

Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER

State Secretariat for Education, Research and Innovation SERI

# Fact and Figures on the Swiss Participation in European Research Framework Programmes

(Last update: 20 May 2020)

The Swiss Parliament has mandated the State Secretariat for Education, Research and Innovation (SERI) to submit regular reports on the Swiss participation in the European Union's research and innovation framework programmes. This summary presents the main facts and figures on Switzerland's participation in the current 8th framework programme (Horizon 2020) and in the Euratom Programme since 2014. These are updated statistics taken from the report entitled, 'Swiss Participation in European Research Framework Programmes - Facts and Figures 2018'. The statistics are based on official data from the European Union as of 2 February 2020.

#### Overview

Table 1. Number of Swiss participations, coordinations and contributions, in relation to overall participation

	FP7 & Euratom (2007 – 2013) (as at November 2015)	Horizon 2020 & Euratom (2014-2020) (as at July 2015)	Horizon 2020 & Euratom (2014-2020) (as at March 2018)	Horizon 2020 & Euratom (2014-2020) (as at February 2020)
Swiss participa- tions	3.2% (4323)	1.8% (318)	2.4% (1942)	2.7% (3577)
Contributions to Swiss participants	4.3% (CHF 2496 m)	2.2% (CHF 172 m)	3.5% (CHF 1141 m)	3.9% (CHF 2203 m)
Swiss coordina- tions	3.9% (981)	0.3% (15)	2.6% (422)	3.6% (985)

Note: Values in brackets represent the absolute number of participations, contributions and coordinations. This is a continuation of the information presented in the report entitled, 'Swiss Participation in European Research Framework Programmes - Facts and Figures 2018', page 6.

# Swiss participations and coordinations by type of institution

930 Total ETH domain 353 **Total Universities** 291 148 Total universities of applied sciences Confederation 467 Industry 27 Cantons and communes 897 248 Small- and medium-sized enterprises 307 Non-profit organisations 0% 10% 20% 25% 30% 35% 40% ■ Participations ■ Coordinations

Figure 1. Swiss participations and coordinations by type of institution

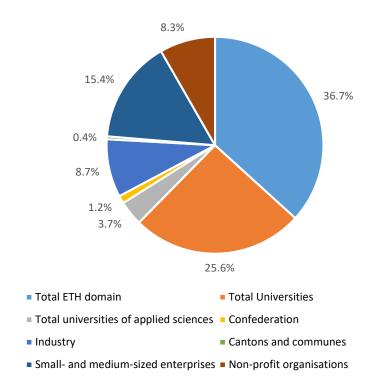
Note: Corresponds to Figure 12 in the report entitled 'Swiss Participation in European Research Framework Programmes - Facts and Figures 2018'.

Source: European Commission, SERI, Last update: 2 February 2020.

The ETH Domain clearly has the largest number of Swiss participations (930; 26%) and coordinations (353; 35.8%) as well as the largest share of contributions in favour of Swiss research institutions (CHF 809.2 million; 36.7%). The two federal institutes of technology in Lausanne and Zurich are the main players accounting for over 750 project participations.

After the ETH Domain, universities account for the largest share of Swiss coordinations and funding (29.5% or 25.6%). In terms of participation, small- and medium-sized enterprises (SME) and industry, i.e. large companies, with 25.1% and 13.1% are other important players.

Figure 2. Share of contributions to Switzerland by type of institution

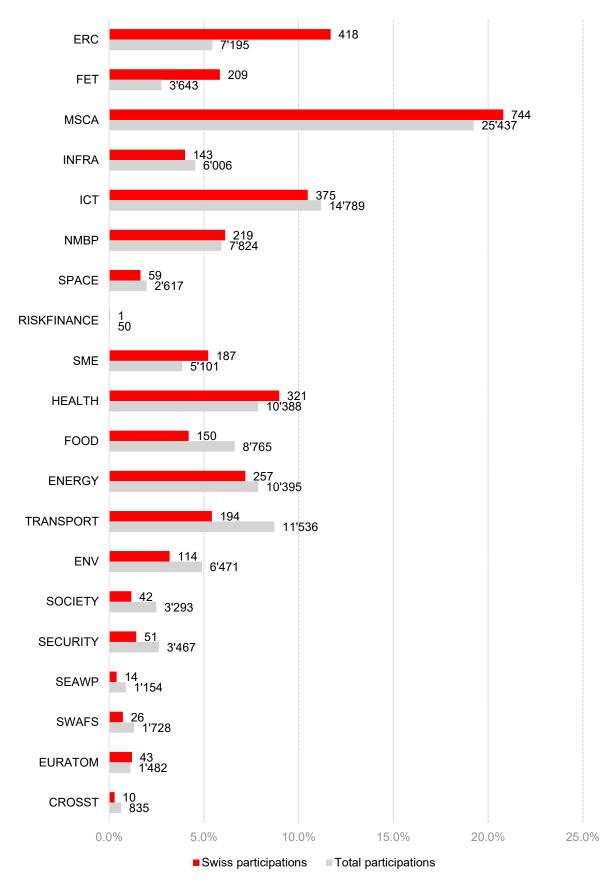


Note: Corresponds to Figure 13 in the report entitled 'Swiss Participation in European Research Framework Programmes - Facts and Figures 2018'.

Source: European Commission, SERI, Last update: 2 February 2020.

## Swiss participations by programme area

Figure 3. Participations by programme area, in relation to all projects

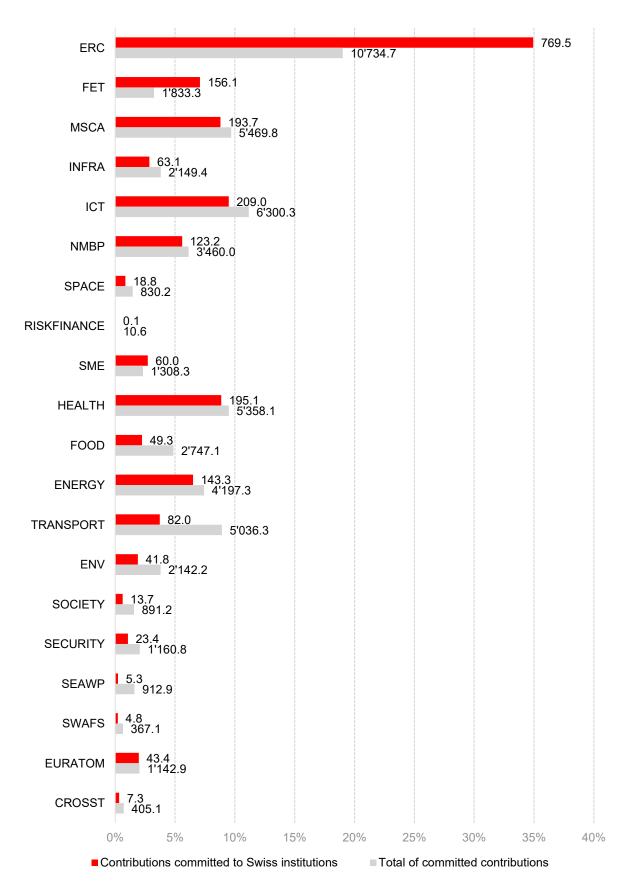


Note: Corresponds to Figure 16 in the report entitled 'Swiss Participation in European Research Framework Programmes - Facts and Figures 2018'.

Source: European Commission, SERI, Last update: 2 February 2020.

Figure 3 clearly shows that Swiss institutions are primarily involved in the following research priority areas and programmes: mobility measures under the Marie Skłodowska Curie Actions (MSCA) (744 participations), the European Research Council (ERC) (418), information and communication technologies (ICT; 375), health (321), energy (257) and nanotechnologies, materials, biotechnologies and production technologies (NMBP; 219).

Figure 4. Funding under by programme area (CHF m), in relation to total funding



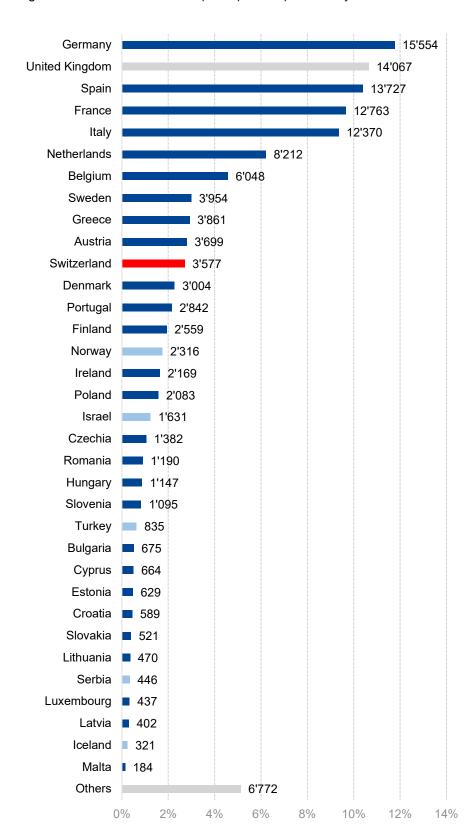
Note: Corresponds to Figure 17 in the report entitled 'Swiss Participation in European Research Framework Programmes - Facts and Figures 2018'.

Source: European Commission, SERI, Last update: 2 February 2020.

So far, Swiss institutions have received a total of CHF 2,202.8 million in funding. The research areas and instruments, which have received the most funding, are primarily those in which the number of Swiss participations is or has been high. ERC grants account for the largest amount of funding, namely CHF 769.5 million or 34.9% of all funding paid out to Swiss institutions. Next in rank are ICT (CHF 209.0 million or 9.5%), health (CHF 195.1 million or 8.9%) and the Marie Skłodowska-Curie Actions (CHF 193.7 million or 8.8%) (Figure 4). In the areas of ERC, FET and innovation in SMEs, the committed contributions are above average.

## Switzerland and Europe compared

Figure 5. Number and share of participations per country

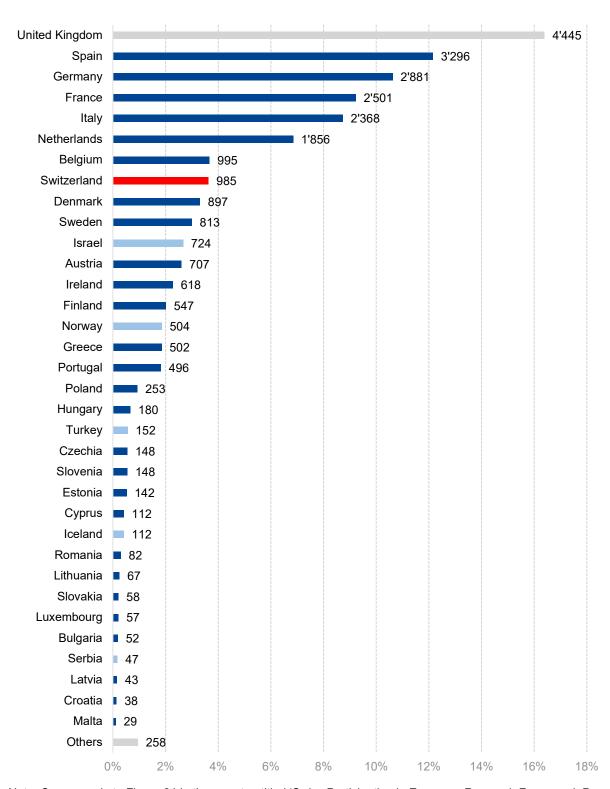


Note: Corresponds to Figure 22 in the report entitled 'Swiss Participation in European Research Framework Programmes - Facts and Figures 2018'. The figure shows EU Member States, the United Kingdom, and the six most successful associated countries (Switzerland, Norway, Israel, Turkey, Serbia and Iceland).

Source: European Commission, SERI, Last update: 2 February 2020.

Of the 132,195 project participations so far, Germany and the United Kingdom account for the largest numbers (11.8% and 10.6% respectively), followed by Spain, France and Italy (Figure 5). These large countries also topped the rankings in the seventh framework programme. Switzerland is still the associated country with the most project participations, ahead of Norway and Israel. However, while Switzerland was in ninth place in the previous programme, it fell to the eleventh position, from 3.2% to 2.7% of the total project participations.

Figure 6. Number and share of coordinations per country



Note: Corresponds to Figure 24 in the report entitled 'Swiss Participation in European Research Framework Programmes - Facts and Figures 2018'. The figure shows EU Member States, the United Kingdom, and the six most successful associated countries (Switzerland, Norway, Israel, Turkey, Serbia and Iceland). Source: European Commission, SERI, Last update: 2 February 2020.

A similar picture to that for the absolute number of project participations emerges for the absolute number of project coordinations, most notably at the top of the list. With 16.4% of all coordinations, the United Kingdom ranks first by a wide margin, ahead of Spain at 12.2% (Figure 6). With Belgium ahead

of Switzerland, Switzerland is in eighth place. The share of Swiss coordinations has improved significantly over the course of the framework programme and now stands at 3.6%. In mid-2015, the Swiss share of coordinations was just 0.3%, placing Switzerland 24<sup>th</sup> in the European rankings.

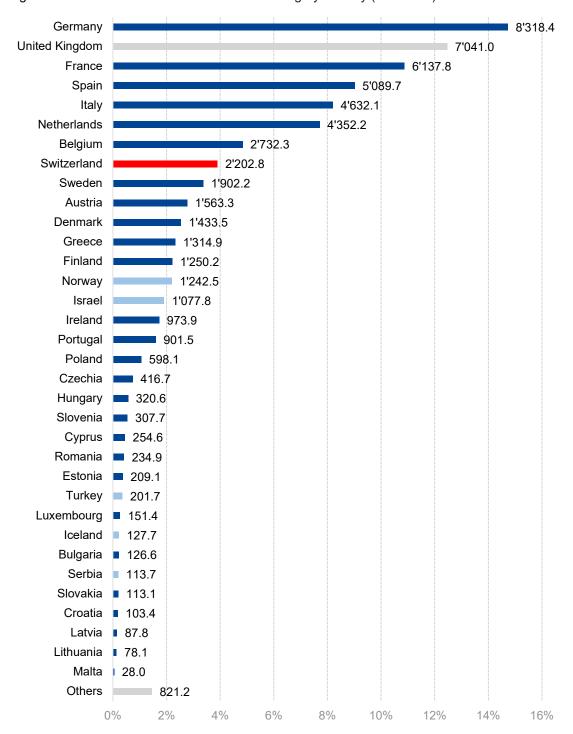
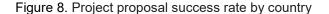


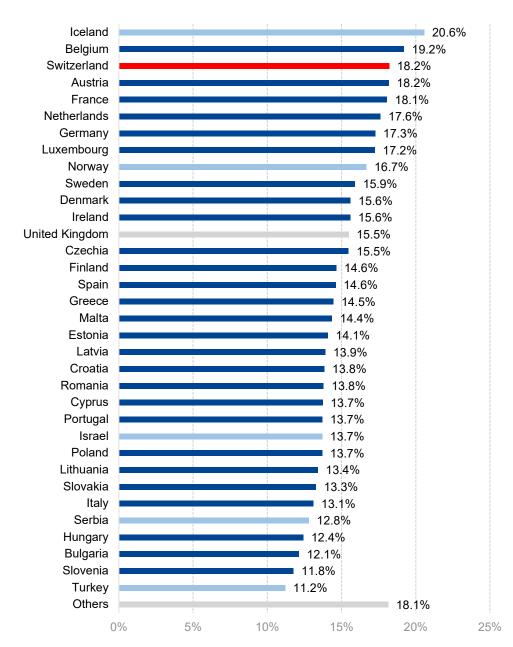
Figure 7. Share and amount of committed funding by country (in CHF m)

Note: Corresponds to Figure 26 in the report entitled 'Swiss Participation in European Research Framework Programmes - Facts and Figures 2018'. The figure shows EU Member States, the United Kingdom, and the six most successful associated countries (Switzerland, Norway, Israel, Turkey, Serbia and Iceland). Source: European Commission, SERI, Last update: 2 February 2020.

As in the absolute number of project participations, the big European countries also dominate when it comes to the distribution of committed funding (Figure 7). Germany accounts for the largest share with

8,318.4 million or 14.7%, followed by the United Kingdom, with 12.5% of all funding. These two countries also topped the ranking of funding recipients under FP7, receiving almost equal amounts of funding with 15.9% (Germany) and 15.3% (UK). With 3.9% of all funding, Switzerland finds itself in eighth position after Belgium and still ranks first among the associated countries. However, there has been a slight deterioration, given that Switzerland was the seventh largest recipient of funding under the previous programme (4.3%).



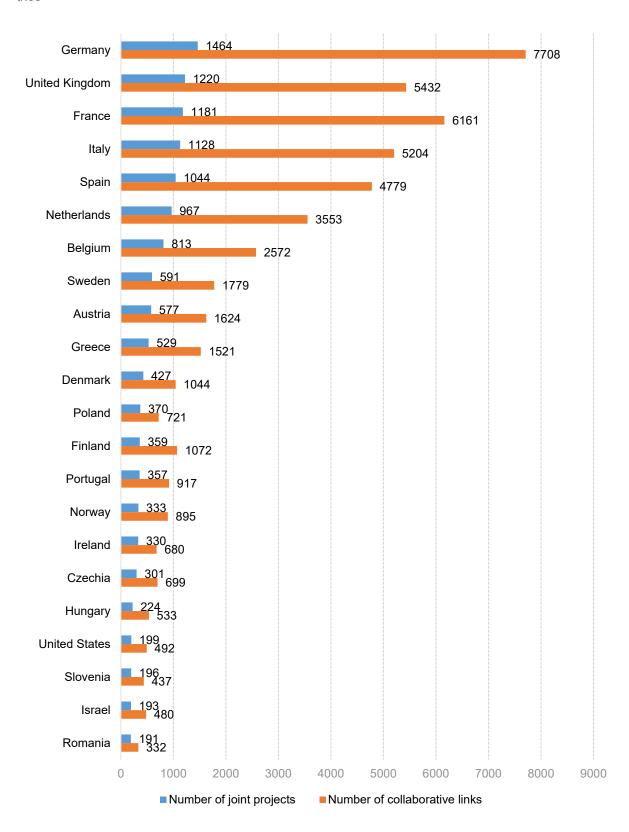


Note: Corresponds to Figure 28 in the report entitled 'Swiss Participation in European Research Framework Programmes - Facts and Figures 2018'. The figure shows EU Member States, the United Kingdom, and the six associated countries with the highest number of participations (Switzerland, Norway, Israel, Turkey, Serbia and Iceland).

Source: European Commission, SERI, Last update: 2 February 2020.

The success rate shows how successful each country is in competing against others in the evaluation process. With a success rate of 18.2%, Switzerland ranks fifth in the European ranking (Figure 8; due to their comparatively low participation, the Faroe Islands and Montenegro are not included in the chart). More than one in six project proposals submitted by a Swiss institution is thus accepted by the European Commission. This is an impressive result. The Faroe Islands in first place (22.8 %) and Iceland (20.6%) in second place are also associated countries, but they conduct far fewer projects than Switzerland. In the previous programme, Switzerland ranked fourth. Compared to FP7, Switzerland has thus fallen one place in the success rate ranking. Under the previous programme, the Swiss success rate had amounted to 24.1% and declined hence by 5.9 percentage points. However, it is noticeable that the overall success rates are significantly lower than under the seventh framework programme for all countries.

Figure 9: Number of joint projects and collaborative links of partners from Switzerland and other countries



Note: Corresponds to Figure 30 in the report entitled 'Swiss Participation in European Research Framework Programmes - Facts and Figures 2018'. Only countries, which work in at least 190 joint projects with Swiss partners, are shown. Collaborations within Switzerland are not represented.

Source: European Commission, SERI, last update: 2 February 2020.

Figure 9 shows the number of joint projects between Switzerland and other countries, i.e. the number of projects in which at least one partner from Switzerland and one partner from the other country is involved. It also shows the number of collaborative links between Switzerland and other countries. This corresponds to the number of pairwise combinations and therefore all potential collaborations between partners from Switzerland and another country. This differs from the first indicator in that it illustrates how many partners from each country are involved in joint projects.