

By Stefano Fella,
Elizabeth Rough,
Matthew Keep

4 November 2022

The UK and EU programmes: participation delayed



Summary

- 1 The Trade and Cooperation Agreement
- 2 Delay to UK participation
- 3 Horizon Europe
- 4 Other programmes

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Contents

1	The Trade and Cooperation Agreement	8
1.1	The UK-EU joint declaration and protocols	8
1.2	Rules and conditions for participation	9
	Conditions for participation	10
	Governance arrangements	10
	Suspension and termination of participation	10
	EU powers to review financial management of programmes in UK	11
	Review of UK participation	11
1.3	UK Financial contribution	11
	Potential cost	12
2	Delay to UK participation	13
2.1	Formalities completed	13
2.2	EU links participation in programmes to Northern Ireland protocol	14
	UK reaction	15
	Reaction from European research associations	16
	European Parliament view	16
2.3	First meeting of the Specialised Committee on Participation in EU Programmes	17
2.4	EU Response to Northern Ireland Protocol Bill	18
2.5	Comments by Science Minister, June 2022	18
2.6	The UK invokes the TCA dispute settlement process	19
2.7	Second meeting of the Specialised Committee on Participation in EU Programmes	21
2.8	Comments by Science Minister, October 2022	22
3	Horizon Europe	23

3.1	Joint declaration and protocol on participation	23
3.2	The UK's financial contribution to Horizon Europe	24
	BEIS R&D budget allocations	25
3.3	Finalising participation	26
3.4	'Plan B'	27
	Funding guarantee	27
	Third country participation	29
	Stakeholder responses	30
4	Other programmes	31
4.1	EU Space Programme	31
	UK participation in EU space programmes	32
	Galileo and EGNOS	33
4.2	Euratom	34
	Background	34
	Nuclear Cooperation Agreement with Euratom	35
	Euratom and UK research	35
	UK Participation	35
4.3	Joint Declaration	36
4.4	UK alternative plans for Euratom research and Fusion Energy	37

Summary

As a Member State of the EU, the UK participated in a range of EU programmes. These included its framework programmes for funding research, most recently Horizon 2020. Once it left the EU the UK was no longer automatically entitled to participate in EU programmes. The Trade and Cooperation Agreement (TCA), which governs UK-EU relations post-Brexit, provided for continuing UK participation in some programmes. However, arrangements for UK participation have still not been finalised.

Which EU programmes should the UK be participating in?

The TCA set out general rules and conditions for UK participation in EU programmes, including a formula for calculating UK financial contributions. The programmes that the UK would be participating in would be set out in a separate protocol. A draft protocol, published alongside the TCA but not yet finalised by the UK and EU, indicated the UK would be involved in the following programmes:

- [Copernicus](#) – one of the [EU space programmes](#), covering earth observation through satellite and land, sea and air surveillance systems (specifically the programme established for 2021-2027).
- [Horizon Europe](#) – the EU’s framework programme for research and innovation for 2021-2027, and successor to Horizon 2020. This is the largest of the programmes, with a budget of €95.5 billion.
- The [research and training programme of the European Atomic Energy Community \(Euratom\)](#), complementing Horizon Europe, from 2021 to 2025.
- The European component of [ITER \(International Thermonuclear Experimental Reactor\) and the Development of Fusion Energy](#).

Participation in EU programmes has, however, yet to be signed off by the EU. A joint UK-EU declaration published alongside the TCA in December 2020 explained that the draft protocol could not be adopted then, as the EU needed to first adopt its long-term budget for 2021-2027 and the legislation for the various programmes that the UK would be participating in. The declaration stated that the UK and EU had agreed the protocols in principle and that these would be submitted to the joint UK-EU Specialised Committee on Participation in EU Programmes for adoption.

The EU delays participation

By early May 2021, the EU's budget and its legislation for the programmes had been adopted. However, the EU did not proceed with sign-off of UK participation. In September 2021, the European Commissioner for Research and Innovation, Mariya Gabriel, indicated that there was [a link between adoption of the protocols on UK participation in EU programmes](#) and resolution of the differences between the UK and EU over the implementation of the [Withdrawal Agreement Northern Ireland Protocol](#).

The Specialised Committee met for the first time in December 2021, where the EU confirmed its view that the completion of procedures for formalising UK participation in EU programmes were not “in the current political setting [...] opportune” because of “[serious difficulties](#)” in implementing the WA.

The differences between the UK and the EU over implementation of the Northern Ireland Protocol have subsequently remained unresolved, and the EU has continued to reject requests by the UK to complete the formalities to enable UK participation in programmes.

The UK launches a dispute under the TCA

In August 2022, the UK Government [requested formal consultations with the EU on the matter](#), as the first stage in the dispute settlement mechanism in the TCA. The Government said that the EU was in breach of the TCA, given that the agreement states the UK shall participate in EU programmes.

The [dispute settlement mechanism](#) provides for a 30-day consultation period between the UK and EU, after which the complaining party can request the establishment of an independent arbitration tribunal. The tribunal can issue a binding ruling on the matter.

In a meeting of the Specialised Committee in September, the EU's position remained unchanged. The Government said it was “[now urgently considering next steps](#)”.

Impact on UK involvement in Horizon Europe

UK researchers can currently apply for Horizon Europe funding, though successful applicants are unable to sign grant agreements with the EU, to access the funding, until UK participation in the Horizon Europe programme is finalised. However, under a UK Government-backed “[funding guarantee](#)” successful UK applicants can access the full value of the funding awarded under the Horizon Europe programme, at their UK host institution, for the lifetime of the grant.

In its 2022-23 to 2024-25 R&D budget allocation, the [Department for Business, Energy and Industrial Strategy \(BEIS\)](#) stated that it had “allocated £6.8 billion over the [spending review period] towards Horizon Europe and other EU programmes”. BEIS added that, if the UK is unable to associate to Horizon Europe, “the funding allocated to Horizon association will go to UK government R&D programmes, including those to support new international partnerships”.

The Government’s “Plan B”

In July 2022, the Government published information on a range of “[transitional measures](#)” to support those affected by the delay in associating to Horizon Europe, as well further details about “the UK’s long-term Horizon Europe alternative”. The transitional measures included the “funding guarantee”, continued Third Country Participation in Horizon Europe and making additional funds available to existing UK research funding schemes run by the National Academies (such as the Royal Society) and UK Research and Innovation (UKRI).

The Government has also sketched out a “[preliminary vision](#)” for a long term, alternative programme to Horizon Europe, should it be required. This [features support](#) for global collaboration, steps that facilitate international mobility for research purposes and additional funding for innovation.

As well as looking at alternatives to Horizon Europe, the [Government added](#) that it was similarly “developing a comprehensive plan of alternatives to Euratom R&T, Fusion for Energy, and Copernicus programmes, including interim measures”.

1 The Trade and Cooperation Agreement

UK participation in EU programmes is provided for in Part Five of the Trade and Cooperation Agreement (TCA). This includes Article 710 of the TCA which states that the UK “shall participate” in EU programmes. Other provisions within Part Five set out conditions and rules for UK participation, and the UK financial contribution. Part Five does not set out which programmes the UK will participate in. These are to be set out in a Protocol to TCA. A draft of the protocol was published when the TCA was finalised in December 2020. This was to be finalised and adopted at a later date by the UK and EU. However, the Protocol has not, at the time of writing, been adopted.

This section provides more detail on the TCA Part Five provisions and draft protocol on participation in EU programmes. The following section will then explain the delay in adoption of the protocol. This will be followed by sections giving more detail on the EU programmes that the UK planned to participate in, and the impact of delay.

1.1 The UK-EU joint declaration and protocols

Part Five of the Trade and Cooperation Agreement covers participation in EU programmes, sound financial management and financial provisions.¹ It does not set out which programmes the UK will participate in. Article 710 states that these will be set out in Protocol I to the TCA. The Protocol will also set out the duration of participation and any specific conditions for participation in the programmes. It may also set out the level of UK contribution to programmes.

Protocol I on participation had not been adopted at the time the TCA was finalised. However, a draft Protocol was published alongside the [joint declaration](#) on UK participation in EU programmes.

The [joint declaration](#) (pdf) adopted alongside the TCA by the UK and EU acknowledged that Protocol I on participation and another protocol on UK access to certain services provided under EU programmes and activities (Protocol II) had not been finalised. It said this was because the Multiannual Financial Framework (MFF, the EU’s seven-year financial framework for 2021-

¹ See UK Government, [UK-EU Trade and Cooperation Agreement \(TCA\)](#), April 2021, CP 426; or Official Journal of the EU, [Trade and Cooperation Agreement between the European Union and the European Atomic Energy Community, of the one part, and the United Kingdom of Great Britain and Northern Ireland, of the other part](#), L 149/10, 30 April 2021

2027) and corresponding EU legal instruments had not yet been adopted at the time of signature of the TCA.

However, the declaration stated that the UK and EU had agreed the protocols in principle and that these would be submitted to the Specialised Committee on Participation in Union Programmes for discussion and adoption. The Specialised Committee is one of several committees overseeing the implementation of different aspects of the TCA established under the governance procedures in Part One of the TCA (Article 8).²

The declaration stated that it was the “firm intention” of the two parties that the Specialised Committee would adopt the Protocols “at the earliest opportunity to allow their implementation as soon as possible”. This was, in particular, with the ambition that UK entities would be able to participate from the beginning of the programmes and activities identified.

Draft Protocol I provides for UK participation in the following programmes:

- [Copernicus](#) – one of the [EU space programmes](#), covering earth observation through satellite and land, sea and air surveillance systems (specifically the programme established for 2021-2027);
- [Horizon Europe](#) – the EU’s framework programme for research and innovation for 2021-2027;
- The [research and training programme of the European Atomic Energy Community \(Euratom\)](#), complementing Horizon Europe, from 2021 to 2025;
- The European component of [ITER \(International Thermonuclear Experimental Reactor\) and the Development of Fusion Energy](#).

The UK would participate for the duration of these programmes or the duration of the 2021-27 MFF, whichever is shorter. The draft protocol sets out specific conditions for UK participation in each of these programmes. This includes a correction mechanism for the UK contribution to Horizon Europe depending on the amount of funding received by UK entities under the programme (see sections 1.3 and 3.2).

1.2

Rules and conditions for participation

Part Five of the TCA sets out various rules and conditions for UK participation in EU programmes. This also includes provisions on UK participation in the EU’s governance arrangements for the programmes, mechanisms for suspension or termination of UK participation in programmes. Part Five also

² See House of Commons Library Briefing paper 9139, [The UK-EU Trade and Cooperation Agreement: governance and dispute settlement](#), 3 August 2021

includes rules for calculating the UK's financial contribution, and measures to ensure sound financial management.

Conditions for participation

Article 712 sets out conditions for participation. These include the following:

- The UK should make every effort to facilitate the entry and residence of persons involved in the implementation of these programmes, including students and researchers (Article 712 (1a)).
- The UK should have appropriate agreements in place as regards participation that involves exchange of or access to classified or sensitive non-classified information. These should comply with the UK-EU Security of Classified Information Agreement (SCIA) agreed alongside the TCA

Governance arrangements

Article 713 provides for participation of the UK in the governance of EU programmes or activities. Representatives of the UK will be allowed to take part as observers in committees, expert group or other similar meetings which assist the European Commission in the implementation and management of programmes. UK representatives should not be present for any votes held, but the UK will be informed of voting results. UK experts or evaluators can be appointed for relevant bodies.

Suspension and termination of participation

Article 718 provides for suspension of UK participation in one or more EU programmes (or parts of programmes) where the UK does not pay its financial contribution to the programme or breaks conditions on participation. The latter could, for example, relate to the UK introducing changes to entry and residence conditions for persons involved in the implementation of programmes.

Article 718 (2) sets out the procedure for suspension. Suspension would take effect 45 days after an EU notification in the Specialised Committee on Participation in Union Programmes. The suspension can also be lifted if the UK subsequently complies with the conditions for participation.

Article 719 provides for termination of UK participation in an EU programme if a suspension has continued for a year.

Under Article 720, the UK can also terminate its participation in an EU programme where there is a substantial modification to an EU programme. This can include significant increases in planned expenditure in a programme or exclusion of the UK from a significant portion of a programme.

EU powers to review financial management of programmes in UK

Article 725 provides that where the UK participates in a specific EU programme, the European Commission and European Court of Auditors will have specific powers within the UK to conduct “technical, scientific, financial or other types of reviews and audits” of persons or entities receiving programme funds. The Commission and the European Anti-Fraud Office (OLAF) will also have the right to carry out inspections to address suspicions of fraudulent use of EU funds. The UK shall inform the Commission or OLAF of any suspicions of irregularities and cooperate with investigations.

Article 728 provides that decisions adopted by the Commission imposing any pecuniary (related to money) obligation on entities or persons relating to claims stemming from EU programmes shall be enforceable in the UK. Where a funding agreement between the Commission and a UK entity provides for European Court of Justice (CJEU) judgments and orders in the application of an arbitration clause, these rulings will be similarly enforceable in the UK. The CJEU will also have jurisdiction to examine the legality of Commission decisions relating to the implementation of EU funding in the UK.

Review of UK participation

Article 732 provides for a review of UK participation in programmes four years after participation begins. The UK and EU can both propose changes to the terms of participation.

1.3

UK Financial contribution

The UK will make financial contributions to take part in the EU programmes (Article 714). The financial contribution is made up of:

- an “operational contribution” based on the ratio of the size of the UK economy (based on GDP) to the size of the EU economy, which is approximately 15-16%. This ratio is applied to the EU’s budget for each of the programmes the UK participates in. The contribution is added to the spending of the programmes in question.
- a “participation fee”, covering the administrative costs of organising the system of EU programmes. This could be considered a general entry fee. It is calculated as a percentage of the operational contribution. The percentage will rise incrementally until it reaches 4% in 2027 (Articles 733 and 714(4)).

The operational contribution will be by far the largest of the two components. It is subject to retrospective adjustments to reflect the EU’s actual annual spending on the programme and the actual ability of UK entities to bid successfully for EU funding.

In general, the UK's participation fee will not be subject to retrospective adjustments.³ As of 2028, the participation fee level may be adjusted by the Specialised Committee on Participation in Union Programmes.

For Horizon Europe, there is an automatic correction measure, which aims to get a balance between what the UK pays in and what it receives. This means that if, in any two consecutive years, the funding the UK receives from the programme is 8% or more of what it contributes, then an additional contribution will be required (Article 716 TCA and Article 5 of Draft Protocol I).

If the UK considers that its net contribution to a programme is too high, it can trigger a review (Articles 721 and 722).

Potential cost

The exact cost of participation in EU programmes will be determined each year, in the way set out above. However, the Treasury estimates the total cost of participation in Horizon Europe, Copernicus, Euratom R&T and Fusion for Energy over the seven years of the EU's long-term budget at around £17 billion:⁴

- £15 billion for Horizon Europe
- £1.2 billion for Euratom R&T and Fusion4Energy
- £0.8 billion for Copernicus

The cost is uncertain, depending on factors such as the relative size of the UK's economy and fluctuations in exchange rates.

The UK will also be a beneficiary from the EU programmes as UK participants in the programmes will receive receipts. The above estimates are of the cost to the UK Government of participating in the programmes, so they do not include the receipts going to beneficiaries. This is because the receipts are paid by the EU to UK recipients.

³ Unless there is a suspension or termination of UK participation.

⁴ HM Treasury. [European Union Finances: Statement on the implementation of the Withdrawal and Trade and Cooperation Agreements](#), July 2022

2 Delay to UK participation

2.1 Formalities completed

By the middle of May 2021, the necessary formalities were in place to proceed with sign-off of the programmes.

The EU adopted the Multiannual Financial Framework (MFF) for 2021 to 2027 in December 2020.⁵ The legislation for the various EU programmes that the UK would be participating was then adopted in April and May 2021.⁶

The [joint UK-EU declaration of participation in EU programmes](#) (pdf) stated that the protocols on participation would be submitted to the Specialised Committee on Participation in Union Programmes (established under the governance procedures in Part One of the TCA) for discussion and adoption.

Meetings of the various governance bodies for the TCA had also been delayed until the end of April 2021 because the Agreement had been applied provisionally and the UK and EU were awaiting its full application. The TCA was provisionally applied, pending the European Parliament consent vote on the Agreement which was required under the EU's procedures for concluding international agreements. In addition, the UK and EU had also agreed to wait until the process of legal revision and authentication of the treaty text in all EU languages had been completed.⁷ This had not been possible in the short period between the TCA being agreed and the need for it to come into

⁵ Council of the EU, [Multiannual financial framework for 2021-2027 adopted](#), 17 December 2020 [Long-term EU budget 2021-2027 and recovery package](#).

⁶ These were: [Regulation \(EU\) 2021/696 of the European Parliament and of the Council of 28 April 2021](#) establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU; [Regulation \(EU\) 2021/695 of the European Parliament and of the Council of 28 April 2021](#) establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013; [Council Decision \(EU\) 2021/764 of 10 May 2021](#) establishing the Specific Programme implementing Horizon Europe – the Framework Programme for Research and Innovation, and repealing Decision 2013/743/EU; and [Council Regulation \(Euratom\) 2021/765 of 10 May 2021](#) establishing the Research and Training Programme of the European Atomic Energy Community for the period 2021-2025 complementing Horizon Europe – the Framework Programme for Research and Innovation and repealing Regulation (Euratom) 2018/1563. The EU component of ITER Fusion Energy did not require new legislation. It is based on [2007/198/Euratom: Council Decision of 27 March 2007](#) establishing the European Joint Undertaking for ITER and the Development of Fusion Energy and conferring advantages upon it.

⁷ See [Decision No 1/2021](#) of the Partnership Council established by the Trade and Cooperation Agreement, 23 February 2021.

operation following the end of the Brexit transition period on 31 December 2020.

In agreeing to delay full application until the end of April 2021, the UK Government had indicated that the various TCA governance bodies should not being their work formally until the TCA was fully applied.⁸

The TCA was applied fully from 1 May 2021. This followed the European Parliament [consent vote on the TCA on 27 April 2021](#) and the Council of the EU [decision on conclusion of the Agreement](#) on 29 April which completed the EU's internal procedures for approving the TCA and enabled ratification.⁹

The Partnership Council – which is the main overarching joint UK-EU governance body for the TCA¹⁰ – met for the first time on 9 June 2021. Some of the other Specialised Committees established by the TCA also met for the first time over the summer of 2021. However, the Specialised Committee on Participation in Union Programmes did not meet until December 2021.¹¹

2.2 EU links participation in programmes to Northern Ireland protocol

In a meeting in the European Parliament in September 2021, the European Commissioner for Innovation, Research, Culture, Education and Youth, Mariya Gabriel, indicated that there was a link between adoption of the protocols on UK participation in EU programmes and implementation of the Protocol on Ireland/Northern Ireland. The latter is part of the Withdrawal Agreement (WA) which came into force when the UK left the EU on 31 January 2020. Gabriel said that the Commission was “completing internal procedures” to be able to adopt the protocol on participation on EU programmes “as soon as possible”. But at the same time, she said that “Questions tied to the protocol on Northern Ireland are also being tackled”.¹² Gabriel confirmed that the Commission was linking the two issues in an interview in October 2022. She said that before UK association to EU programmes could proceed “transversal issues need to be tackled first”.¹³

⁸ Letter from Rt Hon Michael Gove, Chancellor of the Duchy of Lancaster, to Vice President of the European Commission, Maroš Šefčovič, [Provisional Application of the EU-UK Trade and Cooperation Agreement](#), 23 February 2021 (pdf)

⁹ Council of EU, [EU-UK trade and cooperation agreement: Council adopts decision on conclusion](#), 29 April 2021

¹⁰ See House of Commons Library Insight, [Governing the new UK-EU relationship and resolving disputes](#), 24 February 2021

¹¹ See European Commission, [Meetings of the EU-UK Partnership Council and Specialised Committees under the Trade and Cooperation Agreement](#), undated, accessed 21 October 2022

¹² Science Business, [Northern Ireland protocol row could influence UK association to Horizon Europe](#), 27 September 2021

¹³ Science Business, [Gabriel confirms UK can't join Horizon Europe until row over Northern Ireland Protocol is settled](#), 14 October 2021

The EU had commenced legal proceedings (the infringement procedure¹⁴) against the UK in March 2021 over alleged UK breach of obligations under the Northern Ireland Protocol, and warned that this could lead to a potential dispute under the WA dispute settlement provisions.¹⁵ The European Commission paused this process following the adoption of measures to address some of the issues relating to the implementation of the Northern Protocol in June 2021. However, some of these measures were temporary and several implementation matters remained unresolved with discussions ongoing.¹⁶

UK reaction

In evidence to the House of Commons European Scrutiny Committee on 25 October 2021, the then Cabinet Office Minister Lord Frost¹⁷ said there was “absolutely no reason” for the delay in finalising participation in EU programmes. He said that there was an obligation for the EU to finalise UK participation, given that Article 710 of the TCA states that the UK “shall participate” in EU programmes and that it:

would be a breach of the treaty if the EU does not deliver on this obligation in article 710, or delays excessively in doing so, so that our participation becomes less worthwhile.

Lord Frost said that every day’s delay is a further day when UK entities cannot participate and the EU was “depriving itself of the big net contribution that we would otherwise be making”. He said there could come a point where the “value-for-money case” for UK participation in programmes looks less compelling than it did at the start of the year. He said he had raised the issue with European Commission Vice-President Maroš Šefčovič and that UK was raising it all the time. He said he hadn’t “really had a clear answer as to why it is happening” although he could guess why.¹⁸

¹⁴ The European Commission has the power to launch an infringement procedure where it believes an EU Member State is in breach of EU law. Under the terms of the Northern Ireland Protocol, the EU institutions retain their powers (as if the UK was still a Member State) in terms of ensuring implementation of certain elements of EU law in Northern Ireland. See House of Commons Library Briefing paper 9016, [The UK-EU Withdrawal Agreement: dispute settlement and EU powers](#), Section 4.

¹⁵ See European Commission, [Withdrawal Agreement: Commission sends letter of formal notice to the United Kingdom for breach of its obligations under the Protocol on Ireland and Northern Ireland](#), 15 March 2021.

¹⁶ See House of Commons Library Briefing paper 9333, [Northern Ireland Protocol: Implementation, grace periods and EU-UK discussions \(2021-22\)](#), 1 June 2022

¹⁷ Lord Frost was the Cabinet Minister responsible for UK-EU relations and was UK co-chair of the Withdrawal Agreement Joint Committee and Trade and Cooperation Agreement Partnership Council (the principal governance bodies for the two agreements) from March 2021 until his resignation from the cabinet in December 2021. Responsibility for UK-EU relations was moved to the Foreign, Commonwealth and Defence Office following Frost’s resignation, with the then Foreign Secretary Liz Truss replacing Frost as co-chair of the two UK-EU governance bodies. The EU co-chair for these bodies is Commission Vice-President Maroš Šefčovič

¹⁸ European Scrutiny Committee, [Oral evidence: The UK’s new relationship with the EU](#), HC 122, Monday 25 October 2021, Q146 and 147.

The European Scrutiny Committee published a report on 25 October 2021 expressing concerns at the delay and asking the Government to clarify what steps were being taken to expedite the process of formalising the UK's participation, and how it intended to respond if delayed further.¹⁹

Reaction from European research associations

At the beginning of November 2021, a joint letter from research and university associations from across Europe to the European Commission expressed concern about the damaging impact of the delay on research collaboration. It called for the UK to become associated to Horizon Europe without further delay.²⁰

European Parliament view

The Chair of the House of Lords European Affairs Committee, Lord Kinnoull, wrote to the Chair of the European Parliament's Committee on Industry, Research and Energy, Cristian-Silviu Buşoi, on 3 March 2022. The letter suggested that the two work together "to encourage both the Commission and the UK Government to unblock the current impasse, which is to the detriment of the excellent scientific and research communities in the UK and the EU alike".²¹

Responding in a letter on 24 March 2022, Buşoi said that the European Parliament fully recognised the importance of cooperation with the UK on science, research and innovation. However, he added that

for the United Kingdom to become fully associated to Horizon Europe and before UK entities can, in effect, receive funding from the Programme, the outstanding points in the Withdrawal Agreement and parts of the Trade and Cooperation Agreement between the European Union and the United Kingdom need to be resolved.²²

¹⁹ European Scrutiny Committee, [Brexit divorce bill and UK participation in EU programmes: how much and who pays?](#), HC 815, 25 October 2021

²⁰ European University Association, [EUA and 24 partners call for the European Commission to finalise UK association to Horizon Europe](#), 4 November 2021. See also Science Business, [Research associations plead for eleventh hour deal on UK's Horizon Europe association](#), 4 November 2021

²¹ Letter from Lord Kinnoull, Chair of the House of Lords European Affairs Committee, to Cristian-Silviu Buşoi MEP, Chair of the Committee on Industry, Research and Energy, [The UK's participation in the Horizon Europe programme](#), 3 March 2022 (pdf). Letters sent by Lord Kinnoull to Mariya Gabriel, European Commissioner for Research, Innovation, Culture, Education and Youth, and to Liz Truss MP, UK Foreign Secretary on the same subject were also attached to the letter.

²² [Letter from Cristian-Silviu Buşoi MEP, Chair of the Committee on Industry, Research and Energy, European Parliament to Lord Kinnoull, Chair of the House of Lords European Affairs Committee](#), 24 March 2022 (pdf)

2.3

First meeting of the Specialised Committee on Participation in EU Programmes

Under the TCA, the Specialised Committees should meet at least once a year (Article 8(7)).

The Specialised Committee on UK participation in EU programmes met for the first time on 21 December 2021.

At the December 2021 meeting, the UK delegation stressed their concerns at the impact of the delay in finalising participation in EU programmes was having on scientific research. It said the UK had taken steps to mitigate the damage of delays, but that there were increasing impacts that the UK could not mitigate unilaterally, and which required the Protocols to now be adopted.

In response, the EU delegation stated that it was important to refer to the political situation and stressed that:

the completion of EU procedures in the current political setting does not seem opportune as there are serious difficulties in the implementation of the Withdrawal Agreement (WA) and the TCA. The EU underlined its hope for a swift resolution of those difficulties, which would enable the establishment of the association to EU programme.²³

The UK delegation also highlighted that the Joint Declaration agreed by both parties stressed “a firm intention to adopt the Protocols at the earliest opportunity”. However, the EU view was that:

any delays in association did not amount to a breach of the TCA as there was no binding timeframe to adopt the Protocols.²⁴

The UK did not agree with this interpretation and referred to the dispute resolution mechanisms in both the TCA and WA. It said that disputes on other issues should be resolved through those mechanisms.

The UK delegation also set out the UK position that its decision to associate with these programmes was “not based on a pure economic calculation but instead reflected the scientific benefits of collaboration”. However, it stated that delays were eroding these benefits and, “while the UK still wanted to

²³ European Commission, [First meeting of the Specialised Committee on Participation in Union Programmes under the EU-UK Trade and Cooperation Agreement, Minutes](#), 21 December 2021

²⁴ European Commission, [First meeting of the Specialised Committee on Participation in Union Programmes under the EU-UK Trade and Cooperation Agreement, Minutes](#), 21 December 2021

associate, participation cannot be at any price and it could not wait forever”.²⁵

In response, the EU also cited Article 775, which it said links the TCA to other bilateral agreements. Article 775 of the TCA states that the Agreement and other supplementing agreements “apply without prejudice to any earlier bilateral agreement” between the UK and EU, and that the Parties “reaffirm their obligations to implement any such Agreement”.²⁶

2.4 EU Response to Northern Ireland Protocol Bill

Following the publication by the UK Government of the [Northern Ireland Protocol Bill](#) on 13 June 2022, the European Commission reiterated its view that obligations under the Withdrawal Agreement and the Trade and Cooperation Agreement were linked. Commission Vice-President Šefčovič stressed the Commission view that the conclusion of the Withdrawal Agreement was a “pre-condition” for the Trade and Cooperation Agreement being negotiated. He said that the UK government’s actions “[undermines the trust that is necessary for bilateral EU-UK cooperation within the framework of the Trade and Cooperation Agreement](#)”²⁷

The Bill would empower ministers to disapply parts of the Protocol, and remove the jurisdiction of the Court of Justice of the EU (CJEU) in enforcing EU rules. The European Commission announced on 15 June that it was re-commencing the infringement procedure against the UK previously launched in March 2021, and later paused, for not complying with the Northern Ireland Protocol on Ireland/Northern Ireland. It also announced two further infringement proceedings against the UK in relation to implementing the Protocol.²⁸ Commenting on the renewed legal action, Šefčovič said the EU “[cannot exclude anything](#)” if the bill becomes law.²⁹

2.5 Comments by Science Minister, June 2022

Giving evidence to the House of Commons Science and Technology Committee in June 2022, the then Science Minister George Freeman said he had met European Commissioner Gabriel and representatives from other Member

²⁵ European Commission, [First meeting of the Specialised Committee on Participation in Union Programmes under the EU-UK Trade and Cooperation Agreement, Minutes](#), 21 December 2021

²⁶ European Commission, [First meeting of the Specialised Committee on Participation in Union Programmes under the EU-UK Trade and Cooperation Agreement, Minutes](#), 21 December 2021

²⁷ European Commission, [Statement by Vice-President Maroš Šefčovič on the UK government's decision to table a bill disapplying core elements of the Protocol on Ireland/Northern Ireland](#), 13 June 2022

²⁸ See House of Commons Library Insight, [The Northern Ireland Protocol: EU legal action against the UK](#), 22 June 2022

²⁹ Politico, [EU launches legal action over UK's Northern Ireland Brexit bill](#), 15 June 2022

States across Europe “to signal that if they are serious about their statements of support for UK membership of Horizon [...] to speak to the Commission and to make that clear”. He added:

The Commission has numerous ways, if it feels the need to punish the UK as a result of the Northern Ireland protocol, and my plea is, “Please, not this way because everyone will suffer and Europe will suffer”.

The Minister also highlighted the Government’s alternative plans if association to Horizon did not go ahead (see also section 3.4)

2.6 The UK invokes the TCA dispute settlement process

On 16 August 2022, the UK Government wrote to the European Commission to invoke dispute resolution proceedings over the ongoing delays to finalising the UK’s participation in EU programmes. The Government said it was initiating formal consultations with the EU on the matter, the first stage in the dispute settlement procedure set out in Part Six of the TCA (see below).³⁰

The Government press release referred to the EU refusal, 18 months after the TCA was agreed, to finalise UK participation in EU programmes “causing serious damage to research and development in both the UK and EU member states”. It said the Government had written to the European Commission to launch dispute resolution proceedings and to encourage the EU to abide by their obligations in the deal. Then Foreign Secretary Liz Truss said:

The EU is in clear breach of our agreement, repeatedly seeking to politicise vital scientific cooperation by refusing to finalise access to these important programmes. We cannot allow this to continue. That is why the UK has now launched formal consultations and will do everything necessary to protect the scientific community.³¹

Then Minister for Europe Graham Stuart stressed the benefits of UK-EU scientific collaboration for both sides. The press release noted that the EU’s research and innovation community had also been calling on the European Commission to associate the UK to these programmes. It said that the UK government was ready to work together with the European Commission to

³⁰ Foreign, Commonwealth & Development Office, [Government requests consultations with EU on participation in EU science programmes](#), 17 August 2022

³¹ Foreign, Commonwealth & Development Office, [UK launches formal consultations with EU over access to scientific programmes](#), 16 August 2022

resolve the issue and looked forward to constructive engagement during the consultations.³²

The Government said that it had engaged extensively with the EU in an effort to resolve this issue, but that it was clear that the EU is not fulfilling the agreement reached. While association to the programmes remained the UK's preference, it said the EU's delays "were creating intolerable uncertainty for researchers and businesses in both the UK and EU Member States". It said it had therefore decided to start formal consultations under the dispute mechanism with the aim of finalising UK participation.³³

1 Dispute Settlement in the Trade and Cooperation Agreement

Dispute settlement mechanisms are set out in Part Six of the TCA. These provide first for consultations between the two parties (Article 738). If a party (the complaining party) feels the other (the responding party) has breached an obligation under the TCA it can request consultations. These should be held within 30 days of the request within the Partnership Council or one of the other governance committees established in Part One of the TCA.³⁴

The arbitration process

After 30 days, the consultation phase can be extended if the matter is not resolved. Alternatively, the complaining party may request the establishment of an arbitration tribunal (Article 739). This will consist of a UK-nominee, an EU nominee and jointly agreed chair. Tribunal members need to be a set of criteria guaranteeing their independence and are selected from a pre-established list of candidates.

Once established, the tribunal needs to give a ruling within 130 days. This can be extended to 160 days (Article 745). Rulings of the arbitration tribunal are binding on the parties (Article 754), and parties need to set out within 30 days of a ruling how they intend to comply.

Compliance and cross-retaliation

Where a party does not comply with a ruling, the other party can request compensation or it can suspend obligations under the Agreement. In some

³² Foreign, Commonwealth & Development Office, [UK launches formal consultations with EU over access to scientific programmes](#), 16 August 2022

³³ Foreign, Commonwealth & Development Office, [Government requests consultations with EU on participation in EU science programmes](#), 17 August 2022

³⁴ See House of Commons Library Insight, [Governing the new UK-EU relationship and resolving disputes](#), 24 February 2021

cases this can entail cross-retaliation from one part of the Agreement to another. This can involve cross-retaliation across the trade, aviation, road transport and fisheries provisions depending on the circumstances.

However, Part Five of the TCA (covering UK participation in EU programmes) is excluded from the cross-retaliation provisions. Where a tribunal ruling relates to interpretation and implementation of Part Five only obligations under Part Five can be suspended. Part Five obligations cannot be suspended in relation to tribunal rulings relating to provisions outside of Part Five (Article 749 (3)).

Link to Withdrawal Agreement

Article 749 (4) of the TCA and Article 178(2)(b) of the Withdrawal Agreement (WA), provide for cross-retaliation from the WA to the TCA, in the case of non-compliance with an arbitration ruling under the WA provisions. Again, certain parts of the TCA are excluded from cross-retaliation from the WA. These include Part Five of the TCA covering participation in EU programmes (Article 749 (3)).

Further Reading

For a detailed examination of the TCA governance and dispute settlement process, see House of Commons Library Briefing paper 9139, [The UK-EU Trade and Cooperation Agreement: governance and dispute settlement](#).

For a brief overview of the TCA and WA dispute settlement processes, and comparisons and links between the two, see House of Commons Library Insight, [Governing the new UK-EU relationship and resolving disputes](#), 24 February 2021

2.7

Second meeting of the Specialised Committee on Participation in EU Programmes

The Specialised Committee on Participation in EU Programmes met for a second time on 22 September 2022. This was just after the end of the 30-day consultation period specified in the TCA dispute settlement procedure. The meeting had originally been scheduled for the previous week (within the 30-day period) but had been postponed due to the mourning period following the death of Queen Elizabeth II.

A UK Government statement noted that the meeting had been held following the UK's request for consultations under the dispute settlement procedure. The statement indicated that no progress had been made:

At today's meeting, the UK once again requested that the EU fulfil its obligation to finalise the UK's association to EU Programmes after 16 months of delays. It is regrettable that the EU continues to decline this request.³⁵

The statement restated the UK preference for association to EU programmes and its views that "the EU's persistent delays to finalising UK association amount to a breach of the TCA". It said that the UK had set out that delays are causing considerable uncertainty for our research and business community and undermining scientific cooperation in both the UK and EU member states.

It added that the UK Government "is now urgently considering next steps".³⁶

2.8

Comments by Science Minister, October 2022

In an evidence session with the Science and Technology Committee on 12 October 2022, the Science Minister Nusrat Ghani said that the EU had "politicised scientific co-operation by [...] inappropriately linking UK participation in EU programmes to the Northern Ireland protocol". She said there "was no legal or practical basis for this linkage". She also said:

We and I have to prepare for an alternative because at some point we need to end the limbo. [...] We have been doing work to ensure that, if we have to pivot, we can.³⁷

³⁵ Foreign, Commonwealth & Development Office, [UK-EU Specialised Committee on Participation in Union Programmes consultations meeting, September 2022: UK statement, 22 September 2022](#)

³⁶ Foreign, Commonwealth & Development Office, [UK-EU Specialised Committee on Participation in Union Programmes consultations meeting, September 2022: UK statement, 22 September 2022](#)

³⁷ House of Commons Science and Technology Committee, [Oral evidence: R&D Policy One-off](#), HC 764, Wednesday 12 October 2022, Q73

3 Horizon Europe

[Horizon Europe](#) is the EU's current flagship funding programme for research and innovation. Running from 2021 to 2027, it has a budget of €95.5 billion which will be used to fund research in five “mission areas”:

- Adaptation to climate change including societal transformation
- Healthy oceans, seas, coastal and inland waters
- Cancer
- Soil health and food
- Climate-neutral and smart cities.³⁸

Under Horizon Europe's predecessor, Horizon 2020, the UK received 12.1% (over €7 billion) of total programme funding. The journal Nature notes that, in percentage terms, the UK received more in funding from Horizon 2020 than its average contribution to the overall EU budget (which was around 11.4% of the total EU budget).³⁹ The United Kingdom also received the highest number of grants from the European Research Council (ERC), the main science-funding body of Horizon 2020:

Of the nearly 7,000 principal investigators from 33 countries who received a prestigious ERC grant, around one-fifth (1,283) were at a UK institution.⁴⁰

3.1 Joint declaration and protocol on participation

The [Joint UK-EU Declaration on Participation in Union Programmes and Access to Programme Services](#) set out the parties' intention to (among other things) formalise UK participation in Horizon Europe at the earliest opportunity. It also stated that the UK would continue to participate in almost all parts of the Horizon Europe programme as an “associated country”.

³⁸ European Commission, [Horizon Europe](#), 19 March 2021, p11

³⁹ [Horizon 2020 by the numbers: how €60 billion was divided up among Europe's scientists](#), Nature, 22 December 2020

⁴⁰ As above

2 What is an ‘associated country’?

Associated countries can participate under the same conditions as Member States in Framework Programme budgets, meaning they can apply to participate in and lead collaborative research projects. Associated country status also means that UK applicants to Horizon Europe can access funding at the same rates, and under the same conditions, as EU Member States.⁴¹

Associated countries have no formal decision-making power over the Programme; they are not involved in discussions about priority funding areas or the structure of the programme. However, Article 4, paragraph 5 of the Joint Declaration states that “where United Kingdom entities participate in direct actions of the Joint Research Centre, representatives of the United Kingdom shall have the right to participate as observers in the Board of Governors of the Joint Research Centre, without voting rights”.

The proposed scope of the UK’s inclusion in Horizon Europe is explained in an FAQ published by the European Commission:

The UK is associating to the full Horizon Europe programme with the only exception of the EIC [European Innovation Council] Fund (which is the loan/equity instrument of the EIC). The scope of association includes the European Research Council (ERC), the Marie Curie-Skłodowska Actions, the six ‘Global Challenges’ clusters and Missions, the partnerships, the European Institute of Innovation and Technology, etc.

UK entities are not eligible to participate in the EIC Fund part of the EIC Accelerator, since the UK decided not to take part in financial instruments of the EU. This means UK entities can apply for grants under the Accelerator but they will not be eligible for loans or equity. They can also participate on an equal footing with entities from EU Member States and other associated countries in the EIC’s Pathfinder component.⁴²

3.2

The UK’s financial contribution to Horizon Europe

The UK will pay an annual participation fee to associate to Horizon Europe. The exact amount has not been finalised, though the formula that will be used to calculate it is available.

⁴¹ UKRI, [Working on EU-funded projects](#), 20 July 2022

⁴² European Commission, [Q&A on the UK’s participation in Horizon Europe](#), 22 December 2021

The UK will make contributions relative to the size of its economy (as measured by GDP) with a correction mechanism, where grants to the UK are above or below set levels

Article 714 of the Trade and Cooperation Agreement (financial conditions) sets out the rules for financing the UK's participation in EU programmes and activities (including Horizon Europe). It explains that the financial contribution includes an operational contribution and a participation fee.

As explained in section 1.3 of this briefing, there is also an automatic correction mechanism (set out in Article 716 and Draft Protocol I). This means that if, in any two consecutive years, the funding the UK receives from the programme (in this instance the value of Horizon Europe grants awarded to the UK) is 8% or more of what it contributes, then an additional contribution will be required. This prevents the UK from becoming a significant net financial beneficiary of the EU research funds from the Horizon Europe programme.

Conversely, if the value of grants awarded to the UK is 12% less than its contribution to the programme, it can request the Specialised Committee on Participation in Union Programmes “to start the performance review procedure [...] analyse the relevant performance-related data and adopt a report proposing appropriate measures to address performance related issues” (Article 721).

BEIS R&D budget allocations

The Government has budgeted for associating to Horizon Europe.

The [BEIS budget allocation](#) for 2021-22 stated that its “Provision for UK contribution to EU R&D programmes” was £1,293 billion. According to the budget allocation, the figure included:

provision for funding the United Kingdom's contribution to EU programmes including Horizon Europe, Euratom Research & Training, and associated volatility risk. We will pay a fair share towards Horizon Europe (around £1bn) and other EU programmes such as Euratom Research and Training (around £200m), the terms of which are set out in the UK-EU Trade and Cooperation Agreement (TCA).

The exact annual cost will vary depending on factors including whether the UK is excluded from any parts of the programme, GDP and foreign exchange rate considerations. We expect the funding set aside to cover these costs. We will not pay for any parts of the programme we are unable to access. Government will separately be providing funding for ongoing UK research projects already awarded under Horizon 2020, Euratom and Copernicus,

which is worth over £500 million in 2021/22 for UK scientists and innovators.⁴³

In its 2022-23 to 2024-25 R&D budget allocation, BEIS stated that it had “allocated £6.8 billion over the [spending review period] towards Horizon Europe and other EU programmes”. It added that, if the UK is unable to associate to Horizon Europe, “the funding allocated to Horizon association will go to UK government R&D programmes, including those to support new international partnerships”.⁴⁴

Giving evidence to the Commons Science and Technology Committee in October 2022, the Science Minister, Nusrat Ghani, confirmed that the £6.8 billion was “ringfenced” and that, were association not to occur, the entire sum would fund ‘Plan B’ (see section 3.4).⁴⁵

The House of Commons European Scrutiny Committee estimated in its May 2021 report that the UK associating to Horizon Europe would require “paying an estimated gross contribution over that period [2021-27] of approximately £12.7 billion, subject to adjustments and exchange rate variations”.⁴⁶ A subsequent letter to the Committee from the then Science Minister stated that the Government expected “UK payments to be in the region of £15bn between 2021-27”, though it is noted that the precise figure will depend on numerous factors, including UK GDP.⁴⁷

3.3

Finalising participation

[Regulation \(EU\) 2021/695](#), establishing Horizon Europe, was adopted by the European Parliament and the Council in May 2021. From this point onwards, finalising the UK’s participation in the programme has been possible. At the time of writing, however, this has yet to take place, with the EU citing “serious difficulties” in the implementation of the WA.

In the December 2021 meeting of the Specialised Committee on UK participation in EU programmes, the UK delegation stressed that delaying the adoption of Protocol I risked damaging scientific research and collaboration. (see Section 2.2).⁴⁸

⁴³ BEIS, [BEIS research and development \(R&D\) budget allocations 2021 to 2022](#), 27 May 2021

⁴⁴ [BEIS research and development \(R&D\): partner organisation allocation 2022-2023 to 2024-2025, updated May 2022](#)

⁴⁵ Q64, Science and Technology Committee, [Oral evidence: R&D Policy One-off](#), HC 764, 12 October 2022

⁴⁶ Commons European Scrutiny Committee, [First Report of Session 2021-22](#), HC 121-i, May 2021, p3

⁴⁷ [Letter from Amanda Soloway to Sir William Cash](#), Chair of the European Scrutiny Committee, 25 May 2021

⁴⁸ European Commission, [First meeting of the Specialised Committee on Participation in Union Programmes under the EU-UK Trade and Cooperation Agreement, Minutes](#), 21 December 2021

3.4

‘Plan B’

UK researchers can currently apply for Horizon Europe funding. Successful applicants, however, are unable to sign grant agreements with the EU, to access the funding, until UK participation in the Horizon Europe programme is finalised.

It was reported in April 2022 that successful UK applicants for European Research Council (ERC) grants, which are funded from the Horizon Europe budget, were given two months by the EU to decide on their next steps. They could either move to an EU (or associated) country, so that they could take up the funding, or decline the grant.⁴⁹ In June 2022, an ERC spokesperson stated that, of the 115 ERC grants so far awarded to UK-based researchers, 19 had moved to an EU or associated country institution to take up the grant, while 12 cases were still unresolved.

Funding guarantee

Recognising that the delays in associating to Horizon Europe were leading to much uncertainty for the research community, the UK Government announced a “funding guarantee” in March 2021. The guarantee is available to successful UK applicants to Horizon Europe who are “unable to sign grant agreements with the EU prior to formalisation of the UK’s association to the programme”. It is for the full value of the funding awarded under the Horizon Europe programme, at their UK host institution, for the lifetime of the grant.

The guarantee was initially due to be in place for those awards “expected to be signed by the end of December 2022”.⁵⁰ In September 2022, the Government extended the guarantee “to cover all Horizon Europe calls that close on or before 31 December 2022, with the majority of grant signature dates expected before the end of August 2023”.⁵¹

Giving evidence to the Commons Science and Technology Committee in June 2022, the then Science Minister, George Freeman, stated that time was running out for the UK to associate to Horizon Europe and that the Government may need to redirect the funding set aside for Horizon Europe to other R&D projects, including those that facilitate international cooperation:

[...] if the phone does not ring in the next few weeks and months, from September we will have to start giving the UK research community some serious reassurance and funding allocation. What I mean by that is—and we have looked at the Horizon programme—

⁴⁹ Science Business, [ERC issues ultimatum telling 150 UK-based grant holders to move to the EU](#), 12 April 2022

⁵⁰ BEIS, [Horizon Europe guarantee: open letters to the UK research and development sector](#), last updated 15 March 2022

⁵¹ Department for Business, Energy & Industrial Strategy, [Government extends Horizon Europe financial safety net](#), 1 September 2022

we will be rolling out more detail on our so-called plan B. I call it that because plan A remains to associate. That is the Cabinet's position. If we have to begin to go into implementing it, we will roll out a full and much bigger programme of pledges, commitments and announcements, and it will not be plan B; it will become then, sadly, plan A.⁵²

In July 2022, the Government published information on a range of “[transitional measures](#)” to support those affected by the delay in associating to Horizon Europe, as well further details about “the UK's long-term Horizon Europe alternative”. Box 3 below sets out the Government's high-level overview of its proposed alternative, though it does not provide information about how much funding will be allocated to each of the mechanisms outlined in the package. More detail on these plans is expected in autumn 2022.

In her evidence to the to the Commons Science and Technology Committee in October 2022, Science Minister Nusrat Ghani said in response to a question about when an alternative programme could be launched that it was important to have the alternative programme up to a level of speed that:

if we had to pivot, we could pivot quite quickly and then also to make sure that we have longer-term programmes ready to start in January. Then we can launch further programmes from April 2023.⁵³

3 A new global R&D programme for the UK

If the UK is unable to associate, the Government has stated that the funding allocated to Horizon Europe, at the 2021 Spending Review, will be used to “build on [...] existing R&D programmes” as well as making “flagship new domestic and international research and innovation investments”. The Government states that the long-term package is likely to include the following:

- “complementing our existing talent offer, a new **flagship talent offer**, with high-value, long-term fellowships and a strong international mobility offer. Our bold UK fellowship and award programme will embrace the success of the ERC and MSCA [Marie Skłodowska-Curie Actions – funding for PhD and postdoctoral training], providing the same career benefits and prestige with enhanced funding and flexibilities to retain and attract top talent in the UK;
- complementing our existing international investments, an ambitious programme for supporting **global collaboration**. This will include funds for bottom-up collaborations with researchers in partner countries

⁵² [Q469](#), Oral evidence: Diversity and Inclusion in STEM, Science and Technology Committee, 15 June 2022

⁵³ [Q76](#), Science and Technology Committee, [Oral evidence: R&D Policy One-off](#), HC 764, 12 October 2022

around the globe; multilateral and bilateral collaborations; and Third Country Participation in Horizon Europe;

- complementing the 66% increase in core Innovate UK funding at the last Spending Review and our range of programmes, we would increase our investment in **end-to-end innovation** by investing in industrial research and innovation. This will address UK government strategic priorities, including those identified by the National Science and Technology Council and industry needs by supporting domestic and international collaborations, focused on developing the UK's strategic advantage, new and emerging technologies, and accelerating commercialisation and uptake of innovation;
- **complementing our investments in the wider R&D system**, going faster on developing world class infrastructure, digital research capability and driving the development of emerging clusters throughout the UK. We would also provide Higher Education Institutions with additional funding to respond to the new programmes to ensure we do not place a further strain on research sustainability in the sector”.

Source: Department for Business, Energy and Industrial Strategy, [Supporting UK R&D and collaborative research beyond European programmes, 20 July 2022](#)

Third country participation

As part of its ‘global collaboration’ strand, the Government’s overview (Box 3) states that it will support ‘third-country’ participation in Horizon Europe programmes if association cannot be achieved.

Under the [EU’s ‘openness principles’](#), non-associated third countries can take part in a project consortium applying for Horizon Europe funding. For the project to be eligible for funding, at least one of the applicants must be based in an EU Member State. It must also involve two other applicants that are either based in an EU Member State or in an associated country. Applicants from the third country do not sign the grant agreement, do not receive EU funding, and typically are required to bring their own funding to the project.⁵⁴ The Government’s overview of its ‘long-term Horizon Europe alternative’ indicates that it would not impose limits on how many third country participants it would help to finance, instead stating that it would:

fund all eligible UK entities participating in any such consortia signing grant agreements before 31 March 2025. The government will

⁵⁴ [Summary of the Rules to be followed — ERA-LEARN](#), not dated [accessed 12 September 2022]

consider our approach to funding for Third Country Participation beyond this date and make an announcement by October 2024.⁵⁵

Stakeholder responses

Stakeholders have broadly welcomed both the Government's transitional measures, as well as its outline of the UK's long-term Horizon Europe alternative, should association not take place. Martin Smith, head of Policy Lab at Wellcome, described the latter as "probably the best that you can do under the circumstances".⁵⁶ Adrian Smith, President of the Royal Society, stated that he particularly welcomed the "Government's commitment to sharing and consulting with the science community on alternative plans".⁵⁷ University Alliance noted that while the plans provided "some assurance [that researchers] are not facing a possible funding cliff edge", it raised concerns about the lack of detail currently available on 'Plan B', with a similar point made by committee members at the Institution of Chemical Engineers.⁵⁸

Stakeholders, however, have also stressed that their first preference remains for the UK to associate to Horizon Europe.⁵⁹ Though Research Professional News reported that, "structurally [the Government's proposed], scheme looks remarkably like Horizon", there are worries that it will not straightforwardly facilitate the aspects of Horizon Europe that are unrelated to funding, such as international collaboration and cooperation.⁶⁰ There are also concerns that, while the sums involved in Horizon Europe are committed for a seven year period, the funding for the UK's domestic replacement scheme may be more prone to change and fluctuation since the funds are not ring-fenced in the same way as in the EU.⁶¹

⁵⁵ BEIS, [Supporting UK R&D and collaborative research beyond European programmes](#), 20 July 2022

⁵⁶ [Lack of political will could undermine UK's plan B - Research Professional News](#), 25 July 2022; [U.K. outlines 'Plan B' research funding to skirt EU impasse | Science | AAAS](#), 21 July 2022

⁵⁷ [Calls for UK to maintain EU research links as Government publishes 'Horizon Plan B' - News - The Chemical Engineer](#), 9 August 2022

⁵⁸ [University Alliance responds to the BEIS 'Plan B' announcement, on an alternative to Horizon Europe | University Alliance \(unialliance.ac.uk\)](#), 21 July 2022; [Calls for UK to maintain EU research links as Government publishes 'Horizon Plan B' - News - The Chemical Engineer](#), 9 August 2022

⁵⁹ [U.K. outlines 'Plan B' research funding to skirt EU impasse | Science | AAAS](#), 21 July 2022; [Calls for UK to maintain EU research links as Government publishes 'Horizon Plan B' - News - The Chemical Engineer](#), 9 August 2022

⁶⁰ [Lack of political will could undermine UK's plan B - Research Professional News](#), 25 July 2022

⁶¹ Science Business, [UK publishes details of 'Plan B' alternative to Horizon Europe](#), 21 July 2022

4 Other programmes

In the TCA negotiations, the UK and EU also agreed that the UK would participate in the ‘Copernicus’ earth observation programme, Euratom Research and Training, and the EU’s contribution to the international ‘ITER’ nuclear fusion project. The UK would also be able to access services from the Space Surveillance and Tracking programme.

Participation in these programmes looks similarly in doubt. This is particularly significant in the context of Copernicus earth observation programme – for which the UK Government had set aside £750 million for future contributions – and where tenders relating to the next stage of its development are being prepared.⁶² The Government has said it is preparing “comprehensive plans of alternative measures for these programmes” if the UK is unable to associate with them.⁶³

4.1 EU Space Programme

A new EU space programme, covering the period 2021 to 2027, was adopted by the European Parliament and Council ([Regulation \(EU\) 2021/696](#)) in April 2021. The regulation is described by the European Council as simplifying “the existing EU legal framework and governance system and standardi[sing] the security framework” for the EU space programme.⁶⁴ It also brings together existing EU programmes “under one umbrella”.⁶⁵ Box 4 sets out the three flagship EU space programmes: Copernicus, Galileo and EGNOS.

4 Flagship EU space programmes

- [Copernicus](#) is the EU’s earth observation programme. It relies on satellite and in situ data to help monitor and map changes (for example in land use) and improve forecasts (for example of the ocean and atmosphere).
- [Galileo](#) is the EU’s global navigation satellite system, providing highly accurate global positioning, navigation and timing data. There are currently 26, out of a planned 30, satellites in orbit, providing Galileo’s initial services.

⁶² [European Space Agency offers UK alternative to EU’s Copernicus project](#), Financial Times, 10 June 2022

⁶³ BEIS, [Supporting UK R&D and collaborative research beyond European programmes](#), 20 July 2022

⁶⁴ European Council, [EU space policy](#), 22 July 2021

⁶⁵ As above

- [EGNOS](#), the European Geostationary Navigation Overlay Service, provides navigation services to aviation, maritime and land-based users throughout the EU through “improving the accuracy of basic satellite navigation signals in Europe, such as those from the USA’s Global Positioning System (GPS)” and Galileo.
- For further information, see the Parliamentary Office of Science and Technology POSTbrief on [Key EU Space Programmes](#) (June 2020).

UK participation in EU space programmes

Copernicus

Under the [Joint Declaration on Participation in Union Programmes and Access to Programme Services](#) (which set out the terms of the UK’s participation in a range of EU programmes) there is an agreement in principle for the UK to continue to participate in the “Copernicus component of the [EU] Space programme and benefit from Copernicus services and products in the same way as other participating countries” for the period 2021-27.⁶⁶ The agreement also includes participation in the “[Copernicus Security Service](#) components”, which uses Copernicus satellite data for border and maritime surveillance. A separate agreement is expected between the UK and EU to define “the extent of cooperation” in relation to the security service components.⁶⁷

Formal participation, however, will only begin once Protocol I to the Trade and Cooperation Agreement is adopted. The then Defra Minister, Rebecca Pow, stated in response to a PQ in May 2021 that the UK’s “financial commitment [to Copernicus] will [then] be reported in Defra’s accounts”.⁶⁸ More recently, Defra’s Estimate for 2022/23 includes “£106 million capital ringfenced budget for the UK’s potential contribution to the EU’s Copernicus Programme of Earth Observation Satellites”.⁶⁹

The UK Government expects participation will involve the following:

- UK-based businesses, academics and researchers will [...] be able to bid for future Copernicus contracts tendered through the EU, funded through the EU’s Multi-annual Financial Framework and through any process using EU procurement rules;
- UK users will also be able to access most of the Copernicus data and services as now;

⁶⁶ Article 3(1) of the [Joint Declaration on Participation in Union Programmes and Access to Programme Services](#), gov.uk, 24 December 2020

⁶⁷ Article 3(3) of the [Joint Declaration on Participation in Union Programmes and Access to Programme Services](#), gov.uk, 24 December 2020

⁶⁸ [PQ 6188](#) [on Copernicus Programme: Finance], 27 May 2021

⁶⁹ Defra, [Estimate](#), May 2022

- the UK would not have access to a small proportion of data considered to be security sensitive.⁷⁰

As noted above, tenders relating to the next stage of Copernicus are being prepared. Currently, however, the UK cannot bid for Copernicus contracts while it is not an associated country.⁷¹ The BEIS policy paper on supporting [supporting UK R&D and collaborative research beyond European programmes](#), published in July 2022, states that there is a plan for a UK alternative to Copernicus, with more details expected in due course. It said the Government was also developing a package of transitional measures “to mitigate the impact of ongoing delays to participating in Copernicus, and to preserve the UK’s leading reputation within the global Earth Observation market”.⁷²

A Financial Times report in June 2022 noted that, without the UK’s participation, Copernicus faces a “budget shortfall” which could “curb planned Copernicus missions after 2024”. The report also said that the Government was exploring an expanded role in the European Space Agency (ESA) as an alternative to involvement in Copernicus.⁷³

European Space Agency

The Government has emphasised that the UK’s membership of the European Space Agency (ESA) is not affected by leaving the EU, since ESA is not an EU organisation. Consequently, the UK also continues to participate in the Copernicus Space Component (CSC-4) of the Copernicus programme through ESA. Further details about Copernicus contracts tendered through the European Centre for Medium-Range Weather Forecasts (ECMWF) are available on the [Department for Business, Energy & Industrial Strategy \(BEIS\) webpage](#).⁷⁴

Galileo and EGNOS

Following the UK’s exit from the European Union, the UK no longer participates in the EU Galileo or EGNOS programmes, both of which are fully-financed by the EU budget. During a debate in the House of Lords on the [space industry](#), the then Cabinet Office Minister, Lord Frost, remarked that the UK “was not able to reach a satisfactory outcome that would have enabled participation in our interests” in these EU space programmes.⁷⁵ BEIS has set out the following, specific areas where UK involvement has come to an end:

⁷⁰ Department for Business, Energy & Industrial Strategy, [UK involvement in the EU Space Programme](#), last updated 7 June 2021

⁷¹ Copernicus, [Current tenders](#) [accessed 1 November 2022]

⁷² BEIS, [Supporting UK R&D and collaborative research beyond European programmes](#), 20 July 2022

⁷³ Financial Times, [European Space Agency offers UK alternative to EU’s Copernicus project | Financial Times](#), 10 June 2022

⁷⁴ As above

⁷⁵ [HL Deb, 4 March 2021, c510GC](#)

The UK:

- does not use Galileo (including the future Public Regulated Service (PRS)) for defence or critical national infrastructure
- does not have access to the encrypted Galileo Public Regulated Service
- cannot play any part in the development of Galileo
- cannot play any part in the development of EGNOS
- from 25 June 2021 UK users will not be able to use the EGNOS SoL service and the EGNOS Working Agreements (EWAs), which will no longer be recognised by the EU

This also means that UK-based businesses, academics and researchers cannot bid for future EU GNSS contracts and may face difficulty carrying out and completing existing contracts.⁷⁶

BEIS also emphasised, however, that “devices that currently use Galileo and EGNOS, such as smartphones, will continue to be able to do so” and that “EU subsidiaries of UK businesses are eligible to bid for future work on the EU Global Navigation Satellite System (GNSS) programmes”.⁷⁷

4.2

Euratom

Background

The European Atomic Energy Community (Euratom) was established in the 1950s as part of the creation of the European Community. The UK became a member of both on 1 January 1973. Euratom provides the basis for the regulation of civilian nuclear activity, implements a system of safeguards to monitor the use of civil nuclear materials, controls the supply of fissile (able to undergo nuclear fission) materials within EU member states, and funds leading international research.⁷⁸

The Government said that Euratom and the EU are “uniquely legally joined” such that “triggering Article 50 therefore also entails giving notice to leave Euratom”. However, concern was raised that leaving Euratom had the potential to impact the UK’s current nuclear operations, including fuel supply, medical radioisotope supply, waste management, cooperation with other nuclear states, and research, such as at the Culham Centre in Oxford.

⁷⁶ Department for Business, Energy & Industrial Strategy, [UK involvement in the EU Space Programme](#), last updated 7 June 2021

⁷⁷ As above

⁷⁸ Details on the role of Euratom are set out in the House of Commons Library Briefing paper, [Euratom](#).

The UK Government consistently said that it wanted a close association with Euratom after Brexit.

Nuclear Cooperation Agreement with Euratom

In December 2020, the Government announced it had agreed a Nuclear Cooperation Agreement with Euratom. The Government said:

The UK and the European Atomic Energy Community (Euratom) have agreed a Nuclear Cooperation Agreement (NCA).

This is a separate agreement from the wider UK-EU Trade and Cooperation Agreement.

An NCA is a commonly used international treaty which gives a legal underpinning to civil nuclear cooperation, and both Euratom and the UK already have such agreements with a number of other countries.

The UK and Euratom are global leaders in supporting responsible practices in civil nuclear, particularly non-proliferation of nuclear weapons. This UK-Euratom NCA sends a clear message to the wider international community, the nuclear sector, and the public that both parties are fully committed to cooperation on civil nuclear, including safeguards, safety, and security. It provides a framework for trade in nuclear materials and technology, facilitates research and development, and enables exchange of information and expertise including on medical radioisotopes.⁷⁹

Euratom and UK research

As a Member of Euratom, the UK was involved in EU nuclear fusion research as part of the JET (Joint European Torus) and ITER (International Thermonuclear Experimental Reactor) projects. JET is a magnetic fusion device, designed to prove the feasibility of fusion as an energy source. The project is based at Culham in Oxfordshire. Euratom provides 87.5% of the funding for the project and the UK Government provides the rest.

JET is helping to inform a larger fusion reactor – ITER - which is being built in France.

UK Participation

[Guidance \(now withdrawn\) on the Government webpage](#) sets out the agreements that the UK made with Euratom regarding continued participation:

⁷⁹ UK Government, [UK-Euratom nuclear cooperation agreement - notice](#), updated 24 December 2020.

The UK left the European Atomic Energy Community (Euratom) on 31 January 2020.

The UK has reached an agreement with the EU and Euratom to participate from 1 January 2021 in:

- the Euratom Research and Training (R&T) Programme
- Fusion for Energy
- the International Thermonuclear Experimental Reactor (ITER) project, as a Fusion for Energy member

This agreement is subject to ratification of the overall deal and finalisation of the EU's budget and the Programme regulations.

Euratom Research and Training programme

UK scientists, researchers and businesses will be able to participate in and bid for competitive awards from the Euratom R&T Programme.

UK participants will be able to lead consortia and distribute funding to other participants.

Fusion for Energy and ITER

The UK will remain a member of Fusion for Energy. UK companies can continue to bid for ITER contracts tendered by both Fusion for Energy and the ITER organisation.

UK researchers and staff can continue working at ITER from 1 January 2021.

Joint European Torus (JET)

The UK Atomic Energy Authority will continue to operate the Joint European Torus (JET) until at least October 2021. The UK government will continue to explore options for operation beyond that date.⁸⁰

4.3 Joint Declaration

Under the [Joint Declaration on Participation in Union Programmes and Access to Programme Services](#) (which set out the terms of the UK's participation in a range of EU programmes), the parties recognise "the mutual benefit in

⁸⁰ UK Government, [Participating in EU nuclear research from 1 January 2021](#), Last updated 24 December 2020

cooperation in areas of shared interest, such as science, research and innovation, nuclear research and space”

The declaration states under Article 7 that UK entities “may participate in all aspects of the Euratom Programme under equivalent conditions as those applicable to Euratom legal entities”. UK entities may also participate in direct actions of the Joint Research Council (JRC).

Terms and conditions for participation in ITER and Fusion Energy (F4E) are set out in Article 8. This includes a statement that, subject to the provisions of the TCA, UK entities “may participate in all the activities of F4E under the same conditions as those applicable to Euratom legal entities”. The terms also state that various agreements relating to the establishment of the ITER “shall apply to the territory of the United Kingdom”.

4.4 UK alternative plans for Euratom research and Fusion Energy

The July 2022 BEIS policy paper on supporting UK R&D and collaborative research beyond European programmes said the Government was working “to develop a robust and ambitious programme of alternatives for our fusion and fission stakeholders”. This is in addition to “support already given for holders of Euratom fission grants”.

It explained that this would involve new technological facilities and new international collaborations. Support for the fusion section would include a short-term package of transitional measures, including “support for the UK fusion supply chain to deploy quickly to reduce funding risks and to protect the UK’s global fusion reputation while longer term alternatives are put in place”. The BEIS paper said this would also include:

continuing to utilise our domestic facilities for cutting-edge fusion research and operations, galvanising support for the fusion sector and exploring the prospect of international fusion research partnerships, including ITER.⁸¹

Further details of these measures would be released in due course, and the Government would work with affected sectors in finalising the plans.⁸²

⁸¹ BEIS, [Supporting UK R&D and collaborative research beyond European programmes](#), 20 July 2022

⁸² As above

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