

# Standardization and Intellectual Property Rights: ETSI's controversial search for new IPR-procedures

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## Abstract

*During the early 1990s, several international standards development organizations including the IEEE re-approached how they deal with intellectual property rights. The search for new procedures by SDOs is a function of comprehensive institutional and market changes associated with the rapidly evolving ICT field. The changes affect both how formal standardization and how IPRs work in this field. In this note, the changing relationship between SDOs and IPRs will be approached in terms of the protracted controversy that has surrounded ETSI's attempt to depart from traditional IPR procedures in favor of more detailed ones. This case-study incorporates many of the forces marking the changing ICT-field that contribute to the 'new environment for standardization'. The study is based on interviews and a study of the theoretic and institutional literature.*

**Keywords:** Intellectual Property Rights, Standardization Procedures, Development Organizations, ETSI

## I. INTRODUCTION

In November 1994, the General Assembly of the European Telecommunications Standardization Institute (ETSI) adopted an IPR Policy after more than five years of divisive debate.<sup>1</sup> This was the second time the 6 year-old institute had adopted a policy addressing the risk that the development of technical standards might strand on proprietary technology. The previous policy, which had been adopted in March 1993 after 4 years of debate within the institute, had been abandoned in the face of strong legal and political resistance. What otherwise might have discounted as an institution's internal procedures became the subject of a legal Complaint lodged under

<sup>1</sup> See the notice (95/C 76/05) in the EU Official Journal (28.3.1995).

EU's competitive law; further, it led to a series of formal protests from ETSI members threatening to quit the formative institute. Moreover it became the subject of intense political pressure from the USA and a series of diplomatic incidents which is rumored to have included the executive level. The '93 policy like its follow-up was only an 'interim measure'.

The exceptional proportions of this controversy and the fact that it was sparked by changes in the internal procedures of a 'voluntary' organization is quite striking. It is the more striking in light of the minimal procedures that had been developed by other SDOs to deal with an eventuality of which they had had no real experience. In this paper, we will investigate this controversy and argue that the relationship between intellectual property rights and standards development organizations is under strain as a function of the changing ICT environment. We note here that other SDOs including the reformed ITU-T and the IEEE were at the same time re-evaluating their IPR procedures. We will also consider aspects of ETSI itself that have made compounded the IPR risk.

### A. The inherent tension

The relationship between IPR-regimes and SDOs is a complex and a changing relationship. Underlying it, however, is an essential opposition. In this section, we shall focus on this essential opposition to the exclusion of the complexity of the interactive and dynamic relationship in order to present the conflict it gives rise to.

The inherent tension between SDOs and IPRs grows out of the fact that these institutions perform functions that are— in terms of the innovation process— complementary to one another. According to conventional analysis, IPRs (particularly patents) are generally envisioned as 'appropriation mechanisms' whose dominant characteristic it is to create an incentive for private R&D where the market does not. [e.g. Arrow, 1962] As a result, IPRs are most characteristically identified as a promoter of a diversity of technological ideas. Formal standardization is found in the opposite corner in this

purely schematic presentation. SDOs characteristically function as 'selection mechanisms' to narrow the diversity of network technologies in order that the industry can take advantage of network externalities [e.g. David, 1987]. Ideally, they work in the collective interest of all actors.

IPRs and SDOs can therefore be said to hold key positions in the innovation process, where this process is envisioned in quasi-evolutionary terms. In this view, "evolution is the result of two seemingly contradictory processes: the creation of variety and its successive reduction through selection. Effective long-term adaptation requires that these two processes be kept in balance." [Carlsson & Stankiewicz, 1994] In general terms, IPR-regimes are construed as facilitating the continuous generation of technical variety. However, because, "Variety conveys efficiencies in specialization and customization that are offset by the failure to achieve network externalities and other economies of scale," [Steinmueller, 1995] a complementary role is needed. In order to achieve the network externalities in a timely manner, standards development organizations act to select from a ripening variety of technological solutions. Thus, "In reducing diversity, standardization curtails the potentialities for the formation of new combinations and the regeneration of variety from which further selection will be possible." [David, 1995]

The complementary roles of IPRs and SDOs in this sense generate forcefields of opposition. At one level, these forcefields play the private interest of the inventor off against the collective interest of the industry. More fundamentally, the opposition involves the promotion of technological variety as against the facilitation of a certain uniformity. In practice, however, the interaction between these roles is mitigated by a number of mechanisms—formal or not—that help to insure their coordination. In the changing climate of the telecommunications industry, however, it appears increasingly difficult to maintain a state of balance.

### *B. A theoretical conflict*

In concrete terms, the tension in the relationship emerges when the development of a standard unavoidably infringes a patent or other industrial IPR. The emergence of such "essential IPRs" is so called because the implementation of a standard, by its *essence*, necessitates the application of proprietary technology. The standards body risks infringing the rights of those companies who have invested valuable R&D resources in this field if the standard 'specs' it proposes, by their depth and detail, necessitate the use of technical solutions that are protected by active property rights, such as patents. Should it do so, the collective interest of the industry in a standard confronts the private interests of an IPR holder.

The discovery of *essential patents* has not been a frequent occurrence. In most cases, this occurrence is one that can be settled peacefully, either through tweaking the standards or, alternately, through different *licensing* arrangements. In the latter situation, however, there is the possibility that the situation will become strained where the cumulative royalty costs of these licenses threaten the technology's marketability. A more serious but in many ways more remote situation involves the case in which the IPR-holder, for some reason, refuses to license his technology in terms which the collective interests in the SDO find acceptable. This case of "blocking IPRs" is rare because the property-rights holder generally benefits greatly when his rights are implicated by a standard. It is nonetheless a factor, and in cases where a *mandatory standard* is involved, such as the GSM case <sup>2</sup>, it is particularly unwelcome factor because a conflict between legal objectives become involved to which there is no obvious legal recourse available.

There is therefore scope for conflict and the ramifications of such conflicts can be serious. However, despite this scope, the risk has until recently been written off as an academic concern faced by voluntary SDOs. Indeed, there has been no record that voluntary SDOs—which have existed in different industries for about a century—had before now experienced a difficult conflict with an IPR holder. There are several reasons for this. The main set of reasons is that, the way industry standardization has historically been conducted in the case of telecommunications simply did not raise the problem. In general, international standardization was long a matter of codifying technologies [Cargill, 1989] that had become de facto standards and of providing for interoperability between different national systems at relevant interfaces. In this case, standards were based deliberately on proprietary material: there was little danger of essential IPRs unexpectedly arising. In Europe, national standards that were typically sponsored by the PTT did not provoke IPR problems because the potential problem was left up to its suppliers (i.e. the national champions). This was the situation of "have-made rights" whereby the PTT developed technical parameters which it gave to its "national champion" to fill. It fell upon the equipment supplier to clear any IPRs it ran across developing that technology. This particular practice meant that these national-champions were in fact loath to patent results of their R&D activity, because this complicated their collaboration with the PTT.

International standardization is no longer a matter of simply codifying existing technologies. As the decade long standardization of the GSM-system testifies, standardization can involve considerable efforts to build large technical systems. In general, standardization has more recently begun working in

<sup>2</sup> Iversen, 1999. This section borrows from this work.

front of the market in the hopes of arriving at more timely standards. At the same time, standardization is no longer a case of 'have-made rights', as the number of actors involved have been multiplied by the re-regulation of the telecoms industry. It is in this environment that the potential for disputes involving IPRs begins to be real.

## II. THE EMERGENCE OF CONFLICT THAT ACCOMPANIED THE BIRTH OF ETSI

At its inception in 1988/89, ETSI insisted that it was born into a "new environment of European standardization" [Tuckett, 1993] in which emerging standards would be "littered with IPRs". Although the fledgling institute later estimated that the IPR-problem would only involve about 2% of its standards work [ETSI document, 1994], the perception that the danger had ceased to be an academic problem encouraged it to seek new measures to tackle the eventuality. Alas, it was not alone in this prognosis in the late 1980s and early 1990s. International voluntary SDOs like the former CCITT [now ITU-t] also recognized but 'avoided the temptation' of defining procedures to address the potentially damaging IPR problem.

There was therefore a common recognition that ICT-standards had entered a "new environment". Several aspects of the evolving ICT-field and the way SDOs work in it do suggest an increased exposure to the IPR-problem. In general, conditions such as the accelerated pace of innovation, its increasing complexity, the changing shape of markets, the changing ranks and positions of actors and, not least, changing geopolitical conditions, all contribute to making the problem both more probable and more damaging for technical innovation. The proliferation of more and more complex technology itself invites conflict between IPRs and SDOs. Accelerated technical complexity encourages more specific standardization of the interface abutting functional entities. This situation arises from the need for ensuring acceptable levels of interoperability between technologies that are increasing different and increasingly far away. By the same token, however, there tend to be greater concentrations of IPRs in areas of greater technical complexity. Thus it becomes increasingly difficult to adopt a standard without incorporating proprietary material. Further there is an increased tendency to standardize *more aspects* of a technology, for example whole technical systems as with GSM. Again, the objective is to ensure system-integrity but the result may be to implicate a greater number of IPRs. This however risks exposure to different types of IPRs, like "systems-patents." Lastly the pace of change means that the industry needs standards more and it needs them more and more quickly. The realization that an IPR exists might take some time. Meanwhile, the delay and potential repudiation of an important standard because of IPR complications may mean a section of the industry might miss its *window of opportunity*. This means that the standardization process is wasted.

### A. ETSI's departure from normal practices.

In addition to these general characteristics of the ICT-field and how standardization functions in it, there are some specific characteristics about ETSI that inclined it to embrace the 'temptation' and re-address the question. First, there is the need to push markets over national borders which has entailed 'mandatory standardization' and thus increased vulnerability to 'blocking patents'. The mandatory classification entails that the only access to the market is through reference to that standard. The prospects of monopoly that arise here serve to grant the IPR holder increased leverage vis-à-vis the market. There is of course recourse to art. 86 in the Treaty of Rome if the holder is found to have abusively exercised his IPR. As the relevant European policy is formative and the legal procedures anyway expensive, complicated and protracted, this mechanism provides limited security to parties reliant on the successful launch of 'mandatory' standards.

This concern provided the basis for ETSI's departure from normal practices. In addition, ETSI inherited what was perhaps the first case in which the IPR-problem had arisen, during the standardization of GSM. [cf. Iversen, 1999] This experience provided the spur to look for a new approach. Finally, its status as a formally new institute provided the opportunity to qualitatively change approaches to the touchy IPR question faced in increasing degree by the standardization community at large. One of the most tangible reasons however was the broadening of the SDO's membership from including only PTT's of the CEPT system to including a range of equipment-suppliers including those with home-markets elsewhere.

## III. ETSI CASE-SURVEY

It was this move towards a new approach to IPRs to fit the new environment that initiated a protracted controversy within the new institute and without. In many senses, ETSI's protracted drive for new procedures was inherited from the CEPT organization from which it was hived off in 1988. The link is most direct in that it was a CEPT working group, GSM-5. This group had been set up to monitor and deal with the IPR questions that had begun to emerge during the comprehensive standardization of GSM and was transferred from the parent organization in 1989.

When GSM-5 set about to redraft IPR-procedures concurrent with the GSM-dispute or in its immediate aftermath, it was against the backdrop of an experience that indicated that IPR-holders were not necessarily willing to license their technologies in terms dictated by the PTTs<sup>3</sup>. Subsequently, other

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<sup>3</sup> This experience involved an American equipment supplier, Motorola, had initially refused to commit to the GSM Memorandum of Understanding. Motorola has argued that it did so because of the nature of its markets and the lack of market-elasticities. Some

“leading IPR experts” joined members of the GSM-5 to establish the Intellectual Property Rights Committee (IPRC), initiating a 5+ year search for new IPR-procedures during which ETSI consistently sought a high degree of detail, while arguing the need to reduce the uncertainty that lurked in the IPR question.

In the following, some of the major events in this quest and the dispute it raised will be presented. In this presentation, two extreme positions that shaped the debate will be identified—one in favor of compulsory licensing of IPRs, one in favor of no rules. We will see that the attempt to reach compromise between these original positions can be divided into two basic stages, each ending with the tentative approval of an IPR policy (in 1993 and 1994). Before turning to the evolution of that discussion, we present the basic aspects of the opposing positions.

#### *A. The Compulsory Licensing Position*

Compulsory licensing was the original tact taken by the IPRC. It involved a multilateral contractual arrangement that detailed the obligation of all members to license any potentially “essential” IPR it or any of its affiliates might hold to any other member. Varying degrees of this licensing obligation were presented in the course of the debate, with the most workable from ETSI’s point of view but most controversial involving unconditional licensing. Such a ‘technology pooling’ approach is not unheard of in forums which are more homogeneous in terms of nature and size of IPR portfolios. Notably, it is similar to the approach some individual equipment industries employ when standardizing for themselves in industry consortia (e.g. ATM-Forum). In the bylaws of these para-standardization organizations, the exercise of IPRs may be bindingly defined in the form of a multilateral contract.

Unlike its parent CEPT, ETSI however housed a diversity of interest. In line with the uneven distribution of IPRs among ETSI members, compulsory licensing has been most strongly advocated by those with the greatest discrepancy between their IPR needs and their IPR portfolios. The case has been put perhaps most directly by the Italian Conglomerate STET-Group which at the time included both the monopoly manufacturer and the TNO. This group sponsored a review of pertinent legal conditions surrounding ETSI, arguing that, by the definition of ETSI’s mission and by its classification as an ‘association’ under French Law, IPRs should be made freely available to ETSI members. This compulsory licensing interpretation had been controversial both in terms of legal

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observers indicate that ETSI tended to over-react to Motorola and other equipment-makers move away from established licensing practices. This controversy is discussed in Iversen, 1999

interpretation, but moreover, for pragmatic political reasons.

#### *B. Laissez-faire position*

The contrary position insisted that the IPR-procedures be minimal. This position was advocated by a “minority alliance” of primarily North American manufacturers. Together, this minority alliance comprised 12% of ETSI when weighed according to the institute’s voting rules in 1994, but represented a far greater percentage of the total IPRs claimed by ETSI members. Despite the IPRC’s steady movement away from the Compulsory licensing approach, this group consistently rejected detailed procedural provisions for dealing with emerging IPR conflicts. Instead, the alliance argued consistently for the minimal procedural guidelines of the type that prevails in other SDOs, notably ISO and IEC as well as CCITT (now ITU-T). In doing so, this contingent has uncompromisingly championed the individual holder’s rights to exercise its IPRs without restriction.

European manufactures typically did not follow such a hard line despite their alignment on certain aspects. Instead, the Europeans were generally in favor of an IPR policy that allowed the IPR-holder to reserve its rights not to license only in exceptional cases but confirmed his general commitment to do so in the common interest of European standardization. In the words of a European manufacturer, the question was whether, “a member really wants to use his resources to search for patents with the aim to create obstacles to European standardization”. [Interview] Noting their reliance on standards to gain access to the formative EU market and their wish to gain as much of the international market as well, European manufacturers have strong interests not to allow their US rivals to reserve the right to create such obstacles.

#### *C. The indemnity issue*

In addition to dealing with internal conflicts, there is a second set of broad concerns that the IPRC faced. The so-called Indemnity question involves what procedures are to be followed if an ETSI standard infringed an IPR holder who is not a member of the institute. In short, the question is who bears the burden of third party infringement, should it appear. Say a manufacturer builds equipment for a TNO based on an ETSI standard, whereupon it is discovered that that equipment infringes the IPRs of a third party; who is the liable party? Does the manufacturer or does the TNO carry the costs of this situation? Or should this be the responsibility of the institute? In the early stages of the IPRC negotiations, this indemnity question became a serious sticking point in the negotiations. In particular, it took on the aspect of a central area of disagreement between TNOs and manufacturers and, in general, threatened to hold up the further progress towards an IPR policy. In order to expedite the process as a whole, this concern was set

aside until after the internal procedures had been accepted and implemented. This issue helps explain why both the 1993 and, after it was abandoned, the 1994 policies had long been “interim policies”.

#### IV. THE EVOLUTION OF ETSI'S IPR-APPROACH

ETSI's search for IPR-procedures is divided into two phases: before and after the 1993 Policy & Undertaking were abandoned. The stages corresponding to the run up to the initial approval of this policy and the subsequent abandonment of it and the approval in 1994 of a policy can together be divided into five stages of negotiations. In the following, we will trace the discussion from its first phase, characterized by ‘the compulsory licensing approach’, through the ‘crown-jewel exception’ approach to the ‘licensing-by-default’ position of the 1993 Policy and Undertaking, followed by attempts at reconciliation and, finally, the abandonment of the

Undertaking. The timeline below points out several major events in this evolution.

Table: Timeline of major events in ETSI's search for a ‘new approach’ to the IPR-question

1989	1992	1993	1994
Committee on IPR issues (GSM-5)	EC- Commission Communication on Standardization and IPRs  ETSI seeks ‘negative clearance’ under EC Competition rules	Approval of the 1993 IPR Policy and Undertaking (March)  CBEMA lodges a formal Complaint with the Commission (June)	IPR-Committee presents its report  Extraordinary meeting on IPRs in ETSI  Adoption of an adjusted IPR Policy without Undertaking
Transition from the “Compulsory-Licensing” to the “Crown-Jewel” Approach	Arrival at the “Licensing-by-default “ Approach	Uncertain Consensus	

##### A. Phase 1: Compulsory Licensing

In the first phase, IPRC's original proposal was that of a straight licensing obligation. If an 'essential' IPR arose, the "owner or controller" would be obliged to license on acceptable terms. This clearly favored PTTs, with their typically limited R&D budgets and limited IPR portfolios as against their enormous demand for technology. For manufacturers, both the large ones who had collected expansive portfolios and small ones who held only a few that were central to their business, this approach was clearly not in keeping with their interests.

The trajectory of this approach lends credence to claims made by CBEMA in its later Complaint, that ETSI's Policy attempted to lay the groundwork for a "PTT intellectual property pool". Compulsive licensing, by effectively making any technology available to the Public Network Operators, would be somewhat in keeping with the PTT oriented standardization model predating of the Monopoly-Providers Paradigm. Their IPR needs would in such a situation continue to be catered to. The effects of such an approach can be summed up in the words of that Green Paper: "Although it could be argued that

consumers would benefit in the short term if IPRs were compulsively licensed to serve as the basis of standards, in the long term, investment in R&D would dry up within the Community." [CEC COM (92) 445 final]

##### B. Phase 2: The ‘Crown Jewel’ Exception

With an eye on balancing the aims of standardization with those IPR holders, the IPRC probably opted to begin at the extreme SDO end of the scale as part of a negotiation strategy. In this case, the second stage predictably represents concessions, both to its CEC 'counselor', and to the IPR holding interests. Here the IPR holder was granted the right to bow out of his obligations under the claim that a particular IPR was central to its business (a.k.a. ‘crown jewel’) and that the obligation to license would undermine the player's business. Such exceptions could occur only in exceptional cases.

However, key uncertainties of precisely what would constitute an "exceptional case", and questions of how efficient the application for the implied clearance would be, point to just a couple of a whole field of relevant issues here. The problem of definitions in general has dogged attempts to institute a detailed

procedure on this front. Besides the precise meaning of 'essential IPRs', other points of uncertainty include the related questions of who is to arbitrate, under what jurisdiction, what conditions, et al. The salient point here, however, was that by opening the compulsory licensing approach to exceptions the potential workability of such a policy receded considerably. This is another good reason why the IPRC originally took a strong compulsory-licensing approach. In terms of the "crown jewel" approach, that otherwise introduced some balance was ultimately abandoned in negotiations that included the Commission.

### *C. Phase 3: the "licensing by default system"*

The approach that was finally approved in 1993 moved considerably further towards the IPR-holders' interests. Here, the IPR owner/controller was permitted to withhold licenses on an "unlimited" basis, pursuant to procedural conditions. In return, affected IPR 'owners/controllers' were to be required to conduct searches of their IPR files and those of their affiliates (subsidiaries) over which they might control and to notify ETSI of any essential IPRs it may wish to exempt within an expanded 180 day period. This crucial period was to be reckoned, "from the time when the scope of the work item relating to the future standard in question is sufficiently clearly defined for the IPR holders to perform a meaningful search." [IPR Undertaking, 1993]

This compromise solution nicknamed the "license by default" approach, was finally adopted in March 1993 when it received a 88% majority [note: the alliance's 12%] which was well above the 71% required. This was expressly an interim measure that was approved. The Undertaking at that point stipulated a period of two-four year trial period during which the Approach could be assessed and adapted in such a way as to allow both persistent points of contention and arising ones to be solved.

There were four unresolved points of contention that remained. These were the (i.) the 180 day intellectual property rights search; (ii.) the patent applications area; (iii.) Arbitration; and (iv.) terms of licensing.

### *The death of the 1993 IPR-Undertaking*

These same unresolved points corresponded to the four points that ETSI found 'essential' about the Undertaking. As a result of both formal and informal protests, the IPR Policy was not instituted despite having majority support. The reasons for this included the following factors;

- CBEMA (digital, IBM, AT&T, Phillips; Motorola as observer) launched a Complaint [Case No. IV/34.760 -CBEMA v ETSI <sup>4</sup>] before the

<sup>4</sup> The Complaint was lodged on 22 June 1993. It alleged that ETSI's contravened the Treaty of Rome's

Commission claiming that ETSI's approach to IPRs contravened European competition law. The CBEMA COMPLAINT drew strength from claims that ETSI intended to flush the dissenters out of the institute. This was a claim that was the centerpiece for its argument that ETSI's IPR Approach was at heart competition distorting.

- A "phenomenal" intensity of American lobbying was mobilized on all fronts to hinder the '93 policy from being implemented. This policy became the subject of trade negotiations between Kantor and Bangemann over which the idea of trade war loomed; the US Dept of Justice started to put together a case; while Clinton is reputed to have pressured the British Government into subtracting support for the policy through threats of moving certain industrial plants from the UK. At the same time, American embassies are said to have exerted pressure on certain voting parties to get them to withdraw support.
- ETSI received between 12-14 letters from parties (i.e. greater than the number of CBEMA-members represented) who threatened to pull out of ETSI if it implemented the 1993 Policy.

Together these circumstances sent the search for an IPR policy into an extra round. This extra-round was designed to find a "pragmatic" solution somewhere between the polarities described. The bone of contention was part II of the '93 Approach, the Undertaking. In the shadow of the pending CBEMA complaint an IPR Special Committee (IPRSC) was set up to try and reach consensus on the four contentious points. This has been described as a futile exercise, where the majority was forced to cede to the minority's strategy to prioritize their individual patent portfolio considerations at the cost of the wider interest of ETSI standardization. The CBEMA Complaint stands as the factor that effectively suppressed implementation of ETSI's hopeful 'license by default' system. In view of this effect it, "has been seen by some as an inappropriate use of the Commission's procedures, and CBEMA members are accused of seeking to prolong and overturn the debate they lost in ETSI's General Assembly." [Tuckett, 1993] The Complaint, whatever its intentions, has indeed had this effect.

### *The Commission Position*

It should be noted that ETSI had concurrently sought "negative clearance" under REG NO 17. 2, pursuant to which the "Commission (might) certify that, on the basis of the facts in its possession, there are no grounds under art 85. 1/or 86 of the Treaty for action

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Competition regime under (art 85-6). Procedurewise, its recourse was through Regulation 17/62/EEC which regulates the implementation of 85/86, under Reg. 17. 3 or that Regulation's 'termination of infringements' article.

on its part in respect of an agreement, decision or practice." [Art 2: emphasis added]. Apparently this was on 25 November 1992 at which time the Commission concluded that the facts it possessed were not sufficient to make a decision.

Importantly, the Commission had opened for the sort of the 'license by default system' finally approved by ETSI under its competition provisions. However it stipulated strongly that this agreement grant IPR holders the 'genuine possibility' to withhold his IPRs. The Commission found at that time that it could not discern whether this central criterion was satisfied by ETSI's Approach. The CBEMA Complaint stepped in the breach 10 months later to provide examples that indicted ETSI on this count. The argument indicated that this criterion would not be fulfilled due to the fact that the "meaningful searches" for IPRs could not be successfully conducted by the holders given the insufficiently detailed information that the SDO could/would make available to the market. Further, the complexity of the search process especially for a multinational company, all of whose affiliates fall under the Policy's purview, must also be factored in.

According to the DGIV preliminary report, ETSI had acknowledged its shortcomings in making enough information available to potential IPR holders. This kind of information is of course integral to the question as it is based on the provision of sufficient information starts the 180 IP search period. If that clock starts running before an IPR holder can adequately determine if he has any relevant IPRs either on the books or, more delicately, under application, then his 'genuine possibility' to withhold his patents et al. is not being honored. That is the 'crucial competition issue' from the point of view of DGIV: ETSI's interpretation of CEC signals on this question is that, pending the improvement on the information mechanism, "(it) seems ready to give the green light to this provision, even if the search process is somewhat burdensome for the members." [ETSI's interpretation, Feb. 1994] Notwithstanding, other issues remained. In addition to the 180-day IP search provisions, The Commission considered the questions of Monetary compensation, standards application area and arbitration in terms of their impact on competition.

#### *D. The fourth phase: towards consensus*

Each of the main points of contention---180 day search; -Standards Area of Application; -Arbitration and -licensing terms--- was hotly contested up to the approval of the first IPR Policy/Undertaking and afterwards. In particular, the Standards Application Area represented a deeply intractable issue, and divided those with Europe as home markets against the 'alliance' of multinationals. In this scenario, the Europeans were strongly interested in "exporting standards" outside of the CEPT area. By defining the

SAA as broadly as possible, PNOs could broaden the stock of suppliers to any country where GSM standards were employed without fear of blocking IPR, while European manufacturers could likewise extend their markets on the same scale.

Not surprisingly, the North American "alliance" was not willing to obligate itself to license IPRs on what could potentially spread to a global scale while including their home market. If, as seems to be the case with the DCS 'delta-specs', a European standard finds its way to the US and a US company controls essential IPRs on it, other US companies would be forced to negotiate through ETSI. Both for tactical reasons and for historical ones (standards wars have not been rare between the US and CEPT: see ISDN or HDTV), this has been unacceptable to the 'alliance' companies. In the final analysis, their sustained disagreement with such an approach became echoed in the CBEMA case, the Kantor-Bangemann talks, and at higher diplomatic levels as noted.

The work of the IPRSC showed some progress on at least two of the contentious issues by June 1994. However, already in March of that year its work and with it the '93 policy was declared dead because there simply was no possible way to reach a viable consensus on the standards application area question. In particular, Alcatel saw this and saw too that the IPR-SC was going in the wrong direction in trying to cater to the 'minority interest'. Therefore, the IPRSC's mandate was by popular request not extended, despite its avowed progress. At this point, the proposition was forwarded by Alcatel that the contentious Undertaking be dropped from the Policy and the non-contentious, non-controversial Part I Policy be revised slightly to fit ETSI's special character. It is remarkable that about the same proportion (over 80%) that had supported the '93 APPROACH, turned around in the fall of '94 and voted it out. Incentives to find such a solution had become stronger and stronger. Although, the CEC (DG IV) preliminary position in the CBEMA Case indicated in principle the strength of ETSI's position, ETSI's potential to win the case became irrelevant in the face of unrelenting opposition.

Meanwhile, it was argued that the IPR controversy was damaging ETSI's legitimacy in the market. In general it should be noted that such a situation is serious for a relatively new SDO that is trying to establish itself in a quickly changing global market. There were more specific circumstances that this comment played on however. More recently, the US reserved the 1900 MHz bandwidth for mobile PCN applications, opening for the possibility of adapting sections of the GSM patents (i.e. the DCS 1800 delta specs noted above). The prospects of exporting a European standard to the US would carry not only competitive advantage for European companies that had pioneered the GSM standards into this coveted

market but it would also give the EU's reputation a boost as well.

### *1994 Approach*

The Approach that was approved in November 1994 represents a return towards the "Normal Procedure" SDOs have traditionally applied when handling the potential IPR conflicts. The ETSI approach distinguishes itself in several important respects from, for example the self avowedly minimalist ITU's Code of Practice, though not radically and thus not contentiously so. The bone of contention was simply jettisoned from the 93 Approach as a pragmatic move to end the dispute.

The 1994 Policy obligates Members to inform ETSI of "essential", IPRs that they "become aware of" though, importantly they have no obligation to search for these. The idea is that IPR holders are keenly aware of their "crown jewels" patents and would immediately recognize if one of these were implicated in an evolving standard. He would have a "bona fide" obligation to declare the IPR(s) and, moreover, whether or not he is willing to license on fair, reasonable and non-discriminatory terms: the choice not to license would have to be backed up by a written declaration. The bona fide obligation seems sufficient in this situation because an IPR-holder would have trouble convincing others members who are eager for a standard that he was unaware of an IPR which, when it finally came to his attention, shows itself to be so important that he is reluctant to license. Therefore potential conflicts would, unlike in the GSM case, emerge early in the shaping of a standard, giving ETSI at least some time to react.

If it was only realized after the standard was formed that a member held an essential IPR, it would be assumed that the importance of that IPR could not be important enough to the holder that he would undermine the common interest of standardization by refusing to license. Such a situation is technically allowable under the new Policy, but it would call one's commitment to the process seriously into doubt. This is a serious disincentive. "Good faith" plays an important role in the positive-sum standardization forum where other more overt forms of coercion lack. In the GSM case, the effect of this mechanism can be seen in that the market began to turn away Motorola when allegations of its unwillingness to license GSM were most rampant and most negative. Motorola claims to have lost a lot of business due to what it terms "lies" and says that it had even considered lodging libel suits against some.

It should be noted by way of closing, that a defining aspect about the policy is its direct references to the CEC. These references touch on the ETSI-specific potential that a blocking IPR emerges in the case of "mandatory standards". In such cases, the CEC will underwrite the laborious IPR searches in order to

locate potentially 'essential' IPRs, a compromise one of the 5 year dispute's difficult topics.

## V. CONCLUSION

The exceptional proportions attained by this controversy testify to the importance of the relationship between SDOs and IPRs in the changing ICT-field. Since the ETSI's departed from normal practices to find a new approach to the IPR-problem which addressed the challenges of the 'new environment', several IPR-disputes have emerged both within ETSI and without. Today, there is general consensus that one has entered into new terrain. Not least, the IEEE reevaluated its patent-rights procedures in 1994 and, "soon found that the real challenge was to make procedures adaptable to a changing environment where increasingly more IEEE standards projects are being developed around patented technology." [PatCom document, 1996] It will be interesting to see if a balance can be reestablished between the respective functions of IPR regimes and SDOs.

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