EXHIBIT 16

Page 48 ETSI Guide on IPRs, 27 November 2008

ETSI Guide on Intellectual Property Rights (IPRs)

Version adopted by Board #70 on 27 November 2008

Background

The ETSI IPR Policy was adopted by the 21st General Assembly on 23 November 1994 and incorporated in the ETSI Directives as Annex 6 to the ETSI Rules of Procedure.

At a later stage a Technical Body Chairman's Guide on IPRs had been written to help Chairmen and others involved in ETSI's standardization activities to understand and implement the Institute's IPR Policy. That Chairman's Guide on IPR had not been endorsed by the General Assembly or the Board and therefore did not have the same official status as the ETSI Statutes, the Rules of Procedure or the Technical Working procedures. The Technical Body Chairman's Guide on IPRs is now replaced by the present ETSI Guide on IPRs.

In 2002 the ETSI General Assembly #40 identified the need to review the ETSI IPR Policy with a view to addressing and rectifying any uncertainties on the operation of this Policy and on any legal rules and obligations on the membership in order to avoid an incorrect implementation of the ETSI IPR Policy and in order to avoid anti-competitive actions. An ad-hoc IPR group, with a clear mandate to review the implementation of the IPR Policy but not to change the Policy itself, was consequently created and 30 recommendations on the operation of the ETSI IPR Policy where approved by the ETSI General Assembly #42. The present ETSI Guide on IPRs embodies most of these recommendations.

A revised version of the Clause 4.1 of the ETSI IPR Policy was adopted by the 46th General Assembly in November 2005. This revision was induced by the EC DG COMPETITION in its concern to generate a general awareness of the risk of "patent ambush" situation in the standard making process. The EC DG COMPETITION rationale behind the changes is given in section 4.5 of the present Guide.

Foreword

Intellectual property plays an important role in standardization, especially in the telecommunications and electronic communications sector. In that context, the likelihood of having Intellectual Property Rights (IPRs) incorporated into ETSI Deliverables became critical after a few years of existence of ETSI. This tension (proprietary nature of IPRs versus wide dissemination of standards) was minimized with the adoption by the ETSI Membership of the ETSI IPR Policy as found in Annex 6 to the ETSI Rules of Procedure.

In the preparation of standards, IPR issues may arise. It is important for all parties involved in the ETSI standards-making process to be aware of their responsibilities and that there is good co-operation between all parties.

This guide is intended to help ETSI Members and any other party involved in ETSI's standardization activities (e.g. Members, Technical Body Chairmen, Secretariat, etc.) to understand and implement the Institute's IPR Policy.

This guide provides explanatory information on how to handle IPR matters in ETSI and does not replace the ETSI IPR Policy which takes precedence in all cases.

This guide has been endorsed by the Board but does not have the same official status as the Statutes, the Rules of Procedure or the Technical Working Procedures.

Should you (the reader) have any difficulty with provisions of this guide or with any practical aspects of the Policy which are not answered by this guide, please do not hesitate to contact the ETSI Secretariat (hereafter called simply "Secretariat").

Page 49 ETSI Guide on IPRs, 27 November 2008

1 The ETSI IPR Policy

1.1 What is the Purpose of the IPR Policy?

The purpose of the ETSI IPR Policy is to facilitate the standards making process within ETSI. In complying with the Policy the Technical Bodies should not become involved in legal discussion on IPR matters. The main characteristics of the Policy can be simplified as follows:

- Members are fully entitled to hold and benefit from any IPRs which they may own, including the right to refuse the granting of licenses.
- It is ETSI's objective to create Standards and Technical Specifications that are based on solutions which best meet the technical objectives of ETSI.
- In achieving this objective, the ETSI IPR Policy seeks a balance between the needs of standardization for public use in the field of telecommunications and the rights of the owners of IPRs.
- The IPR Policy seeks to reduce the risk that investment in the preparation, adoption and application of standards could be wasted as a result of an Essential IPR for a standard or technical specification being unavailable.
- Therefore, the knowledge of the existence of Essential IPRs is required as early as possible
 within the standards making process, especially in the case where licenses are not available
 under fair, reasonable and non-discriminatory (FRAND) terms and conditions.

The ETSI IPR Policy defines the rights and obligations for ETSI as an Institute, for its Members and for the Secretariat.

The Policy is intended to ensure that IPRs are identified in sufficient time to avoid wasting effort on the elaboration of a Deliverable which could subsequently be blocked by an Essential IPR.

1.2 Where can I find the ETSI IPR Policy?

The ETSI IPR Policy is part of the ETSI Directives and can be found in Annex 6 of the ETSI Rules of Procedures (http://portal.etsi.org/Directives/home.asp). This means that the rights and obligations specified by the IPR Policy are an integral part of the ETSI Rules of Procedure and are binding on all ETSI Members.

You can also find a copy of the Policy at Annex A.

1.3 Terminology

The ETSI IPR Policy defines a number of terms; those used in this guide correspond to those used in the Policy.

In the ETSI IPR Policy:

an IPR includes:

- COPYRIGHT
- PATENT
- UTILITY MODEL
- REGISTERED DESIGN
- ... and applications thereof.

an IPR does not include:

- TRADEMARKS
- TRADE SECRETS
- CONFIDENTIAL INFORMATION

Page 50 ETSI Guide on IPRs, 27 November 2008

RIGHTS RELATING TO GET-UP (packaging)

1.4 Rights and obligations deriving from the IPR Policy

The ETSI IPR POLICY defines rights and obligations for ETSI as an Institute, for its Members and for the Secretariat. Non-Members of ETSI also have certain rights under the Policy but do not have legal obligations.

The following table intends to give a clear overview of the most important rights and obligations of the Institute, the Members, the Secretariat and the rights of third parties as specified under the ETSI IPR Policy. All references below which are in italics relate to the ETSI IPR Policy.

	Obligations	Rights
Institute	 to inform users of standards about Essential IPRs declared and ensure that this information is publicly available (Clause 7). to perform IPR searches if the EC and/or EFTA so require and reasonable expenses are met (Clause 6.2). to grant licenses on ETSI-owned IPRs (other than copyright) on fair, reasonable and non-discriminatory terms and conditions to third parties, free of charge to ETSI Members (Clause 9.3). to respect confidential information within a Technical Body until publication of the relevant Deliverable. to include the information in a standard (Clause 10). 	
Members	 to inform ETSI about their own, and other people's Essential IPRs (Clause 4.1). owners of Essential IPRs are requested to undertake to grant licenses on fair, reasonable and non-discriminatory terms and conditions (Clause 6.1). owners of Essential IPRs who refuse to grant license when no alternative is available, are requested to reconsider their position and provide the Director-General with a justification (Clause 8.1). to abstain from claiming copyright on standards documentation (text, graphics etc., of the standard itself) on behalf of the member itself and its employees (Clause 9.1). 	 no obligation to conduct IPR searches (Clause 4.2). to refuse the inclusion of own IPRs in standards (Clauses 8.1 and 8.2). to be granted licenses on fair, reasonable and non-discriminatory terms and conditions in respect of a standard (Clause 6.1). to make copies of standards documentation (Clause 11) free of charge. to use IPRs owned by ETSI free of charge (Clause 9.3). to have confidential information within a Technical Body respected until publication of the relevant Deliverable (Clause 10).

Page 51 ETSI Guide on IPRs, 27 November 2008

Secretariat	 the Director-General to contact owners of Essential IPRs having refused to grant licenses on behalf of ETSI (Clauses 8.1 and 8.2). the Director-General to request the owner of an Essential IPR to give within three months an undertaking in writing that it is prepared to grant licenses (Clause 6.1). 	
Third Parties	 the ETSI IPR Policy is only binding on ETSI Members. Third parties do not have any legal OBLIGATIONS under the Policy. when ETSI is informed that an IPR belonging to a non-Member could be essential for a standard, the non-Member owner is also requested to undertake to grant licenses on fair, reasonable and non-discriminatory terms and conditions (Clause 6.1). 	 Third parties have certain RIGHTS under the ETSI IPR Policy either as owners of Essential IPRs or as users of ETSI standards or documentation: to refuse the inclusion of their own Essential IPRs in ETSI Deliverables (Clause 8.1 and 8.2). To be granted licenses on fair, reasonable and non-discriminatory terms and conditions in respect of a standard at least to manufacture, sell, lease, repair, use and operate, (Clause 6.1) to be granted licenses for ETSI owned IPRs (other than copyright in the standard documentation) (Clause 9.3) on fair, reasonable and non-discriminatory terms and conditions. to have confidential information within a Technical Body respected until publication of the relevant Deliverable (Clause 10).

1.5 "Essential" IPRs

Clause 15.6 of the ETSI IPR Policy gives the following definition of essentiality:

"15.6 ESSENTIAL as applied to IPR means that it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing that IPR. For the avoidance of doubt in exceptional cases where a STANDARD can only be implemented by technical solutions, all of which are infringements of IPRs, all such IPRs shall be considered ESSENTIAL".

In simpler terms, an "essential IPR" is an IPR which has been included within a standard and where it would be impossible to implement the standard without making use of this IPR. The only way to avoid the violation of this IPR in respect of the implementation of the standard is therefore to request a license from the owner.

Page 52 ETSI Guide on IPRs, 27 November 2008

2 Importance of timely disclosure of Essential IPRs

The main problems for ETSI as a standards body which may arise from "late disclosures" include:

- Licenses for Patents which have been disclosed late and are not available at all, or,
- Licenses for Patents which have been disclosed late and which are available, but not on Fair, Reasonable and Non-Discriminatory (FRAND) terms, i.e. the company is unwilling to make a "FRAND" undertaking/licensing declaration.

If the above problems cannot be satisfactorily resolved, then ETSI has to change the standard, which in some extreme cases could even include the need to start again with the development of that standard.

NOTE 1: Definitions for "Timeliness" or "Timely" cannot be agreed because such definitions would constitute a "change to the Policy".

NOTE 2: The following description of Intentional Delay has been noted:

"Intentional Delay" has arisen when it can be demonstrated that an ETSI Member has deliberately withheld IPR disclosures significantly beyond what would be expected from normal considerations of "Timeliness".

This description of "Intentional Delay" should be interpreted in a way that is consistent with the current ETSI IPR Policy. In complying with the requirements of timeliness under Clause 4.1 of the IPR Policy, Members are recommended to make IPR disclosures at the earliest possible time following their becoming aware of IPRs which are, or are likely to become, Essential.

NOTE 3: "Intentional Delay", where proven, should be treated as a breach of the IPR Policy (Clause 14 of the ETSI IPR Policy) and can be sanctioned by the General Assembly.

2.1 Members Duties

2.1.1 Responding to Calls for IPRs performed in Technical Body meetings

Members participating in Technical Bodies should respond at the earliest possible time to the Call for IPRs performed by Technical Body Chairmen at the beginning of each meeting, based on the working knowledge of their participants.

Furthermore, the call for IPRs acts as a reminder of the Member's obligations under the IPR Policy and is performed to foster the disclosure of Essential IPRs in a timely fashion.

Members having IPR portfolios should improve their internal IPR co-ordination processes to ensure, as far as possible, that their participants in Technical Bodies are aware of any alleged-essential IPR the company may have (related to the on-going work on a particular ETSI Standard or Technical Specification), that they understand their obligations, and that they know how to discharge them.

Members are encouraged to make general IPR undertakings/licensing declarations that they will make licenses available for all their IPRs under FRAND terms and conditions related to a specific standardization area and then, as soon as feasible, provide (or refine) detailed disclosures. This process reduces the risk of the standards making process being blocked due to IPR constraints.

2.1.2 Disclosure and licensing of patents from a PATENT FAMILY

The deemed fulfilment in Clause 4.3 of the IPR Policy of the obligations pursuant to Clause 4.1 in respect of all existing and future members of a PATENT FAMILY is only applicable to the extent that the IPR owner has the right to make the IPR undertaking/licensing declaration pursuant to Clause 6.1

Page 53 ETSI Guide on IPRs, 27 November 2008

of the ETSI IPR Policy as to members of the PATENT FAMILY at the date of the IPR information statement and licensing declaration.

For the purpose of the disclosure made under Clause 4, the patent owner may consider any part of an IPR document, in particular the description, the claims and the drawings.

2.1.3 Use the ETSI IPR Licensing Declaration forms

The ETSI IPR Licensing Declaration forms consist of the (i) the IPR information statement and licensing declaration form, including its annexes, and (ii) the General IPR licensing declaration form:

- The IPR information statement and licensing declaration shall be submitted with the IPR information statement annex and, where applicable, together with the IPR licensing declaration annex to identify the specific IPRs which are applicable.
- The General IPR licensing declaration shall be used to give an undertaking to grant licenses under any IPR that are or become essential in respect of the identified STANDARD(S), TECHNICAL SPECIFICATION(S), or ETSI Project(s). It is submitted without the IPR information statement annex but, in accordance with Clause 4.1 of the ETSI IPR Policy, members should provide updates in a timely fashion via the IPR information statement and licensing declaration and the IPR information statement annex.

Use of the General IPR licensing declaration does not take away the obligation for members to declare essential patents to ETSI as stated in 2.1.1.

The ETSI IPR Licensing Declaration forms can be found at Annex 6 of the ETSI Rules of Procedure and online at:

http://www.etsi.org/WebSite/document/Legal/IPRforms.doc

These forms, once completed and duly signed should be returned to the ETSI Director-General.

Any questions related to the completion of the forms should be addressed to the ETSI Legal Affairs Director (legal@etsi.org).

2.1.4 Update and complete the ETSI IPR Information Statement form

Members are not obliged to inform ETSI of any updates to their essential IPRs. Nevertheless, Members are encouraged to update and complete their information statements in line with the forms (see Annex 6 of the ETSI Rules of Procedure). A minimum of information should be provided, which allows verifying the essentiality or the potential essentiality of an IPR.

2.1.5 Copyrights in ETSI Deliverables

Members should be aware that once a technical proposal has been included into ETSI documentation the copyright is owned by ETSI, for the purpose of the publication of ETSI documentation.

2.2 Members do NOT have a duty to:

- conduct IPR searches (see Clause 4.2 of the IPR Policy).
- disclose within the Technical Body the commercial terms for licenses for which they have undertaken to grant licenses under FRAND terms and conditions. Any such commercial terms are a matter for discussion between the IPR holder and the potential licensee, outside of ETSI (see section 4.1 of this Guide).

2.3 Technical Body Chairmen's duties

Chairmen represent the membership while having the authority to represent the Institute in their Technical Body. Chairmen have an important role in respect of both, the identification and disclosure

Page 54 ETSI Guide on IPRs, 27 November 2008

of essential IPRs. They have a duty to remind the Members of their statutory obligations to submit IPR disclosures.

In addition to the actions aiming at the identification of IPRs, the Chairmen also need to take the following actions, which ensure that the disclosure of essential IPRs is properly carried out:

- to record in the report of the meeting that an IPR call has been made and to record any responses;
- to inform the Secretariat of the existence of any essential IPRs identified.

Also, Chairmen shall not allow any discussion on commercial issues in the Technical Body, in particular but not limited to discussions on details of specific licensing terms and conditions.

Finally, the Chairman should take care that the ETSI Guidelines for antitrust compliance are strictly observed.

Throughout the standardization process the Chairmen must take the actions as laid down in the following Sections of this Guide, which facilitate the identification of Essential IPRs.

2.3.1 Define scope statements for work items

It is vital that Chairmen ensure that the scope statements for all work items in the ETSI work programme are properly defined. This will ensure that if a search for patents is required (under Clause 6.3 of the Policy) or chosen to be performed by a Member, the task can be carried out in the most effective manner.

In order that the scope statement of an ETSI work item can be used for IPR purposes, it should contain the following:

- a broad statement concerning the technical field of this work;
- a description of broad system concepts;
- identification of any standard on which the work item is likely to be based;
- a list of features which the standard will define, or on which the standard will place limitations;
- · a technical description of each feature listed, in broad terms; and,
- a list of any criteria which the standard must satisfy.

2.3.2 Make call for IPRs in Technical Bodies meetings

Every Technical Body and working group meeting shall start with a "Call for IPRs" (either in a written form – as part of the meeting's agenda - or in oral form) performed by the Chairman. This Call for IPRs acts as a reminder of the Member's obligations under the ETSI IPR Policy and is performed to foster the disclosure of Essential IPRs in a timely fashion.

An example of this "Call for IPRs" may be found below in Clause 2.3.3. Please note that during the Operational Co-ordination Group meetings (OCG) Chairmen will be reminded to perform that call for IPRs.

Technical Body Chairmen are also invited to encourage Members to make general IPR undertakings/licensing declarations that they will make licenses available for all their IPRs under FRAND terms and conditions related to a specific standardization area and then, as soon as feasible, provide (or refine) detailed disclosures.

2.3.3 When and How?

A formal call for IPR disclosures shall be made by the Chairman at the beginning of each meeting.

The formal call for IPR disclosures needs to be made by the Chairman orally or in writing according to the example given below. Members need to be reminded that the forms for the notification of essential IPRs and licensing declaration are available on-line and attached in Annex 6 of the ETSI Rules of Procedure.

Page 55 ETSI Guide on IPRs, 27 November 2008

Example of a formal call for IPRs

The attention of the members of this Technical Body is drawn to the fact that ETSI Members shall use reasonable endeavours under Clause 4.1 of the ETSI IPR Policy, Annex 6 of the Rules of Procedure, to inform ETSI of Essential IPRs in a timely fashion. This section covers the obligation to notify its own IPRs but also other companies' IPRs.

The members take note that they are hereby invited:

- to investigate in their company whether their company does own IPRs which are, or are likely to become Essential in respect of the work of the Technical Body,
- to notify to the Chairman or to the ETSI Director-General all potential IPRs that their company may own, by means of the IPR Information Statement and the Licensing Declaration forms that they can obtain from the ETSI Technical Officer or http://www.etsi.org/WebSite/document/Legal/IPRforms.doc.

Members are encouraged to make general IPR undertakings/declarations that they will make licenses available for all their IPRs under FRAND terms and conditions related to a specific standardization area and then, as soon as feasible, provide (or refine) detailed disclosures.

During the meeting a short reminder call for IPR disclosures should be made:

- on formal submission of a technical solution;
- on completion of the first stable draft of the standard;
- · on working group approval of a draft standard;
- on TB approval of a draft standard.

E.g., this may consist of the following sentence "May I remind Members of their obligations to use reasonable endeavours to disclose any Essential IPR [related to this issue] in a timely fashion".

The Technical Body Chairmen should note and should make their attendees aware that disclosure of Essential or potentially Essential IPRs should be made at the earliest possible stage within the above list

Knowing who has contributed to the development of a standard may help identify IPRs Essential to that standard.

If it becomes apparent that an IPR declaration/licensing undertaking is unlikely to be provided, the Technical Body Chairman should inform the Legal Advisor in the Secretariat, who will take the necessary action.

Ultimately, it may be necessary for the Secretariat to invoke Clause 8.1 of the Policy, which could require all work on the standard to stop. In any case, the party owning the IPR is allowed three months consideration time after the Technical Body has examined the matter and the Director-General has invited the IPR owner to reconsider its refusal to grant a license. Chairmen should use their judgment (in consultation with the Secretariat) as to whether or not the Technical Body should suspend work on the standard until the matter has been resolved.

2.3.4 Record and report information on IPRs

Technical Body Chairmen must be particularly careful to record in the report of each meeting that a reminder was issued and include details of any responses that were made. If there were no responses, then this fact should also be recorded.

Whenever a Chairman becomes aware of the existence of an Essential or potentially Essential IPR he must immediately inform the Legal Advisor of the ETSI Secretariat.

Page 56 ETSI Guide on IPRs, 27 November 2008

2.3.5 Copyrights in ETSI Deliverables

Chairmen shall ensure that all technical proposals adopted by their Technical Body are recorded in the minutes of the meeting, together with any restrictions on their use, and shall report them to the Secretariat. The Secretariat will inform Chairmen if copyright licenses/assignments are required. If so, then they must be obtained before publication of the document. The Secretariat will determine, with the assistance of the Chairman, which third party copyrights, if any, have to be acknowledged.

2.3.6 Confidential information

It may happen that Chairmen or Technical Bodies are offered confidential information. There are certain precautions which must be observed and Chairmen are strongly urged to contact the Secretariat before proceeding.

Clause 10 of the Policy states that information disclosed to ETSI's Technical Bodies is to be regarded as non-confidential, unless all of the following criteria are satisfied:

- the information is in written or other tangible form; and
- the information is identified in writing as confidential at the time it is submitted; and
- the information is first submitted to the Technical Body Chairman and accepted by him as confidential.

Where a Chairman becomes aware that confidential information has been disclosed in breach of a confidential disclosure agreement to which ETSI is a party, he must immediately inform the Secretariat.

2.4 ETSI Secretariat Duties

The Secretariat, and especially the Legal Advisor, have a general duty to assist the Chairmen in IPR matters. In addition to this, the Secretariat is responsible for the actions below:

2.4.1 Information on Essential IPRs in ETSI Deliverables

The ETSI Secretariat will ensure that an appropriate reminder of the duty to disclose the identity of Essential IPRs is included in all published ETSI Deliverables in the form of a standard text.

Specifically, the Secretariat shall ensure that the following marking appears in ETSI Deliverables prior to Publication, Member vote, Public Enquiry or National Vote:

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in SR 000 314: "Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (SR 000 314).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

2.4.2 Initiate a procedure of Clause 8 when no licensing declaration can be obtained

Where the IPR undertaking/licensing declaration as provided in Clause 6 of the ETSI IPR Policy cannot be obtained because of the refusal by the essential IPR owner, the ETSI Secretariat is obliged to initiate the procedure set out in Clause 8 of the ETSI IPR Policy. For the avoidance of doubt with regard to PATENT FAMILIES, the ETSI Secretariat is obliged to initiate a procedure of Clause 8 of the ETSI IPR Policy in every case where the IPR owner refuses to give the IPR undertaking/licensing

Page 57 ETSI Guide on IPRs, 27 November 2008

declaration as provided in Clause 6 of the ETSI IPR Policy for at least one member of a PATENT FAMILY regardless of the fact that the IPR owner might have given such IPR undertaking/licensing declaration for other members of the same PATENT FAMILY.

2.4.3 Non response by an IPR owner

In situation where there has been no response from an IPR owner to a request for undertaking/licensing declaration within the three months specified in Clause 6.1 of the IPR Policy or the response is not sufficiently defined the steps listed in Clause 8 of the IPR Policy should be applied.

2.4.4 Redrafting of ETSI Deliverables

Published Standards or Technical Specifications should not be redrafted because a change on the essentiality of an IPR arises unless the required undertaking/licensing declaration has not been provided within the three month period foreseen under Clause 6.1 of the IPR Policy, or has been refused. Any IPR changes should be entered into the ETSI IPR Database by the Secretariat, showing the date of the entry.

2.4.5 Disclose copyright identified in ETSI documentation

The copyright of ETSI documentation, including that produced in its Technical Bodies, is owned by ETSI. The Secretariat shall ensure that the following marking appears in ETSI Deliverables prior to Publication, Member vote, Public Enquiry or National Vote:

Reproduction is only permitted for the purpose of standardization work undertaken within ETSI.

The copyright and the foregoing restrictions extend to reproduction in all media.

© European Telecommunications Standards Institute yyyy.
All rights reserved.

This marking shall also appear in document templates provided to the Technical Organization by the Secretariat.

2.4.6 Acknowledgement of third parties copyright

Due acknowledgement of copyrights owned by third parties, which are identifiable in ETSI documentation, must be made in the following form:

Some material contained herein is the copyright of, or has been supplied by...(insert name of party in question).

This legend should appear on the ETSI documents and/or media concerned and should immediately follow the copyright legend(s) referred to above.

In response to the obligation on Chairmen to report to the Secretariat any copyright restrictions in technical proposals adopted by their Technical Body, the Secretariat will inform Chairmen if copyright licenses/assignments are required. If so, then they must be obtained before publication of the document. The Secretariat will determine, with the assistance of the Chairman, which third party copyrights, if any, have to be acknowledged.

2.4.7 Reporting of a substantial IPR problem

The ETSI Director-General should bring any [substantial] IPR problem to the ETSI Board and/or General Assembly for further discussion.

Page 58 ETSI Guide on IPRs, 27 November 2008

2.4.8 Maintenance of information on Essential IPRs

The Secretariat is responsible for the maintenance of the ETSI IPR online database and the ETSI Special Report 000 314 (see sections 3.1 and 3.2 of this guide).

3 Information on Essential IPRs by ETSI

All information statements and licensing declarations of IPRs received by ETSI are publicly available to ETSI Members and standards' implementers via two means: The ETSI Special Report (SR) 000 314 and the ETSI IPR Online Database.

3.1 Where to find information on essential IPRs

3.1.1 ETSI Special Report 000 314

The ETSI Special report SR 000 314 is an ETSI Deliverable entirely dedicated to information on IPRs which have been notified to ETSI as being Essential, or potentially Essential, to ETSI standards. This SR is generated twice a year and offers a summary of the information contained in the ETSI IPR Online database as of the time it is generated.

In case of any conflict between the information contained in SR 000 314 and the information contained in the ETSI IPR Online Database, the contents of the database takes precedence.

ETSI SR 000 314 can be found at: (SR 000 314).

3.1.2 The ETSI IPR Online Database

The ETSI IPR Online Database is an application that has been developed by the ETSI Secretariat to allow electronic online access to Information Statements and Licensing Declarations received by ETSI.

Like the SR 000 314, the ETSI IPR Online Database contains IPRs, particularly patents and patent applications, which have been notified to ETSI as being essential, or potentially essential, to ETSI standards.

Unless otherwise specified, all IPRs contained herein have been notified to ETSI, with an undertaking from the owner to grant licenses according to the terms and conditions of Clause 6.1 of Annex 6 of the ETSI Rules of Procedure (the ETSI IPR Policy).

It is important to note that the ETSI IPR online database provides data that is based on the information received, i.e.:

- ETSI has not checked the validity of the information, nor the relevance of the identified patents/patent applications to the ETSI standards and cannot confirm, or deny, that the patents/patent applications are, in fact, essential, or potentially essential;
- No investigation or IPR searches have been carried out by ETSI and therefore, no guarantee
 can be given concerning the existence of other IPRs which are, or may become, essential;
- Potential licensees should use the information in this database at their discretion and should contact the patent holder, for example to establish the status of a disclosed patent family, prior to making a patent licensing decision.

The ETSI IPR Online Database can be found at: http://webapp.etsi.org/ipr.

3.1.3 Requests to the ETSI Secretariat

Whenever requested, the ETSI Secretariat shall provide any details on information statements and licensing undertakings/licensing declarations that it has received. The main contact point is the ETSI Legal Advisor.

Page 59 ETSI Guide on IPRs, 27 November 2008

3.2 What type of information and procedures for updates

IPR information reflected by ETSI is based on the information received. ETSI has not checked the validity of the information, nor the relevance of the identified patents/patent applications to the ETSI standards and cannot confirm, or deny, that the patents/patent applications are, in fact, essential, or potentially essential. No investigation or IPR searches have been carried out by ETSI and therefore, no guarantee can be given concerning the existence of other IPRs which are, or may become, essential.

3.2.1 Assessment of IPR rights

As a general principle, ETSI does not perform any check on the status and validity of any Essential IPRs notified to ETSI.

In addition, ETSI does not perform any search for Essential IPRs which may exist and have not been notified.

3.2.2 Update procedure for the ETSI IPR Online database

In addition to the entry of new disclosures and undertakings/licensing declarations, existing data in the ETSI IPR Database should only be updated based on information received from IPR holders or as the result of a General Assembly decision, in particular with respect to the following cases:

- Completion of an existing data entry, e.g. the publication number, identification of standard.
- Updating of legal information, such as change of legal status of an IPR (e.g. grant, dropped, revoked or expired), change of ownership of the IPR.
- Addition of information concerning studies performed on the essentiality of an IPR:
 Members are obliged to disclose IPRs, which might be essential and ETSI is obliged to make
 these disclosures available to Members. This disclosure reflects, of course, only an opinion of
 the Member and some facts on the IPRs, but the Member is responsible for the content. Any
 further opinion should be added only with the agreement of the Member or to implement a
 General Assembly decision.
- Removal of IPR disclosures at the request of the IPR holder: Members are obliged to
 declare IPRs which they believe to be essential. A license undertaking/licensing declaration
 for these IPRs is also published. ETSI is obliged to publish this undertaking/licensing
 declaration. Any such removal shall be tracked in the IPR on-line database.
- Removal of IPR disclosures in exceptional circumstances: Removals not requested by the IPR holder shall only be performed following a decision taken by the General Assembly. Any such removal shall be tracked in the IPR on-line database.

4 Other ETSI IPR Policy matters

4.1 Licensing terms and ex ante disclosure

Specific licensing terms and negotiations are commercial issues between the companies and shall not be addressed within ETSI. Technical Bodies are not the appropriate place to discuss IPR Issues. Technical Bodies do not have the competence to deal with commercial issues. Members attending ETSI Technical Bodies are often technical experts who do not have legal or business responsibilities with regard to licensing issues. Discussion on licensing issues among competitors in a standards making process can significantly complicate, delay or derail this process.

Without prejudice to ETSI IPR Policy and other sections of this Guide, voluntary, unilateral, public, ex ante disclosures of licensing terms by licensors of Essential IPRs, for the sole purpose of assisting members in making informed (unilateral and independent) decisions in relation to whether solutions best meet the technical objectives, are not prohibited under ETSI Directives. Licensing terms from such disclosures may, in some circumstances, improve transparency for individual Members in considering technologies for inclusion in STANDARDS and TECHNICAL SPECIFICATIONS.

Page 60 ETSI Guide on IPRs, 27 November 2008

No detailed licensing terms should be available from ETSI to avoid a misleading impression. ETSI may act as a depository, where IPR owners (licensors) can make available information on how and where to access such disclosed licensing terms, and provide links to URLs of IPR owners, which contain the details of licensing terms and conditions, so that information about the availability of licenses can be disseminated to all users of ETSI standards.

However, this provision does not create any obligation for any Member to disclose any licensing terms related to any of its IPRs. The lack of disclosure by a Member of its licensing terms does not create any implication under the ETSI Directives. Specifically, the requested undertaking in writing of an IPR owner that it is prepared to grant licenses on fair, reasonable and non-discriminatory terms and conditions pursuant to Clause 6.1 of the ETSI IPR Policy is sufficient when selecting technologies for ETSI standards and technical specifications.

4.2 Transfer of Ownership of ESSENTIAL IPRs

Taking into account the importance of a robust standards system, those implementing ETSI standards should be able to rely on licensing undertakings provided in accordance with Clause 6.1 of the ETSI IPR Policy, regardless of any change in the ownership of the relevant IPRs. To that end, it is desirable that, to the maximum extent possible in each legal jurisdiction, when ownership of an ESSENTIAL IPR is transferred, any applicable licensing undertaking should automatically transfer to the new owner. Some legal jurisdictions may already provide for achievement of this result. However, ETSI recognises that this result may not be certain in all legal jurisdictions.

Therefore, ETSI encourages:

- Prospective assignees or transferees to check for applicable licensing declarations, for example, by searching for registrations of such declarations in the ETSI IPR database;
- MEMBERS that have given General IPR licensing declarations to draw the attention of any
 assignee or transferee to the possibility that undertakings given in such declarations might
 apply to the IPRs that are to be assigned or transferred.

4.3 Dispute Resolution

ETSI Members should attempt to resolve any dispute related to the application of the IPR Policy bilaterally in a friendly manner.

Should this fail, the Members concerned are invited to inform the ETSI GA in case a friendly mediation can be offered by other ETSI Members and/or the ETSI Secretariat.

However, it should be noted that once an IPR (patent) has been granted, in the absence of an agreement between the parties involved, the national courts of law have the sole authority to resolve IPR disputes.

4.4 Notice on the use of NDAs in IPR negotiations

It is recognized that Non Disclosure Agreements (NDAs) may be used to protect the commercial interests of both potential licensor and potential licensee during an Essential IPR licensing negotiation, and this general practice is not challenged. Nevertheless, ETSI expects its Members (as well as non-ETSI Members) to engage in an impartial and honest Essential IPR licensing negotiation process for FRAND terms and conditions.

4.5 Financial contingency

Members developing products based on standards where there may be Essential IPRs, but there is uncertainty, have mechanisms available which they can use to minimize their risk. As a non-exclusive example, a Member might wish to put in place financial contingency, based on their assessment of "reasonable", against the possibility that further/additional license fees might become payable.

Page 61 ETSI Guide on IPRs, 27 November 2008

4.6 Rationale and clarifying texts for the changes in Clause 4.1 of the ETSI IPR Policy

A revised version of the Clause 4.1 of the ETSI IPR Policy was adopted by the 46th General Assembly on November 2005. This revision was induced by the EC DG COMPETITION in its concern to generate a general awareness of the risk of "patent ambush" situation in the standard making process.

4.6.1 History of changes

Prior to the 46th ETSI General Assembly, Clause 4.1 of the ETSI IPR Policy read:

4.1 Each MEMBER shall use its reasonable endeavours to timely inform ETSI of ESSENTIAL IPRs it becomes aware of. In particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.

During the 46th ETSI General Assembly the modifications below to Clause 4.1 of the ETSI IPR Policy were adopted.

- 4.1 <u>Subject to Clause 4.2 below, Ee</u>ach MEMBER shall use its reasonable endeavours, <u>in particular during the development of a STANDARD or TECHNICAL SPECIFICATION where it participates, in particular</u> to timely inform ETSI of ESSENTIAL IPRs <u>in a timely fashion</u> to the becomes aware of. In particular, a MEMBER submitting a technical proposal for a STANDARD or TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.
- 4.6.2 EC DG COMPETITION's position regarding the rationale and scope for the changes of Clause 4.1 of the ETSI IPR Policy

The extracts below are taken from various correspondences between ETSI and the EC DG COMPETITION services.

4.6.2.1 Addition of the sentence "Subject to Clause 4.2 below..." and Deletion of the phrase "... it is aware of or becomes aware of."

RATIONALE from DG COMPETITION

" the deletion of the phrase "becomes aware of" is important from the Commission's "patent ambush" perspective...."

Source: DG COMPETITION letter dated 26 April 2005 reproduced in B#52(05)17, Annex, Footnote 2.

CLARIFYING LANGUAGE from DG COMPETITION"

".... the deletion of the phrase "becomes aware of" is important from the Commission's "patent ambush" perspective, [but] does not imply an extra burden on ETSI Members - by definition, a company can only inform about essential IPRs if it has knowledge of such IPRs."

Source: DG COMPETITION letter dated 26 April 2005 reproduced in B#52(05)17, Annex, Footnote 2.

"... the deletion of the words "becomes aware of" "arguably imposes a higher burden of disclosure for the ETSI Members". More specifically, you raise the concern that this might oblige Members to conduct IPR searches. We do not believe that this concern is warranted. As Mr. Mensching noted in his letter of 28 January 2005, the rationale behind the proposed deletion of "becomes aware of" is that we would expect a Member in a standard-setting process to have a general awareness of the scope of its IPR rights in that area, and therefore

Page 62 ETSI Guide on IPRs, 27 November 2008

where necessary, "use its reasonable endeavours" to identify these IPR.¹ However, as has been explicitly confirmed to you in writing on numerous occasions, this does not mean that we would expect Members² to conduct patent/IPR searches. As such, our proposed change does not create a heightened expectation for Members to identify essential IPRs. Nor does it create any contradiction with Article 4.2 of ETSI's IPR policy. Nevertheless, in order to explicitly convey this message in ETSI's IPR policy itself, we would be willing to incorporate, at the beginning of Article 4.1, the phrase "Subject to Clause/Article 4.2 below". "

Source: DG COMPETITION LETTER dated 29 March 2005 reproduced in GA#45(05)22, Annex I, paragraph 4.

4.6.2.2 Addition of the phrase "... where it participates ..."

RATIONALE from DG COMPETITION

"The addition of the phrase "in which it participates" therefore addresses the concern expressed by some ETSI members, and also means that to the extent that a member is not participating in an ETSI standards development committee/working group but becomes aware of certain essential IPRs, a general obligation to inform ETSI of the essential IPRs remains".

Source: DG COMPETETITION LETTER dated 26 April 2005 reproduced in B#52(05)17r1, Annex III (paragraph 4 of Annex to the EC letter of 26.04.05).

4.6.2.3 Re the expression "in particular"

CLARIFYING LANGUAGE from DG COMPETITION

"Firstly, I note your concern that DG Competition's proposed wording might be interpreted as narrowing the obligation to disclose essential IPR to a very specific phase of the standardisation process. As you stress, we have already confirmed that our proposed changes do not mean that the window of opportunity to declare essential IPR is closed when a standard is adopted. However, to more explicitly address your concern in Article 4.1 of the IPR rules, we are happy to accept your proposed addition of the words "in particular".

Source: DG COMPETITION LETTER dated 29 March 2005 reproduced in GA#45(05)22, Annex I, paragraph 2.

4.6.3 ETSI's position regarding the rationale and scope for the changes of Clause 4.1 of the ETSI IPR Policy

The extracts below has been developed, with the support of EC DG COMPETITION, by the ETSI membership and endorsed by the 46th ETSI General Assembly.

4.6.3.1 Re the addition of the sentence "Subject to Clause 4.2 below..."

The insertion of the phrase "Subject to Clause 4.2 below" at the beginning of the first sentence of the new text of Clause 4.1 is intended to reflect the general framework under which the requirement of disclosure of Clause 4.1 operates. This insertion explicitly conveys the notion that the requirement of disclosure contained in Clause 4.1 is not to be interpreted as an obligation on ETSI Members to conduct IPR searches.

As DG COMPETITION explicitly confirmed to ETSI in writing on numerous occasions;

Once again, this is consistent with the notion of members being invited by the meeting Chairman to identify essential IPR at the beginning of each relevant meeting.

whether or not they are participating in the development of a standard.

In this regard, as you correctly noted at the General Assembly, the deletion of the phrase "becomes aware of" is important from the Commission's "patent ambush" perspective, but does not imply an extra burden on ETSI members - by definition, a company can only inform about essential IPRs if it has knowledge of such IPRs.

Page 63 ETSI Guide on IPRs, 27 November 2008

the new text of Clause 4.1 "does not mean that we would expect Members⁴ to conduct patent/IPR searches. As such, our proposed change does not create a heightened expectation for Members to identify essential IPRs. Nor does it create any contradiction with Article 4.2 of ETSI's IPR policy. Nevertheless, in order to explicitly convey this message in ETSI's IPR policy itself, we would be willing to incorporate, at the beginning of Article 4.1, the phrase "Subject to Clause/Article 4.2 below".

Source: Letter from Angel Trabacete, DG COMPETITION, to Karl Heinz Rosenbrock, ETSI Director-General, 29 March 2005 reproduced in GA#45(05)22, Annex I,

paragraph 4.

"it is clear that it should not be reasonably expected that an ETSI Member should have a duty to take steps to find out about potential IPR it might have relating to ETSI standards development work in areas/committees where that Member is not participating in that work (no more than it should be expected, as we have previously confirmed, that a Member carry out patent/IPR searches)."

Source: Letter from Angel Tradacete, DG COMPETITION, to Karl Heinz Rosenbrock, ETSI

Director-General, 26 April 2005, reproduced in B#52(05)17r1, Annex III

(paragraph 2 of Annex to the EC letter of 26.04.05).

4.6.3.2 Re the deletion of the phrase "... it is aware of or becomes aware of."

DG COMPETITION's intention in pursuing deletion of the phrase "it becomes aware of" is viewed as important from the patent ambush perspective. The idea is to prevent an ETSI Member from intentionally not disclosing Essential Intellectual Property Rights (EIPR) during the standardization process, and after the standard has issued, then disclosing such EIPR with the intention to not license on fair, reasonable, and non-discriminatory (FRAND) terms as expected by ETSI Policy for EIPR Intentional non-disclosure of EIPR generally occurs in two instances:

- when a representative participating in a Technical Body on behalf of a Member has actual knowledge of EIPR, and yet the Member holds back notification; or,
- 2) when a member fosters an atmosphere of ignorance amongst its employees participating at ETSI with the intent to avoid its EIPR disclosure and FRAND licensing obligations.

DG COMPETITION has made it clear that the removal of the "it becomes aware of" wording is not intended to place a higher burden of disclosure upon a Member, nor is it intended to create a heightened expectation for Members to identify EIPR. This position is consistent with the ETSI IPR Policy and ETSI practice to requiring Members participating in Technical Bodies to respond at the earliest possible time to the Call for IPRs performed by Technical Body Chairmen at the beginning of each meeting, based on the working knowledge of their participants.

Further, it has been explicitly confirmed by DG COMPETITION on numerous occasions that the removal of the words does not mean a Member would be required to conduct patent/IPR searches.9

Concern has been raised that removal of the "it becomes aware of" wording places an untenably broad burden of disclosure on ETSI Members. Based on the above, it appears the intent is for the burden to remain the same while identifying conduct whereby "patent ambush" in violation of the ETSI IPR Policy may be assumed.

Whether or not they are participating in the development of a standard.

DG COMPETITION letter dated 26 April 2005

⁶ ETSI IPR Policy, Section 6.1.

⁷ DG COMPETITION letter dated 26 April 2005.

⁸ ETSI Guide on Intellectual Property Rights, Section 2.3.1.

⁹ DG COMPETITION letter dated 29 March 2005.

Page 64 ETSI Guide on IPRs, 27 November 2008

4.6.3.3 Addition of the phrase "... where it participates ..."

The term "where it participates" as employed in Clause 4.1 seeks to clarify that a Member's obligation to use such reasonable endeavours under this Clause should be adhered to in those Technical Bodies or its Working Groups in which an employee (or otherwise authorised representative) of such Member (as defined within the ETSI IPR Policy) performs at least one of the following:

- attends a meeting of;
- ii) participates in or contributes, directly or indirectly, to the work of;
- iii) votes on any matter raised within;

such Technical Body or Working Group where such Technical Body or Working Group is responsible for the ETSI Work Item from which such STANDARD or TECHNICAL SPECIFICATION, [as an ETSI Deliverable], has or will result.

4.6.3.4 Re the expression "in particular"

The insertion of the phrase "in particular" in the first sentence of the new text of Clause 4.1 is intended to reflect the importance placed by DG COMPETITION on a member's informing ETSI of Essential IPRs during the period when that information might be most relevant to the development of a Standard of Technical Specification. DG COMPETITION has made clear (see DG Competition Letter dated 29 March 2005 reproduced in GA#45(05)22, Annex 1, paragraph 2) that the inclusion of this phrase does not mean either that the window of opportunity for a member to declare its Essential IPRs is closed once a standard is adopted or that the member's duty to use its "reasonable endeavours" post-adoption is waived or altered.

4.6.3.5 Re the expression "Reasonable Endeavours"

The new text of Clause 4.1 of the ETSI IPR Policy provides, in part, that each ETSI Member "shall use its reasonable endeavours, in particular during the development of a Standard or Technical Specification where it participates, to inform ETSI of Essential IPRs in a timely fashion." Clause 4.2 of the ETSI IPR Policy provides that these disclosure obligations "do however not imply any obligation on Members to conduct IPR searches."

As DG COMPETITION has pointed out, the concept of "reasonable endeavours" qualifies the obligation to disclose essential patents. As it has noted, "it is clear that it should not be reasonably expected that an ETSI Member should have a duty to take steps to find out about potential IPR it might have relating to ETSI standards development work in areas/committees where that Member is not participating in that work (no more than it should be expected, as we have previously confirmed, that a member carry out patent/IPR searches)."

Source: Letter from Angel Tradacete, DG COMPETITION, to Karl Heinz Rosenbrock, ETSI Director General, 26 April 2005, at Annex.

This interpretation by DG COMPETITION is supported by the longstanding interpretation of "reasonable endeavours" in the ETSI Guide on Intellectual Property Rights. The steps that must be taken to identify essential patents focus on the activities and knowledge of the ETSI Member's representatives who are active in a particular ETSI matter. Each Technical Body and working group meeting, for example, must begin with a call for IPRs. See ETSI Guide on Intellectual Property Rights, Section 2.3.2. "Members participating in Technical Bodies should respond at the earliest possible time to the Call for IPRs performed by Technical Body Chairmen at the beginning of each meeting, based on the working knowledge of their participants." Id., Section 2.1.1.

Accordingly, it seems that the "reasonable endeavours" that are to be taken to disclose patents that are essential to a particular ETSI deliverable should be measured in terms of the knowledge of representatives of an ETSI Member who are actively involved in the work of the body developing that ETSI deliverable. This interpretation acknowledges, as DG COMPETITION has noted, that "reasonable endeavours" has the benefit of being able to cover different scenarios on their merits on a logical, case-by-case basis."

Source: Letter from Angel Tradacete at Annex, note 1.

Page 65 ETSI Guide on IPRs, 27 November 2008

Annex A ETSI Intellectual Property Rights Policy

See ETSI Rules of Procedure, Annex 6.

Annex B Void

This Annex previously contained the ETSI IPR Information Statement and Licensing Declaration forms which have been moved to the ETSI IPR Policy itself (RoP Annex 6).

Annex C Check list of the Chairmen's obligations in respect of the notification and disclosure of IPRs

- Check that the scope statements for work items are sufficiently defined
- Perform "call for IPRs" in Technical Bodies meetings:
 - at the beginning of meetings using the text supplied in Clause 2.3.3 of the IPR Guide.
 - during meetings: (reminder of the formal call of IPRs) as in Clause 2.3.3 of the IPR Guide:
 - on formal submission of a technical solution;
 - on completion of a first stable draft;
 - on working group approval of a draft standard;
 - on TB approval of a draft standard.
- Record that the "call" has been performed.
- Record any responses received (or the absence thereof) and inform the Secretariat.
- Record any copyright identified (or absence thereof) and inform the Secretariat.