Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER

State Secretariat for Education, Research and Innovation SERI

Updated extract: Facts and Figures on the Swiss Participation in the 8th European Framework Programme for Research and Innovation

(Last update: 30 August 2022)

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 8th framework programme (Horizon 2020) and in the Euratom Programme since 2014, sometimes in comparison with the 7th framework programme (FP7). 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 15 March 2022.

Overview

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

	FP7 & Euratom (2007 – 2013) (as at October 2019)	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 March 2022)
Swiss participa- tions	3.2% (4382)	1.8% (318)	2.4% (1942)	2.8% (4944)
Contributions to Swiss participants	4.1% (CHF 2503 m)	2.2% (CHF 172 m)	3.5% (CHF 1141 m)	4.0% (CHF 3048 m)
Swiss coordina- tions	3.9% (997)	0.3% (15)	2.6% (422)	4.0% (1418)

Note: Values in brackets represent the absolute number of participations, contributions and coordinations. This is an update of the table 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

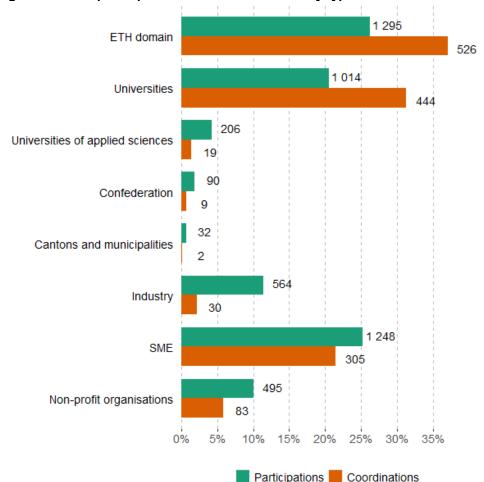


Figure 1. Swiss participations and coordinations by type of institution.

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: 15 March 2022.

The ETH Domain has the largest number of Swiss participations (1295; 26.2%) and coordinations (526; 37.1%) as well as the largest share of contributions in favour of Swiss research institutions (CHF 1.1 billion; 37.0%). The two federal institutes of technology in Lausanne and Zurich are the main players accounting for 1062 project participations.

After the ETH Domain, universities account for the largest share of Swiss coordination and funding (31.3% or 25.3%). In terms of participation, small- and medium-sized enterprises (SME) and industry, i.e. large companies, are other important players with 25.2% and 11.4%. Contributions to SME and industry are smaller (16.2% and 5.6%) since these organisation often cover 30% of the project costs on their own.

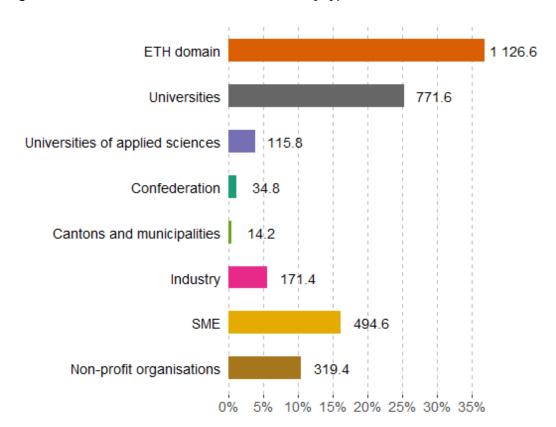


Figure 2. Share of contributions to Switzerland by type of institution.

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: 15 March 2022.

Swiss participations by programme area

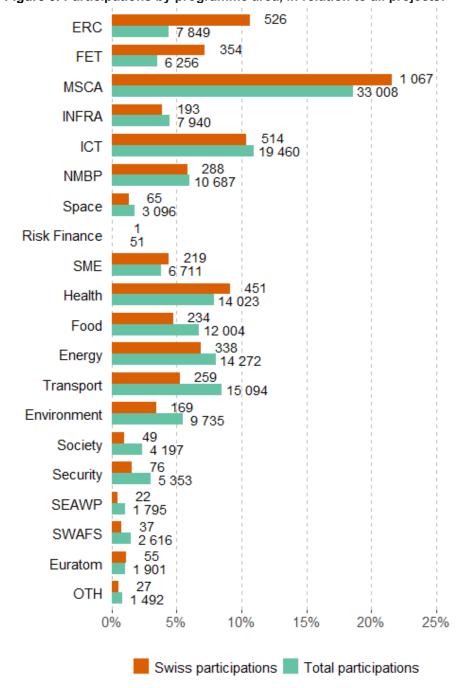


Figure 3. Participations by programme area, in relation to all projects.

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: 15 March 2022.

Figure 3 shows that Swiss institutions are primarily involved in the following research priority areas and programmes: mobility measures under the Marie Skłodowska-Curie Actions (MSCA) (1067 participations), the European Research Council (ERC; 526), information and communication technologies (ICT; 514) and health (451).

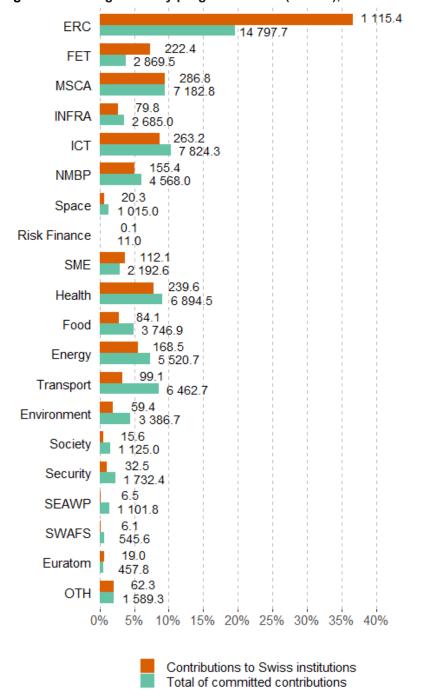


Figure 4. Funding under by programme area (CHF m), in relation to total funding.

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: 15 March 2022.

So far, Swiss institutions have received a total of CHF 3 048.3 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 1.1 billion or 36.6% of all funding paid out to Swiss institutions. Next in rank are the Marie Skłodowska-Curie Actions (CHF 286.0 million or 9.4%), ICT (CHF 263.2 million or 8.6%), health (CHF 239.6 million or 7.9%) and future and emerging technologies (FET; CHF 222.4 million or 7.3%; Figure 4). In the areas of ERC, FET and innovation in SMEs, the committed contributions are above average.

Switzerland and Europe compared

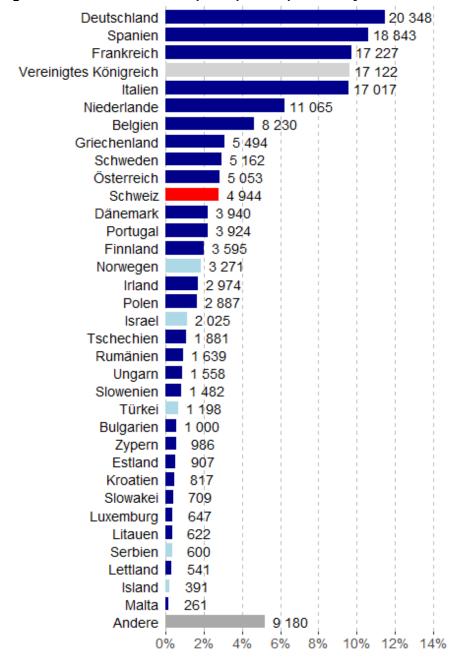


Figure 5. Number and share of participations per country.

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 associated countries with the highest number of participations (Switzerland, Norway, Israel, Turkey, Serbia and Iceland).

Source: European Commission, SERI, Last update: 15 March 2022.

Of the 177 540 project participations so far, Germany and Spain account for the largest numbers (11.5% and 10.6% respectively), followed by, France, the United Kingdom and Italy (Figure 5). These large countries also topped the rankings in the seventh framework programme, which is linked to their sizable population. 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 2.8% of the total project participations.

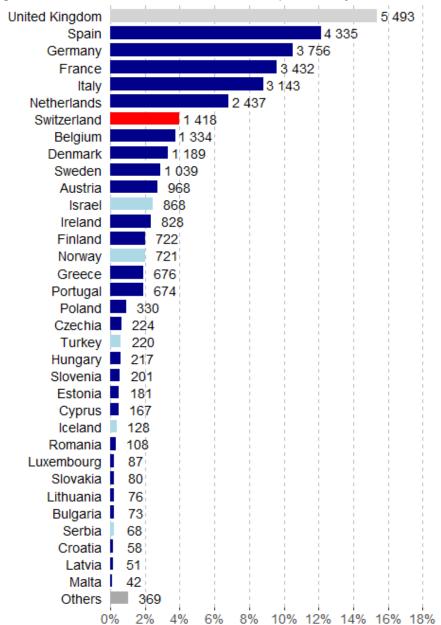


Figure 6. Number and share of coordinations per country.

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 associated countries with the highest number of participations (Switzerland, Norway, Israel, Turkey, Serbia and Iceland).

Source: European Commission, SERI, Last update: 15 March 2022.

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 15.4% of all coordinations, the United Kingdom though ranks first by a wide margin, ahead of Spain at 12.1% (Figure 6). Meanwhile ahead of Belgium, Switzerland is in seventh place as already in the seventh framework programme. The share of Swiss coordinations has increased over the course of the framework programme and now stands at 4.0%. In mid-2015, the Swiss share of coordinations was just 0.3%, placing Switzerland 24th in the European rankings.

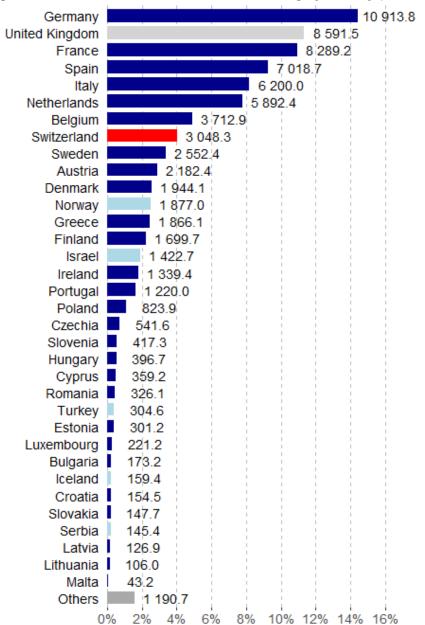


Figure 7. Share and amount of committed funding by country (in CHF m).

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 associated countries with the highest number of participations (Switzerland, Norway, Israel, Turkey, Serbia and Iceland).

Source: European Commission, SERI, Last update: 15 March 2022.

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 10.9 billion or 14.4%, followed by the United Kingdom, with 11.3% of all funding. These two countries also topped the ranking of funding recipients under FP7, then receiving almost equal amounts of funding with 15.5% (Germany) and 15.3% (UK). With 4.0% 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 (4.1%).

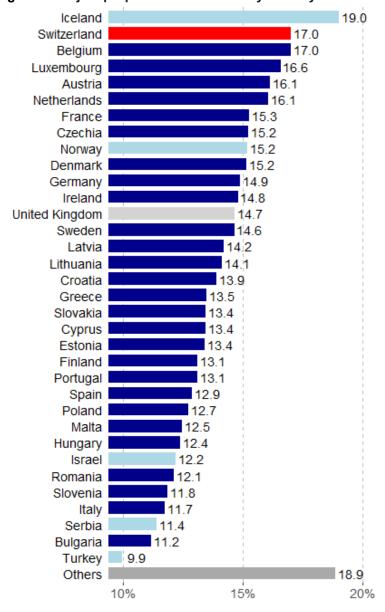
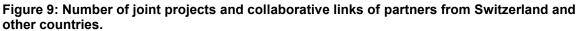
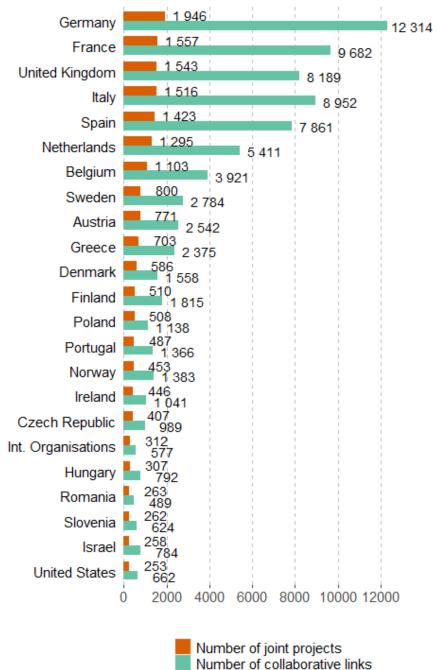


Figure 8. Project proposal success rate by country.

Note: Corresponds to Figure 28 in the report entitled 'Swiss Participation in European Research Framework Programmes - Facts and Figures 2018'. Where several project partners from the same country are involved, only one entry is counted. 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 15 March 2022.

The success rate shows how successful each country is in competing in the evaluation process. With a success rate of 17.0%, Switzerland ranks third in the European ranking, just behind Iceland and equal to Belgium (Figure 8; due to their comparatively low participation, the Faroe Islands 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. With the Faroe Islands (19.8%) and Iceland (19.0%), two associated countries rank first and second, although far fewer projects are carried out in these two countries compared to Switzerland. Already in the previous programme, Switzerland had ranked third. Under the previous programme, the Swiss success rate had amounted to 25.0% and declined hence by 8 percentage points. However, it is noticeable that the overall success rates are lower than under the seventh framework programme for all 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 more than 250 joint projects with Swiss partners, are shown. Collaborations within Switzerland are not represented.

Source: European Commission, SERI, last update: 15 March 2022.

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.