Assimilated Technology Transfer Block Exemption Review

CMA's Recommendation to the Secretary of State

Contents

1. Summary

1.1 The purpose of this document is to recommend that the Secretary of State for Business and Trade (the Secretary of State) make a new UK block exemption order to replace the assimilated[1] Technology Transfer Block Exemption Regulation (Assimilated TTBER)[2] when it expires on 30 April 2026.

1.2 The Assimilated TTBER automatically exempts certain types of technology transfer agreements from the Chapter I prohibition of the Competition Act 1998 (CA98). A 'technology transfer agreement' for the purpose of the Assimilated TTBER is an agreement in which one party (the licensor) assigns or licences the use of intellectual property rights (such as patents, design rights, software copyrights and know-how) to another party (licensee) for the production of goods or services.[3]

1.3 The Assimilated TTBER is aimed at facilitating the licensing of technology rights. This is in recognition that such agreements can often be pro-competitive and can significantly benefit innovation, investment and growth, including by the following:

- encouraging the cost-effective dissemination of technology;
- broadening the reach of the licensed technology into different markets;
- increasing market penetration: the owner of technology rights may license another business to sell products protected by the technology rights in territories that the owner of the licensed technology cannot cover;

[1] Under the Retained EU Law (Revocation and Reform) Act 2023, what was previously 'retained EU law' has become 'assimilated law' from 1 January 2024. 'Assimilated law' is domestic law which was previously retained EU law, but without the application of the EU law interpretative features applied to retained EU law by the European Union (Withdrawal) Act 2018 - namely, supremacy, general principles of EU law and rights retained under section 4 of the European Union (Withdrawal) Act 2018.

[2] Commission Regulation (EU) 316/2014 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements (see section 10(12)(g) of the CA98), available here Commission Regulation (EU) No 316/2014 of 21 March 2014 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements (Text with EEA relevance).

[3] Article 1(1)(c) of the Assimilated TTBER. Article 1(1)(b) of the assimilated TBBER defines the 'technology rights' to which a technology transfer agreement for the purposes of the block exemption can apply as patents, utility models, design rights, topographies of semiconductor products, supplementary protection certificates for medicinal products or other products for which such supplementary protection certificates may be obtained, plant breeder's certificates and software copyrights. There is no protection available for utility models in the United Kingdom.

- reducing cost: a business may 'license in' innovation to reduce its own research and development costs;
- saving time: a business may get its products or services to market more quickly by acquiring a licence to use existing technology rights, instead of 're-inventing the wheel' (sometimes referred to as an 'engineering workaround'); and
- accessing expertise: by taking a technology licence, a business may be able to tap into expertise that it does not have in-house.[4]

1.4 However, technology transfer agreements can also have negative effects on competition. The aim of the Assimilated TTBER is to provide an automatic exemption to those agreements that, in broad terms, result in benefits to consumers which outweigh the impact of any restrictions on competition they cause.

1.5 On 14 March 2025, the Competition and Markets Authority (CMA) published a consultation document pursuant to section 10A of the CA98. In the consultation document, the CMA sought views on its proposed recommendation to the Secretary of State to replace the Assimilated TTBER with a UK Technology Transfer Block Exemption Order (the Recommended TTBEO). This consultation (the Consultation) ran until 11 April 2025, and the CMA received 12 responses.

1.6 The CMA is grateful for the useful contributions from respondents. The CMA has made some changes to the proposed recommendation that was set out in the Consultation, based upon this feedback. The non-confidential responses to the Consultation have been published on the CMA webpage (with any confidential information redacted).

Background

The Chapter I prohibition of the CA98

1.7 The Chapter I prohibition of the CA98 prohibits anticompetitive agreements between undertakings.[5] An undertaking is in effect a business. For the purposes of this Recommendation, therefore, we will refer to undertakings as businesses.

[4] See, for example, Licensing intellectual property - GOV.UK. And see also Recital 4 of the Assimilated TTBER.
[5] The Chapter I prohibition is set out in section 2 of the CA98.

1.8 The Chapter I prohibition applies to agreements between businesses which have as their object or effect the prevention, restriction or distortion of competition within the UK and which:

(i) in the case of agreements implemented, or intended to be implemented, in the UK, may affect trade within the UK; or

(ii) in any other case, are likely to have an immediate, substantial and foreseeable effect on trade within the United Kingdom

1.9 unless such agreements satisfy the exemption criteria set out in section 9 of the CA98.

Exemptions

1.10 Section 9(1) of the CA98 (the section 9 exemption) provides that an agreement is exempt from the Chapter I prohibition if it:

(a) contributes to

(i) improving production or distribution; or

(ii) promoting technical or economic progress;

1.11 while allowing consumers a fair share of the resulting benefit; and

1.12 (b) does not

(i) impose on the businesses concerned restrictions which are not indispensable to the attainment of those objectives; or

(ii) afford the businesses concerned the possibility of eliminating competition in respect of a substantial part of the products in question.

Block exemption orders

1.13 An agreement may be individually recognised as exempt by a competition authority or a court. In addition, certain types of agreement will be treated as automatically exempt if they meet conditions set out in a 'block exemption' regulation or order applicable to that category of agreements.[6]

[6] See section 6 of the CA98.

Block exemptions - benefits

1.14 Block exemptions have several benefits for businesses. First, they provide legal certainty to businesses as they enable them to know in advance how to ensure that their agreements comply with competition law. Second, they avoid placing on businesses the burden of scrutinising a large number of agreements that are likely to satisfy the exemption requirements set out in section 9 of the CA98. Third, the existence of a block exemption also ensures consistency of approach by providing a common framework for businesses to assess their agreements against the Chapter I prohibition.

1.15 Block exemptions also bring about enforcement efficiencies by removing the need for the CMA to spend considerable time scrutinising agreements likely to be benign, thereby enabling it to concentrate its resources on other matters that are more likely to give rise to significant competition concerns. In this regard, the CMA notes that the various conditions of the current assimilated block exemptions are designed to ensure that exempted agreements will not give rise to significant competition concerns.

The Assimilated TTBER in UK Law

1.16 The Assimilated TTBER was retained in UK law following the United Kingdom's withdrawal from the European Union (EU) and the end of the Transition Period, [7] and is due to expire on 30 April 2026.[8] The European Union Technology Transfer Block Exemption Regulation (the EU TTBER) is substantively the same as the Assimilated TTBER except that it applies to the EU rather than the UK.

1.17 The EU TTBER was adopted in March 2014[9] in advance of the expiry on 30 April 2014 of the 2004 version of the EU TTBER (the 2004 EU TTBER).[10] The EU TTBER also expires on 30 April 2026.[11]

[7] The Transition Period began when the UK left the EU on 31 January 2020 and ended on 31 December 2020. During this period, the UK ceased to be an EU Member State but remained subject to most EU rules. The assimilated exemptions were created by a combination of the operation of the European Union (Withdrawal) Act 2018 and the Competition (Amendment etc.) (EU Exit) Regulations 2019, as amended by the Competition (Amendment etc.) (EU Exit) Regulations 2020.
[8] Previously, Regulation 316/2014 of 21 March 2014 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements OJ L 93, 28.3.2014 applied in the UK and provided an automatic exemption for the agreements that met the conditions set out in that regulation.
[9] See footnote 8 above.
[10] Commission Regulation (EC) No 772/2004 of 27 April 2004 on the application of Article 81(3) of the Treaty to categories of technology transfer agreements. OJ L 123, 27.4.2004.
[11] See Article 11 of the EU TTBER.

1.18 The EU TTBER is also accompanied by the EU Technology Transfer Guidelines (EU TTGs).[12] The EU TTGs are intended to complement the EU TTBER and set out general principles for the assessment of technology transfer agreements. They provide guidance on both the application of the EU TTBER to technology transfer agreements and the assessment of other technology transfer agreements that are not covered by the EU TTBER.

Aims of the Assimilated TTBER

1.19 Technology transfer agreements can often be pro-competitive and can benefit innovation, investment and growth.

1.20 As such, in many cases, technology transfer agreements either do not restrict competition (i.e. they fall outside the scope of the Chapter I prohibition of the CA98), or, where they fall within that prohibition, they create objective benefits that are passed on to consumers and meet the exemption criteria set out in section 9 of the CA98.

1.21 However, technology transfer agreements, or certain clauses within such agreements, can also have negative effects on competition. In particular, they may facilitate collusion, restrict the ability of competitors to enter a market or to expand, or they may harm inter- or intra-technology competition, for example by reducing the incentives to innovate.

1.22 Bearing these considerations in mind, the Assimilated TTBER aims to facilitate pro-competitive technology licensing, while providing legal certainty for businesses.[13] It seeks to achieve this aim by automatically exempting technology transfer agreements from the Chapter I prohibition of the CA98, insofar as those agreements meet the conditions set out in Assimilated TTBER. Agreements that do not satisfy those conditions do not necessarily infringe the Chapter I prohibition of the CA98, but they will require individual assessment under that prohibition.

Review of the Assimilated TTBER

1.23 The CMA formally launched a review of the Assimilated TTBER in July 2024 for the purpose of making a recommendation to the Secretary of State about whether to replace the Assimilated TTBER with a block exemption order when it expires on 30 April 2026 and, if it is to be so replaced, whether to vary it. A

[12] Communication from the Commission — Guidelines on the application of Article 101 of the Treaty on the Functioning of the European Union to technology transfer agreements
[13] See Recital 3 of the Assimilated TTBER.

key part of this review included publishing a call for inputs to seek stakeholder feedback on the Assimilated TTBER (the Call for Inputs).[14]

1.24 The CMA received 11 responses to the Call for Inputs. The responses were provided by academics, legal professionals, businesses and business associations.[15]

1.25 Prior to launching the Call for Inputs, the CMA also had discussions with certain interested stakeholders about their views on the effectiveness of the Assimilated TTBER.

1.26 As noted above, the CMA issued its Consultation on 14 March 2025[16] and received 12 responses.[17] The responses were provided by academics, law firms, businesses, business associations. A list of respondents to the Consultation is provided in Annex A.

1.27 The European Commission separately launched its own evaluation process in November 2022 (the European Commission Evaluation).[18] As part of this exercise, the European Commission published a Staff Working Document on 22 November 2024 (the European Commission Staff Working Document)[19] and a Call for Evidence for an Impact Assessment on Revision of the Technology Transfer Block Exemption Regulation and Technology Transfer Guidelines on 31 January 2025 (the European Commission Impact Assessment).[20] The Call for Evidence (along with a public consultation questionnaire) ran until 25 April 2025.

1.28 In addition to the responses to the Call for Inputs, the responses to the Consultation and other stakeholder engagement, the CMA has also taken into consideration the evidence from the European Commission's Evaluation in making this Recommendation. The CMA considers this to be appropriate, among other things, because most of the Assimilated TTBER is identical to the EU TTBER. Stakeholder views on the effectiveness of the EU TTBER are obviously relevant to a review of the Assimilated TTBER.

1.29 Moreover, businesses often engage in technology licensing programmes on a regional, and even, global basis. This means that the Assimilated TTBER

[14] Technology Transfer Block Exemption Regulation - GOV.UK.
[15] For the non-confidential responses, see Technology Transfer Block Exemption Regulation - GOV.UK
[16] Consultation on the CMA's Proposed Recommendation on the Assimilated TTBER
[17] The non-confidential responses are published here: Technology Transfer Block Exemption Regulation - GOV.UK
[18] 2023 technology transfer - European Commission
[19] EU competition rules on technology transfer agreements – evaluation.
[20] EU competition rules on technology transfer agreements (revision).

cannot be considered in isolation as such businesses frequently need to consider compliance with both UK competition law and EU competition law when engaging in technology licensing. Differences between EU and UK technology licensing block exemptions could increase the cost of, and therefore risk disincentivising, technology licensing in the UK. The CMA has therefore also taken into consideration, as appropriate, the draft revised EU TTBER and draft EU TTGs published for consultation on 11 September 2025.[21] It should, however, be noted that some variations between such block exemptions may be necessary or appropriate, having regard to any relevant differences between the EU and UK legal and economic contexts.

The Recommendation

1.30 Having carefully considered the various issues and the responses that it has received to the Consultation, the CMA recommends, pursuant to section 6(1) of the CA98, that the Secretary of State make the Recommended TTBEO. This would be an exemption order of 12 years' duration, with a transitional period of one year,[22] that exempts the categories of technology transfer agreements currently exempted by the Assimilated TTBER and includes the same definitions, conditions and obligations as the Assimilated TTBER (adapted as necessary for UK purposes), subject to making some minor clarificatory changes and the following variations:

(a) removing 'utility models' from the definition of 'technology rights';

(b) adding 'copyright in a database' and 'database rights' to the definitions of 'technology rights' and making any necessary clarifications to the definition of 'intellectual property rights';

(c) adding definitions of 'active sales' and 'passive sales';

(d) in respect of technology markets, in addition to carrying over the market share thresholds from the Assimilated TTBER, providing for an alternative test of three or more competing technologies – these would be alternative tests, and an agreement would only need to satisfy one of the two tests in order to benefit from the block exemption;

[21] These are available here: EUR-Lex - 52025XC05024 - EN - EUR-Lex

[22] This means that the Chapter I prohibition would not apply during a period of one year from the date on which the Recommended TTEBO comes into effect in respect of technology transfer agreements already in force on that date which do not satisfy the conditions for exemption provided for in the Recommended TTBEO, but on that date, satisfied the conditions for exemption provided for in the Assimilated TTBER (unless the benefit of the block exemption is cancelled, or otherwise varied or revoked, in accordance with the provisions of the Recommended TTBEO or the CA98).

(e) when carrying over the provisions of Article 8(b) of the Assimilated TTBER on using the preceding calendar year for calculating market share data, adding provisions to the effect that, if the preceding calendar year is not representative of the parties' position in the relevant market(s), the market share is to be calculated as an average of the parties' market shares for the three preceding calendar years;

(f) when carrying over the 'footprint' approach in Article 8(d) of the Assimilated TTBER, amending it so that it applies equivalently to both parties to the agreement;

(g) when carrying over the grace period in Article 8(e) of the Assimilated TTBER, increasing it to three years from the current two years, and, in respect of technology markets, ensuring that an agreement initially satisfying either the applicable market share threshold test **or** the three or more competing technologies test benefits from the grace period, if that agreement subsequently satisfies **neither** of these conditions;

(h) providing the CMA with investigative powers in situations where it is considering whether the benefit of the block exemption should be removed from a technology transfer agreement; and

(i) providing the CMA with the power to remove the benefit of the block exemption from a technology transfer agreement if the CMA considers that the agreement is not an exempt agreement.

1.31 In making this Recommendation, the CMA has had regard to the importance of prioritising growth and encouraging investment, and also supporting growth and international competitiveness in the eight growth-driving sectors set out in the Government's The UK's Modern Industrial Strategy.[23] The CMA also notes that the UK Modern Industrial Strategy among other things refers to the importance of driving and supporting innovation.[24]

1.32 The CMA considers that technology licensing facilitates important collaboration that helps promote innovation, investment and growth (see paragraph 1.3 above).

1.33 However, technology transfer agreements can also have negative effects on competition. The aim of the Recommended TTBEO is to provide an automatic

[23] See, for example, the Strategic steer to the Competition and Markets Authority - GOV.UK. In The UK's Modern Industrial Strategy eight growth-driving sectors are discussed: (i) advanced manufacturing; (ii) clean energy industries; (iii) creative industries; (iv) defence; (v) digital and technologies; (vi) financial services; (vii) life sciences; and (viii) professional and business services.
[24] Ibid.

exemption to those agreements that, in broad terms, result in benefits to consumers which outweigh the impact of any restrictions on competition they cause. It is therefore intended to help ensure that businesses are not deterred from engaging in pro-competitive technology licensing. The Recommended TTBEO aims to do so by providing legal certainty as to when such technology transfer agreements are automatically exempt from the Chapter I prohibition of the CA98. In this way, the Recommended TTBEO will help promote innovation, investment and growth by facilitating the pro-competitive licensing of technology.

1.34 The CMA also plans in due course to publish a guidance document intended to help businesses understand the application of any block exemption order that the Secretary of State might make for technology transfer agreements. The guidance document is important because technology transfer agreements that do not meet the requirements of any block exemption order may still be capable of individual exemption. The guidance document will explain how the Chapter I prohibition applies to such agreements not covered by any such block exemption order.

1.35 The CMA's detailed reasons for the Recommendation are discussed in Chapter 2 below.

2. The CMA's Recommendation

2.1 The following paragraphs provide more detail of the rationale for the CMA's Recommendation set out above.

2.2 The CMA also summarises key points made in response to the Consultation and the CMA's views on them. Furthermore, the CMA discusses below, as it considers appropriate and relevant to the Recommendation, outputs from the European Commission Evaluation.

2.3 This document is not intended to be a comprehensive record of all views expressed in response to the Consultation, nor to be a comprehensive response to all individual views.

General recommendation

2.4 Respondents to the Call for Inputs said that the Assimilated TTBER had worked well overall and created real benefits for technology licensing in the UK. No respondents to the Call for Inputs suggested that the Assimilated TTBER should be allowed to lapse without replacement.[25]

2.5 There were also no suggestions from respondents to the Call for Inputs that the Assimilated TTBER was exempting categories of agreements unlikely to the satisfy the exemption criteria in section 9 of the CA98.[26]

2.6 The CMA noted in the Consultation that the European Commission Staff Working Document also concludes that the EU TTBER and EU TTGs have overall met their objectives.[27] The European Commission states in the same document that a study it commissioned for the purposes of its evaluation did not identify any types of technology transfer agreements that are currently covered by the block exemption, but for which it is not possible to assume with sufficient certainty that they meet the conditions for exemption under Article 101(3) of the TFEU (the EU equivalent of the Section 9 exemption). The European Commission Staff Working Document also states that stakeholders would anticipate increased costs in the absence of the EU TTBER and EU TTGs.[28]

2.7 Respondents to the Consultation similarly said that the Assimilated TTBER has worked well overall and created real benefits for technology licensing in the UK. No respondents to the Consultation suggested that the Assimilated

[25] See paragraph 3.4 of the Consultation.
[26] Ibid.
[27] See paragraph 3.5 of the Consultation.
[28] Ibid.

TTBER should be allowed to lapse without replacement. There were also no suggestions from respondents that the Assimilated TTBER exempts categories of agreements unlikely to the satisfy the exemption criteria in section 9 of the CA98.[29] Six respondents to the Consultation said that there would be a negative impact if the Assimilated TTBER were allowed to lapse without replacement.[30]

2.8 Some respondents to the Consultation, however, suggested various changes to the Assimilated TTBER for inclusion in the Recommended TTBEO. These suggestions and the CMA's views on them are discussed below.

2.9 The CMA therefore recommends to the Secretary of State that a new UK block exemption order be made to replace the Assimilated TTBER when it expires on 30 April 2026, subject to the changes set out in the following section.

Changes to the Assimilated TTBER

Definitions

Current regime

2.10 The Assimilated TTBER is applicable to technology transfer agreements concerning the licensing or assignment of technology rights and as such covers only bilateral agreements between two businesses.[31] These agreements will usually improve economic efficiency and be pro-competitive as they can reduce duplication of research and development, strengthen the incentives for initial research and development, spur incremental innovation, facilitate diffusion of new technologies, and generate product market competition.[32]

[29] In this context, it should be noted that a respondent observed that under the EU TTGs, technology pools are assessed 'by analogy' to the Assimilated TTBER. This respondent asserted that patent pools – particularly, the collective licensing of standard essential patents – were currently allowed to operate largely without competition law scrutiny of various key aspects of their operation, the result of which could be a restriction of competition. They said that the Assimilated TTBER and EU TTGs were now out of date with respect to technology pools and should be updated to keep pace with market practices and behaviours in order to promote economic activity and benefit consumers in the UK. However, the CMA notes that the Assimilated TTBER does not apply to agreements that establish technology pools (see, for example, paragraph 2.71 below). The CMA therefore does not regard this as feedback on the effectiveness of the Assimilated TTBER itself, but rather sees it as a commentary on the coverage of technology pools in the EU TTGs. Technology pools and the CMA's views on addressing them in potential guidance are discussed in paragraphs 2.68—2.93 below.
[30] One law firm, three businesses, one confidential respondent and one business association.
[31] Article 1(1)(c) of the Assimilated TTBER.
[32] Recital 4 of the Assimilated TTBER.

2.11 Article 1 of the Assimilated TTBER provides relevant definitions, including the definition of technology rights in Article 1(1)(b) of the Assimilated TTBER:

> '(b) 'technology rights' means know-how and the following rights, or a combination thereof, including applications for or applications for registration of those rights:
>
> (i) patents;
> (ii) utility models;
> (iii) design rights;
> (iv) topographies of semiconductor products;
> (v) supplementary protection certificates for medicinal products or other products for which such supplementary protection certificates may be obtained;
> (vi) plant breeder's certificates; and
> (vii) software copyrights.'

Recommendation

2.12 The CMA recommends that the definitions in Article 1 of the Assimilated TTBER should be maintained in the Recommended TTBEO, subject to the following proposed variations:

(a) removal of 'utility models' from the definition of 'technology rights';

(b) adding 'copyright in a database' and 'database right' to the definitions of 'technology rights' and making any necessary clarifications to the definition of 'intellectual property rights'; and

(c) adding a definition of 'active sales' and 'passive sales' that is consistent with the definition of these terms in the VABEO

2.13 We explain each of these recommendations in further detail below, summarising the stakeholder feedback taken into account in reaching the recommendations and our views on such feedback.

Removal of reference to utility models

2.14 In the Consultation, the CMA proposed removing 'utility models' from the definition of 'technology rights' so that, unlike the position under the Assimilated TTBER, the exemption provided by the Recommended TTBEO would not apply to utility models. This was because UK law does not provide protection for utility models and as such, there are unlikely in practice to be utility model licences in the UK. Such a variation could be achieved by not

including ‘utility models’ in the definition of ‘technology rights’ in the Recommended TTBEO.[33]

2.15 There were no Consultation responses objecting to this proposal, and one respondent explicitly supported it.[34]

Copyright in databases and database rights

2.16 The Assimilated TTBER does not include data or database rights in the definition of ‘technology rights’ in Article 1. Respondents to both the Call for Inputs, as well as to the European Commission Evaluation noted this omission. They said that data was of much greater importance in the modern economy than when the EU TTBER was adopted in 2014 and suggested that, in view of this, agreements for the licensing of data and database rights should come within the scope of covered technology rights, subject to such agreements otherwise meeting the criteria for exemption.[35]

2.17 In the Consultation, the CMA stated that it was aware of the increased significance of data in the modern economy and the fact that the licensing of data can lead to innovation. The CMA noted that the Government’s Invest 2035: the UK's modern industrial strategy Green Paper among other things discussed the importance of data for innovation and growth. That Green Paper referred to the need to ensure that data is created, handled, and shared in a way that both unlocks economic opportunities and is safe and ethical across the economy.[36]

2.18 The CMA in the Consultation also observed that the European Commission Staff Working Document noted the growing importance of data in the digital economy. The European Commission Staff Working Document further stated that technology transfer agreements relating to technology rights falling within the scope of the EU TTBER increasingly include clauses governing the transfer of data, in particular the data generated in the development of the transferred technologies and during the life of the agreements.[37]

[33] See paragraph 3.11 of the Consultation,
[34] One business.
[35] One academic; pages 40 to 42 of the of the European Commission Staff Working Document.
[36] See paragraph 3.13 of the Consultation. See also The UK's Modern Industrial Strategy, which builds on the Green Paper and which among other things discusses the importance of capitalising on the value of data.
[37] See paragraph 3.14 of the consultation and page 40 of the European Commission Staff Working Document.

2.19 The CMA stated in the Consultation that it saw force in suggestions that licences for data should fall within the category of agreements capable of exemption under the Assimilated TTBER.[38]

2.20 In the Consultation, the CMA also said that it understood there is no UK intellectual property right for data as such.[39] However, the CMA noted that there can be copyright in a database under UK law[40] and databases in the UK can also be protected by sui generis database rights.[41] Copyright protects the selection or arrangement of material in a database, where that selection or arrangement is original. Database rights protect the contents of a database where there has been a substantial investment in obtaining, verifying or presenting the data.[42]

2.21 Therefore, in the Consultation, the CMA proposed adding 'copyright in a database' and 'database rights' to the definitions of 'technology rights' and 'intellectual property rights'.[43]

2.22 However, the CMA did not consider it appropriate for the Recommended TTBEO to include 'data' in the defined technology or intellectual property rights, given that under UK law there is no UK intellectual property right for data. Moreover, the CMA understood that depending upon the circumstances, data may be protected by the technology rights already covered by the Assimilated TTBER. For example, the CMA noted that in some cases, data might fall within the definition of 'know how' in Article 1(1)(i) of the Assimilated TTBER. [44]

2.23 Two respondents to the Consultation commented on the issue of licensing of data.[45] One said that it strongly favoured the block exemption applying to licences of database rights and to copyright in databases.[46] Another respondent submitted that licences of data should be eligible for block exemption in some circumstances, but said that the approach taken in this regard should follow that taken in the final EU TTBER.[47]

2.24 The CMA is aware that the European Commission has not proposed that the draft revised EU TTBER apply to data licensing. The European Commission

[38] See paragraph 3.15 of the Consultation.
[39] Ibid.
[40] Ibid. And see for example, section 3(1)(d) of the Copyright, Designs and Patents Act 1988.
[41] Ibid. And see The Copyright and Rights in Databases Regulations 1997 (SI 1997/3032).
[42] Ibid. And see for example Sui generis database rights - GOV.UK.
[43] See paragraph 3.16 of the Consultation.
[44] Ibid.
[45] One law firm and one business.
[46] One law firm.
[47] One business.

has stated that its stakeholders had opposed a blanket extension of the EU TTBER to the licensing of all types of data and furthermore that an expert study had highlighted the challenges of applying the EU TTGs to the licensing of data not protected by intellectual property. Instead, the European Commission among other things proposes that it will apply the principles of the EU TTBER and EU TTGs to licences of databases protected by database rights or copyright, provided the licence is bilateral and for production purposes.[48] The draft EU TTGs furthermore observe that the licensing of data is a fast-evolving practice, and it cannot be excluded that certain restrictions of competition included in such licences are either not covered by those guidelines or that they produce effects on competition or consumers that are substantially different from those described in those guidelines.[49]

2.25 In line with the Consultation, the CMA recommends that it would not be appropriate to include 'data' in the definition of technology or intellectual property rights in the Recommended TTBEO.

2.26 Nevertheless, having regard to the supportive feedback in response to the Consultation for the CMA's proposal, that the fact that there was no feedback objecting to it, and the significance of data to the modern economy, the CMA recommends that copyright in a database and database rights should be added to the list of technology rights in the Recommended TTBEO (in addition to the definitions carried over from the Assimilated TTBER). The CMA also recommends considering whether, for the sake of clarification, database rights should be added to the non-exhaustive list of examples of rights included in the definition of the intellectual property rights in the Recommended TTBEO (again, in addition to the relevant examples carried over from the Recommended TTBEO).[50] For completeness, the CMA further recommends ensuring that the Recommended TTBEO is drafted in a manner that does not inadvertently exempt agreements for access to databases that facilitate a cartel arrangement, such as through the anti-competitive exchange of information (for example, a database containing information about pricing intentions).

2.27 In making this recommendation, the CMA has taken into account the European Commission's points discussed in paragraph 2.24 above about data licensing being a fast-evolving practice and that the possible competitive impact of restrictions in such licences might be different from those

[48] See paragraph 15 of the European Commission's explanatory note on the main proposed changes in the EU TTBER and guidelines.
[49] See the draft EU TTGs at paragraph 65.
[50] For the avoidance of doubt, the CMA considers that database rights already come within the definition of intellectual property for these purposes.

encountered under other forms of technology licensing. However, as noted above, the CMA recommends the inclusion of provisions to avoid inadvertently exempting agreements that involve cartel arrangements. Furthermore, the CMA considers that if an individual licence of copyright in a database or database right covered by the Recommended TTBEO did not satisfy the section 9 CA98 exemption criteria, it could cancel the Recommended TTBEO in respect of that individual licence (see paragraph 3.8 below). Moreover, rather than being a blanket extension of the block exemption to all types of data licensing, the CMA's recommendation would involve the block exemption being extended to licensing of database rights and copyright in a database, which are specific intellectual property rights.

2.28 The CMA also does not consider that this difference from the draft revised EU TTBER risks increasing the cost of technology licensing, or disincentivising such licensing, in the UK. Instead, it means that the Recommended TTBEO would exempt a broader scope of intellectual property rights than the draft revised EU TTBER, and by comparison is likely to provide increased legal certainty for licences of copyright in a database and database rights in the UK, which given their increased significance in the modern economy, may help support innovation in the UK.

2.29 The CMA proposes also to discuss agreements for the licensing of data – as well as for intellectual property rights not covered by the Recommended TTBEO – in guidance.

Adding a definition of 'active sales' and 'passive sales'

2.30 As will be explained further below at paragraphs 2.165 to 2.167, the CMA proposed in the Consultation that the approach to active and passive sales restrictions set out in Article 4 of the Assimilated TTBER (relating to hardcore restrictions) should be adopted in the Recommended TTBEO.[51] The CMA also noted in the Consultation that these terms are not currently defined in the Assimilated TTBER.[52]

2.31 The CMA considered in the Consultation that it would be helpful for the Recommended TTBEO to define these terms consistently with the corresponding definitions used in the Competition Act 1998 (Vertical Agreements Block Exemption) Order 2022 (the VABEO).[53] In the CMA's view, the VABEO provided a well-established framework for defining active and

[51] See paragraphs 3.91—3.94 of the Consultation.
[52] See paragraph 3.18 of the Consultation.
[53] See paragraph 3.19 of the Consultation and The Competition Act 1998 (Vertical Agreements Block Exemption) Order 2022.

passive sales. Aligning the definitions, the CMA considered, would ensure legal certainty and predictability for businesses when assessing compliance of their transfer technology agreements. Further, by adopting a consistent approach, unnecessary divergence in interpretation could be avoided which could result in inconsistencies which could undermine the objectives of the Recommended TTBEO and the application of the hardcore restrictions in it.[54]

2.32 In the Consultation, the CMA therefore proposed that the approach to active and passive sales restrictions set out in Article 4 of the Assimilated TTBER (relating to hardcore restrictions) should be adopted in the Recommended TTBEO, adding a definition of 'active sales' and 'passive sales' that is consistent with the definition of these terms in the VABEO.[55]

2.33 Two respondents to the Consultation commented on this proposal.[56]

2.34 One respondent referred back to its Response to the Call for Inputs, saying that it believed that the distinction between active and passive sales was problematic in non-retail (request-for-quotation) based industries where transport costs are low, and supplier offers are not transparent. It suggested that in those industries, the more conservative treatment applied to passive sales restrictions likely has chilling effects on the dissemination of technology.[57] Another respondent however supported the CMA's proposal to define these terms consistently with the TTBER, while noting that the definitions relating to public procurement would need to be updated to refer to the Procurement Act 2023.[58]

2.35 The responses to the Consultation did not indicate any disagreement with the CMA's specific proposal to use the definitions set out in the VABEO for 'active sales' and 'passive sales'. The CMA therefore recommends for clarity and consistency that the Recommended TTBEO should include the definitions of

[54] See paragraph 3.19 of the Consultation.
[55] See paragraph 3.20 of the Consultation.
[56] One law firm and one business.
[57] One business.
[58] One law firm.

'active sales'[59] and 'passive sales'[60] corresponding to those used in Article 8(7) of the VABEO.[61]

2.36 The CMA deals at paragraphs 2.172 to 2.173 below with the concerns expressed by the respondent with respect to adopting in the Recommended TTBEO the approach to active and passive sales restrictions set out in Article 4 of the Assimilated TTBER (relating to hardcore restrictions).

Scope

Current regime

2.37 The Assimilated TTBER can apply to:

(a) reciprocal agreements: these are technology transfer agreements which involve two businesses granting each other technology rights licences where those licences concern competing technologies or technologies that can be used in the production of competing products;[62] and

(b) non-reciprocal agreements: these are technology transfer agreements which involve only one business granting the other business a technology licence, or each business granting the other a technology licence of non-

[59] Article 8(7) of the VABEO defines active sales as:'(a) actively targeting customers by for instance calls, e-mails, letters, visits or other direct means of communication; (b) targeted advertising and promotion, by means of print or digital media, offline or online, including online media, digital comparison tools or advertising on search engines targeting customers in specific geographical areas or customer groups; (c) advertisement or promotion that is only attractive for the buyer if it (in addition to reaching other customers) reaches a specific group of customers or customers in a specific geographical area (and is considered active selling to that customer group or customers in that geographical area); (d) offering on a website language options different to the ones commonly used in the geographical area in which the distributor is established; or (e) using a domain name corresponding to a geographical area other than the one in which the distributor is established, and the expressions "actively sell" and "actively selling" should be construed accordingly...'

[60] Article 8(7) of the VABEO defines passive sales as: 'a) sales in response to unsolicited requests from individual customers, including delivery of goods or services to such customers without the sale having been initiated through advertising actively targeting the particular customer group or geographical area; (b) general advertising or promotion that reaches customers in other distributors' geographical areas or customer groups (whether exclusive or not) but which is a reasonable way to reach customers not in those other distributors' geographical areas or customer groups (whether exclusive or not), for instance to reach customers in a supplier's own geographical area; or (c) participating in a public procurement exercise undertaken in accordance with—(i) the Public Procurement Act 2023 or (ii) in in respect of a public authority that is a devolved Scottish authority, the Public Contracts (Scotland) Regulations 2015, the Concession Contracts (Scotland) Regulations 2016 or the Utilities Contracts (Scotland) Regulations, 2016…'
and the expressions "passively sell" and "passively selling" should be construed accordingly…'

[61] The CMA notes that in Article (1)(1)(s) and (t) of the draft revised EU TTBER, the European Commission proposes definitions of 'active sales' and 'passive sales' that differ in small respects from those that are used in the VABEO. However, this does not change the CMA's view that for clarity and consistency, the Recommended TTBEO should use the definitions of these terms corresponding to those in the VABEO.

[62] Article 1(1)(d) of the Assimilated TTBER.

competing technology that cannot be used for the production of competing products.[63]

2.38 The Assimilated TTBER applies to agreements between competitors and between non-competitors. These key terms are defined in Article 1 of the Assimilated TTBER. Different rules apply to these different types of agreements.

2.39 Article 3 of the Assimilated TTBER applies different market share thresholds depending upon whether the technology transfer agreement is between competing or non-competing businesses (20% and 30% respectively). Article 4 also applies hardcore restrictions differently depending upon whether the parties are competing businesses (Article 4(1)) or non-competing businesses (Article 4(2)).

2.40 With respect to competing businesses, the hardcore restrictions set out in Article 4(1) of the Assimilated TTBER apply differently, depending upon whether the technology transfer agreement in question is reciprocal or non-reciprocal.[64] The hardcore list in the Assimilated TTBER is stricter for reciprocal agreements than for non-reciprocal agreements between competitors.

2.41 This distinction between reciprocal and non-reciprocal agreements was first included in the 2004 EU TTBER[65] for a number of hardcore restrictions between competitors.

Recommendation

2.42 The CMA recommends that the Recommended TTBEO should retain the Assimilated TTBER's distinctions between (i) competing and non-competing businesses; and (ii) reciprocal and non-reciprocal agreements.

2.43 We explain this recommendation in further detail below, summarising the stakeholder feedback taken into account in reaching this recommendation and our views on such feedback.

[63] Article 1(1)(e) of the Assimilated TTBER.
[64] Article 4(1)(b) and (c) of the Assimilated TTBER.
[65] Commission Regulation (EC) No 772/2004 of 27 April 2004 on the application of Article 81(3) of the Treaty to categories of technology transfer agreements. OJ L 123, 27.4.2004.

Agreements between competitors and non-competitors

2.44 One respondent to the Call for Inputs suggested that the difference in treatment in the Assimilated TTBER between competing and non-competing businesses should be removed, as should the difference in treatment in respect of reciprocal and non-reciprocal treatments between competing businesses.[66]

2.45 The same respondent to the Call for Inputs argued that these distinctions lead to dubious differences in the treatment of similar agreements and that the CMA should instead adopt a pragmatic approach focusing on efficiencies and undesirable effects regardless of the type of licensing agreement. This was especially the case, the respondent suggested, due to complex market environments in which it might not be practical to distinguish between competing and non-competing businesses.

2.46 In the Consultation, the CMA noted that agreements between competitors can pose a greater risk to competition than agreements between non-competitors, especially where the competing businesses might have some degree of market power. Accordingly, if the CMA were to remove the distinction in treatment of agreements between competitors and non-competitors, then the CMA would likely propose the application of the stricter set of rules to all agreements. This might mean that fewer agreements between non-competing businesses would benefit from the block exemption, potentially reducing legal certainty.[67]

2.47 The CMA added in the Consultation that the CMA had not seen persuasive evidence suggesting that the distinction between competing and non-competing businesses in the Assimilated TTBER had been difficult to apply in practice and had reduced legal certainty for businesses.[68]

2.48 In view of this, the CMA in the Consultation proposed retaining the current Assimilated TTBER's distinction between competing and non-competing businesses in the Recommended TTBEO. The CMA considered that it provided the right legal framework for most technology transfer agreements. It also helped to ensure effective protection of competition, while providing adequate legal certainty for businesses.[69]

[66] One business said that the Assimilated TTBER could be greatly simplified without these distinctions.
[67] See paragraph 3.31 of the Consultation.
[68] See paragraph 3.32 of the Consultation.
[69] See paragraph 3.33 of the Consultation.

2.49 Two respondents to the Consultation commented on the competitor/non-competitor distinction in the Assimilated TTBER.[70]

2.50 One respondent to the Consultation supported retaining the distinction because this distinction is long-standing and is likely to be maintained within the EU TTBER. That respondent said that it generally favoured minimising differences between UK and EU competition law given the impact on those with business operations across Europe.[71]

2.51 In contrast, the other respondent said that removing the distinction between competing and non-competing businesses would make the Assimilated TTBER easier to apply as the analysis would focus on efficiencies and undesirable effects of agreements, regardless of the type of technology transfer agreement. This would, they said, improve legal certainty for procompetitive technology transfers between industry players, which could be particularly beneficial in contexts where the competitive relationship between the parties is not yet well-established or where the parties only compete over limited parts of their portfolios.[72]

2.52 The CMA has considered the suggestion that removing the competitor/non-competitor distinction would improve legal certainty and make the Recommended TTBEO easier to apply in practice. However, the CMA can only recommend a block exemption in respect of categories of agreements that in its opinion are likely to be exempt. The CMA remains of the view that agreements between competitors can pose a greater risk to competition than those between non-competitors. Therefore, in the CMA's view, removing the distinction in the Recommended TTBEO in the treatment of agreements between and competitors and non-competitors could unduly risk exempting categories of agreements unlikely to benefit from the section 9 CA98 criteria, given the potentially different competitive impact of such agreements.

2.53 It is also not clear to the CMA why this analysis should change for the purposes of the block exemption where the competitive relationship between the parties is not well established or where the parties compete over only limited parts of their portfolios, where such parties are nevertheless competing businesses, as defined in the Assimilated TTBER. In any event, the CMA notes that in some such circumstances, the parties to the agreement might have a low degree of market power such that they still benefit from the block exemption.

[70] One law firm and one business.
[71] One law firm.
[72] One business.

2.54 The CMA still considers that it has not seen persuasive evidence indicating that the distinction between competing and non-competing businesses in the Assimilated TTBER has been difficult to apply in practice and/or has reduced legal certainty for businesses. The CMA also notes that no other respondent to the Consultation expressed such concerns.

2.55 The CMA accordingly recommends retaining the Assimilated TTBER's distinction between competing and non-competing businesses in the Recommended TTBEO. The CMA continues to consider, as set out in the Consultation, that the current approach provides the right legal framework for most technology transfer agreements, as it helps to ensure effective protection of competition, while providing adequate legal certainty for businesses.

Reciprocal and non-reciprocal agreements

2.56 In response to the Call for Inputs, one respondent argued that the differentiation between reciprocal and non-reciprocal agreements in the Assimilated TTBER should be removed as it leads, in its view, to unwarranted differences in the treatment of similar agreements.[73]

2.57 However, in the Consultation, the CMA stated that it considered that there were sound economics-based reasons for treating non-reciprocal agreements between competitors more leniently than reciprocal agreements between competitors. For example, two-way output restrictions between competing businesses are treated as hardcore restrictions under Article 4(1)(b) of the Assimilated TTBER given their greater potential to have an anti-competitive effect.[74]

2.58 In contrast, the CMA stated in the Consultation that a one-way restriction between competing businesses in CMA's view was comparatively less likely to have an anti-competitive effect than a two-way restriction, and could in fact encourage the dissemination of technology. The rationale was that a licensor might be unwilling to license technology at all if it is concerned about output from a licensee which may impact its business negatively. Further, the CMA understood that a one-way restriction may lead to a real integration of complementary technologies or an efficiency-enhancing integration of the licensor's superior technology with the licensee's productive assets.[75]

[73] One business.
[74] See paragraph 3.34 of the Consultation.
[75] See paragraph 3.35 of the Consultation and paragraph 104 of the EU TTGs.

2.59 In the Consultation, the CMA therefore sought views on the proposal that the Recommended TTBEO should retain the Assimilated TTBER's distinction in treatment between reciprocal and non-reciprocal agreements.[76]

2.60 Two respondents to the Consultation commented on this point.[77]

2.61 One respondent supported the retention of such differential treatment in the Recommended TTBEO, for similar reasons to those in paragraph 2.50 above.[78]

2.62 The other respondent said that removing the distinction between reciprocal and non-reciprocal agreements would make the Assimilated TTBER easier to apply as the analysis would focus on efficiencies and undesirable effects of agreements, regardless of the type of technology transfer agreement. They noted that the definition of reciprocal agreements covers technologies (even if not competing) that can be used for the production of competing products. The respondent suggested that even within competing technologies, parties may hold complementary intellectual property rights, which could justify cross-licensing relationships. Treating all reciprocal agreements under an approach tailored for competition-reducing agreements, they asserted, does not properly reflect the broad reality of 'reciprocal' agreements as currently defined and likely has a chilling effect on the dissemination of technology among market participants in the same industry.[79]

2.63 While the CMA has noted these concerns, it still has not seen evidence that the current distinctions in treatment of reciprocal and non-reciprocal agreements in the Assimilated TTBER have had a chilling effect on the dissemination of technology among market participants in the same industry.

2.64 Moreover, the CMA can only make recommendation for a block exemption in respect of categories of agreements that in its opinion are likely to satisfy the exemption criteria under section 9 of the CA98. As noted in paragraphs 2.57 to 2.58 above, reciprocal agreements risk having a greater impact on competition than non-reciprocal agreements. Furthermore, there may be clearer efficiencies in respect of non-reciprocal agreements between competitors, than reciprocal ones, such as encouraging the dissemination of new technology.

[76] See paragraph 3.36 of the Consultation.
[77] One business and one law firm.
[78] One law firm.
[79] One business.

2.65 In addition, the CMA considers that the definition of reciprocal agreement in the Assimilated TTBER is appropriate. It deals with technologies that themselves compete with each other, as well as situations where the technologies themselves might not directly compete with each other but can be used to produce products that do compete with each other (for example as different inputs into competing products). In this regard, the CMA also recalls that 'contract product' is defined in the Assimilated TTBER as 'a product produced, directly or indirectly, on the basis of the licenced technology rights…".[80] Narrowing the definition of reciprocal agreement only to cover competing technologies could therefore risk exempting agreements having an anti-competitive impact on product markets.

2.66 The CMA therefore remains of the view that the Assimilated TTBER's stricter provisions for hardcore restrictions in respect of reciprocal agreements should be retained to avoid the risk of block exempting agreements unlikely to satisfy the section 9 exemption criteria. Indeed, this could even risk block exempting horizontal market sharing or output restrictions between competitors in respect of the reciprocally licenced technologies. Accordingly, the CMA considers it appropriate that the Recommended TTBEO retain this distinction between reciprocal and non-reciprocal agreements.

2.67 However, the CMA proposes to provide further guidance on the assessment on a case by case basis of reciprocal agreements that fall outside of the block exemption, including in the circumstances suggested by the respondent.

Technology pools and Licensing Negotiation Groups (LNGs)

Current regime

2.68 Technology pools involve at least two or more patent holders agreeing to contribute their patents to a 'pool' or package of intellectual property rights that is licensed.[81] Each contributor typically enters into a licensing agreement with the pool, under which the pool may grant licences to licensees, on the members' behalf, in respect of all patents contributed by or declared essential by the members of the pool.[82] Associated royalties are then allocated to each member and to the pool administrator according to agreed rules.[83]

2.69 In terms of their structure, technology pools can take the form of simple arrangements between a limited number of parties or more elaborate

[80] See Article 1(g) of the Assimilated TTBER.
[81] See Standard Essential Patent licensing - GOV.UK.
[82] Ibid.
[83] Ibid.

organisational arrangements whereby the organisation of the licensing of the pooled patents is entrusted to a separate entity. In both cases the pool may allow licensees to operate on the market on the basis of a single licence.[84] Agreements establishing technology pools are generally multilateral.[85]

2.70 A Standard Essential Patent (SEP) is a patent which protects technology which is essential to implementing a technical standard.[86] A technical standard is an agreed technical description of an idea, product, service, or way of doing things.[87] These are usually produced by standard developing organisations, established for the purpose of creating standards, with inputs from industry, government, academia and other technical experts.[88] The term Licensing Negotiation Groups (LNGs) in this context refers to industry associations or groups representing implementers of standards that jointly negotiate licences with individual SEP holders and SEP technology pools.[89]

2.71 The Assimilated TTBER only covers technology transfer agreements between two businesses.[90] Technology pools and LNGs are generally multiparty agreements and as such are not covered.

Recommendation

2.72 The CMA recommends that agreements establishing technology pools should not be covered by the Recommended TTBEO. However, given the importance of technology pools in technology licensing, the CMA plans to provide guidance on these arrangements.

2.73 The CMA also recommends that agreements establishing LNGs should not be covered by the Recommended TTBEO. However, the CMA is aware that LNGs are a matter of great interest and discussion in technology licensing. The CMA will therefore consider providing further guidance on LNGs.

2.74 We explain each of these recommendations in further detail below, summarising the stakeholder feedback taken into account in reaching the recommendations and our views on such feedback.

[84] Paragraph 244 of the EU TTGs.
[85] Paragraph 56 of the EU TTGs.
[86] See Standard Essential Patent licensing - GOV.UK.
[87] Ibid.
[88] Ibid.
[89] See, for example, page 169 of the document published by the European Commission SEPs Expert Group - Contribution to the Debate on SEPs.pdf.
[90] Paragraph 54 of the EU TTGs. Section 4.4. of the TTGs provides guidance on technology pools.

Whether technology pools and LNG should be covered by the Recommended TTBEO

2.75 A number of respondents to the Call for Inputs suggested that the scope of the Assimilated TTBER and/or guidelines should be expanded variously to apply to arrangements relating to technology pools and LNGs.[91] Those advocating for such content on technology pools tended to be from the licensor community. In contrast, those calling for content on LNGs tended to be from the licensee community. There also was little consensus between respondents from each community as to how these issues should be treated under the CA98.[92]

2.76 The CMA in the Consultation noted that agreements establishing technology pools and LNGs will usually involve multi-party arrangements.[93] The CMA observed that such agreements are of a very different nature and purpose to the technology transfer agreements covered by the Assimilated TTBER, which only involve two parties, under which a licensor allows the licensee to use the licensed technology rights for the purpose of producing goods or services.[94]

2.77 The CMA in the Consultation stated that including such arrangements in the Recommended TTBEO would, in the view of the CMA, significantly change the scope and purpose of the Recommended TTBEO from the Assimilated TTBER. Moreover, given the absence of relevant case law, and lack of consensus on these matters in the academic literature, the CMA did not consider that it was currently in a position to reach a view on whether and when such arrangements constitute categories of agreements that are likely to satisfy the exemption criteria set out in section 9 of the CA98. The CMA in the Consultation therefore did not propose to recommend that the Recommended TTBEO be extended to cover agreements establishing technology pools or LNGs.[95]

2.78 The CMA also noted in the Consultation that technology pools are discussed in the EU TTGs and that arrangements for the establishment of technology standards are covered in the CMA's Guidance on Horizontal Agreements.

2.79 Having regard to the above considerations, the CMA in the Consultation sought views on a proposal that agreements establishing technology pools

[91] One academic, two businesses and one business association drew attention to the treatment of technology pools, SEPs and LNGs within the Assimilated TTBER and the EU TTGs.
[92] See paragraph 3.43 of the Consultation.
[93] Paragraph 56 of the EU TTGs.
[94] See paragraph 3.45 of the Consultation.
[95] See paragraph 3.46 of the Consultation.

and LNGs should not be covered by the Recommended TTBEO. However, given the importance of technology pools in technology licensing, the CMA proposed to consider providing guidance on these arrangements. [96]

2.80 Ten respondents to the Consultation commented on whether agreements establishing technology pools and/or LNGs should be covered by the Recommended TTBEO.[97]

2.81 Six respondents agreed that agreements establishing technology pools should not be covered by the Recommended TTBEO, but instead should be addressed in guidance.[98] Two of these respondents considered that such agreements are by their nature multi-party agreements and therefore fall outside the scope of the current Assimilated TTBER, which covers only agreements involving two parties (i.e. bilateral arrangements). Including them within the scope of the Recommended TTBEO, they submitted, would significantly change the nature of the block exemption.[99] One respondent also said that technology pools are well-established mechanisms that are familiar to competition authorities globally. Given this familiarity, the respondent believed that technology pools did not need to be covered in the Recommended TTBEO. The respondent considered that providing guidance on agreements establishing technology pools in guidance would be sufficient. It also urged the CMA to focus on promoting joint licensing solutions when drafting such guidance, as these solutions enhance efficiency and innovation while maintaining competitive markets.[100] There was some respondent suggestion that patent pools – particularly, the collective licensing of SEPs – were currently allowed to operate largely without competition law scrutiny of various key aspects of their operation and that the Assimilated TTBER and EU TTGs were now out of date and should be updated to keep pace with market practices and behaviours in order to promote economic activity and benefit consumers in the UK. There were also various suggestions for how such issues should be addressed in guidance. One respondent for example said that in addition to dealing with technology pools, guidance should also deal with other potential licensing structures and formats, and that pools for SEPs should comply with the fair, reasonable, and non-discriminatory (FRAND) obligations undertaken by the SEP holders.[101]

[96] See paragraph 3.47 of the Consultation.
[97] Six businesses, one confidential respondent, two law firms and one business association.
[98] Four businesses, one law firm and one business association.
[99] One business and one business association.
[100] One business.
[101] One confidential respondent.

2.82 One respondent said that they did not have any strong views, but that if the Recommended TTBEO did not apply to agreements establishing technology pools, then they would welcome guidance on the treatment of technology pools.[102]

2.83 One respondent asserted that that there had been enough experience with the procompetitive effect of technology pools comprising non-substitute technology in the patent licensing industry to warrant the addition of a safe harbour for such technology pools in the Recommended TTBEO.[103] That respondent said that although the European Commission did not include a safe harbour for technology pools in the EU TTBER in 2014, it was appropriate for the CMA to do so with the Recommended TTBEO now. The respondent said doing so would enhance legal certainty for technology pools and further enable all industry participants, as well as consumers, to benefit from increased innovation and efficient distribution of technologies. The same respondent said that the CMA should at least retain a soft safe harbour for technology pools in guidance.

2.84 Two respondents expressed concerns with what they saw in the Consultation as a conflation by the CMA of patent pools and LNGs.[104] One respondent said this would ignore differences between the two types of arrangements and the regulatory treatment that they have been afforded to date. In a similar vein, another respondent said that technology pools have been a tried and tested mechanism for providing one-stop-shop licensing option to implementers and have led to demonstratable pro-competitive effects on markets. Patent pools, they submitted, have existed for decades and competition authorities, as well as academic literature, have extensively analysed their competitive effects, which cannot be said for LNGs.

2.85 With respect to LNGs, seven respondents explicitly said that LNGs should not be covered by the Recommended TTBEO.[105] One respondent said that LNGs should be covered by guidance.[106] One respondent said that they did not have any strong views, but that if the Recommended TTBEO did not apply to agreements establishing LNGs, then they would welcome guidance on the treatment of LNGs.[107]

[102] One law firm.
[103] One confidential respondent.
[104] Two business.
[105] Five businesses, one confidential respondent and one business association.
[106] One law firm.
[107] One law firm.

2.86 However, five respondents expressed concerns that LNGs were anti-competitive[108] and four of these respondents said that LNGs should not be addressed in guidance. For example, one respondent said that inclusion of LNGs in the Recommended TTBEO or guidance would have a significant negative impact on consumers. According to that respondent, LNGs' inherently anti-competitive nature would result in diminished technological progress, as licensors are unable to generate a reasonable return-on-investment and are subsequently led to deprioritise or abandon high-risk, high-cost research and development projects. The impact on consumers, it was claimed, is indirect but profound. Reduced innovation means fewer new technologies entering the market, limiting the availability and quality of products and services. Consumers ultimately bear the cost of stagnation, as markets become less dynamic and competitive.

2.87 Similarly, another respondent said that the very genesis of a LNG involves collusion between competitors, in that they combine their purchasing. The activity of an LNG would also be potentially problematic, according to this respondent, as its purpose is to negotiate on a collective basis. Therefore, a case by case economic analysis would need to be pursued to ensure that the LNG in question would not produce an unwarranted distortion(s) of competition, with no economic benefits that could not be achieved by other means, and with resulting benefit to consumers (both in the long and short term). That respondent expected there to be a negative impact from an LNG being permitted under competition law, whether by virtue of the CMA guidance or the Recommended TTBEO itself.[109]

2.88 Two respondents added that there is a role to play for LNGs, and other licensing programmes with appropriate guidelines.[110]

2.89 The CMA notes that the majority of respondents to the Consultation agreed that such agreements should not be addressed in the Recommended TTBEO but should rather be addressed in guidance. While the CMA has noted one respondent's point that there has been considerable use to date of technology pools comprising non-substitute technology, it is nevertheless the case that agreements creating such pools are of a very different nature to the bilateral licensing agreements covered by the Assimilated TTBER. The CMA therefore remains of the view that is not appropriate to include agreements establishing technology pools within the scope of the Recommended TTBEO.

[108] Five businesses.
[109] One business.
[110] One business and one confidential respondent.

2.90 Rather than recommend including agreements establishing technology pools in the Recommended TTBEO, the CMA plans to deal with such arrangements in guidance. In this context, the CMA notes the significant importance of technology pools in modern technology licensing. In addition, it notes that technology pools are already discussed in the EU TTGs and that arrangements for the establishment of technology standards are covered in the CMA's Guidance on Horizontal Agreements. In preparing such guidance, the CMA will take into account the feedback provided about the scope for providing for a safe harbour for such technology pools in guidance.

2.91 The CMA also notes that most respondents agreed with the CMA that it would not be appropriate to bring LNGs within the scope of the Recommended TTBEO, and none supported such a proposal. In light of such feedback, the CMA does not consider that there is any basis to depart from the proposed recommendation that agreements establishing LNGs should not be within the scope of the Recommended TTBEO.

2.92 However, the CMA observes that LNGs are a matter of increasing interest in technology licensing, even if there is disagreement among stakeholders as to whether they are anti-competitive or pro-competitive.[111] The CMA therefore remains of the view that it should consider whether to provide guidance on the assessment of LNGs under the CA98. In doing so, the CMA will take into account respondent comments about LNGs, including those that had concerns about addressing LNGs in guidance.

2.93 The CMA has also noted the concerns expressed by some respondents that it was conflating technology pools and LNGs in the Consultation. For the avoidance of doubt, the CMA is aware that such agreements are different, with distinct aims, contents and contexts. The CMA has no intention of conflating any competitive assessments of technology pools and LNGs in guidance or elsewhere.

Market share thresholds

Current regime

2.94 The exemption in the Assimilated TTBER only applies if the market shares of parties to a technology transfer agreement are within certain thresholds.[112] The market share thresholds are as follows:

[111] In this context, the CMA notes that the European Commission on 9 July 2025 issued an informal guidance letter in respect of an LNG in the automotive sector.
[112] As set out in Article 3 of the Assimilated TTBER.

(a) in the case of agreements between competing businesses, the parties' combined market share is 20% or less on the relevant market(s);[113] and

(b) in the case of agreements between non-competing businesses, the parties each have a market share of 30% or less on the relevant market(s).[114]

2.95 The term 'relevant market' is defined in Article 1(1)(m) of the Assimilated TTBER. It means the combination of the relevant product or technology market with the relevant geographic market.

2.96 'Relevant product market' is defined in Article 1(1)(j) of the Assimilated TTBER and comprises the contract products and products which are regarded by the buyers as interchangeable with or substitutable for the contract products, by reason of the products' characteristics, their prices and their intended use.

2.97 'Contract products' is defined in Article 1(1)(g) of the Assimilated TTBER and means products produced directly or indirectly on the basis of the licensed technology rights. The market share of the licensee on the relevant product market is calculated on the basis of the licensee's sales of products incorporating the licensor's technology and competing products. When the licensor is at the same time also a supplier of products on the relevant market, its sales will also be taken into account. Sales made by other licensees are not taken into account when calculating the licensee's or the licensor's market share.[115]

2.98 'Relevant technology market' is defined in Article 1(1)(k) of the Assimilated TTBER and consists of the licensed technology rights and any substitutes, that is to say, all those technology rights which are regarded by the licensees as interchangeable with or substitutable for the licensed technology rights, by reason of the technology rights' characteristics, their royalties and their intended use. In the case of technology markets, the TTBER provides[116] that the licensor's market share is to be calculated on the basis of the sales of the licensor and all its licensees of products incorporating the licensed technology.[117] This calculation applies both for the product and the geographic dimension of the relevant market of the licensed technology rights.

[113] Article 3(1) of the Assimilated TTBER.
[114] Article 3(2) of the Assimilated TTBER.
[115] See the EU TTGs at paragraph 91.
[116] Article 8(d) of the Assimilated TTBER.
[117] See the EU TTGs at paragraph 86.

Under this approach, the combined sales of the licensor and its licensees of contract products are calculated as part of all sales of competing products, irrespective of whether these competing products are produced with a technology that is being licensed.[118] This approach of calculating the market share of the licensor on the technology market as its 'footprint' at the product level, is used because of the practical difficulties in calculating a licensor's market share based on royalty income.[119]

2.99 'Relevant geographic market' is defined in Article 1(1)(l) of the Assimilated TTBER and means the area in which the businesses concerned are involved in the supply of and demand for products or the licensing of technology, in which the conditions of competition are sufficiently homogeneous, and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas.

2.100 Market shares are calculated on the basis of data relating to the preceding calendar year.[120] If the parties' market shares are initially within the applicable thresholds but subsequently rise above the thresholds, the exemption in the Assimilated TTBER continues to apply for a period of two consecutive calendar years following the year in which the threshold was exceeded.[121] This is referred to as 'the two year grace period'.[122]

Recommendation

2.101 For the purposes of the Recommended TTBEO, the CMA recommends:

(a) no change to the market share thresholds in the Assimilated TTBER with respect to product markets;

(b) retaining the market share thresholds for technology markets in the Assimilated TTBER, while also adding an alternative 'three or more competing technologies' test: a technology agreement satisfying **either** of

[118] Ibid.
[119] See the EU TTGs at paragraph 87.
[120] Article 8(b) of the Assimilated TTBER. This means that in some cases, for example, where an entirely new technology is introduced for which there have been no sales of products incorporating the licensed technology and no sales by the parties of competing products, the market shares of the parties might be 0%, for the purposes of the first year of the agreement.
[121] Article 8(e) of the Assimilated TTBER.
[122] Taking the example of an agreement involving an entirely new technology referred to in footnote 117, if in the second year of the agreement, the relevant market shares had risen well above the applicable market share thresholds set out in the Assimilated TTBER, the two year grace period would enable the parties to benefit from exemption for a further two years beyond the year in which the market share thresholds were first exceeded.

these tests in respect of technology markets will be exempt, provided that all of the other conditions for exemption are satisfied;'

(c) when carrying over the provisions of Article 8(b) of the Assimilated TTBER on using the preceding calendar year for calculating market share data, adding provisions to the effect that if the preceding calendar year is not representative of the parties' position in the relevant market(s), the market share is to be calculated as an average of the parties' market shares for the three preceding calendar years

(d) when carrying over the 'footprint' approach in Article 8(d) of the Assimilated TTBER, amending it so that it applies equivalently to both parties to the agreement; and

(e) when carrying over the grace period in Article 8(e) of the Assimilated TTBER, increasing it to three years from the current two years, and, in respect of technology markets, ensuring that an agreement initially satisfying either the applicable market share threshold test **or** the three or more competing technologies test benefits from the grace period, if that agreement subsequently satisfies **neither** of these conditions.

2.102 We explain each of these recommendations in further detail below, summarising the stakeholder feedback taken into account in reaching the recommendations and our views on such feedback.

Market share thresholds and the grace period

2.103 In discussion with stakeholders prior to the Call for Inputs on the Assimilated TTBER, some stakeholders said that the market share thresholds in such innovative markets were often easily exceeded from the outset. This was because a new technology might – initially at least – capture a very large share of the relevant market. Such stakeholders nevertheless said that the Assimilated TTBER set out a useful framework for structuring technology transfer agreements, even if there were concerns that the market share thresholds might be exceeded.

2.104 Three respondents to the Call for Inputs commented on the market share provisions in the Assimilated TTBER, and of those, two agreed with them and one raised concerns.[123]

2.105 The respondent raising concerns with market share thresholds suggested that specific market share thresholds were not appropriate indications of market power in markets concerning innovative markets involving new technology, where dynamic developments are the norm. The respondent noted difficulties in calculating market shares for the purposes of the Assimilated TTBER, especially in technology markets (where there might be little or no information about competing technologies and their licensing conditions). The respondent questioned whether market share thresholds should be used at all.[124]

2.106 Another respondent however noted that the Assimilated TTBER creates a safe harbour, which it acknowledged must be conservative. That respondent suggested that the current thresholds should not be changed in the absence of positive evidence that a different threshold was more appropriate.

2.107 One respondent to the Call for Inputs also suggested that the two-year grace period provided by Article 8(e) of the Assimilated TTBER should be extended, among other things because they said it was difficult to recoup investments in R&D intensive markets in two years.

2.108 The CMA in the Consultation observed that in its Staff Working Document, the European Commission also said that overall market share thresholds remained useful and necessary to exclude from the EU TTBER's safe harbour technology transfer agreements that might not meet the condition for exemption set out in Article 101(3) of the Treaty on the Functioning of the European Union (TFEU). However, there were challenges in applying the markets share thresholds for technology markets. The European Commission said that the evidence points to a number of practical difficulties in calculating the market share of the parties to the technology transfer agreements, which reduced the legal certainty provided by the thresholds.[125] The Commission highlighted the following practical difficulties that had been raised by stakeholders:

- limited visibility on the relevant technology market(s), due to the technologies in question being very young or of a disruptive nature;

[123] One business and one academic advocated for maintaining the current market share thresholds; while another business raised concerns.
[124] One business.
[125] See paragraph 3.62 of the Consultation and pages 29—30 of the European Commission Staff Working Document.

- insufficient data to undertake the calculation of the market share of the licensed technology, including the calculation of the overall size of the market, due to uncertainty about the degree of substitutability (also in terms of prices) between the various technologies;

- long product development timelines in some sectors (up to ten years), resulting in uncertainty in identifying the relevant timeline for the market share assessment; and

- occasional uncertainty over the qualification of the parties to the agreement as competitors or non-competitors, given the size of the patent portfolios of larger companies. This results in uncertainty on whether the 20% or the 30% market share threshold is applicable.[126]

2.109 The CMA also noted in the Consultation that in the European Commission Impact Assessment, the European Commission had identified various possible options, including the possibility of making no change to the EU TTBER, as well as the following possible changes to the TTBER and EU TTGs:

- not changing the approach to market share thresholds, but considering changing the conditions relating to the soft safe harbour in paragraph of 157 of the EU TTGs;

- removing the market share threshold for relevant technology markets, leaving only the threshold for relevant product markets; or

- replacing the current market share threshold for technology markets, for example with a condition based on the existence of a certain number of other independently controlled technologies that are substitutable for the licensed technology, similar to the soft safe harbour currently provided in point 157 of the EU TTGs and with related guidance to be provided in revised EU TTGs.[127]

2.110 In the Consultation, the CMA also referred to Recital 5 of the Assimilated TTBER which provides that the likelihood that the efficiency enhancing and pro-competitive effects of technology transfer agreements will outweigh the anti-competitive effects of restrictions contained in such agreements depends upon the degree of market power of the businesses concerned, and therefore

[126] See paragraph 29 of the European Commission Staff Working Document.
[127] See paragraph 3.63 of the Consultation and the European Commission's Call for Evidence for an Impact Assessment on Revision of the Technology Transfer Block Exemption Regulation and Technology Transfer Guidelines at page 2.

on the extent to which those businesses face competition from businesses owning substitute technologies or which produce substitute products.[128]

2.111 Having regard to this consideration, the CMA set out in the Consultation that market share thresholds, or some other mechanism for assessing the market power of the businesses concerned, provided a useful general indication for when technology transfer agreements restrictive of competition can nevertheless be considered likely to fulfil the exemption requirements in section 9 of CA98. Indeed, other UK Block Exemption Orders (the Specialisation Block Exemption Order (SABEO),[129] the Research and Development Agreements Block Exemption Order (R&DABEO)[130] and the VABEO) use market share thresholds.[131]

2.112 In the Consultation, the CMA considered that the market share thresholds in the Assimilated TTBER will normally (in combination with other requirements in the Assimilated TTBER) help to ensure that technology transfer agreements otherwise satisfying the requirements for exemption will not, for example, enable the participating businesses to eliminate competition in respect of a substantial part of the products in question. However, the fact that market shares of the parties to an agreement might exceed the thresholds does not give rise to any presumption either that the relevant technology transfer agreement does not fulfil the exemption conditions in section 9 of CA98 or otherwise infringes the Chapter I prohibition in CA98. An individual assessment of the technology transfer agreement will be required in such circumstances.[132]

2.113 Having regard to the potentially different impact on competition of technology transfer agreements between competing and non-competing businesses, the CMA in the Consultation also considered that the approach in the Assimilated TTBER of having different market share thresholds for such agreements was appropriate. Similarly, the CMA also considered that the Assimilated TTBER sets each such threshold at an appropriate level for ensuring that only agreements capable of meeting the section 9 exemption criteria are covered by the block exemption. The CMA also stated that it had not seen evidence that either of these market share thresholds was set at a level that undermines the achievement of the Assimilated TTBER's goals of ensuring

[128] See paragraph 3.64 of the Consultation.
[129] The Competition Act 1998 (Specialisation Agreements Block Exemption) Order 2022
[130] The Competition Act 1998 (Research and Development Agreements Block Exemption) Order 2022
[131] See paragraph 3.65 of the Consultation.
[132] See paragraph 3.66 of the Consultation.

effective protection of competition and providing adequate legal certainty for businesses.[133]

2.114 Furthermore, in the Consultation the CMA stated its view that the current two-year grace period provided a good balance between providing legal certainty for businesses and promoting competition by ensuring that agreements that go on to exceed the market share thresholds are reviewed within a reasonably prompt period. The CMA also noted that the current two-year grace-period is consistent with the grace periods contained within other UK block exemption regulations, such as the SABEO or the R&DABEO which also include a similar two-year grace period.[134]

2.115 The CMA in the Consultation therefore stated that it was minded to recommend that the Recommended TTBEO retain the Assimilated TTBER's market share thresholds in respect of product markets. The calculation of the market shares in the product markets follows the traditional manner of calculation of market shares based on the sales of products as explained in paragraph 2.98 above. The CMA said that it had not seen persuasive evidence that the need to calculate product market shares undermines the legal certainty that the Assimilated TTBER is intended to create.[135]

2.116 However, the CMA in the Consultation noted stakeholder concerns, both in response to the Call for Inputs and those discussed in the European Commission's Staff Working Document, that market share thresholds can be particularly difficult to calculate in respect of technology markets. Moreover, the CMA also observed that the 'footprint' approach discussed in paragraph 2.98 above itself was adopted in recognition of the practical challenges involved in calculating technology market shares and requires using product market sales as a proxy for determining the market position of the licensed technology.[136]

2.117 The CMA in the Consultation considered that the first option to address these practical difficulties in calculating technology market shares could be for the Recommended TTBEO to retain the Assimilated TTBER's market share thresholds in respect of product market, but simply to remove the market share thresholds in respect of technology markets. However, the CMA added in the Consultation that it can only make a recommendation for a block exemption in respect of a particular category of agreements that are, in the opinion of the CMA, likely to satisfy the exemption criteria in section of the 9 of the CA98. The CMA was concerned that such an option would omit an

[133] See paragraph 3.67 of the Consultation.
[134] See paragraph 3.68 of the Consultation.
[135] See paragraph 3.69 of the Consultation.
[136] See paragraph 3.70 of the Consultation.

important safeguard against the risks of granting the benefit of the block exemption to agreements likely to have anti-competitive effects in technology markets. This was because, as noted above, the likelihood that the efficiency enhancing and pro-competitive effects of technology transfer agreements will outweigh the anti-competitive effects of restrictions contained in such agreements depends upon the degree of market power of the businesses concerned, and therefore on the extent to which those businesses face competition from businesses owning substitute technologies or which produce substitute products.[137]

2.118 A second option set out in the Consultation was to carry over to the Recommended TTBEO the existing market share thresholds in respect of product markets but to replace the market share threshold for technology markets with a condition that there must be a minimum number of independently controlled technologies in addition to the technologies controlled by the parties to the agreement that may be substitutable for the licensed technology. The CMA observed that a similar approach had been used in the R&DABEO with respect to innovation, for example. This would also be similar to the 'soft safe harbour' in paragraph 157 of the EU TTGs.[138]

2.119 The CMA stated that this alternative test would provide a proxy for assessing market power in technology markets that did not involve the practical difficulties of calculating market share thresholds in such markets. Moreover, as noted above at paragraph 2.98, the existing 'footprint' approach to calculating market share thresholds for technology markets itself involves using product market sales as a proxy for determining the market position of the licensed technology. The CMA stated that in principle, adopting the alternative test would not provide a less effective mechanism for assessing market power than the existing 'footprint' approach, but that it considered this was likely to be an easier test to apply.[139]

2.120 The CMA stated in the Consultation that it provisionally considered three or more independently controlled substitutable technologies, in addition to the technologies held by the parties to the agreement in question, would be the appropriate number of competing technologies for these purposes. Three is also the number used with respect to competing innovation under the R&DABEO. The CMA provisionally considered that this set out a reasonable number of competing technologies in lieu of market share thresholds for technology markets. This was on the basis that this number of competing

[137] See for example paragraph 3.71 of the Consultation and Recital 5 of the Assimilated TTBER.
[138] See paragraph 3.72 of the Consultation.
[139] See paragraph 3.73 of the Consultation.

technologies should, in principle, be able to ensure that parties face sufficient competition on the technology market.[140]

2.121 The CMA also stated that it did not consider a lower number of competing technologies would be effective for these purposes as it could risk exempting agreements that are unlikely to benefit from the exemption criteria in section 9(1) of the CA98 given their impact on the market. The CMA indicated it would also be concerned that, at least where the relevant geographical market is national in scope, a requirement that there be four additional technologies risked setting the bar too high and risks excluding pro-competitive agreements from the benefit of the block exemption.[141]

2.122 In addition, the CMA stated that setting the threshold at three competing technologies would mean that in respect of agreements between competing businesses on the technology market, there would be at least five competing technologies (i.e. three alternative technologies to the two technologies of the parties to the agreement) and four in the case of agreements between non-competing businesses on the technology market. In the event the parties could not satisfy this condition, it would still be open to them to self-assess their agreement to determine whether it meets the conditions for exemption under section 9(1) of the CA98, and there would be no assumption that it would not. The CMA said that it would in guidelines provide further clarity as to how to identify and assess substitutable technology for these purposes.[142]

2.123 The CMA acknowledged in the Consultation that parties would need to identify competing technologies under this approach and that may in some situations be challenging (for similar reasons identified with respect to market share thresholds – see paragraph 2.108 above). However, it would nevertheless in most cases simplify assessment and provide greater legal certainty in relation to technology markets in comparison to calculating markets shares on such markets. At the same time, the CMA stated it would also ensure the block exemption only applies to technology transfer agreements in respect of which parties face sufficient competition in technology markets.[143]

2.124 In the Consultation, the CMA noted that such a test might be difficult to apply if the technology market were asymmetric, such as where the parties to the agreement had only very low market shares on the technology market, and there were only one or two additional competing technologies held by independent parties with very large market shares. However, the CMA

[140] See paragraph 3.74 of the Consultation,
[141] See paragraph 3.75 of the Consultation.
[142] See paragraph 3.76 of the Consultation.
[143] See paragraph 3.77 of the Consultation.

considered that these circumstances could be addressed in the guidance that the CMA plans to produce to accompany any TTBEO that might be adopted.[144]

2.125 The CMA in the Consultation also set out a third option, which would simply involve carrying over to the Recommended TTBEO the existing market share thresholds and continuing to apply them in respect of both product and technology markets. Indeed, the CMA noted in the Consultation that one stakeholder in its response to the Call for Inputs suggested that the Assimilated TTBER put in place an appropriate framework for calculating market shares, and that any necessary further clarification in this area could be provided in guidance. Under this option, CMA could in guidance clarify further how market share thresholds are to be calculated under the Recommended TTBEO, as well as how to assess technology transfer agreements that exceed these thresholds. However, the CMA suggested that this option would be less preferable if it simply maintained a market share threshold for technology markets that was difficult in practice to apply.[145]

2.126 Of the three options, the CMA stated in the Consultation that it did not consider the first option to be appropriate for the reasons set out above in paragraph 2.117. As between the second and third options, the CMA in the Consultation stated that it was minded to propose the option which involves carrying over the market share thresholds from the Assimilated TTBER with respect to product markets, and replacing the market share threshold for technology markets with a 'three or more competing technologies' condition. However, the CMA welcomed stakeholders' views on whether this alternative approach would be as effective as the existing market share thresholds in identifying where parties to an agreement might have market power. In addition, the CMA welcomed views on whether, in practice, this option would provide a greater degree of legal certainty and be easier to apply than simply carrying over the Assimilated TTBER's market share thresholds in respect of both product and technology markets.[146]

2.127 The CMA also sought views on its proposal for no change to the two-year grace period provided in the Assimilated TTBER.[147]

2.128 Five respondents to the Consultation commented on the market share thresholds issue.[148]

[144] See paragraph 3.78 of the Consultation.
[145] See paragraph 3.79 of the Consultation.
[146] See paragraph 3.80 of the Consultation.
[147] See paragraph 3.81 of the Consultation.
[148] Two businesses, one law firm, one academic and a confidential respondent.

2.129 Two of these supported the proposal to replace market share thresholds for technology markets in the Assimilated TTBER with a test based on there being three or more competing technologies.[149] One of these respondents said that this condition should be easier to assess in practice and therefore provide greater legal certainty for businesses.[150] The other of these two respondents said that it believed this would be a more straightforward and effective way to assess the level of market power than with the existing market share thresholds for technology markets.[151] However, the same respondent suggested that even one single, let alone two, substitutable technology/technologies may generate intense competitive pressure on the parties to the agreement.[152]

2.130 Another respondent said that it believed that there is useful information about levels of market power contained in both technology market shares **and** in technology market counts, which is to say, the number of competing technologies.[153] In support of counting the number of competing technologies, the respondent observed that a technology does not 'disappear' if it is not used. It remains as available as it ever was as long as the knowledge is available (in the form of a patent document or otherwise), and so its potential as the basis for a competitive constraint does not disappear simply due to lack of use. The respondent said that this was quite different from a product market where, if no other products are available, the market functions without much competitive constraint. That said, borrowing from the terminology used in some of the EU decisions in the pharmaceutical sector,[154] the respondent said that when using technology counts, one must consider whether a technology is a 'real and concrete' alternative today and whether it will remain a real and concrete alternative in future. If a technology is used very little or not at all, it may not be such a real and concrete alternative in either period. The respondent also said that while market share thresholds were not as justified in relation to technology markets, as unlike product markets there were no economies of scale in technology markets, there was still important information that market shares could convey. The respondent suggested that market shares are a good (and relatively ready-to-hand) indicator of both actual competition among technologies and the 'persistence' of this competition based on likely 'live' technologies in the market in the future. The

[149] One law firm and one business.
[150] A law firm.
[151] A business.
[152] Ibid.
[153] One academic.
[154] See for example Judgement of the CJEU of 30 January 2020, *Generics (UK) and others,* case C/307/18 [ECLI:EU:C:2020:52]

respondent also argued that market shares are relevant to both static and dynamic market operation.

2.131 One other respondent said that it did not consider that it would be helpful to replace the market share thresholds for technology markets with a test based on there being three or more competing technologies.[155] That respondent suggested that the consideration of market shares in the relevant technologies held by the parties to a licence is a useful but crude proxy for determining market power and the actual or potential effect of the agreement at issue. To exclude a safe harbour based on technology market shares, but to include one for the relevant product markets would, they suggested, be an artificial distinction in what is already a crude analysis. The counting of three alternative technologies as a means of automatic exemption, it was argued, is even more crude and could yield an arbitrary result. The respondent asserted that markets can be highly competitive even where there are fewer than three competing technologies. Further, it was not clear to the respondent why an arbitrary distinction would be drawn in affording legal certainty to restrictive agreements to the extent they produce an effect on product markets, but no safe harbour at all would be afforded where agreements (also or only) produce an effect on technology markets. This would, in the view of that respondent, greatly reduce the scope and utility of the Recommended TTBEO.

2.132 Another respondent took the view the Assimilated TTBER did not greatly assist novel technologies (which for these purposes would include very new technologies for which there was not yet even a clear market), because this activity is about market creation, not how to avoid competition distortion in existing markets.[156] The respondent considered that market threshold tests did not make sense in that context. It was unclear to that respondent how the approach of asking if there were an additional three competing technologies could apply to novel technologies. That respondent suggested that it would be very helpful if there was a simple safe-harbour route for licensing novel technology to underpin early-stage investments. The assumption would be such that novel technology is market-creating and the necessary exclusive licensing activity falls within the safe harbour.

2.133 The CMA has carefully considered the various responses to the Consultation on the market shares thresholds issue.

[155] A business.
[156] A confidential respondent.

2.134 The CMA recognises that there may be challenges with using market share thresholds to assess market power, but it remains of the view that, where it is practical to calculate market shares, market shares thresholds in the Assimilated TTBER are necessary to ensure that technology transfer agreements otherwise satisfying the requirements for exemption will not, for example, enable the participating businesses to eliminate competition in respect of a substantial part of the products in question.

2.135 The CMA accordingly recommends that the Recommended TTBEO should retain the Assimilated TTBER's market share thresholds in respect of product markets. The calculation of the market shares in the product markets follows the traditional manner of calculation of market shares based on the sales of products.

2.136 However, the CMA also remains mindful of stakeholder concerns, both in response to the Call for Inputs and those discussed in the European Commission's Staff Working Document, that market share thresholds can be particularly difficult to calculate in respect of technology markets.[157] Moreover, the CMA acknowledges that in the case of technology markets in particular, markets shares might not always be a good indicator of the relative strength of the technology in question.[158]

2.137 That said, completely removing the market share thresholds without any replacement for approximating market power would be an inappropriate way to deal with these concerns. This would risk exempting agreements in respect of technology markets that do not satisfy the exemption criteria in section 9 CA98. The competitive impact of effects restrictions will likely depend upon the degree of market power of one or both of the parties to the agreement and therefore the extent to which those parties face competition from parties owning substitute technologies.[159]

2.138 The CMA has taken into account the mixed views of respondents on the proposal to replace the market share thresholds for technology markets with a three or more competing technologies condition. In particular, the CMA has taken into account the concern about the impact of **only** having a three or more competing technologies test where, at the time the licence is entered into, there had not yet been any presence of the licensed technology in the relevant product or technology markets such that it would not be possible to identify at least three competing technologies.

[157] See for example, paragraphs 3.58—3.63 of the Consultation.
[158] And see for example, paragraph 162 of the TTGs.
[159] See Recital 5 of the Assimilated TTBER.

2.139 While such agreements might fall below the market share thresholds in the Assimilated TTBER and be exempted under that test[160] (and might subsequently have benefitted from the two-year grace period even if those thresholds had been exceeded as a result of commercialisation of the technology that yielded high market shares), they might not benefit from the three or more competing technologies condition and therefore not be exempted. This would be an undesirable situation.

2.140 Accordingly, the CMA does not recommend that the existing technology market share thresholds in the Assimilated TTBER be removed and replaced with a three or more competing technologies condition.

2.141 Nevertheless, the CMA takes the view that the 'three or more competing technologies' approach may help address some of the practical challenges some parties experience with the existing market share threshold for technology markets. The CMA also does not accept the assertion that this approach would draw an arbitrary distinction in affording legal certainty to restrictive agreements to the extent they produce an effect on product markets, but no safe harbour at all for agreements (also or only) producing an effect on technology markets. On the contrary, under this approach, there would be a safe harbour in respect of technology markets for agreements satisfying the three or more competing technologies condition.

2.142 Therefore, the CMA considers that there would be considerable benefit in the Recommended TTBEO retaining the market share thresholds for technology markets in the Assimilated TTBER, while **also** adding an **alternative** three or more competing technologies condition. A technology agreement satisfying **either** of these tests in respect of technology markets would be exempt under this approach, provided that all of the other conditions for exemption are satisfied.[161]

2.143 If parties to an agreement found it difficult to obtain information about market share thresholds in respect of technology markets (as might be the case for

[160] For example, if the licensee was not a competitor of the licensee in the relevant technology market and therefore had a 0% share of that market.

[161] As set out in paragraph 2.109 above, in the European Commission Impact Assessment, the European Commission proposed various possible changes to the market share thresholds, including replacing the current market share threshold for technology markets with a condition based on the existence of a certain number of other independently controlled technologies that are substitutable for the licensed technology, similar to the soft safe harbour currently provided for in point 157 of the EU TTGs. However, in its draft revised TTBER published on 11 September 2025 the Commission has proposed not replacing the current market share thresholds with any of these options and has made no change to the EU TTBER in this respect. It has however proposed retaining the soft safe harbour currently in the EU TTGs in the draft EU TTGs.

the licensee's share of technology market in respect of competitors on the technology market),[162] they could if, they found it easier, seek to assess whether there are three or more technologies that compete with the technology covered by the agreement in question. Conversely, parties might find it easier to assess their agreement against market share thresholds than seeking to identify the number of competing technologies. Retaining the ability to rely on market share thresholds as an alternative would help to avoid the undesirable situation discussed in paragraph 2.139 above in which the block exemption was not available to agreements involving novel technologies because, at the time the licence was entered into, there were no alternative licensed technology in the relevant product or technology markets. Either option would be open to parties in assessing their agreement under the Recommended TTBEO in respect of technology markets.

2.144 In the CMA's view, the adoption of both tests as alternatives would still mean that categories of agreements in the CMA's opinion likely to satisfy the section 9 CA98 exemption criteria benefit from the block exemption in respect of technology markets. However, at the same time, this could help improve certainty and make the block exemption easier to apply in situations where technology market share data was difficult to obtain.

2.145 With respect to the three of more competing technologies test, the CMA appreciates stakeholder comment to the effect that competing technologies for these purposes should provide 'real and concrete' competition to technology covered by the licensing agreement. For example, obsolete or grossly inferior technology might well not provide such a constraint and if so, should not be construed as competing technology for these purposes. The CMA therefore considers that the Recommended TTBEO should ensure that competing technologies for these purposes are those that are real and concrete alternatives to the licensed technology. The CMA also plans to deal with this issue in guidance.[163]

2.146 The CMA has also considered the suggestion that even one single, let alone two, substitutable technologies may generate intense competitive pressure on the parties for the purposes of the technology market. However, the CMA does not consider that fewer than three additional competing technologies would in itself allow for a general presumption that the parties would face a sufficient degree of competitive restraint that the criteria in section 9 of the CA98 are likely to be satisfied. In any event, the CMA notes that under the

[162] Note that the 'footprint' approach used in Article 8(d) of the Assimilated TTBER only applies in respect of the market share of a licensor. And see paragraph 2.148 below.
[163] And compare in this regard the approach taken in paragraph 157 of the EU TTGs.

approach it recommends, an agreement could still be exempted where there were fewer than three additional competing technologies, but the technology market share threshold was satisfied. This would likely indicate that there was sufficient competitive pressure on the parties to agreement to allow for a presumption that the criteria in section 9 of the CA98 were likely to be satisfied.

2.147 The CMA has noted the concerns expressed by one stakeholder about the application of the Assimilated TTBER to novel technologies. The CMA does not consider it appropriate for the Recommended TTBEO to include a specific safe harbour route for licensing novel technology to underpin early-stage investments. Among other things, the CMA can only make recommendations to the Secretary of State for block exemptions for categories of agreements the CMA considers are likely to be exempt agreements under section 9 of the CA98.[164] The CMA does not have sufficient experience of dealing with such novel technology licensing agreements to be able to assess whether these as a category are likely to satisfy the exemption criteria set out in section 9 of the CA98. However, the CMA plans to discuss this issue in more detail in guidance. The CMA also notes that with respect to new technologies for which there is no clear market, Article 8 of the Assimilated TTBER – the terms of which the CMA considers should be carried over the Recommended TTBEO – and in particular, Articles 8(b) and 8(d), may be of some assistance, especially bearing in the mind the grace period provided or in Article 8(e), as explained in the example set out in footnotes 120 and 122 above.[165]

2.148 For reasons set out above, the CMA considers that the 'footprint' approach to calculating technology market shares set out in Article 8(d) of the Assimilated TTBER plays an important role in addressing some of the challenges in calculating technology market shares identified by stakeholders (see paragraph 2.108 above). However, on the current drafting of Article 8(d), this approach only appears explicitly to apply to calculating the market share of 'a licensor'. The CMA considers that the fact that the Assimilated TTBER does not appear to make provision for licensees to use the 'footprint' approach is an anomaly and therefore recommends that the Recommended TTBEO apply the 'footprint' approach equivalently to both parties to the agreement. This is to avoid any confusion or uncertainty as to how the licensee's technology

[164] Section 6(1) of the CA98.
[165] Article 8(b) of the Assimilated TTBER provides as follows: ' the market share shall be calculated on the basis of data relating to the preceding calendar year..' Article 8(d) of the Assimilated TTBER provides as follows: 'the market share of a licensor on a relevant market for the licensed technology rights shall be calculated on the basis of the presence of the licensed technology rights on the relevant market(s) (that is the product market(s) and the geographic market(s)) where the contract products are sold, that is on the basis of the sales data relating to the contract products produced by the licensor and its licensees combined…'

market share is to be calculated in respect of agreements between competitors on the technology market. The CMA notes that the European Commission is proposing a similar change in Article 8(d) of the draft revised EU TTBER.[166]

2.149 The CMA also plans to provide further clarification of these various points concerning the market share and three or more competing technologies tests in guidance.

2.150 Two respondents[167] to the Consultation commented on the grace-period issue. Both supported the CMA's proposal to carry over the two-year grace period to the Recommended TTBEO, with one of them saying that the grace period provides a measure of reassurance.[168]

2.151 The CMA remains of the view that a grace period should be carried over to the Recommended TTBEO. Indeed, as noted above at paragraph 2.148, a grace period can be especially important in providing certainty with respect to novel technologies, where there might be no clear markets for such technologies when they are first commercialised, and where there may be very low market shares at first.

2.152 The CMA in the Consultation had rejected a suggestion made in response to the Call for Inputs that the grace period should be increased to beyond two years, among other things because it considered that the two-year grace period struck a good balance between providing legal certainty for businesses and promoting competition by ensuring that agreements that go on to exceed the market share thresholds are reviewed within a reasonably prompt period (see paragraphs 2.107 and 2.114 above).

2.153 However, the CMA notes that in the draft revised EU TTBER, the European Commission has proposed increasing its grace period to three years.[169] As mentioned above at paragraph 1.29, the CMA considers that unnecessary differences between EU and UK technology licensing block exemptions could increase the cost of, and therefore risk disincentivising, technology licensing

[166] Article 8(d) of the draft revised EU TTBER provides as follows '
the market share of a party active on a relevant technology market shall be calculated on the basis of the presence of that party's technology rights on the relevant market(s) (namely the product market(s) and the geographic market(s)) where the contract products are sold, that is, on the basis of the combined sales of that party and its licensees of products incorporating that party's licensed technology rights…' The CMA also observes that Recital 13 of the draft revised EU TTBER clarifies with respect to technology markets that technologies that have not yet generated sales of contract products will be considered to hold zero market share.
[167] A law firm and a business.
[168] A law firm.
[169] See Article 8(e) of the draft EU TTBER.

in the UK. Moreover, the CMA is also aware of the challenges that market thresholds can create for those developing novel technologies, and the reality that many early-stage technologies can experience significant increases and/or fluctuations in market shares. Having regard to these factors, the CMA considers it appropriate to recommend that the Recommended TTBEO have a grace period of three consecutive calendar years following the year in which the relevant market shares are exceeded. The CMA considers this to be a proportionate increase over the existing two-year period, one which can help to provide even greater legal certainty, especially in relation to novel technologies, while avoiding any unnecessary difference with the draft revised EU TTBER.

2.154 For the avoidance of doubt, in respect of technology markets the CMA further recommends that an agreement initially satisfying **either** the applicable market share threshold test **or** the three or more competing technologies test should benefit from the three-year grace period, if that agreement subsequently satisfies **neither** of these conditions.

2.155 The CMA also notes that in the draft revised EU TTBER, the European Commission proposes adding provisions to Article 8(b) (which establishes that the preceding calendar year is to be used for calculating market share data), to provide that where the preceding calendar year is not representative of the parties' position in the relevant market(s), market shares are to be calculated as an average of the parties' market shares for the three preceding calendar years.

2.156 The CMA considers that this is a helpful addition to those provisions, as it can better address situations where market shares might vary significantly from year to year (as can be case when technology is commercialised). This is also consistent with the approach taken in the SABEO and R&DABEO.[170] The CMA considers that it would be potentially unhelpful for the Recommended TTBEO to differ from the draft revised EU TTBER and the SABEO and R&DBEO on this point. The CMA therefore recommends that provisions with similar effect to those discussed in paragraph 2.153 are added when carrying over Article 8(b) of the Assimilated TTBER to the Recommended TTBEO.

[170] See Article 6(1)(b) of the SABEO and Article 9(1)(b) of the R&DABEO.

Hardcore restrictions

Current regime

2.157 The exemption in the Assimilated TTBER does not apply to any technology transfer agreement containing 'hardcore restrictions'.[171] The hardcore restrictions differ depending on whether a technology transfer agreement is entered into between competing businesses or non-competing businesses.[172] The table below sets out an overview of the hardcore restrictions for each type of agreement.

Agreement between competing businesses	Agreement between non-competing businesses
Price-fixing or restrictions on a party's ability to determine its prices when selling to third parties.	Price-fixing (other than imposing a maximum price or recommending a retail price).
Limitations on output (subject to certain exceptions).	Restrictions on the territories into which, or the customers to whom, the licensee may passively sell the contract goods or services (subject to certain exceptions).
Allocation of markets or customers (subject to certain exceptions).	Restrictions on active or passive sales to end-users by licensees which are members of a selective distribution system operating at the retail level of supply (although it is permitted to include a clause prohibiting a licensee from operating out of an unauthorised place of establishment).
Restrictions on the licensee's ability to exploit its own technology rights or restrictions on any party's ability to carry out research and development (except where they are necessary to prevent disclosure of licensed know-how to third parties).	

2.158 Where the businesses that entered into the agreement were non-competing businesses at the time of conclusion of the agreement but became competing businesses afterwards, the hardcore restrictions for agreements between non-competing businesses will apply for the full term of the agreement.[173]

[171] Article 4 of the Assimilated TTBER.
[172] For agreements entered into between competing businesses, hardcore restrictions are set out in Articles 4(1) of the Assimilated TTBER. For agreements between non-competing businesses, hardcore restrictions are set out in Article 4(2) of the Assimilated TTBER.
[173] Article 4(3) of the Assimilated TTBER. This will apply unless the agreement is subsequently amended in any material aspect; including the conclusion of a new technology transfer agreement between the parties concerning competing technology rights.

2.159 The hardcore restrictions set out in Article 4 of the Assimilated TTBER include several exceptions which vary depending on whether the agreements are entered into between competing or non-competing businesses; and, for agreements between competitors, depending on whether the agreements are reciprocal or non-reciprocal.

2.160 The exceptions are set out in Articles 4(1)(c), 4(2)(b) and 4(2)(c) of the Assimilated TTBER and they allow different restrictions in relation to active and passive sales.

2.161 The Assimilated TTBER does not define active and passive sales. However, as noted in paragraph 2.31 above, definitions of these terms can be found in Article 8(7) of the VABEO.[174]

Recommendation

2.162 The CMA recommends that the Recommended TTBEO should retain the hardcore restrictions set out in Article 4 of the Assimilated TTBER (subject to a couple of minor clarificatory changes explained further below). This includes retaining provisions in Article 4 relating to active and passive sales restrictions.[175] However, the CMA plans further to clarify in Guidance as to how the hardcore restrictions should be applied.

2.163 We explain each of these recommendations in further detail below, summarising the stakeholder feedback taken into account in reaching the recommendations and our views on such feedback.

Hardcore restrictions

2.164 Three respondents to the Call for Inputs commented on the existing hardcore restrictions in the Assimilated TTBER.[176] While one respondent appeared content with maintaining the existing hardcore restrictions,[177] a different respondent submitted that the hardcore restrictions are too complicated and should be simplified to remove distinctions between competing and non-competing businesses and reciprocal and non-reciprocal agreements. It argued that the safe harbour should be simplified and unified for all type of agreements.[178]

[174] SI 2022/516. Paragraph 108 of the EU TTGs suggests for the TTBER to apply the interpretation of active and passive sales as defined in the EU Guidelines on Vertical Restraints.
[175] As noted in 3.13 the CMA is also proposing for the Recommended TTBEO to include specific definitions for active and passive sales that track the definitions in the VABEO.
[176] Two businesses and one law firm.
[177] One business said these were sufficiently clear, particularly when read together with the EU TTGs.
[178] One business.

2.165 The CMA stated in the Consultation that in its view, the hardcore restrictions in the Assimilated TTBER addressed those provisions in technology transfer agreements which involve serious restrictions of competition that will in general cause harm to the market and to consumers. Moreover, as noted above, the CMA in the Consultation said that it considered that the different treatment in Article 4 for hardcore restrictions in terms of the type of agreement and whether it is between competing and non-competing businesses is appropriate, since in general, agreements between competitors can pose a greater risk to competition than agreements between non-competitors.[179]

2.166 With respect to the latter, the CMA stated in the Consultation that it did not agree with the argument that the passive and active sales distinction is no longer appropriate following the UK's exit from the EU. This distinction, the CMA said, remains appropriate in respect of, among other things, protecting intra-brand competition.[180]

2.167 The CMA also indicated that it had previously analysed the differentiation between active and passive when it made the recommendation to the Secretary of State to make the VABEO. On that occasion, the CMA had examined whether the then-current distinction between active and passive sales remained fit for purpose. The CMA in that exercise had concluded that the distinction between active and passive sales was still relevant in the UK, especially in relation to intra-brand competition and exclusive distribution systems.

2.168 In the Consultation, the CMA sought views on a proposal that the Recommended TTBEO should retain the hardcore restrictions set out in Article 4 of the Assimilated TTBER, including retaining provisions in Article 4 relating to active and passive sales restrictions.[181] However, the CMA in the Consultation also proposed further to clarify in guidance how the hardcore restrictions should be applied.[182]

2.169 Two respondents to the Consultation commented on the issue of retaining the hardcore restrictions from the Assimilated TTBER.[183] One respondent to the Consultation supported the proposal, including in respect of retaining the provisions relating to active and passive sales restrictions. They noted that

[179] See paragraph 3.91 of the Consultation.
[180] See paragraph 3.92 of the Consultation.
[181] As noted above at paragraph 2.28 the CMA in the Consultation also proposed that the Recommended TTBEO include specific definitions for active and passive sales tracking those in the VABEO.
[182] See paragraph 3.93 of the Consultation.
[183] One business and one law firm.

these provisions are well established and suggested a change could have a negative impact in terms of creating an unnecessary difference between the UK and EU position, involving additional analysis and therefore costs for business and potentially reduced innovation for consumers.[184]

2.170 However, one respondent objected to the carrying over of the provisions in the Assimilated TTBER relating to active and passive sales restrictions. They considered that the distinction between active and passive sales is problematic in non-retail (request-for-quotation) based industries where transport costs are low, and supplier offers are not transparent. In those industries, they asserted, the more conservative treatment applied to passive sales restrictions likely has chilling effects on the dissemination of technology.[185]

2.171 As set out in the Consultation, the CMA considers that the hardcore restrictions address those provisions in technology transfer agreements which involve serious restrictions of competition that will in general cause harm to the market and to consumers. Moreover, the CMA considers that the different treatment in Article 4 for hardcore restrictions in terms of the type of agreement and whether it is between competing and non-competing businesses is appropriate, since in general, agreements between competitors can pose a greater risk to competition than agreements between non-competitors.

2.172 While the CMA has considered the concerns of one stakeholder about retaining the active and passive sales restrictions from the Assimilated TTBER, the CMA has not seen persuasive evidence that such provisions have had a chilling effect on the dissemination of technology in the UK, including with respect to the non-retail (request-for-quotation) based industries that the stakeholder referred to. Indeed, as another respondent noted, these provisions are well established. Furthermore, this distinction is used in the UK VABEO, for example. As discussed in the Consultation, the CMA analysed the differentiation between active and passive sales when it made the recommendation to the Secretary of State to make the VABEO. It concluded that the distinction between active and passive sales is still relevant in the UK, especially in relation to intra-brand competition and exclusive distribution systems.

2.173 The CMA therefore recommends that the Recommended TTBEO should retain the hardcore restrictions set out in Article 4 of the Assimilated TTBER,

[184] One law firm.
[185] One business.

including those with respect to active and passive sales. As discussed at paragraph 2.31 above, the CMA also recommends including specific definitions for active and passive sales in the Recommended TTBEO that track the definitions in the VABEO.

2.174 In addition, the CMA notes that the draft revised EU TTBER has proposed some clarificatory drafting changes in Article 4(1)(c)(i) and (ii),[186] and Article 4(2)(b)(v)[187]. The CMA considers that these amendments are helpful and recommends that clarificatory changes to similar effect are made to the corresponding provisions of the Recommended TTBEO carried over from the Assimilated TTBER.

Excluded restrictions

Current Regime

2.175 The exemption in the Assimilated TTBER does not apply to the following obligations or restrictions contained in a technology transfer agreement (whether direct or indirect),[188] namely:

(a) any obligation on the licensee to assign or license exclusively to the licensor (or someone designated by the licensor) any improvements to the licensed technology (such as incremental innovation) made by the licensee, or new applications for the licensed technology discovered by that licensee (such obligations are called 'grant-back clauses');[189]

(b) any restriction prohibiting one of the parties from challenging the validity of the other party's UK intellectual property rights, with the exception that the exemption will apply to a provision in an **exclusive** licence allowing the technology transfer agreement to be terminated if the licensee challenges the validity of the licensed technology rights (provisions in licence preventing a party from challenging the validity of the others' intellectual property rights are called 'no-challenge clauses' and provisions in a licence allowing termination of licence are on a challenge to the validity of the licensed intellectual property rights are called 'termination on challenge clauses');[190]

[186] The European Commission has proposed adding references to 'contract products' in respect of the sales restrictions discussed in these provisions.
[187] The European Commission has proposed slightly amending that article to read as follows: " "the restriction of sales to unauthorised distributors located in a territory where the licensor operates a selective distribution system for the contract products;"
[188] As set out in Article 5 of the Assimilated TTBER.
[189] Article 5(1)(a) of the Assimilated TTBER.
[190] Article 5(1)(b) of the Assimilated TTBER.

(c) where the technology transfer agreement is between non-competing businesses, any restriction limiting the licensee's ability to exploit its own technology rights or limiting any of the parties' ability to carry out their own research and development (unless such a restriction is indispensable to prevent disclosure of licensed know-how to third parties).[191]

2.176 Where such an excluded restriction is included in a licence agreement, only that restriction is excluded from the benefit of the Assimilated TTBER. The restriction will require an individual assessment.

2.177 EU technology transfer block exemptions prior to the EU TTBER distinguished between severable and non-severable improvements to underlying technologies for the purpose of excluded restrictions.[192] A 'severable' improvement is one which can be used without infringing the rights in the underlying technology. In contrast, a 'non-severable' improvement cannot be used without infringing the rights in the underlying technology.

2.178 Under the existing Assimilated TTBER, an obligation to grant back to the licensor an exclusive licence to any improvements of the underlying technology is treated as an excluded restriction. By contrast, under the 2004 EU TTBER, only an obligation to grant back to the licensor an exclusive license to severable improvements was treated as an excluded restriction.[193]

2.179 Under the 2004 EU TTBER, all termination on challenge clauses were covered by the block exemption. Under the Assimilated TTBER and the EU TTBER, only termination on challenge clauses in **exclusive** licences are block exempted, whereas termination on challenge clauses in **non-exclusive** agreements are excluded from the block exemption: see the European Commission Working Document at page 32.

Recommendation

2.180 The CMA recommends maintaining the existing approaches in the Assimilated TTBER for grant-back, no challenge and termination on challenge clauses in the Recommended TTBEO.

[191] Article 5(2) of the Assimilated TTBER.
[192] See for example, Article 5(1) of the EU TTBER.
[193] Ibid.

2.181 We explain each of these recommendations in further detail below, summarising the stakeholder feedback taken into account in reaching the recommendations and our views on such feedback.

Excluded restrictions

2.182 A number of respondents to the Call for Inputs commented on the issue of excluded restrictions.[194] Two said that the existing excluded restrictions in the Assimilated TTBER were sufficiently clear.[195] While one of those two respondents went on to say that there was no need for modifications, additions or removal of any of the excluded restrictions,[196] the second respondent gave specific recommendations for changes in respect of grant backs and termination on challenge clauses. [197]

2.183 A further two respondents to the Call for Inputs noted that the current excluded restrictions in regard to grants backs of severable and non-severable innovations were an improvement from the previous iteration of the block exemption.[198]

2.184 One respondent to the Call for Inputs argued that the treatment of grant backs should be amended to reinstate a distinction in the treatment of grant backs of severable and non-severable innovations. It was argued this would increase certainty in the licensing of technology rights. The CMA also notes that stakeholders responding to the European Commission Evaluation made similar comments in respect of grant backs.[199]

2.185 Three respondents to the Call for Inputs commented on the issue of termination on challenge clauses.[200] Two of those respondents asserted that the current provisions on termination on challenge clauses in the Assimilated TTBER tilted the balance of bargaining power in favour of licensees, and that it provided licensees an instrument to use against licensors (such as leverage in negotiations). It was suggested that this risked creating a disincentive for holders to license and thereby disseminate their technology.[201]

2.186 A different respondent to the Call for Inputs indicated that it was content with the Assimilated TTBER's existing treatment of termination on challenge

[194] Two academics, two businesses and one business association.
[195] Two businesses.
[196] One business.
[197] One business.
[198] One academic and one business association.
[199] See pages 32—33 of the European Commission Staff Working Document.
[200] One business, one business association and one academic.
[201] One academic and one business advocated in this regard.

clauses as excluded restrictions. It noted that termination on challenge clauses prevent licensees from contesting the validity of patents, allowing licensors to maintain control over potentially weak or invalid patents. It said that it helped to avoid perpetuating a situation where the market is distorted by the enforcement of patents that do not meet the legal standards for patentability, thereby hindering technological progress and innovation, and distorting the competitive landscape.[202]

2.187 The CMA in the Consultation noted that, according to the European Commission Staff Working Document, the majority of respondents to the Commission's public consultation confirmed the effectiveness of the excluded restrictions on termination on challenge clauses in the EU TTBER.[203] According to the European Commission Staff Working Document, one respondent said that the current no-challenge restrictions in the EU TTBER were too restrictive and that it damaged licensors, and that the 2004 EU TTBER struck a better balance between allowing parties to challenge invalid patents and protecting good faith in licensing negotiations.[204] Another respondent to the European Commission consultation said that one of the objectives of the current provisions in the EU TTBER – enabling licensees to challenge invalid intellectual property rights without the risk of the licensor retaliating by terminating the licence – was extraneous to antitrust law and should not be protected as such.[205]

2.188 In the Consultation, the CMA observed that, as the European Commission explained in the Staff Working Document, the reason for the approach to grant backs that adopted in the Assimilated TTBER is that:

(a) block-exempting exclusive grant back obligations for non-severable improvements can disincentivise the licensee from engaging in incremental innovation with the licensed technology, as this completely prevents the innovator from using its own innovation; and

(b) non-severable improvements cannot in any case be exploited by the licensee without also using the licensor's original licensed technology,

[202] One business association.
[203] See paragraph 3.105 of the Consultation and page 32 of the European Commission Staff Working Document.
[204] The 2004 EU TTBER all termination on challenge clauses were covered by the block exemption. Under the Assimilated TTBER and the EU TTBER, only termination on challenge clauses in exclusive licences are block exempted, whereas termination on challenge clauses in non-exclusive agreements are excluded from the block exemption: see the European Commission Working Document at page 32.
[205] Ibid.

which will generally benefit the licensor by leading to increased sales of products incorporating the licensed technology.[206]

2.189 In the same document, the European Commission stated that the majority of stakeholders responding to its evaluation confirmed the effectiveness of the current rules on grant backs and that critical voices to the contrary did not advance new facts or arguments not already considered prior to the adoption of the EU TTBER. In the European Commission's view, this indicates that the current rules on the EU TTBER on grant backs remain effective in meeting the objectives of the block exemption.[207]

2.190 The CMA in the Consultation stated that it had not seen any evidence that the approach to grant backs under Article 5 of the Assimilated TTBER has hindered innovation or licensing and that there should be a return to the approach in 2004 EU TTBER of block exempting exclusive grant backs only for non-severable improvements. Moreover, the CMA said in the Consultation that it also considered that the grant back provisions in Article 5 of the TTBER were simpler to apply than those under the 2004 EU TTBER, since there is no need to determine whether the underlying technology will necessarily be infringed through the use of the improvement.[208]

2.191 Furthermore, the CMA noted that retaining the current limitation of the grant back provision to requirements that the licensee grant exclusive licenses or assignments of the rights in improvements was not a restriction against all grant backs. Indeed, requirements on the licensee to grant non-exclusive licences for improvements to the licensor can benefit from the exemption established in the Assimilated TTBER, provided that the other requirements of the block exemption are satisfied.[209]

2.192 Moreover, the CMA in the Consultation said that the inclusion of an exclusive grant back requirement in a technology transfer agreement did not mean that such a provision would automatically infringe the Chapter I prohibition. Such a provision would simply need individual assessment, as it is not covered by the Assimilated TTBER.[210]

[206] See paragraph 3.106 of the Consultation and page 32 of the European Commission Staff Working Document.
[207] See paragraph 3.107 of the Consultation and page 32 of the European Commission Staff Working Document.
[208] See paragraph 3.108 of the Consultation.
[209] See paragraph 3.109 of the Consultation.
[210] See paragraph 3.110 of the Consultation.

2.193 Accordingly, the CMA proposed in the Consultation that the existing approach to the treatment of grant backs in Article 5 of the Assimilated TTBER should be retained in the Recommended TTBEO.[211]

2.194 The CMA also provisionally considered in the Consultation that the existing provisions on no challenge and termination on challenge clauses in the Assimilated TTBER continued to strike the right balance, on the one hand between preserving incentives to innovate and license technology, and on the other, ensuring that invalid intellectual property rights are removed as a barrier to innovation and economic activity. The CMA said that it had not, in its view, seen persuasive evidence to suggest that a change in approach to termination on challenge clauses was warranted, including with respect to the different rights covered by the Assimilated TTBER.[212]

2.195 In reaching this provisional view in the Consultation, the CMA said that it had also taken into account the comments in the European Commission Staff Working Document to the effect that the identical provisions on termination on challenge clauses in Article 5 of the EU TTBER have, notwithstanding some criticisms, met their objectives. In the same document, the European Commission refers to a study report commissioned for the purposes of its evaluation finding that the current approach to termination on challenge clauses in the EU TTBER helps to re-balance the position of licensors where they are significantly smaller than licensees, and therefore cannot afford to defend their technology in court if challenged – this is especially the case, for example, in the biotechnology sector.[213]

2.196 Having regard the above considerations, the CMA provisionally considered in the Consultation that the approach to the treatment of termination on challenge clauses in Article 5 of the Assimilated TTBER should be retained in the recommended TTBEO and is therefore not proposing to recommend any changes to such clauses.[214]

Grant-back clauses

2.197 Three respondents to the Consultation commented on the proposal of retaining the Assimilated TTBER's approach to grant-back clauses in the Recommended TTBEO.[215] One respondent said that they found the 2014

[211] See paragraph 3.111 of the Consultation.
[212] See paragraph 3.112 of the Consultation.
[213] See paragraph 3.113 of the Consultation.
[214] See paragraph 3.114 of the Consultation.
[215] One academic, one business and one law firm.

revised version of the EU TTBER an improvement on the 2004 version.[216] Another considered that this remained a reasonable approach and was consistent with the position under the EU TTBER. [217] A third respondent also supported the approach to grant-back clauses in the EU TTBER on the basis that it was very difficult to distinguish between severable and non-severable improvements with sufficient legal certainty, meaning that it would not be an improvement only to exclude from the block exemption exclusive grant-back requirements in respect of non-severable improvements.

2.198 The CMA has noted respondent support for the Consultation's proposal with respect to grant-back clauses and has not seen any other evidence that it would be inappropriate.

2.199 Accordingly, the CMA recommends that the existing approach to the treatment of grant backs in Article 5 of the Assimilated TTBER should be retained in the Recommended TTBEO.

No challenge/termination on challenge clauses

2.200 Three respondents to the Consultation commented on the issue of no challenge and termination on challenge clauses.[218] Two of these supported carrying over to the Recommended TTBEO the approach to no challenge and termination on challenge clauses taken in the Assimilated TTBER, for the same reasons as they supported carrying over the approach to exclusive grant backs (see paragraph 2.185 above).

2.201 One respondent however objected to carrying over the approach to no challenge and termination on challenge clauses from the Assimilated TTBER.[219] They considered that the difference in treatment between intellectual property rights and know-how as regards no-challenge clauses gives rise to intricate differentiation issues when determining the scope of lawful non-challenge provisions and the consequences of know-how litigation on the licensing of underlying intellectual property rights. In addition, they said that affording only limited protection against intellectual property challenges in situations where the licensee gets a close look into the licensor's intellectual property portfolio may constitute a strong disincentive to license. They said that the Assimilated TTBER's position is also inconsistent with the more

[216] An academic.
[217] A law firm.
[218] One academic, one business and one law firm.
[219] A business.

favourable approach to non-challenge clauses in the context of settlement agreements, discussed in the EU TTGs.[220]

2.202 The same respondent instead considered that allowing the block exemption to cover all termination on challenge clauses would provide more comfort for companies to share their technology without fear of retaliation and without the fear of being locked up in a relationship that has turned sour. If the harm is limited to the licensee's intellectual property challenge, they suggested, the licensor would be unlikely to have an incentive to terminate the agreement.

2.203 The same respondent suggested that instead, as regards termination clauses in case of a challenge to the validity of intellectual property rights, this should always be possible in situations where the licensing agreement includes some form of commitment by the licensor to invest in the relationship with the licensee or when the licensee takes advantage of its position to damage the value of the intellectual property rights (beyond merely challenging the intellectual property in court).

2.204 The CMA has noted the concerns expressed by one respondent about the consequences of the different treatment under the Assimilated TTBER of know-how and intellectual property no-challenge clauses. However, the CMA has not seen persuasive evidence that this significantly undermines legal certainty in the UK or that that is has adversely affected innovation (including where the licensee gets a close look into the licensor's intellectual property portfolio). Furthermore, as discussed in the EU TTGs, an obligation on the licensee not to challenge the licensed know-how promotes dissemination of new technology, in particular by allowing weaker licensors to license stronger licensees without fear of a challenge once the know-how has been absorbed by the licensee.[221] The CMA therefore considers it appropriate that non-challenge and termination clauses solely concerning know-how are not excluded from the scope of the TTBER.

2.205 Furthermore, the CMA notes that there is no assumption that provisions relating to no-challenge or termination on challenge clauses that do not satisfy the requirements in the Assimilated TTBER automatically infringe the Chapter I prohibition of the CA98. Instead, these require individual assessment.

2.206 The CMA also does not consider that the approach to no-challenge clauses in the Assimilated TTBER is inconsistent with that taken to no-challenge clauses in the context of settlement agreements, discussed in the EU TTGs.[222] In the

[220] See paragraphs 242-243 of the EU TTGs.
[221] See paragraph 140 of the EU TTGs.
[222] See footnote 214 above.

context of settlement agreements for intellectual property disputes, non-challenge clauses are generally likely to fall outside the Chapter I prohibition of the CA98. The CMA considers that it is inherent in such agreements that the parties agree not to challenge ex post the intellectual property rights which were the centre of the dispute, and that the very purpose of the agreement is to settle existing disputes and/or to avoid future disputes.[223]

2.207 Moreover, the CMA also considers that no-challenge clauses in intellectual property settlement agreements can under specific circumstances be anti-competitive and may be caught by the Chapter I prohibition of the CA98. This may include circumstances where an intellectual property right was granted following the provision of incorrect or misleading information. Scrutiny of such clauses under the Chapter I prohibition may also be necessary if the licensor, besides licensing the technology rights, induces, financially or otherwise, the licensee to agree not to challenge the validity of the technology rights or if the technology rights are a necessary input for the licensee's production.[224]

2.208 The CMA does not consider that it would be appropriate for the Recommended TTBEO to provide that a no challenge or termination on challenge restriction always be exempted in situations where the licensing agreement includes some form of commitment by the licensor to invest in the relationship with the licensee or when the licensee takes advantage of its position to damage the value of the intellectual property rights (beyond merely challenging the intellectual property in court). Given their anti-competitive potential, in the CMA's view whether such restrictions satisfy the exemption criteria in section 9 of the CA98 necessitates a case by case analysis, having regard to all of the circumstances of the agreement.

2.209 In view of the above considerations, the CMA recommends that the approach to the treatment of no-challenge and termination on challenge clauses in Article 5 of the Assimilated TTBER should be retained in the recommended TTBEO.

Recommendations based on additional stakeholder suggestions

2.210 In the Consultation, the CMA invited any stakeholder suggestions for any other provisions that the Recommended TTBEO could include to help improve the dissemination of technology in the UK.[225] The CMA received no responses on this point.

[223] See paragraph 242 of the EU TTGs.
[224] See paragraph 243 of the EU TTGs.
[225] See paragraph 3.115 of the Consultation.

Other considerations for guidance

2.211 Respondents to the Consultation made various suggestions for issues to be covered in CMA guidance. These included the following:

(a) clarifications for how counts of competing technologies would be carried out;[226]

(b) assessment of technology pools (including in relation to the obligations of SEP holders);[227]

(c) assessment of LNGs (though as noted above, many respondents did not favour addressing LNGs in guidance, and one respondent said that such guidance should include adequate safeguards to prevent an LNG from operating as a buyers' cartel, particularly with respect to the negotiation of licenses for SEPs.);[228]

(d) licensing and sub-licensing by SEP holders;[229] and

(e) licensing novel technology to underpin early-stage investments.[230]

2.212 The CMA will consider the case for covering these issues in guidance.

[226] An academic.
[227] A law firm.
[228] One law firm and one business.
[229] A business.
[230] One confidential respondent

3. Other Provisions and Duration of the Recommended TTBEO

Transitional period

3.1 In line with the Consultation,[231] the CMA recommends that the Recommended TTBEO should provide for a transitional period of one year. This means that the Chapter I prohibition would not apply during a period of one year from the date on which the Recommended TTEBO comes into effect in respect of technology transfer agreements already in force on that date which do not satisfy the conditions for exemption provided for in the Recommended TTBEO, but on that date, satisfied the conditions for exemption provided for in the Assimilated TTBER.[232]

3.2 In other words, existing agreements that meet the conditions of the Assimilated TTBER could continue to benefit from its terms for a year after its expiry, whereas agreements entered into after its expiry would need to meet the conditions of the Recommended TTBEO to benefit from the block exemption.

3.3 Only one respondent to the Consultation commented on this issue, and it did not object to the above approach. The CMA therefore recommends that the Recommended TTBEO have a transitional period of one year to allow businesses that wish to take advantage of the 'safe harbour' to review and (if necessary) revise their technology transfer agreements.

Cancellation in individual cases

3.4 Section 6(6)(c) of the CA98 provides that a block exemption order may provide that if the CMA considers that a particular agreement is not an exempt agreement,[233] it may cancel the block exemption in respect of that agreement.

3.5 In line with the Consultation,[234] the CMA recommends that the Recommended TTBEO should also contain such a provision.

3.6 CMA recommends that any cancellation, i.e. withdrawal of the benefit of the Recommended TTBEO in an individual case, should be in writing, and that

[231] See paragraph 4.3 of the Consultation.
[232] Unless the benefit of the block exemption is cancelled, or otherwise varied or revoked, in accordance with the provisions of the Recommended TTBEO or the CA98.
[233] 'Exempt agreement' means an agreement which is exempt from the Chapter I prohibition as a result of Section 9 of the CA98: Section 6(8) of the CA98.
[234] See paragraph 4.4—4.6 of the Consultation.

the CMA should first give notice in writing of its proposal and consider any representations made to it before making a decision to cancel the block exemption in respect of that agreement. The CMA recommends that any notice should state the facts on which the CMA bases its decision or proposal and its reasons for making it. The CMA envisages that these provisions would be similar to those in the R&DABEO.[235]

3.7 Only one respondent to the Consultation commented on this issue, and it did not object to the above approach.

3.8 The CMA therefore recommends that the Recommended TTBEO allow the CMA to cancel the benefit of the block exemption in individual cases to ensure that the 'safe harbour' is only available for those agreements that satisfy the conditions for exemption under section 9 of the CA98. The CMA considers that this provision is likely only to be used in exceptional circumstances and that the proposal to provide notice in writing and to consider any representations would ensure that the provision was used appropriately.

Obligation to provide information

3.9 Section 6(5) of the CA98 provides that a block exemption order may impose obligations subject to which a block exemption is to have effect. Section 6(6)(b) of the CA98 specifies that a block exemption order may provide for the cancellation of the block exemption with respect to the agreement where there is a failure to comply with an obligation imposed by the order. In line with the Consultation,[236] the CMA recommends that the Recommended TTBEO should impose an obligation for parties to provide the CMA with information in connection with those technology transfer agreements to which they are a party if requested to do so, and that failure to do so without reasonable excuse should result in cancellation, i.e. withdrawal, of the block exemption.

3.10 Only one respondent to the Consultation commented on this issue, and they did not object to the above approach.

3.11 The CMA therefore recommends that the obligation should be for businesses to supply the CMA with such information in connection with those technology transfer agreements to which they are a party as the CMA may require, within ten working days from the date on which the party receives notice in writing of the request or within such longer period of working days commencing with the relevant day as the CMA may, having regard to the particular circumstances

[235] See Articles 15 and 16 of the R&DABEO.
[236] See paragraph 4.8—4.10 of the Consultation.

of the case, agree with the person in writing.[237] The CMA also recommends that if it proposes to cancel the block exemption, it should first give notice in writing of its proposal and consider any representations made to it. The CMA envisages that these provisions would be similar to those in the R&DABEO.[238]

3.12 The CMA considered that such provisions will ensure that the CMA is in a position to assess whether an agreement that benefits from the block exemption is one that satisfies the conditions for exemption under section 9 of the CA98. This provision would also enable the CMA to investigate instances where competition law concerns arise from parallel networks of similar technology transfer agreements.[239]

Duration

3.13 The current Assimilated TTBER has a duration of 12 years and is due to expire on 30 April 2026.[240]

3.14 Under Section 6(7) of the CA98, a block exemption order may provide that the order is to cease to have effect at the end of a specified period. As set out in the Consultation, a benefit of a block exemption having a fixed duration is that it provides businesses with legal certainty whilst also providing an opportunity for the CMA to conduct a further review of the operation of the block exemption, taking account of market developments since the last review, after a specified period.[241]

3.15 The Consultation set out an alternative approach which would involve the Recommended TTBEO not having a fixed duration. An advantage of such an approach is that it would give the CMA flexibility to carrying out a review of the Recommended TTBEO if, for example, market circumstances significantly changed. This approach makes particular sense when there is evidence that

[237] The CMA is minded to clarify in any guidance on technology transfer agreements that where appropriate, it will seek to give recipients of large information requests advance notice so that they can manage their resources accordingly. The CMA is also minded to clarify that, in certain circumstances and, where it is practical and appropriate to do so, it may send the information request in draft.
[238] See Articles 14-16 of the R&DABEO.
[239] The process for providing representations where a response contains commercially sensitive information or details of an individual's private affairs and the sender considers that disclosure might significantly harm their interests or the interests of the individual, is explained in Chapter 7 of the Guidance on the CMA's investigation procedures in Competition Act 1998 cases: CMA8.
[240] See Article 11 of the Assimilated TTBER.
[241] See paragraph 4.12 of the Consultation.

there are likely to be market developments, but there is some uncertainty as to when those developments might arise.[242]

3.16 However, providing for a fixed duration of 12 years would not prevent a review of the Recommended TTBEO at an earlier stage if, during the course of that period, market circumstances did in fact significantly change. Indeed, there is a statutory requirement for DBT to carry out and publish a post-implementation review of any block exemption order within five years of it coming into force and then regularly thereafter on a five-year cycle.[243]

3.17 Three respondents to the Consultation commented on this issue, all of whom supported the above approach to duration for the Recommended TTBEO, although said that such a provision must be drafted in terms that were 'technology proof'.

3.18 On balance, given that the CMA has not received specific evidence of likely imminent changes in market circumstances, and having regard to the responses to the Consultation, the CMA recommends that the Recommended TTBEO have a fixed duration of 12 years. This is consistent with the Assimilated TTBER. The CMA considers that a 12-year duration would provide the benefits of legal certainty without precluding a review if developments had arisen that called into question any aspect of the TTBEO.

[242] See paragraph 4.13 of the Consultation. The CMA followed this approach in its review of other Block Exemptions like the Public Transport Ticketing Schemes Block Exemption, for example.
[243] See paragraph 4.14 of the Consultation and section 28 of the Small Business, Enterprise and Employment Act 2015.

Annex A: List of respondents

1. Avanci

2. Dentons LLP

3. Ericsson

4. Fair Standards Alliance

5. Interdigital

6. Nokia Technologies

7. Professor Katharine Rockett from the University of Essex

8. SME Safe Island

9. Sisvel International

10. Three confidential respondents