

## THE INTERFACE BETWEEN ANTITRUST LAW AND INTELLECTUAL PROPERTY RIGHTS IN STANDARD SETTING ACTIVITIES: THE ROLE OF INTERNAL REGULATIONS\*

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### 1. Towards private management of the standardisation processes.

In the complex interface between antitrust law and intellectual-property rights, the theme of voluntary standardisation bodies has become particularly relevant and has attracted the attention of political, academic and technical circuits, especially in north America. The *standard setting organisations* (SSO) today represent key variables in the world economic arena: standardisation activity permeates numerous (and different) economic contexts, assuming a fundamental role primarily in the *Information and Communications Technologies* sector (ICT). Globalisation of markets, the growth and development of parties present in the electronic communications sector (above all following liberalisation), greater availability on a planetary scale of communications networks, have multiplied the need for standards guaranteeing compatibility and interoperability among the diverse technological solutions.

Although the processes for establishing technical norms were originally operated by specifically-delegated international structures, these have now begun to be guided into various economically-developed areas. Principally following the impulse generated by liberalisation in the electronic communications sector, but also due to technological convergence, the process of standardisation is taking a regionalised direction whose various relapses, even from a juridical point of view, are evident and have led to a divergence in the relative processes. In the US, the tendency is to leave the management of standardisation processes to those directly involved in the digital revolution. In Europe, however, the process has been conducted principally by supranational administrative standard organisations which (in pursuing the objective of Common Market integration) have often conditioned the definition of technical norms. Aside from the fact that there have been certain incontestable successes (for one, the establishment of the GSM standard for second-generation mobile telephones), a realisation has been mounting that too-heavily bureaucratic structures –under the command of public authorities– may mean chronic delays in the management of processes which in actual fact require speed so as to keep pace with rapid technological development. Amongst other things, the political connotations of standardisation activities (coming together in the structures specifically-designated for such activity) have contributed to strong friction in transatlantic relations. *The Transatlantic Business Agenda* (TABD) has suffered difficult moments that have made for a crisis in international relations between the two areas. In other words, the standard has acquired notable strategic weight in the international sphere: it has become an instrument for

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protection and conquest of markets, so much so that the OCSE sees in standards one of the most insidious forms of *non-tariff barrier*.

In this context (as has already been mentioned) the European Commission has intervened more than once during 2003 in order to underline that the voluntary processes of establishing norms must be further encouraged in the direction of convergence in terms of economic and technological integration both inside and outside the European market. By emphasising the role of primary importance played by European organisms such as ETSI, Cen and Cenelec, the Commission has assigned to operators the prime objective of reaching interoperability amongst the various platforms. The New Regulations for Electronic Communications have set out in this direction, a tendency which will be one of the key points of the *eEurope 2005* plan.

The industrial sector has been encouraged (for example in digital terrestrial TV and third-generation mobile phones) to use open APIs, thereby assisting the standardisation process and conferring a mandate on the European bodies for the establishment of norms. This is the reason why the subject of standardisation and the intersection between intellectual property and competition is bound to become of particular relevance also in Europe. The passing of the process (at least theoretically) from government to private structures should be welcomed, but it does necessitate careful reflection on the part of the EU structures, amongst which the European Commission and the European Patent Office. If there are subjects within a consortium who operate at the same level of the value chain, there is the risk of collusive practices and serious anticompetitive behaviour which could counterbalance the advantages a *market-driven* standardisation would bring. Let us therefore attempt to understand what distortions may occur and why *ex-ante* intervention to limit them may be opportune.

## **2. Benefits of voluntary standardisation bodies and antitrust risks.**

In an ever-more technological society, the need for apparatus and networks compatible and interoperable amongst themselves represents an absolutely central knot to untie; the specifically-designated structures permit the efficient management of the ample patent portfolios held by many companies active in the ICT sector. Standardisation consortia can represent an elective option for reducing transaction costs and *hold-up* problems linked to the presence of and the exercise of numerous exclusive rights on products or processes. The north American *Patent and Trademark Office* and the European Patent Office have often reiterated that (both in the US and Europe) requests for patents have increased considerably in the last few years, giving rise to the so-called "*patent race*". The presence of numerous property rights which are complementary and possessed by different subjects may slow down the innovation processes, even reaching a paralysis of standardisation processes and their associated research and development. Through a more efficient management of intellectual property rights (IPR) held by participants, consortia are able to avoid the risk described five years ago by Professor Heller and known as "*The Tragedy of the Anticommons*", in which excessive protection granted by IPRs has caused the resources to be *underused*.

The benefits that can be gained by opting for this type of establishment of norms are numerous. Economic literature has pointed them out on many occasions (Swann 2000). In extreme synthesis: the standards defined, beyond assuring interoperability and compatibility amongst diverse networks and products, generate results external to the

network which benefit both the producer and the consumer. The standardisation process also leads to the exchange of information amongst producers and (aside from pathological situations which alter the dynamics of the market) consequently can prevent the wasting of resources, especially if standardisation follows a research and development phase. The process can therefore generate incentives to innovation – through suitable remuneration to the participants– because of the possibility of recouping investments in standardised products or processes (and protected by intellectual property rights) once they have been put on the market. Finally, and always assuming that the activity is sound and not tainted by anticompetitive behaviour, the risks of technological obsolescence may be reduced.

The process by which standards are defined, however, may be affected by strategic evaluations rather than reasons of efficiency. Success or failure in the choice of a standard determines the future market conditions which businesses will have to face.

Through a decrease in the variety of products or processes available, the standardisation process may in fact lead to a restricted choice for consumers. It may also lead to the loss of technology with superior characteristics: producers who fail to impose their own standard may suffer an increase in the operative costs required in order to guarantee compatibility with the ‘winning’ product or process. This increase in costs may force competitors off the market and decrease competitiveness.

Essentially, once the organisation has been formed, threats to the competitive process and their relative need for careful attention will concern three orders of subjects: 1) precisely those subjects belonging to the organisation, because of the dangers of collusion that arise from membership in the body; 2) those still outside the organisation who intend to become part of it, because of the blocking strategies the *incumbents* may use; 3) those who simply need access to the technology, guaranteeing themselves licences for the relative intellectual-property rights.

In such a context, the anticompetitive risks usually recognised as an effect of belonging to the *standard setting organisations* are traceable to three categories. In the first place, such organisms can facilitate collusion amongst participants. In other words, they can represent the opportunity for those involved (by means of exchanging information) to fix prices and quantities produced. In addition, the organisation can impose restrictions on the typology of products or services provided, leading to higher prices. Lastly, the *standard setting organisations* can restrict to an excessive degree the diversification or quality offered and thereby the range of choice for the consumer.

As the north American experience demonstrates, the question of anticompetitive conduct within the SSOs is rather complicated in that the very procedure of development and selection of the standard implies cooperation amongst the participants. This not only implies but at times leads to or hides forms of coordination which may fall within the prohibitions of competition laws (in regard to which it is not always possible to draw an absolute line between the legal and the illegal).

This first data suggests a consideration for industrial policy that should have effects at the level of the treatment of laws, regardless of the direction authorities at a national or European level decide to follow. In other words, a too-rigid or aprioristic evaluation of the organisations in question could be exaggeratedly restrictive and therefore create snarls in the organisational activities of the same. On the other hand, an exemption by category would not succeed in avoiding anticompetitive problems entirely.

Amongst the many aspects to consider for the purpose of antitrust evaluation there are certain behaviours which definitely fall within the prohibitions regarding laws (articles

81 and 82 of the European Union Treaty) and with respect to which the instrumental activities of the SSOs cannot be expected to eliminate the risks implied. The exchange of information amongst competitors regarding prices, costs, sales and distribution of products or processes may constitute a symptom of restrictive competitive behaviour instead of a *plus factor*, above all when implemented within oligopolistic markets, which may be those to which the standardised technologies refer. Therefore, although the risk of behaviour which is potentially damaging to competitive processes and ultimately to the consumer cannot be completely averted within the SSOs (by their very nature and by the activity performed), it is quite possible and certainly desirable to establish an orientation which attempts to define under what conditions this behaviour becomes illegal to all effects and as such must cease.

In view of this –even though recourse to private standardisation organisms is to be encouraged– it is also necessary to reflect upon certain aspects that allow spontaneous coalitions to reach expected results in a licit manner. It appears that competition laws at the European Union level do not in fact have a trustworthy response. The Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements (Guidelines) still appear too scanty to form a reassuring guide, especially for subjects intending to effect a standardisation activity in the sphere of voluntary consortia. The Commission has yet to intervene so as to furnish a framework which will regulate the more delicate aspects, with a view to its insertion into consortium statutes. Still, by leaving to the statutes (and therefore to the will of the participants) the task of governing the range of difficulties which we have only sketched out, there is the risk that these difficulties will not be adequately taken into consideration by the participants and that the way will be open for strategic and anticompetitive behaviour which calls for *ex-post* intervention on the part of organisms designated for market protection.

### **3. The importance of consortium regulations.**

The north American experience, certainly more mature than the European one, has outlined the importance of having consortium regulations which govern all those aspects which are potentially able to generate anticompetitive risks. As has already been emphasised, over the last few years the US has witnessed an ever increasing growth in the number and type of standardisation consortia. However, comparative studies into consortia statutes have underlined the regulations drawn up regarding those bodies' working procedures, the processes for defining standards, as well as managing intellectual property rights, are frequently misunderstood. In such cases, and in relation to the key aspects no regulation was found. This fact is even more worrying when it is considered that the standardisation consortia are often made up of subjects operating at the same level within the value chain (horizontal competitors), where the risk of anticompetitive conduct dramatically increases.

It should also be remembered, as far as intellectual property rights are concerned, as it cannot be ignored, the subject holding standardised technology rights has an advantage point when acquiring relevant market power. In other words, the business of standardisation can make those holding IPRs earn the market power which individual exclusive entitlement rights does not normally account for. In such a perspective, the risk which managing intellectual property rights is adopted within a key strategy, has been shown as (especially in the US) something more than just a vague chance.

This is why those organisations which are called upon to define the standards, must have clearly defined regulations on the consortium's participating and working procedures and also with regard to managing intellectual property rights. Conflicts or omissions in the management of such rights can lead to paralysing the standardisation process or generating serious anticompetitive effects. In other words, the value of statutory guidelines which are not clear can badly influence such activities presented to the consortium, thus causing *ex post* the risk of antitrust intervention. It is therefore timely to define certain aspects, to be added to the consortium statutes, which can represent a guide to those involved to be able to start correct standardisation procedures, and with time reduce the risks of investigations aimed at tracking down anticompetitive practices.

Going exclusively by those statutory regulations freely defined by the participants has numerous advantages, but does pose just as many risks. Relevant to this is the north American experience which offers the chance to reflect the political legislative choices which is best to use, as well as the fact that it is necessary to have a legislative *level playing field* which is accurate and common to all interested parties, leaving for the time being that the consortia regulations can only answer some problems.

It is probably timely at this point to confront a series of situations which influence the standardisation procedures: the interested parties' participation, with relevant access or refusal options, standard selection processes, access to such information, clear and detailed norms on the management of intellectual property rights, as well as assembly voting procedures are just some of the critical aspects which should be looked into. Let's try then to analyse the most relevant in more detail.

#### Consortia membership:

The aspect of consortia membership is of fundamental importance. The exclusion of one player in the standardisation process can provoke serious anticompetitive risks. The competitor excluded by the consortium, in fact, will not have the chance to influence the definition of the market standard. Just as soon as the standard is put onto the market, it will presumably have to stand *re-authoring* costs, being made to bear the expenses due to paying *royalties* on those technologies (protected by IPR) which are part of the standardised product or process.

With this in mind, the selection process of a particular standard, in addition to reducing the number of the following substitutes, could provoke *raising rivals' cost strategy* (Krattenmaker and Salop, 1986), putting those businesses who do not have access to the body at an even greater disadvantage. The solution which appears to surface would be to guarantee access to anyone who asks to join the consortium.

Taking a closer look, however, it is not feasible to predict that all consortia should be forced into an *open access* policy. This observation takes on particular relevance especially when concerning those consortia which are involved in a research and development activity, leading up to the definition of a standard. In these cases there is the risk that some subjects might have an interest in becoming a member of the consortium, but in fact they actually only intend to capitalise by *free-riding* on other people's resources. Should the consortium carry out research activities, the *open access* policy, which would certainly offer protection against risks of antitrust nature, does not seem to represent the most convincing solution.

In the US, the *membership* problem, first came to light during the *Allied Tube* case (cfr. *Allied Tube & Conduit Corp. v. Indian Head, Inc.* 486 U.S. 492, 1988), where the

strategic and anticompetitive value membership was highlighted. The exclusion of a participant, *Indian Head*, manufacturer of PVC material for electric cables, stopped them from offering their goods as standard for the market. The Supreme Court sanctioned the conduct and from then onwards the American courts and agencies, when evaluating the anticompetitive nature of exclusion, increasingly resort to the *rule of reason* approach, each time putting into practice an investigation to verify whether the consortium members were horizontal competitors and whether or not their membership contributed to their market power.

As far as the European regulations are concerned, it is important to remember the Guidelines on horizontal cooperation agreements state that a considerable part of the sector's participation must be completely transparent when defining a standard. In addition, the possible exclusion must justify itself by demonstrating that somebody's membership would cause serious inefficiency.

Although the regulations do not appear to be particularly precise, it does seem possible to sustain that those organisations called upon to define standards must clearly layout the conditions regarding membership rules. The consortia must be able to guarantee the widest membership possible in relation to the aims to meet. If the competitors are horizontal, if the consortium grants market power to the standard protected by IPRs and if there are no valid economic reasons which make the exclusion legitimate, access has to be guaranteed to anyone who applies. However, principally when research and development activities have to be undertaken, objective criteria can be identified, added to the statute so that the necessary resources are commonly available. For this reason, the exclusion must be justified based on such regulations and not on discriminatory personal judgment.

#### *The voting mechanism:*

Closely linked to the consortia membership subject, is the aspect of voting rights. It is obvious, in fact, that guaranteeing membership to whoever applies for it, but not allowing members to exercise the effective faculty of deciding, through voting rights limitations, does not seem to be a particularly satisfactory solution, especially if such a limitation is carried out arbitrarily. The consortium statutes, in fact, can establish that the voting rights is awarded exclusively to some members, guaranteeing them the chance to influence the standard definition process.

Such a possibility is aggravated by recognising that certain consortium statutes declare that membership to the organism entails a *fee*, according to which differing member *status* applies (eg. *full member* or just *supporter*). Such a mechanism, normally recognised with the formula "*pay to play*", can represent another means for selecting '*new entries*', limiting access to those parties who are not able to afford the substantial sums which are frequently asked for.

Other regulations which assign differing voting rights are found for example within the ETSI statute which has two voting mechanisms: *weighted national voting* and *weighted individual voting*. In those cases where individual countries are asked to vote, the procedures adopted by ETSI mean the national delegations practice their joint voting rights. Every country has voting rights based on a pre-established grid: this implies that those countries with more developed economies are given greater decision-making weight compared to those with a lower GNP. Should, on the other hand, voting be individual, voting rights are assigned proportionally to the market share held. It is obvious that such decisional mechanisms can have the effect of perpetuating dominating

situations, guaranteeing more developed countries and businesses with greater sales volumes the power to lead EC standardisation. The problem appears to be of practical relevance also and especially for voluntary organisations, particularly where the organisations' statutes use proportional voting rights based on their market share.

In conclusion, as the Guidelines don't specify differently, it seems possible to sustain that voting rights should be attributed on a non-discriminatory basis. Possible limitations of this right (e.g. voting mechanisms gauged according to market share held or subscriptions paid to the consortium) should be carefully evaluated and admitted by the consortium only when it has to provide, according to circumstances and nature, a logical justification as well as being economically appreciable.

*Duty to disclose:*

Within the scope of managing intellectual property rights, an aspect which necessitates being taken into close consideration is the one which relates to the *disclosure* of IPRs. In other terms, to enable the consortium to rationally operate those choices relative to the standard as well as the various parts which it is composed of, the consortium members must inform the other members about the IPRs held. This obligation must be carried out before the standard is defined and available on the market.

In this case the risk of strategic behaviour by the owners can generate problems of an antitrust nature both for the consortium members, as well as third parties. Emblematic of such a proposal is the *Dell* case. This north American firm claimed, during standardisation phases, to not be the owner of any intellectual property right on a product in the process of being defined. When the standard was put onto the market, however, Dell declared it had IPRs on the standard and therefore wanted to exercise its exclusive rights over other members. This controversy was resolved by the *Federal Trade Commission* which imposed upon the firm the obligation to not enforce any IPR on the standard, forcing to give away the licence on a royalty-free basis to whoever asked for it (cfr. *In re Dell Computer Corp.*, 121 F.T.C. 616, 1996 FTC LEXIS 291).

This case highlighted that the *disclosure* obligation must be included within the consortia statutes, thus limiting the opportunity for strategic behaviour. However, the simple obligation is not able to guarantee that anticompetitive conduct is kept in check. For this reason it is timely to identify deterring mechanisms which limit disrespect for the regulations. With regard to this, it has been emphasised that the *disclosure* obligation must be accompanied by a regulation which obliges owners to give away licences on a royalty-free basis if IPRs are concealed during the standardisation phases (Lemley 2002).

It is helpful to add that the statute should also discipline a series of aspects connected to the *disclosure*: the charge of research into the IPRs and the moment when the consortium is informed. As far as the first aspect is concerned, research costs can turn out to be excessively burdensome when one realises the considerable patent portfolios held by those companies active in the ICT sector. In this case, research can be carried out by the consortium or taken on board by individual members. Should this research be left to the members, it has been underlined that the task may become complex, as well as costly, and be a disincentive to the organisation's participation. The opposite is relevant, however, in the case where the statute calls for the task to be handled directly by the consortium, necessitating financing and qualified personnel.

To what extent, at that moment, the *disclosure* is actually put into effect, is extremely complex to establish if the obligation is absolved during the initial phases of the

standardisation process or later on. During the initial phases, in fact, the standard has not yet been defined and there can be uncertainties concerning the components (protected by IPR) to include (so-called essential patents). However, some consortia call for the expression *timely*, which implies the *disclosure* must be put into effect before the conclusion of the process.

Finally, the IPR *disclosure* problem, as well as those aspects related to it, necessitate being included within the statutes. Vague and sketchy regulations can cause strategic behaviour, posing the risk of antitrust authorities intervention. It is additionally necessary to mention that articles 81 and 82 of the Treaty do not seem to represent particularly effective instruments. Article 81 would in fact be used in the case where several parties agreed to not put the *disclosure* into effect; while article 82 could only be used if the party who hadn't respected the consortium regulations committed an abuse having a dominant position.

#### Exchanging licences:

Another aspect which is of prime importance within the scope of managing intellectual property rights is the one concerning members exchanging licences.

The consortium members are usually obliged to concede the licence to the other members and/or third parties based on certain conditions. The consortium statutes usually take recourse to the FRAND convention, acronym which identifies the formula *fair, reasonable and non discriminatory* terms, and which can be also be found in the Guidelines on horizontal agreements (cfr. § 174). The regulation intends to limit the risk that the IPR owner can ask for particularly high *royalties* regarding the technologies involved within the standard. This aspect, that cannot be scrutinised here, is of particular relevance since when the owner is asked to guarantee the licences on those IPRs held, the very function of the intellectual property rights can reach a crisis, that's to say promoting innovation. Additionally, regulations which are particularly restrictive, which limit the opportunity of reaching a satisfactory level of royalties for the owner, can be seen as a disincentive to participate in standardisation bodies (and to the definition of open standards), creating, in the meantime, the incentives to obtain a more lucrative *de facto* standardisation.

Based on this, it is particularly complex to establish when the licence level is *reasonable*. The owner has the right to sufficient remuneration, but determining the details is difficult and resorting to the FRAND convention does not help in providing definitive answers. It has been sustained that the *royalty* level must be in proportion to the technological improvement brought by the standard (in innovation terms) and not influence other variables. However, it has been highlighted that the price of the licence normally also calculates the value deriving from network effect produced by the standard. In other terms, the price paid to obtain the licence can be high since consumers attribute a value to the goods which partly derives from the possibility of sharing it with others. This idea often generates a price increase for the licence, which should not be included in the *royalties* and asked for by the owners (Patterson 2002).

Generally, however, it is possible to sustain that the *royalties* level precedes the standard entering the market and that the owners acquire market force. Should the royalties be established later on, in fact, the risk that they are considered excessive dramatically increases. In this case, the EC and national antitrust authorities, have demonstrated having serious problems in identifying and sanctioning an excessive price.



This means a careful and complex evaluation of the problem and the relevant authorities do not seem to have the necessary resources in order to efficiently absolve such a task. Finally, it seems possible to sustain that the consortium statutes must create the most favourable conditions to allow negotiations within the consortia, e.g. to give them an incentive to create *patent pools*, avoiding royalties being determined based on the standard put onto the market.

*Internal arbitration mechanisms:*

An aspect which should be taken into close consideration regards the creation of a mechanism concerning internal arbitration within the consortium, which basically represents help during the most critical phases of the standardisation process.

Resorting back to an arbitration system could turn out particularly useful should the negotiation between members, aimed at defining the *royalties* level, not end successfully. In these cases it would be possible to transfer the establishing of the royalties to an internal structure within the consortium, thus avoiding stopping the entire standardisation process.

This structure should be made up of parties who have no specific interest in the definition of a given standard, but have the skills, including legal, to be able to settle internal controversies, as well as the supervisory role over the entire process. This way, all more delicate aspects concerning establishing royalties on licences, would be handled by a structure which could limit the exchange of sensitive information between members.

A similar mechanism could turn out to be particularly useful even should a member violate the consortium regulations. In this case, the violation would be sanctioned before the standard was defined and put onto the market, and the consortium would have, in the most serious of cases, the chance to choose to develop a different standard. Sanctioning mechanisms could also become established, which cater for the liquidation of damages suffered by the consortium and, in the most serious of cases, provide for the exclusion of members.

In the absence of such a mechanism, in the case where members cannot define the *royalties* level, the courts or antitrust bodies must tackle the issue (in the case of complaints of excessive pricing) although they do not appear to be particularly equipped to intervene as regulators.

*Compulsory Licencing:*

The subject of the compulsory licence within the scope of intellectual property rights takes on an important role. The compulsory licence is the legal instrument used to oblige the patent owner to concede the licence to third parties, guaranteeing however payment with a certain mark-up. This institute, deciding the solution for strategic behaviour, must however only rarely be used. The basic principle lies in the fact that a party can obtain a licence on an involuntary basis only to produce and market a different product compared to the one protected by IPR. The EC survey – for example cases like *IMS* and *Magill*—highlighted, however, the fact that resorting to the compulsory licence is both a complex exercise and possible only upon verifying certain special conditions. In any case, even should it be possible to track down the legal hold in order to justify resorting to the compulsory licence, for example to the *essential facility doctrine*, the mechanism cannot lead to an application extended to such a solution. The use of the institute should therefore be as limited as possible. Only in exceptional cases can it

represent a reliable solution. Ample resort to such an instrument could represent a disincentive to membership. It is therefore preferable that the parties negotiate for the exchange of the licences and for establishing *royalties* and that this task is not given over to the courts and bodies placed to protect competition.

*The standard selection process:*

Finally, still aiming to avoid any activity put in place in the consortia from provoking anticompetitive behaviour and having to ‘ask for’ *ex post* the antitrust authorities to intervene, it seems timely to predict that the process includes non-discriminatory, open and transparent procedures. On this subject, it seems correct to add to the statute, regulations which impose various structures within the consortium to preserve all the documentation regarding the business of standardisation. Diaries, minutes taken at meetings, as well as any other relevant document should be available and consultable at any moment by third parties, provided they do not have any specific interest in the consortium’s aims. Additionally, the standardisation body’s aims should be clearly worded in the statute. Ulterior motives regarding standardisation procedures should not be included or, through exchanging information for their very realisation, anticompetitive aims are nurtured and the risk becomes more than just a remote possibility.

#### **4. Conclusions and policy guidelines.**

The previous paragraphs have covered a broad spectrum of issues that are deemed to be highly critical for the evolution of the *information and communication technology* industry in Europe, in particular in its most recent innovative trajectories, the third generation mobile telephony and digital terrestrial television.

In particular, we traced a path of possible evolution of the European legislation regarding antitrust discipline for standardisation activities, in order to ensure the virtuous co-existence of very different and often orthogonal requirements and instances: on one side the necessity to ensure the rapid and efficient coordination on single, open and interoperable standards, on the other the necessity to sustain and foster innovation through the appropriate attribution of intellectual property rights and, finally, the necessity to make such activities compatible with antitrust legislation.

Obviously, the intersection of these issues defines an extremely rich political agenda although, at the same time, the space for intervention is relatively limited. The success of a European model in standardisation activities, together with the information industry in its entirety, is in fact connected to the European institutions’ ability to strike an extremely delicate balance among the abovementioned issues. It should also be brought to attention that the final outcome of any normative innovation discussed here, firmly depends on the contextual ability face two problematic profiles which are the backdrop to this general outline: one clear political direction in the matter of software patentability and an effort towards defining the procedures for attributing, protecting and managing digital rights on contents. The definition of a clear and consistent framework in these subjects will significantly contribute to the realisation of a successful European model for standardisation activities.

The guidelines developed in this paper are based on the analysis of the economic nature of the standardisation processes. In particular, we have tried to show how the *standard setting organisations* can represent a threat to the competitive process for two main reasons: one set of reasons abides by the nature of the standardisation activity while a second set abides by the fact that some management practices aimed at improving the efficiency of the standardisation process itself, with particular reference to the management of intellectual property rights, can eventually be perceived by antitrust authorities as anticompetitive activities.

The first set of reasons fundamentally involves three orders of subjects: those who belong to the organisation, for dangers of collusion ; those who, although not belonging to the organisation, intend to join, due to discriminatory behaviour which the incumbents can put in practice and those who quite simply need to access the technology through the attribution of licences.

The second set of reasons, as was said, is related to the strategies with which the *standard setting organisations* and their members try to minimise transaction costs and to improve their managerial efficiency. Strategic behaviour founded on exercising intellectual property rights, such as *cross-licensing* and *patent pooling*, described in the first chapter of this text, certainly resemble a typology of horizontal agreement which is bound to be under close scrutiny by the antitrust authorities. Likewise, mandatory FRAND licensing can be alternatively seen as a price fixing strategy or as a discriminatory practice, as in the extreme case of *collective boycott*, with which the *standard setting organisation* tries to avoid including any patented technology (and relative *patentee*) into the standard. On this basis, we have discussed the inadequacy of the current antitrust legislative framework: the *standard setting organisations* are limited in their ability to abridge the necessity to preserve innovation incentives with the need to converge efficiently on the definition of an open and interoperable standard from the fact that the current antitrust discipline does not sufficiently clarify, *ex-ante*, which practices and agreements are to be considered legitimate and in what form.

This reflection outlines an industrial policy issue which cannot be neglected in any effort to reform the current legislative framework, whichever the direction both the national and European authorities decide to take. An evaluation which is too rigid or pre-conditioned of standard setting organisations could be exaggeratedly restrictive, consequently, ensnaring that organisation's activities. Alternatively, exemption by category would not be able to avoid all anticompetitive implications.

These aforementioned aspects, aimed at antitrust evaluation, are found within the normative prohibitions (art. 81 and 82 of the European Union Treaty); these latter are not sufficient to eliminate the risk that they are misperceived. The European *Guidelines* on applying art. 81 to horizontal cooperation agreements do not offer, in the authors' view, sufficient consistent reference for those intending to spontaneously form a coalition with the aim of defining open and interoperable standards. The European Commission's policy is mindful of delegating to single consortia's statutory regulations the task of providing a regulatory framework for the more delicate aspects involved in the standardisation procedures, which we have examined. This approach, however, is seriously exposed to the risk that the relevant dispositions are not included in the statutes or that they are not given sufficient weight and relevance in the negotiating and arbitration process, resulting in a favourable environment for anticompetitive conduct and consequent intervention *ex post* by the antitrust authorities. For these reasons it is timely to thoroughly evaluate a series of variables which decisively determine the

procedures with which the standardisation procedures are carried out: membership rules, with the relative access or denial procedures, standard selection processes, access to the relevant information, clear and detailed norms on managing intellectual property rights and, in particular, on the *cross-licensing* and *patent pooling* agreements, as well as assembly voting procedures are just some of the critical aspects that need to be tackled.

From the reflections proposed on these pages it seems obvious that the attention is to be put on the standardisation process and the consortia regulations which discipline members' activities. Missing to include in the statutes the norms to regulate the aspects which have been mentioned, would dramatically increase the probability of recourse to the Commission to settle the (complex) controversies. In this view, we also tried to emphasise that the definition in the statutes of clear and detailed procedures represents, first of all, a guide for operators, limiting the risk of anticompetitive conduct. Leaving the operators the option of freely disciplining the various activities, as well as managing intellectual property, increases the risks to anticompetitive deviations. Contrarily, the definition of clearly defined rules giving the consortium, through arbitrate mechanisms, the chance to stamp out anticompetitive conduct seems to represent the preferable option. This is why it appears relevant that the statutes include all the most critical aspects. Under this perspective, it is advisable, for the European Commission, to recommend to whoever intends starting a technical standardisation activity within the scope of a private consortium, the adoption of guidelines which are useful in managing standardisation processes and, at the same time, antitrust compliant. Such guidelines (to be incorporated into consortia's statutes) would also remarkably reduce the risks of anticompetitive behaviour in the management of intellectual property rights.

A solution of this nature would also be useful to the organisms which grant clearance (ex Art. 81, par. 3) regarding standardisation agreements: the Commission would lighten its task and the recourse to comfort letters would be facilitated. Amongst other considerations, at the moment when antitrust organisms intervene so as to investigate alleged misconduct, a declaration that clear and non-discriminatory procedures were respected during the standardisation phases could represent a presupposition regarding the correctness of the procedure.

Under these terms, it seems possible to conclude by affirming that the guarantees for the correctness of such procedures should be provided first of all by the consortia themselves through statutory norms. As yet, the Commission has not intervened to regulate the complex relationship between the management of intellectual property rights and standardisation, but has limited itself to providing recommendations primarily for recognised European organisms (see COM 445/92). In consideration of the fact that the standardisation processes can and have to be managed by private industry coalitions, it seems advisable to reflect upon the aspects which may give rise to potentially serious distortions. Simply resorting to the Guidelines for horizontal agreements, and to the regulations on competition in the Treaty, can hardly elicit an enthusiastic response. The legislative framework and the instruments in the Commission's hands do not appear to be those most suitable for guiding privately managed processes. In the light of these considerations, it seems advisable for all the parties involved (amongst which the Commission and the European Patent Office) to reflect together upon the matter, in order to begin a serious confrontation about the critical situation arising from the intersection between standardisation, management of intellectual property rights and antitrust discipline. In relation to the key aspects and in

consideration of the anticompetitive distortions that may be generated, it is foreseeable that statutes may be regulated through the obligatory insertion of various regulations. It also seems that the moment for doing so can no longer be delayed.

The spirit of the reform is extremely transparent: to provide *ex-ante* a clear regulatory framework within the scope of which companies are as free as possible to organise and coordinate themselves spontaneously, in order to define compatibility standards. The antitrust legislative framework is inspired therefore not to the idea of imposing new rules and constraints to standardisation activities, but rather to the principle of providing, *ex-ante*, a clear regulatory context, within which the companies' activities are limited as little as possible by the threat of *ex-post* intervention by the antitrust authorities. The prospected action of innovation of European antitrust legislation appears to be the most favourable timing for revising the specific aspects of discipline related to standardisation activities.