The State of the European Consulting Engineering Sector

BAROMETER autumn 2018

efca

Representing FIDIC in Europe

EFCA Barometer Task Group

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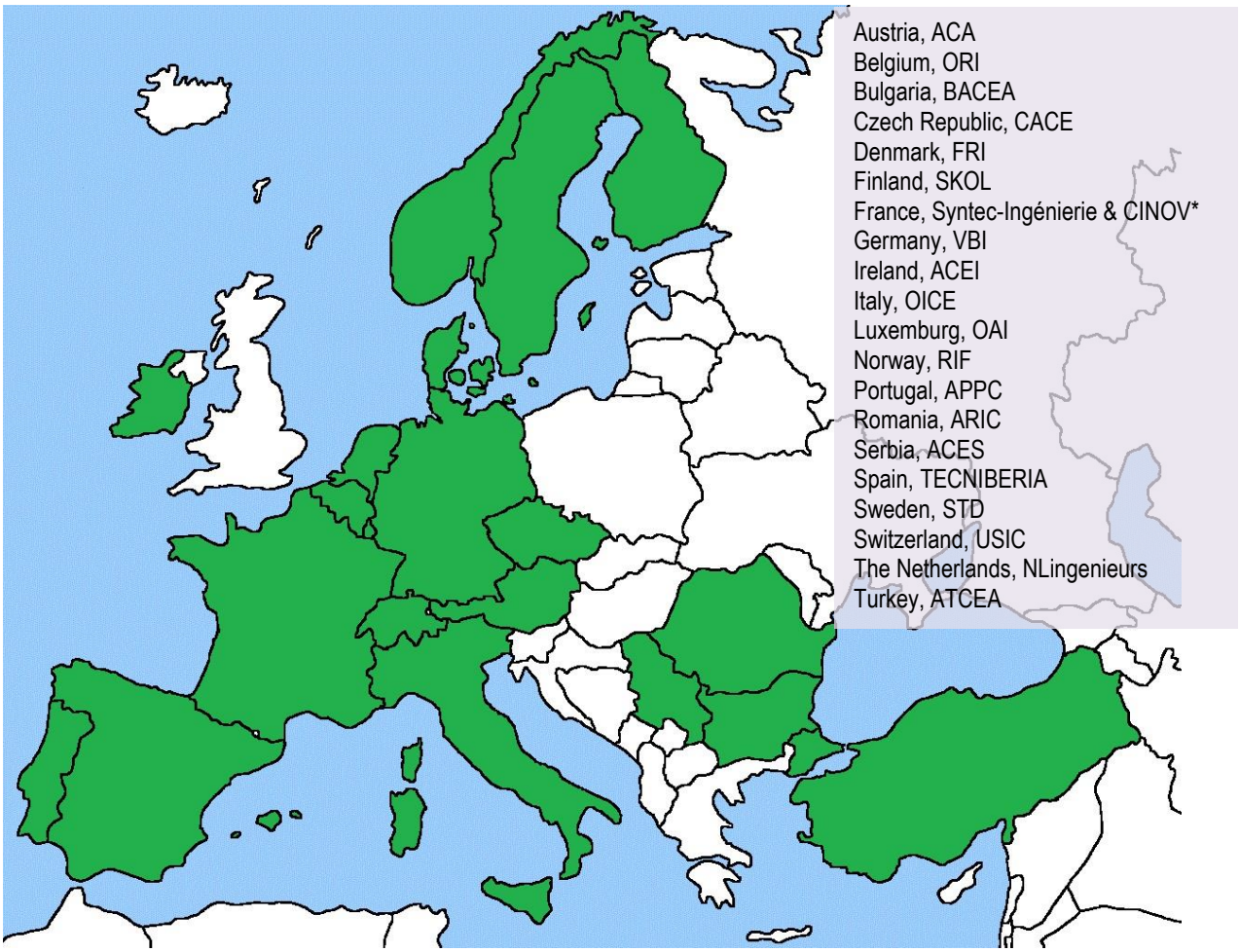
The Barometer Task Group of the European Federation of engineering Consultancy Associations (EFCA) has been conducting biannual surveys since 2012 to provide an overview of the consulting engineering sector in Europe, detailing developments for the latest six months and expected trends for the coming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

The Task Group has produced this report and analysis based on best available information on the current state of business (September and October 2018) collected through a survey by the member associations of EFCA for their respective countries.

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

Participating associations in this survey



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* CINOV-SYNTEC is representing France in the federation. The figures in the report represent aggregated data.

Executive summary
State of the European consulting engineering sector, Autumn 2018

The market is stable – although uncertainties are growing

The global size of the architecture and engineering market in Europe is around €350 billion, according to Eurostat (2016). The survey for this EFCA barometer was conducted in October 2018 with participation of 20 associations for consulting engineering companies across Europe.
The signals collected show a stable European market - with a few exceptions - and continued positive expectations for the consulting engineering sector. Profitability has improved and is expected to level out in the coming year.
Staff shortage and salary increases continue to be the main challenges, along with low fees. These factors further support the picture of a stabilised market, which is still growing in some parts. But there are also factors that challenge profitability.

The most significant trend emerging from the EFCA 2018 autumn barometer of the consulting engineering markets in Europe, is that we have a good market across Europe, except for Spain. The northern European countries have been growing for several years, though some markets appear to be levelling off at a high level. This trend will be interesting to follow in the EFCA 2019 spring Barometer. The southern European countries are continuing the growth that kicked off in 2016, but they are still recovering from weaker market conditions.
Political uncertainty is affecting the market because of some unpredictable factors, such as Brexit-related risks, global trade negotiations and the geopolitical tensions and security threats in Europe. The fact that growth is now a Europe-wide phenomenon does potentially increase the challenge of staff shortages as qualified staff will have easier access to jobs locally. This trend was identified in the spring of 2018 and appears to continue.

Market developments in the second half of 2018

Market signals are positive. In eight of 20 countries there has been an increase in the average order stock of the consulting engineering companies. In the remaining 12 countries order stock is stable. Compared to the EFCA 2017 autumn barometer, order stock has increased by almost two months.
As a result of growing order stocks, turnover is also increasing. 12 out of 20 countries expect the total turnover of the consulting engineering industry in their country to increase. Profitability is also improving across Europe. The average profit ratio (EBITDA) for 2017 was 7.9%, which was an improvement from 7.1% in 2016. The 2018 profit ratio is not yet available. However,12 countries expect improved profitability for 2018, two countries expect a decline and the remaining six countries expect no change. The outlook for 2019 indicates that profitability is levelling out: 16 countries expect no change, two expect an increase and two countries expect profitability to decrease.

In conclusion, activity in the consulting engineering industry in Europe is stable. The markets in southern Europe are still improving while the markets in Northern Europe are staying at a steady level of progress after a period of steady growth. The market is good or very good in 14 out of 20 countries. Only Spain still has a weak market. Profitability is expected to level out in 2019 as staff shortages lead to more competition for employees which speed up salary increases. Low fees and staff shortage are 2 major challenges for the consulting engineering industry.

QUICK OVERVIEW, OVERALL MARKET IN EUROPE

Current market status	Expected orderstock coming 6 months	Expected turnover coming 6 months	Expected staff change coming 6 months

EFCA Barometer Task Group, November 2018

Current state of European markets

To give an overview of the state of different markets around Europe, member associations in each country were asked about the state of the national market. They were offered 5 options, with short definitions:

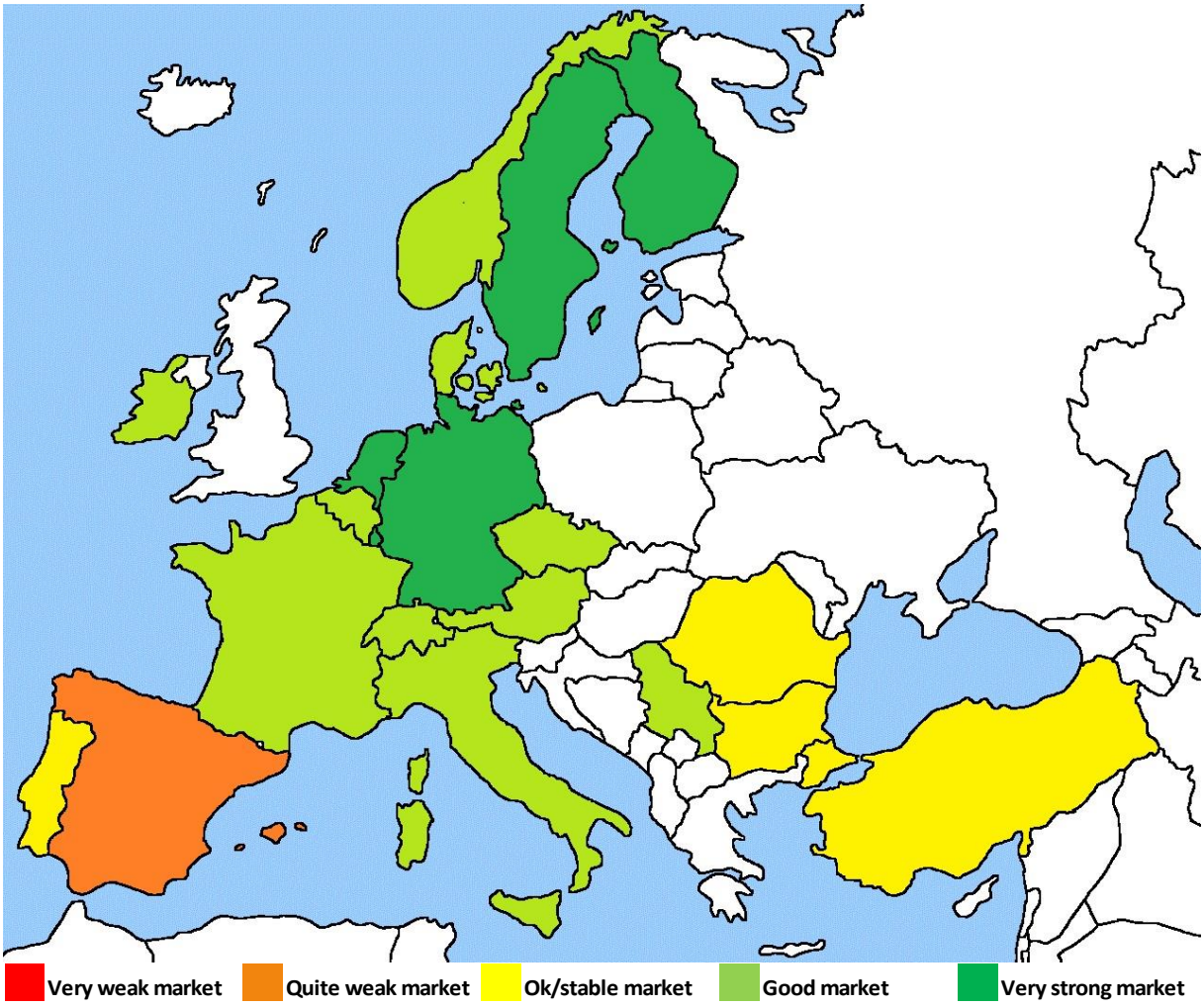
- Market is very weak. (Few projects & downsizing staff)
- Market is quite weak. (Difficult to keep everyone busy)
- Market is ok. (Could be stronger, but most staff are busy)
- Market is good. (All staff are busy)
- Market is very strong. (Rejecting projects and lacking staff)

The map below shows the reply for each country: dark red stands for very weak and dark green for very strong.

The figure is giving a general impression of existing differences around Europe. It is also helping to understand better the actual results brought on by changes in order stocks or turnover in a country. Indeed, 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. 19 out of 20 countries declared their market was ok, good or very strong. Only Spain stated that its market was weak.

Current state of European markets. EFCA survey autumn 2018



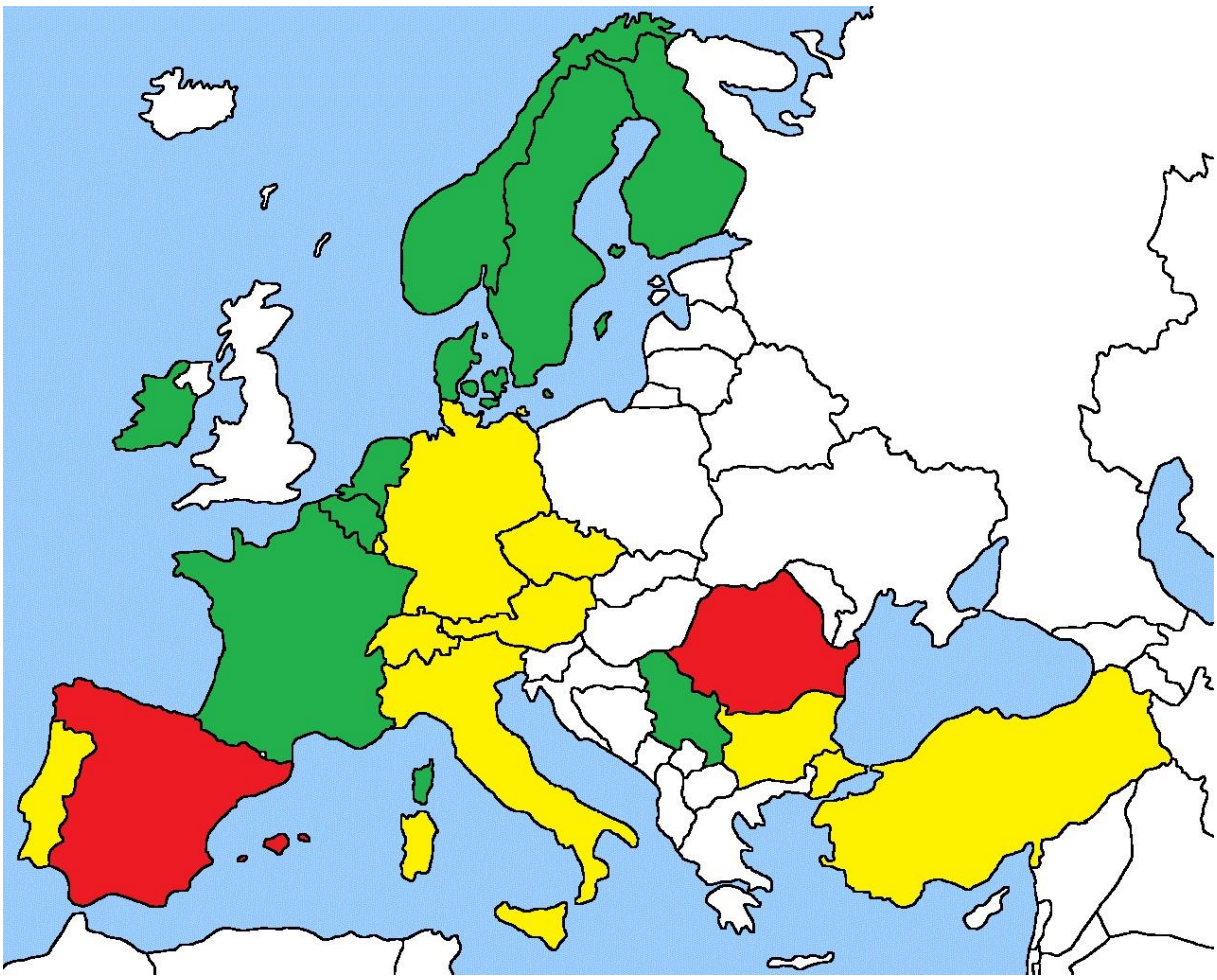
Employment

Actual developments in staffing

Employment trends vary between the participating countries. Over the 6 months between spring 2018 and autumn 2018, staff (Full Time Equivalent, FTE[1]) increased in nine out of 20 countries (Belgium, Denmark, Finland, France, Ireland, Norway, Serbia, Sweden, The Netherlands).

Staff remained unchanged in nine countries (Austria, Bulgaria, Czech Republic, Germany, Italy, Luxemburg, Portugal, Switzerland, Turkey). In two countries (Romania, and Spain) staff decreased.

Employment, past six months. EFCA survey autumn 2018



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

Developments in employment for the consulting engineering sector – past six months, October 2018

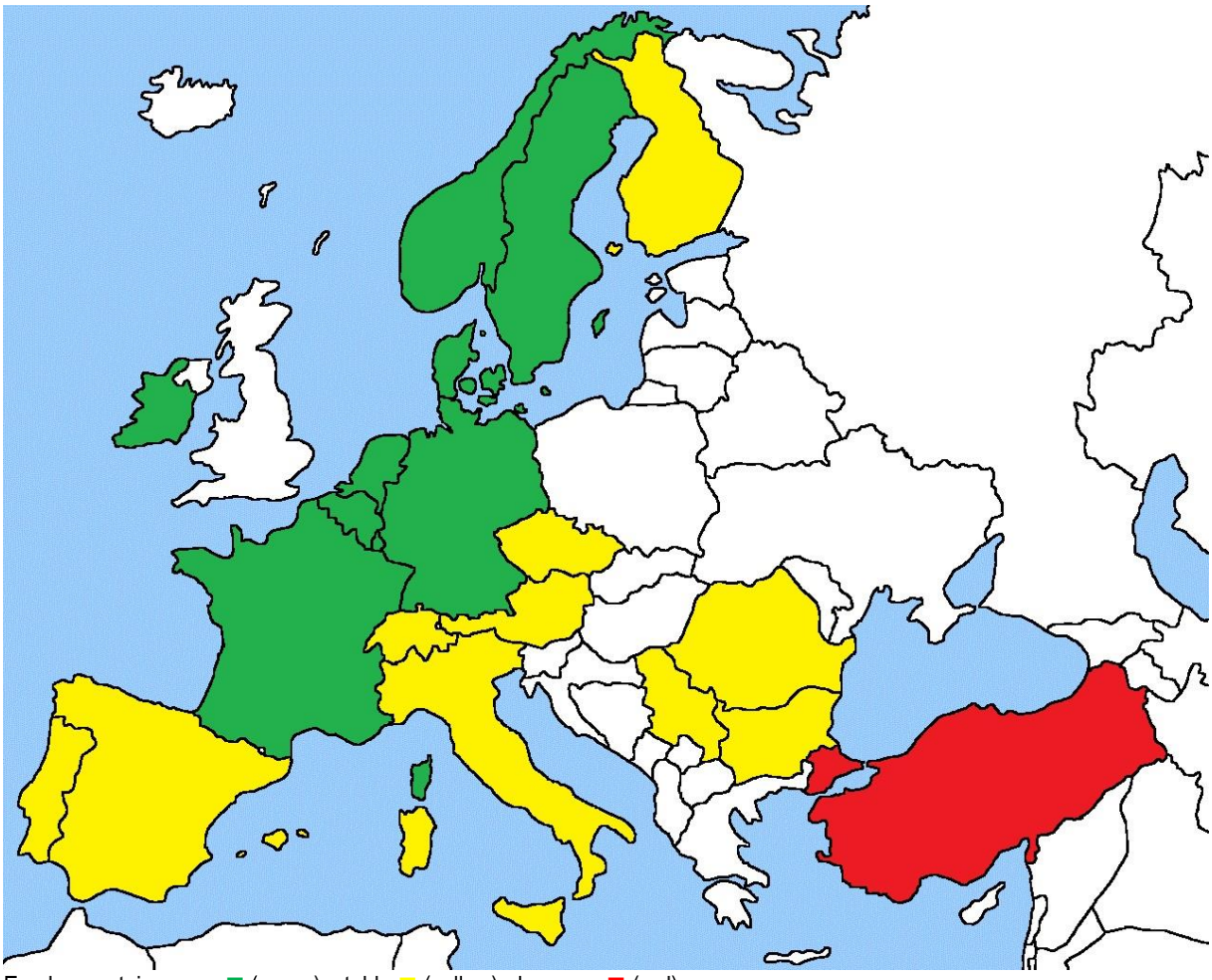
[1] *Number of staff/employees is defined as FTE, Full Time Equivalent, where the total number of hours worked by the staff in a company is divided by the equivalent of a full year's work load. Example: four half-time employees are counted as two employees.*

Expected developments in staffing

In October 2018, nine out of 20 countries (Austria, Finland, Ireland, Luxemburg, Norway, Serbia, Spain, Switzerland, The Netherlands) expected an increase of staff (FTE). Ten countries expected a status quo (Belgium, Bulgaria, Czech Republic, Denmark, France, Germany, Italy, Portugal, Romania, Sweden). Only Turkey expected a decrease.

The general trend indicates a shortage of qualified available staff at European level, although there are regional differences. Expected staff development and shortage of qualified staff do not necessarily need to go hand in hand. There may be a shortage of certain competences despite there isn't an overall urge for staff increases, but in many countries they do coincide. The industry needs more engineers and consequently the shortage creates bottlenecks for growth in many areas. As southern Europe catches up with central- and northern Europe, staff shortage will become even more critical.

Employment, coming six months. EFCA survey, autumn 2018



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

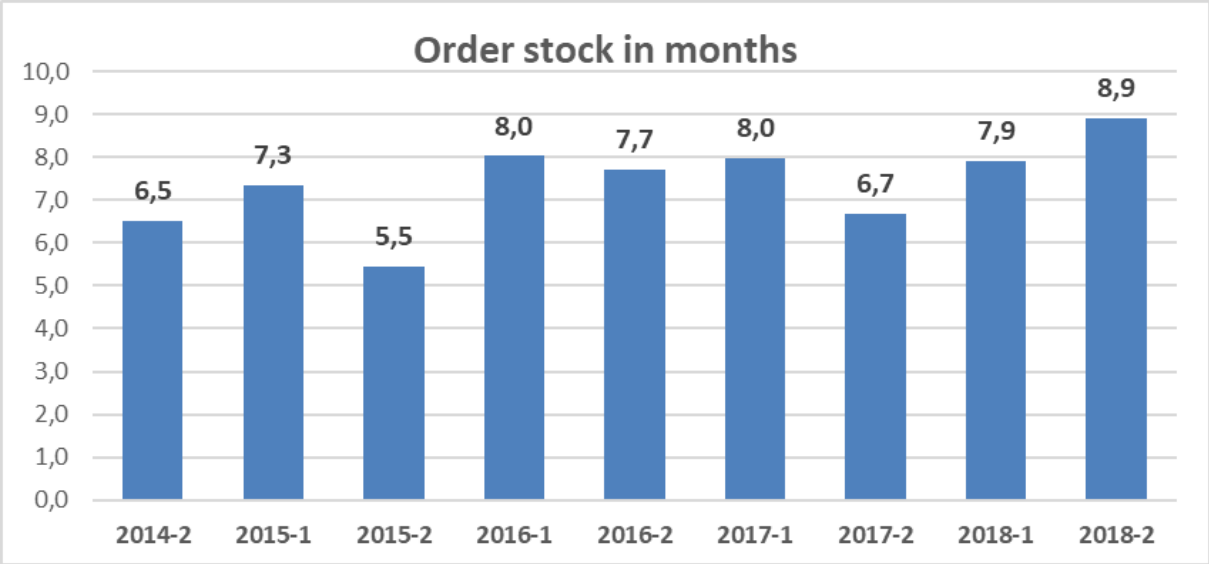
Developments in employment for the consulting engineering sector – expectations for the coming six months, October 2018

Order Stock

Average order stock[2]

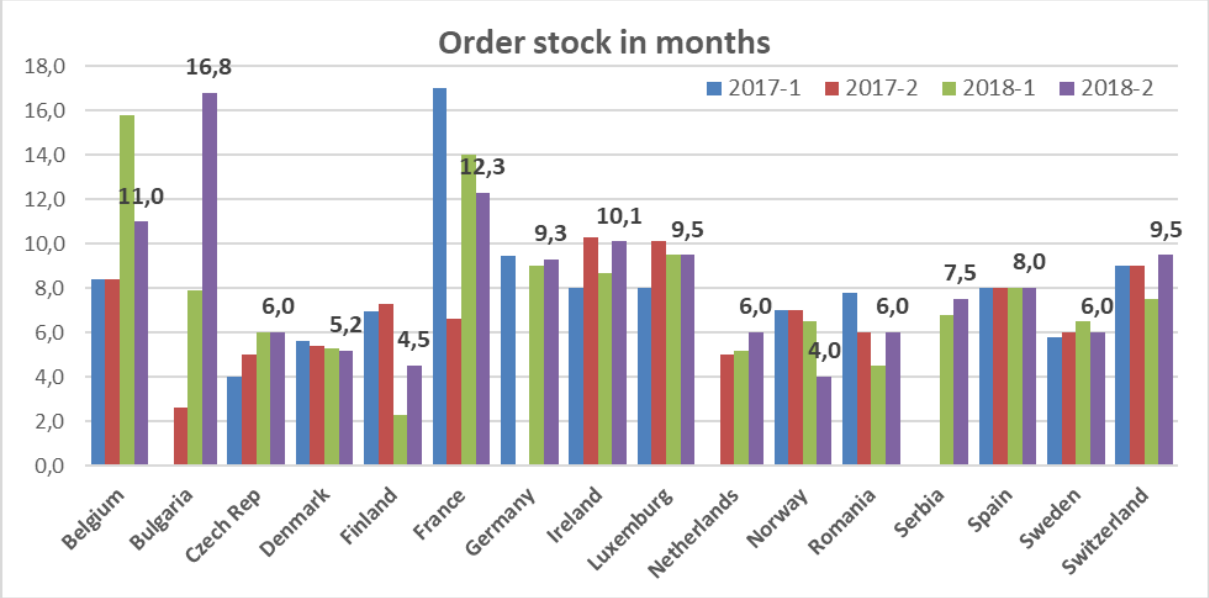
In October 2018, the average amount of work that consulting engineering companies in Europe had 'in stock' (order stock) was 8.9 months' worth. In the last survey (spring 2018) the average order stock was 7.9 months. Although variations in countries that participated in the consecutive barometer surveys may partly explain the difference, it still represents a significant growth. The graph below indicates the average order stock in months at European level.
The European average is calculated by weighing the national averages by the respective market size (in employees) according to the most recent Eurostat figures.

Average order stock, European average 2014-2018



The graph below shows the average order stock per country. Data are not available for all countries or all surveys, but the general trend is that of growing order stocks around Europe.

Average order stock by country. EFCA survey, 2018 autumn survey

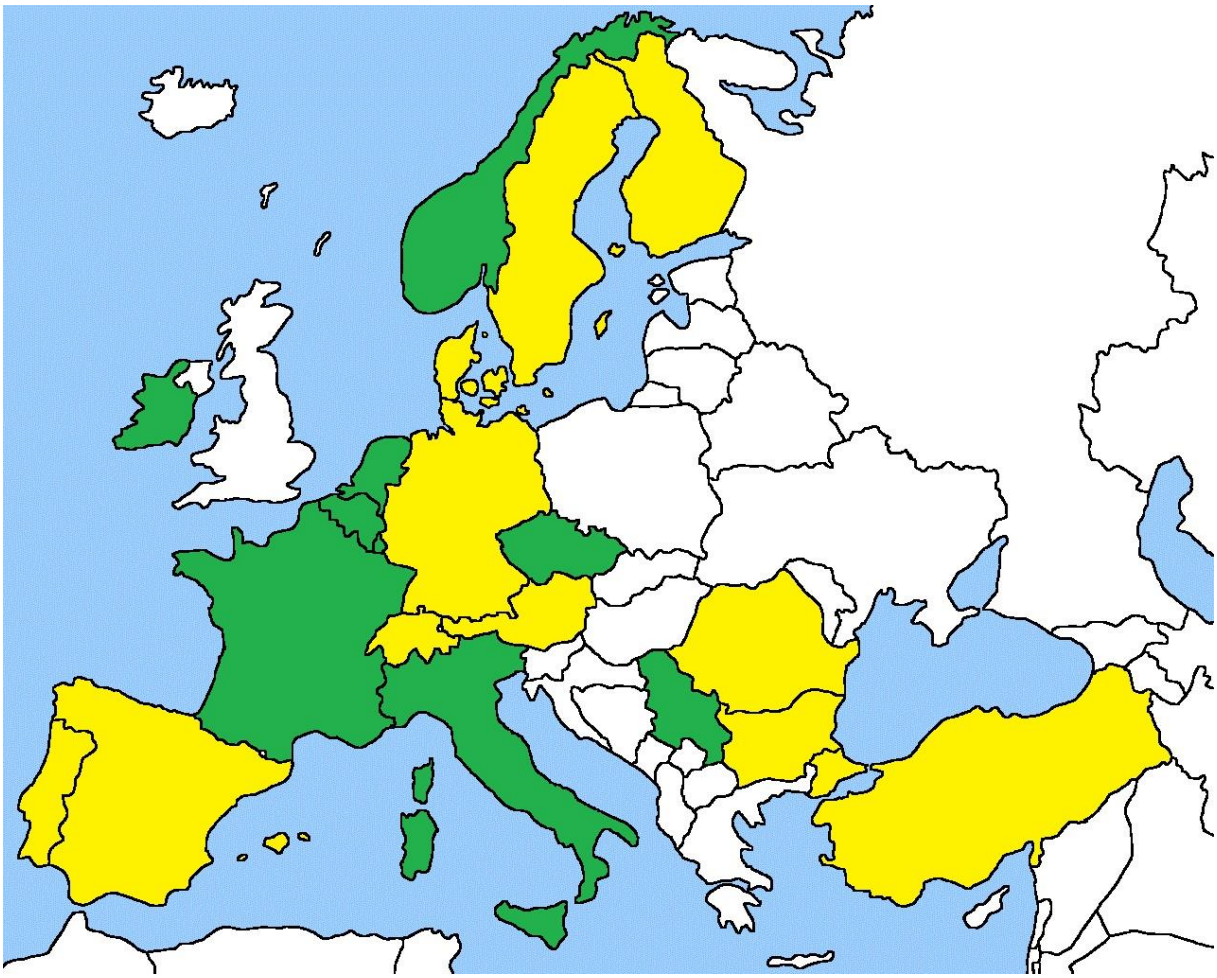


[2] The *order stock in the survey is defined as 'the total work that a firm has agreed to do in the future'. Example: The order stock is €1 million and the firm has 20 employees. The average annual turnover/employee is €100,000 and the current order stock/employee is €1 million/20 = €50,000/employee. The current order stock therefore represents €50,000/100,000 = 0.5 * 1 year = 6 months' work for the firm.*

Actual developments in order stock

The actual order stocks grew in 9 countries (Belgium, Czech Republic, France, Ireland, Italy, Luxemburg, Norway, Serbia, The Netherlands) in the past 6 months (before October 2018).
In the remaining eleven countries (Austria, Bulgaria, Denmark, Finland, Germany, Portugal, Romania, Spain, Sweden, Switzerland, Turkey) order stocks remained unchanged.

Order stock, past six months. EFCA survey, autumn 2018



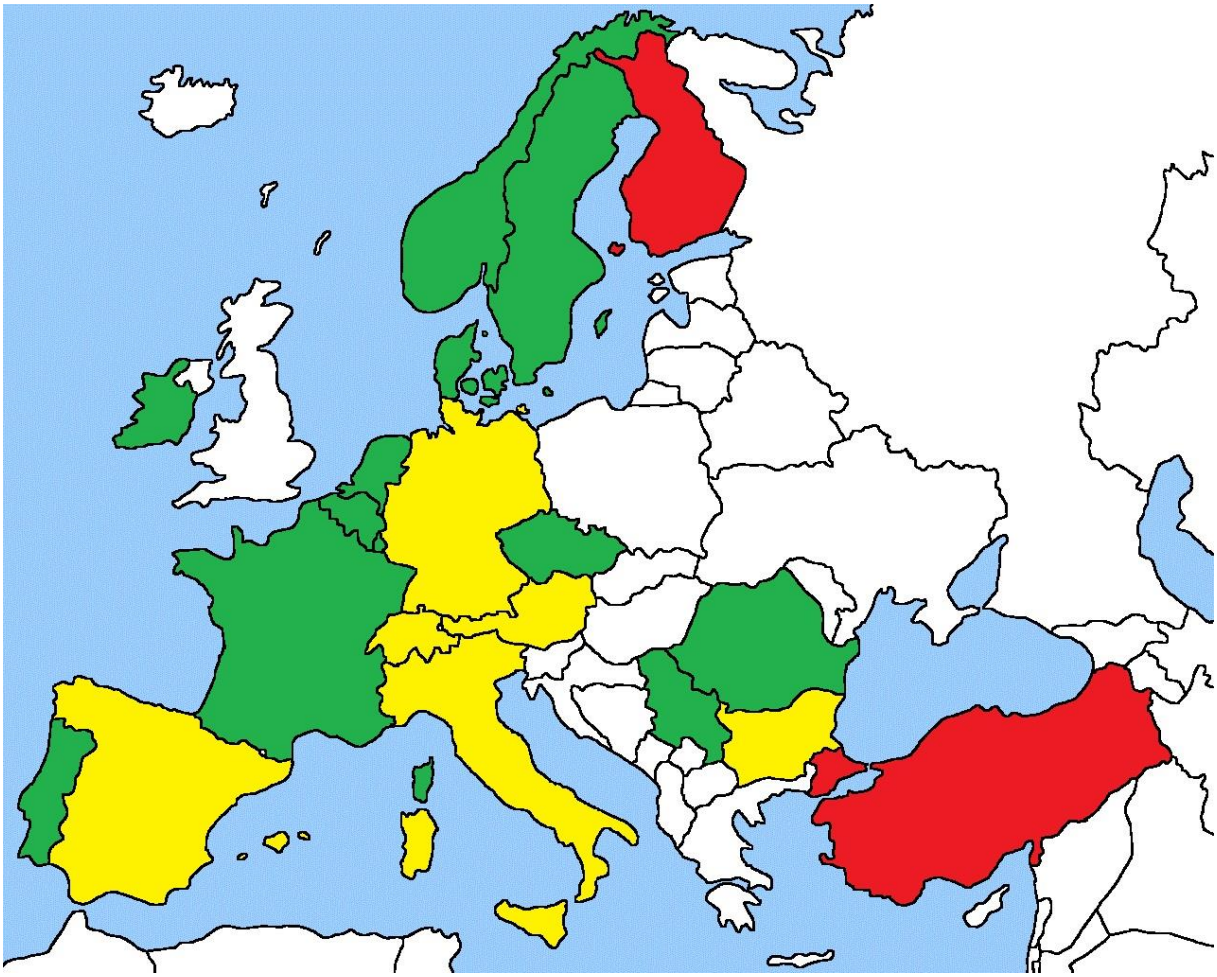
Order stock increase ■ (green); stable ■ (yellow); decrease ■ (red)

Expected developments in order stock

Order stocks are expected to increase over the coming 6 months (October 2018) in twelve countries (Belgium, Czech Republic, Denmark, France, Ireland, Luxemburg, Norway, Portugal, Romania, Serbia, Sweden, The Netherlands).

Six countries (Austria, Bulgaria, Germany, Italy, Spain, Switzerland) are expecting unchanged order stocks for the coming six-month period and 2 countries (Finland and Turkey) are expecting a decrease.

Order stock, coming six months. EFCA survey, autumn 2018



Order stock increase ■ (green); stable ■ (yellow); decrease ■ (red)

The development in actual as well as expected order stock reinforce the picture of a stabilized consulting engineering market in Europe, considering that most markets are doing ok or better. However, with two countries (Finland and Turkey) expecting declining order stock, and more countries expecting a stable development, we may see the first indicators for a levelling out of the growth in central and northern Europe.

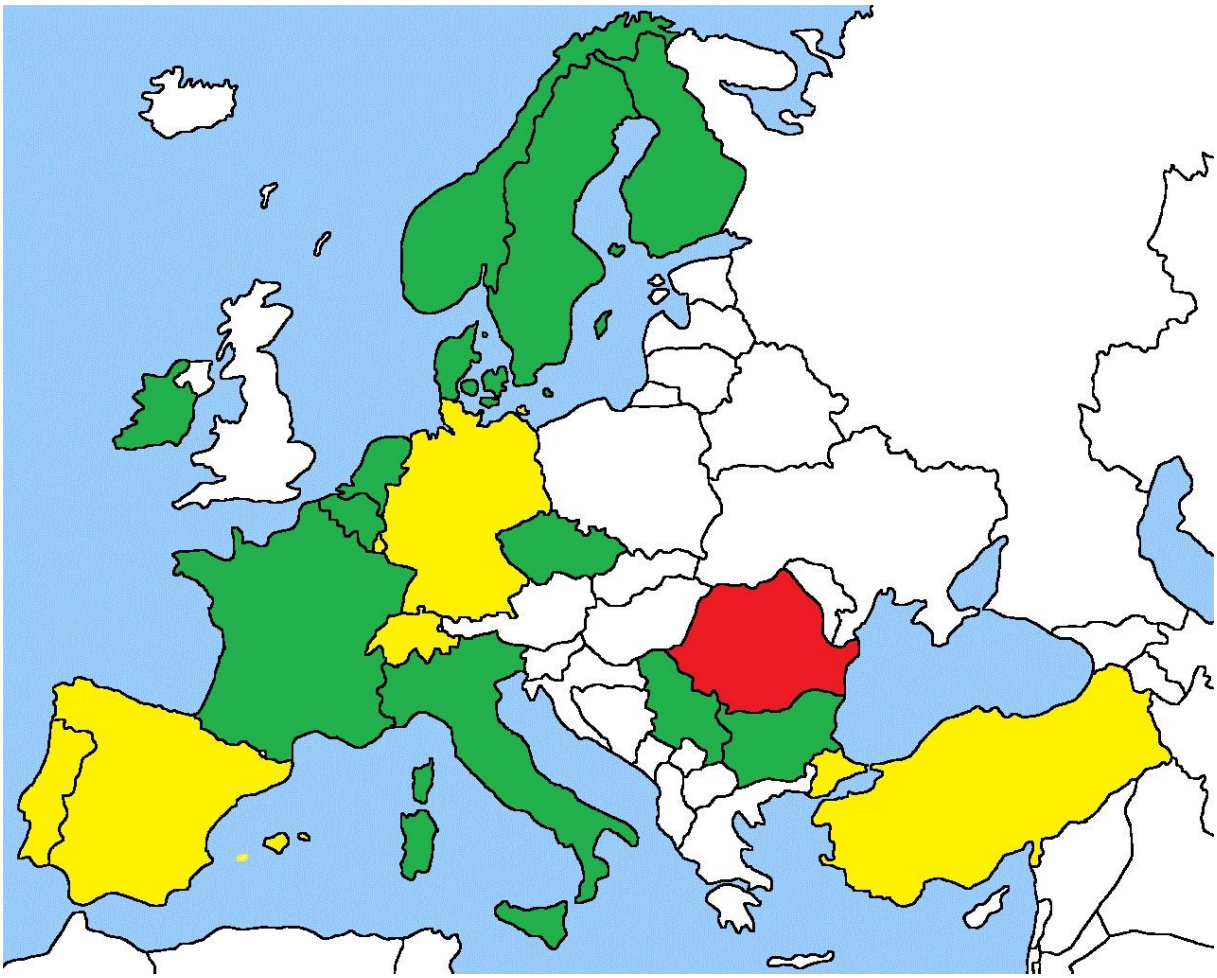
Turnover

Actual developments in turnover

As order stocks across Europe grow so does turnover in most European markets.

Twelve countries reported growing turnover for the past six months (Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Ireland, Italy, Norway, Serbia, Sweden, The Netherlands). Six countries reported a status-quo in turnover (Germany, Luxemburg, Portugal, Spain, Switzerland, Turkey). Only Romania reported that turnover had fallen in the six months before October 2018. Austria did not respond.

Turnover, past six months. EFCA survey, autumn 2018



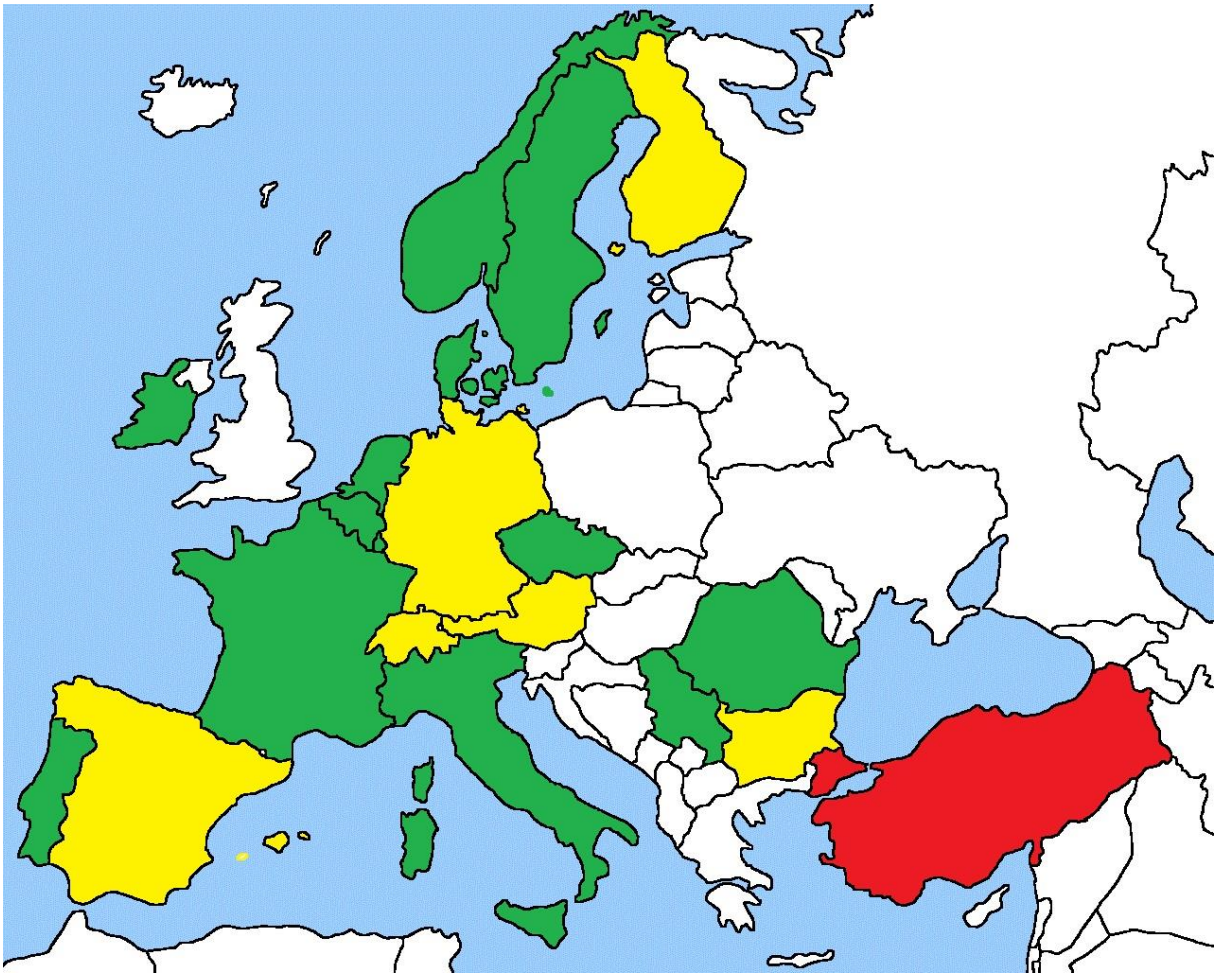
Turnover: increase ■ (green); stable ■ (yellow); decrease ■ (red).

Expected developments in turnover

Thirteen out of 20 participating countries are expecting an increase in turnover for the coming six months (Belgium, Czech Republic, Denmark, France, Ireland, Italy, Luxemburg, Norway, Portugal, Romania, Serbia, Sweden, The Netherlands).

Six countries are expecting a status-quo when it comes to turnover (Austria, Bulgaria, Finland, Germany, Spain, Switzerland,). Turkey is the only country expecting decreasing turnover in the coming six months.

Turnover, coming six months. EFCA survey, autumn 2018



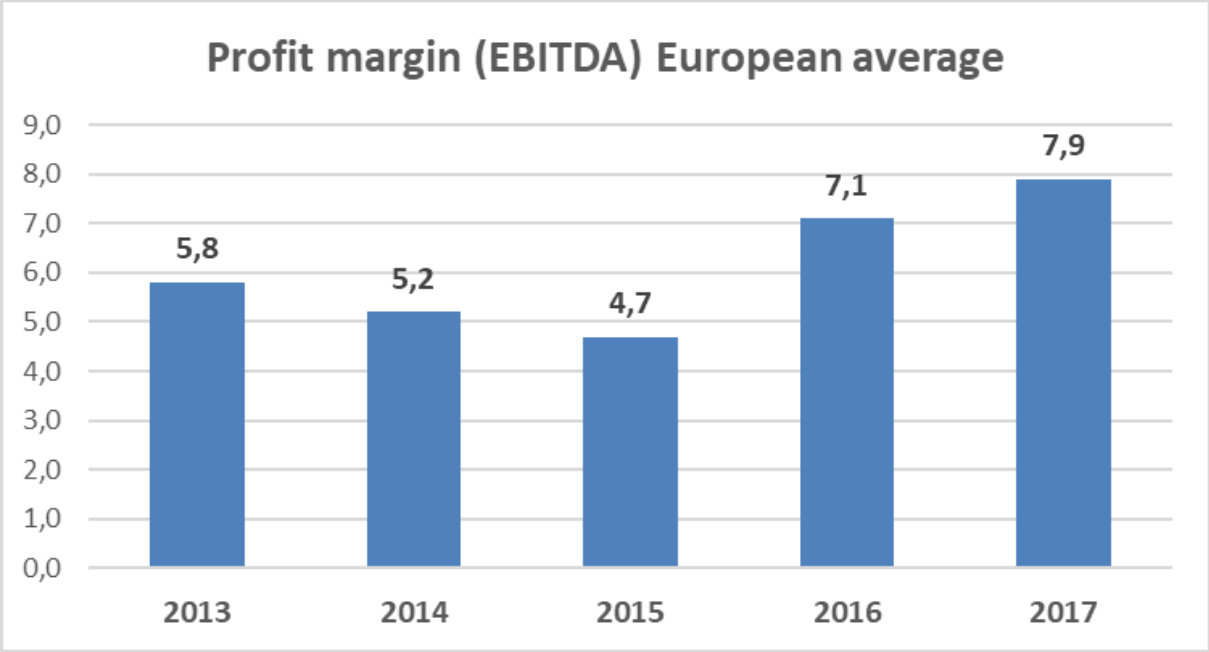
Turnover: increase ■ (green); stable ■ (yellow); decrease ■ (red).

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.

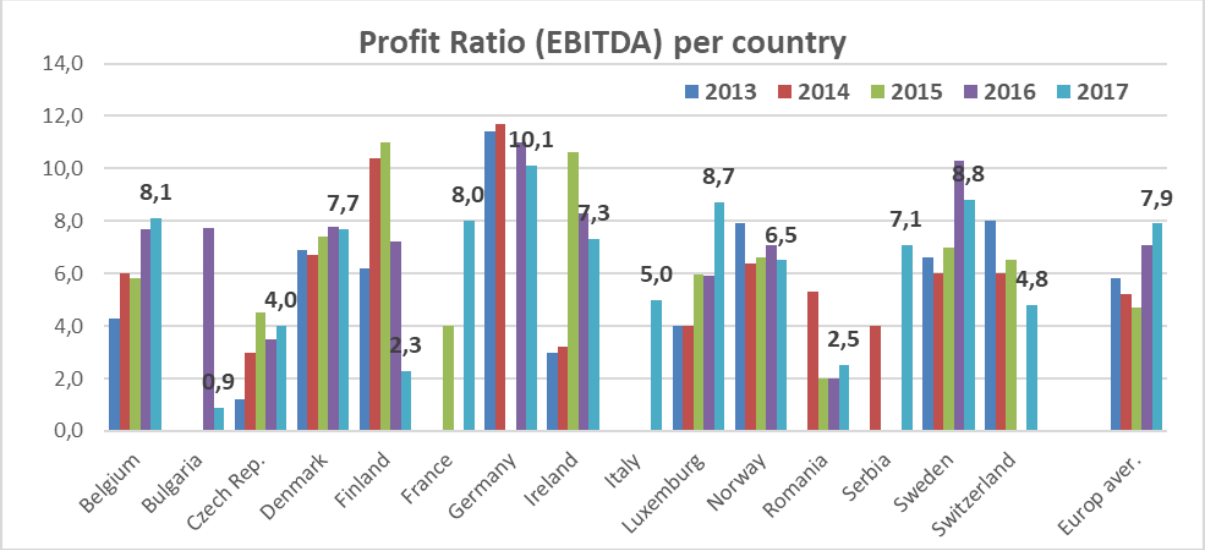
The average weighted European profit ratio (EBITDA) in 2017 was 7.9% of total turnover[3].
The development of the profit ratio at European level is shown below. The trend is positive, and profitability is increasing. It must be said, though, that changes in participating countries between different surveys 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. No figures are available for all countries and surveys. Overall, profitability is improving.

Profit ratio (EBITDA) per country, 2013-2017



[3] 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.

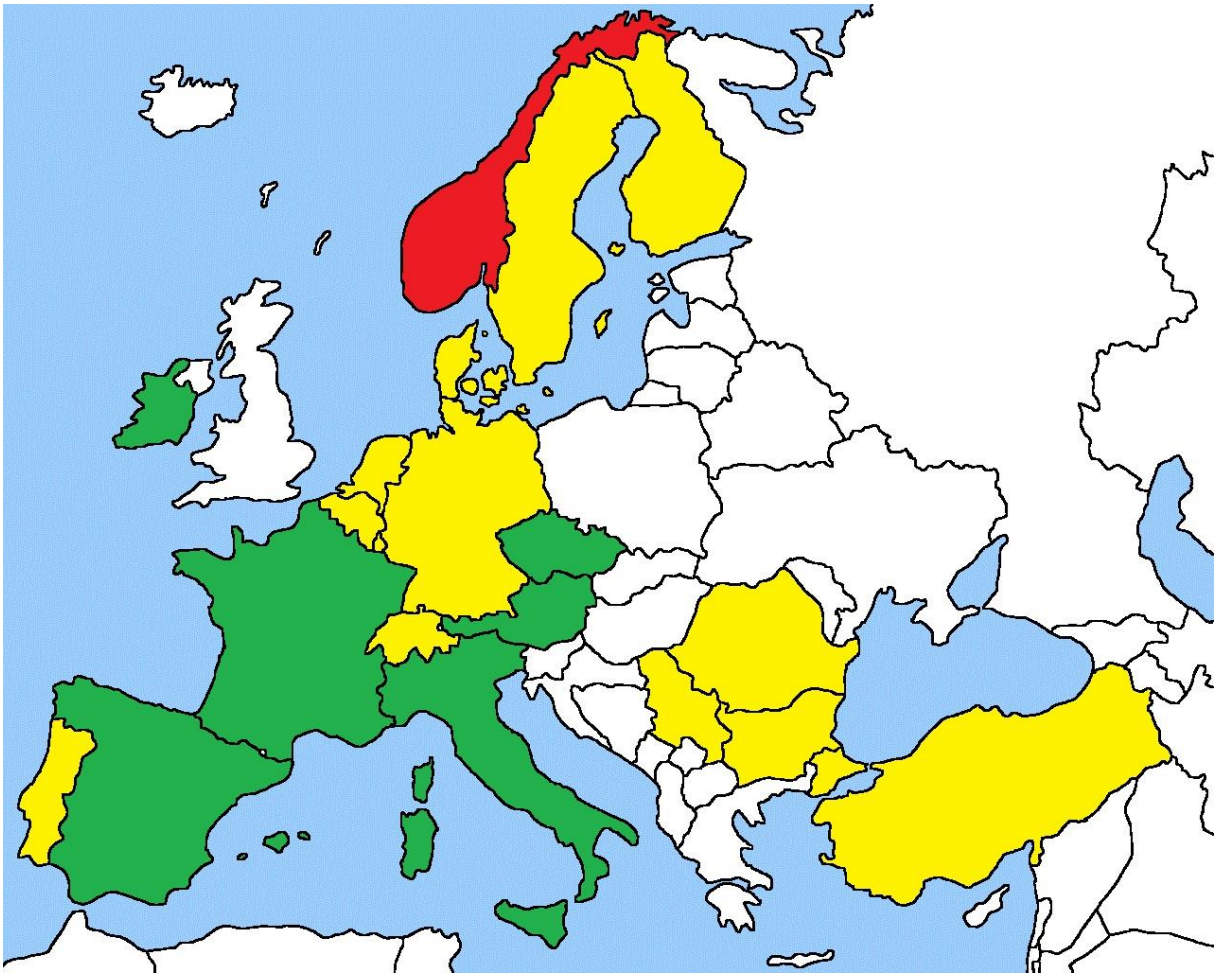
Expected developments in profitability in 2018 compared to 2017

Based on preliminary numbers, six countries expect profitability to have improved in 2018, compared to 2017 (Austria, Czech Republic, France, Ireland, Italy, Spain).

Thirteen countries expect profitability to be unchanged in 2018 compared to 2017 (Belgium, Bulgaria, Denmark, Finland, Germany, Luxemburg, Portugal, Romania, Serbia, Sweden, Switzerland, The Netherlands, Turkey).

Only Norway expect profitability to have decreased in 2018 compared to 2017.

Expected profitability for 2018 compared to 2017. EFCA survey, autumn 2018



Profitability increase ■ (green); stable ■ (yellow); decrease ■ (red)

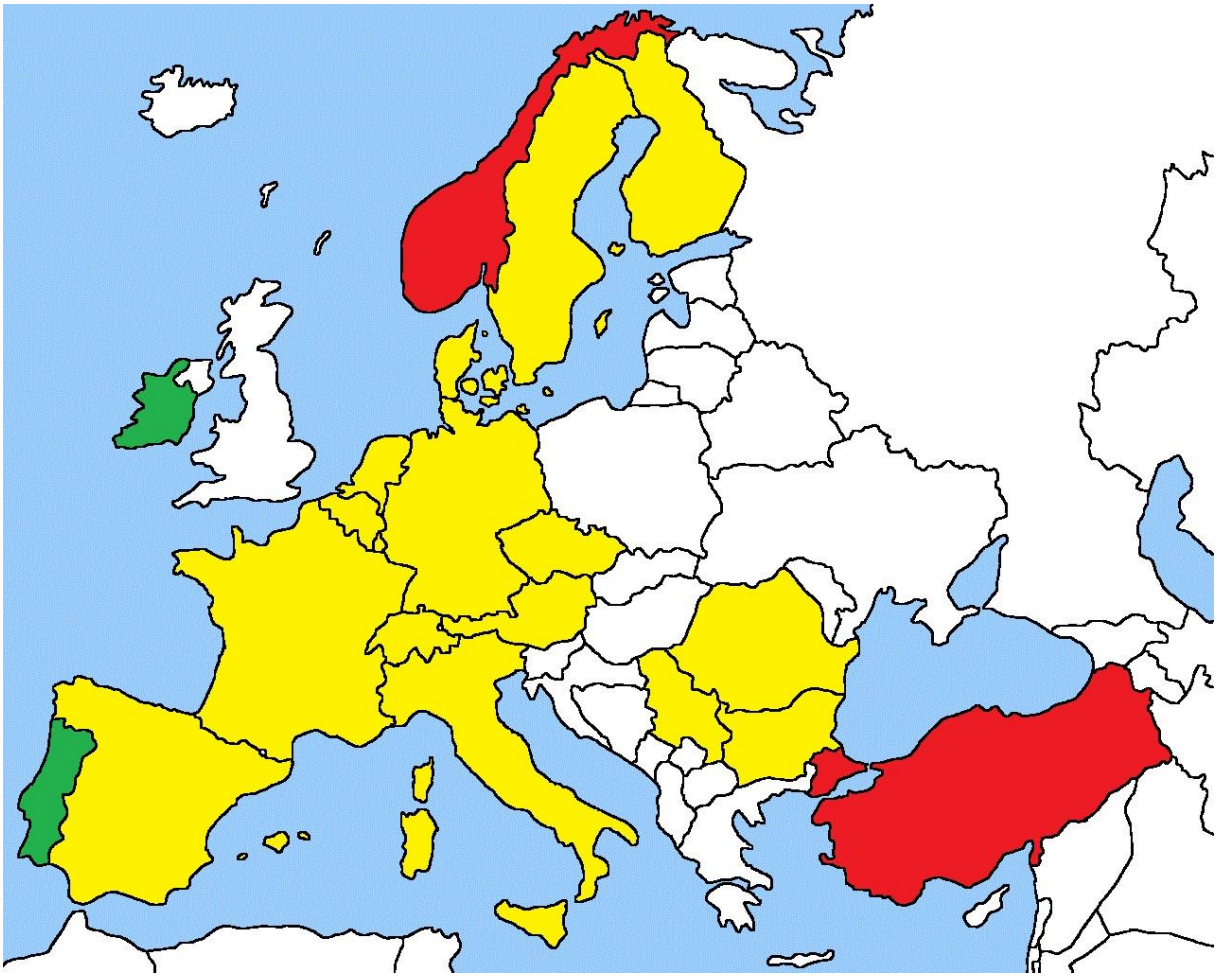
Expected developments in profitability in 2019 compared to 2018

Only two countries are expecting profitability to improve in 2019, compared to 2018 (Ireland and Portugal).

In 16 countries profitability is expected to remain unchanged in 2019 (Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Romania, Spain, Serbia, Sweden, Switzerland, The Netherlands).

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

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



Profitability increase ■ (green); stable ■ (yellow); decrease ■ (red)

More markets are stabilising at a high level, or growing at a steady pace. However, profitability is expected to level out in 2019, most likely due to salary increases resulting from shortages in staff.

Challenges for the consulting engineering industry in Europe

In each survey the participating associations are asked to select the five main challenges the sector is facing in their respective country.

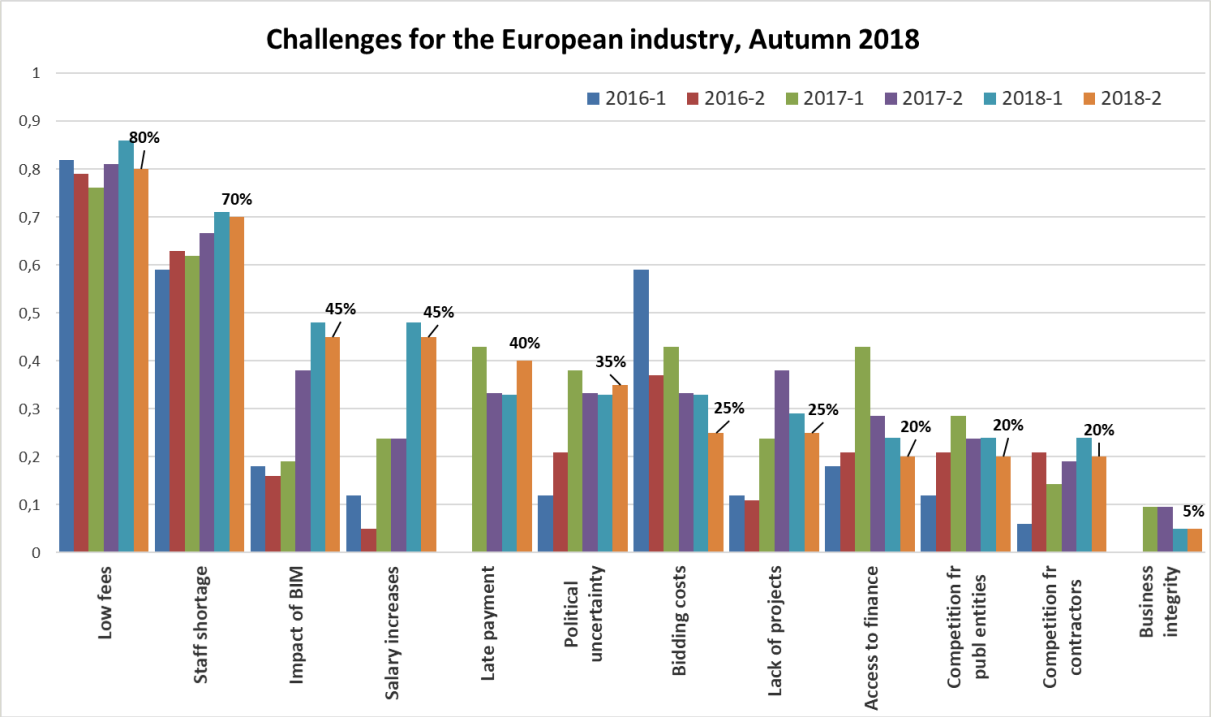
The results in this survey are in line with previous surveys; low fees remain the main challenge that the industry is facing, followed by staff shortages.

Impact of BIM and salary increases have jumped to the third position followed by concerns about salary increases. Late payments are still a worry for the sector, and this has worsened since the spring 2018 survey. It is worth noting that political uncertainty has been a concern for the industry in the last two years and it will probably remain so in the coming years.

The chart below indicates the development of the main challenges at European level between the spring of 2016 and the autumn 2018 survey. It 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 to a greater degree from competitors, clients and other industries, 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 and new business models will be key drivers for the next improvement in profitability.

Main challenges faced by companies at European level. EFCA survey, autumn 2018



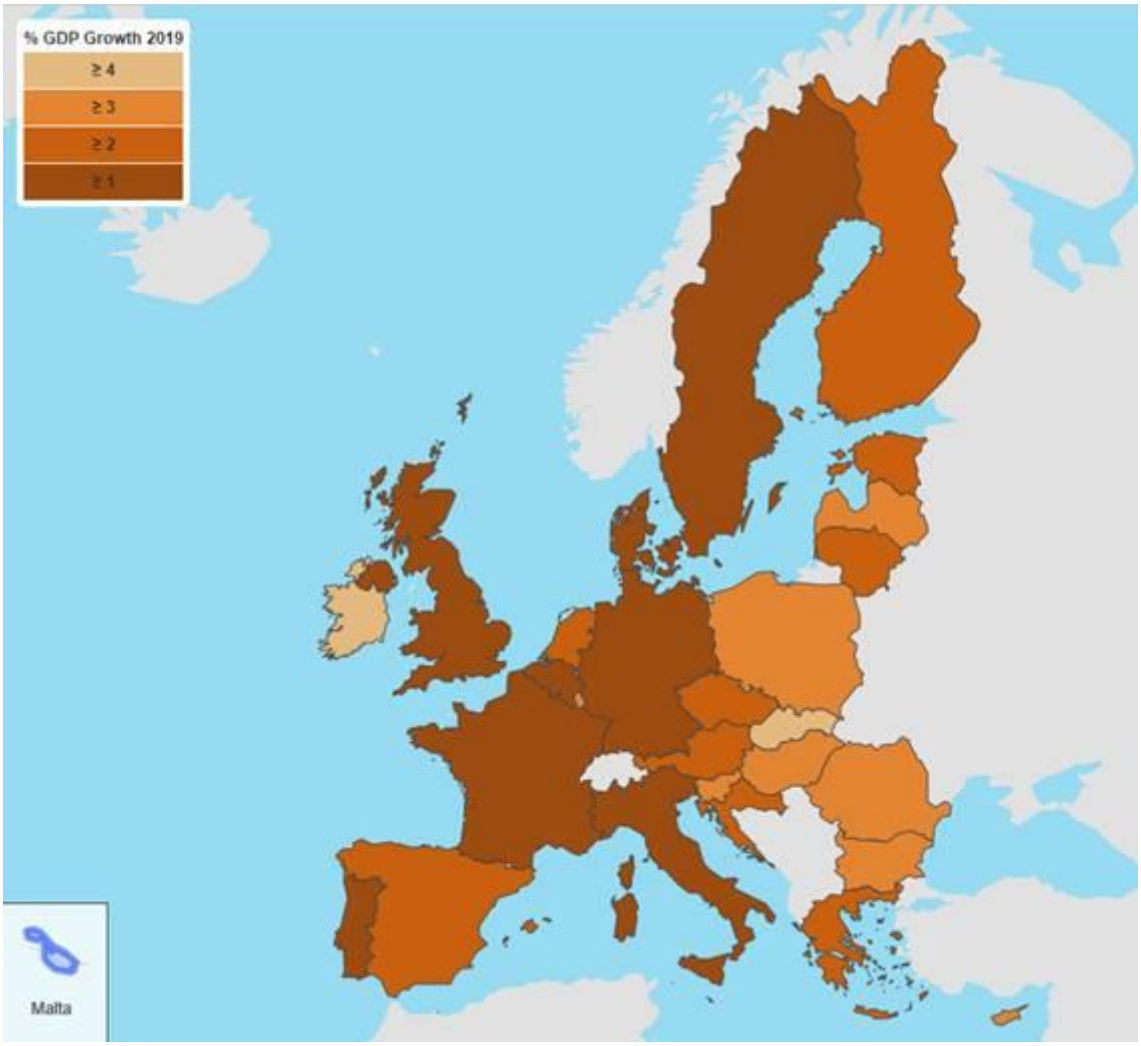
Appendix

The appendix carries information from the European Commission and Eurostat that could be of interest to the consulting engineering industry, or that explains economic development on a larger scale.

Most important is the European Commission "Growth Map 2019". The growth map illustrates that the European economy is on track to grow at its fastest pace in a decade. This is very much in line with the expectations presented in the EFCA Barometer – autumn 2018.

Key messages from the European Commission in the autumn 2018 forecast are:

- Economic expansion set to continue in all Member States, but at a lower rate than previously seen
- Domestic demand will be the main driver for growth
- Labour market improvements continue, but at a lower rate, as the pool of potential workers is shrinking
- Inflation expected to move up very gradually
- Public finances are improving further
- External downside risks are rising, creating more uncertainty: Global trade, Brexit etc.
- Capacity constraints emerging in some Member States but signs of remaining slack elsewhere.



Definitions

EFCA	European Federation of engineering Consultancy Associations – the sole association representing 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