



The State of the European Consulting Engineering Sector

BAROMETER spring 2018



 Representing
FIDIC in Europe

EFCA Barometer Task Group

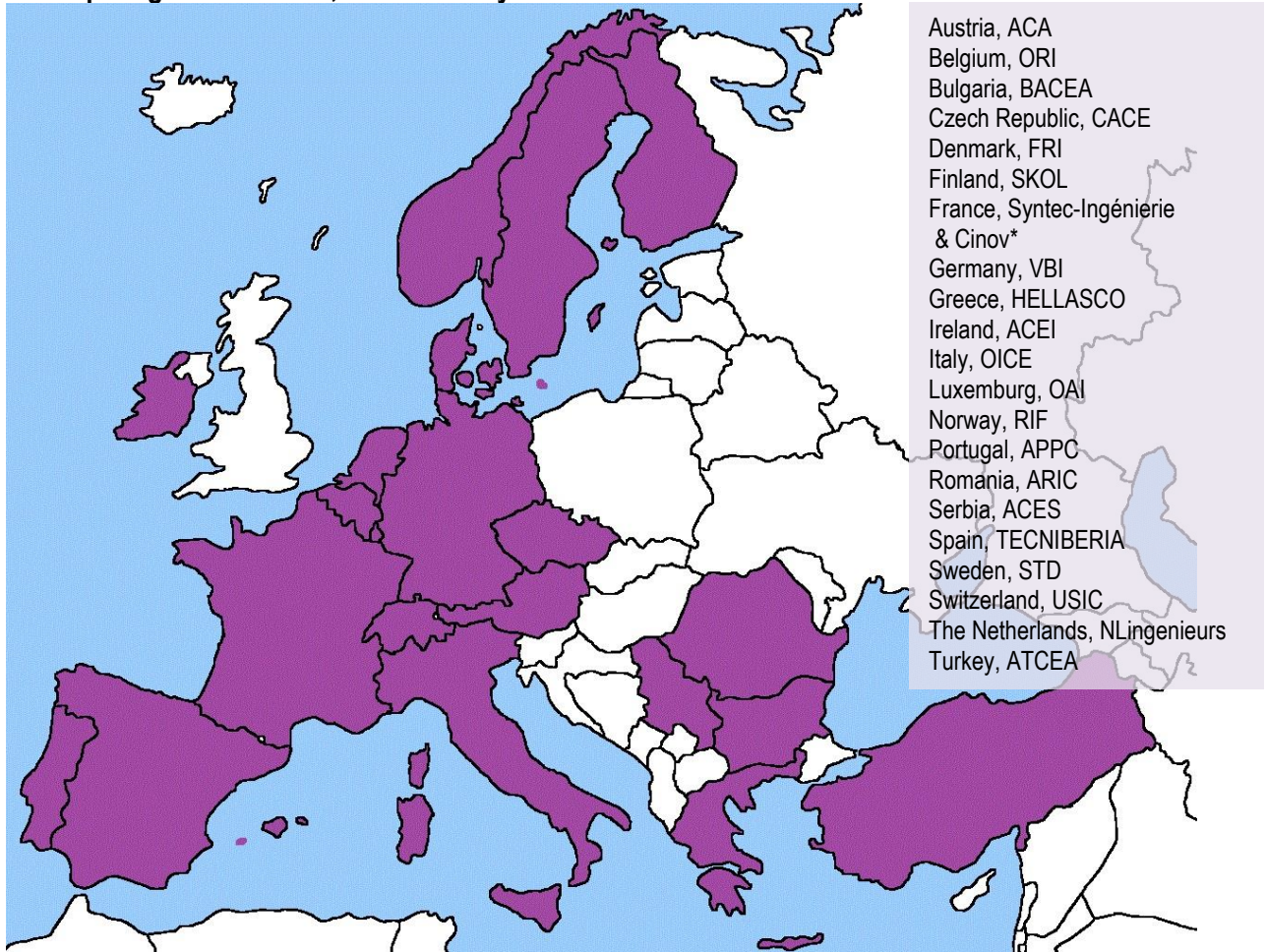
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The Barometer Task Group of the European Federation of engineering Consultancy Associations (EFCA) has been conducting biannual surveys since 2012 to provide an overview of the consulting engineering sector in Europe, detailing developments for the 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 (March and April 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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* 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 2018

The market is growing – staff shortages will be the main challenge

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 March - April 2018 with participation of 21 associations for consulting engineering companies across Europe. The signals collected show a stable growing market with continued positive expectations for the Consulting Engineering sector in Europe. Although there are still variations between countries, the market as a whole continues to improve. Profitability is expected to increase. Staff shortage and salary increases are becoming bigger challenges to European markets and lack of projects is becoming less of a challenge; factors that further support the picture of a stable and growing market. But also factors that may challenge profitability.

The most significant trend emerging from the EFCA 2018 spring barometer of the consulting engineering markets in Europe, is that we can identify a steady general improvement of the markets across Europe. The northern European countries have had positive growth for several years and are still growing at a steady level. The southern European countries are continuing the positive growth that kicked off in 2016, but they are still recovering from weaker market conditions.

In general, the sector is reflecting the growth of the European economies, particularly the level of investment in gross fixed capital formation. The GDP growth in the Eurozone countries is slightly lower than for other European countries. The market for engineering services is affected negatively by budget constraints of the governments across Europe, as the public sector has reduced its investments. However, despite retraction in the public market, the order stocks of many consulting engineering companies are still growing thanks to increasing demand in the private sector. The main challenges facing European consulting engineers are low fees and lack of qualified staff.

Moreover, political uncertainty is affecting the market, because some factors are not predictable such as Brexit-related uncertainty 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, without travelling, no matter where in Europe they are located.

Market developments in early 2018

Market signals are positive. In twelve of 21 countries there has been an increase in the average order stock of the consulting engineering companies.

As a result of growing order stocks, turnover is also increasing. 14 out of 21 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 2016 was 7.1%, which was a significant improvement from the 4.7% of 2015. The 2017 figure is not yet available, but eight countries expected improved profitability for 2017, six countries expected a decline and the remaining seven countries expected no change. The outlook for 2018 is more positive, all countries, but two, expect profitability to improve or remain stable.

In conclusion, activity in the consulting engineering industry in Europe is stable and improving. The market is good or very good in 13 out of 21 countries. Only Greece is expected to face continued difficulties. Profitability is improving as project volumes increase, but staff shortages lead to more competition for employees that speed up salary increases. Staff shortage and low fees are two of the main challenges to 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



Current state of European markets

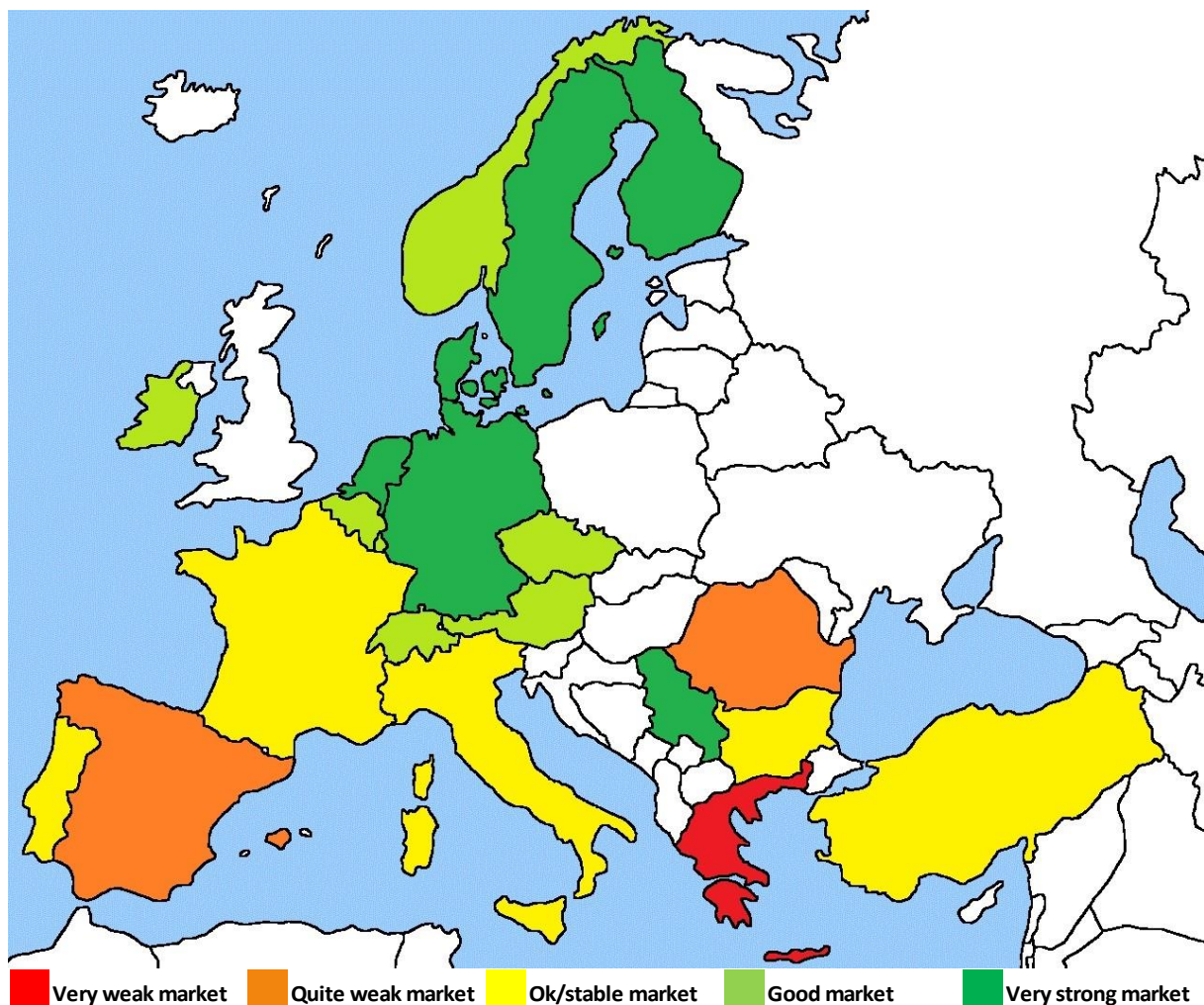
To give an overview of the state of different markets around Europe, Member Associations in each country were asked about the state of the national market. They were offered five options, with short definitions:

- 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 three countries stated their market was weak (Spain and Romania) or very weak (Greece). The European market has stabilized in the last couple of years.

Current state of European markets. EFCA survey spring 2018



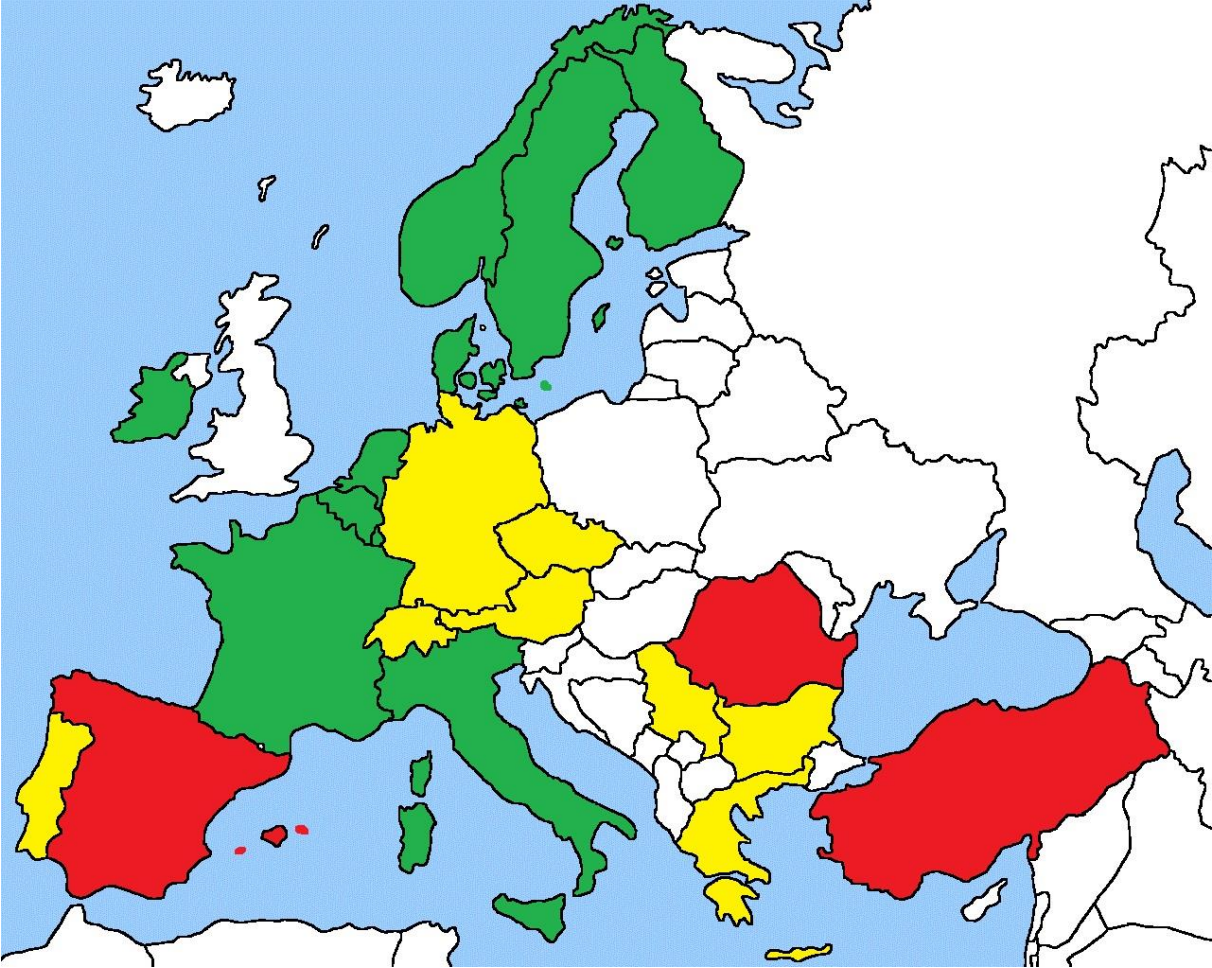
Employment

Actual developments in staffing

The trends in employment vary between the participating countries. Over the six months between autumn 2017 and spring 2018, staff (Full Time Equivalent, FTE¹) increased in 10 out of 21 countries (Belgium, Denmark, Finland, France, Ireland, Italy, Luxemburg, Norway, Sweden and the Netherlands).

In eight countries (Austria, Bulgaria, Czech Republic, Germany, Greece, Portugal, Serbia and Switzerland) staff remained unchanged. In three countries (Romania, Spain and Turkey) staff decreased.

Employment, past six months. EFCA survey spring 2018



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

Developments in employment for the consulting engineering sector – past six-month, April 2018

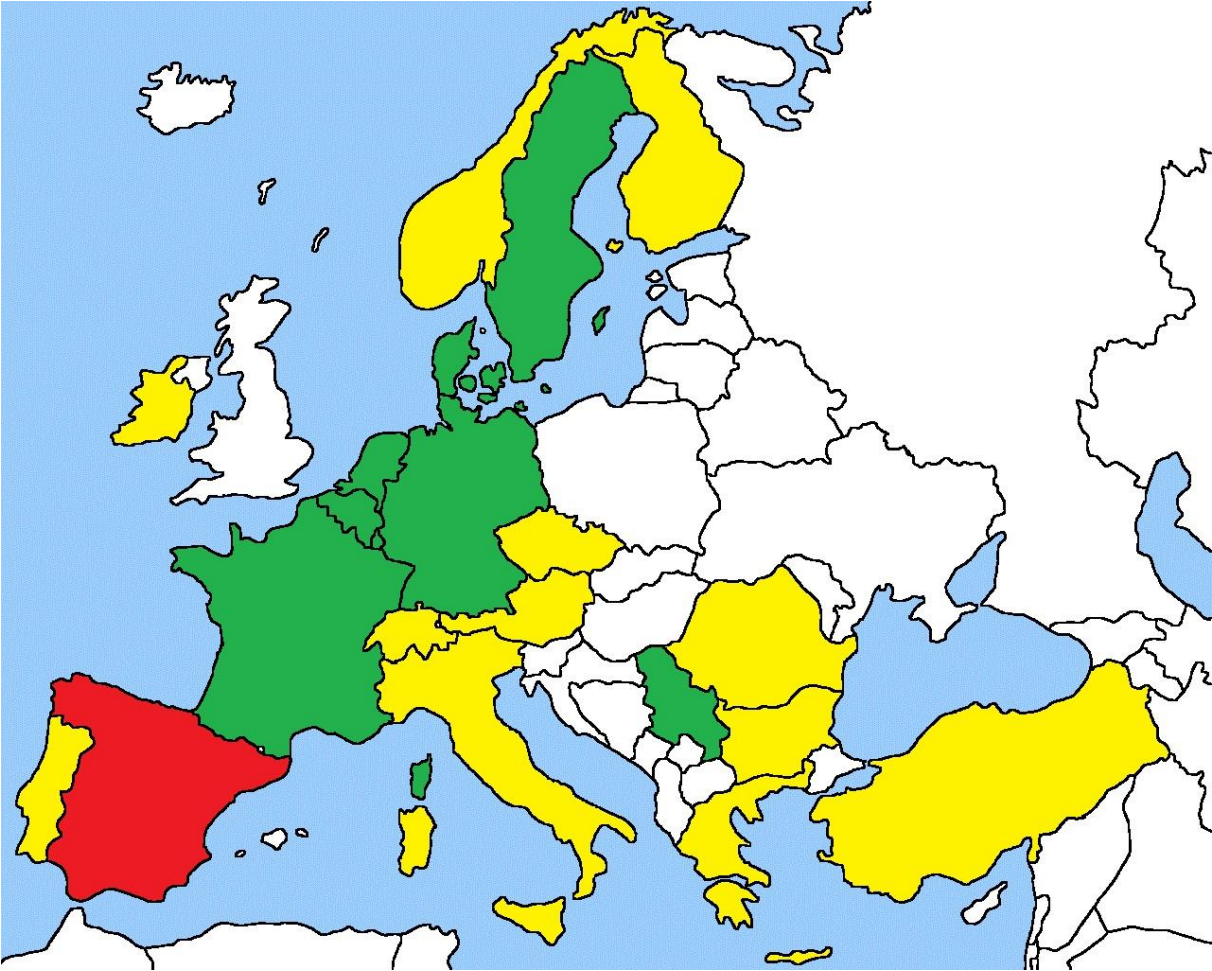
¹ Number of staff/employees is defined as FTE, Full Time Equivalent, where the total number of hours worked by the staff in a company is divided by the equivalent of a full year's work load. Example: four half-time employees are counted as two employees.

Expected developments in staffing

In April 2018, eight out of 21 countries (Belgium, Denmark, Finland, France, Luxemburg, Sweden and the Netherlands) expected an increase of staff (FTE). 12 countries expected a status quo (Austria, Bulgaria, Czech Republic, Finland, Greece, Ireland, Italy, Norway, Portugal, Romania, Switzerland and Turkey). Only Spain expected a decrease.

In general, the trend is there is 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 not being an overall urge for staff increases. But, in many countries they do coincide. The industry needs more engineers, the shortage therefore creates bottle-necks for growth in many areas. The more southern Europe catches up with central- and northern Europe, the more critical the staff shortage will become.

Employment, coming six months. EFCA survey, spring 2018



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

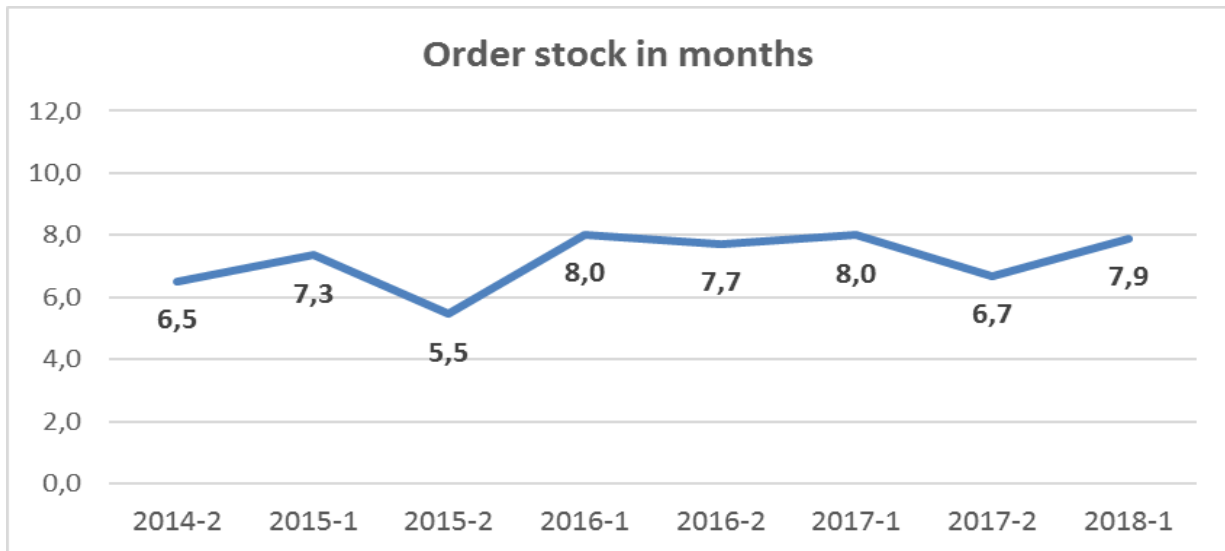
Developments in employment for the consulting engineering sector – expectations for the coming six months, April 2018

Order Stock

Average order stock²

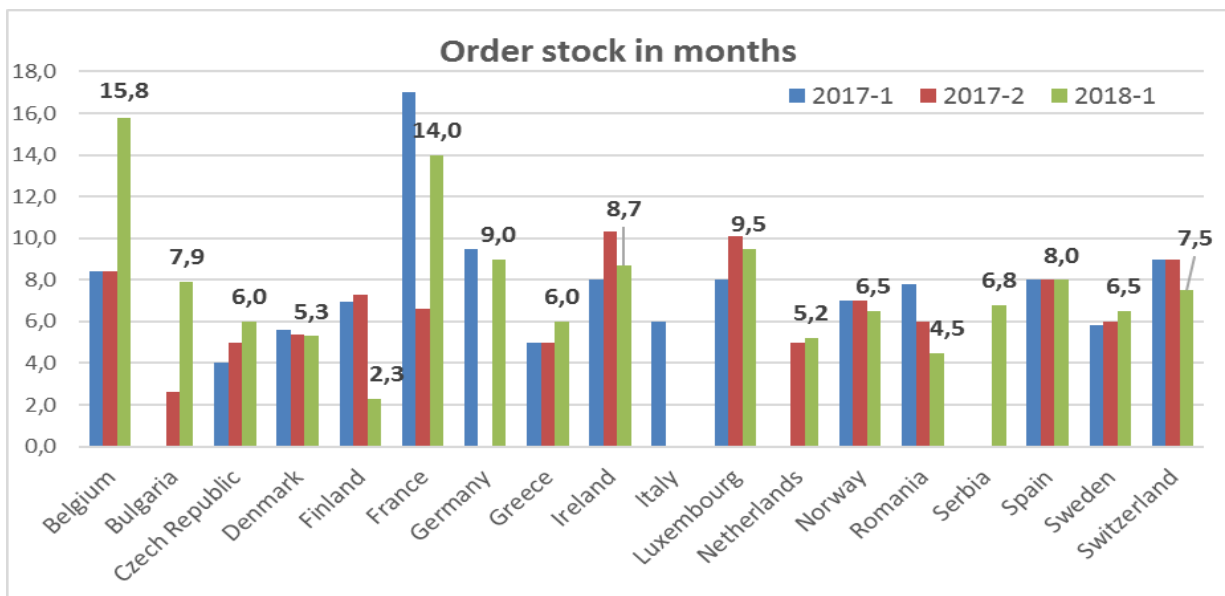
In April 2018, the average amount of work consulting engineering companies in Europe had ‘in stock’ (order stock) was 7.9 months’ worth. In the last survey (autumn 2017) the average order stock was 6.7 months. Although differences in the participating countries between the surveys may explain some of the differences, this still represents a significant growth. The graph below shows the average order stock in months on a 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.



In the graph below the average order stock per country is presented. 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. 2018 spring survey.



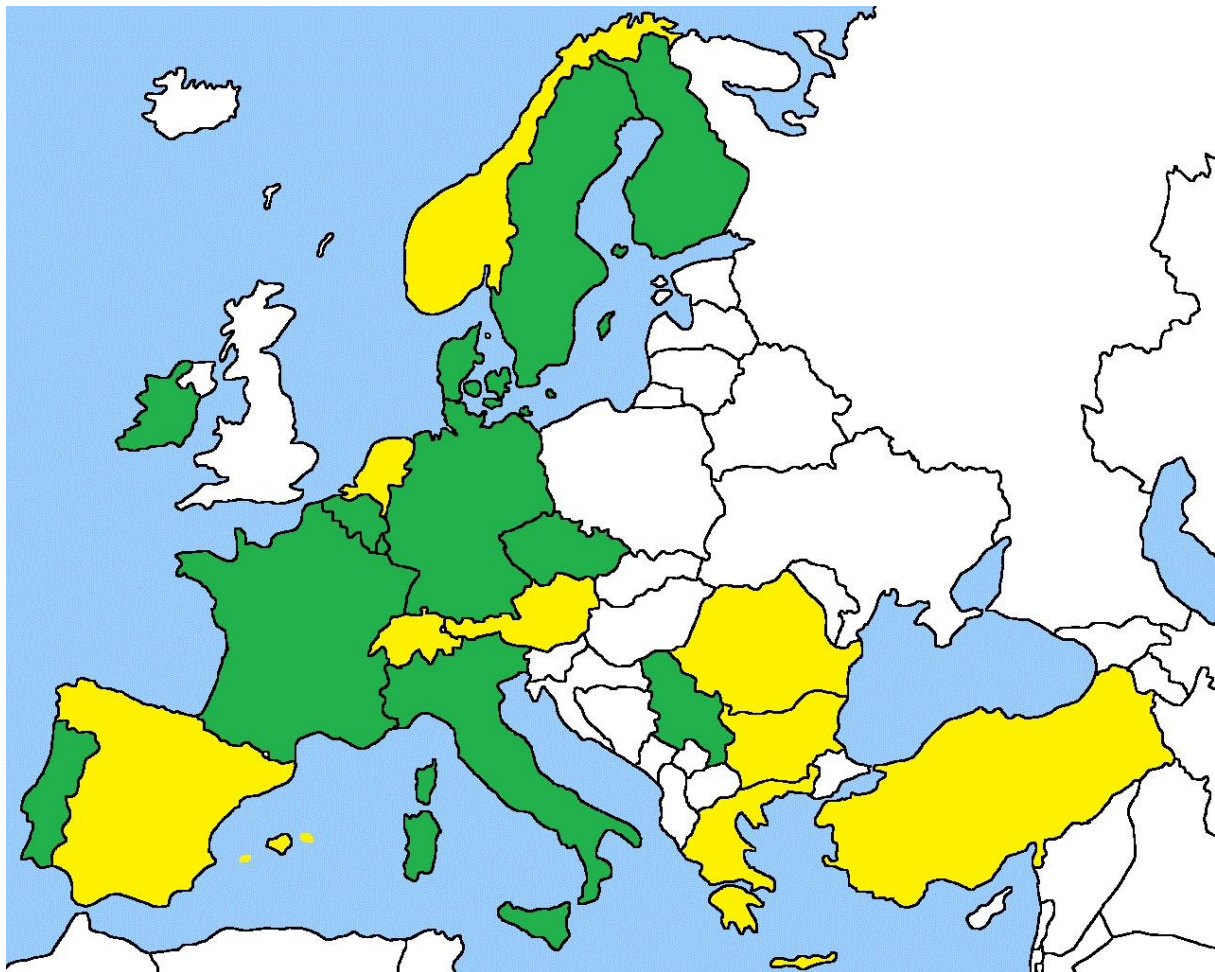
² The order stock in the survey is defined as ‘the total work that a firm has agreed to do in the future’. Example: The order stock is €1 million and the firm has 20 employees. The average annual turnover/employee is €100,000 and the current order stock/employee is €1 million/20 = €50,000/employee. The 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 twelve countries in the past six months (before April 2018) (Belgium, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Luxemburg, Portugal, Serbia and Sweden).

In the remaining nine countries (Austria Bulgaria, Greece, Norway, Romania, Spain, Switzerland, Turkey and the Netherlands) order stocks were unchanged.

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



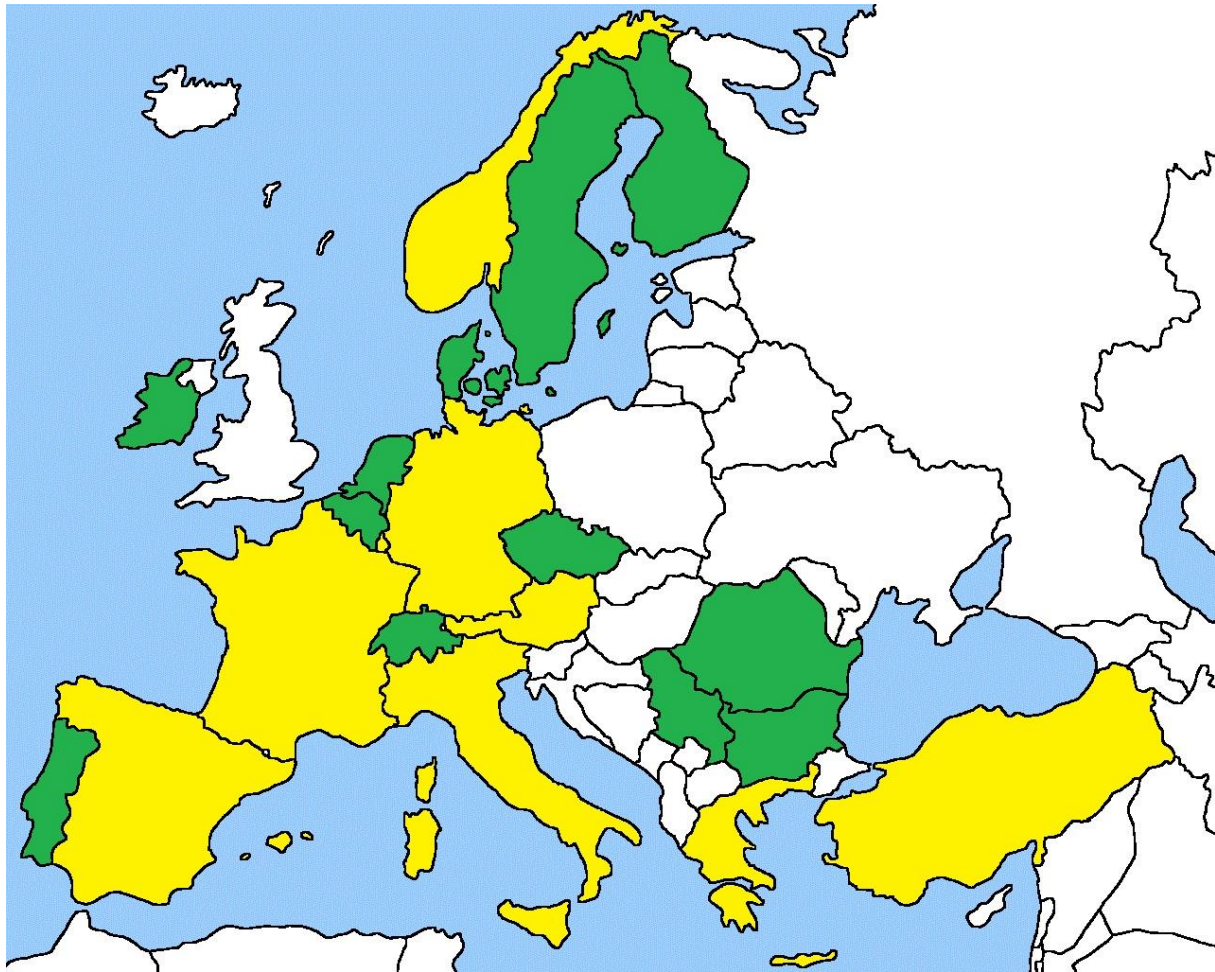
Order stock increase ■ (green); stable ■ (yellow); decrease ■ (red)

Expected developments in order stock

Order stocks are expected to increase over the coming six months (April 2018) in twelve countries (Belgium, Bulgaria, Czech Republic, Denmark, Finland, Ireland, Portugal, Romania, Serbia, Sweden, Switzerland and the Netherlands).

Nine countries (Austria, France, Germany, Greece, Italy, Luxemburg, Norway, Spain and Turkey) are expecting unchanged order stocks for the coming six-month period.

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



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

The questions about actual and expected order stock development strengthen the picture of a stabilized Consulting Engineering market in Europe, considering that most markets are doing ok or better, since there were no countries that reported diminishing order stocks in this survey or the last.

Turnover

Actual developments in turnover

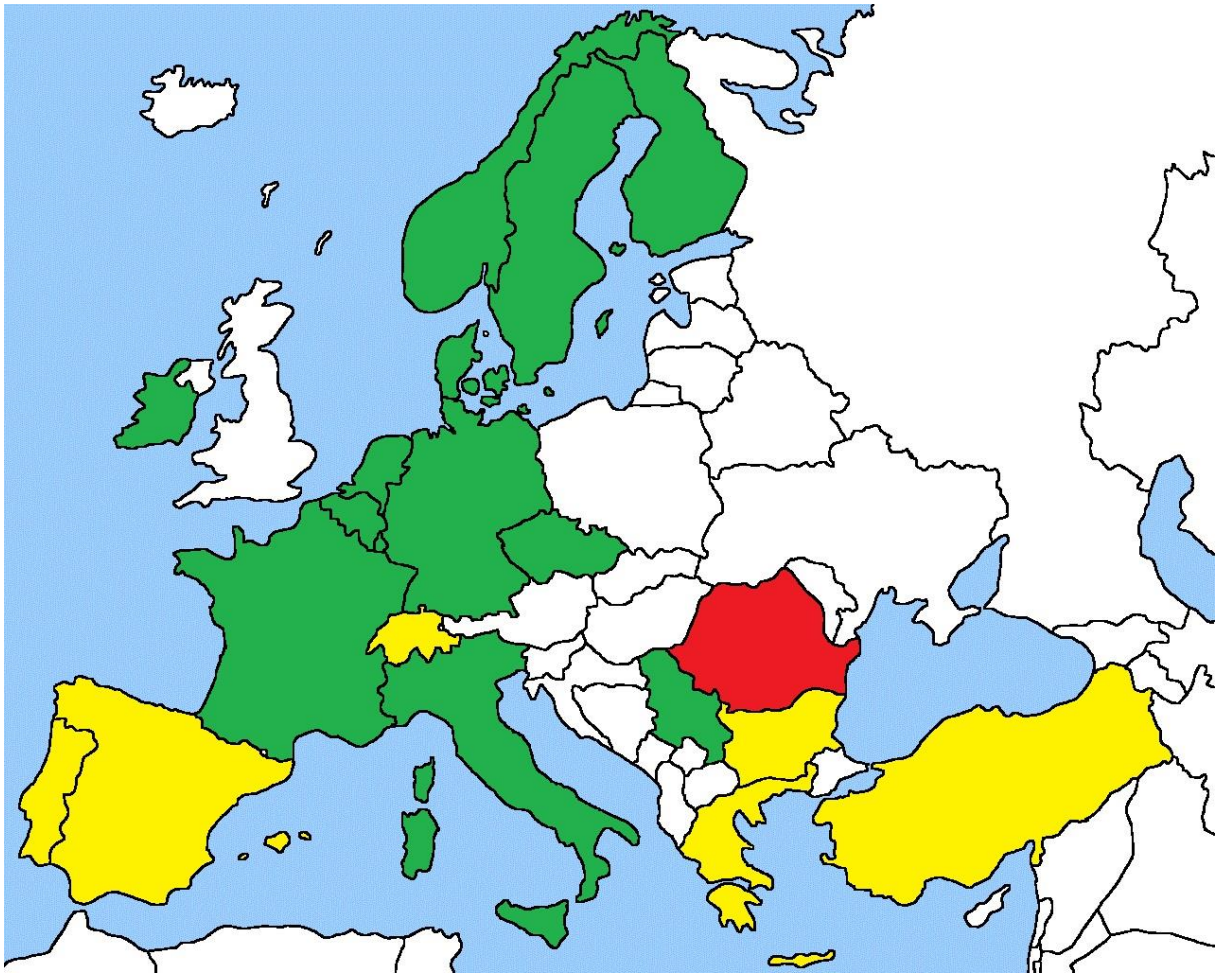
As order stocks around Europe grow so does turnover on most European markets.

Thirteen countries reported growing turnover for the past six months (Belgium, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Luxemburg, Norway, Serbia, Sweden and the Netherlands)

Six countries reported a status-quo in turnover (Bulgaria, Greece, Portugal, Spain, Switzerland and Turkey)

Only Romania reported that turnover had fallen in the six months before April 2018.

Turnover, past six months. EFCA survey, spring 2018



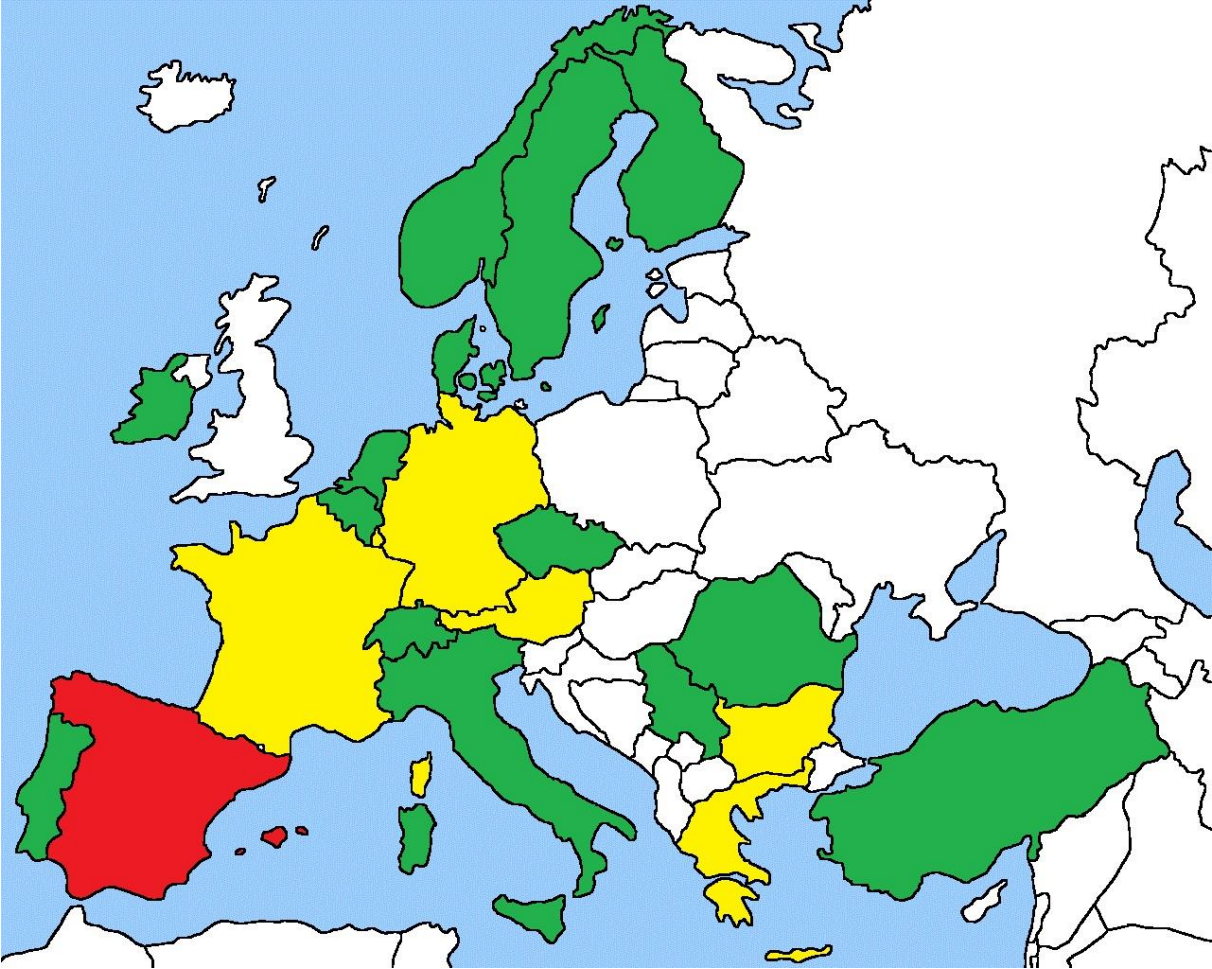
Turnover: increase ■ (green); stable ■ (yellow); decrease ■ (red).

Expected developments in turnover

14 out of 21 participating countries are expecting an increase in turnover for the coming six months (Belgium, Czech Republic, Denmark, Finland, Ireland, Italy, Norway, Portugal, Romania, Serbia, Sweden, Switzerland, Turkey and the Netherlands).

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

Turnover, coming six months. EFCA survey, spring 2018



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

Profitability

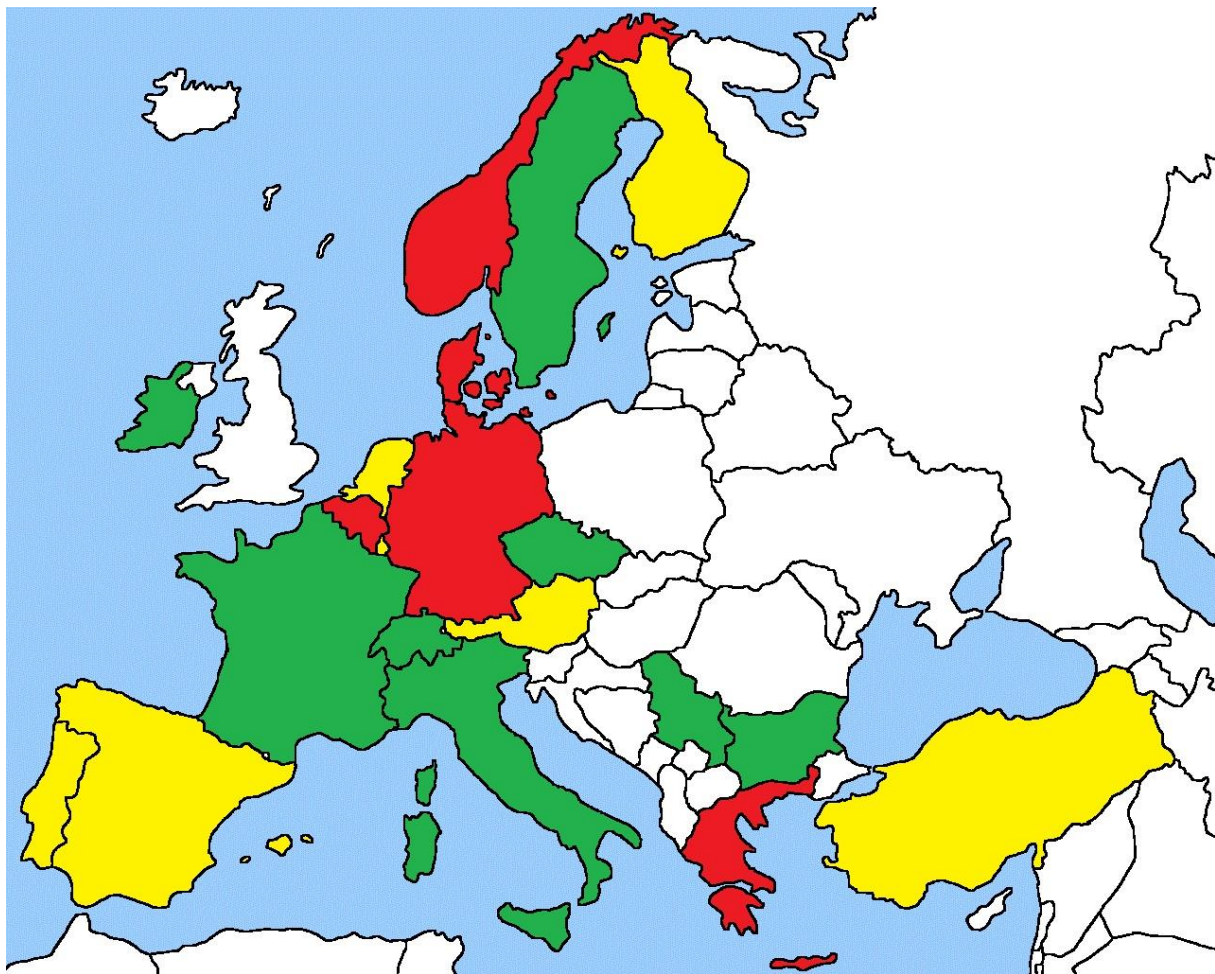
Expected developments in profitability in 2017 compared to 2016

Based on preliminary numbers, eight countries expected profitability to have improved in 2017, compared to 2016; Bulgaria, Czech Republic, France, Ireland, Italy, Serbia, Sweden and Switzerland.

Seven countries expected profitability to be unchanged in 2017 compared to 2016; Austria, Finland, Luxemburg, Portugal, Spain, Turkey and the Netherlands.

The remaining six countries expected profitability to have decreased in 2017 compared to 2016: Belgium, Denmark, Germany, Greece, Norway and Romania).

Expected profitability for 2017 compared to 2016. EFCA survey, spring 2018



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

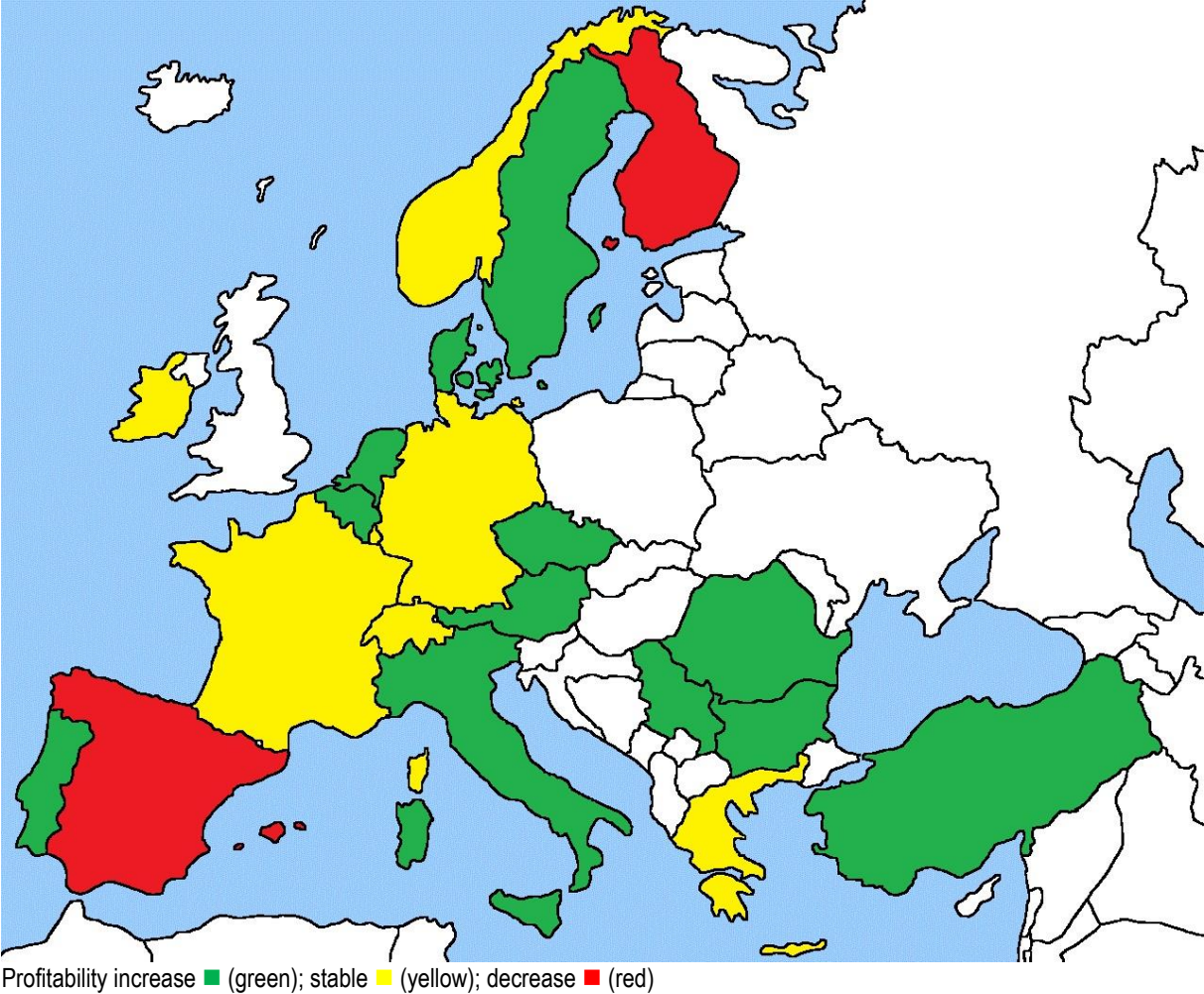
Expected developments in profitability in 2018 compared to 2017

Twelve countries are expecting profitability to improve in 2018, compared to 2017: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Italy, Portugal, Romania, Serbia, Sweden, the Netherlands and Turkey.

In seven countries profitability is expected to remain unchanged in 2018: France, Germany, Greece, Ireland, Luxemburg, Norway and Switzerland.

Only Finland and Spain are expecting profitability to decrease in 2018, compared to 2017.

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

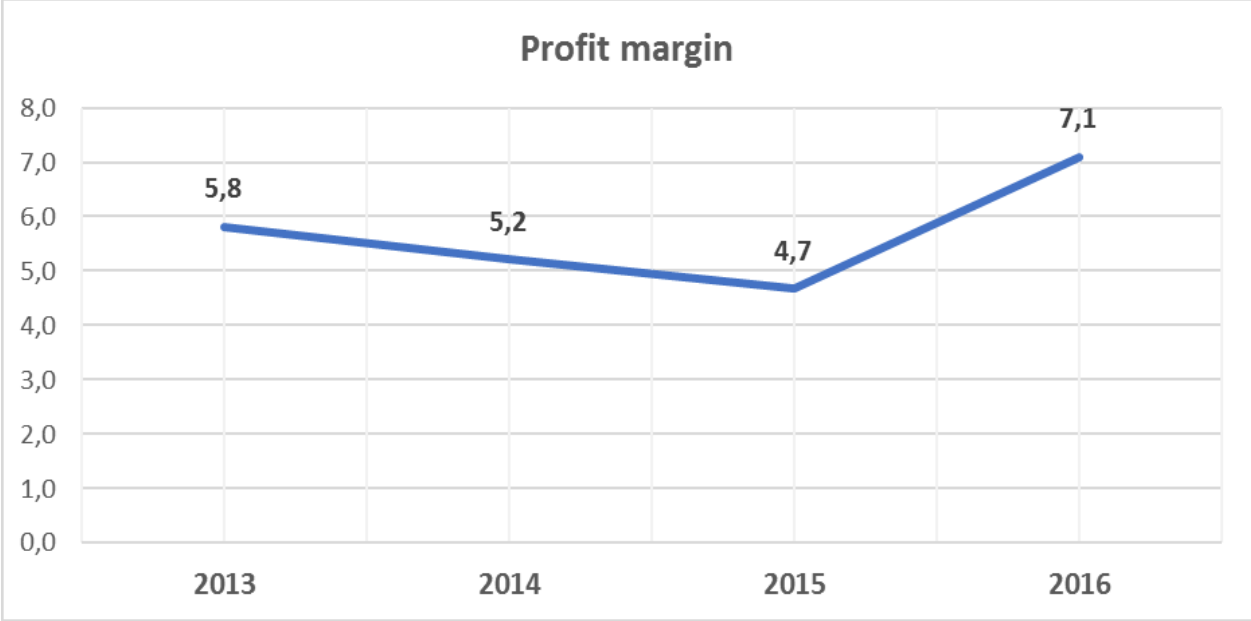


As order stocks grow and turnover increase, profitability in the Consulting Engineering markets around Europe is also improving.

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, so these figures have not been updated in this survey. For reference, we present the historical figures below.

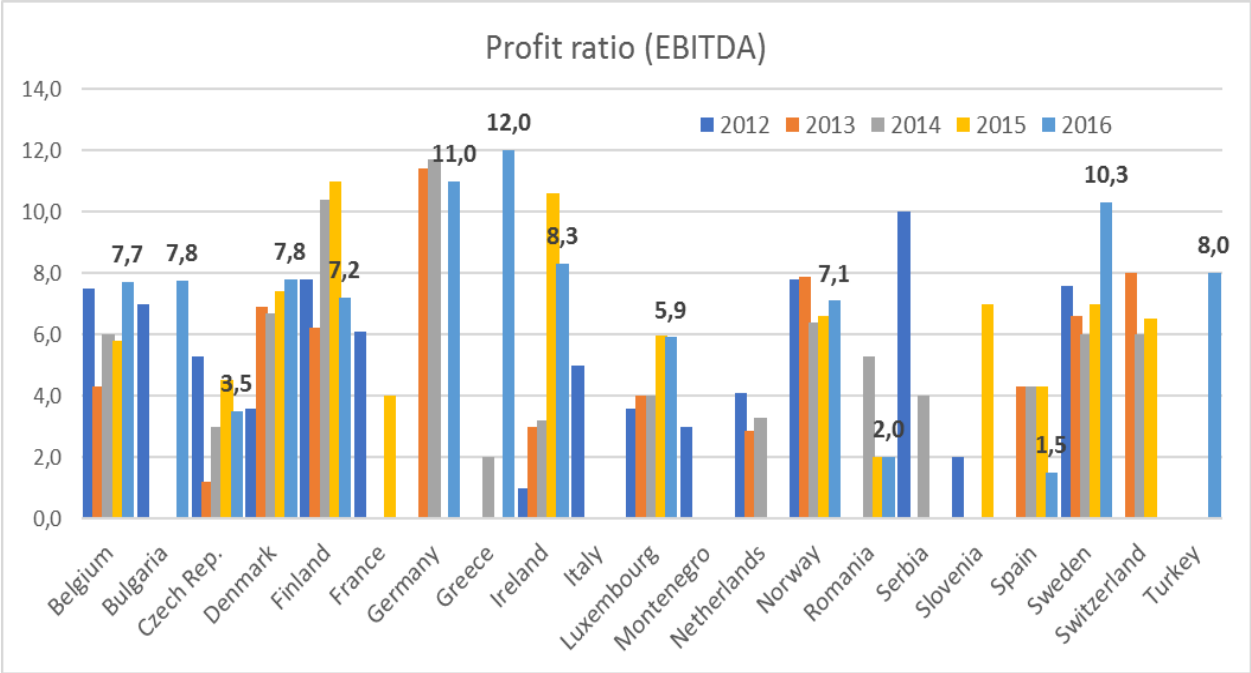
The average weighted European profit ratio (EBITDA) in 2016 was 7.1% of total turnover³. The development of the profit ratio at European level is shown below. The trend is positive, and profitability is increasing. It must be said, though, that changes in participating countries between different surveys do influence the average profit ratio figures.

Profit ratio (EBITDA) European average, 2013-2016



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, 2012-2016



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.

Challenges for the consulting engineering industry in Europe

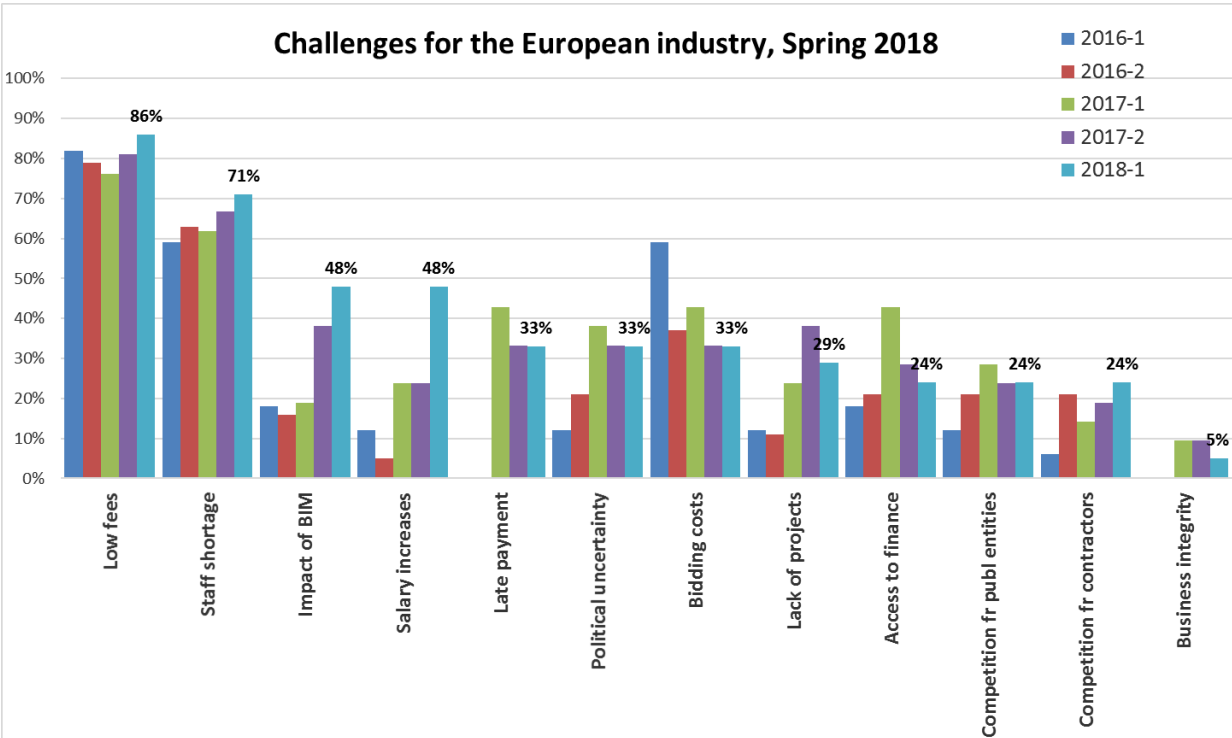
The participating associations are asked in each survey to select the five main challenges the sector is facing in their respective countries.

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. Lack of projects have dropped to seventh place.

The chart below shows the development of the main challenges at European level between the spring of 2016 and the spring 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.

Main challenges faced by companies at European level, spring 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 “Growth Map 2018” as made by the European Commission. 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 – spring 2018.

Key messages from the European Commission on the spring 2018 forecast are:

- Economic expansion set to continue in all Member States
- Labour market improvements continue
- Inflation expected to move up very gradually
- Public finances are improving further
- External downside risks have risen
- Capacity constraints emerging in some Member States but signs of remaining slack elsewhere

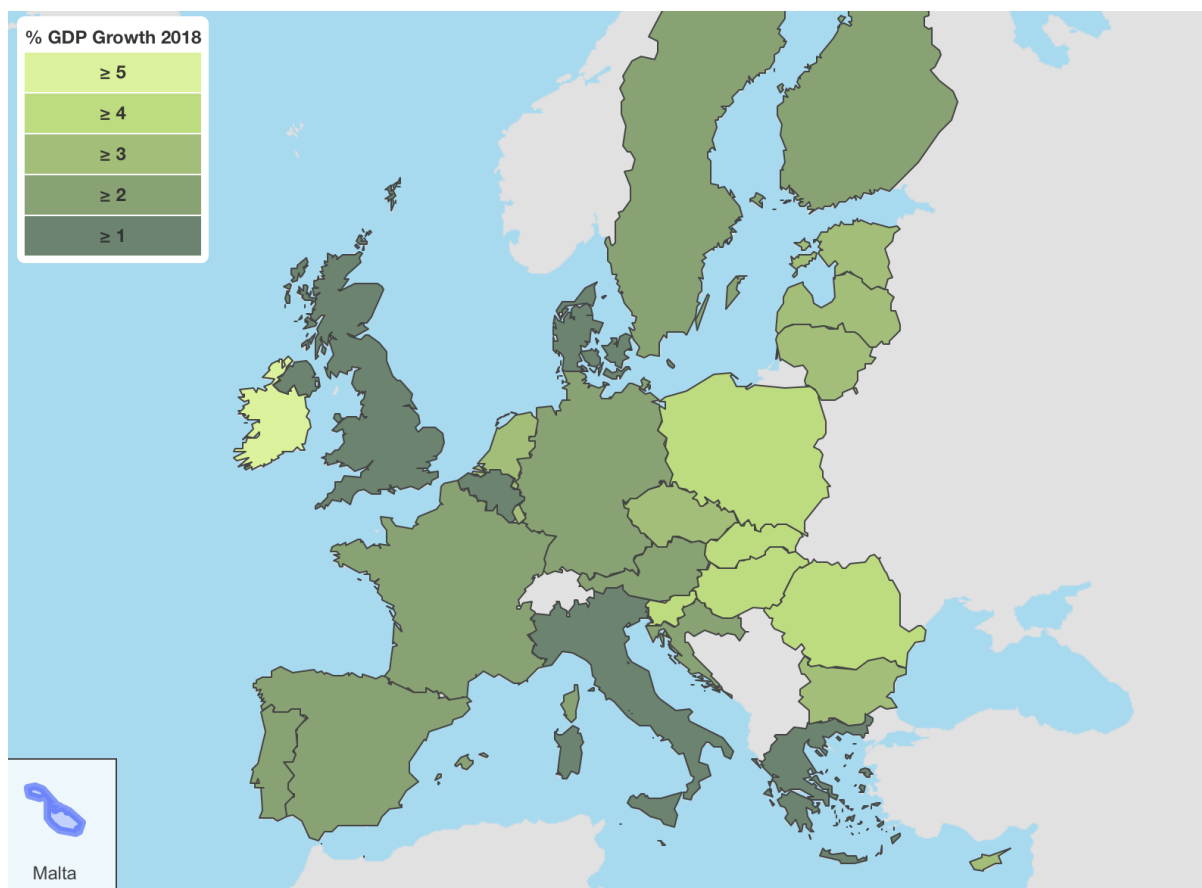
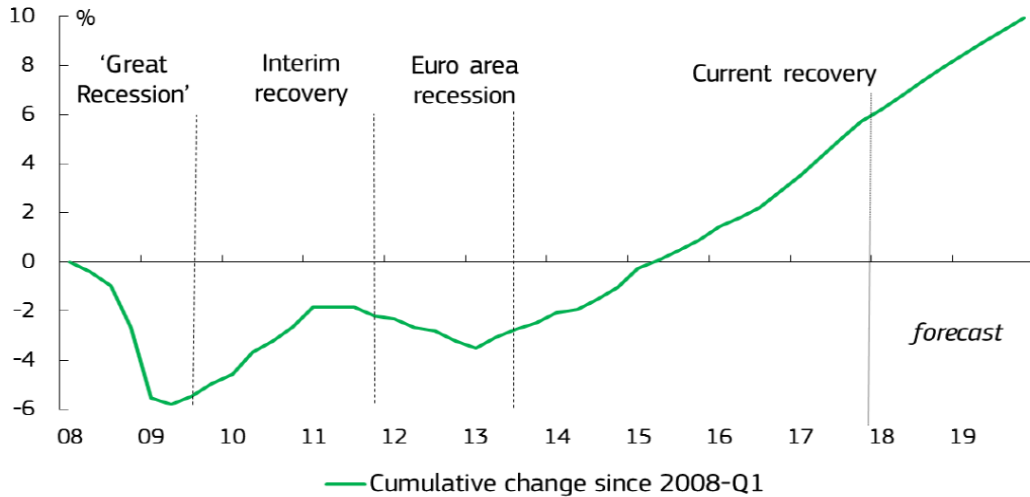


Figure 1 - EU GDP: annual growth rate 2008-19

Source: https://ec.europa.eu/info/sites/info/files/economy-finance/ecforecast_spring2018.pdf

Economic expansion set to continue

Real GDP during the recession and recovery phases (2008-2019), euro area



The European economy is performing well despite the political uncertainties and challenges it continues to face. The economic expansion has continued into 2018, thereby completing a period of five years of uninterrupted GDP growth.

Concerns about elevated uncertainty are giving way to improving economic sentiment but this has yet to show up in hard economic indicators.

Recent information on the European economy shows growth continuing, despite lingering policy uncertainty but the conditions for a (strong) acceleration of economic activity are not yet present.

Appendix – 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. <i>Example</i> : 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? <i>Example calculation</i> : 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