turnovers as well as rising order stocks. Although the development is not homogenously applicable to all responding countries. In particular, Greece, Turkey and Spain appear to struggle with difficult market conditions.

Profitability appears to have improved or remained the same across all countries with the exception of Denmark and Norway, which declared a reduction in profitability in 2018, compared to 2017. As for 2019, profitability is expected to increase or remain unchanged for all countries, except Turkey and Norway, indicating a stable, overall positive, trend.

Staff increases not proportionate to market trend

This economic growth is only partially accompanied by an increase in staff. Despite an overall upward trend, only half of the countries, which have experienced or are expecting rising markets have proportionally adapted their staff. The three main challenges of the industry continue to be low fees, staff shortages and digital transformation, the latter significantly increasing in importance.

These findings indicate that while markets are generally strong, the industry continues to face several challenges. Low fees indicate either a strong competition or a trend toward standardisation of services while continuous staff shortage tends to increase salary costs. Digital transformation may be a key issue in reducing both production costs and staff shortage.

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Quick overview, overall market in Europe

<table>
<thead>
<tr>
<th>Current market status</th>
<th>Expected orderstock coming 6 months</th>
<th>Expected turnover coming 6 months</th>
<th>Expected staff change coming 6 months</th>
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EFCA Barometer Task Group, May 2019
Current state of European markets

To give an overview of the different markets around Europe, EFCA Member Associations were asked to indicate the current state of the national market. They were offered five options, with short definitions:

- Market is very weak. (Few projects & downsizing staff).
- Market is quite weak. (Difficult to keep everyone busy).
- Market is ok. (Could be stronger, but most staff are busy).
- Market is good. (All staff are busy).
- Market is very strong. ( Rejecting projects and lacking staff).

The reply for each country is shown in the picture below where very weak is illustrated with dark red and very strong with dark green. The picture of the current state of each market is giving a general impression of existing differences around Europe and is intended to gain a better understanding of the actual results brought on by changes in order stocks or turnover in a particular country. An expected increase of orders in one country does not automatically imply that the market situation is better compared to a country where order stocks are expected to decline or remain stable.

Overall the market is doing well in Europe. 18 out of 21 countries declared their market was ok, good or very strong. Only Spain stated their market was very weak while Greece and Bulgaria’s markets were described as quite weak. Overall, this paints the picture of a consulting engineering market that has clearly stabilized on a European level. Some countries are still recovering while others are entering a slowing down phase.

Current state of European markets. EFCA survey, spring 2019
Employment

Actual developments in staffing

The trends in employment vary between the participating countries. Over the six months between the autumn of 2018 and spring of 2019 staff (Full Time Equivalent, FTE\(^1\)) increased in eleven countries (Belgium, Denmark, Germany, Ireland, Italy, Luxemburg, Netherlands, Norway, Romania, Sweden and Switzerland) Staff remained unchanged in six countries (Bulgaria, Czech Republic, France, Greece, Portugal and Serbia) while staff decreased in three countries (Finland, Spain and Turkey). Austria did not reply to this question.

Employment, past six months. EFCA survey, spring 2019

\(^1\) Number of staff/employees is defined as FTE, Full Time Equivalent, where the total number of hours worked by the staff in a company is divided by the equivalent of a full year’s work load. Example: four half-time employees are counted as two employees.
Expected developments in staffing

In April 2019, 10 out of 20 countries (Denmark, France, Germany, Ireland, Luxemburg, Netherlands, Norway, Romania, Serbia and Sweden) expected an increase in staff (FTE). The remaining 10 countries (Belgium, Bulgaria, Czech Republic, Finland, Greece, Italy, Portugal, Spain, Switzerland and Turkey) expected a status quo. So, no countries expected decreasing staffs. That in itself is a sign of an industry with some confidence. Austria did not reply to this question.

Employment, coming six months. EFCA survey, spring 2019

Employment: increase ☑ (green); stable ☑ (yellow); decrease ☑ (red).

Developments in employment for the consulting engineering sector – expectations for the coming six months, April 2019.
Actual developments in order stock

The actual order stocks grew in twelve countries (Bulgaria, Czech Republic, France, Germany, Ireland, Italy, Luxemburg, Netherlands, Norway, Romania, Serbia and Switzerland) in the past six months (before April 2019). In seven countries (Austria, Belgium, Denmark, Greece, Portugal, Sweden and Turkey) order stocks were unchanged and in Finland and Spain order stocks decreased. The European average order stock in months increased to 9,1 months, which is an all-time high in the EFCA Barometer.

Order stock, past six months. EFCA survey, spring 2019

Average order stock in months, European average 2014-2019

Order stock increase ■ (green); stable ■ (yellow); decrease ■ (red)
Expected developments in order stock

Order stocks are expected to increase over the coming six months (April 2019) in eleven countries (Denmark, Portugal, Sweden, Bulgaria, France, Luxemburg, Netherlands, Norway, Romania, Serbia and Finland).

Nine countries (Austria, Belgium, Greece, Czech Republic, Germany, Ireland, Italy, Switzerland and Spain) are expecting unchanged order stocks for the coming six-month period and Turkey are expecting a decrease.

Order stock, coming six months. EFCA survey, spring 2019

The current level of order stock, as well as the expected developments, strengthen the picture of a stabilised and stronger Consulting Engineering market in Europe. Most markets are doing better than what was registered in the autumn 2018 survey. And more importantly, only Turkey is expecting a declining order stock.
Turnover

Actual developments in turnover

As order stocks around Europe grow, so does turnover on most European markets.

Fourteen countries reported growing turnover for the past six months (Belgium, Denmark, Greece, Turkey, Czech Republic, France, Germany, Ireland, Luxemburg, Netherlands, Norway, Serbia, Switzerland and Finland). Five countries reported a status-quo in turnover (Portugal, Sweden, Bulgaria, Italy and Romania). Only Spain reported that turnover had fallen in the six months before April 2019. Austria did not respond.

Turnover, past six months. EFCA survey, spring 2019

Turnover: increase (green); stable (yellow); decrease (red).
Expected developments in turnover

Twelve out of 20 participating countries (Denmark, Greece, Portugal, Sweden, Bulgaria, France, Ireland, Luxembourg, Netherlands, Norway, Romania and Serbia) are expecting an increase in turnover for the coming six months.

The remaining nine countries (Austria, Belgium, Turkey, Czech Republic, Germany, Italy, Switzerland, Finland and Spain) expect a status-quo when it comes to turnover.

Turnover, coming six months. EFCA survey, spring 2019

Turnover: increase ◼ (green); stable ◼ (yellow); decrease ◼ (red).

The average turnover for all companies represented by the MA’s in the EFCA Barometer survey can be divided into three overall categories: domestic public, domestic private and exports. All three sectors are important for the industry, as illustrated by the figure below.
Profitability

Once a year, EFCA member associations are asked for the average profit ratio in their country based on the results of the previous financial year. The profit ratio is measured as EBITDA, ‘earnings before interest, taxes, depreciation, and amortisation’. This is done in the autumn surveys.

The average weighted European profit ratio (EBITDA) in 2017 was 7.9% of total turnover\(^2\). The development of the profit ratio at European level is shown below. The trend is positive, and profitability is increasing. It must be said, though, that changes in participating countries between different surveys do influence the European average profit ratio figures.

Profit ratio (EBITDA). European average, 2013-2017

Profit ratios (EBITDA) at national level are presented in the diagram below. Figures are not available for all countries and surveys.

Profit ratio (EBITDA) per country, 2013-2017

\(^2\) The average European profit ratio (EBITDA) for 2016 was presented as 5.1% in the autumn report of 2017. This figure has been corrected to 7.1%. In the autumn report of 2017, the profit for Germany was excluded as the reported figure seemed too high (21.9%). The correct figure, 11%, is included in the 7.1% profit ratio.
**Expected developments in profitability in 2018 compared to 2017**

Based on preliminary numbers, eleven countries expected profitability to have improved in 2018, compared to 2017; Austria, Belgium, Greece, Bulgaria, Czech Republic, France, Germany, Ireland, Italy, Luxemburg and Serbia.

Eight countries expected unchanged profitability in 2018 compared to 2017; Portugal, Sweden, Turkey, Netherlands, Romania, Switzerland, Finland and Spain.

Norway and Denmark expect profitability to have decreased in 2018 compared to 2017.

**Expected profitability for 2018 compared to 2017. EFCA survey, spring 2019**
Expected developments in profitability in 2019 compared to 2018

Seven countries expect improved profitability in 2019, compared to 2018: Denmark, Portugal, Sweden, Bulgaria, Czechia, Romania and Serbia.

Twelve countries expected profitability to remain unchanged in 2019: Austria, Belgium, Greece, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Switzerland, Finland and Spain.

Only Norway and Turkey are expecting profitability to decrease in 2019, compared to 2018.

Expected profitability for 2019 compared to 2018. EFCA survey, spring 2019

More markets are stabilising at a high level or growing at a steady pace. However, profitability is expected to level out in 2019.
Challenges for the consulting engineering industry in Europe

The participating associations are asked in each survey to select the five main challenges the sector is facing in their respective country, from the options below. In this survey “bureaucratic constraints” was introduced as an option.

- Access to finance
- Bidding costs
- Business integrity
- Competition from contractors
- Competition from public entities
- Digital transformation (including impact of BIM)
- Lack of projects
- Late payment
- Low fees
- Political uncertainty
- Qualified staff shortage
- Salary increases
- Bureaucratic constraints (new in this survey)

The results in this survey are in line with previous surveys; low fees remain the main challenge that the industry is facing, followed by staff shortages.

Impact of BIM and salary increases have jumped to the third position followed by concerns about salary increases. Late payments are still a concern for the sector and has increased since the last survey. It is worth noting that political uncertainty has been a concern for the industry in the last two years and will probably remain so in coming years. Another observation worth mentioning, is the development in competition from contractors. This has been a growing challenge since 2016, and currently it is rated as a challenge at the same level as salary increases.

The chart on the next page shows the development of the main challenges at European level between the spring of 2016 and the autumn 2018 survey. This chart illustrates, as have previous diagrams, a market that has stabilized. ‘Low fees’ is a continuous challenge to the industry. The improving market is placing greater stress on the shortage of available staff. Higher salary costs are a direct consequence, as companies hire from competitors, clients and other industries to a greater degree, pushing salaries upwards.

The fact that lack of projects has dropped to the seventh position is another factor that supports the picture of a stable market. But also, of a market where BIM or new business models will be key drivers for the next improvement in profitability.

See the next page for the complete list of challenges.
Main challenges faced by companies at European level, spring 2019

- Staff shortage: 67% (2016-1), 55% (2016-2), 42% (2017-1), 33% (2017-2), 27% (2018-1), 20% (2018-2), 19% (2019-1)
- Late payment: 88% (2016-1), 73% (2016-2), 65% (2017-1), 57% (2017-2), 49% (2018-1), 40% (2018-2), 30% (2019-1)
- Bidding costs: 24% (2016-1), 20% (2016-2), 16% (2017-1), 12% (2017-2), 10% (2018-1), 8% (2018-2), 4% (2019-1)
- Lack of projects: 19% (2016-1), 16% (2016-2), 13% (2017-1), 10% (2017-2), 8% (2018-1), 6% (2018-2), 4% (2019-1)
- Bureaucratic constraints: 19% (2016-1), 16% (2016-2), 13% (2017-1), 10% (2017-2), 8% (2018-1), 6% (2018-2), 4% (2019-1)
- Competition fr pub entities: 19% (2016-1), 16% (2016-2), 13% (2017-1), 10% (2017-2), 8% (2018-1), 6% (2018-2), 4% (2019-1)
- Business integrity: 0% (2016-1), 0% (2016-2), 0% (2017-1), 0% (2017-2), 0% (2018-1), 0% (2018-2), 0% (2019-1)
Appendix
The appendix carries information from the European Commission of interest, which is of interest for the consulting engineering industry, when reviewing market trends.

Most important is the “Growth Map 2019” as made by the European Commission. The growth map illustrates that the European economy is expected to grow for the seventh year in a row in 2019, with expansion forecast in every Member State. The pace of growth overall is projected to moderate compared to the high rates of recent years and the outlook is subject to large uncertainty.

Key messages from the European Commission on the Winter 2019 forecast are:

- Economic momentum at the start of this year was subdued, but the fundamentals remain sound. Economic growth will continue, albeit more moderately. The European economy is set to continue to benefit from improving labour market conditions, favourable financing conditions and a slightly expansionary fiscal stance. Euro area GDP is now forecast to grow by 1.3% in 2019 and 1.6% in 2020.
- A high level of uncertainty surrounds the economic outlook and the projections are subject to downside risks. Trade tensions, which have been weighing on sentiment for some time, have alleviated somewhat but remain a concern. China’s economy may be slowing more sharply than anticipated and global financial markets and many emerging markets are vulnerable to abrupt changes in risk sentiment and growth expectations. For the EU, the “Brexit” process remains a source of uncertainty.

Eurostat-figures

For calculations of European averages the figures for each country are weighted by the FTE-numbers provided by Eurostat. The Eurostat figures may not always correspond exactly with the actual numbers of employees in each country, since they are based on NACE industry codes that can sometime inflate or deflate the size of the market depending on how accurately companies are coded. But they give an idea of the comparative size of each national market and they are consistent.

**Employees in FTE (Full Time Equivalent units)**

<table>
<thead>
<tr>
<th>Employees in full time equivalent units</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>38 552</td>
</tr>
<tr>
<td>Belgium</td>
<td>30 916</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>7 858</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>14 091</td>
</tr>
<tr>
<td>Croatia</td>
<td>20 560</td>
</tr>
<tr>
<td>Cyprus</td>
<td>2 173</td>
</tr>
<tr>
<td>Czechia</td>
<td>50 082</td>
</tr>
<tr>
<td>Denmark</td>
<td>39 433</td>
</tr>
<tr>
<td>Estonia</td>
<td>5 312</td>
</tr>
<tr>
<td>Finland</td>
<td>38 297</td>
</tr>
<tr>
<td>France</td>
<td>304 987</td>
</tr>
<tr>
<td>Germany (until 1990 former territory of the FRG)</td>
<td>514 541</td>
</tr>
<tr>
<td>Greece</td>
<td>27 167</td>
</tr>
<tr>
<td>Hungary</td>
<td>33 493</td>
</tr>
<tr>
<td>Iceland</td>
<td>2 220</td>
</tr>
<tr>
<td>Ireland</td>
<td>24 223</td>
</tr>
<tr>
<td>Italy</td>
<td>66 606</td>
</tr>
<tr>
<td>Latvia</td>
<td>6 938</td>
</tr>
<tr>
<td>Lithuania</td>
<td>10 677</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>6 085</td>
</tr>
<tr>
<td>Malta</td>
<td>2 069</td>
</tr>
<tr>
<td>Netherlands</td>
<td>92 980</td>
</tr>
<tr>
<td>North Macedonia</td>
<td>5 358</td>
</tr>
<tr>
<td>Norway</td>
<td>40 479</td>
</tr>
<tr>
<td>Poland</td>
<td>66 256</td>
</tr>
<tr>
<td>Portugal</td>
<td>30 442</td>
</tr>
<tr>
<td>Romania</td>
<td>60 175</td>
</tr>
<tr>
<td>Serbia *</td>
<td>25 000</td>
</tr>
<tr>
<td>Slovakia</td>
<td>16 371</td>
</tr>
<tr>
<td>Spain</td>
<td>175 763</td>
</tr>
<tr>
<td>Sweden</td>
<td>90 809</td>
</tr>
<tr>
<td>Switzerland</td>
<td>89 806</td>
</tr>
<tr>
<td>Turkey *</td>
<td>75 000</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>486 8</td>
</tr>
</tbody>
</table>

* Figures are not available from Eurostat and have therefore been estimated.
Definitions

EFCA European Federation of engineering Consultancy Associations – the sole association for the engineering consultancy industry in Europe

ECB European Central Bank

Turnover Total revenues/sales

Profit ratio/margin Turnover divided by profit, measured as EBITDA (earnings before interest, taxes, depreciation and amortization)

FTE Full time equivalent. Number of staff/employees is defined as FTE, where the total number of hours worked by the staff in a company is divided by the equivalent of a full year’s work load. Example: four half-time employees are counted as two employees according FTE

Order stock The total work/assignments that the firm has agreed to do in the future

Order stock in months Order stock defined by what it represents in time for the firm. How much time, how many months, does the work load of the current order stock represent for the whole firm? Example calculation: The order stock is €1 million. The firm has 20 employees. The average yearly (12 months) turnover/employee is €100,000. The current order stock/employee is: €1 million/20 = €50,000/employee. Order stock defined in months is: €50,000/€100,000 = 0.5 * 12 (months) = 6 months
Individual notes from the report presentation at the EFCA Conference 2019