COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT

Accompanying the document

COMMISSION REGULATION

on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements

and

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
COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT

Accompanying the document

COMMISSION REGULATION

on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements

and

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

TABLE OF CONTENTS

1. Background .................................................................................................................................................. 6
1.1. Context ...................................................................................................................................................... 6
1.2. The current review of the TTBER and the Guidelines .............................................................................. 10
1.3. Main proposed changes in the draft TTBER and the draft Guidelines ...................................................... 17
1.4. Input received in 2013 public consultation ............................................................................................. 19
1.5. Elaboration and assessment of future options ........................................................................................... 21
1.6. Implementing the Opinion of the Impact Assessment Board .................................................................... 21
2. Issues to be addressed ................................................................................................................................... 22
2.1. Treatment of exclusive grant-backs ........................................................................................................... 22
2.2. Treatment of termination clauses .............................................................................................................. 23
2.3. Treatment of patent pools ........................................................................................................................ 27
3. Objectives ...................................................................................................................................................... 32
3.1. General objectives of the review .............................................................................................................. 32
3.2. Specific objectives of the review .............................................................................................................. 32
4. Policy options ................................................................................................................................................ 33
4.1. Keeping the structure of the present system ............................................................................................. 33
4.2. Identification of the Policy Options to be assessed ................................................................................ 34
5. Impact Assessment of policy options ........................................................................................................ 37
5.1. Exclusive grant-backs .............................................................................................................................. 38
5.2. Termination clauses ............................................................................................................ 41
5.3. Patent pools ....................................................................................................................... 46
5.4. Summary of the overall conclusions .................................................................................. 50
6. Monitoring and evaluation .................................................................................................... 52
Annex 1 .............................................................................................................................. 55
Annex 2 .............................................................................................................................. 56
Annex 3 .............................................................................................................................. 59
Annex 4 .............................................................................................................................. 63
# Executive Summary Sheet

**Impact assessment on the Draft Technology Transfer Block Exemption Regulation and the Draft Commission Notice - Guidelines on the application of Article 101 TFEU to technology transfer agreements**

## A. Need for action

**Why? What is the problem being addressed?**

Technology transfer agreements are agreements by which one party (licensor) authorises another (licensee) to use its technology for the production of goods and services. Most licensing agreements do not restrict competition, but have positive effects, as they give rise to substantial efficiencies by strengthening the incentives to innovate and leading to the dissemination of technology. Yet, licensing agreements can also result in negative effects on competition by facilitating collusion or foreclosing competitors and thereby harming consumers by leading to higher prices, lower output or less innovation. However, even those licensing agreements that restrict competition may give rise to pro-competitive efficiencies, and therefore be exempted under Article 101(3) TFEU, provided that they create objective economic benefits for consumers and that their pro-competitive effects outweigh the restrictive effects that the agreements have on competition. Based on these grounds, the TTBER block exempts those licensing agreements that fulfil the conditions set out in it.

## What is this initiative expected to achieve?

The goal of this revision is to verify that the Commission's competition policy as regards technology transfer agreements still reflects the right balance between providing effective incentives for competitors and non-competitors to enter into innovation and welfare increasing technology transfer agreements while ensuring that such agreements do not undermine economic welfare by unnecessarily distorting competition.

## What is the value added of action at the EU level?

Since Council Regulation 1/2003, the Commission is no longer the sole entity with competence to apply Article 101(3) TFEU. Companies themselves are now responsible for carrying out the assessment of their agreements under Article 101 TFEU. Moreover, national competition authorities (NCAs) and national courts have been empowered to apply Article 101 TFEU directly. There is therefore a strong need for guidance by the Commission on the application of Article 101 TFEU to technology transfer agreements.

## B. Solutions

**What legislative and non-legislative policy options have been considered? Is there a preferred choice or not? Why?**

Since stakeholders and NCA’s are content with the structure of the present regime, it was decided at an early stage of the revision to keep the system of a Block Exemption Regulation accompanied by Guidelines instead of having Guidelines as the only guidance tool. Considering the significant number of respondents that requested changes in the TTBER and its Guidelines, this revision has at its later stage focused on adopting revised versions of the TTBER and the Guidelines. The requested changes pertain to exclusive grant-backs, termination clauses and patent pools.

Concerning exclusive grant-backs the options are (1) keeping the status quo i.e. keeping exclusive grant-backs of non-severable improvements in the safe harbour, (2, preferred) treating all exclusive grant-backs as excluded restrictions and (3) considering exclusive grant-backs as hardcore restrictions. Concerning termination clauses the options are (1) keeping the status quo, i.e. keeping termination clauses benefitting from the safe harbour, (2) considering termination clauses as excluded restriction, (3, preferred) considering only termination clauses in non-exclusive agreements as excluded restriction and (4) considering termination clauses as hardcore restrictions. Regarding patent pools the options are (1) keeping the current text of the Guidelines, (2) bringing patent pools under the safe harbour of the TTBER and (3, preferred) introducing a soft law safe harbour in Guidelines.

## Who supports which option?
Concerning exclusive grant-backs, a majority of stakeholders were against the removal of the distinction between severable and non-severable improvements. On the other hand, other stakeholders and the NCAs welcomed the change. Concerning termination clauses, a majority of the stakeholders were against the inclusion of termination clauses in the list of excluded restrictions. On the other hand, in addition to the NCAs there were also several stakeholders supporting the change. Regarding patent pools, the majority of the submissions commended the Commission for including a comprehensive safe harbour for technology pools in its draft guidelines.

C. Impacts of the preferred option

What are the benefits of the preferred option (if any, otherwise main ones)?

The preferred option for exclusive grant-backs would reduce compliance costs for companies, in particular SMEs (by removing the need for identifying what is a severable or non-severable improvement) and gives an incentive for research and follow-on-innovation.

Concerning termination clauses the preferred option ensures that termination clauses which have the same effect as non-challenge clauses are not automatically exempted, while at the same time catering for the particular scenario of the smaller licensor in a situation of dependence towards its exclusive licensee. It contributes to removing barriers to follow-on innovation and competition by facilitating the removal of invalid IPR.

Regarding patent pools the preferred option provides for the lowest compliance costs when setting up a pool, while safe-guarding consumer welfare and still allowing for enough flexibility for pools that want to differ from the "blue print" set out in the soft law safe harbour.

What are the costs of the preferred option (if any, otherwise main ones)?

As regards the preferred option on exclusive grant-backs and termination clauses certain companies may wish to review existing licensing agreements. However, this is likely to concern only a limited number of companies and does not entail a risk of illegality of the whole agreement.

How will businesses, SMEs and micro-enterprises be affected?

These stakeholders will benefit from the preferred options by the effects elaborated above. The preferred option regarding termination clauses is particularly designed for strengthening SMEs by catering for the particular scenario of the SME licensor in a situation of dependence towards its exclusive licensee.

Will there be significant impacts on national budgets and administrations?

There is no direct impact on national budgets and administrations.

Will there be other significant impacts?

There are no other significant effects.

D. Follow up

When will the policy be reviewed?

The proposed TTBER will expire 12 years after its entry into force. The Commission will amend or repeal the TTBER before its expiry should it no longer respond to the market conditions in the EU.
1. BACKGROUND

1.1. Context

The EU aims to achieve a more competitive, connected, greener, knowledge based and inclusive society. In particular, innovation and competitiveness are fundamental to the Commission’s Europe 2020 strategy. Innovation often results in greater prosperity and a more efficient use of scarce resources, with knowledge as the key input. As shown in the tables below, taken from the recent joint OHIM/EPO study intellectual property rights ("IPR") intensive industries have generated almost 26% of all jobs in the EU during the period 2008-2010. On average IPR intensive industries generated (over the same period) almost 39% of total economic activity in the EU. IP intensive industries thus contribute significantly to the European economy.

Table 1: Direct contribution of IPR-intensive industries to employment

<table>
<thead>
<tr>
<th>IPR-intensive Industries</th>
<th>Employment</th>
<th>Share of total employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade mark-intensive</td>
<td>45,508,046</td>
<td>20.8%</td>
</tr>
<tr>
<td>Design-intensive</td>
<td>26,657,617</td>
<td>12.2%</td>
</tr>
<tr>
<td>Patent-intensive</td>
<td>22,446,133</td>
<td>10.3%</td>
</tr>
<tr>
<td>Copyright-intensive</td>
<td>7,049,405</td>
<td>3.2%</td>
</tr>
<tr>
<td>GI-intensive</td>
<td>374,345</td>
<td>0.2%</td>
</tr>
<tr>
<td><strong>All IPR-intensive</strong></td>
<td><strong>56,493,661</strong></td>
<td><strong>25.9%</strong></td>
</tr>
<tr>
<td>Total EU economy</td>
<td>218,400,733</td>
<td></td>
</tr>
</tbody>
</table>

---

Efficiency enhancing technology transfer agreements between competitors or non-competitors can further promote innovation and competitiveness in Europe by ensuring that technologies are disseminated to also other companies than the original inventor. Dissemination of technology enables more competition and can also increase follow-on innovation.

One particular type of technology transfer agreement, so called patent pools, where industry comes together to jointly license out patents necessary to produce, for example, a standard compliant product, can be one piece of the puzzle to solve problems with so called patent thickets. The Commission's 2012 Industrial Policy Communication underlines that recent studies have detected patent thickets in 9 out of 30 technology areas and that an efficient and proportionate regulatory system could foster patent pool arrangements as effective market-driven instruments to mitigate the risk of negative effects of patent thickets.

Competition is one of the key tools, which incentivises companies to innovate and co-operate in various efficiency enhancing projects. Competition enforcement can only be effective if its policy instruments, in particular those having significant impact on technology transfer agreements, are kept up to date and brought in line with market developments.

Guidance for the assessment of technology transfer agreements under the EU competition rules is currently given by two instruments, namely the 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 ("TTBER") and the accompanying Guidelines on the application of Article 81 of the EC Treaty to Technology Transfer agreements ("Guidelines"). The TTBER creates a safe harbour (in other words it gives an automatic exemption from competition law) for certain categories of technology transfer agreements whereas the Guidelines provide guidance on the application of the

2 "Patent thickets" occur where a significant number of patents, held by different patent owners, are necessary to produce a particular product,. Royalty stacking results from independent pricing of these complementary patents leading to a problem of double marginalisation. Patent thickets are prevalent in communication technology, semiconductors, optics, electrical machinery and medical technology.
TTBER and Article 101 to the agreements that cannot benefit from the safe harbour in the TTBER (for example because they exceed the market share thresholds).

As the TTBER is due to expire on 30 April 2014, the Commission is now in the process of reviewing the rules applicable to technology transfer agreements. The revision should help to ensure that the Commission's policy reflects current market realities, provides effective incentives for competitors and non-competitors to enter into technology transfer agreements and also helps to assure that the licensing agreements contribute to economic welfare without, at the same time, distorting competition. This Impact Assessment Report ("Report") discusses both the draft TTBER and the draft Guidelines.

The Directorate General for Competition ("DG COMP") is the lead service for this review and impact assessment. The other departments involved are: DG Enterprise and Industry, DG Internal Market, DG Economic and Financial Affairs, DG Connect, DG Joint Research Centre, DG Research and Innovation and the Secretariat-General. Technology transfer agreements and substantive competition rules

Technology transfer agreements are agreements entered into between two parties, by which one party (licensor) authorises another (licensee) to use its technology for the production of goods and services. In general, a simple transfer by way of sale is not covered by the TTBER. Rather, the term "technology transfer agreement" refers to an agreement which licenses the use of patents, know-how, software copyrights or other types of intellectual property rights covered by TTBER for the purposes of producing goods or services.

Most licensing agreements do not restrict competition. On the contrary, technology transfer agreements will often have positive effects, as they will give rise to substantial efficiencies by strengthening the incentives to innovate, reduce duplication of research and development ("R&D") and promote innovation by allowing innovators to earn returns to cover their R&D costs, lead to dissemination of technology, lower production costs, result in improved products, facilitate diffusion of innovation and generate product market competition. Licensing agreements are also capable of removing obstacles to the development and exploitation of the licensee's own technology, creating design freedom and removing the risk of infringement claims by the licensor. The efficiencies often stem from the combination of the complementary assets and technologies of the licensor and licensee. Such type of cooperation can lead to a cost/output configuration that otherwise would not be possible. For instance, the combination of an improved technology of the licensor with more efficient production or distribution assets of the licensee may reduce production costs or lead to the production of higher quality products.

On the other hand, as also recognized by the agreement on Trade-Related Aspects of Intellectual Property Rights ("TRIPS agreement")\(^3\), licensing agreements can also result in negative effects on competition on the market. Technology transfer agreements might facilitate collusion, foreclose competitors from the market by raising barriers to entry, e.g. by restricting their access to essential inputs or raising their costs, or reduce inter- or intra-technology competition between companies thereby creating obstacles to market integration and harming consumers by leading to higher prices, lower output, less product variety, lower product quality or less innovation.

---

\(^3\) Article 40 TRIPS.
However, even those licensing agreements that restrict competition may give rise to pro-competitive efficiencies, and therefore be exempted under Article 101(3) TFEU, provided that they create objective economic benefits for consumers and that their pro-competitive effects outweigh the restrictive effects that the agreements have on competition.

According to the EU competition rules, all agreements are first examined under Article 101(1) TFEU. If the agreement is found to be anticompetitive under Article 101(1) TFEU, a further assessment of whether such agreement fulfils all the conditions set out in Article 101(3) TFEU is carried out, in order to examine whether it could benefit from the individual exemption provided for therein. Agreements, falling under Article 101(1) TFEU, which do not satisfy the conditions of Article 101(3) TFEU, are null and void pursuant to Article 101(2) TFEU.

The TTBER block exempts, in other words gives an automatic exemption from the EU competition rules, those licensing agreements that fulfil the conditions set out in it. The block exemption applies to certain categories of technology transfer agreements on the presumption that such agreements, to the extent they are caught by Article 101(1) TFEU, fulfil the conditions laid down in Article 101(3) TFEU. The TTBER applies to a wide range of agreements: it covers both agreements entered into by actual or potential competitors and agreements between non-competitors. These types of agreements give rise to different degrees of competition concerns. Generally, agreements between competitors pose a higher risk of anticompetitive effects (e.g. licensing between competitors might facilitate collusion by increasing transparency in the market, by reducing the incentives to compete, raising barriers to entry or by resulting in licensing agreements that lead to a high degree of commonality of costs). Therefore, agreements between competitors, in particular if reciprocal, are dealt with under a stricter regime, whereas a more lenient approach is taken towards agreements between non-competitors.

The TTBER applies different exemption criteria based on whether the parties to the agreement are competitors or non-competitors. The TTBER block exempts technology licensing agreements i) between competitors which do not possess a combined market share in excess of 20 % and non-competitors where the market share of each of the parties does not exceed 30 % on the affected relevant technology and product markets and ii) where the agreements do not include so-called "hardcore" restrictions of competition such as price-fixing, the limitation of output or the allocation of markets or customers.

An individual assessment is required in order to evaluate the licensing agreements concluded by companies whose market shares fall outside the safe harbour created by the above mentioned market share thresholds. However, the fact that market shares exceed the thresholds does not give rise to any presumption that the agreement is either caught by Article 101(1) TFEU or that the agreement does not fulfil the conditions of Article 101(3) TFEU. The Guidelines provide guidance in making this assessment.

Since the "modernisation" of the public enforcement of EU competition law in May 2004, as implemented by Council Regulation 1/20034, the Commission is no longer the sole entity, which has the competence to apply Article 101(3) TFEU. Before May 2004, the exemption was not applicable.

---

unless formally granted by the Commission following notification by one of the parties to the agreement. The companies themselves are now responsible for carrying out the assessment of their agreements under Article 101 TFEU in its entirety (so called "self-assessment"). Moreover, the competition authorities of the Member States ("NCAs") and national courts have also been empowered to apply Article 101 TFEU directly. Hence, cases dealing with technology transfer agreements under Article 101 TFEU are now mostly examined at a national level.

There is therefore a strong need for guidance by the Commission on the application of Article 101 TFEU to technology transfer agreements. Building on its role as a guardian of the Treaty, Regulation 1/2003 has entrusted the Commission with the power to ensure the consistent and coherent application of Article 101 TFEU throughout the whole EU. Block exemption regulations and guidelines are among the key tools to achieve this in a world of decentralisation and self-assessment, where NCAs, national courts and companies apply and evaluate Article 101 TFEU.

1.2. The current review of the TTBER and the Guidelines

Due to the expiry of the TTBER at the end of April 2014, a review of the TTBER and the accompanying Guidelines was initiated by the Commission in 2011. The review comprised an ex post evaluation of these two instruments and took form of public consultations of stakeholders and NCAs. The stakeholders and the NCAs were invited to submit their experience and their views on the functioning of the current rules and to identify the areas for possible improvements, also in the light of recent market developments and the evolving economic and legal context.

1.2.1. Consultation and expertise sought

Since the launch of the public consultation in December 2011, a number of steps were taken in order to evaluate the current system and to establish areas that might benefit from further improvements.

The main steps include:

- Ex post evaluation by way of (a) a written consultation of the NCAs which took place from 24 October 2011 to 29 March 2012 and (b) a written public consultation of stakeholders on the overall functioning of the current TTBER and guidelines which took place from 6 December 2011 till 3 February 2012 ("2012 public consultation");
- An economic study by Pierre Régibeau and Katharine Rockett on "Assessment of potential anticompetitive conduct in the field of intellectual property rights and the interplay between competition policy and IPR protection", attached as Annex 1;
- One meeting with the NCAs' representatives on 29 March 2012 in the context of the European Competition Network, to discuss the ex post evaluation;
- One meeting with the NCAs' representatives on 22 January 2013 to discuss proposed changes to the current rules, and;
- A public consultation on the draft text of TTBER and Guidelines which took place from 20 February to 17 May 2013 ("2013 public consultation");
- A study by ECORYS and TU/e as part of the ECSIP consortium, commissioned by DG ENTR, on "Patents and Standards - A modern
framework for IPR-based standardization” (to the extent it concerns patent pools). \(^5\)

– One final meeting with NCAs’ representatives in the form of an Advisory Committee meeting which was held on 12 February 2014.

1.2.2. Ex post evaluation - Input from stakeholders and the Member States on initial questionnaire and statistics

The 2012 public consultation concerned the overall functioning of the current technology transfer regime and was based on a questionnaire concerning stakeholders’ experience of the TTBER and the Guidelines. In total 38 replies were received, mainly from law firms, law associations and industry associations, although comments from several companies and citizens were also received.

Stakeholders considered that the present system is largely satisfactory, both the TTBER and the Guidelines are regarded as useful and important tools for the industry. Many respondents however made suggestions for incremental improvements in both the TTBER and the Guidelines. Most of the stakeholders’ comments focused on issues concerning the scope of the TTBER, market share thresholds and patent pools. The stakeholders also commented on hardcore restrictions, treatment of grant-back provisions and cross-licensing. Stakeholder replies are publicly available under the following link: http://ec.europa.eu/competition/consultations/2012_technology_transfer/index_en.html. A summary of the input received in the public consultation is attached as Annex 2 to this report.

On 24 October 2011 questionnaires were sent to the NCAs in order to collect information about their experience in cases at national level and their views as regards the current regime for technology licensing agreements. The NCAs presented their experience in an ECN working group meeting on 29 March 2012. The Member States’ replies were largely consistent with the feedback received from the stakeholders. Although the majority of the Member States indicated that they have only limited experience applying the TTBER and the Guidelines, the NCAs agreed that both instruments are useful in practice. The majority of the Member States requested continuous guidance on technology transfer agreements. The issues of patent pools and reverse payment settlements received the most attention.

There are no direct statistics available on the number of cases in which NCAs or national courts have directly or indirectly applied the TTBER and/or the Guidelines. However, exchanges with NCAs in the context of the ex-post evaluation of the currently applicable TTBER and the Guidelines indicate that the number of national cases concerning these rules is rather limited. In total five NCA investigations (which led to three decisions) and four national court cases were reported, which in addition had sometimes only an indirect link with the TTBER. None of these cases provided insights in the application of the TTBER useful for this review exercise.

There is also little statistics available on the total number of companies that enter into IPR licensing agreements in Europe. The increasing importance of licensing for innovation is therefore mostly supported by anecdotal evidence.

However, an OECD study from 2009\(^6\) shows that patent licensing is widespread among patenting firms. Around one company out of five in Europe licenses patents to companies outside its own group

\(^{5}\) Not yet published.

\(^{6}\) Not yet published.
(whereas more than one of four does so in Japan). This study also indicates that the relationship between size of the firm and probability to license out is U-shaped – small firms and large firms are more likely to license out their patented inventions than the medium-sized.7

The Commission (DG RTD in cooperation with DG COMP) has also attempted to get relevant statistics and figures on licensing activities by patenting firms in the context of a study commissioned by DG RTD, "PATLICE Survey – Survey on patent licensing activities by patenting firms" ("PATLICE Survey").8

As set out in the PATLICE Survey, there are no general databases or statistics available on patent licensing activities.9 The consultants' goal with the survey was therefore to, at least partly, cover this lack of data through a wide survey to patent licensing firms. In the PATLICE Survey, the consultant (technopolis) contacted, through different means, not less than 5270 firms with questionnaires on the licensing practices of these firms.10 However, the response rate to the questionnaire was only 5.8%. In other words, only 330 out of the 5270 firms responded (most of these only to a shorter version of the questionnaire, only 126 responded to the one with in-depth questions,11 and sometimes in addition only partly). As regards question on the content of actual licensing agreements, many companies were not willing to provide the information for confidentiality reasons.12 Overall, the response rate to this survey is disappointing and shows the difficulty of getting access to information on companies' strategies for licensing of statistical relevance.

However, the PATLICE Survey does at least give some indications about certain aspects of patent licensing.

For example 56% of the companies that responded indicate that they are licensing out IPR. Though, as stated in the survey, care should be taken when making interferences from this sample to the overall population of patenting firms. In the OECD/EPO survey, referred to above, the share of out-licensing firms was considered to be 35% in Europe.

---


7 See also "Monitoring industrial research: The 2012 EU Survey on R&D Investment Business Trends", p. 26-27. This 2012 EU Survey on R&D Investment Business Trends also gives certain trends as regards licensing activities in European companies.

8 The PATLICE survey can be found here: http://ec.europa.eu/research/innovation-union/pdf/patlice-survey.pdf.

9 See PATLICE Survey, p. 3, "There are no general databases or statistics available on patent licensing activities. Some data is collected in the course of trade statistics. But trade data has a number of shortcomings, the most prominent being that it does not differentiate between the various types of licensing activities (some of which are not related to patenting). Other than trade data, there are only patent databases available. However, these cannot be used directly to assess patent licensing activities.".

10 Address data stored in patent data bases were used for identifying firms with patents (which could be more likely to be involved in patent licensing, at least licensing out, than other firms).

11 PATLICE Survey, p. 4; "We have created two versions of the questionnaire: A long one, with around 12 pages with in-depth questions on many aspects of the licensing strategies pursued for a first phase of the research, and a second shorter one, with around 6 pages. The short questionnaire contained a subset of the questions posed in the longer questionnaire, in order to increase the number of responses (and hence statistical representativeness) for the most important questions on licensing".

12 PATLICE Survey, p. 5, "Data confidentiality is, in our experience, a very important reason for not answering the questionnaire. Many companies were reluctant to provide us with data on this questionnaire because many if not most of the questions tackled (too) sensitive matters within the firm."
In the sample that responded to the PATLICE Survey the industries oil, gas, basic materials and health care had the highest share of patent out-licensing firms. However, considering the low response rate care should also be taken to draw any inferences from this. One interesting indication is that, in the majority of firms responding, only small parts of the patent portfolios are licensed out: for 45% of the firms at most 5% and for another 19% between 5-10% of the portfolio. The distribution is thereafter decreasing (i.e. we find fewer firms in classes with higher shares of the patent portfolios being licensed out). The only exception is that 10% of companies license out 80-100% of their patent portfolio. The result also indicates that SMEs tend to out-license larger shares of their patent portfolio than large firms.

As for cross-licensing and exclusive licensing, relatively small shares of the patents out-licensed are exclusively out-licensed or cross-licensed. Only 6% of the companies that responded to this question license between 80 to 100% of their patents in an exclusive manner. The same share of the companies has 80 to 100% of their out-licensed patents cross-licensed. By contrast, 50% of the firms do not license out exclusively at all, and 46% of the firms out-licensing do not engage in cross licensing. However, this is not to say that exclusive licensing and cross-licensing is not very important in certain industries and company groups. Potentially some further conclusions could be drawn: As regards cross-licensing it seems that SMEs engage less often in cross-licensing than large firms. This result is somewhat expected as the attractiveness of a firm as partner for cross-licensing depends on the size of its patent portfolio pertaining to a particular technology. As regards exclusive licensing the PATLICE Survey finds that companies without foreign subsidiaries tend to out-license more often exclusively than those with a subsidiary. This is potentially indicative of market entry/access strategies using exclusive patent licensing contracts.

The PATLICE Survey indicates that the majority of licensing out of patents would be to competitors.\textsuperscript{13}

Interesting for the purpose of this revision is that the most important barrier to licensing out is perceived to be "potential loss of competitive/technological edge". All other factors, including legal and regulatory barriers, received ratings that indicate that they are limiting patent out-licensing activities only to a weak extent. As put in the PATLICE Survey "not engaging in out-licensing was the result of a specific company strategy or the result of the specific technology field/industry the firms were operating in".\textsuperscript{14}

As regards types of restrictions in the licensing agreements the PATLICE Survey indicates that the most common type of restrictions used would be field of use restrictions (i.e. licensee can only use a patent for a certain type of technical field).\textsuperscript{15} Ranked second are geographical restriction and temporal restrictions which are on average "seldom" used. Finally, "other restrictions" were very rarely used.\textsuperscript{16}

There are little statistics available on the total number of EU companies that enter into technology transfer agreements with third-country firms. There are no general databases or statistics available on patent licensing activities. The PATLICE Survey contains certain information about the licensing-out activity of European firms with third-country firms. According to the PATLICE Survey, most EU

\textsuperscript{13} PATLICE Survey, p. 24.
\textsuperscript{14} See PATLICE Survey, p. 34.
\textsuperscript{15} Average rating 2.6 on a scale from 1=not used to 4=always used.
\textsuperscript{16} See PATLICE Survey, p. 46 where "other restrictions" score 1.2 where 1.0 is not used.
firms are, however, licensing out to other EU companies. Only 13% of the PATLICE Survey’s respondents indicate that they license out only to third-country firms.

According to the PATLICE Survey, the second most important licensing trading region would be North America. This finding clearly underlines the importance of the US IP market in the global context. Only 37% of the firms responding to the survey did not have a partner among their non-affiliated licensees in the US. The third most important patent licensing trade region is the same country where the licensing-out firm is located. This result may be at first surprising. However, the different country sizes (i.e. sizes of national markets) need to be taken into account. For German firms, for example, only 17% would have no licensee in Germany, 21% no licensee in Europe and around 45% no licensee in the US. Interestingly, according to the PATLICE Survey Asian countries fall back considerably as licensees for European technology. Ranked forth is Japan, which is only slightly ahead of China and ‘other’ Asian countries. For at least around 85% of the European companies having responded to the PATLICE Survey, Korea, South America, other parts of the world and India are currently not the subject of patent out-licensing deals with non-affiliated partners.

For firms that are part of an enterprise group, the PATLICE Survey only indicated that firms, which are part of an enterprise group, tend to have licensees in North America more often than their respective counterparts that are not part of a group. This gives an indication that it is mostly larger firms licensing out to the North American market.

In conclusion, the PATLICE Survey shows that it is mainly the North American market that is of importance for licensing trade with European firms (amongst non-European markets). Japan would also have some importance.

As to the total number of agreements to which companies and their legal advisers apply the TTBER and Guidelines, there are no statistics available (as the example of the PATLICE Survey shows it is even difficult to get responses to targeted surveys covering these issues). However, normally every company entering into a technology transfer agreement would need to make a self-assessment (i.e. analyse whether the agreement can benefit from the safe harbour in the TTBER and if not, assess the agreement with the help of the Guidelines).

Due to the reasons set out above, i.e. the few actual competition cases (before competition authorities or courts at national or European level), the fact that agreements are (since modernisation of EU competition law in 2004) no longer notified to the Commission but instead assessed by the companies’ themselves and the lack of available (statistically significant) data, the assessment in this report will have to be mainly based on qualitative rather than quantitative factors.

It should in this context be noted that the Commission has a limited margin of discretion in the area of competition policy. The Commission is bound by the competition rules as laid down in the Treaty on the Functioning of the European Union ("TFEU") and, in particular, by the case-law of the European Court of Justice and is thereby, in many cases, limited in the choice of policy options in this area.

It should further be underlined that, considering the incremental changes proposed to the TTBER and the Guidelines, this impact assessment report is based on the concept of the “proportionate level of analysis” as regards the appropriate level of details and analysis (including data collection and arrangements for monitoring and evaluation). As set out below, stakeholders are overall appreciative of the legal system in this area and the changes proposed are only changes on the margin to the already
existing instruments. DG COMP has therefore, in this revision, decided to carry out a relatively limited impact assessment in terms of depth and scope, with the exception of stakeholder consultations which have been carried out twice and where all stakeholders have been publicly invited to provide input. The impacts of the changes discussed in this impact assessment report are not likely to have an important level of significance and do not seem to be of high political importance.

1.2.3. The Study by Pierre Régibeau and Katharine Rockett

As part of the assessment of the current technology licensing regime, the Commission commissioned Pierre Régibeau and Katharine Rockett to complete an "Assessment of potential anticompetitive conduct in the field of intellectual property rights and the interplay between competition policy and IPR protection" ("Study"), see Annex 1. The results of the Study were published in November 2011 and is publicly available on DG Competition’s website see: http://ec.europa.eu/competition/consultations/2012_technology_transfer/index_en.html.

The main issues analysed in the Study were patent thickets and the problems arising from them. The Study analysed the ways the current regime deals with cross-licensing, patent pools and grant-back obligations. In general, the Study supported the approach taken by the Commission towards technology licensing agreements. In addition, with regard to the treatment of exclusive grant-back clauses in technology transfer agreements, the Study suggests the need to abolish the distinction between severable and non-severable improvements and argues for a stricter approach towards grant-back clauses in general.

1.2.4. Public consultation on revised draft texts

In the 2013 public consultation, the draft TTBER and the draft Guidelines were published for public consultation on 20 February 2013, after obtaining an approval from the College on the same day. The public consultation ran until 17 May 2013. The Commission received 58 replies from stakeholders. These replies are publicly available at http://ec.europa.eu/competition/consultations/2013_technology_transfer/index_en.html. The replies are also summarised in Annex 3.

Stakeholders seem to in general be more comfortable in self-assessing the compliance of their agreements with Article 101 of the Treaty and support the current effects-based approach to enforcement that the Commission has been promoting since modernisation of EU competition law in 2004. The overall majority of stakeholder indicate that the current system has given them flexibility to organise their cooperation, notably through the so called "safe harbours" provided for in the TTBER and the Guidelines. Therefore, companies welcome that the Commission is keeping the overall structure of the regime and only proposes incremental changes.

The stakeholders welcome the clarifications concerning the scope and that the draft Guidelines were more reader friendly. On substance, most of the submissions focused on the proposed changes, including the terminantion clause, exclusive grant-back and patent pools. As regards the interest groups licensor/licensee and small/big firm, it is not in all cases possible to make such distinctions when analysing the stakeholders' submissions. For example, many big companies are vertically integrated and are active both as licensor and licensees. Most interest organisations in the field would also represent both licensors and licensees as well as small(-er) and large companies. In public consultations regarding revisions of competition law instruments, there is also (as in this case) a certain amount of international law-firms responding. Also in this case, the view of the law firm often
represents the overall view of the law firm taking into account interests of different clients. In conclusion, it is therefore not possible to make a clear distinction between different interest groups when analysing the written input to the public consultation. For specific comments on the issues covered by this impact assessment report see section 1.4 below.

The NCAs, which have been consulted at several stages of the process (see Section 1.2.1) agree, in view of their national experience, with the preferred options for all three topics covered.

However, meetings and also discussion at public events (specialised conferences) indicate the following as regards the three topics concerned:

As regards the options for termination clauses a clearer pattern as to different interest groups can be found. First, in particular companies in the telecom industry seem to have a more positive view on the option of equalising termination clauses with non-challenge clauses. This industry is experiencing the difficulties of navigating through the patent thicket in a patent landscape where companies declare too many patents as potentially essential to the standard setting organisations, for which implementers of the standard thereafter have to pay royalties in order to be able to bring their products to the market. It is, in this context, perceived as very important to keep the right of challenging both validity and essentiality of patents before a competent judge in order to remove unmerited barriers to innovation. Companies in industries with fewer patents may not see the issue as equally important (even though this is also not necessarily true in all scenarios, for example in an industry with few but very valuable patents the right to challenge the validity may be just as important). Second, the dialogue with stakeholders has brought to the Commission's attention that innovative start-ups, which license out their innovations exclusively, would have a particular interest in keeping an automatic exemption for termination clauses. In this business model and market context, it is argued, there would be a risk that a larger licensee uses his right to challenge the licensed IP as a mere re-negotiating tactics, without the licensor being able to respond by threatening to terminate the contract.

When it comes to the options for patent pools the views do not seem to differ depending on different interest groups. Overall, industry seems to agree to the benefits of voluntary patent pools and for the benefits of providing an easier check-list approach to the competition law assessment of such.

1.2.5. The current TTBER framework and International Trade

Generally, policies on international trade and investment and competition policy are complementary instruments in promoting economic efficiency, development and growth. Trade policy fosters these goals primarily through the reduction of government-imposed barriers to international commerce, while competition policy like the TTBER rules addresses principally anti-competitive practices of enterprises that impede access to, or the efficient functioning of, markets. Neither instrument is likely to be fully successful in the absence of the other. Robust competition in the home market contributes generally positively to the international competitiveness of firms by providing incentives for the continual upgrading of products, production methods and marketing and distribution channels.

As outlined in Annex 4 the TRIPS agreement recognizes this complementary nature of trade policy and competition law in respect of technology agreements. TRIPS states as a basic principle that "appropriate measures [...] may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology." Secondly, TRIPS acknowledges in general terms that IP licensing can "have
adverse effects on trade and may impede the transfer and dissemination of technology”. It also specifically allows WTO members to formulate rules to identify abusive behaviour "having an adverse effect on competition in the relevant market”.

The ex-post evaluation as outlined in Section 1.2.2 has not brought forward any evidence that the current TTBER framework would negatively affect trade and investment relations with our major trading partner nor that it would not be compliant with the TRIPS agreement. Stakeholders have indicated in the 2012 public consultation that the present framework, both the TTBER and the Guidelines, are regarded as useful and important tools for the industry. Stakeholders did not identify any particular problems in respect to investment relations with the EU’s major trading partners. On the contrary, both European and US firms, often appreciate the legal certainty provided by the EU system (based on block exemption regulations).

Moreover, it is important to underline that the current framework creates a level playing field between EU and third-country firms in respect of the European market. As EU competition law is applicable on agreements which have a significant effect on EU consumers irrelevant of the nationality of the firms involved, the TTBER and its Guidelines applies equally to technology transfer agreements between EU companies as well as technology transfer between EU companies and third-country firms. The TTBER rules would equally apply to a technology transfer agreement between two third country firms provided that the agreement has significant effects on EU consumers. The consultations have not brought forward any evidence about any problems concerning the current TTBER framework in respect of negative effects on trade and investment relations with non-EU partners.

1.3. Main proposed changes in the draft TTBER and the draft Guidelines

The changes proposed to the TTBER and the Guidelines are mainly incremental improvements considering that stakeholders input shows that overall the system works well. It is important in this context to recall that the TTBER is based on the objective of promoting diffusion of innovation and technology by giving incentives to licensing out and that the rules therefore are more lenient than our other block exemption regulations (allow for more restrictions in both agreements between competitors and non-competitors). This fundamental approach is not touched in the present revision. The main proposed changes in the TTBER include proposed changes in the treatment of exclusive grant-backs and termination clauses as described below.

All exclusive grant-back clauses (a provision where the licensee is obliged to license back to the licensor on an exclusive basis, and not even use itself, its own improvements to the licensed technology) are proposed to be treated equally. The current TTBER makes a distinction between so called severable\(^\text{17}\) and non-severable\(^\text{18}\) improvements and excludes from the safe harbour of the TTBER exclusive grant-back obligations concerning severable improvements. It is now proposed that all exclusive grant-backs will fall outside the scope of the TTBER and therefore require an individual assessment by companies (with the help of the guidance set out in the Guidelines) as to whether they

---

\(^{17}\) I.e. where the licensee can use his innovation without infringing the underlying IPR licensed out in the original agreement.

\(^{18}\) I.e. where the licensee cannot use his innovation without infringing the underlying IPR licensed out in the original agreement.
in compliance with competition law. However, the rest of the agreement can still benefit from the safe
harbour of the TTBER. All non-exclusive grant-backs are still covered by the TTBER.

In the current TTBER, non-challenge clauses (preventing the licensee to challenge the validity of the
technology) do not benefit from the safe harbour of the TTBER. They are instead to be assessed
individually by companies (with the help of the guidance set out in the Guidelines). However, as with exclusive grant-backs, introducing such a provision in an agreement does not prevent the rest of the agreement from benefitting from the safe harbour of the TTBER. The Commission proposed initially (i.e. in the draft TTBER and Guidelines on which the public were consulted between February to May 2013) to equal all termination clauses (a clause that allows the licensor to terminate the agreement if the other party challenges the validity of the licensed technology) with non-challenge clauses i.e. to treat them as excluded restrictions. In other words, termination clauses would no longer benefit from the safe harbour of the TTBER but require individual assessment by companies (with the help of the guidance set out in the Guidelines). After taking into account the views of the stakeholder in the public consultation on the proposal the option to to keep the safe harbour for termination clauses in exclusive licence agreements has also been assessed.

As regards changes in the Guidelines the revision of the section on patent pools could be highlighted. In addition to certain more technical clarifications, this section now also includes a more comprehensive safe harbour, covering both the set-up and the licensing out from a pool. By structuring their pool and the subsequent licensing agreements from the pool in such a way that the safe harbour conditions are fulfilled, the pool contributors can be certain that the pool is considered to be pro-competitive, regardless of the market share the pool could obtain.19

The following safe harbour criteria are set out in the Guidelines:

1. Participation in the standard and pool creation process is open to all interested technology owners: When participation in a standard and pool creation process is open to all interested technology owners it is more likely that technologies for inclusion into the pool are selected on the basis of price/quality considerations than when the process is open only to a limited group of technology owners.

2. Sufficient safeguards are adopted to ensure that only essential technologies (which therefore by necessity are also complements) are pooled: When technologies in a pool are substitutes, royalties are likely to be higher than they would otherwise be, because licensees do not benefit from rivalry between the technologies in question. When the technologies in the pool are complements the patent pool reduces transaction costs and may lead to lower overall royalties because the parties are in a position to fix a common royalty for the package as opposed to each fixing a royalty for its own technology while not taking into account that a higher royalty for one technology will usually decrease the demand for complementary technologies.

3. Sufficient safeguards are adopted to ensure that exchange of sensitive information (such as pricing and output data) is restricted to what is necessary for the creation

---

19 It should be noted that the safe harbour, in principle, builds on criteria already set out in the currently applicable Guidelines as criteria on which the competition law assessment of a patent pool should be made. However, the safe harbour attempts to give a clearer message as regards the competition law risk a patent pool agreement when these criteria are fulfilled and to make it easier for the companies self-assessing to do the self-assessment.
and operation of the pool. In oligopolistic markets exchanges of sensitive information such as pricing and output data may facilitate collusion.

4. The pooled technologies are licensed into the pool on a non-exclusive basis. In other words, it should still be possible for the licensor to license out its own patents outside the context of the pool.

5. The pooled technologies are licensed out to all potential licensees on FRAND\textsuperscript{20} terms. This ensures that all licensees get access to the pooled technology on fair and reasonable terms.

6. The parties contributing technology to the pool and the licensees are free to challenge the validity and the essentiality of the pooled technologies. This condition ensures that the patent pool does not become a shield for invalid or non-essential patents, requiring licensees to pay for more than needed.

7. The parties contributing technology to the pool and the licensee remain free to develop competing products and technology. This ensures that the pool participants continue to compete in innovation.

For more details about the proposed changes in the TTBER and the Guidelines subject to public consultation between February to May 2013, see http://ec.europa.eu/competition/consultations/2013_technology_transfer/index_en.html.

Annex 4 of the Report analyses the legal situation in respect of the three key problem areas (grant-backs, termination clauses and patent pools) in respect of the TRIPS agreement as well as in respect of the current US and Japanese competition policy. This comparison indicates that the revision will not lead to significant differences which are likely to affect the trade with these major trading partners. For example, the TRIPS agreement does not make a distinction between different types (severable and non-severable) of exclusive grant-backs and recent US case law seems to advocate also a stricter approach towards such barriers to challenge the validity of patents underlining the important public interest in removing potentially high numbers of invalid patents from the market. On patent pools there seem also to be no significant substantive differences between the EU proposed revision and the current US and Japanese approach.

1.4. **Input received in 2013 public consultation**

1.4.1. **Exclusive grant-backs**

Two thirds of the submissions contained comments on exclusive grant-backs. Even if the first public consultation had brought out the difficulty of separating severable and non-severable improvements, the majority of stakeholders were against the removal of the distinction. Many of these stakeholders pointed out that when improvements are non-severable, the licensee would always be dependent on a license to the underlying IPR, and that the licensor would thus have the right under patent law to prevent the licensee from using his own improvement. Some stakeholders also pointed out that the licensor has a legitimate interest in using the improvements, that it would be a disincentive to license out in the first place, and that it would push a number of contracts into self-assessment, which would create more uncertainty. On the other hand, other stakeholders welcomed the change. These stakeholders pointed out that there is no need to differentiate between severable and non-severable

\textsuperscript{20} FRAND here means fair, reasonable and non-discriminatory terms. In the US this is often referred to as RAND (reasonable and non-discriminatory).
improvements and they found the new rule simpler and easier to apply. Moreover, they found that treating all exclusive grant-backs as excluded restrictions would encourage the licensee to improve the licensed technology and foster competition.

No clear interest groups have crystallized in the dialogue with stakeholders. However, meetings and also discussion at public events (specialised conferences) indicate the following very general interests. Companies acting solely or mainly as licensors are generally not positive towards any changes which limit their possibility of obliging the licensee to exclusively license back his improvements and follow-on innovation (thereby preventing the innovator himself from using his innovation). Therefore, such companies would be for option 1 (keeping status quo), against option 2 (the preferred option to treat all exclusive grant-backs as excluded restrictions) and strongly against option 3 (dealing with exclusive grant-backs as hardcore restrictions). Companies acting mainly as licensees would, on the opposite, be against option 1 (keeping status quo) since this option partly gives an automatic exemption to exclusive grant-backs, for option 2 and potentially even strongly for option 3. However, as stated above, in many cases companies are acting as both licensors and licensees (and it is not possible to say that small companies are more often licensing in or licensing out, this may differ from on particular sector of industry to another).

As explained below, there are indications that also exclusive grant-backs regarding non-severable improvements may lead to disincentives for innovation by the licensee. In addition, the argument that the licensor has the right under patent law to prevent the licensee from using the underlying IPR would not seem to be convincing in the scenario under the TTBER where the licensor has already licensed out the underlying IP to the licensee. Licensors would still be able to ensure that they can have access to improvements by way of non-exclusive grant-backs (and, under individual assessment, even by exclusive grant-backs). The change would not prevent the rest of the agreement to benefit from the safe harbour, it is only the exclusive grant-back that would need to be subject to self-assessment.

1.4.2. Termination clauses

Three fourths of the submissions contained comments on termination clauses. The majority of the stakeholders were against the inclusion of termination clauses in the list of excluded restrictions. Many arguments were put forward, the most common ones being that the change would act as a disincentive to license out, that the change would give too much leverage to the licensees and that the licensor should not be forced to stay in a contractual relationship with a licensee challenging the essence of the relationship. Several of these stakeholders did however recognise the need for this change as regards standard essential patents.

On the other hand, there were also several stakeholders supporting the change. These stakeholders approved the aim of identifying invalid IPRs and pointed out that termination clauses may have the same effect as non-challenge clauses, inter alia because high sunk costs significantly deter the licensees from challenging the validity of the licensed IPR. Moreover, these stakeholders found that the change would ensure that cross-license agreements do not shield invalid patents from challenge, further strengthen the pro-competitive effects of broad cross-licenses that parties enter into to achieve patent peace, and encourage the thinning of the patent thicket.
The outcome of the stakeholder consultation confirms our understanding that termination clauses are, today, commonly used (probably regardless of market shares). However, this will not necessarily mean, as was massively argued by stakeholders, that agreements will need to be renegotiated if we were to maintain the proposal on termination clauses. Changing the status of a termination clause to an excluded restriction does not prevent the rest of the agreement from continuing to benefit from the safe harbour. The only consequence is that the clause in question is subject to self-assessment. Input from stakeholders has brought attention to the fact that the proposed change as regards termination clauses could lead to undesirable effects in case of a smaller licensor licensing out exclusively to a larger licensee, for instance a small biotech research firm licensing out to a large pharmaceutical company. In this scenario the proposed change could lead to an unjustified imbalance between the licensor and the licensee, where the licensee (after obtaining the exclusive licence) could use the mere threat of litigation on validity as a means, for example, to renegotiate down royalties, while the licensor could not respond by threatening to terminate the license. In such a case, where royalties are the main income of the licensor, the proposed change could potentially lead to a disincentive to innovate and to sub-optimal solutions to enter the product market, see further below on the assessment of termination clauses.

1.4.3. Patent pools

More than half of the submissions contained comments on patent pools. The stakeholders strongly welcomed the substantially expanded guidance and the clarifications made in the chapter on patent pools, which were found to be useful. Several submissions welcomed that the definition of "essential" IPR is clarified to explicitly cover also standard essential patents. However, some stakeholders submitted that further guidance would be helpful on certain issues, in particular in regard to FRAND royalty rates and how these rates are set.

The majority of the submissions commended the Commission for including in its draft guidelines a comprehensive safe harbour for technology pools that covers both the creation of the pool and its subsequent operation. A few stakeholders, however, voiced the concern that self-assessment would remain difficult even with the expanded guidance.

1.5. Elaboration and assessment of future options

An inter-service steering group was set up for this Impact Assessment Report and met five times on 11 November 2011, 25 October 2012, 27 May, 1 and 17 October 2013. The following DGs have participated: COMP, ECFIN, ENTR, MARKT, CNECT, SG, RTD and JRC. A draft of this Impact Assessment Report was submitted to the Impact Assessment Board on 23 October 2013, which decided in written procedure. On 22 November 2013, the Board issued an overall positive opinion and made certain recommendations to improve the report in a number of respects.

1.6. Implementing the Opinion of the Impact Assessment Board

The Impact Assessment Report has been amended along the lines of the recommendations of the Opinion of the Impact Assessment Board. In particular, the Impact Assessment Report provides more background on the international aspects (see e.g. Section 1.2.2 and 1.2.5), the key problems are more clearly brought out (see e.g. Section 1.2, 2.1-2.3), the objectives are formulated in more concrete terms (see in particular Section 3.1 and 3.2) and the assessment and comparison of the different options was improved (see Section 5.1-5.4).
2. **ISSUES TO BE ADDRESSED**

The goal of this revision is to verify that the Commission's competition policy as regards technology transfer agreements still reflects the right balance between providing effective incentives for competitors and non-competitors to enter into innovation and welfare increasing technology transfer agreements while ensuring that such agreements do not undermine economic welfare by unnecessarily distorting competition.

While both the current TTBER and the Guidelines are perceived by stakeholders to have been working well in practice, some issues have surfaced which require minor revision of the rules. The proposed most significant changes in the draft TTBER and the Guidelines for achieving the goal of this revision (as set out above) and which are being impact assessed, are related to the following topics. First, the issue has been raised whether the treatment of exclusive grant-backs is correctly dealt with in the present TTBER. Secondly, the question has also arisen whether termination clauses in the context of challenging IPRs should continue to be covered by the safe harbour of the TTBER. Finally, there has been a discussion regarding how to foster the creation of pro-competitive patent pools through facilitating companies' assessments of competition law compliance of a potential pool.

2.1. **Treatment of exclusive grant-backs**

2.1.1. *Ex post evaluation*

The 2012 public consultation on the current technology transfer regime (see section 1.3.2 above) as well as the Study (see section 1.3.3 above), have raised the issue of how to treat exclusive grant-back obligations. A grant-back obligation (or grant-back) is a clause in a licensing agreement whereby the licensee agrees to give a licence to the licensor in respect of the licensee's future improvements to, or new applications of, the licensed technology. An exclusive grant-back means that it is only the licensor (and not (also) the licensee which in this case is the innovator) who can decide on the use and exploitation of the IPRs covered by the grant-back requirement and has thus practically the same effects as an assignment (sale) of these rights back to the licensor.

The current version of the TTBER provides for an exemption for non-exclusive grant-backs as well as exclusive grant-backs of so called non-severable improvements (on condition that the market share thresholds of 20% for competitors and 30% for non-competitors are not exceeded on any relevant market). Non-severable improvements are improvements made by the licensee that cannot be used independently, i.e. where the licensee still needs the licence to the underlying technology in order to be able to exploit its improvements. Severable improvements are those which can be used without any licence to the underlying technology. In the currently applicable TTBER, an exclusive grant-back of a severable improvement falls outside the TTBER. It needs to be assessed on a case-by-case basis whether the clause would risk infringing Article 101 or not.

The 2012 public consultation on the current TTBER regime brought out that some firms find it difficult to make a clear distinction between severable and non-severable improvements. This could risk creating uncertainty as to the coverage of grant-backs by the TTBER. More importantly, the Study contains an analysis and arguments to suggest that the difference in treatment of grant-backs of severable and non-severable improvements may not be merited and that the current treatment of exclusive grant-backs concerning non-severable improvements (coverage by safe harbour of the

---

21 These topics have been chosen together with the impact assessment steering group.
TTBER) may be too lenient in view of the capacity of such clauses to limit the incentives of licensees to innovate. In addition, an international comparison, see Annex 4 indicates that other jurisdictions do not necessarily make that distinction between different types (severable and non-severable) of exclusive grant-backs.

2.1.2. Problem definition

As indicated above, according to stakeholders in the 2012 public consultation on the current TTBER regime, one negative aspect of the current system is the difficulty in practice to separate severable from non-severable improvements. Apparently, this is not always possible to do without entering into complex and detailed technical discussions. This would indicate that the current system is not optimal from a "compliance" point of view. The difficult assessment could create extra compliance costs and uncertainty while it is not justified by sufficient reasons to differentiate the treatment of such grant-backs, as will be further explained below.

On an international level, TRIPS mentions explicitly the potential anti-competitive effects of exclusive grant-backs without differentiating between severable or non-severable.22 Also the US and Japanese guidelines do not differentiate between severable and non-severable exclusive grant-backs as the current EU TTBER regime (see Annex 4).

Moreover, according to the Study, based on a wide survey of the relevant literature and cases and on own research, grant-back clauses can be expected in general to reduce the incentive of licensees to innovate. This is particularly the case if the grant-back is not given against (sufficient) compensation. Such compensation or payment is in most cases difficult to arrange at the time of licensing as the future improvements and their possible value are not yet known.23 Exclusivity strengthens the negative effects as the licensee loses the possibility itself to use its own improvements and to license it to third parties. In addition, it is sometimes added that exclusive grant-backs may allow the licensor to artificially prolong the life of its IPR (so-called ever-greening) beyond its expiry date.

These arguments hold both for grant-backs of severable and non-severable improvements. The only difference is that non-severable improvements are normally only valuable for those companies who already have the possibility to use the original technology, i.e. the licensor, the licensee and possible other licensees of the licensor.

2.1.2.1. Conclusion

In conclusion, this review provides the opportunity to take the above arguments and concerns as regards grant-backs into account and harmonise the treatment of such clauses for severable and non-severable improvements.

2.2. Treatment of termination clauses

2.2.1. Ex post evaluation

In the current TTBER, any direct or indirect obligation on the licensee not to challenge the validity of intellectual property rights ("non-challenge clause") does not benefit from the safe harbour of the TTBER. Such an obligation is instead to be assessed individually (with the help of the guidance on

---

22 Article 40.2 TRIPS.
23 In some cases it may be possible to agree in advance on royalty payments based on the achieved cost reduction in producing the contract product or created added value for the contract product.
this issue in the Guidelines). However, termination clauses, i.e. clauses which allow the licensor to terminate the agreement in case the licensee challenges the validity of the licensed intellectual property rights are currently covered by the safe harbour of the TTBER.

In the context of recent competition cases as well as in the context of patent related litigations before courts in the Member States, the question has been raised whether termination clauses are still in line with EU competition law considering that they may have the same effect as a non-challenge clause which the European Court has considered as infringing Article 101 TFEU (see section 2.2.2 below).

In particular in cases involving standard essential patents where the licensee cannot technically produce a standard compliant product without the licensed standard essential patent, a termination clause in fact amounts to an indirect obligation not to challenge the validity of that IP right. Holders of standard essential patents are unavoidable trading partners for any manufacturer of standard-compliant products. Without a licence, the holder of the standard essential patent can often enforce its standard essential patents by means of injunctions and damage claims. The risk that the licensee faces in case the licensor enforces its IPR is in these cases often significantly higher than the the potential gains for the licensee by invalidating the IPR taking in account that invalidating an IPR usually takes a number of years.

Besides the scenario concerning standard essential patents (where the market power of the licensor is very high), there are also other scenarios possible where a termination clause can have the same effect as a non-challenge clause, in particular where the licensee has already incurred significant sunk costs for the production of the contract products (for example costs for specific machines or tools which cannot be used for producing with another technology) or where the licensor's technology is a necessary input for the licensee's production and the licensee has already started to produce with the respective technology. The termination of the licensing agreement would in these scenarios create such significant economic risks that a reasonable licensee would not challenge the validity of the patents even if he/she would assume a high likelihood that the patent would be invalid. These recent cases have to be seen in the light of contemporary studies indicating that, although the patent quality of originally granted patents by the EPO is generally regarded as high compared to other jurisdictions (as is the case for other patent offices of the Member States), the Courts, as well as the EPO opposition procedure, have in the past been able to remove a not insignificant amount of invalid IPR from the market to the ultimate benefit of the consumer.

---

24 See e.g. AT 39.985 Apple/Motorola; COMP/M.6381 Google/Motorola Mobility.
25 See OLG Karlsruhe 23. 1. 2012, docket no. 6 U 136/11 marginal no. 28 et seq. – GPRS Zwangslizenz.
27 See with particular regard to SEPs Meier-Beck, in FS for Klaus Tolkisdorf, p. 8 (not published yet); Barthelmeß/Rudolf, WuW 2013, 116, 124 f.; Körber, NZKart 2013, 87, 96.
28 Patqual, Study on the quality of the patent system in Europe, March 2011. The study also indicates that despite the increase of patent applications, there is not enough evidence to say that the patent quality decreased considerably in the last years.
This can be explained by the fact that although the patent quality of originally granted patents by the EPO is generally regarded as high, a patent right is less certain than legal rights to physical objects, such as a piece of land or a car. A patent right is only merited if an invention has been made which is new, involves a genuine inventive step and is capable of industrial application. It is often not easy to assess if the requirements are met. In addition, the patent application process is essentially an *ex parte* process, i.e. a process between the applicant and the patent office only. Although third parties – such as actual or potential competitors – have an opportunity to make written observations before the patent office makes a decision on the patent application which might be taken into consideration, if justified, by the examiners, third parties do not have the right to discuss those observations with the patent office or the applicant before a decision on the application is taken. At this stage, expert witnesses of third parties cannot be heard. After the patent has been granted any third parties can formally oppose it. The possibility for third parties to challenge the validity of the IPR at the EPO and the courts is part of a well-functioning European patent system. Besides the licensor, the licensees are normally in the best position to determine whether or not an intellectual property right is invalid and merits a challenge.

In the view of the above, it is important to ensure that only valid patents “stay in the market” and the invalid patents are being removed as unmerited barriers to innovation. The latter can only delay innovation and hinder competition. In view of the constantly increasing number of IPR, their increased economic importance as well as the phenomenon of so called patent thickets identified in important areas (see section 2.3.2), barriers to challenge the validity of economically valuable but potentially invalid patents before courts, as well as through the EPO opposition procedure, seems to be more problematic than ever for a well-functioning patent system and a competitive European market.

2.2.2.  **Problem definition**

Patent protection grants companies exclusivity to commercially exploit their invention over a certain period of time. This protection is provided to enhance the incentive to do and invest in R&D by enabling to obtain an adequate reward for successful R&D efforts.
However, invalid patents create a deadweight cost for society. The current Guidelines already point out that it is in the interest of undistorted competition and in conformity with the principles underlying the protection of intellectual property that invalid intellectual property rights should be eliminated. Invalid intellectual property stifles innovation rather than promoting it. The licensees are normally among the ones who are best placed to determine whether or not an intellectual property right is invalid.\footnote{TTBER Guidelines, paragraph 112.}

The European Courts have held in \textit{Windsurfing International v Commission}\footnote{Case 193/83 \textit{Windsurfing International Inc. v Commission}, paragraphs 89-94.} and in \textit{Bayer v Süllhöfer}\footnote{Case 65/86 \textit{Bayer AG and Maschinenfabrik Hennecke GmbH v Heinz Süllhöfer.}}\footnote{Article 40(2) TRIPS.}, that an obligation on the licensee not to challenge the validity of the patents covered by the license (i.e. a non-challenge clause) restrict competition within the meaning of Article 101(1) TFEU when the licensed technology is valuable and therefore creates a competitive disadvantage for undertakings that are prevented from using it or are only able to use it against the payment of royalties. The current TTBER and its Guidelines also express a cautious view on limitations on the licensee's right to challenge the validity of IPR as such non-challenge clauses are excluded from the safe harbour of the TTBER (i.e. seen as a so called excluded restriction which necessitates an individual assessment).

Moreover, on an international level, TRIPS recognize explicitly the potential anti-competitive effects of all practices which create "conditions preventing challenges to validity".\footnote{US Supreme Court decision, MedImmune v. Genetech, 549 U.S. 118 (2007); US Court of Appeals for the Second Circuit decision, Rates Technology Inc. v. Speakeasy, 685 F.3d at 172 (2012). See for more details on the US and Japanese law Annex 4.} While the Japanese guidelines are treating termination clauses more favourably, also recent US case law seems to advocate a stricter approach towards such barriers to challenge the validity of patents underlining the important public interest in removing potentially high numbers of invalid patents from the market.\footnote{Cf. Singleton, Peter/Alfred Server, Licensee Patent Validity Challenges Following MedImmune: Implications for Patent Licensing, Hastings Science & Technology Law Journal Vol. 3:2 [2010], 243-438; Shapiro, Carl/Farell, Joseph, How Strong Are Weak Patents, American Economic Review 2008, 98:4, 1347-1369.}

Both recent cases and the economic literature\footnote{Cf. Singleton, Peter/Alfred Server, Licensee Patent Validity Challenges Following MedImmune: Implications for Patent Licensing, Hastings Science & Technology Law Journal Vol. 3:2 [2010], 243-438; Shapiro, Carl/Farell, Joseph, How Strong Are Weak Patents, American Economic Review 2008, 98:4, 1347-1369.} indicate that restricting the licensee to challenge the licensed technology may potentially lead to a socially detrimental situation where patents which have been wrongly granted will continue to exist with the potential effect of blocking innovation and competition. A stricter approach enables and fosters challenges to patent validity both in order to eliminate a potential monopoly over a technology that should not have been patent protected in the first place and in order to avoid increasing costs of products and services which may result from undertakings having to pay royalties for invalid patents.

However, it also has to be taken into account that not all termination clauses have the same effect as a non-challenge clause. Only in specific circumstances will the risk associated with the termination of the licensed agreement be so considerable that it significantly reduces the incentive to challenge the patent in the first place. Moreover, up to now, the Guidelines gave a positive message towards termination clauses and according to the consultation on the draft proposal these clauses are widespread in current licensing agreements. The current Guidelines argue in favor of termination...
clauses that the licensor should not be forced to continue dealing with a licensee that challenges the very subject matter of the licence agreement, implying that upon termination any further use by the licensee of the challenged technology is at the challenger's own risk. The licensee should be in the same position as a third party without a licensing agreement.\textsuperscript{30} A stricter approach towards termination clauses might lead to less pro-competitive licensing or less incentive to innovate as it changes the balance of power between the licensor and the licensee.

2.2.2.1. Conclusion
The review provides the opportunity to assess and re-balance the significant public interests in removing invalid\textsuperscript{37} patents on the one hand with the potential risk that a stricter approach might lead to less pro-competitive licensing and/or less incentive to innovate.

2.3. Treatment of patent pools
2.3.1. Ex post evaluation
In the 2012 public consultation many stakeholders commented on the issue of patent pools. The majority of the respondents favour the current regime regarding technology pools. Some respondents also mentioned explicitly that patent pools could help to reduce the problem of patent thickets\textsuperscript{38} and are therefore pro-competitive.

In the context of recent discussions with stakeholders, it has been put forward that further guidance would be welcome as the creation of a patent pool is a quite difficult exercise. It was also mentioned that the Commission should foster pro-competitive patent pools.

Certain submissions suggested bringing patent pools within the scope of a safe harbour to be provided by a future revised TTBER.

As to case-experience the Commission has not taken any decisions concerning the set up or licensing out from patent pools since the currently applicable rules were adopted in 2004. The NCAs’ experience of cases concerning patent pools has also been reported to be limited.

2.3.2. Problem definition
In certain markets, usually with a high number of IPR and dispersed ownership as well as with (de facto) standards, companies come together to pool their patents/technologies, i.e. to create patent/technology pools. The technology pool would license all the pooled technology to the participants but also to third parties. A patent pool may create a one-stop-shop for the licensee (or will at least reduce the number of licensing agreements to be concluded) in order for the licensee to be able to produce a particular product and/or to comply with a (de facto) standard. It can therefore reduce

\textsuperscript{36} TTBER Guidelines, paragraph 113.
\textsuperscript{37} The term “invalid” also include partly invalid where e.g. the legal criteria are fulfilled but the original granted scope is too broad.
\textsuperscript{38} "Patent thickets" occur where a significant number of patents bear on a particular product and are held by different patent owners. Or in the words of Carl Shapiro, a patent thicket is "a dense web of overlapping intellectual property rights that a company must hack its way through in order to actually commercialize new technology". "Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting", Innovation Policy and the Economy, Volume 1, edited by Adam B. Jaffe, Josh Lerner and Scott Stern, chapter author Carl Shapiro, p. 120.
transaction costs and also lead to overall lower royalties (avoiding double marginalisation).\textsuperscript{39} Most patent pools, today, offer licenses for patents for a specific technology standard.\textsuperscript{40} However, it would seem that there are only "a few dozen patent pools in existence while there are many thousands of standards in use".\textsuperscript{41} According to a recent survey, only 3% of the responding firms used patent pools by a 'large degree' and another 10% to a 'minor degree'.\textsuperscript{42}

In most cases the creation of patent pools will have beneficial effects on consumer welfare. However, this is only true if certain conditions are fulfilled. The creation of a patent pool necessarily implies joint selling of the pooled technologies, which in the case of pools composed (partly or fully) of competing technologies is more likely to be anti-competitive. Moreover, not only is there a danger that competition is lessened between the parties. There is also a risk of reduction in innovation by foreclosing alternative technologies from the market (in particular when there is an underlying industry standard, the existence of the standard in combination with the pool may make it more difficult for new and improved technologies to enter the market). The current Guidelines contain a chapter on patent pools which gives guidance on how the Commission would assess patent pools under competition law. According to the current Guidelines there is a presumption that the patent pool is pro-competitive (in legal terms, falls outside Article 101(1) TFEU) irrespective of the market position of the parties when the pool is composed "only of technologies that are essential and therefore by necessity also complements".\textsuperscript{43} However, "the conditions on which licences are granted" may be in themselves anticompetitive.

As set out in the Commission's 2012 Industrial Policy Communication\textsuperscript{44} (see section 1.1) studies have detected patent thickets\textsuperscript{45} in not less than 9 out of 30 technology areas.\textsuperscript{46} In today's IPR landscape with


\textsuperscript{41} See Bekkers, Iversen and Blind quoted above, p. 21.

\textsuperscript{42} "PATLICE Survey – Survey on patent licensing activities by patenting firms” by Alfred Radauer and Tobias Dudenbostel, Draft Version July 2013, p. 48.

\textsuperscript{43} See for a similar approach also "The Essentiality Test for Patent Pools” by Richard Gilbert, Competition Policy Center, UC Berkeley, September 2009.

\textsuperscript{44} Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A Stronger European Industry for Growth and Economic Recovery, COM(2012)582 final p. 19-20.

\textsuperscript{45} Several authors demonstrate that patent pools may reduce patent thickets. See for example, R. P. Merges, "Institutions for Intellectual Property Transactions: The Case of Patent Pools", in R. Dreyfuss, D.L. Zimmerman and H. First (eds), "Expanding the Boundaries of Intellectual Property", p. 123-166, 2001 and "Optimal formation rules for patent pools", Economic Theory 40, 373-388, S. Brenner 2009. It should be noted that certain research also indicates that patent pools could contribute to patent inflation by leading to companies filing for more patents (this effect would be due to the fact that many patent pools distribute royalties between the members relating to the number of essential patents held by each company), see in particular Justus Baron and Tim Pohlmann, "Patent Pools and Patent Inflation, An empirical analysis of contemporary patent pools, paper at the 7th Annual Conference of the EPIP Association, September 27-28 2012, Leuven, Belgium. However, even if this research indicates that patent pools could lead to an increase in patents, it is submitted that patent pools could still help to solve the patent thickets for companies wishing to enter the market. The licensee would still enjoy the
an increasing number of patent thickets, patent pools could be an important piece of the puzzle to solve the problem created by patent thickets, thereby, at least partly, remove the barriers to entry for potential entrants (in particular potential entrants without any or a large relevant patent portfolio to be used as a bargaining chip). There are multiple benefits of pools  

1. Reduce transaction costs for both licensees and licensors (for the latter once set-up costs are recovered).
2. Introduce a coordination mechanism that helps to prevent royalty stacking. It may reduce the total royalty fee for licensees compared to the aggregate fee of the same patents when licensed in via bilateral negotiations.
3. Reduce search costs at the side of licensees.
4. Reduce uncertainty in total patent landscape, patent availability and pricing, thus reducing barriers to new entrants to implement standards.
5. Reduce or moderate the phenomenon of over claiming essential patents (by virtue of good essentiality testing mechanisms in pools).
6. Offer a mechanism of coordination through which patent owners can collectively decide on how to change (lower) their fees in response to changing market circumstances.
7. May increase the total royalty fee for licensors compared to the aggregate fee of the same patents when licensed out via bilateral negotiations.
8. More level playing field across implementers (more of them paying for the implemented patents, and paying the same level).

May allow relatively small SEP owners to effectively generate revenues from its patents. In the last few decades, over forty patent pools have been created, which have granted more than 8,000 licensing contracts. Nevertheless, patent pooling is still not widely practiced in most areas where standard-essential patents play an important role. Furthermore, while some well-known patent pools have gathered a large number of members and patents, not all pools are successful in quickly attracting a large share of the relevant patent holders. Several attempts at pooling patents have not even resulted in a pool being created. This is likely to be partly related to the fact that pools have substantial set-up costs (usually worn by the technology owners that consider to join the pool, the pool initiator and/or the pool administrator).

Pools are launched and administered by a licensing administrator. In some of the oldest pools (DVD6C, DAB, mp3), this administrator is a patent holding company picked from the pool members. However, more recent pools are usually administered by independent third parties. Currently, five companies specializing in the administration of patent pools indeed account for the large majority of pools and attempted pool launches: MPEGLA, ViaLicensing, Sisvel, SiproLab, and VoiceAge. In

benefits of a patent pool (one stop shop, no double marginalisation etc) even if the number of patents in the pool would increase.

For example in communication technology, semiconductors, optics, electrical machinery and medical technology.

This list of benefits is taken from the ECSIP study "Patents and Standards - A modern framework for IPR-based standardization commissioned by DG ENTR, p. 54, which gives an overview of potential pro- and anticompetitive effects of patent pools.

The lowering of fees can be repeatedly observed in many pools.
other cases (e.g. One-Blue, One-Red), the pool members have created an ad hoc entity to administer a particular pool.

**Number of pools by licensing administrator**

At this moment in time it may be observed that the number of pools differ widely between sectors. Quite naturally there are more patent pools in industries where standards exist. However, patent pools are neither evenly distributed across technological fields in which standard-essential patents are relevant. They are more frequently found in coding and compression, broadcasting and Audio/Video home systems – all of which are related to consumer electronics. The remaining pools are associated with short-range communication standards and the telecommunication sector. However, the need for patent pools is likely to expand across industries because, first, patenting and patent assertion are on the rise in many more industries than those where patent pools are currently concentrated and, second, the subset of standard-related patent pools is likely to become more important as an increasing number of companies need to integrate IP-based standardised technologies in their products and thus rely on smooth access to these licenses.

The size of existing patent pools, in terms of licensors and licensees, varies considerably (see the table below). The various technological fields are characterized by significant differences in the average number of licensees (varying between 250 and almost 700), but the number of licensees varies even more strongly between individual pools, with only seven pools licensing to more than 500 licensees, and several pools having a very limited number of licensees. As regards number of licensors three pools have more than 20 pool members, but most pools have only between four to ten members at the time of their greatest expansion.

Size features of pools differ considerable across technology areas. Standards such as codecs or compression technologies are typically used in many different applications, and pools on such standards often achieve high coverage and a very large number of licensees, especially in consumer electronics. In contrast, standards such as telecommunication standards (e.g. LTE), broadcasting technologies (DVB-T, ATSC) or home systems (Blu-Ray), incorporate and combine a large number of disaggregated technology standards for a particular technological purpose. Pools on these standards often achieve lower coverage of essential patent owners and have a limited number of licensees.

---

49 Since several pools are already in a phase of substantial decline, all figures provided refer to the highest value observed.
The main topic in the public discussion on patent pools concerns a small number of clearly successful pools. However, over the past 15 years, there have also been several unsuccessful attempts to launch pools. Failed attempts at pool launches can be due to various factors. In many cases, the underlying standard or technology fails in the market. The pool project is abandoned as a reaction to insufficient potential demand. In other cases, the failure of the pool launch is attributable to a failure in the coalition building for the pool itself. The two scenarios are not always clearly distinguishable, and can be interrelated. The failure of a pool launch can undermine the chances of a standard in the market, or the coalition building for a pool can fail for the same reasons, thus weakening the support for the standard (such as strong rivalry between significant players). Recent research indicates the effect of the change to a more positive stance in the application of competition law to patent pools, which occurred from 1997 to 1999. While only a limited amount of standard-related patent pools was launched before 1997, several very significant and successful patent pools were launched in the following five years. The regulatory framework regarding patent pooling was progressively clarified in this period. Furthermore, a number of specialized pool licensing administrators were established, acquiring increasing experience in the creation and administration of pools. These factors should have made it easier to create pools. However we can see that the intermediary phase from 2003 to 2006 typically had a high number of launches, but also a relatively high rate of failure and relative failure. New waves of relatively successful pools have subsequently occurred from 2008-2009 and 2011-2012.

The TRIPS agreement does not cover the issue of patent pools. The US and Japanese competition policy on patent pools seem not to deviate substantially from the EU competition policy (see for more details Annex 4).

2.3.2.1. Conclusion

This review gives an opportunity, in line with the Commission's 2012 Industrial Policy Communication, to scrutinize to what extent competition policy could contribute to giving an incentive to the creation of pro-competitive patent pools by facilitating companies' self-assessment of

---

50 See in particular the Quantitative Annex of the Second Interim Ecips study.
competition law compliance of pools.\textsuperscript{51} It is, in this context, important to understand that competition law and the attitude of antitrust regulators towards the creation of pools have been a decisive factor for companies when setting up pools. If competition law guidance on when patent pools risk infringing EU competition law is not clear enough, this may be lead to a dis-incentive for creation of welfare enhancing pools. The concept of a soft law safe harbour, as set out below, could decrease set up costs for pools by giving a clear signal to industry of how to set up a competition law safe pool. Set up costs for a patent pool could thereby be lowered.

It should be underlined that this project is limited to defining the Commission’s policy on patent pools in relation to EU competition law and that any policy change is limited by the boundaries of competition law.\textsuperscript{52}

3. \textbf{OBJECTIVES}

3.1. \textbf{General objectives of the review}

One of the overarching goals of the revision is to contribute to the Commission’s Europe 2020 strategy. Technology licensing agreements play a significant role in fostering further innovation and competitiveness. The Commission’s policy towards technology transfer agreements aims to leave companies maximum flexibility when entering into technology licensing agreements in order to increase the competitiveness of the European economy while at the same time ensuring effective competition for the benefit of European businesses and consumers. The Technology Transfer Regime aims at providing guidance to companies as to what business actions they can undertake without a risk of infringing competition law and therefore tries to minimise the compliance costs for the affected businesses, especially for SMEs. Finally, the TTBER and the Guidelines also aim to even further simplify administrative supervision by providing a technology transfer agreements’ assessment framework for the Commission, NCAs of the Member States and national courts.

3.2. \textbf{Specific objectives of the review}

The specific objective of the review of the treatment of exclusive grant-backs is to ensure that the Commission’s competition policy as regards exclusive grant-back clauses reflects the right balance between providing effective incentives for companies to enter into technology transfer agreements while ensuring that such clauses do not undermine economic welfare by giving disincentives for follow-on innovation. The ex-post evaluation of the current framework for exclusive grant-backs has specifically indicated that a differentiation between severable and non-severable improvements might not be economically justified and this distinction sometimes even might create extra compliance costs. The revision has therefore provided the opportunity to look into this issue and -- if appropriate --

\textsuperscript{51} The Commission’s 2012 Industrial Policy Communication states that "an efficient and proportionate regulatory system could foster forms of pro-competitive cross-licensing or patent pool arrangements as effective market-driven instruments to mitigate those risks." It is also announced that "as part of that regulatory system, the Commission will update its rules on agreements on technology transfer".

\textsuperscript{52} As set out in the Ecsip study p. 157 there could be other interesting ways of promoting patent pools for example through standard setting organisations: "While pools are a voluntary mechanism, there is still a lot to win, from a public perspective, if pool creation and pool participation could be further promoted. One of the ways in which this might be done is collaboration between pools and SSOs."
harmonise the treatment of such clauses for severable and non-severable improvements. The specific and concrete objective is to preserve incentives for innovation (both for original and follow-on innovation) with a system not imposing any unnecessary costs on companies.

The specific objective of the review of the treatment of termination clauses is to ensure that invalid IPR is not unduly protected by contractual arrangements and does not remain a barrier to innovation. This topic seems to be all the more relevant under the current circumstances where the number of patents is constantly increasing. The ex-post evaluation has indicated that termination clauses can under specific circumstances have the same effect as a non-challenge clause which is already under the current framework excluded from the safe harbour of the TTBER. The review will focus to assess and re-balance the significant public interests in removing invalid patents on the one hand with the potential risk that a stricter approach might lead to less pro-competitive licensing and/or less incentive to innovate. The specific and concrete objective is to ensure that companies are not either forced to pay for, or even foreclosed from markets by, invalid patents while still keeping incentives for licensors to license out.

The specific objective as regards patent pools is to foster the establishment of pro-competitive patent pools (by simplifying the companies' self-assessment when setting up pools) as an effective market-driven instrument to mitigate the risks of lessened competition due to the increasing number of patent thickets. The ex-post evaluation has indicated that competition law and the attitude of antitrust regulators towards the creation of pools have been a decisive factor for companies when setting up pools. If competition law guidance on when patent pools risk infringing EU competition law is not clear enough, this may be lead to a disincentive for creation of welfare enhancing pools. This review has the specific objective, in line with the Commission's 2012 Industrial Policy Communication, to scrutinize to what extent competition policy could contribute to giving an incentive to the creation of pro-competitive patent pools by facilitating companies' self-assessment of competition law compliance of pools.

4. **POLICY OPTIONS**

4.1. **Keeping the structure of the present system**

At the outset of this revision, the possibility of not renewing the TTBER but only keeping the Guidelines as the tool to give guidance on the application of Article 101 TFEU to licensing agreements was considered. This would have brought the EU system in this area close to the US approach.

However, as described above, stakeholders and NCA’s of the Member States are content with the structure of the present regime – both the TTBER and the Guidelines are considered to be working well and to be useful in practice. Stakeholders do not seem to want to abolish the TTBER and to keep only the Guidelines. A majority of the stakeholders appreciate the legal certainty given for those agreements that benefit from the safe harbour in the TTBER.

Although the main historical reason for introducing a block exemption regulation (i.e. to avoid a large number of repetitive notifications) is no longer valid, it is still agreed that: (i) a block exemption regulation provides legal certainty for companies entering into technology transfer agreements and is justified where the risk of harm to consumers is low; (ii) a block exemption regulation frees the resources of the Commission and the NCAs and allows them to deal only with the most harmful
agreements, i.e. those concluded by companies that have significant market power; (iii) a block exemption regulation together with the accompanying guidelines provide guidance to businesses that need to self-assess the compatibility of their agreements with the EU competition rules; (iv) finally, a block exemption regulation combined with guidelines provide a common framework for the Commission, the NCAs and for the courts, which contributes to a European-wide level playing field. In a nutshell, abolishing the TTBER could have negative impacts on the volume and importance of technology transfer agreements in Europe, since this would risk leading to a lack of coherence at national level and less legal certainty for companies.

Based on the outcome of the public consultation on the current TTBER regime (i.e. the 2012 public consultation) it was therefore decided at an early stage of the revision to keep the system of a Block Exemption Regulation accompanied by Guidelines. The 2013 public consultation on the proposal has confirmed this decision. Basically all of the submissions on the proposal have welcomed that the current system of TTBER and Guidelines was kept. Keeping a system of a block exemption regulation combined with guidelines is in line with the policy decisions taken by the Commission in recent revisions as regards both vertical (distribution) agreements and horizontal agreements (different type of agreements between competitors such as R&D and specialisation agreements).

Therefore, this revision has focused on adopting revised versions of the TTBER and the Guidelines before end of April 2014 taking in account the comments of the stakeholders as well as case experience gained in the last years.

4.2. Identification of the Policy Options to be assessed

This Report will focus on three main changes in the draft TTBER and the Guidelines. The baseline scenario is the continuation of the current policy without any change, i.e. without any new or additional EU intervention. The identification of the most suitable topics for the impact assessment report has been made in agreement with the Impact Assessment Steering Group.

The options, as identified below, will be measured as regards their impact on:

1. Economic impact (effect on competition and consumers, compliance cost for companies – in particular SMEs)

2. Innovation and research (Does the option stimulate or hinder research and development? Does it further dissemination of technologies and access to technologies? How does it affect intellectual property rights?)

3. Legal certainty/flexibility (is the right balance between legal certainty and flexibility struck?) Companies find it important to have legal certainty as to whether their agreement would risk infringing competition law. The highest degree of legal certainty is given when an agreement can benefit from the safe harbour of the TTBER (binding on national courts). However, there is also a demand for sufficient

---

53 A block exemption regulation binds the Commission, the NCAs and the national and EU courts; the guidelines only bind the Commission, however, in practice other authorities also generally rely on them. Both instruments are used to give guidance on the application of Article 101 TFEU to technology transfer agreements. Also, under Regulation 1/2003 the Commission is responsible for ensuring consistent application of EU competition rules throughout the whole EU.
flexibility in order to cater for agreements/scenarios which could, under an individual assessment be justified.

The options discussed below do not have any direct impact on public administration and the Union budget. They do not lead to any increased or decreased administrative burden for the European Commission or for the national authorities.

Environmental impacts would seem to be either non-existing or minimal. The marginal changes as to how certain clauses are assessed from a competition law perspective do not seem to have any direct correlation with the environment. To the extent that the options have a positive impact on research and innovation they could however also have a positive impact on innovation regarding environmentally friendly products. However, any such indirect impact is not measurable.

Direct impacts on the competitiveness of EU firms seem to be either non-existing or minimal. It has to be kept in mind that the TTBER regime applies to EU firms as well as to Non-EU firms as EU competition law is applicable on agreements which have a significant effect on EU consumers irrelevant of the nationality of the firms involved. The TTBER and its Guidelines apply equally to technology transfer agreements between EU companies as well as technology transfer between EU companies and third-country firms. The TTBER rules would equally apply to a technology transfer agreement between two third country firms provided that the agreement has significant effects on EU consumers (see more in Section 1.2.5 on the TTBER regime and international trade). However, generally, it is recognized that robust competition in the home market contributes positively to the international competitiveness of firms.

Social impacts would also seem to be either non-existing or minimal. To the extent that the changes improve the balance between giving incentives for innovation and research while preserving competition in order to increase consumer welfare, there could potentially be an indirect link with an increase in employment. Any such impact is however not measureable.

These three latter types of impacts will therefore not be further assessed.

4.2.1. **Exclusive grant-backs**

Options

a) **Option 1: Status quo i.e. to keep exclusive grant-backs of non-severable improvements in the safe harbour (the baseline scenario)**

Option 1 would be to keep the status quo (the baseline scenario) and not to change the treatment of exclusive grant-back clauses for non-severable improvements in the TTBER. As explained above, currently such clauses are included in the safe harbour of the TTBER. In practice this means that national courts cannot address such clauses when found in an agreement which otherwise fulfils the conditions of coverage by the TTBER (respect of the relevant market share threshold etc.) even if they are, in a particular case, considered to produce negative effects. In case of competition concerns, the Commission and NCAs can only address such clauses for the future after withdrawal of the TTBER for that particular agreement.

b) **Option 2: All exclusive grant-backs to be treated as excluded restrictions**
Option 2 would be to simplify Article 5 of the TTBER by taking away the distinction between, and difference in treatment of, exclusive grant-back clauses for severable and non-severable improvements. As a result all exclusive grant-back clauses would be excluded from coverage by the TTBER. They would need to be individually assessed. However, there would be no negative presumption against exclusive grant-back clauses and only the clause in question would be excluded from coverage by the TTBER. The remainder of the licence agreement could still benefit from the safe harbour of the TTBER. In case of competition concerns, the Commission, the NCAs and the national courts could address such clauses directly under Article 101.

c) Option 3: Consider exclusive grant-backs as hardcore restrictions

Option 3 would be to classify all exclusive grant-back clauses as hardcore restrictions by listing them in Article 4 of the TTBER. This would mean that they are treated as prima facie anticompetitive. An agreement containing such a clause would be automatically excluded from the safe harbour of the TTBER, the agreement would be presumed to have negative effects and it would be presumed unlikely that the agreement will fulfil the conditions of Article 101(3) for an individual exemption.

4.2.2. Termination clauses

Options

a) Status quo, i.e. termination clauses benefit from the safe harbour of the TTBER (the baseline scenario)

Option 1 would be to keep the status quo i.e. not to change the current TTBER and Guidelines in respect of termination clauses (the baseline scenario). As explained above, termination clauses are, in the currently applicable rules, included in the safe harbour of the TTBER. In practice this means that national courts cannot address such clauses when found in an agreement which otherwise fulfils the conditions of coverage by the TTBER (respect of the relevant market share threshold etc.) even if they are, in a particular case, considered to produce negative effects. In case of competition concerns, the Commission and the NCAs can only address such clauses under Article 101 TFEU after withdrawal of the TTBER for that particular agreement.

b) Termination clauses will be considered as an excluded restriction

Option 2 would be to treat all termination clauses similar to non-challenge clauses. Termination clauses would be considered as an excluded restriction and not benefit from the safe harbour of the TTBER. The effects of the termination clause would have to be assessed on a case by case basis, in line with the principles set out in the Guidelines, taking into account in particular whether the termination clause has the same effect as a non-challenge clause. However, the remaining part of the agreement could still benefit from the safe harbour of the TTBER.

---

54 In case the agreements in which they are contained would not be able to benefit from the De Minimis Notice (in general where the market share threshold of 10% respectively 15% for agreements between competitors respectively non-competitors as contained in the De Minimis Notice is exceeded), see Commission Notice on agreements of minor importance which do not appreciably restrict competition under Article 81(1) of the Treaty establishing the European Community (de minimis), OJ C 368, 22.12.2001, p. 13-15.

55 In case the agreements in which they are contained would not be able to benefit from the De Minimis Notice (in general where the market share threshold of 10% respectively 15% for agreements between
c) Only termination clauses in non-exclusive agreements to be considered as an excluded restriction

Option 3 would be to treat termination clauses in non-exclusive licence agreements as excluded restrictions (i.e. requiring self-assessment in line with principles set out in the Guidelines) while termination clauses in exclusive licence agreement would continue to profit from the safe harbour of the TTBER (like in option 1).

d) Consider termination clauses (and non-challenge clauses) as hardcore restrictions

Option 4 would be to consider termination and non-challenge clauses as hardcore restrictions. This would have the effect that the whole agreement would be excluded from the safe harbour if a termination clause was to be included and that termination clauses would be seen as prima facie anticompetitive. It would be presumed to have negative effects and would be unlikely to fulfil the conditions of Article 101(3) for an individual exemption.

4.2.3. Patent pools

a) Option 1: Keeping the current text of the Guidelines (the baseline scenario)

Option 1 would be to keep the current treatment of patent pools in the technology transfer rules (the baseline scenario). In the present rules the set-up of patent pools is covered by the Guidelines while an individual licence granted by the pool to third parties (i.e. the licensing out from the pool) is treated like any other licence agreement and is therefore block exempted only if the conditions of the TTBER are fulfilled. The Guidelines give guidance as to when the set-up of a pool would risk infringing competition law by setting out different factors that would be relevant for this assessment.

b) Option 2: Bringing patent pools under the safe harbour of the TTBER

Option 2 would be to enlarge the scope of the TTBER to cover also the set-up of patent pools. Today multiparty agreements such as patent pool arrangements are not covered by the TTBER (nor by the enabling regulation delegating the power to the Commission to adopt the block exemption regulation).

c) Option 3: Introducing soft law safe harbour in Guidelines

Option 3 would be to create a soft law safe harbour in the Guidelines which would set out the conditions under which the Commission would consider both the set-up of the pool and the licensing out from the pool to be pro-competitive. It would provide an easy check-list approach for compliance with competition law to the companies wishing to set up a pool.

5. Impact Assessment of Policy Options

This section sets out the Commission’s assessment of the positive and negative impacts that the identified policy options would be likely to have if implemented. The impact is assessed against the

competitors respectively non-competitors as contained in the De Minimis Notice is exceeded), see Commission Notice on agreements of minor importance which do not appreciably restrict competition under Article 81(1) of the Treaty establishing the European Community (de minimis), OJ C 368, 22.12.2001, p. 13-15.
baseline scenario (Option 1) of a continuation of the current policy (i.e. rolling over the currently applicable technology transfer regime).  

5.1. **Exclusive grant-backs**

5.1.1. **Economic impact (effect on competition and consumers, compliance cost for companies – particular SMEs)**

As described above, the safe harbour of the TTBER covers exclusive grant-backs of non-severable improvements but does not cover exclusive grant-backs of severable improvements (Option 1). **Option 2**, which is the preferred option, would be, as explained above, to treat all exclusive grant-backs as excluded restrictions (i.e. requiring self-assessment) and **Option 3** to treat them as hardcore restrictions.

According to stakeholders in the 2012 public consultation on the current TTBER regime, one negative aspect of the current system is the difficulty in practice to separate severable from non-severable improvements. Apparently, this is not always possible to do without entering into complex and detailed technical discussions. This would indicate that **Option 1** is not optimal from a compliance cost point of view but instead leads to higher costs for companies as compared to the other options. The assessment of whether a certain improvement is severable or non-severable creates extra compliance costs and uncertainty while this would not seem to be justified by sufficient reasons to differentiate the treatment of such grant-backs, as will be further explained below.

**Option 2** and **Option 3** score better on compliance costs as they take away the direct need to make the distinction between severable and non-severable improvements. **Option 3**, at the face of it, by treating all exclusive grant-backs as hardcore restrictions, gives the clearest message as to their future treatment and thus in that sense may further reduce compliance costs (in other words, it will be clear and easy for companies, in particular SMEs to see that all exclusive hardcores should be avoided). However, in view of the serious consequences of including a hardcore restriction in an agreement (i.e. including a hardcore restriction leads to the whole agreement falling outside the TTBER), it will also force more firms to scrutinise their current agreements for the absence of such clauses and increase temporarily again the compliance costs.

According to the Study, based on a wide survey of the relevant literature and cases and on own research, grant-back clauses can be expected, in general, to reduce the incentive of licensees to innovate. Exclusivity strengthens the negative effects as the licensee loses the possibility itself to use its own improvements and to license it to third parties. This holds both for grant-backs of severable and non-severable improvements. A reduction in the incentives to innovate will also lead to a negative effect on competition and, in the long run, to a reduction in consumer choice and therefore also to a direct negative impact on consumers.

However, on the positive side it could also be argued that, in certain scenarios the licensor would not be willing to license in the first place or only against higher royalties if an (exclusive) grant-back was not granted. This is referred to as the "but for" argument, and is one of the arguments put forward by the stakeholders in the 2013 public consultation. Another efficiency could be that grant-backs allow

---

56. See Impact Assessment Guidelines of 15 January 2009, p. 24 “…where there is already an EU policy the baseline is the continuation of the current policy without any change, i.e. without any new or additional EU intervention”.

57. See pages 38 to 68 of the Study.

38
the licensor to ensure that there is a one stop shop for all its licensees also for all future improvements by centralising improvements from all licensees and ensuring pass-on to all to provide a level playing field. The first efficiency is only credible, though, if it can be shown that without the (exclusive) grant-back the licensing will be less profitable or even unprofitable for the licensor. Only in these cases would the grant-back ensure that the licensing takes place or takes place against lower royalties. These effects on the profitability of the licensing may in particular take place if the improvement is severable and creates a substitute technology which can be used as alternative for the licensed technology. The second efficiency is only relevant in situations where the licensor has a network of licensees. It is therefore only in limited circumstances that it will be necessary to require (exclusive) grant-backs to obtain this efficiency. In addition, it would seem that this positive effect can also be achieved usually through non-exclusive grant-backs (which are not considered in general to pose a competition law problem).

As regards in particular SMEs the fact of not having to distinguish between severable and non-severable improvements could be an advantage in itself.

In view of the above, Option 2, by allowing an individual assessment of the possible negative and positive effects, is most likely to have the best impact on competition and consumers. Option 1 provides a safe harbour for certain exclusive grant-back clauses while these clauses can be expected in general to lower the incentive of the licensee(s) to innovate and will have countervailing efficiency benefits only in certain circumstances. Therefore this option is not likely to lead to the best outcome for consumer welfare by reducing consumer choice in the long run. Option 3 will deal with exclusive grant-back clauses with a strong negative presumption which does not seem justified given the potential for efficiencies (i.e. in certain scenarios it can indeed be justified for the licensor to introduce an exclusive grant-back in the licensing agreement). It could lead to companies not including exclusive grant-backs even in scenarios where this would be beneficial for the European consumer.

<table>
<thead>
<tr>
<th>Economic impact (--- to +++)</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>++</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

5.1.2. **Innovation and research**

As stated above, grant-back clauses can be expected in general to reduce the incentive of licensees to research and innovate. Exclusivity strengthens the negative effects as the licensee loses the possibility itself to use its own improvements and to license it to third parties. This holds both for grant-backs of severable and non-severable improvements. A reduction in the incentives to innovate will also lead to a negative effect on competition and, in the long run, to a reduction in competitiveness of firms and consumer choice. At the same time, (exclusive) grant-back clauses may also provide additional incentives to provide the original licence in the first place and the licensing by multiple licensees, thus improving the conditions for the original innovation and for follow-on innovation. In particular, grant-

---

58 The tables in Sections 5.1 to 5.4 (the assessments with "+" and "+") do not intend to give a scientific estimate of the likely impacts but is rather an attempt to make the report more reader-friendly through a graphic overview of the qualitative assessment of the likely impacts.
backs may allow the licensor to ensure that there is a one stop shop for all its licensees also for all future improvements by centralising improvements from all licensees and ensuring pass-on to all to provide a level playing field. However, it would seem that this positive effect can be achieved usually through non-exclusive grant-backs (which are not considered in general to pose a competition law problem) (see sections 5.1.1/2. of the Report).

Option 2, by allowing an individual assessment of the possible negative and positive effects, is most likely to have the better impact on innovation as compared to Option 1, while allowing for taking into account both the incentives for the original innovation and for follow-on innovation. Option 1 provides a safe harbour for certain exclusive grant-back clauses while these clauses can be expected in general to lower the incentive of the licensee(s) to innovate and will have countervailing efficiency benefits only in certain circumstances. This option therefore risks having a negative effect on innovation and research. Option 2, however, would ensure that follow-on innovation is not unduly disincentivised.

Option 3 would mean dealing with exclusive grant-back clauses with a negative presumption which does not seem justified given the potential for positive and negative effects on the incentives to innovate. It might therefore only have a limited positive effect on innovation because of its negative effect on the incentives to license (in those cases where the licensor would not have licensed out absent an exclusive grant-back) and therewith both on the incentives for the original innovation and follow-on innovation. In particular where the licensee is appropriately remunerated for the exclusive grant-back the disincentive for follow-on innovation might be slight or even non-existent.

| Impact on innovation and research (--- to +++)|
|---|---|---|
| Option 1 | Option 2 | Option 3 |
| 0 | ++ | + |

5.1.3. Legal certainty / Flexibility

With Option 1 there would still be a need to distinguish between severable and non-severable improvements, a distinction which seems to be difficult to apply in practice according to some stakeholders. The option therefore scores negatively on legal certainty. By block exempting non-severable exclusive grant-backs it also reduces the flexibility for authorities and courts to apply Article 101 in case such exclusive grant-backs would prove to have negative effects.

Option 3 creates more legal certainty for firms, but does so at the cost of reducing their commercial freedom beyond what seems justified by the possible negative and positive effects of such grant-backs. In addition, treatment of such clauses as hardcore restrictions will also reduce the flexibility of competition authorities and courts to take proper account of possible negative and positive effects of exclusive grant-backs.
Option 2 combines a reasonable measure of legal certainty, by treating all exclusive clauses in the same way under the TTBER, with a high degree of flexibility to take account of both negative and positive effects depending on the circumstances of the case.

<table>
<thead>
<tr>
<th>Balance between legal certainty/flexibility (--- to ++++)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

5.2. Termination clauses

5.2.1. Economic impact (effect on competition and consumers, compliance cost for companies – particular SMEs)

The majority of stakeholders in the 2013 public consultation have argued that a more restrictive view on termination clauses would act as a disincentive to license out, that the change would give too much leverage to the licensees and that the licensor should not be forced to stay in a contractual relationship with a licensee challenging the essence of the relationship. Stakeholders have also indicated that termination clauses are widely used in the industry and that therefore any change would create compliance cost since it would lead to a necessity of revising already existing agreements.

However, in Option 2 and 3 the parties’ incentive to revisit past agreements (thus creating compliance costs) would be limited compared to the baseline scenario in Option 1 since the rest of the agreement would still benefit from the safe harbour of the TTBER, i.e. even if the termination clause would have the same effect as a non-challenge clause and risk being void, the rest of the agreement would still be enforceable so that the temporary increase in compliance costs for past licence agreements would be limited. In addition, in Option 3 (the preferred option) only termination clauses in non-exclusive licence agreements would have to be revised. The compliance costs for future agreements would be limited as termination clauses would have to be assessed on a case by case basis. It could be further reduced by providing more guidance in the new Guidelines on scenarios where termination clauses have the same effect as non-challenge clauses.

Compared to the baseline scenario, the temporary increase in compliance cost would be significant in Option 4 where the effect of including a termination clause would lead to the removal of the whole technology transfer agreement from the safe harbour of the TTBER (in other words many existing agreements would in this option be presumably anticompetitive and void). For future licence agreements Option 4 would, however, not lead to an increase in compliance costs, rather on the opposite, as qualifying non-challenge clauses and termination clauses as hardcore restrictions would send a clear signal not to integrate these clauses in the licence agreements.

Stakeholders in the 2013 public consultation have pointed out that the termination clause might be necessary to protect the interests of the licensor. It could be argued that, in line with general equity and contract law practices, the fact that one party challenges key elements of an agreement (e.g. whether the quality of the goods delivered are in accordance with what is stipulated in the agreement), does not lead to an automatic right for the other party to terminate the agreement. However, a termination clause may indeed be necessary to protect the interest of the licensor in the limited case where a small
innovator is exclusively licensing its innovation to a large licensee. Absent a termination possibility for the licensor, in this scenario, the licensee may, after obtaining the licence threaten to challenge the IPR with the intention to renegotiate the royalties or otherwise undermine the position of the innovator. Such an innovator firm may be particularly vulnerable in an exclusive licence relationship as it cannot switch to another licensee or produce itself without a prior termination of the agreement. Another example might be in a genuine settlement where a termination clause or even a non-challenge clause might be necessary to come to a final settlement. Not allowing for termination clauses in these scenarios could risk giving a disincentive for innovation which in the long run could lead to less competition and a decrease in consumer welfare through a decrease in consumer choice.

Option 4 would give a strong disincentive for companies to put termination clauses in their agreements (since the hardcore restrictions are presumed to be anticompetitive), but would do so also in cases where a termination clause would be justified, and might thus lead to less pro-competitive licensing or settlement than the baseline scenario.

Option 2 allows for a case by case assessment. However, it will not always be easy to assess if such a clause is necessary to protect the licensor’s interests of receiving a fair value for its (valid) IPR. It cannot be excluded that a case by case assessment (for all types of licensing) creates a limited uncertainty that in very specific situations leads to a disincentive to licence.

Option 3 allows keeping the safe harbour for termination clauses in an exclusive licence agreement scenario. It is thus more targeted and gives a positive message to the use of termination clauses in the scenario where the licensor is more vulnerable. This could help to ensure that start-ups in innovative sectors are not negatively affected by this revision.

Faced with the risk of having their licences terminated, licensees that have made substantial investments in a licensed technology may hesitate to challenge the validity of the licensed IPRs. Therefore, a termination clause can have, in some cases, the same effect as a non-challenge clause. Implementing Option 2 and Option 3 would, in most relevant cases, remove this chilling effect on the incentives to challenge IPR. It would enable licensees to challenge the validity of IPRs and thereby removing invalid IPRs as an unmerited barrier to innovation and economic activity. Stakeholders in the public consultation on the proposal have recognised the aim of identifying and removing invalid IPRs and pointed out that termination clauses often have the same effects as non-challenge clauses, e.g. high sunk costs can significantly deter the licensees from challenging the validity of the licensed IPR or in the case of SEPs. Moreover, these stakeholders found that the change would ensure that cross-license agreements do not shield invalid patents from challenge, further strengthening the pro-competitive effects of broad cross-licenses that parties enter into to achieve patent peace, and encourage the thinning of the patent thicket.

That Option 3 would not remove the chilling effect for exclusive licence agreements seems to be less problematic as in most cases a licensee who has an exclusive licence will have only a very limited incentive to eliminate the licenced IPR. On the other hand, the companies which do not have access to this exclusively licensed out IPR have a strong incentive to challenge the IPR if they consider it valuable and potentially invalid.\(^{59}\)

\(^{59}\) Note that the incentives for licensees to challenge the validity of the licensed IPR may also not be strong in the context of non-exclusive licensing, in particular if all licensees pay equal royalties.
Option 3 also comes out best in terms of limiting compliance costs, in particular for smaller firms. In Option 2 and 3 the parties’ incentive to revisit past agreements (thus creating compliance costs) would be limited compared to the baseline scenario in Option 1 since the rest of the agreement would still benefit from the safe harbour of the TTBER, i.e. even if the termination clause would have the same effect as a non-challenge clause and risk being void, the rest of the agreement would still be enforceable so that the temporary increase in compliance costs for past licence agreements would be limited. In addition, in Option 3 (the preferred option) only termination clauses in non-exclusive licence agreements would have to be revised. The compliance costs for future agreements would be limited as termination clauses would have to be assessed on a case by case basis. It will be further reduced by providing more guidance in the new Guidelines on scenarios where termination clauses have the same effect as non-challenge clauses. Option 3 would, in addition, cater for the fact that in an exclusive licensing relationship, the licensor is more dependent on the licensee. In particular for SME’s a termination clause might be necessary to balance the economic need of a licensee of an exclusive licensing relationship (common in specific industries like the pharmaceutical and biotech sector where the technology has to be further developed and tested before the contract product can go onto the market) while safeguarding the licensor’s interest in getting a fair value for its research. (see section 5.2.1. of the Report)

Option 4 would give a clear message that termination and (non-challenge) clauses should be avoided regardless of the individual circumstances. It could contribute further to challenge weak or invalid IPR, thus removing barriers to competition and follow-on innovation. However, (as discussed above) it does not take into account that without a termination clause pure technology firms might be disincentivised to innovate, it should, first, be noted that invalid patents by definition do not represent

<table>
<thead>
<tr>
<th>Economic impact (--- to ++++)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

5.2.2.  Innovation and research

In the 2013 public consultation stakeholders argue that if licensors were precluded from including termination clauses in licence agreements, this could have a detrimental effect on licensors’ willingness to invest in R&D and innovation, or to grant licences. In respect of the argument that without a termination clause pure technology firms might be disincentivised to innovate, it should, first, be noted that invalid patents by definition do not represent
valuable technology innovation. According to one study on average around 30% of challenged patents were declared invalid by the national courts in the EU. There is no public interest in guaranteeing revenues for patent holders based on patents granted in error. On the contrary, as set out above, there is public interest in eliminating such patents. Moreover, it is fallacious to suggest that the possibility for a licensee to challenge the validity of patents has a "detrimental effect" on the incentive of the licensors to innovate. Innovation cannot be driven by investments in invalid patents which should not have been granted in the first place.

In fact, Option 2, 3 and 4 could increase the incentive to apply for patents on substantial innovations as they are less likely to be successfully challenged. Patents on substantial innovations would thus become more valuable than patents on non-substantial improvements. Instead of investing in non-substantial improvements which may be more doubtful to hold up in case of a patent challenge, stakeholders would arguably focus more on substantial improvements. This could be one step in fostering innovation and avoiding patent thickets in the light of the overall constant increase in patent application.

Compared with the baseline scenario, Option 2 and Option 3 contribute to removing barriers to follow-on innovation by facilitating the removal of invalid IPR. The removal of invalid IPR would reduce costs for innovation in the respective areas.

Option 3 would, in addition, take best into account the possible diverse effects of termination clauses. On the one hand, both recent cases and the economic literature indicate that restricting the licensee to challenge the licensed technology may potentially lead to a socially detrimental situation where patents which have been wrongly granted will continue to exist with the potential effect of blocking innovation and competition. A stricter approach enables and fosters challenges to patent validity both in order to eliminate a potential monopoly over a technology that should not have been patent protected in the first place and in order to avoid increasing costs of products and services which may result from undertakings having to pay royalties for invalid patents. This will enhance the competitiveness of EU firms (see section 2.2.2. of the Report).

On the other hand, it also has to be taken into account that not all termination clauses have the same effect as a non-challenge clause. Only in specific circumstances will the risk associated with the termination of the licensed agreement be so considerable that it significantly reduces the incentive to challenge the patent in the first place. In particular if licensees have made substantial investments in a licensed technology, they may hesitate to challenge the validity of the licensed IPRs if it would induce termination of the agreement. A termination clause may in particular be necessary to protect the interest of the licensor if a small innovator is exclusively licensing its innovation to a large licensee. Absent a termination possibility for the licensor, in this scenario, the licensee may, after obtaining the licence threaten to challenge the IPR with the intention to renegotiate the royalties or otherwise undermine the position of the innovator. Such an innovator firm may be particularly vulnerable in an exclusive licence relationship as it cannot switch to another licensee or produce itself without a prior termination of the agreement (see sections 5.2.1.1 of the Report).

However, it should also be kept in mind, as set out in section 2.2.1 that the patent quality of originally granted patents by the EPO is generally regarded as high compared to other jurisdictions.

Van Zeebrock, Graham, 2010, Overall outcome of infringement and invalidity actions by jurisdiction Table AIII-2. See also Footnote 29.
The preferred option would, in most relevant cases, remove the chilling effect on the incentives to challenge IPR. It would enable licensees to challenge the validity of IPRs and thereby removing invalid IPRs as an unmerited barrier to innovation and economic activity. At the same time it would recognise that in case of exclusive licence agreements the chilling effect seems to be less problematic as in most cases a licensee who has an exclusive licence will have only a very limited incentive to eliminate the licenced IPR, while the licensor, in particular if it is a smaller innovator, may be more easily induced to license-out with a termination clause in the agreement.

As mentioned above, in addition, in an exclusive licensing relationship, the licensee has from the beginning generally a less significant incentive to eliminate the potential invalid IPR. While having the potential benefit of avoiding royalty payments, it would also terminate his exclusive right through the licensing agreement against actual or potential competitors. Thus, it can be expected that allowing a termination clause in these scenarios will not have a significant effect on the number of successful IPR challenges.

**Option 4** could also have a negative impact as it does not allow for termination clauses even in the specific circumstances where the innovator might need such a clause to protect himself from abusive behaviour from the licensee or to reach a genuine settlement.

<table>
<thead>
<tr>
<th>Impact on innovation and research (--- to +++)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

5.2.3. **Legal certainty / Flexibility**

**Option 1** could be seen, at least from the viewpoint of certain courts, to bless termination clauses even when the agreement falls outside the safe harbour provided by the TTBER, e.g. if the parties market share is above the respective threshold (even if in this scenario the termination clause should, according to the Guidelines, be individually assessed). By explicitly allowing termination clauses although they might, as explained above, have the same effect as non-challenge clauses, stakeholders could be led into the perception that these clauses never cause competition concerns.

**Option 2 and 3** remove this uncertainty as non-challenge clauses and termination clauses would both be treated as excluded restrictions. However, **Option 2 and 3** would also leave enough flexibility for a more lenient treatment of those cases where the termination clause does not have the same effect as a non-challenge clause or where both create in specific circumstances efficiencies. In such cases an individual assessment could lead to the conclusion that the termination clause did not produce any anticompetitive effects.

**Option 4**, on the one hand, increases legal certainty as an individual assessment of these clauses would in most cases not be necessary as they would be presumed anticompetitive. However, this option would also remove most of the flexibility for cases where the termination clause does not have a

---

62 OLG Karlsruhe, 23. 1. 2012, docket no. 6 U 136/11 marginal no. 28 et seq. – *GPRS Zwangslizenz*.
comparable effect to a non-challenge clause or creates efficiencies and therefore should not be treated as a hardcore restriction.

<table>
<thead>
<tr>
<th>Balance between flexibility and legal certainty (--- to +++)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

5.3. Patent pools

5.3.1. Economic impact (effect on competition and consumer, compliance costs for companies – in particular SMEs)

Compared to the baseline scenario Option 2 (covering set up of patent pools by block exemption regulation) and Option 3 (soft law safe harbour) have a positive effect on competition and consumers by giving a stronger incentive to the creation of pro-competitive patent pools by giving certain guidance and legal security on the creation of pro-competitive patent pools and thereby facilitating the creation of such patent pools (which in turn should lead to easier entry for companies in the market and lower prices for the consumers). This is underlined by the significant number of submissions in the public consultation on the proposal that have strongly welcomed the substantially expanded guidance and the clarifications made in the chapter on patent pools.

There are two aspects of compliance costs of importance for assessing these options.

First, the cost for the companies wishing to set up a patent pool to assess whether that pool would risk infringing competition law. Option 1 implies relatively high compliance costs for companies by making it necessary for them to enter into a comparatively complicated self-assessment of whether the pool would risk infringing competition law or not. The present Guidelines do not contain a clear safe harbour for patent pools, but instead necessitate an analysis of a quite long list of factors and leave it to the companies to weigh these factors. Option 1 thus, in many cases, does not allow companies and their lawyers to quickly conclude whether their future set up is competition law compliant. This self-assessment would often imply paying for the service of a lawyer specialised in the field of competition law. Especially for SMEs this cost could be quite important, potentially even prohibitive.63 The self-assessment would be significantly easier in many cases (i.e. in those cases where the respective safe harbour conditions are fulfilled) in Option 2 and Option 3 (the preferred option). Under Option 3 this assessment could even be made by the companies themselves without recourse to an external lawyer.

In general, a self-assessment under a block exemption regulation, Option 2, is quite easy. For example, if a certain market share threshold is not exceeded and certain hard-cores (clauses which are presumed to lead to negative effects on competition) are not included in the agreement, companies would know with certainty that their agreement is covered and therefore is also presumed legal. However, already the mere fact of deciding on the relevant market and calculating the market share of the patent pool on that market can be demanding and might necessitate recourse to an external lawyer. In addition, most

63 Even if it seems quite rare today that SMEs participate in patent pools.
patent pools have high market shares and can thus in practice not benefit from such a safe harbour. Option 3 would therefore seem to lead to the lowest level of compliance costs (here defined as costs for checking whether a certain patent pool set up is competition law compliant).

Second, further costs could be imposed if already existing pools would be obliged or incentivised to change the way their pool is set up.

As regards Option 3 it should be noted that the elements of the safe harbour (see section 4.1 above) are based on the classical criteria developed by antitrust regulators both in Europe and in other parts of the world, for example the US. Virtually all pools existing today would (to our knowledge) already fulfil these safe harbour criteria. There could potentially be a very small number of existing or future pools outside the context of standard essential patents, which would not already license out on so called FRAND terms. In case a pool has just started its activity and is therefore not (yet) dominant, it is not (from a competition law perspective) obliged to license out on non-discriminatory and fair terms. However, since most pools want to ensure that they are competition law proof also when they become successful (dominant) they seem to already from the beginning of the life of the pool engage to license on fair and non-discriminatory terms. As regards the criteria not to exchange pricing and output data not necessary for the creation of a pool, this obligation follows already from the Commission's policy on information exchange agreements. In other words, Option 3 would in the large majority of cases not create extra set up/compliance costs for pools by imposing new conditions. It should be noted that all the criteria of the safe harbour are considered necessary for being included in the safe harbour. Even if a patent pool could, in an individual assessment when further analysing the facts of the specific case, be considered pro-competitive even when not fulfilling all criteria, they would all seem necessary to ensure that any patent pool wishing to avail of the safe harbour is "competition law proof" regardless of the market share it, through commercial success, achieves. For example, a small patent pool without market power could very well license out on discriminatory terms without infringing competition law. However, as soon as the patent pool would be successful (dominant) that practice would no longer be competition law compliant. In addition, in an individual case, it could certainly be justified to include a significant amount of complementary but non-essential patents. However, in other scenarios this could lead to a concern of foreclosure of third part technologies. Once again, in order to have a "competition law proof" safe harbour this criterion also has to be included in the safe harbour.

---

64 See also "A study on industries dependent on standards and patent challenges and possible policy reactions", draft final report from August 2013, at p. 153: "Important elements is that the pools should only include complementary patents, not substitutes (a condition that can be met by including only essential patents because these are complementary by definition), that pools have good mechanisms to test essentiality, and that all patent owners are also free to license out their patents directly, not via the pool. Virtually all pools established after the three pools in question have adopted these basic principles."

65 For example, one of the most important recently created pools, which does not (only) cover standard essential patents, publicly commits to license on reasonable and non-discriminatory terms, see http://www.one-blue.com/royalty-rates. The same pool is also a good example of the industry practice to invite all technology owners with essential patents to join the pool see http://www.one-blue.com/licensors.

66 See the chapter on information exchange in the Commission's Horizontal Guidelines, Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements", OJ C 11, 14.1. 2011, where for example exchange of individualised data regarding intended future prices or quantities is considered to be a restriction of object (when exchanged between competitors).
As to **Option 2** the question of how an enlarged TTBER covering patent pools would affect existing patent pools would obviously depend on how such an enlarged TTBER would be drafted. All existing block exemption regulations consist of a safe harbour which applies if certain market share thresholds are not exceeded and certain restrictions (so called hardcore restrictions) are not put into the agreement. It could be argued that this traditional concept based on market share thresholds would not be very helpful in case of patent pools where the positive effects of the patent pool increase alongside the increase in market share. There would in practice not be many pools that could benefit from such a safe harbour. The alternative to such a block exemption regulation would be a regulation without a market share cap but requiring respect of qualitative criteria as described in **Option 3**. Such qualitative criteria are usually reserved for guidelines as inclusion of such qualitative criteria in an instrument, like a regulation, that is supposed to provide legal rights which should be enforceable in national courts, is not considered appropriate. **Option 2** would thus lead to increased compliance costs, either because the safe harbour would cover almost no pools in practice or because it would lead to a legal instrument difficult to enforce. **Option 3** would not have these drawbacks and would allow, where necessary, for a more nuanced assessment based on the likely pro- and anti-competitive effects in a particular case.

Finally, as the current enabling regulation (Regulation 19/65) only delegates the power to deal with bilateral agreements, extending the block exemption regulation safe harbour also to patent pools (i.e. multiparty agreements), **Option 2** would require first amending the enabling regulation. Such an amendment would require the Commission to ask the Parliament and Council for the amendment and would not be possible to do before the current technology transfer framework expires in April 2014. This option would therefore likely, at a first stage, necessitate a roll-over of the existing technology transfer rules in order to give enough time to amend the enabling regulation. From that perspective, **Option 2** would therefore have a long lead-time before an incentivising system for the creation of patent pools could be put in place.

<table>
<thead>
<tr>
<th>Economic Impact (--- to ++++)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>Option 2</td>
<td>Option 3</td>
</tr>
<tr>
<td>0</td>
<td>+</td>
<td>++</td>
</tr>
</tbody>
</table>

5.3.2. **Innovation and research**

The existence of pro-competitive patent pools is, as such, beneficial for innovation and research by providing for easy access to the necessary technology in a particular market. If companies have an easy and affordable access to this technology, this fact is also likely to increase the possibilities and chances for follow-on innovation and research. However, by not providing for an easy "check-list approach" and by not giving a clear safe harbour for patent pools, it would seem that **Option 1** gives less incentives for the creation of pro-competitive patent pools and therefore would lead to a sub-optimal number of pools and therefore also less follow-on innovation than if more pro-competitive pools were created.
By providing for an easy "check-list approach" Option 3 would seem to give more incentives to the creation of pro-competitive patent pools and therefore also for follow-on innovation. By providing for an easy "check-list approach" Option 3 can be expected to give more incentives to the creation of pro-competitive patent pools and therefore also for follow-on innovation. The majority of the submissions commended the Commission for including in its draft guidelines a comprehensive safe harbour for technology pools that covers both the creation of the pool and its subsequent operation. The concept of a soft law safe harbour, as set out in the preferred Option 3, comes out best for strengthening competition and the competitiveness of firms.

In case Option 2 would be based on a market share cap it could have negative effects on innovation by only allowing for a clearance of patent pools with moderate market shares. In case it would be based on more qualitative criteria (such as those in Option 3) it could have positive effects on follow-on innovation by incentivising pools which, in turn, allows for easier access to essential patents.

<table>
<thead>
<tr>
<th>Impact on innovation and research (--- to ++++)</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

5.3.3. Legal certainty / Flexibility

Option 1 provides for a certain degree of legal certainty, by giving guidance on the factors which would be important for assessing whether a certain patent pool arrangement is in compliance with competition law (thus removing most of the risk for negative effects through illegality or potential sanctions). However, as set out above, the current Guidelines do not provide for an easy safe harbour/check-list approach. An assessment of whether the set-up and operation of the patent pool would risk infringing competition law is therefore somewhat complex and may not lead to an optimal level of legal certainty. In addition, the licensing out from the pool may, in view of the market share thresholds, easily fall outside the TTBER and may therefore require these licences also to be assessed individually. This adds to the complexity of the pools self-assessment. However, the current Guidelines would seem to provide for a quite high level of flexibility.

Extending the safe harbour of the TTBER to cover also patent-pools under Option 2 could in theory provide more legal certainty for companies wishing to set up some pools. Providing for a safe harbour in the TTBER has the advantage of being binding also on national courts. However, as said above, in practice such a safe harbour will be of very limited value as most pools will exceed the relevant market share threshold(s).

Option 2, a block exemption regulation allows for less flexibility than an assessment under Guidelines (Option 3). In particular in an area where practices may still be developing (i.e. practices as to how pools are set up may evolve over time) Guidelines could provide for the necessary flexibility for this type of agreements.
### Balance between legal certainty/flexibility (--- to +++)

<table>
<thead>
<tr>
<th></th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic impact</td>
<td>0</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Innovation and research</td>
<td>0</td>
<td>++</td>
<td>+</td>
</tr>
</tbody>
</table>

5.4. **Summary of the overall conclusions**

On exclusive grant-backs, in view of the arguments set out above Option 2 would seem to be the option with the most positive impact (in relation to the factors assessed) in this Report. It would reduce compliance costs for companies, in particular SMEs (by removing the need for identifying what is a severable or non-severable improvement). It would also seem to lead to the best outcome for competition and consumer welfare through giving an incentive for research and follow-on-innovation, which in the long run will lead to increased consumer choice. In addition, by ensuring that, when justified, exclusive grant-backs can still be exempted under an individual assessment, it has sufficient flexibility to also cater for the scenario where the licensor would not, absent an exclusive grant-back, have licensed out in the first place. **Option 2** is therefore the preferred option.

The proposed change will strengthen the incentive of licensees to innovate and could thus in general be said to favour licensees and innovation. However, as made clear by the economic study by professors Régibeau and Rockett, licensors will in general also benefit from increased follow-on innovation by licensees. If licensees improve the licensed technology or the produced product, this will strengthen the position of the licensor's technology on the market and increase its revenues. The proposed change, in addition, does not remove the safe harbour for non-exclusive grant back obligations. Licensors may therefore still (through non-exclusive grant-backs) ensure that they benefit from possible improvements made to their technology and are able to pass these improvements on to other licensees. However, by excluding exclusive grant-back obligations from the automatic exemption, it becomes less attractive for licensors to deprive the licensee who made the improvement from using its own innovation. This can be expected to favour in particular smaller licensees as they are generally less able to resist, when negotiating the original licence agreement, the requirement to hand-over improvements exclusively to the licensor. The simplification obtained by no longer differentiating between severable and non-severable improvements, a distinction criticised for its practical difficulty to implement, will also benefit in particular less sophisticated firms such as SMEs and can be expected to reduce their compliance costs.
On the **termination clause**, in view of the arguments set out above **Option 3** would seem to be the option with the most positive impact (in relation to the factors assessed) in this Report. It ensures that termination clauses having the same effect as non-challenge clauses are not automatically exempted, while at the same time catering for the particular scenario of the smaller licensor in a situation of dependence towards its exclusive licensee. It contributes to removing barriers to follow-on innovation and competition by facilitating the removal of invalid IPR, while still allowing for a positive message in relation to termination clauses which do not risk having the same effect as non-challenge clauses (i.e. giving strong dis-incentive not to challenge).

The preferred option will strengthen the position of licensees. Although an excluded restriction is not a hardcore restriction - i.e. there is no negative presumption that the agreement is anti-competitive and the remainder of the agreement still being covered by the TTBER (see section 1.3 of the Report) – the proposed change may have a certain dissuasive effect on including such clauses in non-exclusive licence agreements. Without a termination and non-challenge clause, a licensee will more often dare to challenge the validity of the licensed IPR while keeping its licence and continuing to pay the royalties (termination for non-payment of royalties is obviously not excluded from the TTBER). To the extent that this removes unmerited barriers to innovation and competition caused by invalid IPR, this will be beneficial for all firms, including those that compete on innovation and that may more often end up being licensors.

The continued coverage by the TTBER of termination clauses in exclusive licensing agreements will in particular benefit SMEs. The PATLICE Survey indicates that, while most licensing is done on a non-exclusive basis, exclusive licensing is relatively more common if firms are small (see section 1.2.2 of the Report). The proposal to continue coverage of termination clauses for exclusive licensing was introduced after the dialogue with stakeholders, which brought to the Commission's attention that innovative start-ups, which often license out their innovations exclusively, would have a particular interest in keeping an automatic exemption for termination clauses. In their business model and market context, it is argued, there would be a genuine risk that a larger licensee uses its right to challenge the licensed IP as a mere re-negotiating tactic. While the exclusive licensee has no real interest to pursue procedures to the end and have its exclusive position being undermined by having the IPR being declared invalid, starting invalidity procedures may thoroughly undermine the financial credibility and position of the licensor. Without the licensor being able to respond by threatening to terminate the contract, the incentive of the licensor to license out may be seriously undermined, possibly leading to sub-optimal licensing. **Option 3** is therefore the preferred option.

### Overall scores termination clause

<table>
<thead>
<tr>
<th></th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Option 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic impact</td>
<td>0</td>
<td>+</td>
<td>++</td>
<td>+</td>
</tr>
</tbody>
</table>
On *patent pools*, in view of the arguments set out above *Option 3* would seem to be the option with the most positive impact (in relation to the factors assessed) in this Report. It would provide for the lowest compliance costs when setting up a pool, while safe-guarding consumer welfare and still allowing for enough flexibility for pools that want to differ from the "blue print" set out in the soft law safe harbour. *Option 3* is therefore the preferred option.

The preferred option does not seem to favour different stakeholders differently, as witnessed by the overall agreement to the benefits of voluntary patent pools and the benefits of providing an easier check-list approach to the competition law assessment of such pools.

<table>
<thead>
<tr>
<th>Overall scores patent pools</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic impact</td>
<td>0</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>Innovation and research</td>
<td>0</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Legal certainty / flexibility</td>
<td>0</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

### 6. Monitoring and Evaluation

These rules will be continuously monitored through a continuing dialogue with stakeholders (both NCAs and companies) providing market information. DG COMP frequently interacts with industry and other stakeholders (both in meetings and specialised conferences). This interaction provides a valuable source of information about how the framework is applied. These contacts provide the Commission with opportunities to receive feedback from representatives from industry, consumer associations, law firms and economic consultants. Given that the enforcement of Article 101 TFEU also takes place at the national level, this dialogue is a very important tool for the Commission not only to monitor, but also to evaluate the functioning of the proposed rules in practice. National courts are contributing to the evaluation of the TTBER when applying it in cases before them.

The proposed Regulations will expire 12 years after their entry into force. However, as with all its competition law instruments, the Commission will amend or repeal the technology transfer rules before their expiry, should they no longer respond to market conditions in the EU (as was for example the case when the technology transfer rules were revised in 2004 prior to the expiry date of the regulations in place).
For the evaluation of the technology transfer rules (before the next revision), it would be advisable to commission another external study on technology transfer agreements which would hopefully give sufficient data points to draw statistically relevant conclusions on technology transfer agreements.
List of Annexes

Annex 1: "Assessment of potential anticompetitive conduct in the field of intellectual property rights and the interplay between competition policy and IPR protection" by Pierre Régibeau and Katharine Rockett

Annex 2: Summary of 2012 public consultation

Annex 3: Summary of 2013 public consultation

Annex 4: An international comparison with the US and the Japan
Annex 1

Assessment of potential anticompetitive conduct in the field of intellectual property rights and the interplay between competition policy and IPR protection" by Pierre Régibeau and Katharine Rockett

Accessible under the following link:
Annex 2

Summary of the initial stakeholders' consultation

1. The initial public consultation was done by publishing a stakeholder questionnaire on the web on 6 December 2011, inviting feedback from stakeholders on their experience of applying the existing regime. The official deadline to reply ended on 3 February 2012. However, due to requested extensions to reply, a number of respondents did so considerably later. We received in total 39 replies, mainly from law firms, law and industry associations but also a few companies and citizens commented.

2. Together with the stakeholders' consultation, DG COMP published a study commissioned by DG COMP (coordinated by the CET) on competition law and patent law by the economists Pierre Régibeau and Katherine Rockett (hereafter "the Study").

3. The stakeholders commented on a number of issues, in particular, general issues, scope, market share thresholds, hard-core restrictions, excluded restrictions and grant-backs, field of use restrictions, cross-licensing and patent pools.

   General issues

4. A majority of respondents consider that the TTBER and Guidelines have functioned well and wish to keep both. However, some stakeholders acknowledged relying only on the Guidelines.

5. Those stakeholders that expressed negative comments still wish to keep the TTBER and Guidelines but consider them to be too complex and that they need to be made more user-friendly.

   Scope

6. As regards the scope of the TTBER, some stakeholders would like to extend the scope to cover patent pools, copyrights and trademarks. However, it should be kept in mind that the enabling Council regulation 19/65/EEC only empowers the Commission to issue a block exemption in respect of bilateral agreements in relation to the use of industrial property rights. The limitation to bilateral agreements rules out patent pool agreements as these are by necessity multiparty. Of the copyright category, only software copyrights are covered as they are considered to be equivalent to industrial property rights. Other copyrights (primarily performance and related rights) are not covered, though the Guidelines, do give guidance on licensing of copyrights for reproduction and distribution because such licence agreements relate to the production and the sale of products on the basis of an intellectual property right ("IPR").

7. A number of respondents also mentioned that in respect of the reproduction of copyright protected works and software licensing the distinction between reproduction and distribution is becoming blurred in the on-line world.

56
8. Generally, the submissions indicate that a further clarification and re-assessment of the relationship with other block exemptions (Vertical BER or R&D BER\(^{67}\) etc.) would be useful.

\textit{Market share threshold}

9. A majority of stakeholders commented on the market share threshold system of the TTBER and the current level of the threshold. While the majority seem to accept the concept of having a market share threshold system, i.e. an effects-based assessment where market shares are a proxy for market power, respondents expressed difficulties in defining the relevant markets, in particular the technology market. However, some stakeholders would like to abolish the market share thresholds all together or at least for the category of non-competitors while others would like to see the market thresholds increased.

10. Alternatives to the market share thresholds were also suggested such as the so called 3 or 4 plus test, i.e. to assess instead if there are at least 3 or 4 substitutable independently controlled technologies on the market. Another potential alternative submitted was a test based on the size of the parties or markets.

1. \textit{Hardcore restrictions}

11. Some respondents expressed a wish to simplify the hardcore list (e.g. no double-negatives). It was also suggested to treat hard-core restrictions between non-competitors as excluded restrictions (i.e. to remove them from the hardcore list).

12. It was suggested to streamline the TTBER and Guidelines with other Block Exemptions and Guidelines as regards the general approach to hard-core restrictions.

13. A few respondents suggested removing the distinction between reciprocal and non-reciprocal licences between competitors. However, it is noteworthy that certain licensing terms are more likely to entail anti-competitive effects in reciprocal agreements. For example, reciprocal output limitations in licensing agreements between competitors constitute a hard-core restriction.

14. Due to changes in supply chain management, some technical comments were made with regard to licensing for the purposes of sub-contracting agreements.

2. \textit{Excluded Restrictions and Grant-backs}

15. Less than half of the respondents commented on the section of the TTBER on excluded restrictions\(^{68}\). The majority of respondents would like to keep the current distinction between the grant-backs\(^{69}\) of non-severable improvements and the grant-backs of severable improvements\(^{70}\) or be even more lenient and remove them from the category of

\begin{footnotes}
\item[68] Unlike hardcore restrictions, only the excluded restriction as such but not the rest of the licensing agreement falls outside of the safe harbour of the TTBER.
\item[69] Grant backs are clauses which obligate the licensee to grant a licence to the licensor in respect of its own improvements to or its own new applications of the licensed technology.
\item[70] An improvement is severable if it can be exploited without infringing upon the licensed technology (Article 1(1)(n) TTBER and para. 109 GL).
\end{footnotes}
excluded restrictions. While the TTBER exempts both, it only covers exclusivity with respect to non-severable improvements (exclusivity for severable improvements is not covered by the TTBER. Some stakeholders, however, found that the distinction between severable and non-severable was not always easy to apply.

16. Some stakeholders also requested removal of the no challenge clause from the list of excluded restriction, thereby according a full exemption for such provisions.

3. **Field of use restrictions**

17. Some stakeholders' suggest to expand the exception for field of use (covered by the TTBER) to cover territories, markets and customers and to also define "field of use" beyond technical characteristics (e.g. low-end v. high-end products).

**Cross-licensing**

18. Only a few responses touched the issue of cross-licensing. It was argued that the Study (see above) which indicates that cross-licensing could under certain circumstances increase the risk of collusion, is not based on sufficient empirical evidence. Instead, the responses stress the pro-competitive effects of cross-licensing which are useful in tackling the problem of patent thickets.

**Patent pools**

19. The majority of the respondents favour the current regime regarding technology pools/patent pools. Some respondents mentioned explicitly that patent pools could help to reduce the problem of patent thickets and are therefore pro-competitive.

20. Several submissions suggested bringing patent pools within the scope of a safe harbour to be provided by a future TTBER. However, this would necessitate a change of the enabling regulation (Council Regulation No. 19/65).

21. Various respondents mentioned that the distinction between complement versus substitute and essential and non-essential technologies is sometimes difficult to assess. Some submissions suggest a more lenient approach towards the inclusion of non-essential patents and to also include commercially essential patents.

22. Other submissions raised the role of independent experts, FRAND definition and the risk that pools can be used to hide invalid patents.

---

71 Under a field of use restriction the licence is either limited to one or more technical fields of application or one or more product markets.

72 A cross-licensing agreement is an agreement according to which two or more parties grant a license to each other concerning part of their respective IPR. The term "cross licensing" normally implies that neither party pays monetary royalties to the other party, however, this may be the case.

73 Fair, reasonable and non-discriminatory ("FRAND").
ANNEX 3

OVERVIEW OF SUBMISSIONS RECEIVED FROM STAKEHOLDERS IN THE PUBLIC CONSULTATION ON THE DRAFT PROPOSAL FOR A REVISED BLOCK EXEMPTION REGULATION FOR TECHNOLOGY TRANSFER AGREEMENTS AND FOR REVISED GUIDELINES

7. INTRODUCTION

4. The public consultation on the draft proposal for a revised block exemption for technology transfer agreements and for revised guidelines took place between 20 February and 17 May 2013. In this context, 58 submissions were received.

5. Companies are getting used to self-assess the compliance of their agreements with Article 101 of the Treaty and in general support the effects-based approach to enforcement that the Commission has been promoting. The current system has given them flexibility to organise their cooperation, notably through the so called "safe harbours" provided for in the Block Exemption Regulation ("BER") and in the Guidelines. Therefore, companies welcomed the Commission's "evolution, not revolution" approach.

6. In the light of the focus and the content of the contributions received, the main topics of interest in the public consultation were, in the draft Technology Transfer Block Exemption Regulation ("TTBER"), the scope, market share thresholds, hardcore restrictions, termination clauses, and grant backs. As regards the draft Guidelines the main areas of interest were patent pools and settlement agreements.

2. COMMENTS REGARDING THE DRAFT TTBER AND THE DRAFT GUIDELINES

7. The following concise summary covers the main comments on the topics that received the most attention during the public consultation.

2.1. The Scope

8. Two fifths of the stakeholders made comments on the scope. Many of these stakeholders welcome the clarifications in this area, in particular the clarifications made on the relationship between the different block exemption regulations. Some stakeholders find that this could be even further clarified.

2.2. Market Share Thresholds

9. More than half of the submissions include comments on market share thresholds. Some stakeholders believe that market shares are difficult to determine and monitor (especially in technology markets) and that the market share thresholds therefore should be removed or substantially raised. Some stakeholders consider that the market share thresholds are not needed because of the hardcore lists.

10. On the other hand, other stakeholders accept the need for market share thresholds, especially, from an economic effects perspective. Several stakeholders commend the
Commission for the existing safe harbour in paragraph 144 of the draft Guidelines (based on number of substitutable technologies available on the market regardless of market shares of parties). Moreover, some stakeholders welcome the guidance given in paragraph 146 of the draft Guidelines and the assurance in paragraph 143 of the draft Guidelines that there is no presumption that Article 101(1) applies merely because the thresholds are exceeded.

11. Finally, many stakeholders commented on the new Article 3(2) in the draft TTBER. Most of these stakeholders find that the new rule addresses a very rare and/or theoretical situation, which could only happen in the case of an exclusive license. These stakeholders, therefore, urge that the lower threshold of 20% should either be abolished or only be applicable to exclusive licences. Moreover, several stakeholders find it to be inconsistent to use the threshold for competitors but the hardcore list for non-competitors in the case of substitute captive technologies.

2.3. Hardcore Restrictions

12. More than half of the stakeholders submitted comments on hardcore restrictions. The vast majority of these comments concern the removal from the draft TTBER of the automatic exception for restrictions on passive sales between licensees for two years (concerning agreements between non-competitors). The situation when such initial passive sales restrictions can be justified between licensees are now instead described in the draft Guidelines. The main arguments of stakeholders are that the change might act as a disincentive to license out and that the TTBER and the block exemption regulation for vertical agreements ("VABER") need not be aligned, as the agreements covered by the respective block exemption regulations are very different. On the other hand, some stakeholders appreciate the change. They find that the removal would bring the TTBER into line with the VABER and thereby remove structural disparities in margin areas of application.

13. Some stakeholders urged the Commission to simplify the hardcore list, as they find it to be difficult to read and interpret.

2.4. Termination Clauses

14. Three fourths of the submissions contain comments on termination clauses. The majority of the stakeholders are against the inclusion of termination clauses in the list of excluded restrictions. Many arguments are put forward, the most common ones being that the change would act as a disincentive to license out, that the change would give too much leverage to the licensees and that the licensor should not be forced to stay in a contractual relationship with a licensee challenging the essence of the relationship. Several of these stakeholders, however, recognise the need for this change in regards to standard essential patents.

15. On the other side, there are also some stakeholders supporting the change. These stakeholders recognized the aim of identifying and removing invalid IPRs and point out that termination clauses often have the same effects as no-challenge clauses, because high sunk costs may significantly deter the licensees from challenging the validity of the licensed IPR. Moreover, these stakeholders find that the change would ensure that cross-license agreements do not shield invalid patents from challenge,
further strengthen the pro-competitive effects of broad cross-licenses that parties enter into to achieve patent peace, and encourage the thinning of the patent thicket.

2.5. Exclusive Grant Backs

16. Two thirds of the submissions contain comments on exclusive grant backs. The majority of the stakeholders are against the removal of the distinction between severable and non-severable improvements by treating both types of exclusive grant backs as excluded restrictions. Many of these stakeholders point out that when improvements are non-severable, the licensee would always be dependent on a licence to the underlying IPR, and that the licensor would thus have anyway the right under patent law to prevent the licensee from using his own improvement. Some stakeholders also point out that the licensor has a legitimate interest in using the improvements, that it would be a disincentive to license out in the first place, and that it would push a number of contracts into self-assessment, which would create more uncertainty.

17. On the other hand, certain stakeholders welcome the change. These stakeholders point out that there is a need to differentiate between severable and non-severable improvements and they find the new rule simpler and easier to apply. Moreover, they find that treating both severable and non-severable improvements as excluded restrictions would encourage the licensee to improve the licensed technology and foster innovation.

2.6. Patent Pools

18. More than half of the submissions contain comments on patent pools. The stakeholders strongly welcome the substantially expanded guidance and the clarifications made in the chapter on patent pools, which are found to be useful. Several submissions welcome that the definition of "essential" IPR is clarified to explicitly cover also standard essential patents. However, some stakeholders submit that further guidance would be helpful on certain issues, in particular in regard to FRAND royalty rates and how these rates are set.

19. The majority of the submissions commend the Commission for including in its draft guidelines a comprehensive safe harbour for technology pools that covers both the creation of the pool and its subsequent operation. A few stakeholders, however, voice the concern that self-assessment will remain difficult even with the expanded guidance.

2.7. Settlement Agreements

20. Two thirds of the submissions contain comments on settlement agreements. The stakeholders welcome the inclusion of an expanded section on settlement agreements in the draft Guidelines. In principle, they also welcome the recognition that “in cases where, in the absence of the licence, it is likely that the licensee could be excluded from the market, access to the technology at issue for the licensee by means of a settlement agreement is generally procompetitive”. They welcome that the Commission recognises that settlement agreements are “in principle a legitimate way to find a mutually acceptable compromise to a bona fide legal disagreement”.

61
21. Some stakeholders, however, are concerned that there is too little guidance as to when reverse payment settlements could lead to a competition problem. The same critique was put forward as to the criteria when a non-challenge clause in a settlement agreement could lead to potential competition concerns. Some stakeholders comment that, in general, they do not believe that competition authorities are well placed to assess the validity of patents and that the question of whether patents are valid should therefore not play an important role in competition law assessment.
Annex 4

Grant-backs, Termination Clauses and Patent Pools under the WTO regime as well as US and Japanese antitrust laws

1. WTO – The TRIPS Agreement

The Agreement on Trade Related Aspects of Intellectual Property Rights ("TRIPS agreement") contains two Articles which relate to abuse of intellectual property rights.

First, Article 8(2) TRIPS states as a basic principle that "appropriate measures [...] may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology."

Secondly, Section 8 titled "Control of Anti-Competitive Practices in Contractual Licences" contains Article 40 TRIP which acknowledges in general terms that IP licensing can "have adverse effects on trade and may impede the transfer and dissemination of technology". It also specifically allows WTO members to formulate rules to identify abusive behaviour "having an adverse effect on competition in the relevant market". It is noteworthy that exclusive grant-back conditions and clauses which prevent the challenge of the validity are explicitly mentioned as examples of such an abuse.

2. United States

In the United States, the interface between technology transfer agreements and antitrust is primarily governed by the Sherman Act and the Clayton Act as interpreted by the courts as well as the FTC Act allowing the FTC to challenge anti-competitive practices. Although US authorities had actually introduced categories of per se illegality to the assessment of IP licencing agreements in the past the modern approach towards technology transfer agreements follows an effects based approach based on the rule of reason. This is the setting in which the U.S. Department of Justice and the FTC published the "Antitrust Guidelines for the Licensing of Intellectual Property" in 1995. In 2007 the agencies issued a report on "Antitrust Enforcement and Intellectual Property Rights"74 in which they – without actually amending the guidelines – review aspects of licensing agreements.

These statements comprise the primary source with regards to public enforcement of antitrust law in the context of IP licensing, i.e. there is no legislative act that explicitly prohibits or allows certain practices of patent holders. Moreover, neither the 1995 guidelines nor the 2007 report introduce safe harbour rules. Finally, as mentioned below, judge made law and legal

doctrine from other areas of law have an influence on the enforceability of licence agreements.

a) Non-challenge and termination clauses

Non-challenge and termination clauses are mainly dealt with under US patent law. According to the applicable case law an agreement barring a patent licensee from challenging the validity of the licensor's patent (i.e. a non-challenge clause) is unenforceable.

Originally the doctrine of “licensee estoppel” barred the licensee to challenge the validity of the patent at issue. It had been developed in order to keep the licensee from first accepting the benefits of a patent licence while subsequently challenging the validity of the licensed patent. A turning point was the *Lear v. Adkins* decision in 1969 in which the Supreme Court overruled previous case-law that built upon this doctrine. The judges argued that it would undermine the federal policy favoring the free use of ideas in the public domain and that, consequently, Lear must be allowed to challenge the invalidity of the patent in order to avoid the payment of royalties.

Since then, the obligation in a licence preventing a licensee from contesting the validity is unenforceable. However, before the licensee could challenge the validity of the IP it was previously required to first breach the contract, for example by ceasing to pay royalties. This view changed with the *MedImmune v. Genentech* decision which widened the possibilities of challenging licensed rights. The Supreme Court held that licensees were not required to breach or terminate a license agreement as a prerequisite for filing an action to challenge the validity, enforceability, or non-infringement of a patent. Consequently, they were able to maintain the benefit of the license while at the same time challenging the patents covered in the license by seeking a declaration of patent invalidity.

However, no Federal Circuit decision has definitively answered the question if a contract provision that permits a licensor to terminate a licensee’s patent rights for merely challenging the patent is enforceable. Based on *Lear and Medimmune*, one could however argue that, due to the similar effect of non-challenge and termination clauses, the latter should also be unenforceable. However, there are also voices who argue that termination clauses might remain enforceable.77

b) Grant-backs

Concerning grant-backs the US courts have traditionally applied a rule of reason analysis. This is due to the judgment issued by the Supreme Court in the case of *Transparent-Wrap Machine Corp. v. Stokes & Smith Co.* dating back to the year of 1947.

75 395 U.S. 653.
78 329 U.S. 637.
The 1995 guidelines explicitly refer to the abovementioned precedent after discussing economic effects of grant-back clauses which are recognized as potentially pro- and anti-competitive in the way that they allocate risks and create incentives with regards to further innovation.

Distinguishing between exclusive and non-exclusive grant-backs the agencies state that they will analyse the overall structure of the licensing arrangement as well as the market conditions, especially if the licensor has market power.

Once it is found that a particular grant-back provision is likely to significantly reduce the licensees' incentives to invest in improving the licensed technology, the agencies will consider the extent to which the grant-back provision has off-setting procompetitive effects, namely "(1) promoting dissemination of licensees' improvements to the licensed technology, (2) increasing the licensors' incentives to disseminate the licensed technology, or (3) otherwise increasing competition and output in a relevant technology or innovation market."79

The rule of reason analysis, along the lines stated above, applies to exclusive and non-exclusive grant backs. However, the latter, i.e. an agreement that allows the licensee to freely license improvement technology to others, is considered less likely to have anticompetitive effects. Despite concerns that were raised during the consultation leading to the report in 2007 the agencies still balance the anti-competitive effects of an exclusive grant back agreement against possible benefits. Invoking a "but for" approach, it is argued that in some cases exclusive grant-back provisions "make follow-on innovation possible"80.

c) Pooling arrangements

With regards to cross-licensing and pooling arrangements the agencies rely on a great deal of case law which is also mentioned in the guidelines. Judgments in this area commonly intend to strike a balance between the benefits of such behavior, namely putting together "complementary technologies, reducing transaction costs" and "avoiding costly infringement", on the one hand, and threats to competition on the other hand, such as reductions in output, exclusion of competitors and deterrence to further innovation in case of mandatory dissemination of R&D results. Consequently, as long as "naked price fixing" is out of question, the rule of reason applies.

For example, it is explicitly state that "exclusion from a pooling or cross-licensing arrangement among competing technologies is unlikely to have anticompetitive effects unless (1) excluded firms cannot effectively compete in the relevant market for the good incorporating the licensed technologies and (2) the pool participants collectively possess market power in the relevant market. If these circumstances exist, the Agencies will evaluate whether the arrangement's limitations on participation are reasonably related to the efficient

development and exploitation of the pooled technologies and will assess the net effect of those limitations in the relevant market."

The DoJ usually analyzes proposal to pool patents in business review letters and has frequently found a likelihood of "substantial integrative efficiencies"\(^81\). However, according to the agencies it is also crucial whether the patents subject to a pooling agreement are complements or substitutes as in the latter case harms to social welfare are more likely. Conversely, essential patents in particular are more likely to represent a complement to other patents.

3. Japan

The first Guidelines for licensing terms came into force in 1968. The "Criteria for Approval" was part of an ex-ante mechanism to screen technology licencing contracts and was implemented by the Japanese competition agency. Since the standard of scrutiny was to tackle "unfair trade practices" and the approach taken was generally rather form- than effects-based the Japan Fair Trade Commission (JFTC) also adopted a so called "black list" with patent licensing restraints that were considered per se illegal. In 1989 and 1999 amendments were introduced which were then followed by patent pool guidelines in 2005. The latest rules are set out in the 2007 Guidelines for the Use of Intellectual Property under the Antimonopoly Act.

a) Termination clauses

Non-challenge clauses were added to the list of practices which could be viewed as unfair trade practices in 1989. The 2007 guidelines recognize pro-competitive effects stemming from facilitated technology transactions. Furthermore, it is explicitly stated that such agreements are "unlikely to reduce competition directly" and "in principle, stipulating termination right of the agreement for the technology with any licensee that challenges the validity of rights may not constitute unfair trade practices." However, according to the agency "it may constitute an unfair trade practices when it is found to tend to impede fair competition by continuing rights that should be invalidated and by restricting the use of the technology associated with the said rights.\(^82\)

These statements suggest a rule of reason approach to assessing when a termination clause would be considered anticompetitive although the standard of scrutiny still relates to the fairness of trade practices.

b) Grant-backs

While traditionally grant-backs have been categorized as per se illegal if not "balanced" and thus had a "dark grey" status, the 2007 guidelines establish that it generally does not


\(^{82}\) JFTC, Guidelines for the Use of Intellectual Property under the Antimonopoly Act, 2007, p. 24 f.
constitute an unfair trade practice if the licensees are merely obliged to grant a non-exclusive license for improved technology developed by them. With regards to this type of grant-back the agency explains that such an obligation "has little impact on licensees’ business activities and is not recognized as being likely to discourage the licensees from undertaking research and development. However, in cases of exclusive grant backs they "may reduce the motivation of licensees to undertake research and development and possibly enhances the position enjoyed by the licensor in the technology or product market."

Therefore, the general rule is that an obligation to license exclusively to the IP holder is not justified whereas non-exclusive grant backs are subject to an analysis which assumes less anti-competitive effects.

c) Patent Pooling

The guidelines on patent pooling, which were issued only two years before the Guidelines for the Use of Intellectual Property under the Antimonopoly Act, acknowledge the procompetitive effects of patent pooling, especially in the case of standardization, for example reduced licence fees. When analysing pro- and anticompetitive effects the JFTC looks at "market conditions such as the share of products with specifications in the relevant market and the position of the pool in that market". According to the 2005 guidelines there are safe harbours in the sense that the JFTC does not find legal issues, when "(a) the market share of the pool is no more than 20% in the relevant markets or (b) if market share is inappropriate for analysing the effect on competition there are at least four other available specifications"\(^\text{83}\). The 2005 guidelines also distinguish between essential and non-essential patents. According to the JFTC, only in the latter case, i.e. when non-essential patents are covered by the pooling agreement, "anticompetitive effects are not negligible and entail an analysis of economic effects that take into account two factors, namely (1) the reasonableness of pooling or its or, pro-competitive effects and 2) whether licences can be obtained without going through the pool allowing businesses to select certain licences. Finally, the guidelines address the issue of discrimination against (potential) members of the pool and between licensees.

These views are also present in the 2007 guidelines where it is stated that a "patent pool can be useful in encouraging the effective use of technologies required for business activities and does not immediately constitute an unreasonable restraint of trade." However, the guidelines also recognize that pooling might facilitate collusion, especially when substitute technologies are concerned. Finally, it is frequently mentioned that patent pooling can constitute an unreasonable restraint of trade if the conduct in question "substantially restraints competition in the field of the trade of the product in question".