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COMPETITION COMMITTEE**

Working Party No. 2 on Competition and Regulation

STANDARD SETTING

-- European Union --

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1. Introduction

1. This paper will focus on the important topic of assessment of standard setting agreements under EU competition law. Standard setting is vital not only for the high-tech industries where interoperability is a key for success but also for a large number of the more traditional sectors. It takes place in different types of settings (from governmentally implemented, to formal standard setting bodies, to a few companies coming together on an ad hoc basis to set a local standard) and there are different types of standards involving different types of cooperation (safety standard, environmental standards, interoperability standards etc). The large variety of types of standards and the large variety of constellations in which such standards are set, makes it also a complex topic from a competition law perspective.¹

2. Standardisation can give rise to significant efficiency gains and further innovation and competitiveness both in Europe and at a global level. For example, EU wide standards may facilitate market integration and allow companies to market their goods and services in all Member States, leading to increased consumer choice and decreasing prices. Moreover, standards which establish technological interoperability often encourage competition on the merits between technologies from different companies and help to prevent lock-in to one particular customer. Standards may reduce transaction costs. They also play an important role for innovation *inter alia* by reducing the time it takes to bring a new technology to the market and by allowing companies to build on top of an agreed solution.

3. However, from a competition law perspective the specific context of standards setting also entails certain risks. For example discussions in the context of standard-setting, like all meetings between competitors, can provide an opportunity to reduce or eliminate price competition in the markets concerned, thereby facilitating a collusive outcome on the market. One specific risk is the risk for misuse of the standard setting procedure of a company holding intellectual property rights reading on the standard. Once a company' intellectual property rights ("IPR")/technology are included in a commercially successful standard, market power will, in general, be conferred on that company. Those wishing to use the standard have become "locked-in" in relation to the IPR-holders, i.e. the IPR-holders have become necessary contract partners for all those companies wishing to produce products in compliance with that standard. This might, for example, lead to a situation where the IPR-holders are tempted to extract monopoly rents by excessive prices in violation of Article 102 of the Treaty on the Functioning of the European Union ("TFEU")². In addition, a company might even hide the fact that it has a patent reading on a future standard while the industry is discussing which technological solution to adopt and thereafter block, "hold-up", the standard by either refusing to licence this patent or charging prohibitive fees.

4. Considering the importance, as described above, of a well-functioning system for standardisation for the competitiveness of the European industry, it is crucial for the Commission to find the right balance in competition policy which allows industry, and in the end the consumer, to benefit from the inherent advantages of standardisation without allowing companies to use standardisation agreements to hamper competition (for example by foreclosing certain competitors or exploiting the users of a standard).

5. The issue of standardisation in a competition law context is a very topical one for the Commission. Not only has the Commission recently investigated several cases related to different aspects of the standardisation process, but it is also just now in the process of consulting upon draft Horizontal

¹ It should be noted that this contribution will only deal with private standards, i.e. standards which are decided upon and entered into by private undertakings and not standards mandated by government legislation.

² Article 102 TFEU prohibits abuse of a dominant position.

Guidelines³, including a substantially revised chapter on standardisation intending to give guidance to industry on the Commission's policy in relation to standardisation agreements. This contribution will, firstly, cover recent cases dealt with by the Commission in this area (Section 2) and, secondly, the changes to the standardisation chapter of the draft Horizontal Guidelines (Section 3).

2. Recent case experience

6. The Commission has, in recent years, dealt with a number of cases concerning different aspects of standardisation agreements. This section will, in particular, deal with two recent cases, the *Ship Classification case*⁴ and the *Rambus case*⁵, which have both ended with the Commission accepting commitments from the companies subject to the investigation, remedying the preliminary concerns identified.⁶ For the sake of completeness, two other cases related to standards also deserve mentioning. Even though these two cases did not lead to any formal decision, they were important in increasing the Commission's experience in the field. By raising certain important principal issues they were also important for furthering policy discussions within the Commission.

7. The *Qualcomm case*⁷, involving in particular the issue of whether certain licensing terms were in breach of a commitment to license on fair, reasonable and non-discriminatory terms (a so called "FRAND" commitment) – or in other terms, unreasonably high – raised important issues about the pricing of Qualcomm's technology after its adoption as part of an industry standard. Qualcomm is a holder of IPR in the CDMA and WCDMA standards for mobile telephone. The WCDMA standard forms part of the 3G (third generation) standard for European mobile phone technology. The Commission's investigation of this case followed complaints lodged with the Commission by mobile phone manufacturers.

8. The Commission committed time and resources to this investigation – considering in particular that this was the first time that the Commission was confronted with the legal consequences of a potential breach of a FRAND commitment – in order to assess the complex body of evidence, but did not reach formal conclusions in this case. Considering that all complainants finally withdrew their complaints the Commission decided not to invest further resources in the case which was therefore formally closed end of 2009. However, during this investigation, the Commission acquired valuable experience and knowledge about the particular issues raised by the case. This experience has fed in to some of the revisions of the standardisation chapter of the draft Horizontal Guidelines (see Section 3).

³ The draft Horizontal Guidelines can be found at the Commission's website at the following webpage: http://ec.europa.eu/competition/consultations/2010_horizontal/index.html

⁴ The press release and a link to the commitment decision can be found at the following webpage: <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1513&format=HTML&aged=0&language=EN&guiLanguage=en>

⁵ The press release and a link to the commitment decision can be found at the following webpage: <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1897&format=HTML&aged=0&language=EN&guiLanguage=en>

⁶ Commitment decisions are based on Article 9 of Council Regulation (EC) No 1/2003 of 16 December 2002, on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1, 4.1.2003.

⁷ <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/09/516&format=HTML&aged=0&language=EN&guiLanguage=en>

9. The *IPCom*⁸ investigation, which just as the Qualcomm case was based on a complaint, concerned a situation where an acquirer of IPR was not initially willing to take over the original IPR-holder commitment to grant irrevocable licenses on FRAND terms to patents essential for various standards set by the European Telecommunications Standard Institute (ETSI). In 2007, IPCom acquired the mobile telephony patent portfolio developed by Robert Bosch GmbH (Bosch) between the mid-1980s and 2000. As a member of ETSI, Bosch took part in the GSM and UMTS (WCDMA) standard setting processes. Bosch had declared that it held essential patents in the relevant standards and committed to ETSI "to grant irrevocable licenses on fair, reasonable and non-discriminatory terms and conditions" for such patents.

10. The investigation ended with a public declaration by IPCom that, following discussions with the Commission, it was ready to take over Bosch's previous commitment to grant irrevocable licences on FRAND terms to patents held by IPCom which are essential for various standards set by ETSI and UMTS. The Commission welcomed IPCom's declaration and emphasised the importance that when patents essential to a standard are transferred from one owner to another, so should any relevant FRAND commitments. Once again, this experience has also fed into particular changes in the revised standardisation chapter in the draft Horizontal guidelines. It has been clarified that there should be a requirement on all IPR-holders who provide a FRAND commitment to take all necessary measures to ensure that any undertaking to which the IPR owner transfers its IPR is bound by that commitment. The transfer of FRAND commitments after the sale of standard-essential patents is important from a competition law perspective.

2.1 The Rambus case

11. In the *Rambus case*, the Commission was, for the first time, confronted with the issue of "patent ambush," infringing the obligation on companies participating in the standard setting procedure to disclose their patents relevant to the standard before its adoption.

12. The US-based standard setting organisation JEDEC developed an industry-wide standard for "Dynamic Random Access Memory" chips ("DRAMs"). JEDEC-compliant DRAMs represent around 95% of the market and are used in virtually all PCs. In 2008, worldwide DRAM sales exceeded US\$ 34 billion (more than €23 billion).

13. On 30 July 2007, the Commission sent Rambus a Statement of Objections, setting out its preliminary view that Rambus may have infringed then Article 82 of the EC Treaty (now Article 102 TFEU) by abusing a dominant position in the market for DRAMs. In particular, the Commission was concerned that Rambus had engaged in a so-called "patent ambush", intentionally concealing that it had patents and patent applications which were relevant to technology used in the JEDEC standard, and subsequently claiming royalties for those patents.

2.1.1 The Commission's preliminary view

14. The Statement of Objections set out the Commission's preliminary view that Rambus had abused its dominant position by claiming unreasonable royalties for the use of certain patents for DRAMS subsequent to the "patent ambush".

15. As Rambus asserts patents on all JEDEC-compliant SDRAM chips and owns the proprietary RDRAM and XDR DRAM technology, the percentage of worldwide commercial DRAM production

⁸ <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/09/549&format=HTML&aged=0&language=EN>

exposed to Rambus' patent claims is thus more than 90%. Rambus has been and remains the only company asserting patents on DRAM interface technology. Every manufacturer wishing to produce synchronous DRAM chips or chipsets complying with JEDEC standards must therefore either acquire a patent licence from Rambus or litigate its asserted patent rights. There are substantial barriers to entry on the market, primarily due to the fact that the industry is locked into JEDEC standards. On the basis of *inter alia* these facts, the Commission provisionally took the view in its Statement of Objections that Rambus held a dominant position on the market at the point when it started asserting its patents and that it has continued to hold that dominant position since.

16. The Commission's preliminary view was that Rambus, in violation of Article 102 TFEU, engaged in intentional deceptive conduct in the context of the standard-setting process by not disclosing the existence of the patents which it later claimed were relevant to the adopted standard. This type of behaviour is known as a "patent ambush". Against this background, the Commission provisionally considered that Rambus abused a dominant market position by subsequently claiming unreasonable royalties for the use of those relevant patents. The Commission's preliminary view was that without its "patent ambush", Rambus would not have been able to charge the royalty rates it did. The Commission therefore provisionally concluded that claiming such royalties was incompatible with Article 102 TFEU, in the light of the specific circumstances of this case, including Rambus' breach of JEDEC policy and the underlying duty of good faith in the context of standard-setting, which resulted in a deliberate frustration of the legitimate expectations of the other participants in the standard-setting process. Furthermore, the Commission provisionally considered that such behaviour by Rambus undermined confidence in the standard-setting process, given that an effective standard-setting process is, in the sector relevant to the present case, a precondition for technical development and the development of the market in general to the benefit of consumers.

The standard-setting context and patent ambushes

17. In the Statement of Objections, the Commission provisionally considered that the specific context relating to standard-setting was important in order to properly assess Rambus' conduct. As set out in the introduction, the process of standard-setting risks leading to an anti-competitive outcome but can also have significant positive economic effects insofar as they promote economic interpenetration on the internal market or encourage the development of new markets and improved supply conditions. For these benefits to be realised, and in view of the risk of anti-competitive outcomes, particular attention must be given to the procedures used to guarantee that the interests of the users of standards are protected. The Commission has therefore outlined the type of behaviour that is considered appropriate behaviour in standard-setting organisations in certain documents. In its 1992 Communication entitled "Intellectual Property Rights and standardisation"⁹ the Commission stated that an IPR-holder would act in bad faith if it was aware that its IPR related to a standard in development and did not disclose its IPR until after the adoption of the standard. This would force its competitors to accept higher licensing fees than those which could have been negotiated at an earlier stage before the adoption of the standard. The Communication also stated that, in order to ensure that a standard-setting process yields its benefits, IPR-holders should be required to identify and report any intellectual property rights relating to a standard in development.

18. The present Horizontal Guidelines¹⁰ also provide a framework for the analysis of the effects of standardisation on competition. The Horizontal Guidelines state that standards must be set on a non-

⁹ Commission Communication "Intellectual Property Rights and standardisation", COM(1992) 445, paragraph 4.2.10.

¹⁰ Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements, OJ C 3, 6.1.2001, p. 2 ("Horizontal Guidelines"), to be found at the following webpage <http://ec.europa.eu/competition/antitrust/legislation/horizontal.html>.

discriminatory basis, and that it must be justifiable why one standard is chosen over another. By their nature, standards will not include all possible specifications or technologies and, in some cases, it may be necessary for the benefit of the consumers or the economy at large to have only one technological solution. The Horizontal Guidelines therefore stress the importance of "non-discriminatory, open and transparent procedures" to safeguard against anti-competitive outcomes.

19. Given these factors, standard-setting bodies generally adopt IPR policies which are designed to prevent or minimise the risk of anti-competitive outcomes. Such policies, including JEDEC's patent policy, generally stress the importance of good faith and early disclosure of potentially related IPR. To give effect to this policy, the Statement of Objections outlined that all members were required to disclose to JEDEC any and all issued or pending patents of which they were aware and which might be involved in the standard-setting work of JEDEC.

20. The Commission provisionally concluded that JEDEC and its members relied upon compliance with the patent policy in developing industry standards. Compliance with JEDEC patent policy, and in particular rules relating to disclosure of issue or pending patents, allowed JEDEC and its members to choose alternative technologies or to design around such potential or actual patents should JEDEC members be unable to obtain an assurance from the patent (application) holder that a licence would be available under satisfactory terms consistent with the JEDEC patent policy. The Commission provisionally concluded that the JEDEC patent policy and the underlying duty of good faith was intended to provide members with an opportunity to develop standards free from potential patent claims. In other words, the policy was aimed at preventing one member company from secretly capturing the standard by not disclosing to JEDEC that technologies being included were covered by the member's granted patent or pending patent application, and at ensuring that licences for technologies protected by patent rights included in the standard are offered to JEDEC members on reasonable and non-discriminatory terms.

21. It should be noted, however, that while the Commission considered that Rambus may have breached JEDEC's patent policy in its Statement of Objections, an actual breach of the precise rules of a standard-setting body would not be a necessary requirement for a finding of abuse in this context. The finding of abuse would instead be conditioned by the conduct that has necessarily influenced the standard process, in a context where suppression of the relevant information necessarily distorted the decision making process within a standard-setting body.

Rambus' alleged capture of the JEDEC standards and its effect

22. The Commission provisionally considered that Rambus planned to capture the standard for DRAM interface technology from the outset and that, pursuant to its business strategy, Rambus may have deliberately used its participation in JEDEC to revise and tailor its pending patent applications in an effort to gain control over JEDEC standard-compliant synchronous DRAM chips. There were a number of factors supporting that JEDEC Members were likely to have designed a "patent-free" standard around Rambus' patents had they known they existed.

23. The Commission therefore provisionally concluded that Rambus was abusing its dominant position on the market for DRAM microchip technology by claiming unreasonable royalties for the use of its patents against JEDEC-compliant DRAM manufacturers at a level which, absent its conduct, it would not have been able to charge.

2.1.2 *The Commitment decision*

24. On 9 December 2009, the Commission adopted a decision that rendered legally binding commitments offered by Rambus Inc which, in particular, put a cap on its royalty rates for certain patents for DRAMs.

25. To address the Commission's concerns, Rambus undertook to put a worldwide cap on its royalty rates for products compliant with the JEDEC standards for five years. As part of the overall package, Rambus agreed to charge zero royalties for the SDR and DDR chip standards that were adopted when Rambus had been a JEDEC member, in combination with a maximum royalty rate of 1.5% for the later generations of JEDEC DRAM standards (DDR2 and DDR3), which is substantially lower than the 3.5% Rambus was charging for DDR in the then existing contracts.

26. The Commitments extend this rate to all market participants and guarantee that industry will not have to pay more than the capped rates. This predictability and certainty has a clear value for business. Potential new entrants will also have a clear perspective of future royalty costs, facilitating a decision to enter the market. The Commission's decision confirmed that it considers the commitments are adequate to address these competition concerns.

2.2 *The Ship Classification case*

27. In the *Ship Classification case*, the Commission was confronted with a completely different aspect of the standardisation process. This case shows that, as outlined in the OECD's invitation for written submissions, problems in this context do not only arise in high-tech standards involving complex intellectual property rights. The case is also relevant in a broader context where membership in a certain association (with market power), or access to that association's products, is vital for competing on an equal footing on the market.

2.2.1 *The Commission's initial concerns*

28. The Commission's concerns were that the International Association of Classification Societies ("IACS") prevented classification societies ("CSs") that were not already members of IACS from joining IACS, participating in IACS' technical working groups (which develop IACS technical resolutions laying down requirements and interpretations to be incorporated into the classification rules and procedures of individual CSs) and, finally, from having access to technical background documents which relate to IACS technical resolutions and which are necessary to properly understand and apply these resolutions. Such behaviour would have hindered the entry and development of CSs that were not members of IACS in the ship classification market and therefore have led to foreclosure.

29. This case concerns the market for classification services for merchant ships. Classification services of CSs consist of two closely related sub-segments, classification work and statutory work. Classification is the traditional domain of CSs and covers the production of technical standards (commonly known as "rules and procedures") for ship construction, equipment, maintenance and inspection; the verification of plans and the supervision of ship construction against these rules and procedures as well as the inspection and certification of ships against these rules once in service. Statutory work covers the task of (i) carrying out the surveys of ships provided for in the International Maritime Organisation ("IMO") maritime safety conventions in order to verify compliance with the technical requirements contained in the IMO maritime safety conventions (statutory requirements); and (ii) issuing the international certificates on their behalf which attest the ships' compliance with these requirements. These tasks can be delegated by a flag state to a CS.

30. In the course of its investigation, the Commission came to the preliminary view that the ten members of IACS had a strong position on the ship classification market. The Commission based its preliminary assessment in particular on the high combined market shares of the ten members of IACS, and on the view that CSs which are not members of IACS face significant competitive disadvantages preventing them from competing effectively with IACS members. For example many flag states do not allow CSs that are not IACS members to perform statutory work on their behalf and a large number of ports do not permit entry of ships that are not classified by an IACS member.

31. In its preliminary assessment, the Commission further took the view that there may have been a restriction of competition on the relevant market in ship classification services due to IACS' decisions (i) on the criteria and procedures governing membership of IACS and the suspension or withdrawal of membership, and on the way that these criteria and procedures were applied, and (ii) on the preparation and accessibility to non-IACS CSs of IACS resolutions and technical background information relating to these resolutions.

32. Given the Commission's preliminary view that the ten members of IACS have a strong position on the market and that classification societies which are not members of IACS may face significant competitive disadvantages, the Commission's preliminary assessment was that these decisions therefore raised concerns as to their compatibility with Article 81(1) EC Treaty (now Article 101(1)¹¹ TFEU) and did not fulfil the cumulative requirements for exemption under Article 81(3) EC Treaty (now Article 101(3) TFEU). In particular, the preliminary assessment expressed the concern that, contrary to Article 101 TFEU, as interpreted by the case law of the European Court of Justice and the Commission's Horizontal Guidelines¹², IACS may have failed to: (a) enact requirements that are objective and sufficiently determinate so as to enable them to be applied uniformly and in a non-discriminatory manner concerning admission to, as well as suspension and withdrawal of, membership of IACS; (b) apply these requirements in an appropriate, reasonable and non-discriminatory way (including the establishment of sufficient safeguards to ensure such kind of application through an independent appeal/review mechanism); (c) provide an adequate system for including non-IACS CSs in the process of developing IACS technical standards (i.e. IACS resolutions), including the establishment of independent complaint/grievance and appeal/review mechanisms ensuring access to IACS' technical working groups; (d) provide for proper dissemination to non-IACS CSs of technical background information (in particular technical background documents) with regard to the application of IACS resolutions (including the establishment of an independent appeal/review mechanism ensuring access to this technical background information).

2.2.2 *The commitments and their proportionality*

33. In order to accommodate the identified concerns, IACS offered a comprehensive set of commitments including the establishment of objective and transparent qualitative criteria for membership of IACS, and guidance for their non-discriminatory application, the possibility for non-IACS CSs to participate in IACS' working groups and full access to IACS technical resolutions and related background documents. In addition, IACS committed to setting up an Independent Appeal Board to settle possible disputes over access to or suspension or withdrawal of membership of IACS, participation in IACS' technical working groups and access to IACS resolutions and to their technical background documents. These commitments open up the ship classification market to the benefit of both CSs that are not members of IACS and customers of ship classification services and enhance the possibilities for effective competition.

¹¹ Article 101(1) TFEU prohibits agreements which have the object or effect of restricting competition. 101(3) gives a legal exemption to an agreement if the prima facie restrictive effects are offset by efficiencies passed on to consumers.

¹² Horizontal Guidelines, cited above footnote 10, section 6, paragraphs 159 to 175.

34. On 14 October 2009, the Commission adopted a commitment decision that rendered legally binding the commitments offered. In its assessment of the proportionality of the commitments, the Commission pointed out that with regard to the proposed criteria for membership of IACS, the commitments strike an appropriate balance between on the one hand maintaining demanding criteria for membership of IACS, while on the other hand removing unnecessary barriers to membership of IACS. The new criteria would ensure that only technically competent CSs are eligible to become members, thus preventing the efficiency and quality of IACS' work being unduly impaired by too lenient requirements for participation in IACS. At the same time, the new criteria would not hinder CSs that are technically competent from joining IACS. Similarly, the new IACS system for participation of non-IACS CSs in the IACS technical standard-setting process would on the one hand ensure appropriate possibilities for non-IACS CSs to participate in the development of IACS technical resolutions, while guaranteeing the proper functioning of IACS' technical working groups. In addition, by granting access to technical background documents to non-IACS CSs, the commitments would also ensure full access to the results of IACS' technical standard-setting process.¹³

35. The Commission's assessment in this case was also guided by the general principles laid down in the standards chapter of the Horizontal Guidelines¹⁴. The chapter emphasises that participation in standard setting should be open to all but also that restricted membership may be permitted if the parties demonstrate important efficiencies. This is a question of proportionality and accordingly, in the ship classification case, the interest of non-IACS members in participation had to be balanced with the public interest that only highly competent CSs decide on the actual setting of a standard. Indeed, participation in IACS' standard-setting process as such had to be seen from the standpoint that IACS standards, by establishing minimum requirements and interpretations to be incorporated in rules and procedures of CSs, play an important role in ensuring maritime safety and the prevention of marine pollution. Therefore, the Commission accepted in the commitments a system which distinguishes between the right of any non-IACS CSs to actively participate in IACS' technical working groups which prepare new standards and the right to finally decide about the adoption of a new standard. This latter right was reserved to CSs that are members of IACS and therefore have passed the demanding competence test of IACS' objective technical membership conditions and are periodically checked as to their continuous compliance with these conditions. At the same time, the new design of IACS' membership criteria as laid down by the commitments ensures that anticompetitive foreclosure under the disguise of technical competence requirements cannot occur.

36. In this system, all non-IACS CSs have the benefit of discussing, influencing and learning about the details, reasons and context of forthcoming new IACS standards through active participation in IACS' working groups. This also enables them to anticipate new developments and, if necessary, to grow into higher technical competence and altogether to acquire a more solid basis for engaging in effective

¹³ The Commission's decision confirms the principles set out in the so co called EBU judgement with regard to membership of commercial associations. While associations without market power may have wide discretion about the way they design and apply their membership rules, this is different, where an association has strong market power and where non-membership of that association gives rise to appreciable competitive disadvantages. Even if membership is not open to all applicants, the restrictions in the membership rules can be held indispensable within the meaning of Article 101(3) TFEU if: (i) the membership rules and practices of that association are objective and sufficiently determinate so as to enable them to be applied uniformly and in a non-discriminatory manner vis-à-vis all applicants for membership and (ii) these membership rules are in fact applied in an appropriate, reasonable and non-discriminatory way. Judgment of the Court of First Instance of 11 July 1996 in Joined Cases T-528/93, T-542/93, T-543/93 and T-546/93 *Metropole télévision SA and others vs. Commission* ('EBU') [1996] ECR-II-649, at paragraph 95.

¹⁴ Cited above footnote 10.

competition with the current members of IACS. Moreover, those non-IACS CSs that wish to join IACS and pass the newly designed objective and non-discriminatory admission test will as new IACS members have the power to co-decide the adoption of new standards in the IACS Council.

2.3 *Conclusion*

37. The cases discussed in this section give an overview of the type of problems that may arrive in the context of standard setting. The two main examples given (the *Rambus* case and the *Ship Classification* case are interesting in comparison since they show that very different types of problems may occur. It can be equally detrimental to competition that a company "misuses" the standard setting process by hiding a potentially relevant patent and thereafter exercising its right when lock-in has occurred, as excluding relevant actors (in this case also potential entrants) from access to important information and technical input. The comparison also shows that, from a competition law perspective, certain problems may be tackled under Article 101 TFEU (prohibition against anticompetitive agreements) and others under Article 102 TFEU (prohibition against abuse of a dominant position). However, it is submitted that in the context of standard setting the dividing line between Article 101 and Article 102 is not always clear – the same fact can sometimes be relevant for both. To give an example, clear and binding rules for a standard setting organisation on disclosure of essential intellectual property rights may not only help to give the standard setting organisation legal certainty as to the fact that their agreement falls outside Article 101 (see below Section 3 about the "safe harbour" created by the new chapter on standards in the Horizontal Guidelines). It may also help to prevent companies benefiting from unclear or loose disclosure rules in misusing the system for their own benefit.

3. **The revision of the standardisation chapter in the draft Horizontal Guidelines**

38. Guidance for the competition assessment of horizontal co-operation agreements, in EU competition law, is currently given by way of two 'block exemption' Regulations (Commission Regulation (EC) No. 2659/2000 on research and development (R&D) agreements and Commission Regulation (EC) No. 2658/2000 on specialisation agreements) and their accompanying Horizontal Guidelines. The two Regulations exempt research and development as well as specialisation and joint production agreements from the EU's general ban on restrictive business practices, provided they meet all conditions set out in the Regulations. The Horizontal Guidelines provide an analytical framework for the assessment of the most common types of horizontal co-operation agreements including standardisation agreements.

39. As the two current Regulations will expire on 31 December 2010, the Commission is already at an advanced stage of the process of reviewing these rules. An initial call for stakeholder input on the overall system was made end of 2008/beginning of 2009. In this initial consultation a number of stakeholders provided comments on standard-setting. In the view of these comments, input from the National Competition Authorities and in particular drawing on recent case experience as outlined above, a substantial revision has been made to the standardisation chapter. The aim of the modifications is to, to the extent possible, avoid the type of competition problems that we have been facing in the recent cases.

40. Already the present Horizontal Guidelines contain a chapter on the assessment of standardisation agreements (providing important general principles for the assessment in both cases analysed above), setting out the Commission's interpretation of when such agreements risk infringing EU competition law. However, the draft standardisation chapter has now been substantially revised in order to reflect our recent case experience on standardisation and competition (as described above), and clarify a number of issues in particular on how to avoid that the inclusion of intellectual property rights in standards leads to an anticompetitive outcome.

41. The aim of the principles set out in the draft chapter on standardisation agreements is to ensure that standards are set in such a way that they are pro-competitive and that the specific benefits of standard-setting are passed on to consumers.

42. The revised chapter provides certain conditions (in other words a "safe harbour") for how the standardisation process should be construed in order to ensure that it falls outside Article 101(1) TFEU (i.e. does not even create any restrictive effect on competition). The general policy message is that as long as participation (as well as the procedure for adopting the standard) is unrestricted and transparent, the standard is not compulsory and access is given to a standard on fair, reasonable and non-discriminatory terms, it does not restrict competition within the meaning of Article 101(1). In more specific terms this means that the following conditions should be fulfilled:

43. First, as regards unrestricted participation and the procedure for adopting the standard, the rules of the standard-setting organisation (in particular its IPR policy) should guarantee that all interested actors can participate in the process leading to the selection of the standard. In particular, there should be no bias in favour or against royalty free standards, depending on the relative benefits of the latter compared to other alternatives. There should also be objective and non-discriminatory procedures for allocating voting rights.

44. Second, as regards transparency, the standard-setting organisations procedure should allow stakeholders to inform themselves of upcoming, on-going and finalised work. As shown by the discussion on the Ship Classification case above, there is a distinction to be made between participation in the form of membership and the broader need for transparency for affected parties.

45. Third, the standard-setting organisation's rules should aim at avoiding misuse of the standard-setting process through hold-ups and charging of abusive royalty rates by IPR holders. This should be done through a binding, clear and balanced IPR policy requiring a good faith disclosure of IPR that might be essential to the standard as well as a requirement that a particular IPR will only be included in the standard if the company provides an irrevocable FRAND commitment (i.e. a commitment to license their IPR to all third parties on fair, reasonable and non-discriminatory terms). There should also be a requirement on all IPR-holders who provide a FRAND commitment to take all necessary measures to ensure that any undertaking to which the IPR owner transfers its IPR is bound by that commitment. The unrestricted access to the underlying proprietary technology on FRAND terms for all third parties safeguards the pro-competitive economic effects of standard setting. Such effects could be eliminated if, as a result of a transfer of patents essential to a standard, the FRAND commitment would no longer apply after the IPR has been transferred.

46. The revised chapter also provides comfort for those standard-setting organisations that wish to introduce a system of unilateral ex ante disclosures of maximum royalty rates. Indeed, such a system enables those deciding on the technology to be adopted as the standard, to not only take into account the technical but also the pricing aspects and therefore enhances competition between technologies before the standard is set. It enables, the price to be auctioned down to the competitive level before the standard is selected, and the problem of artificially inflated ex post pricing as a result of the standard may be avoided. The revised guidelines therefore give the requested comfort to standard setting organisations that such systems of unilateral ex ante disclosures are pro-competitive and that DG Competition will therefore not come after such systems. However, this is not part of the safe harbour and we do not in any way intend to oblige the standard-setting organisations to introduce this system.

47. It should be noted that opposition to such schemes has been mooted in some quarters on the grounds of supposed anti-trust concerns (e.g. because "discussing" price in such a collective standards forum should be taboo). Such criticisms should not be used as a smokescreen to hinder the uptake of ex

ante type schemes. In a scenario where there are a number of substitute technologies competing to be chosen, "price-fixing" would in most cases not be a concern. Quite the contrary, since the schemes introduce a parameter of competition (i.e. on price) that has up until now not been present in standards bodies. Of course, if a certain scheme in question is simply a cover for some kind of cartel, then that would obviously be a problem, but that is then nothing to do with the nature of the scheme in itself.

48. Finally, the chapter also gives guidance on how the level of FRAND (fair, reasonable and non-discriminatory terms) could be interpreted under competition law. Our intention is to provide practical benchmarks which, in case of dispute, could be used to assess whether certain licensing fees or other terms are excessive.

49. The public consultation of the draft Horizontal Guidelines is open until 25 June 2010. It is expected that there will be many comments from stakeholders, in particular on the changes proposed in the standards chapter. The input received in the public consultation will be incorporated in the final version of the Horizontal Guidelines to be finalised for the end of 2010.

4. Conclusion

50. The discussion above shows the vast type of difficulties that may arise in the context of standard setting agreements.

51. However, a general theme in the context of standards is the importance of standard setting taking place under strict conditions of openness and transparency. Once a standard has been adopted it might, if successful, completely change the competitive landscape. It is therefore increasingly important not only that access to the decision-making process but also to the result of the standard is ensured. An effective standard-setting process should take place in a non-discriminatory, open and transparent way so as to ensure competition on the merits and to allow consumers to benefit from technical development and innovation.

52. Given the increase in patenting and the number of standards which incorporate protected technologies, a lot of the recent debate has focussed on the best way to construct the intellectual property rights policies of a standard-setting organisation. In fact, a patent essential to the implementation of a standard may have a much higher value once the standard has been adopted than it has ex ante. This can therefore create an incentive for the patent holder to attempt to extract the ex post rather than the ex ante value of his technology. There is therefore an important pro-competitive rationale behind, as in the Commission's draft standardisation chapter of the Horizontal Guidelines, requiring disclosure of patents and patent applications in the framework of standard-setting before a standard is adopted.