



**The DVB Project
Multimedia Home Platform (MHP)**

**MHP Implementation Arrangements
and associated agreements**

**A066 Rev. 1
July 2003**

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0.1 Preface to Revision 1

This revision to the DVB Blue Book on MHP implementation arrangements reflects a number of important developments during the past 18 months. As of the date of this revision – June 2003 – there are now some 8 holders of the MHP mark and the Custodian is now actively distributing copies of the MHP Test Suite to potential implementers. To respond to growing interest in the MHP specification in a number of markets, the DVB has adopted two variations as part of its process for Globally Executable MHP; two others are being developed.

This revision takes account of

- An amended and restated DVB Conformance Custodian Agreement and the practice, based now on nine months of experience, of conformance testing and IPR licensing (item 3.1)
- As part of that experience, the offer of licences by additional holders of rights in applications in the MHP Test Suite (items 5.2 et seq);
- The establishment of a feedback procedure as a further assessment of queried applications in the MHP Test Suite (item 4.3.3);
- The IPR issues raised by the adoption by sister standards fora of variants of our MHP specification under our process for Globally Executable MHP (item 4.4); and
- The clarification of certain aspects of the implementation process (for example, relating to Incomplete Implementations) (section 2.4.4.4); the addition of a glossary (item 2.6); and the furnishing of core documents for DVB's IPR policy (item 7).

The work continues on these implementation arrangements and a further revision may include information on the use of the MHP mark for authoring tools and progress on the voluntary licensing schemes covering patents essential to MHP and GEM.

This revision comes at the end of DVB's first decade. It represents the expertise and dedication of lawyers and others from DVB members, working in parallel with the technical work within DVB. It also benefits greatly from its close links with the European Telecommunications Standards Institute (inter alia in its capacity as Custodian) and with the sister standards fora now taking up the MHP specification.

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1. Preface

Erkki Liikanen

**Member of the European Commission,
responsible for Enterprise and the Information Society**

The technical specification work of the DVB Project is one of the outstanding successes of European industry in new technologies, and has provided the world standards for digital television across a variety of transmission media. The reasons for that success can be traced back to the structure and approach of the DVB. Its consensus-based process brings together the widest range of sector actors in digital video broadcasting – equipment manufacturers, software developers, infrastructure and service providers – into a global forum. By first collecting commercial requirements and then specifying appropriate technologies, the DVB has reversed an earlier tradition of technology-push, whereby public authorities would try to pick winners from among competing standards. In addition, collaboration with the European Telecommunications Standards Institute (ETSI) is a textbook example of timely creation of specifications by an industry consortium combined with the benefits of formal standardisation, fostering the launch and onward progress of digital television in Europe.

The Multimedia Home Platform is a great achievement of the DVB and its Technical Module. The MHP offers two important prospects for the future evolution of digital television: a horizontal market for both digital television services and consumer equipment, together with a sophisticated way of integrating broadcasting and Internet within the TV world. In Europe we will exploit all terminals, from the TV to the mobile phone, to bring the promise of Information Society services to our citizens. The digital age should be socially inclusive, building consumer trust and strengthening social cohesion. The roll-out of MHP is likely to have a considerable catalysing and multiplier effect, both on the consumer and supplier side.

A necessary complement to the technical achievement are the implementation arrangements set out in this DVB Blue Book. I share the enthusiasm for a broad European, indeed world-wide, market in interoperable MHP consumer equipment designed for a wealth of new applications and services. For this reason, the conformance testing regime described in these arrangements – MHP Experts Group, single MHP Test Suite, self-certification, ease of IPR licensing – is a significant contribution to ensuring the rapid implementation and take-up of MHP. I am grateful that ETSI has agreed to serve as the custodian for the regime.

DVB Blue Book A066 is a milestone: I congratulate the IPR Module and the lawyers from DVB members who, through the implementation arrangements, offer a framework to help resolve complex legal, market and technical issues. The DVB Blue Book is the most recent of a long history within the DVB of proposing resolutions to technological gateways which could block or delay innovation. I have in mind its "conditional access package" in 1994, its IPR policy ensuring licences of essential patents on terms fair, reasonable and non-discriminatory, the patent pooling arrangements it has fostered and now these MHP implementation arrangements.

Other challenges lie ahead, including completion of a voluntary licensing scheme covering all the essential IPR incorporated in MHP and the globalisation of the MHP standard to accommodate regional broadcast environments. I wish the DVB Project continued success in this endeavour.

Erkki LIIKANEN

Member of the European Commission

responsible for Enterprise and the Information Society

October 2001

2. Explanatory Note

2.1 Introduction

With the adoption of a specification for the Multimedia Home Platform¹, the DVB Project has made a significant advance for the provision, through the television receiver, of digital services to the consumer. In addition to accommodating digital television, available now thanks to DVB's transmission standards, the MHP can also provide access to Internet connectivity, e-commerce, and e-government services. This TV-centric development pushes the Information Society beyond the personal computer; it enfranchises consumers who risked being on the fringes of the digital revolution. By setting a specification for an application programming interface, MHP opens a more vast market for digital applications and services.²

This Blue Book explains the legal arrangements for the conformance testing and licensing of certain intellectual property rights essential to MHP. The DVB's consideration of this important issue ran parallel to its standard-setting work. It required the attention of its Steering Board, the IPR Module and several groups created ad hoc to address matters at the cutting edge of law and technology. The DVB Project is grateful for the contribution of its members, notably its lawyers. In addition to an explanation of the arrangements, this Blue Book also contains many of the principal agreements associated with MHP testing and licensing.

While the core arrangements described in this Blue Book – ETSI as custodian, MHP Test Suite, self-certification, centralised licensing – were more or less fixed at the time of the first version of this Blue Book, since that time further licensors of IPRs in the MHP Test Suite have joined the implementation arrangements. The DVB has launched a process for creating a voluntary agreed upon licensing regime of IPRs essential to MHP. When that process is more advanced, it is intended that the resulting pool participate in the ETSI process. Because of these future developments (and because of the evolution of the specification itself) it is likely that there will be further revisions of this Blue Book.³ Following this introduction is a summary checklist, a quick guide for implementers on the steps to follow to obtain an MHP Test Suite, to submit a Certification of Completion of Conformance Tests and to qualify for the MHP Mark. After the checklist, the Blue Book sets out the background for MHP and the IPR policy of the DVB Project. Thereafter, the implementation arrangements, and associated agreements, are presented at greater length.

The descriptive material is followed by the agreements themselves, including the central documents adopted by the Steering Board; the contractual arrangements with the European Telecommunications Standards Institute, the MHP custodian; and the forms of licence agreement submitted by licensors for the MHP Test Suite and MHP implementation. Other IPR

1 TS 101 812 entitled "Digital Video Broadcasting (DVB); Multimedia Home Platform (MHP) Specification 1.0.1" is available from <http://pda.etsi.org/pda/queryform.asp> or <http://www.mhp.org/> under Technical Essentials

2 Some capitalised terms are defined in a glossary set out in section 2.6. (Note that capitalised terms and abbreviations may be separately defined in other documents in this Blue Book (notably in the DVB Conformance Testing Custodian Agreement (item 3.1).)

3 The implementer should consult www.mhp.org to find the documentation it needs for conformance testing and licensing; the website will contain all changes adopted between revisions.

related documents are presented, including the declaration relating to the HAVi specification and the call for declarations of IPR essential to the MHP specification.

This Blue Book is intended to assist implementers in understanding the framework for testing MHP implementations and licensing the related IPRs. Future revisions will take account notably of the work of the Technical Module's MHP Umbrella Group, which sets specifications for the Globally Executable MHP, variations to the MHP specification to account for regional broadcast environments, and the progress of the process launched to foster a voluntary licensing regime for IPRs essential to MHP.

Questions related to the materials in this Blue Book can be addressed to eltzroth@dvb.org.

July 2003

2.2 Summary of Conformance Testing, IPR Licensing; Checklist

2.2.1 Introduction

Under the ETSI programme for MHP conformance testing and licensing, an implementer requests the MHP Test Suite from ETSI upon payment of an ETSI administrative fee of 1000 euros and delivery of licensing agreements, signed by the implementer, covering test applications in the MHP Test Suite. The implementer can also request various elements of source code and test harnesses. Once its implementation has passed the MHP Test Suite, the implementer delivers, to ETSI, its certificate of completion of conformance testing and, to the DVB Project Office, a copy, signed by the implementer, of the MHP Mark Licence Agreement. It is entitled to use the MHP Mark, for which it pays a €10,000 initial royalty and an annual royalty. For IPRs essential to the MHP specification, the implementer has several options at the time it delivers its certificate of completion of conformance testing: it can sign a short-form patent licence; it could enter into a broader licensing arrangement with the MHP technology providers; or it could take the view that it has developed the MHP implementation on a clean-room basis.⁴

MHP is a registered trademark of the DVB Project. The mark indicates that the equipment to which it is affixed conforms to the MHP specification; its implementation has passed the MHP conformance testing regime; and it is interoperable with other MHP equipment. The use of the MHP mark is subject to licensing conditions. Each implementer should note that it is **not entitled to use the MHP mark** until it has submitted to ETSI its certificate of completion of conformance testing, delivered to the DVB Project Office its signed MHP Mark Licence Agreement, and completed the other steps noted above.

The checklist below follows the steps an implementer will take from review of the MHP specification, conformance testing using the MHP Test Suite, licensing intellectual property rights essential to the specification and placing the MHP Mark on conforming equipment.

All the documents referred to in the checklist are set out in this Blue Book. In addition they are available at <http://www.mhp.org/>.

⁴ The IPR licensing regime described in the text may be complemented by a voluntary licensing regime, covering other essential IPR, in a process now being fostered by the DVB Project. See the press releases describing this process at item 6.4. This process now covers GEM variations; the holders of essential IPR may set up multiple pools across the different specifications.

2.2.2 Checklist: MHP Conformance Testing and IPR Licensing

IMPLEMENTER ACTIVITY	ACTION	IPR LICENSING & FEES ⁵
1. Considering Implementation		
	Examine MHP at http://www.mhp.org ; references to third party specification on separate third-party website	Third-party website may have click-through limitations; no fees
2. Implementation – Testing		
a. MHP Test Suite	Send ETSI two copies, each signed, of each Test Application Licence	Review licensing terms; ETSI administrative fee of 1000 euro; no royalty ⁶
b. Source code, test harness	At your option, send ETSI two copies, each signed, of each Source Code Licence and of each Test Harness Licence	Review licensing terms; no additional administrative fee; no royalty
3. Implementing – Market Launch		
All implementers using the MHP Mark	Send ETSI a Certificate of Completion of Conformance Testing; Send to DVB Project Office two copies, each signed, of the MHP Mark Licence Agreement	€10,000 royalty, payable to DVB
a. Short-form licence of essential IPR	Send ETSI two copies, each signed, of each Essential IPR Licence	Review licensing terms; no royalty
b. “Long-form” licence with IPR holder	Make direct contact with the licensor	Royalty, other terms subject to bilateral negotiations
c. No licence (“clean-room implementer”)	Send to ETSI notice that you choose not to deliver an Essential IPR Licence	

⁵ The table reflects the situation as of June 2003 in respect of royalties. As other IPR holders participate in the ETSI program, they may ask for payment of royalties. Note that Sun has offered a second form of Essential IPR Licence under which it will assess a royalty not to exceed US\$ 1 for each hardware unit.

⁶ As indicated in the prior footnote, there is as of the date of this Blue Book no royalty associated with the MHP Test Suite. The MHP Test Suite is confidential and for that reason a rights holder may not be aware that its essential IPR is implicated until after its adoption by the DVB Steering Board. See section 2.4.2. Note also that the licences for test suites adopted for other GEM variations may be royalty-bearing and contain terms different than those set out in this Blue Book.

2.3 Background

2.3.1 The Multimedia Home Platform

The Multimedia Home Platform defines a generic interface between interactive digital applications and the terminals on which those applications execute.⁷ This interface decouples different providers' applications from the specific hardware and software details of different MHP terminal implementations. It enables digital content providers to address all types of terminals ranging from low-end to high-end set top boxes, integrated digital TV sets and multimedia PCs. The MHP extends the existing, successful DVB open standards for broadcast and interactive services in all transmission networks including satellite, cable, terrestrial and microwave systems.

The MHP supports many kinds of applications including electronic programming guides, information services ("super teletext", news tickers, stock tickers), applications synchronized to TV content (score cards, local play-along games) and e-commerce and secure transactions.

The core of the MHP is based around a platform known as DVB-J. This includes the Java virtual machine as originally specified by Sun Microsystems, Inc. A number of software packages provide generic application program interfaces (APIs) to a wide range of features of the platform. MHP applications access the platform only by means of these specified APIs. MHP implementations are required to perform a mapping between the specified APIs and the underlying resources and systems software.

The MHP specification provides a consistent set of features and functions required for the enhanced broadcasting and interactive profiles. New profiles will be added later based on the continuing work of the DVB Project.

2.3.2 Organisation of MHP work: technical specification

The work of setting a standard for the Multimedia Home Platform largely followed the normal process for setting specifications adopted by the DVB Project. Consistent with its normal pattern, the DVB Steering Board called on the Commercial Module to adopt user and market requirements. The resulting document on "enhanced and interactive digital broadcasting in the local cluster", encompassed over 40 detailed requirements set out in 26 pages and was adopted by the Steering Board.⁸ The Technical Module thereafter set out to create a specification responding to these requirements (although the TM launched its work even while the CM was completing its detailed requirements).

Once the TM's specification was adopted by the Steering Board, it was formally delivered to ETSI so that it could in turn set a standard Technical Specification (TS). ETSI has its own internal process for reviewing the DVB's proposals; these are generally vetted in the first instance by a joint technical committee composed of CENELEC, ETSI and the European Broadcasting Union. The MHP specification was published by ETSI as TS 101 812.

The technical process for MHP has an important element novel to the DVB Project: an MHP Experts Group has been charged with passing on the test applications comprising the MHP Test Suite. The DVB has earlier not favoured a conformance testing regime, but, for the reasons set out in Section 2.4.2, the conformance regime described in this Blue Book was established, and the use of the MHP mark by an implementer is conditioned on the successful completion of that regime. Operating under a set of Rules and Procedures (item 4.3.1), the MHP Experts Group receives test applications, scrutinizes them, and passes on a single MHP Test Suite for approval by the DVB Steering Board. The Rules and Procedures describe the process the MHP Experts Group uses in its work and a set of principles designed to ensure the independence of the test applications incorporated in the MHP Test Suite. The MHP Experts Group has also

⁷ This paragraph, and the next three paragraphs, are taken from Carsten Vogt (Alcatel): "The DVB Multimedia Home Platform" (TAM545) (14 February 2000)

⁸ MHP 045 rev 12 was adopted by the Steering Board on 16 July 1998 as SB 21(98)08.

adopted a feedback mechanism for review of queried applications within the MHP Test Suite (item 4.3.3).

Under the DVB's practice, matters relating to the intellectual property in a specification are addressed generally after the specification has been adopted. That is, while DVB members are held to offer essential IPRs on terms fair, reasonable and non-discriminatory, the effort to identify the IPRs, for the formation of a patent pool, can occur months later. Because of concerns about the licensing policy of a principal technology provider, however, the DVB undertook to address certain of the IPR issues while the MHP specification was being completed.

2.3.3 IPRM and the IPR policy of the DVB Project

From its inception in 1993, the DVB Project has addressed issues related to the intellectual property rights associated with the specifications it was developing for digital video broadcasting.⁹ Its IPR policy first confronted the risk that patents essential to DVB specifications for terrestrial, cable and satellite transmissions could block implementation. For this reason, the DVB Project adopted an IPR amendment under which its members agree to grant licences to essential IPRs – that is, those necessarily infringed from a technical point of view when implementing the specification – on terms, which are fair, reasonable and non-discriminatory. DVB members can give notice that their IPR is unavailable at set times in the specification process.¹⁰ In addition, the amendment, now incorporated in the Memorandum of Understanding of the DVB Project, also fosters the creation of voluntary, agreed upon licensing programmes, in other words, patent pools of essential IPRs.¹¹ It also formed, as a separate module, a forum of specialists that could raise, discuss and often resolve concerns arising out of potentially blocking patents, gateways created by proprietary technology and novel licensing policies of rights holders. Under this framework, the DVB has seen through to implementation a licensing arrangement for its DVB-T specification (administered by MPEG-LA (<http://www.mpeg-la.com>) and earlier adopted a comprehensive solution to the perceived gateway represented by conditional access technology controlled by dominant broadcast players.¹²

It was within the IPR Module that there occurred the most vigorous debates on issues raised by the incorporation in the DVB's Multimedia Home Platform of technology from a significant technology supplier. It also developed the structure for the conformance testing regime; participated in and heard the results of the work of negotiating teams, lawyers conferences and ad-hoc discussions on licensing terms; considered and commented on the opinion delivered by the DVB's competition counsel (item 4.5); and today monitors the progress of the

⁹ For more complete information on the IPR policy of the DVB Project, see Eltzroth, IPR Policy the DVB Project (Singapore conference (2001)) now at http://www.dvb.org/dvb_membership/. On the technical aspects of digital video broadcasting generally, see U. Reimers, Digital Video Broadcasting: The International Standard for Digital Television (Berlin 2001) – Springer Verlag ISBN 3-540-60946-6.

¹⁰ Articles 14.1 and 14.3 of MoU DVB set out the timing requirements for "negative disclosure". No notice under either provision has been delivered. The Memorandum of Understanding of the DVB Project, as amended and restated in December 2000, is set out in item 7.1 and in http://www.dvb.org/dvb_membership/pdfs/mou2001.pdf.

¹¹ The IPR rules of DVB are not intended to displace those of the recognised standards bodies to which DVB submits its specifications. This is clear in art 14 MoU DVB; the art 14.1 notices issued by the DVB's technical module to all members are a frequent reminder to DVB members of their obligations within such bodies. The rules applying within ETSI can be found at www.etsi.org/legal/home.htm.

¹² The "conditional access package" adopted in 1994 included a comprehensive licensing scheme of the technology for the common scrambling algorithm, see Common Scrambling Algorithm Distribution Agreements, DVB Blue Book A011 Rev. 1, to be found at the <http://www.etsi.org/technicalactiv/dvb/dvb.htm>. The success of that scheme led it to be used as a model for these MHP implementation arrangements.

review of declarations of patents essential to the MHP specification (see item 6.4). This Blue Book, together with the accompanying agreements, is in large measure the results of the deliberations of the IPR Module.

2.3.4 DVB and the IPR policies of sister standards fora

The success of MHP has brought the DVB Project into cooperation with other standards bodies for the development of a Globally Executable MHP and “functional equivalents” corresponding to local broadcast environments. This cooperation has raised the concern that the sister standards forum – which is called upon to set the specifications for functional equivalents – may not require a licensing policy comparable to DVB’s. There could arguably be a failure of reciprocity: while DVB members would be obligated to grant licenses in respect of the core GEM elements on terms which are fair, reasonable and non-discriminatory, the members of the sister forum may not be similarly bound for the “functional equivalents”. In addition, the sister standards forum may not recognize the importance of conformance testing for implementations offering the range of functionalities as MHP.¹³

For these reasons, a special procedure was adopted by the Steering Board for review of the policies, adopted by a sister standards body, for IPR licensing and conformance testing. This procedure calls upon the IPR Module to assess whether the members of the sister standards forum undertake to grant licences to essential IPR on terms fair, reasonable and nondiscriminatory. As for conformance testing, the IPR Module compares the process adopted by the sister standards forum to determine whether it addresses the goals of interoperability of MHP equipment and ease of IPR licensing and can be integrated into the DVB’s own process. It is not expected that the forum follows all the elements of the DVB’s policy.¹⁴

At the time the IPRM has completed its review, and the technical elements of the functional equivalents have been specified, the DVB adopts a revision to its GEM specification. At that time a new “90-day window” is opened under the DVB’s MoU article 14.1, allowing a further period for negative disclosure by a DVB member in respect of the revision.

The relationship with a sister standard body can work extremely well: DVB and CableLabs have together created the OCAP specification for the US cable environment. After a review of CableLab’s policy on essential IPR and conformance testing, the DVB adopted a version of GEM which includes OCAP for fully compliant equipment. CableLabs and DVB continue to work together on efforts to foster patent pooling arrangements for MHP and OCAP and on conformance issues.¹⁵

¹³ The same issues – reciprocity in IPR licensing, importance of conformance testing – are not present in DVB’s “vertical cooperation” with recognised standards bodies such as ETSI and in liaison relationships with, for example, the TV Anytime Forum.

¹⁴ The decision of the Steering Board defining the relationship with the sister standards forum is set out in “Intellectual Property Rights, Conformance Testing associated with the Globally Executable MHP”, item 4.4.

¹⁵ In June 2003, GEM discussions were proceeding with a Japanese broadcast standards forum and with a US forum responsible for digital terrestrial standards.

2.4 MHP Implementation Arrangements and Associated Agreements

2.4.1 Introduction

In 1997 the DVB Project decided to extend its development of specifications to the Multimedia Home Platform,¹⁶ the set-top box for the household which would include not only standard broadcast functionalities but also interactivity and links to the Internet. When considering the operating system suitable for the platform, the DVB Project selected for the work of its Technical Module the Java technology owned by Sun Microsystems, Inc.

Java technology is based on a "virtual machine" which can provide to applications written in Java the ability to run on a number of operating systems without the need for a software developer to write for (or "port" to) multiple systems. For this reason, the choice of Java technology was attractive to DVB. At the same time Sun's policy of "write once, run anywhere" has brought it to impose rigorous licensing terms including a prohibition against a licensee's implementation of variations for the Java specification and regime of conformance tests including test suites developed by Sun. Sun has its own process for evolution of its specifications and for the extension of its core Java technology to other platforms.

Faced with this complex policy, there was uncertainty within the DVB Project on whether Sun, although a DVB member, could satisfy the test of the MoU for licensing IPRs essential for the forthcoming MHP on terms fair, reasonable and non-discriminatory. Some of these issues are discussed below.

2.4.2 Conformance Testing

The DVB has earlier not favoured a conformance-testing regime, largely out of concern that it could be subject to the control of a few market players. For this reason, the use of the DVB mark is granted by the project office of the DVB Project, based solely on the submission of a certificate by the implementer.¹⁷

For MHP, the concern was that the specification was of such a complexity that conformance testing would be needed to ensure a broad market in interoperable consumer equipment. In other words, the objective was to avoid the risk that variant implementations could divide the European (now world-wide) market, complicating the ability of service providers to reach as many installed MHP consumer units as possible. A further concern was that if there were no conformance-testing regime, MHP applications would need to be written (or ported) to multiple MHP platforms.

While conformance testing was attractive, there was concern that Sun, as lead technology provider, would be providing the majority of the test applications, which would serve as the basis for the MHP Test Suite. Thus, it was argued, the MHP implementer would be using a test suite biased toward Sun technology. A series of safeguards was developed: An MHP Experts Group was named to approve the MHP Test Suite, based on submission by Sun and others of test applications. This experts group would be mandated to refuse "any test application that does not conform to the MHP specification or is more restrictive . . ." Other detailed rules and procedures were established for the experts group to ensure genuine independence of test applications and allowing evolution of the MHP specification.¹⁸ Further safeguards lie in the

¹⁶ The press release announcing the launch of the DVB's work on MHP is item 4.6.

¹⁷ Generally, the DVB has required that an implementer need only declare compliance with a DVB standard, without the need for type approval. After the DVB receives a declaration, it issues an acknowledgement of receipt, allowing the DVB logo to be used. The DVB Project maintains a file of declarations. The Declaration of Conformity with DVB Specifications/Standards is available at http://www.dvb.org/dvb_technology/framesets/registration-fr.html

¹⁸ The Rules and Procedures of the MHP Experts Group are found in item 4.3.1.

relative ease in the process of conformance compliance; the naming of ETSI as a neutral custodian to administer the certification process; and the availability of the feedback mechanism under which a challenged application can be further assessed for its compliance with these rules.¹⁹

The MHP Experts Group has also received contributions from other test application developers. These have also found their way into the MHP Test Suite. Some developers have offered licences covering their test applications.²⁰ A concern arose out of the confidentiality of the work of the MHP Experts Group. For a rights holder not a member of the MHP Experts Group, this confidentiality would frustrate its ability to inform the DVB that its IPR, essential to a test application, would not be available under article 14 of the DVB's Memorandum of Understanding. At its October 2001 meeting, the DVB's Steering Board adopted a series of measures to reduce this risk. These included a declaration that the MHP Test Suite is a "specification" under the MoU and the adoption of a process including a call for negative disclosure addressed to the members of the MHP Experts Group and ultimately the replacement of an application where IPR was not available.

2.4.3 Licensing Terms for implementations

As noted above, the IPR policy of the DVB Project calls for licensing of patents and other IPRs essential to a DVB specification on terms fair, reasonable and non-discriminatory. Early in the development of the MHP specification, there was uncertainty on how Sun's own IPR policy could be reconciled with the DVB's: its prohibition against variations of java technology, against supersetting, conformance testing, the special role of the "Java Community process" in evolving the standard, etc.

As a result, the Steering Board and the ad hoc groups named to discuss with Sun its licensing policy addressed over 30 legal and practical issues. The scope of this Blue Book does not permit a lengthier discussion of these issues, for which, however, there was in the end broad consensus within the Steering Board. Among the most notable issues were:

- the ability of the clean room implementer to implement, test and market its implementation without being bound by the constraints of the Sun licensing arrangements and by the terms of reference of the MHP Experts Group;
- the restriction Sun places on implementers forbidding supersetting in the Java namespace;
- the appearance of discrimination in the licensing and other arrangements which, it was argued, give a competitive advantage to Sun's direct licensees.

Among the most noteworthy is the implementer's agreement to use the licensed rights only for the MHP implementations, that is, with interfaces and functionality of Sun's portion of the specification, without modification or subsetting of any Sun file or class name or interface declaration, without supersetting into the java namespace and fully satisfying the MHP Test Suite.

A second important provision is contained in Sun's license of its IPRs essential to the MHP specification. Sun's DVB MHP Patent License Agreement is royalty-free for so long as the licensee does not bring a claim against another implementer on the basis that it has infringed the licensee's own essential IPR or against Sun for inducing an implementer to infringe the licensee's essential IPR. One effect of this provision (or "covenant not to sue") would be to encourage the roll-out of MHP equipment on an entirely royalty free basis. The other effect, of course, is to deprive a licensee of its right to receive royalty payments for its valuable patent

¹⁹ The feedback mechanism is set out in item 4.3.3.

²⁰ These licences are set out in items 5.2 et seq. Generally an implementer executes all the test application licences. As the number of licensors grew (including participants in the MHP Test Consortium), it was decided that a licensor of test applications included in the MHP Test Suite should not be obliged to execute its own test application licence. This is true also for an entity which is identified as a participant in the MHP Test Consortium. Such a licensor (or participant) should notify the Custodian to that effect.

rights. If the licensee chooses to exercise these rights, and brings an infringement claim, then Sun's DVB MHP Patent License Agreement terminates and Sun will offer a similar license subject to a royalty not exceeding \$1 U.S. per hardware unit.

When examining these issues, the Steering Board called upon the expertise of competition counsel to examine the implementation arrangements and to consider the views of some DVB members. Counsel's principal focus was on whether implementers should be entitled to superset in the Java namespace. Counsel's conclusion was that

While several Sun MHP license agreements state clearly that a license to superset in that name space is withheld, and the scope of the Patent and Code Licenses are expressly limited to exclude all Implementations that superset in the Sun/Java name space, this is in our view (based on the information we have received) compatible with Article 81(1) and (3) or the EC Treaty, and no notification is required under Article 81(3).²¹

The text of counsel's opinion is set out in item 4.5.

The process described above addresses the IPRs held by Sun and many of the documents in this Blue Book reflect the results of that process. The position of certain other IPR holders, including the HAVi consortium and the owners of test applications, are also set out in this Blue Book. IPRs held by other rights holders – DVB members and others – are the subject of a call for declarations of essential IPRs (see item 6.4).

2.4.4 Implementing MHP

With this complex history in mind, what are the practicalities for obtaining the MHP Test Suite and for becoming a licensee?²²The regime for conformance testing and licensing involves four parties, the Licensor, the DVB Project, the Custodian and the implementer.

Figures A and B set out schematically the conformance testing regime and licensing regime for the MHP Test Suite.

²¹ This is only a summary on subsetting and royalties. For the substance of these provisions, it is important to examine the actual text of the relevant agreements contained elsewhere in this Blue Book.

²² This revision of the Blue Book does not include early aspects of the licensing and conformance process, including the initial version of the DVB Conformance Testing Custodian Agreement; the first two amendments thereto; a side letter between ETSI and the DVB Project on licensors of IPRs essential to the MHP Test Suite; documents relating to the initial versions of the MHP Test Suite; and the initial version of the MHP Mark Licence Agreement. Many of these documents related to early versions of the MHP Test Suite. The provisions of these documents are now incorporated elsewhere in the Blue Book or are otherwise epiphenomenal.

There may be further revisions of the MHP Test Suite, containing additional or alternative test applications, together with instructions on their use.

Figure A: Conformance Testing

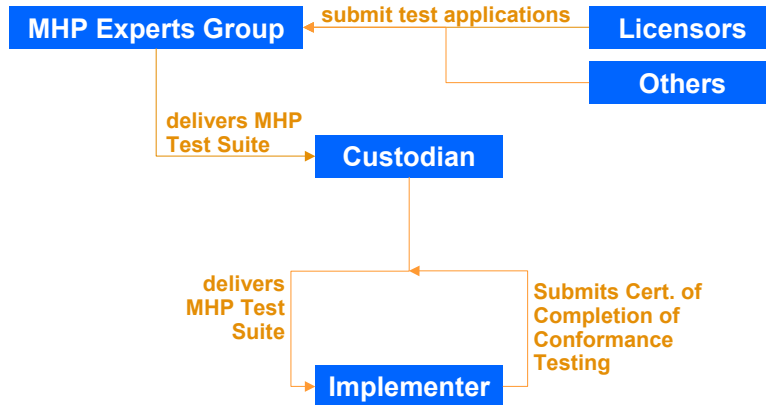
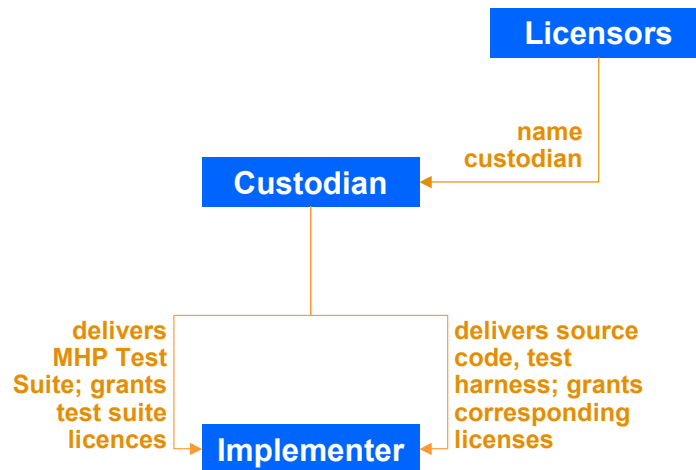


Figure B: Licensing (1) Test



2.4.4.1 If you are considering implementation.

A company which is considering implementation of the MHP specification can examine the procedure at <http://www.mhp.org> (under MHP Compliance) and look at the specification on the website <http://www.mhp.org> (under Technical Essentials). Where the MHP specification refers to a specification or other document in which a third party, for example Sun, has copyright, a separate website has been established containing the referenced documents. Sun’s website is located at <http://java.sun.com/products/specformhp/>.

2.4.4.2 If you are implementing.

ETSI as custodian will deliver to you the MHP Test Suite when you provide to ETSI:

- a. two copies, each signed by you, of each Test Application Licence, and
- b. the administration fee payable to ETSI of €1,000.

In addition, at your request (and for no further fee), ETSI will deliver to you

- c. elements of source code, when you provide to ETSI two copies, each signed by you, of each Source Code Licence, relating to the source code you have decided to use, and
- d. one or more test harnesses, when you provide to ETSI two copies, each signed by you, of each Test Harness Licence relating to the test harnesses you've decided to use.

In addition to the MHP Test Suite, elements of source code and test harnesses, ETSI will deliver to you a copy of the licences described above, each signed by ETSI as custodian for the licensor(s).

2.4.4.3 Introducing your MHP implementation to the market.

When you have completed conformance testing and your implementation successfully passes the MHP Test Suite, you can obtain, from ETSI as custodian for certain licensors, a licence of IPRs essential to the MHP specification. There are several options for which licensing arrangement you chose to enter into: You can request a basic "short-form" patent licence or decide to enter into a wider, direct licensing arrangement with a licensor. Alternatively, you may take the position that your implementation of the MHP specification has been developed on a "clean-room" basis and infringes no essential patents.

Each implementer using the MHP mark must

- i. deliver to ETSI its signed Certificate of completion of conformance testing exactly in the form attached as an annex to the DVB Conformance Testing Custodian Agreement,
- ii. deliver to the DVB Project two copies, each signed by you, of the MHP Mark_Licence Agreement,
- iii. pay to the DVB Project €10,000 as the initial MHP Mark Licence Fee, and
- iv. deliver to ETSI proof of payment of the initial MHP Mark Licence Fee,

in addition to following one of the steps listed in the next three sections.

When you have taken these steps, ETSI will examine the Certification of Completion for formal regularity and thereafter deliver the items applicable to you described below. The DVB Project will deliver to you a copy of the MHP Mark Licence Agreement, together with a suitable copy of the MHP Mark and guidelines of its use. (A new product may be considered a new implementation requiring separate testing and submission of a separate Certificate of Completion. See section 2.4.5.)

2.4.4.3.1 When you want to license IPRs essential to your implementation ("short-form" licence).

If you wish to take an Essential IPR Licence, you should, in addition to the steps listed in (i), (ii), (iii) and (iv) above,

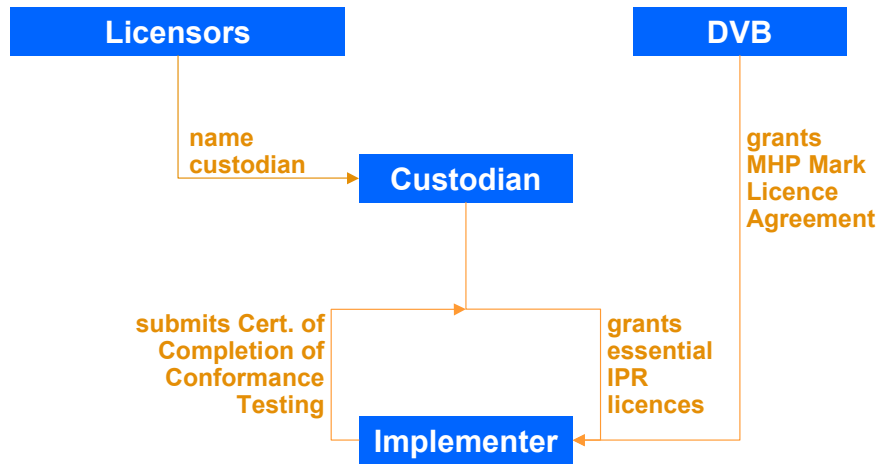
- (1). deliver to ETSI, a copy, signed by you, of each Essential IPR Licence.

Upon completion of these steps, ETSI will deliver to you a copy, signed by ETSI as custodian on behalf of the licensor(s) of each Essential IPR Licence.

Note that under the terms of the Essential IPR Licence offered by Sun you as licensee agree not to bring any claims for infringement of your own IPR essential to the MHP specification. If instead you intend to seek a royalty from implementers based on your own essential IPR you should contact Sun directly. Sun has indicated that in such cases it will assess you a royalty not to exceed US\$ 1 for each hardware unit.

Figure C sets out schematically the licensing regime for a licensee of both essential IPR under the "short-form" arrangement and the MHP mark.

Figure C: Licensing (2): Essential IPR, Brand



2.4.4.3.2 When you want to enter into a wider contractual arrangement with an IPR licensor.

If you wish to go beyond the licensing arrangements set out in an Essential IPR Licence and enter into a broader arrangement with one or more licensors, you should, in addition to the steps listed in (i), (ii), (iii), (iv) and (1) above.

- (2). make direct contact with the licensor(s).

These arrangements are subject to bilateral negotiation between you and the licensor(s) and are beyond the scope of the DVB implementation arrangements.

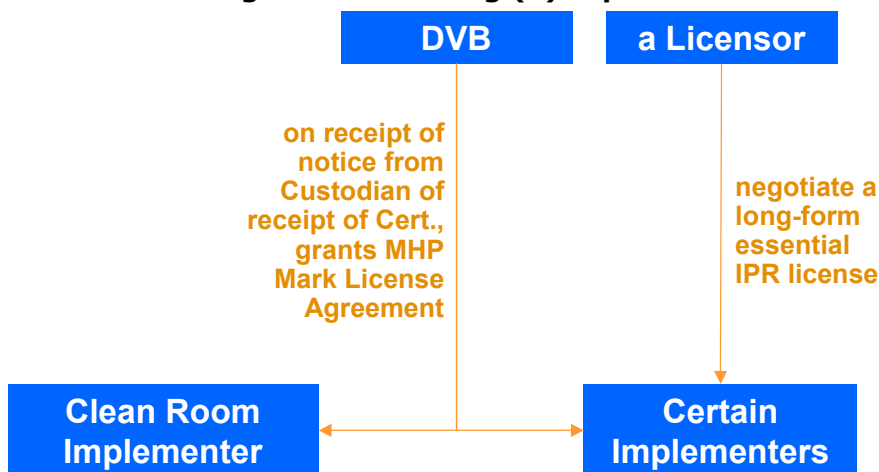
2.4.4.3.3 When you do not want to take an Essential IPR Licence (“clean-room implementation”).

If you take the view that your implementation does not infringe the patents of one or more of the licensor(s) which has furnished its Essential IPR Licence, then, at the time you take the steps listed in (i), (ii), (iii) and (iv), you should also

- (3). indicate in writing to ETSI that you have chosen not to sign and deliver the applicable Essential IPR Licence(s).

Figure D describes the regime for a clean-room implementer that is also a licensee of the MHP mark.

Figure D: Licensing (3): Options



2.4.4.4 Incomplete implementations; subcontractors.

This section discusses the steps to be taken, under the licensing regime, by component vendors, subcontractors and others which are not offering complete implementations to the market. Their position is different than the full implementer, that is a licensee intending to introduce a full implementation, which, among other requirements, fully satisfies the MHP Test Suite. The concern of licensors was that the MHP Test Suite could be used to test components for products other than MHP (and thus arguably competing with licensor products outside the field of MHP).

The process offered by the licensors of the MHP Test Suite is not uniform (but not inconsistent). Sun Microsystems, Inc. has the most comprehensive process and it appears that compliance with that process will satisfy the others (although a licensee should reach its own conclusion based on its review of the licensing documents in item 5).

The steps required by Sun Microsystems, Inc. are set out below. There are duties required of both the component vendor and full implementer.

When the component vendor tests its components

- The component vendor obtains an MHP Test Suite by entering into Test Application Licences described in section 2.4.4.2.

When selling its components

- The sales agreement between the component vendor and its purchaser states that the component or incomplete implementation may only be distributed when it is integrated into a full implementation.
- The component vendor may ask its purchaser (if it is a full implementer) for a copy of the certificate of assurance the purchaser has lodged with the Custodian to the effect that it is a full implementer.

At the time the full implementer purchases components to be incorporated into its full implementation MHP,

- It lodges with the Custodian the certificate described in the previous paragraph (a form of which is an exhibit to item 5.1.1).

Thereafter, at the request of the component vendor,

- With its confirmation that its component has been incorporated into a full implementation, the Custodian delivers to the component vendor one or more Essential IPR Licence(s).

The implementer is also entitled to use subcontractors. The licensing arrangements set out in this Blue Book recognise the role of subcontractors (item 5). There is a related point on affiliates. At times within a group, product development and marketing are handled by separate affiliated companies. The first company tests an implementation using the MHP Test Suite, submits its Certificate of completion of conformance testing under section 2.4.4.3 and enters into the MHP Mark Licence Agreement. The second, responsible for marketing and sales, is entitled to use the MHP mark as a sublicensee of the first upon submission to the DVB Project Office of an amended Schedule 5 ("Sublicensed Affiliates") to the MHP Mark Licence Agreement.

2.4.5 Continuing responsibilities for the MHP mark

The MHP mark is an element central to the development of a broad market, within Europe and elsewhere, for interoperable MHP consumer equipment. As noted elsewhere, the conformance testing regime is intended to prevent the fragmentation of MHP markets. The regime will help in ensuring that an MHP service provider will have access to as many MHP consumer units as possible and that an application writer will not have to port (or write) and application to

multiple MHP platforms. Recognising the important link between mark and conformance testing, the Steering Board declared,

there will be one DVB MHP Label... [which] will be granted to Implementers declaring to the Custodian that their implementation has passed the Test Suites made available by the Custodian and fully implement the appropriate profile of the specification . . .

For this reason, the use of the MHP mark is tied to successful completion of the conformance tests contained in the MHP Test Suite. An implementer can become a licensee of the MHP mark only when it satisfies the condition that it has delivered to ETSI as custodian its certificate of completion of conformance testing. Once it has delivered its certificate, executed and delivered to the DVB Project its copies of the MHP Mark License Agreement, and paid the initial royalty, the implementer, as licensee, is free to use the MHP mark following the guidelines adopted by the trademark owner, the DVB Project.²³

Whether a new product offered by an Implementer constitutes a new Implementation is left to the decision of the implementer. The DVB Project Office can offer guidance on whether a new product is a new implementation requiring delivery to the Custodian of a separate Certificate. Generally speaking, a product may well be considered a new "Implementation" if it meets the requirements of further test applications introduced since its initial product passed the MHP Test Suite; if it adds significant new functionalities; if it is intended to address different markets (eg for cable networks and not for terrestrial transmissions). On the other hand, a change in an existing implementation of its external appearance is not likely to trigger a new Certificate.²⁴

In succeeding years, the mark licensee has continuing responsibilities in respect of the MHP mark. Here is a summary of some provisions; an implementer should also refer to the text of the MHP Mark License Agreement (item 3.2). First, with the grant of the non-exclusive license to the MHP mark, the mark licensee can, in respect of its implementations, display the MHP mark on consumer or professional equipment, and on brochures and other marketing materials.

Each year, the mark licensee has the duty to submit a supplemental annual certificate in which it represents and warrants that each of its MHP implementations satisfies conformance testing using the MHP Test Suite. In other words, this supplemental annual certificate covers all its implementations and not just the implementation that was the subject of the initial certification delivered to ETSI. This is to ensure that once the mark licensee has obtained the MHP mark, its implementations continue to satisfy the conformance testing regime even where the MHP Test Suite has been amended or supplemented. At the time of submission of the supplemental annual certificate, the mark licensee pays to the DVB Project an annual license fee of €5000.

²³ An implementer not using the MHP mark is not required to undertake conformance testing. Such an implementer would not be able to avail itself of the short-form IPR licensing arrangements.

²⁴ The submission of a Certificate to the Custodian on the completion of conformance testing for a new implementation requires payment neither to the Custodian nor to the DVB Project Office. It will ensure the accuracy of the supplemental annual certificate submitted to the DVB Project Office under the MHP Mark Licence Agreement (at which time a payment of EUR 5000 is made).

A new product "rebadging" an existing product may, in some cases, not need to be treated as a new implementation calling for conformance testing. This case could arise for OEM products. The distributor of the rebadged product would in any event seek an MHP Mark Licence Agreement, which it obtains upon payment of the initial licence fee and its certificate, also signed by its seller (OEM), to the effect that the product is a rebadging of a product for which a Certificate of Completion has previously been filed. The distributor should also review the position of its seller in respect of IPRs essential to the implementation.

The mark licensee has also important duties to ensure the continuing integrity of the conformance testing process and of the use of the mark for MHP interoperability. If it becomes aware of any defect or insufficiency in the MHP Test Suite, it is called upon to inform the DVB, which will in turn submit the issue to the MHP Experts Group. In addition, the mark licensee is to give to the DVB Project notice of any unauthorised use of the mark by any other person in order to avoid infringement or other violation of IPR rules.

The chart set out below summarises some of the obligations of various categories of implementers.

	Testing Conformance	MHP Mark²⁵	Essential IPRs	Reference ²⁶
Full Implementation	Obtains MHP Test Suite	Obtained with Certificate of Completion	Available	<i>passim</i>
Incomplete Implementations	Obtains MHP Test Suite	No	Obtains Certificate of Assurance	Item 5.1.1 (A)
OEM purchaser	If only rebadging, not needed	Yes with certificate from OEM	To be reviewed by purchaser	Footnote 24
Changed Implementation	Implementer decides if retesting needed	Annual certificate may suffice	To be reviewed by Implementer	Explanatory Note, s 2.4.5
Affiliate		Yes, as sublicensee	Covered	MHP Mark Licence Agreement, schedule 5

²⁵ Note also annual requirements for supplemental certificate, fee, etc

²⁶ Cross-reference is not inclusive. Other provisions may be relevant

2.5 Chronology

October 1997	Steering Board approves commercial requirements for MHP
July 1998	Java virtual machine chosen as core technology for MHP, and DVB opens discussions with Sun Microsystems on IPR related issues.
June 1999	Steering Board adopts Declaration on conformance testing, licensing for MHP and endorses first working draft MHP specification
August 1999	Draft MHP standard demonstrated at IFA '99
November 1999	DVB approves "MHP Declaration" - document outlining the arrangements between DVB and Sun concerning the use of Java in MHP.
February 2000	MHP 1.0 approved in DVB at SB's 28th meeting
May 2000	Steering Board approves sending MHP 1.0 (profile 1: enhanced broadcasting; and profile 2: interactive TV) to ETSI
July 2000	ETSI publishes MHP 1.0 as TS 101 812 V1.1.1
December 2000	Steering Board approves MHP 1.0 corrigenda
April 2001	Steering Board approves MHP 1.0.1 Conformance testing, licensing documentation approved; DVB and ETSI enter into custodian agreement MHP Experts Group (MEG) begins work
June 2001	Steering Board approves MHP 1.1 (adding profile 3: internet profile)
August 2001	First launch of MHP products at IFA '01
September 2001	DVB launches MHP patent pooling programme, calling for declarations of essential IPR
October 2001	Blue Book A066 "MHP Implementation Arrangements and Associated Agreements", approved by Steering Board ETSI publishes MHP 1.0.1 as TS 101 812 V1.1.2
November 2001	ETSI publishes MHP 1.1 as TS 102 812 V1.1.1
December 2001	MHP Umbrella Group announced to set specifications within DVB of variations of MHP for regional broadcast environments
January 2002	DVB and CableLabs announce adoption by CableLabs of MHP for OCAP (Open Cable Application Protocol)
June 2002	DVB approves first version of MHP Test Suite (MHP Test Suite 1.0.2a), with provisions to ensure upgrade of MHP implementations which a fuller Test Suite becomes available.
November 2002	Steering Board approves first version of Globally Executable MHP (GEM) - encompassing CableLabs OCAP.
December 2002	DVB approves MHP Test Suite 1.0.2b - the first complete MHP Test Suite
January 2003	GEM published by ETSI as TS 102 819
April 2003	DVB approves MHP 1.0.3 and MHP 1.1.1 which are passed to ETSI for standardisation as TS 101 812 V1.3.1 and TS 102 812 V1.2.1 respectively.
June 2003	ARIB (Japan) announces adoption of MHP (GEM) based Application Environment for Japanese Data Broadcasting

July 2003

ETSI sends draft ES 201 812 V1.1.1 (an ETSI Standard version of MHP)
out to vote.

2.6 Glossary of terms

This glossary of terms provides a convenience translation of some of the terms used in the Explanatory Note. The terms may be defined with a different meaning in the documents contained in this Blue Book.

API	application programming interface
Certificate of Completion	a certificate delivered to the Custodian when an implementation has completed conformance testing, in the form of item 3, annex A
Custodian	ETSI, as custodian under the DVB Conformance Testing Custodian Agreement
DVB	the DVB Project
DVB Project Office	DVB Project Office, c/o European Broadcasting Union, Ancienne route 17A, Ch-1218 Grand Saconnex/Geneve, Switzerland
Essential IPR Licence	a licence offered to implementers covering IPRs essential to MHP implementations
ETSI	the European Telecommunications Standards Institute, a recognized standards body
GEM	Globally Executable MHP, a specification building on the core elements of MHP and completed by functional equivalents offered by a sister standards forum
HAVi	
IPR	intellectual property rights
Java	a technology promoted by Sun Microsystems Inc. and a central element of MHP
MEG	MHP Experts Group, a body within DVB responsible for developing the MHP Test Suite
MHP	Multimedia Home Platform
MHP mark	the trademark owned by the DVB Project, granted under the MHP Mark Licence Agreement to implementers submitting a Certificate of Completion (in the form of schedule 1 to item 3.2)
MHP Test Consortium	a group of companies (listed in item 5.2) developing test applications for the MHP Test Suite
MHP Test Suite	a set of test applications delivered by DVB to the Custodian for conformance taking of MHP implementations
MoU	The Statutes (Memorandum of Understanding) of the DVB Project, as amended and restated in December 1997
MPEG LA	an administrator of patent licensing programmes, including the DVB-T patent pool
Steering Board	the governing body of the DVB
TS	Technical Specification, a form of standard under ETSI rules
Test Application Licence	a licence required for use of the MHP Test Suite covering test applications within the MHP Test Suite

3. DVB Arrangements: Conformance Testing and Licensing of Intellectual Property Rights

3.1 Amended and Restated DVB Conformance Testing Custodian Agreement

(24/4/2003)

This Amended and Restated DVB Conformance Testing Custodian Agreement is among the DVB Project, a not for profit association with legal personality governed by Swiss law, European Telecommunications Standards Institute, a standards-making organisation recognised by the European Union, and the entities identified on the signature page hereof as Licensors.

RECITALS:

- a. By a decision of its Steering Board taken on 22 February 2000, the DVB Project (all capitalised terms, unless otherwise defined, are defined in section 1 of this Agreement) has adopted a specification for MHP; and on 9 November 1999 the Steering Board issued its Declaration (DVB SB 27 (99) 15 Rev. 2) with respect to certain DVB MHP rules, the arrangements for a custodian and an experts group, testing and certain other matters.
- b. As of 19 April 2001, the DVB Project and ETSI entered into the Initial Agreement, for which a Licensor delivered its counterpart signature page; together with such Licensor, the DVB Project and ETSI entered into two amendments to the Initial Agreement, dated as of 6 June 2001 and 24 October 2001, respectively; with the completion of the initial MHP Test Suite and the beginning of the Custodian's distribution of the MHP Test Suite, the DVB Project and ETSI entered into a letter agreement dated as of 29 August 2002, covering TA Licensors;
- c. Each Licensor has delivered to the Custodian one or more Licences in respect of its Intellectual Property Rights.
- d. Certain Licensors have delivered, to the MHP experts group formed by the DVB Project, Test Applications and Source Code for its review pursuant to the rules and procedures of such experts group; the DVB Project has delivered the MHP Test Suite and Source Code to the Custodian and certain Licensors have delivered licences related thereto.
- e. Each Implementer and each Component Vendor wishes to use the MHP Test Suite and to undertake Conformance Testing to aid implementation of MHP when developing and testing its product and to ensure conformance and interoperability among different implementations; for the purpose of Conformance Testing, the Custodian is willing to distribute the MHP Test Suite according to the terms of this Agreement.
- f. In addition to the MHP Test Suite, the Custodian is willing to deliver the Source Code according to the terms of this Agreement (but an Implementer may choose not to use Source Code).
- g. Each Essential IPR Licensor is willing to grant a licence to the Intellectual Property Rights in respect of an Implementation to a Licensee upon delivery by the TA Licensee to the Custodian of a Certificate of the completion by such TA Licensee of the Conformance Testing and upon the terms and conditions set forth in the Essential IPR Licence between such Licensee and such Licensor; such Essential IPR Licence covers the Intellectual Property Rights related to the activities of the Component Vendor in respect of the Licensee's Implementation.
- h. The DVB Project owns the MHP trademark and wishes to grant a licence to the Mark to a Licensee, also upon the delivery of the Certificate of the completion by such Licensee of the Conformance Testing and upon the terms and conditions set forth in the MHP Mark Licence Agreement.
- i. An Implementer may choose not to become an Essential IPR Licensee, but, as a lean-room implementer, implement MHP based only on the published text of MHP and on know-how owned by or otherwise properly available to such Implementer; an Implementer may also choose not to use Source Code; alternatively an Implementer may choose not to take the Essential IPR Licences offered by means of the Custodian but to seek a licence directly from one or more of the Essential IPR Licensors; any such Implementer may, upon delivery of its Certificate of completion of the Conformance Testing, obtain a licence to the Mark under the MHP Mark Licence Agreement.
- j. By means of this Agreement, the DVB Project, the Custodian and each Licensor intend to make clear that by entering into a Licence an Implementer is not deemed to acknowledge that the

Licensor thereunder has any Intellectual Property Rights in MHP or the MHP Test Suite and that by entering into the MHP Mark Licence Agreement an Implementer is not required to enter into an Essential IPR Licence.

- k. The DVB Project and the Licensors each believe that self-certification by Implementers will support the creation of a horizontal, competitive market in consumer equipment implementing MHP.
- l. The parties intend that the confidentiality of any Implementer will be generally protected so that no commercial advantage can be gained by a Licensor through discovering the identity of an Implementer.
- m. By the Initial Agreement, the DVB Project, pursuant to a decision of its Steering Board on 21 June 2000, and certain Licensors appointed ETSI, and ETSI accepted such appointment, as Custodian pursuant to the terms of this Agreement for the delivery of the MHP Test Suite (and, when so requested, Source Code) to potential Implementers, together with the licences associated therewith; for the receipt of Certificates from Implementers of the completion of Conformance Testing; the execution, on behalf of the Licensors, and delivery to Licensees, of the Licences; and for the other activities described in this Agreement; and by this Amended and Restated DVB Conformance Testing Custodian Agreement, the DVB Project, ETSI and the Licensors intend to reconfirm such arrangements, to provide for the matters covered by the amendments to the Initial Agreement and in the letter agreement dated as of 29 August 2002, to allow signature of this Agreement by TA Licensors, and to set out the other clarifications and matters herein contained.

Now therefore the parties have agreed as follows:

1. **Appointment of Custodian; definitions.**

- a. Appointment of Custodian. The DVB Project and each Licensor hereby appoints ETSI, and ETSI accepts such appointment, as Custodian to undertake the duties specified under, and subject to the provisions of, this Agreement.
- b. Definitions. For the purposes of this Agreement, the following words shall have the meanings ascribed to them below:

Certificate	The Certificate, in the form of Annex A, to be delivered to the Custodian by an Implementer.
Challenge Procedure	The procedure defined in section 4.
Component Vendor	A manufacturer of an implementation of MHP, intended solely for incorporation in an Implementation and sold or otherwise transferred to an entity delivering a Certificate and that implements less than all the required interfaces and functionality of those technology specifications published by a Licensor and to which a Licensee seeking to create such implementation is referred by MHP.
Conformance Testing	The process described in section 3 for the testing, using an MHP Test Suite, of a Licensee's implementation or of a Component Vendor's partial implementation of MHP and conformance with such specification.
Custodian	ETSI, or any replacement custodian named pursuant to section 6(c).
DVB Project	The DVB Project, a not for profit association with legal personality governed by Swiss law under the terms of an Amended and Restated Memorandum of Understanding dated 17 December 1996, or, if such association cease to exist, the body succeeding to its activities or its assignee named pursuant to section

	6(c).
Essential IPR Licence	A licence (or licences), of Intellectual Property Rights granted by a Essential IPR Licensor in respect of an Implementation to a Licensee upon delivery of its Certificate of completion of the Conformance Testing pursuant to section 3, in the form attached to the counterpart signature page of such Essential IPR Licensor. For the avoidance of doubt, "Essential IPR Licence" may cover one or more licences of Intellectual Property Rights.
Essential IPR Licensor	An entity identified as such on the counterpart signature page for such entity (and offering an Essential IPR Licence in respect of Implementations).
ETSI	European Telecommunications Standards Institute, a standards-making organization recognized by the European Union.
Further Test Applications	Test applications, amending or supplementing an MHP Test Suite, or related to an amendment to MHP, in each case delivered to the Custodian pursuant to the second sentence of section 2(a).
Implementation	An implementation of MHP which <ul style="list-style-type: none"> (i) fully implements the appropriate profile of MHP with the possible exception of options; (ii) implements all required interfaces and functionality of MHP; and (iii) is self-certified to have passed the MHP Test Suite.
Implementer	An entity producing an Implementation, which entity may be a Licensee or a clean-room implementer.
Initial Agreement	The DVB Conformance Testing Custodian Agreement, dated as of 19 April 2001, between the DVB Project, ETSI and a Licensor.
Intellectual Property Rights	Patents, copyright, trade secrets and other intellectual property rights owned by a Licensor on the date it has executed this Agreement, or hereafter acquired, which are essential to the MHP Test Suite or to the implementation of MHP, or to both, as the case may be.
Licence	An Essential IPR Licence, or a Test Application Licence, or both, as the case may be.
Licensee	A TA Licensee or an Essential IPR Licensee.
Licensor	An entity identified as such on the signature page hereof, which may be a TA Licensor or an Essential IPR Licensor, or both.
Mark	The trademark "MHP", owned by the DVB Project.
MHP	The MHP specification, as specified by the Steering Board of the DVB Project on 22 February 2000 under specification number MHP 1.0 as such specification may from time to time be amended.
MHP Mark Licence	The MHP Mark Licence Agreement, in the form

Agreement	delivered by the DVB Project.
MHP Test Suite	The test suite as initially delivered to the Custodian pursuant to section 2(a) as such test suite may be amended or supplemented by the delivery to the Custodian, pursuant to such section 2(a), of Further Test Applications.
Source Code	The elements of source code (and other items) listed on Annex B hereto, as it may be amended and supplemented from time to time pursuant section 2 (b).
Source Code Licence	The licence agreement of a Licensor in respect of its intellectual property rights in Source Code.
TA Licensee	An Implementer which has entered into one or more Test Application Licences.
TA Licensor	An entity identified as such on the counterpart signature page for such entity (and offering a Test Application Licence in respect of its Test Applications).
Test Applications	Test applications incorporated in the MHP Test Suite.
Test Application Licence	The licence agreement of a Licensor in respect of its intellectual property rights in Test Applications.

2. **Delivery to the Custodian of the MHP Test Suite and Source Code.**

a. Delivery of the MHP Test Suite.

On or promptly after the date of this Agreement, the DVB Project will pursuant to the rules and procedures of its experts group deliver the initial MHP Test Suite to the Custodian. Thereafter, pursuant to such rules and procedures, the DVB Project may from time to time deliver Further Test Applications together with instructions, if in the judgement of the DVB Project such instructions are necessary, relating to

- (i) the integration of such applications with an MHP Test Suite previously delivered to the Custodian,
- (ii) the Implementers to which such amended or supplemented Further Test Applications are to be delivered, and
- (iii) other matters relating to such applications.

b. Delivery of Source Code.

On or promptly after the date of this Agreement, the DVB Project will deliver the Source Code listed on Annex B. Thereafter the DVB Project may from time to time deliver further elements of Source Code, together with an amended Annex B.

c. Custody and copying of the MHP Test Suite and Source Code.

The Custodian shall exercise due care in the custody of the MHP Test Suite and Source Code. It shall, at its own cost, make such number of copies as it deems necessary for the performance of its duties under this Agreement. It shall treat as the MHP Test Suite, Source Code and Further Test Applications (and the instructions related thereto) only those materials identified as such by the DVB Project; it shall not deliver to Implementers or otherwise treat as the MHP Test Suite Source Codes Further Test Applications or instructions related thereto materials it has received from any other person.

3. Conformance Testing and Delivery to Licensees of the MHP Test Suite and Test Application Licences and to Implementers of Essential IPR Licences.

a. Delivery of forms of licence.

Upon delivery by a Licensor of its form of one or more Licences at the time of its signature of a counterpart signature page, the Custodian shall make available on its website on Internet the forms of the Test Application Licences, the Source Code Licences and the Essential IPR Licences, together with the MHP Mark Licence Agreement, and this Agreement.

b. Request for MHP Test Suite and Source Code.

Upon the delivery by any person of two copies, each duly executed by such person, of each Test Application Licence and, at the option of such person, each Source Code Licence, and upon the payment by such person to the Custodian in the account designated by the Custodian of the administrative fee of EUR 1000, the Custodian shall deliver to such person

- i. the MHP Test Suite, together with a fully executed copy of each Test Application Licence, and,
- ii. if such person has delivered a Source Code Licence, Source Code, together with a fully executed copy of each Source Code Licence.

c. Certification by Licensee.

Upon the delivery by a TA Licensee to the Custodian of the TA Licensee's Certificate in the form of Annex A, two copies of each Essential IPR Licence, each duly executed by the Licensee, and confirmation from the DVB Project that it has received its initial royalty under the MHP Mark Licence Agreement, the Custodian shall forthwith review such Certificate pursuant to the first sentence of section 3(e) and sign, as agent on behalf of each Essential IPR Licensor, each Essential IPR Licence, and deliver one copy of each such Licence to the Licensee. The Custodian shall, when it receives a Certificate, and the DVB Project shall, when it receives the initial royalty under the MHP Mark Licence Agreement, notify the other of such receipt.

d. Certification by certain Implementers.

Upon delivery by an TA Licensee to the Custodian of the TA Licensee's Certificate in the form of Annex A, and its written notice that it does not seek one or more of the Essential IPR Licences, and confirmation from the DVB Project Office that it has received the initial royalty under the MHP Mark Licence Agreement, the Custodian shall forthwith review such Certificate pursuant to the first sentence of section 3(e). Upon the request of the Implementer, the Custodian may also, after such review, sign, as agent of each Essential IPR Licensor, one or more of the Essential IPR Licences, as may be designated by the Implementer, and deliver one copy of each such agreement to the Implementer. The Custodian shall, when it receives a Certificate, and the DVB Project shall, when it receives the initial royalty under the MHP Mark Licence Agreement, notify the other of such receipt.

e. Examination of Certificate.

The Custodian shall review each Certificate to ensure that it is in the form of Annex A. The Custodian shall not be responsible for any further examination of the results reported on Conformance Testing. If the Custodian determines that the Certificate is not in the form of Annex A, it shall reject the Certificate and redeliver to the Implementer or Licensee, as the case may, the non-conforming Certificate and other delivered documents together with an explanation of the rejection.

f. Component vendors.

The Custodian shall deliver one or more Essential IPR Licences to a Component Vendor upon its request and its written confirmation certifying that its component has been incorporated into an Implementation, and identifying the Implementer of such Implementation, which has previously delivered a Certificate.

g. Confidentiality; information on Implementers.

The Custodian will maintain accurate and up-to-date records of all those who have received Licences, Source Code and the MHP Test Suite. The records will include details of version numbers and the date of distribution. Except as provided in the next sentence or in section 4 or when required by court order, the Custodian shall keep the identity of each person requesting the MHP Test Suite or Source Code (or any element thereof), and of any Implementer and the contents of such Implementer's Certificate, strictly confidential and not disclose it to any other person. A person which has requested the MHP Test Suite or Source Code, or an Implementer, may direct the Custodian to disclose its status to a Component Vendor.

h. Later Licensors; Further Test Applications.

A Licensor entering into this Agreement after the date hereof shall agree with the DVB Project the arrangements for distribution, pursuant to section 3(a), of its Licence to Implementers (or class of Implementers) which have already obtained the MHP Test Suite or submitted Certificates. The DVB Project shall deliver instructions to the Custodian setting out such arrangements. If the Custodian delivers such a later Licence, Further Test Applications and additional elements of Source Code to an Implementer (or a class of Implementers), it may ask the Implementers to pay a further administrative fee and give notice of such further fee to the DVB Project.

4. Challenge Procedure.

If a Licensor has provided to the Chairman of the Steering Board of the DVB Project reasonable grounds for believing that an entity is using the MHP Test Suite outside the scope of such Licensor's Test Application Licence, the Chairman shall request the Custodian to certify in writing whether such entity is a licensee under a Test Application Licence. If a Licensor has provided to the Chairman reasonable grounds for believing that an entity is using the Mark outside the scope of the MHP Mark Licence Agreement, the Chairman shall request the Custodian to certify in writing whether such entity has delivered to the Custodian a Certificate. Upon receipt of either such request, the Custodian will certify to the Chairman and to the Licensor whether the entity has obtained an MHP Test Suite or has delivered a Certificate, as the case may be.

5. Certain Licensor arrangements.

a. Licence related to Test Suites.

Each Licensor hereby grants a licence free of charge under its Intellectual Property Rights incorporated in its Test Applications and related testing materials and contained in the Source Code or elements thereof which it has contributed, to the Custodian for use in Conformance Testing, including the activities of the Custodian set forth in this Agreement, and to the MHP experts group formed by the DVB Project for the use in activities described in its rules and procedures.

b. Use of specification.

If MHP contains references to a specification or other document (the "Referenced Documents") in which a Licensor has copyright, such Licensor agrees that it will create a separate website (the "Website") with a universal resource locator containing the Referenced Documents. Such Licensor shall grant access to the Referenced Documents (unless under terms more favourable) for use, copying and distribution of the Referenced Documents solely for the purpose of evaluating the MHP specification and for determining whether the person granted access wishes to make Implementations under the terms described in the DVB blue book, MHP Implementation Arrangements and associated agreements (DVB BlueBook No. A066) as such blue book may be from time to time revised, and available at <http://www.mhp.org>. Such Licensor shall maintain the Website using reasonable care and may not add to or delete from the Referenced Documents unless pursuant to an amendment of MHP or otherwise authorised by the Custodian. If such Licensor closes the Website, makes unauthorised additions or deletions, or, in the opinion of either the DVB Project or the Custodian, makes access to the

Website unduly onerous, such Licensor hereby grants to each of the Custodian and the DVB Project at no charge a licence to publish, but not alter, the Referenced Documents. For this purpose, the Licensor shall provide to the Custodian the Referenced Documents, including the terms of use described in this section 5(b), in CD Rom format, including in the form of a website, provided that the terms of use are the same.

c. Reservation of certain rights

The DVB Project, the Custodian and each Licensor agree that (i) Article 3 cannot be interpreted as requiring a licensee under the MHP Mark Licence Agreement to execute and deliver an Essential IPR Licence or to recognize the existence, validity or applicability of the Intellectual Property Rights asserted by any Licensor; and further that (ii) by executing and delivering a Licence, a Licensee shall not be deemed by such action to acknowledge or to represent that the Licensor has intellectual property rights essential for the Implementation or the MHP Test Suite, as the case may be, or, if essential, that such rights are valid or subsisting.

6. Miscellaneous.

a. Custodian duty in respect of Licences.

The Custodian shall not execute any Test Application Licence, Source Code Licence or Essential IPR Licence except in the form thereof delivered by the Licensor at the time of execution of this Agreement. The Custodian's only obligation under this Agreement in respect of such agreements is to execute and deliver such agreements, as agent, pursuant to the terms of section 3 and to confirm to the DVB Project its receipt of a Certificate. The Custodian shall not agree to amend, or to consent to any waiver of, any such agreement. The Custodian shall not represent the Licensor except as expressly provided herein.

b. Term; termination.

- (i) This Agreement shall terminate on 19 April 2006 but shall be extended for successive five-year renewal terms unless the Custodian or the DVB Project gives written notice of termination three months before the end of the initial term or any renewal term.
- (ii) This Agreement may also be terminated upon
 - (A) six months' written notice given either by ETSI or by the DVB Project,
 - (B) upon material breach by ETSI of this Agreement (and after written notice given by the DVB Project), or
 - (C) the bankruptcy, insolvency, liquidation, judicial administration, winding up or similar proceedings undertaken by or in respect of ETSI or the DVB Project.
- (iii) Each Licensor may terminate this Agreement, in respect of its Licence, at the times or upon the occurrence of the events specified in clause (i) or clause (ii) of this section 6(b) or if its interests are materially and adversely affected by changes to the rules and procedures, in effect on the date of the Licensor's signature of this Agreement, of the MHP experts group formed by the DVB Project, or a failure to follow such rules. Each Licensor agrees that notwithstanding termination of this Agreement it will offer its Intellectual Property Rights covered by the Licences theretofor delivered on terms fair, reasonable and non-discriminatory pursuant to the Statutes (Memorandum of Understanding) of the DVB Project.

c. Assignment, notices.

The DVB Project and each Licensor may, by notice to the other parties, assign its rights and obligations hereunder. ETSI (and its successors as Custodian) may assign its rights and obligations hereunder only upon the prior written consent of the DVB Project which consent may not be unreasonably withheld. Notices shall be delivered

if to Custodian: European Telecommunications Standards Institute,
as Custodian
650 route des Lucioles
06921 Sophia Antipolis, France

attention: Legal Advisor

fax: +33 4 9365 4716

if to the DVB Project: DVB Project Office
c/o the European Broadcasting Union
Ancienne Route 17A
CH-1218 Grand-Saconnex/Geneva
Switzerland

fax: +41 22 7172727

attention: Chairman

with a copy to Carter Eltzroth (eltzroth@dvb.org)

if to a Licensor: to the address indicated on the signature page of such Licensor,
which address a party may by notice change.

d. Entire agreement; miscellany.

This Agreement is the only agreement between the parties on the subject matter described herein and replaces in all respects the Initial Agreement, the first and second amendments thereto and any other prior agreement, written or oral, on the subject matter. The Custodian has no duties, under principles of agency law or otherwise, except as herein expressly provided. Any amendments to this Agreement shall be in writing signed by each of the parties. In respect of the administrative fee contemplated hereunder, the Custodian may require that any value added tax, sales tax or other charges levied or imposed by any governmental authority foreign or domestic on such administrative fee shall be for the account of Implementer. This Agreement may be executed in counterparts and shall become effective upon the signature by the DVB Project, the Custodian and each Licensor. It shall become effective in respect of any Licensor thereafter executing this Agreement on the date of such execution.

e. Governing Law.

This Agreement shall be construed according to the laws of Switzerland and, in case of disagreement that cannot be settled amicably, the courts of the Canton and Republic of Geneva shall have exclusive jurisdiction.

Executed as of 24 April 2003.

the CUSTODIAN
EUROPEAN TELECOMMUNICATIONS
STANDARDS INSTITUTE

by
its Director

by
its Chairman

**Counterpart Signature Page of a Licensor under the Amended and Restated DVB
Conformance Testing Custodian Agreement**

Pursuant to the terms of the Amended and Restated DVB Conformance Testing Custodian Agreement among the DVB Project, the Custodian and the Licensors therein

named, the undersigned (i) attaches hereto the form of each Licence, for purposes of that Agreement, and (ii) hereby executes and delivers its counterpart signature page under that Agreement.

Executed as of _____, 200_ by the Licensor named below:

Address for notice pursuant
to section 6(c) of this Agreement

[NAME OF LICENSOR]

[Name of Licensor]
[address]
[city, country]

by _____
its

fax:

attention;

The Licensor is attaching hereto (please check all that apply):

___ a form of Test Application Licence;

___ a form of Source Code Licence; and

___ a form of Essential IPR Licence.

Annex A: Certificate of Completion of the Conformance Testing

[date]

To the Custodian under the DVB Conformance Testing Custodian Agreement
European Telecommunications Standards Institute
650 route des Lucioles
06921 Sophia Antipolis, France

Attention: DVB MHP administration

Ladies and Gentlemen:

Certificate of completion of Conformance Testing

We hereby deliver our Certificate under the DVB Conformance Testing Custodian Agreement. All capitalised terms in this Certificate shall have the same meaning as in that Agreement; for purposes of this Certificate, we are the Implementer.

We hereby represent and warrant that

- (a) the Implementer has completed the Conformance Testing, using the MHP Test Suite delivered to the Implementer by the Custodian;
- (b) during the Conformance Testing, the implementation by the Implementer of MHP satisfied the MHP Test Suite; and
- (c) this Certificate has been prepared and signed by the person who has performed the Conformance Testing on behalf of the Implementer and who is authorised to sign the Certificate on its behalf.

We understand that if these representations and warranties are untrue there may be a breach of the MHP Mark Licence Agreement and one or more Test Application Licences, Source Code Licences or Essential IPR Licences.

We also enclose with this Certificate, if we are also an Essential IPR Licensee, two executed copies of each Essential IPR Licence.

Sincerely,

[IMPLEMENTER]

by: _____

its

We attach to this Certificate two copies of each Essential IPR Licence.

We chose not to attach an Essential IPR Licence.

Annex B: Elements of Source Code and other items

From Sun Microsystems Inc.

Byte code verifier

Class file parser

JavaTest TM and JavaTest Harness software

From [Licensor]

3.2 MHP Mark Licence Agreement

This MHP Mark Licence Agreement is between the DVB Project, a not for profit association with legal personality governed by Swiss law, and the entity identified on the signature page hereof as Licensee.

RECITALS:

- a. The MHP Mark Licensor owns the MHP Mark.
- b. The Steering Board of the DVB Project has adopted a Declaration (DVB SB 27 (99) 15 Rev. 2) in which it has declared that "there will one DVB MHP label . . . which will be granted to Implementers declaring to the Custodian that their implementation has passed the test suites made available by the Custodian and fully implements the appropriate profile of the [MHP specification with the possible exception of options"]
- c. Pursuant to that Declaration, the DVB Project, the Custodian and certain Licensors have entered into a Conformance Testing Custodian Agreement, under which
 - i. the MHP Test Suite and Source Code have been delivered to the Custodian for distribution to Implementers;
 - ii. an Implementer may deliver its Certificate to the Custodian by which it certifies its completion of Conformance Testing; and
 - iii. upon delivery of such Certificate, and payment of the initial MHP Mark Licence Fee, the MHP Mark Licensor is called upon to execute and deliver to the Implementer the MHP Mark Licence Agreement.
- d. The Licensee has, pursuant to the Conformance Testing Custodian Agreement, delivered to the Custodian its Certificate in which it has represented and warranted, among other things, that during the Conformance Testing its Implementation has satisfied the MHP Test Suites, and has made to the MHP Mark Licensor payment of the initial MHP Licence Fee.

Now therefore the parties have agreed as follows:

Article 1. Definitions.

For purposes of this Licence Agreement, the capitalised terms shall have the same meaning as in the Conformance Testing Custodian Agreement unless otherwise herein defined. The following words shall have the meanings ascribed to them below:

Affiliate	Any subsidiary or parent company of the Licensee, as well as any entity owned or controlled, directly or indirectly by the Licensee or by an entity owning or controlling the Licensee in the same way
	Ownership or control shall exist through the direct or indirect: <ul style="list-style-type: none"> - ownership of 50 percent or more of the nominal value of the issued equity share capital or of 50 percent or more of the shares entitling the holders to vote for the election of directors or persons performing similar functions, or - right by any other means to elect or appoint directors or persons who collectively can exercise such control.
Conformance Testing Custodian Agreement	The DVB Conformance Testing Custodian Agreement, dated as of 19 April 2001, among the DVB Project, the Custodian and the Licensors therein named.
Excluded Countries	Those countries, if any, set out in Schedule 2 (as amended from time to time in accordance with this Licence Agreement)

	in which the Licensee is not permitted to use the MHP Mark.
MHP Licence Fee	The initial licence fee and further annual fees listed on Schedule 3.
MHP Mark	The trademarks listed in Schedule 1, whether registered or not.
MHP Mark Licensor	the DVB Project, a not for profit association with legal personality governed by Swiss law, or its successor or assignee pursuant to Article 9.
Supplemental Annual Certificate	A certificate in the form of Schedule 4.
Territory	Those countries as set out in Schedule 2, as amended from time to time in accordance with this Licence Agreement, and any other countries in which the MHP Mark Licensor has rights in the MHP Mark other than through registration.

Article 2. Licence.

(a) Grant.

In consideration of the representations and warranties of the Licensee in its Certificate and in each Supplemental Annual Certificate, the initial MHP Licence Fee and the other payments to be made in accordance with Article 4, and subject to the other provisions of this Licence Agreement, the MHP Mark Licensor hereby grants to the Licensee a non-exclusive licence to use the MHP Mark in the Territory on, or in relation to, Implementations, including without limitation such use displayed on consumer or professional equipment which are Implementations, and in brochures and marketing materials related to Implementations.

(b) Excluded Countries.

The MHP Mark Licensor may give notice to the Licensee from time to time that a country or countries should be added to the list of Excluded Countries where it appears or is claimed that the use of the MHP Mark in such country or countries infringes the rights of any third party or parties.

(c) No Other Use.

Except as otherwise expressly authorised by the MHP Mark Licensor, the Licensee shall not use the MHP Mark other than in accordance with the provisions of this Licence Agreement, except that nothing in this Licence Agreement shall prohibit the use of the MHP Mark by the Licensee in any way in which a non-licensee would legally be able to use the MHP Mark.

(d) Use of the MHP Mark.

The use of the MHP Mark by the Licensee shall at all times be in keeping with their distinctiveness and reputation as determined by the MHP Mark Licensor as set forth in this Licence Agreement and the Licensee shall forthwith cease any use not consistent therewith as set forth in this Licence Agreement. The Licensee shall not use or register any mark or name confusingly similar to the MHP Mark in respect of any goods and services. Nothing contained in this Licence Agreement shall entitle the Licensee to use or register the MHP Mark as part of any corporate, business, or trading name of the Licensee or to use the MHP Mark or any such trademark outside the Territory. The Licensee shall not, in any written material or otherwise, make any reference to or use of the MHP Mark in such a manner as may lead the reader thereof to believe that the Licensee is licensed to apply the MHP Mark to any product other than an Implementation.

Article 3. Duration, Termination.

(a) Duration.

The Licence Agreement and the licences hereby granted shall commence on the date of countersignature by the MHP Mark Licensor and shall, unless terminated in any of the circumstances of Article 3(b), continue in force:

- i. in the case of each licence granted under this Licence Agreement in respect of each of the trademarks listed on Schedule 1, until the cessation of the MHP Mark Licensor's registration of such trademark, and
 - ii. in the case of this Licence Agreement, until the cessation of the MHP Mark Licensor's registration of the last of such trademarks;
- unless the Licensee shall have given notice of termination of this Licence Agreement.

(b) Termination.

This Licence Agreement may be terminated upon notice given by the MHP Mark Licensor upon the occurrence of any of the following events:

- i. the Licensee breaches any of the terms hereof and such breach is not susceptible of cure, or, if curable, the Licensee has not cured such breach within 60 days of notice thereof by the MHP Mark Licensor, or
- ii. any representation and warranty given by the Licensee in its Certificate or any Supplemental Annual Certificate is inaccurate, and the Licensee has not remedied such inaccuracy within 60 days of notice thereof by the MHP Mark Licensor, or
- iii. there is a voluntary or involuntary filing of bankruptcy, insolvency or liquidation by, or a similar event affecting, the Licensee.

(c) Effect of Termination.

Upon the expiration or termination of this Licence Agreement for whatever reason, the Licensee at its expense shall within 90 days (or, in the case of failing to make any payment of the MHP Licence Fee, immediately) cease to make any use of the MHP Mark, and cause the MHP Mark to be removed from all its products, whether or not Implementations, and from all sales literature and other materials and, where necessary to achieve this, use its reasonable effort to recall products, sales literature and materials from retailers and other persons (other than the ultimate customer).

Article 4. Fees.

As of the date of this Licence Agreement, the Licensee has made payment of the initial MHP Licence Fee. On each anniversary date of this Licence Agreement, the Licensee shall make the further payment indicated on Schedule 3.

Article 5. Notification of defects in Conformance Testing

If at any time the Licensee becomes aware of any defect or insufficiency in the MHP Test Suite or other information provided from time to time by the Custodian it shall promptly inform the MHP Mark Licensor in writing giving such details as the Licensee has of such defect or insufficiency, which the MHP Mark Licensor shall submit to the experts group formed to consider test applications and the MHP Test Suite or to such other process as the DVB Project may from time to time establish.

Article 6. Ownership of the MHP Mark

(a) Ownership.

The MHP Mark Licensor is the proprietor or exclusive licensor of the MHP Mark and of applications for registration of the MHP Mark in various countries, particulars of which are available from the MHP Mark Licensor on request, and warrants that it has the right to grant the licences granted hereunder. It is not aware at the date hereof that the MHP Mark or the use of it on or in relation to any Implementation in the Territory infringes the rights of any third party.

(b) No Action Inconsistent.

The Licensee undertakes not to do or permit to be done any act which would or might jeopardise or invalidate the MHP Mark or its registration nor to do any act which might assist or give rise to an application to remove the MHP Mark from any

national register or which might prejudice the right of MHP Mark Licensor to the MHP Mark.

(c) Furnishing Information.

The Licensee shall on request give to MHP Mark Licensor or its authorised representative any relevant publicly-available information as to its use of the MHP Mark which MHP Mark Licensor may reasonably require and will (subject to the provisions of Article 7) render any assistance reasonably required by MHP Mark Licensor in maintaining the registrations of the MHP Mark. Such information shall be subject to the provisions of Article 10 where applicable.

(d) No Further Right.

Except as provided in Article 2(c), the Licensee shall not make any representation or do any act which may be taken to indicate that it has any right, title, or interest in or to the ownership or use of the MHP Mark except under the terms of this Licence Agreement and acknowledges that nothing contained in this Licence Agreement or done pursuant to this Licence Agreement shall give the Licensee any right, title, or interest in or to the MHP Mark save as granted hereby.

(e) Recording of Licences.

Subject to the Licensee complying with its obligations hereunder, the MHP Mark Licensor shall wherever required to do so by local laws in any part of the Territory record the Licensee as a Licensee or registered user. The Licensee shall at the MHP Mark Licensor's request assist the MHP Mark Licensor as may be necessary (including by executing necessary documents including registered user agreements) recording the Licensee as a registered user of the MHP Mark in any part of the Territory, and the Licensee hereby agrees that each such entry may be cancelled by the MHP Mark Licensor upon any termination of this Licence Agreement in accordance with its terms, and that it shall assist the MHP Mark Licensor so far as may be necessary to achieve such cancellation including by executing necessary documents. At the Licensee's request and expense the MHP Mark Licensor shall take all necessary steps to record such licences with the regulatory authorities in countries where such registration is required or desirable.

(f) Further Registration.

The MHP Mark Licensor shall, subject to the Licensee's cooperation, use its reasonable efforts to renew any registrations for the MHP Mark already registered, and to produce registrations for applications of the MHP Mark. The MHP Mark Licensor will add to the Territory any registrations of the MHP Mark which are completed in additional countries. However, subject to Article 11(c), the MHP Mark Licensor may at any time remove a country from the Territory for legal or justifiable commercial reasons.

Article 7. Infringements

(a) Infringements of the MHP Mark.

The Licensee shall exert reasonable efforts to give to the MHP Mark Licensor in writing, if the Licensee becomes aware thereof, particulars of any unauthorised use or proposed use by any other person of a trade name, MHP Mark, or get-up of goods or mode of promotion or advertising which might in the good faith opinion of the Licensee's trademark attorneys amount either to infringement of the MHP Mark Licensor's rights in relation to the MHP Mark or to passing-off or similar causes of action under the laws of any part of the Territory.

(b) Infringement of Third Party Marks.

If the Licensee becomes aware that any other person alleges that the MHP Mark used by the Licensee is invalid or if either party hereto becomes aware that any other person alleges that use of the MHP Mark infringes any rights of another party, the Licensee or the MHP Mark Licensor as appropriate shall give to the other party hereto particulars in writing thereof. The Licensee shall make no comment or admission to any third party in respect thereof except pursuant to any judicial order binding upon it.

(c) Conduct of Proceedings Relating to the MHP Mark.

The MHP Mark Licensor shall have the conduct of all proceedings relating to the MHP Mark and shall in its sole discretion decide what action if any to take in respect of any infringement or alleged infringement of the MHP Mark or passing-off of any other claim or counter-claim brought or threatened in respect of the use or registration of the MHP Mark. The Licensee shall not be entitled to bring any action for infringement under any provisions of the laws of any other jurisdiction enabling licensees to bring proceedings for infringement of trademarks provided always that nothing herein shall be deemed to remove from the Licensee any right to bring such proceedings which may not under any relevant country's laws be excluded by agreement between a licensor and licensee.

(d) Cooperation.

The Licensee shall at the request of the MHP Mark Licensor provide reasonable assistance to the MHP Mark Licensor in any action, claim, or proceedings brought or threatened in respect of the MHP Mark; Licensee shall bear its own cost and expenses in respect of any such assistance. Where the Licensee requests the MHP Mark Licensor to bring proceedings which the MHP Mark Licensor would not otherwise bring in any part of the Territory, the Licensee shall be consulted at all significant stages of such proceedings and shall meet the MHP Mark Licensor's costs associated with the bringing of such proceedings. In the event of the successful prosecution of such proceedings the MHP Mark Licensor shall remit to the Licensee any resulting damages recovered by it after the deduction of all of the MHP Mark Licensor's own costs incurred as a result of such proceedings. Notwithstanding the above, it shall be at the MHP Mark Licensor's sole discretion whether or not any proceedings are brought or continued.

(e) Products Altered by Purchasers and Licensees.

A purchaser or licensee of the Licensee's Implementation and of related materials bearing the MHP Mark, who may for the purposes of resale or re-licensing be altering the content or specification of all or part of such Implementation in such a way as to affect the compliance of such Implementation with the Conformance Testing, is not permitted to use the MHP Mark on or in relation to such altered products, including in any marketing materials relating thereto, whether supplied by the Licensee or by any other person, unless such purchaser or licensee of the Licensee's Implementation is a licensee under a separate MHP Mark Licence Agreement between the MHP Mark Licensor and such purchaser or licensee. The Licensee shall use reasonable efforts to inform purchasers and licensees who may be misusing the MHP Mark that they may be infringing the rights of the MHP Mark Licensor.

Article 8.

(a) Scope of indemnity.

The Licensee shall indemnify and hold harmless the MHP Mark Licensor together with its officers, servants and agents, when engaged in activities on behalf of the MHP Mark Licensor but only to the extent that they are acting in that capacity (together the "Indemnified") against any and all demands, claims, and liability (whether criminal or civil, in contract, tort, or otherwise) for losses, damages (including without limitation direct damages), settlements and costs (including lawyers' fees) of any nature whatsoever asserted against or suffered by the Indemnified (including, without limitation, demands and claims brought by the Licensee), but limited to demands, claims, and liability arising out of:

- i. the manufacture, use, or supply of any Implementation on or in relation to which the MHP Mark has been applied by or on behalf of the Licensee, or
- ii. the use by the Licensee of the MHP Mark;

provided that the Licensee (together with any other Licensees of the MHP Mark affected by such claims) shall have the conduct of such claims but shall consult fully with the MHP Mark Licensor before taking any action or making any

admission or settlement which may adversely affect the MHP Mark Licensor's interest.

(b) Cure of invalidity.

Any provision of Article 8(a) shall not apply in any circumstances or in respect of any liability or class of liability to the extent that it may not apply in accordance with applicable law. In the event of such a provision being held to be inapplicable or invalid the parties will make such amendments to this Licence Agreement by the addition or deletion of wording, or otherwise, as to remove the inapplicable or invalid part of the provision but otherwise retain the provision to the benefit of the MHP Mark Licensor to the maximum extent permissible under applicable law.

Article 9. Assignment; Extension of Licence to Affiliate

(a) Assignment.

Neither party shall assign, transfer, subcontract, sub-licence, or in any other manner make over to any third party the benefit and/or burden of the whole or any part of this Licence Agreement or purport to do any of the same without the prior written consent of the other. Notwithstanding the foregoing, such written consent shall not be unreasonably refused

- (i) in the case of an assignment by the Licensee where such assignment is part of a merger, reconstruction, or transfer of business and the assignee accepts all the obligations of the Licensee under this Licence Agreement, or
- (ii) in the case of an assignment by the MHP Mark Licensor (or any successor or assign under this Article 9) to another entity undertaking substantially similar activities to those of the DVB Project, or to an entity responsible for maintenance of the MHP specification and related activities, or to an entity responsible, among other things, for maintaining and enforcing the MHP Mark.

(b) Extension of Licences to Affiliates.

The licences granted herein shall include the right of Licensee to grant sublicences to its Affiliates, subject to the condition that any Affiliate of the Licensee receiving such further sublicences be identified in Schedule 5. Each sublicensed Affiliate shall be bound by the terms and conditions of this Licence Agreement as if it were named herein in the place of the Licensee; provided, however, that Licensee shall pay and account to the MHP Mark Licensor for royalties hereunder payable. Any sublicense granted to an Affiliate shall terminate automatically and without notice on the date such Affiliate ceases to be an Affiliate. If

- (i) a sublicense to an Affiliate of the Licensee is terminated either as a result of the Affiliate ceasing to be an Affiliate, or as a result of a termination of the sublicense of the Affiliate by the Licensee, or
- (ii) the Licensee grants a new sublicense to either a new Affiliate or an existing Affiliate not previously sublicensed, such termination or such new sublicense shall be effective immediately provided that the Licensee notifies the MHP Mark Licensor within ten days thereof and delivers with such notice a Schedule 5 as so modified.

Article 10. Confidentiality

(a) Holding in confidence.

The MHP Mark Licensor shall, except where a provision of the Licence Agreement provides otherwise, maintain in confidence all information disclosed to it under or in relation to this Licence Agreement by the Licensee, which is in writing marked "confidential" or, if oral or visual, is identified as confidential at the time of disclosure and reduced to writing marked "confidential" and sent to the MHP Mark Licensor within 30 days thereafter, and shall not use any such information except for the purposes of this Licence Agreement. The MHP Mark Licensor's obligations under this Article shall be limited to taking such steps as it ordinarily takes to preserve its own confidential information.

(b) Exemptions.

The obligation of non-disclosure and non-use set out in Article 10(a) above shall not apply to any item of information which:

- (i) is in the public domain at any time;
- (ii) was rightfully in a person's possession without obligation of confidence prior to its disclosure pursuant to this Licence Agreement, or is subsequently independently developed by that person by employees having no access to the information disclosed hereunder;
- (iii) is subsequently rightfully obtained without obligation of confidence by a person from a source other than the Licensee; or
- (iv) is required to be disclosed by order of any court of competent jurisdiction or to enable the MHP Mark or any licence thereunder to be validly registered or notified in any part of the Territory or otherwise to protect the validity of the MHP Mark, provided that no right or interest under any licence, patent, or otherwise shall be acquired by the recipient of any information by virtue of the application of this Article.

(c) Survival.

The obligations of non-disclosure, and the limitations on use, set out in Article 10(a) above, shall survive for a period of two years after termination of this Licence Agreement but subject to Article 10(b) above.

(d) Disclosure within the MHP Mark Licensor.

The MHP Mark Licensor may disclose the Licensee's confidential information to those of its employees, agents or subcontractors who reasonably require to have access to such information. However, the MHP Mark Licensor may not disclose the Licensee's confidential information to any employee of a member company of the DVB Project, unless another exception to the obligations under this Sub-clause applies. For the avoidance of doubt, the MHP Mark Licensor may disclose the Licensee's confidential information to employees of the Licensee.

Article 11. Entire Licence Agreement, Amendment

(a) Prior Agreements.

This Licence Agreement including its Schedules constitutes the entire agreement and understanding of the parties relating to the subject matter of this Licence Agreement and supersedes all prior oral or written agreements, understandings, or arrangements between them relating to such subject matter.

(b) Amendment.

Neither party shall be entitled to rely on any agreement, understanding, arrangement, or representation relating to the subject matter of this Licence Agreement which is not expressly contained in this Licence Agreement and, subject to Article 11(c), no change may be made to this Licence Agreement except in writing signed duly by authorised representatives of both parties.

(c) Amendment of Schedules.

The Schedules to this Licence Agreement may be amended by the MHP Mark Licensor from time to time, consistent with the processes established by the MHP Mark Licensor, as follows:

- i. Schedule 1 (MHP Mark) will generally not be modified except that the MHP Mark Licensor may add a newly acquired MHP mark.
- ii. In respect of Schedule 2 (Territory), countries will be added on application for and completion of the registration of the MHP Mark in such additional countries. Deletions of countries may be made for legal or justifiable commercial reasons and the Licensee will be notified of each such deletion accordingly. In the event of such a deletion for justifiable commercial reasons the Licensee shall have a period of 30 days from the date of the

MHP Mark Licensor's notice of deletion in which to object in writing to such deletion.

(d) Partial Territory Amendments.

If in any jurisdiction the effect of any provision of this Licence Agreement or the absence from this Licence Agreement of any provision would be to prejudice the MHP Mark or any remedy under the MHP Marks, the parties will make such amendments to this Licence Agreement and execute such further agreements and documents limited to that part of the Territory which falls under such jurisdiction as may be necessary to remove such prejudicial effects.

Article 12. Governing law, jurisdiction

The validity, construction, and performance of this Licence Agreement shall be governed by Swiss law, and shall be subject to the non-exclusive jurisdiction of the Courts in the canton of Geneva, Switzerland except that proceedings to the extent only that they relate to the validity or enforcement of any of the Trademarks in any part of the Territory shall be governed by the law and procedures of that part of the Territory.

Article 13. Waiver of Rights under this Licence Agreement

No failure or delay on the part of either of the parties to exercise any right or remedy under this Licence Agreement shall be construed or operate as a waiver thereof nor shall any single or partial exercise of any right or remedy preclude the further exercise of such right or remedy as the case may be.

Article 14. Notices

Any notice or other document to be given under this Licence Agreement shall be in writing in the English language and shall be deemed to have been duly given if sent by hand or by recorded delivery or registered post, or by facsimile (subsequently confirmed by post) to a party at the address for that party on a signature page hereof unless a different address has been notified to the other in writing for this purpose.

Notices shall be deemed to have been received by the addressee within 72 hours of posting as on the signature page hereof or within 24 hours if sent by hand or facsimile to the addressee's correct address.

Article 15. Interpretation

The headings in this Licence Agreement are inserted only for convenience and shall not affect its construction. Where appropriate words denoting the singular only shall include the plural and vice versa. The Schedules to this Licence Agreement (as amended from time to time by the MHP Mark Licensor where it is entitled to do so in accordance with this Licence Agreement) shall form part of this Licence Agreement as if they were specifically set out herein.

Executed in two originals as of the later of the two dates set out below:

MHP	MARK	LICENSOR	LICENSEE
DVB PROJECT			
_____			_____ ²⁷
By _____			By: ²⁸ _____
Title: _____			Title: _____ ²⁹
—			—
Date: _____			Date: _____
—			—
Address:			Address ³⁰ :
The DVB Project			
c/o European Broadcasting Union			
attention: Executive Director			
Ancienne Route 17A			
CH-1218 Grand Saconnex (Geneva)			
Switzerland			

²⁷ Name of Licensee

²⁸ Name of authorised representative.

²⁹ Title of authorised representative.

³⁰ Address of Licensee.

**Schedule 1 to the MHP Mark Licence Agreement
Trademarks**



and / or



and / or

MHP

**Schedule 2 to the MHP Mark Licence Agreement
Territory**

Territory:

Algeria

Argentina

Australia

Bosnia-Herzegovina

Brazil

Canada

China

Cuba

Czech Republic

Egypt

European Union (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom)

Hungary

Indonesia

Japan

Kenya

Mexico

Morocco

Norway
Poland
Romania
Russian Federation
Slovak Republic
Slovenia
South Africa
Switzerland
Turkey
Ukraine
United States
Yugoslavia

Excluded Countries: None

Schedule 3 to the MHP Mark Licence Agreement
MHP Licence Fee

initial MHP Licence Fee	EUR 10,000
further payments on the anniversary of the MHP Mark Licence Agreement	EUR 5,000

Schedule 4 Supplemental Annual Certificate

Supplemental Annual Certificate in respect of Conformance Testing
[on the anniversary date of the MHP Mark Licence Agreement]

To the MHP Mark Licensor under the MHP Mark Licensor Agreement

The DVB Project
c/o European Broadcasting Union
Ancienne Route 17A
CH-1218 Grand Saconnex (Geneva)
Switzerland
Attention: Executive Director

Gentlemen:

Supplemental Annual Certificate

We hereby deliver our Supplemental Annual Certificate under the MHP Mark Licence Agreement. All capitalised terms in this Supplemental Annual Certificate shall have the same meaning as in that Agreement; for purposes of this Supplemental Annual Certificate, we are the Licensee.

We hereby represent and warrant that:

- (a) in respect of each of our Implementations, we have completed the Conformance Testing, using the MHP Test Suite delivered, from time to time, to the Licensee by the Custodian;
- (b) during the Conformance Testing, each Implementation of MHP satisfied the MHP Test Suite; and
- (c) this Supplemental Annual Certificate has been prepared and signed by the person who has performed the Conformance Testing on behalf of the Licensee and who is authorised to sign the Supplemental Annual Certificate on its behalf.

We understand that if these representations and warranties are untrue there may be a breach of the MHP Mark Licence Agreement and one or more Test Application Licences, Source Code Licences or Licences.

We also have made to you on or before today the further payment of EUR 5000 in respect of the MHP Licence Fee.

Sincerely,

[LICENSEE]

by:
its

Schedule 5 to the MHP Mark Licence Agreement

Sublicensed Affiliates

**4. DVB Arrangements:
Steering Board Decisions**

4.1 DVB Steering Board MHP Declaration³¹

4.1.1 INTRODUCTION

The European Project for Digital Video Broadcasting (DVB) is an entity providing harmonised specifications for digital video and multimedia broadcasting. Whenever appropriate the DVB specifications are submitted to authorised standardisation bodies for standardisation.

Most of these have been self-contained, others included references to public specifications and standards.

Subsequently some of the standardised specifications may become mandatory standards through national and/or supranational regulation.

Conformance to DVB specifications has always been on the basis of self-certification by the suppliers involved.

Although IPR from various IPR-holders (patents, copyrights and trademarks) may be essential to the standards, through the IPR rules of the standardisation bodies the DVB specifications become open standards.

As the deliverables of the DVB Project are defined to be specifications for presentation to a recognised standardisation body, this means that the DVB Project should always provide a complete specification containing all necessary information required for independent implementations.

With the Multimedia Home Platform, the DVB Project is entering the field of application interoperability, software security and device API compliance. This will necessitate making reference to standards and specifications created outside of the DVB Project, which has been done in the past, for example MPEG, ATM and TCP/IP stacks.

To complement specifications and to guarantee interoperability, the DVB may have to administer a self-certification regime that:

- fulfils the purpose of the MHP specification,
- provides Implementation Guidelines based on the DVB specification,
- provides equal opportunity to implement the specification to all its members and to others that want to implement,
- fulfils the requirements of the standardisation bodies for open standards,
- references only publicly available documents,
- ensures that control of further evolution remains with the DVB Project or its nominated successor organisation,
- remains essentially based on self-certification, however assisted by some test suites and source code available from multiple sources that can be obtained from a neutral DVB-assigned body.

Although the DVB Project still has to decide on its future organisation, it is assumed that the DVB Project will still exist for some years.

Whatever final choices the DVB Project will make about its future, the administration of the activities related to testing based on self-certification has to be put in place now.

This has to be based on continuity, and preferably it should have a clear link to the authorised standardisation body of choice.

³¹ Draft DVB-SB MHP Declaration (V4.0) (SB 27(99) 15 Rev.2)

This is the basis for the proposed use of a Custodian linked with a DVB MHP Experts Group and the selected standardisation body for the standardisation of the DVB MHP Specification.

4.1.2 DEFINITIONS

1. **The DVB MHP Specification (further referred to as "Specification")** is the DVB Multimedia Home Platform as adopted by the Steering Board of the DVB Project on the date of its first adoption, and as such Specification may be amended from time to time.
2. **DVB MHP Implementers (further referred to as "Implementers")** are entities implementing the Specification and bringing Implementations to the market either integrated in end-user products or as software to be implemented in end-user products.
3. **DVB MHP Implementations (further referred to as "Implementations"):**
 - fully implement the appropriate profile of the Specification with the possible exception of options
 - implement all required interfaces and functionality of the Specification, and
 - have been self certified to have passed the Test Suites.
4. **DVB MHP Test Suites (further referred to as "Test Suites")** are the test suites declared by the DVB MHP Experts Group (see Section V.) to be the MHP Test Suites. The Test Suites are intended to aid implementers when developing and testing their product, and to ensure conformance and interoperability among different implementations.
5. **DVB MHP Clean-room Implementations (further referred to as "Clean-Room Implementations")** of the Specification are Implementations of the Specification or parts thereof that are based only on the published text of the Specification and on know-how owned by the Implementer or sublicensed from the Custodian.
6. **Evolution of the Specification** means the extension of the Specification in such a way that MHP-based receivers implementing the extended Specification show better performance and/or are able to deliver more features.

Implementers are free to introduce extensions to the Specification, but only the DVB Project is, at any time, free to introduce extensions that become part of the Specification.

The DVB Project can at its discretion introduce new profiles of the MHP Specification that may be a subset or superset, provided that the component technologies, e.g. Java, are not themselves subsetted.

4.1.3 DVB MHP RULES

1. The Java™ specification, including byte code verifier and class file parser functional requirements and interface specifications, is included in the Specification by reference to a specific version/release (for example by ISBN number). This reference will be made in such a way that it is compatible with the policy of the chosen standardisation body.
2. For various reasons (e.g. stability and integrity of the platform) it is assumed that all Implementations, system wise, include both a byte code verifier and a class file parser. The Custodian (see Section IV) makes byte code verifier and class file parser source code available.

In case of Clean-Room Implementations, byte code verifier and class file parser are included in the Implementation by the Clean-Room Implementers.

It is to be investigated, however, whether for certain Implementations byte code verifier and class file parser could be implemented at the head-end rather than in the receiver.

3. Clean-Room Implementations are allowed.
4. There will be one DVB MHP Label.
5. The DVB MHP Specification is permitted to evolve independent of the Java specification.

4.1.4 DVB MHP CUSTODIAN ARRANGEMENT

4.1.4.1 Introduction

A legal entity is needed to administer Test Suites, byte code verifier and class file parser source codes, that Implementers of the Specification will require to produce fully interoperable Implementations that conform to the Specification and use the MHP Label.

Whilst DVB could do this directly itself, it may be better to assign this task to a third party organisation that has the facilities and resources to administer this process on a long term continuous basis.

The choice of the Custodian is a matter for DVB and any formal decision to appoint a Custodian, or change to a different Custodian, will be made by the DVB Steering Board.

The current proposal is that DVB should use the European Telecommunications Standards Institute (ETSI) as its Custodian.

4.1.4.2 Main functions of the Custodian

1. The Custodian will administer non-exclusive licences to MHP intellectual property, with rights to sub-license this IPR to Implementers of the Specification.
2. The Custodian will hold byte code verifier and class file parser source codes and Test Suites from multiple providers.
3. The Custodian will maintain accurate and up-to-date records of all those who have received licences, source code or Test Suites. The records will include details of the version numbers and the date of distribution. The confidentiality of any licensee will be protected, so that no commercial advantage can be gained by a licensor through discovering the identity of a licensee.
4. The Custodian will not make available the list of those requesting Test Suites or source code to the providers of codes and Test Suites or elements thereof. The Custodian will, however, make available the list of Implementations that have obtained the DVB MHP Label (see Chapter VI) for products offered to the market.
5. Implementers of the Specification have the opportunity to use byte code verifier and class file parser source codes, which can be provided to Implementers by the Custodian.

Test Suites to be used for testing of Implementations will also be provided by the Custodian for all elements of the Specification.

6. The Custodian will attach DVB agreed terms and conditions to the grant of licences for the use of Test Suites and source code, to meet the reasonable requirements of the licensors. These terms and conditions will limit the use of licences, Test Suites and code to the sole purpose of implementing the Specification or parts thereof, including the ability to sublicense Implementations.
7. The Custodian will, at all times, act under the direction of the DVB Steering Board, or its successor organisation, regarding the licensing, selection or adoption of new, additional, substitute or alternative versions of the source code and Test Suites.

DVB will form an Experts Group (see Section V.) to advise on such matters.

8. The Custodian will make available only those Test Suites that were forwarded to it by the DVB Project through the Experts Group.
9. The Custodian will be able to charge the recipients of its services a reasonable fee to cover its operating costs. An initial amount of 5000 Euro is proposed.

10. The DVB Project and the Custodian will sign a Custodian Agreement; it will run for an initial period of 5 years, renewable thereafter for further terms of 5 years.
The DVB Steering Board or its successor organisation can terminate the agreement on six months notice in case the Custodian should not maintain a satisfactory quality of service, or if there is a material breach of the Custodian Agreement.
11. The Custodian will provide a high quality, responsive service with simple performance measures in place. The Custodian Agreement (to be made) will define the required quality, service level and performance measurement of the Custodian.

4.1.5 DVB MHP EXPERTS GROUP ARRANGEMENTS

4.1.5.1 Introduction

A DVB MHP Experts Group (further referred to as MHP-EG) is needed to advise the DVB Steering Board on the release of Test Suites and source code to the Custodian.

Any DVB member is entitled to join the MHP-EG. If there are issues concerning commercial confidentiality, a specific confidentiality agreement will be considered by the DVB Steering Board concerning the work within the MHP-EG.

The rules and procedures for the working methods, the recommendations, and the output, of the MHP-EG will be under the control and accountability arrangement of the DVB Technical Module, and of the DVB Steering Board as a whole.

The Ad-hoc Group on Rules and Procedures and the Technical Module will jointly propose the rules and procedures for the working methods of the MHP-EG to the DVB Steering Board. The AHG RP and the TM will assign the drafting of a proposal for the rules and procedures of the MHP-EG to a limited number of members of the AHG RP and the TM. The membership of this drafting group is open to all AHG RP and TM members who can demonstrate their competence in this field.

In principle and in practice, the MHP-EG can consider, on a fair and non-discriminatory basis, input and proposals for Test Suites and source code from any source.

The MHP-EG, on behalf of DVB, has effective control of the Test Suites and source code from any source that may be made available by the Custodian.

4.1.5.2 Main Functions of the MHP-EG

1. The MHP-EG will scrutinise and review Test Suites and other relevant information offered for use by Implementers through the Custodian, to determine their effectiveness and independence for use in testing all Implementations of the Specification from various sources.
2. A dedicated subgroup of the EG will scrutinise byte code verifier and class file parser source code only on request of DVB members in case of interoperability problems.
3. The MHP-EG shall not approve any Test Suites that do not conform to the Specification or are more restrictive than the Specification. In case of doubt, the Specification shall be the reference.
4. Any DVB member, or other interested party, will be free to offer its source code or Test Suites to the MHP-EG for release to the Custodian.

The MHP-EG will advise on such matters, with the ultimate decisions being referred to the DVB SB for final resolution, in accordance with the MoU, where consensus cannot be reached.

5. It is recognised that the MHP-EG may consist of individuals from companies that have separate implementations of Test Suites and/or source code (only relevant in case of the need to scrutinise source code in a subgroup of the EG) contributed to the Custodian. Further it is recognised that these people will gain know-how. This

is allowed provided that their company accepts the responsibility to ensure that its individuals maintain the confidentiality of the information they had access to as part of the MHP-EG.

6. The MHP-EG will ensure that any Test Suites are genuinely independent of any particular Implementation of the Specification, so that there is an open and competitive market for MHP software.
7. The MHP-EG will have the right to reject Test Suites or modules of Test Suites presented by any party. Any rejection shall have to be explained in detail, on the basis of identifiable and relevant data.
8. For testing of any technology that was contributed by any DVB member or other interested party, the MHP-EG shall offer a right of first and last presentation to the original technology contributor as to proposing modified versions of the tests. This will allow the contributor to propose the original version of the test, and if needed, the opportunity to address the concerns raised by the MHP-EG when evaluating that test.
9. Whenever considering the use of Test Suites or modules, at equivalent functionality in the MHP environment, the MHP-EG shall favour those used in other tests that Implementers may be required to pass to meet compliance criteria in a user community that is wider than DVB MHP, e.g. the Java Community. Main criteria for the selection of Test Suites or modules, however, remain compatibility and usefulness in a DVB MHP environment.
10. Where bugs or other shortcomings are found in the Test Suites then the MHP-EG will raise these issues with the provider(s) of these Test Suites, and together they will find appropriate and timely solutions.
11. Any conflict that rises between the Specification and the Test Suites or a valid Implementation will be resolved by the normal DVB processes, supported by the MHP-EG.
12. The MHP-EG will work with Implementers to ensure that there is full interoperability between different vendors of MHP software that run on the MHP. Where any problems may occur, the MHP-EG will address these as already described.
13. The MHP-EG shall not approve Test Suites and modules that prevent the evolution and the extension of all elements in the Specification.

4.1.6 DVB MHP TESTING AND THE MHP LABEL

1. Testing means the testing of Implementations for interoperability with other Implementations and with DVB MHP Test Suites by testing for compliance with the Specification.
2. Testing is done with the use of Test Suites that are pieces of software developed by the DVB Project and/or its members for testing as defined above.
3. Implementers perform testing; no compliance or interoperability test centre etc. will be mandated.
4. If interoperability problems occur, the following hierarchy will be applied: the Specification overrules the Test Suites, which overrule the Implementation.
5. The MHP Label will be granted to Implementers declaring to the Custodian that their Implementation has passed the Test Suites made available by the Custodian, and fully implements the appropriate profile of the Specification with the possible exception of options.
6. Self-certification may bear the risk of non-serious Implementers. In a horizontal market with competition, however, these will be discovered by market forces with the risk to lose their market position or even disappear from the market. However, it must be possible to determine if a particular vendor has self-certified

compliance. Therefore the Custodian, on request by the Chairman of the Steering Board, will acknowledge if a particular vendor using the MHP logo, has or has not self-certified compliance with the specification.

4.1.7 DVB MHP CONFORMANCE WITH ETSI RULES

1. ETSI will standardise a specification from DVB that includes references to another document (a specification or similar), provided that it is publicly available. Use of an International Standard Book Number (ISBN) is an acceptable way of defining a reference. This reference, however, is not normative as the Java VM specification is a mixture of functional specifications and implementation recommendations. The latter cannot be part of a normative reference.
2. Clean-room implementation must be possible. ETSI will standardise the MHP specification that includes IPR from Sun and others. Particular conditions, such as the use of Test Suites, would also be acceptable where specifications of such Test Suites are included as part of the ETSI EN-series document. In all cases IPR would have to be made available on fair, reasonable and non-discriminatory terms. Code cannot be part of an ETSI European Norm.
3. Test Suites included in the EN-series document can be modified or extended as part of a MHP standard update, for example to reflect practical experience in the market and to improve interoperability, through the usual ETSI procedures.
4. Any executable source code and Test Suite from Sun, or another supplier, would not be a matter for ETSI in its role as a standards body provided that use of such code and Test Suites was not mandatory. As a potential custodian, ETSI could make such code and Test Suites available to implementers of DVB MHP.
5. The ETSI PAS (Publicly Available Specification) procedure is not relevant to the standardisation of MHP at this stage. However, an ETSI standard that includes a reference to other documents, such as the Java VM specification, that are not recognised International Standards cannot be made mandatory by governments within the EU. If there were a need for the MHP to be a mandatory specification within the EU, then the Java specifications referred to by the MHP would need to be approved by a body such as ETSI. The PAS process is a way in which this could be done.
6. ETSI is willing to use the word "Java" in its standards, and include an acknowledgement that it is a Sun trade mark, as long as this is acceptable to Sun. ETSI already does so with certain trade marks from other software companies, e.g. Microsoft.
7. ETSI standard implementation is voluntary. It is advisable to position the references to Java within the MHP specification so that it is clear that Sun's implementation is one possible implementation of the MHP specification, and that other implementations are also possible, provided that they meet the MHP specifications and pass the Test Suites. However, no condition or permission may be imposed, in the standard, on other implementations proposed to the market.

4.1.8 ANNEX: Sun's POSITION ON DVB MHP

1. Sun reiterates its affirmation of the DVB MoU and its IPR clause. Sun declares that, if the MHP Working Draft (DVB SB 25 (99) 30) were a specification for which notice has been given under Article 14.1, it would not submit a list under that article.

Sun further agrees that from today until the end of the 90-day period referred to in article 14.1 relating to the notification of approval of the Specification, it will not take any action which would obligate it to submit a list under article 14.1.

Moreover, it will not take any such action that would cause it to make the declaration of the exceptional circumstances under article 14.3.

2. Sun will provide indicative licensing terms and upper bounds for its IPR costs in the proposed Specification.
3. Sun will make available to the MHP-EG free of charge:
 - (a) byte code verifier and class file parser source code
 - (b) relevant tests suites for the Java Specification.
4. Sun will make the source code and the Test Suites available at the time the Custodian arrangements are put in place. In advance of these arrangements, Sun will put interim arrangements in place in co-operation with DVB.
5. Sun will grant the Custodian, at no charge, a non-exclusive licence to sublicense the code and Test Suites to vendors for use in implementing and testing Implementations of the Specification, this being the only condition for such licensing.
6. If Sun creates further updates, bug fixes or functional enhancements of the byte code verifier, class file parser and Test Suites, Sun will make these available to the Custodian through the MHP-EG on the same conditions as the initial versions.

Sun would encourage the DVB Project to remain synchronised with the rest of the Java community, and certainly would strongly recommend doing so if a fix were provided to resolve a security issue.

The DVB Project however has the freedom to accept or reject these updates for inclusion in future or interim releases at its sole discretion, and at timing determined by DVB.
7. Sun will use reasonable efforts to resolve bugs, inconsistencies or ambiguities that arise between the Specification and the associated Test Suites, once notified through DVB.
8. Sun agrees that it cannot unilaterally change this declaration. The DVB Steering Board must approve any change.
9. Sun will contribute its know-how and expertise, including the experience of the wider Java Community, to the work of the MHP-EG.
10. Where there are licensing terms and conditions specified in referenced specifications, e.g. by ISBN number, these are superseded by the DVB arrangements, which take precedence
11. There will be no requirement for a commercial relationship with Sun for MHP application development or for transmissions and usage of MHP applications.

4.2 DVB Chairman's further statement on "DVB MHP Supersetting"

Geneva, 12.06.2000

To: Members of the DVB Steering Board

Dear colleagues,

The discussions on supersetting the DVB MHP Specification and the use of some test suite elements should result in solutions that satisfy the DVB community, the standardization bodies, and the regulators.

It is my view that the solution to the present dispute is found along the following logic:

1. We have agreed in DVB that clean-room implementations of the DVB MHP Specification are allowed. For this reason, there cannot be any discrimination between clean-room and non-clean-room implementations.
2. We have agreed in DVB that supersetting the DVB MHP Specification cannot be forbidden by the DVB project. As a consequence, implementers may choose to superset in their proprietary namespace, in a `dvb.org` namespace, or elsewhere. Supersetting, however, is not part of the DVB MHP Specification, and consequently cannot be governed by the DVB MHP Implementation Arrangements.

Thus, a supersettted implementation of the DVB MHP Specification is not, by definition, excluded from being an Implementation. However, there is no requirement that licensors explicitly grant through the DVB arrangements IP rights or Test Suite rights (for the original provider's tests) for anything but the MHP specification.

3. We have agreed in DVB that the test suite elements delivered by DVB members, and accepted as for the DVB MHP Test Suite by the DVB MHP Expert Group, constitute the DVB MHP Test Suite. License conditions agreed with the original provider of a particular test suite element must be respected, but apart from that the DVB MHP Test Suite is in the hands of the DVB Project or its nominated Custodian.
4. Any implementation of the DVB MHP Specification that rightfully and successfully runs through the DVB MHP Test Suite must be entitled to obtain the DVB MHP Label, irregardless of whether or not the implementer has chosen to superset the DVB MHP Specification.
5. It must be clear in the DVB MHP Implementation Arrangements that the DVB MHP Label does not mean anything else than compliance with the DVB MHP Specification. Any compliance claim that goes over and beyond compliance with the DVB MHP Specification cannot be based on the use of the DVB MHP Test Suite.
6. The DVB Steering Board encourages DVB members, who want to build products that superset the DVB MHP Specification, to do so in their proprietary namespace.

It is my understanding that Sun Microsystems agrees with the positions outlined in this letter. We will have to decide in the upcoming Steering Board meeting how to formally handle the letter. A possibility could be: an amendment or addition to the DVB MHP Declaration.

Kind regards,

THEO PEEK

4.3 DVB MHP Expert Group

4.3.1 Rules & Procedures of the DVB MHP Experts Group (MEG)

4.3.1.1 Formation of MEG; Underlying Principles

1. A DVB MHP Experts Group (MEG) is hereby formed to advise the DVB Steering Board on the release of the MHP Test Suite and source code to the Custodian and on the other matters described in these Rules and Procedures. The MHP Test Suite comprises test applications, identified by the MEG, for the purpose of testing a number of features (possibly related) of an Implementation.
2. These rules and procedures have been adopted for the MEG. They comprise its working methods, recommendations, and output. These Rules and Procedures have been approved by the Steering Board. Any changes must be proposed by the Technical Module and approved by the Steering Board (except that paragraphs 6, 7, 12, 13, 14, 16 and 18-22 cannot be changed if such change prejudices the position of an original technology provider). Unless otherwise defined, each capitalised term in these Rules and Procedures has the meaning for such term found in Attachment 2.
3. Any DVB member is entitled to join the MEG.
4. The members of MEG shall name a chairman, who shall be approved by the Technical Module. The MEG shall adopt its decisions based on consensus. In the absence of consensus among its members, the chairman MEG shall deliver one or more reports to the Technical Module reflecting the differing views of the members of MEG. Ultimate decisions are made by the DVB Steering Board, with final resolution in accordance with the MoU where consensus cannot be reached.
5. In principle and in practice, the MEG can consider, on a fair and non-discriminatory basis, test applications, input and proposals for the MHP Test Suite and source code from any DVB member or other interested party. It may seek the views of the constituent modules of the DVB Project.
6. The MEG, on behalf of DVB, has the power, upon direction from the DVB Steering Board, to deliver to the Custodian, consistent with the other provisions of these Rules and Procedures, the MHP Test Suite and source code made available by any source.
7. The work of the MEG includes, subject to the provisions of Paragraphs 13 and 14 below, the selection and adoption of new, additional, substitute or alternative versions of the source code and the MHP Test Suite. The MEG can propose to the Technical Module for recommendation to the Steering Board whether to accept or to reject such versions for inclusion in future or interim releases and to determine the timing of any release.
8. It is recognised that the MEG may consist of individuals from companies that have separate testing technologies (or source code in the case of the dedicated subgroup formed under paragraph 25). Further it is recognised that such individuals will gain know-how. Arrangements concerning commercial confidentiality relating to the work within the MEG are set out in the confidentiality agreement attached to these Rules and Procedures as Attachment 1. Each member of MEG shall sign the confidentiality agreement.

4.3.1.2 Main Functions of the MEG

4.3.1.2.1 MHP Test Suite

9. The MHP Test Suite is intended to aid implementers when developing and testing their product, to ensure conformance and interoperability among different Implementations.

10. The scope of the MHP Test Suite is limited to Implementations. Where additional data or streams are needed in order to test an application program interface, such data or streams shall be considered to form part of the test application concerned. The scope of the MHP Test Suite and the work of MEG may in the future be extended pursuant to paragraph 2 to cover aspects of broadcast signals and MHP applications and html. Extensions to the MHP specification are not within the scope of the MHP Test Suite.

4.3.1.2.2 Test Suites: Process

11. The MEG will encourage the provision of or create test specifications, that is an unambiguous description of test procedure and test conditions, and codes which form the test applications. The test applications will be written based upon test specifications or otherwise obtained.
12. The MEG will scrutinise and review test applications and other relevant information offered by any proponent. The objective of this scrutiny and review is to determine the effectiveness and independence of the MHP Test Suite for use in testing all Implementations of the MHP specification from various sources. The process described in paragraphs 13 and 14 shall be the only means by which the MEG may provide or modify test applications that address those elements of MHP that are initially proposed by an original technology provider.
13. When an element of the MHP specification (whether included directly or by reference) has been originally proposed by one entity, it shall have the right to present the initial version of the test applications related to that element. It shall have the same right in respect of updates and revisions of the MHP specification.
14. Upon receipt of the test applications proposed by such an original technology provider pursuant to Paragraph 13, the MEG shall objectively evaluate and test, with respect to implementations which implement all required interfaces and functionality of the elements of the MHP specification which it has proposed, whether any particular test application fails to meet the criteria specified in paragraphs 18 to 22. The MEG shall notify the proponent of any concerns found with particular test applications based on this evaluation. If the proponent concurs with the evaluation, it shall use commercially reasonable measures to develop promptly and provide to the MEG a replacement test application, or otherwise to find appropriate and timely solutions to resolve the problem. If the proponent does not concur with the MEG that the test application is flawed, it shall notify the MEG of that conclusion and its rationale. The proponent and MEG shall then work together in good faith to resolve the dispute. If despite these efforts, the proponent declines to respond further to MEG's requests or ceases to make any meaningful efforts to correct a test that is flawed for either of the reasons stated above, then the MEG may:
 - (x) direct the Custodian to delete the test in question upon first giving 30 days notice to the proponent of that decision, or
 - (y) incorporate into the MHP Test Suite a substitute, functionally equivalent test that resolves such flaws unless and until the proponent provides the MEG with the proponent's own functional equivalent test applications that also is not flawed for such reasons.
15. When a revised MHP specification is approved by the Steering Board, the MEG shall interpret the changes and consider whether the MHP Text Suite needs revision. If the MEG adopts Further Test Applications or a new MHP Test Suite, it will consider whether it is necessary to communicate any further information, for example, on the importance of the modification and any significant differences compared with the previous version. The version number of the MHP Test Suite shall reflect the appropriate version of the MHP specification.
16. Any person may give notice to the MEG of bugs or other errors found in the MHP Test Suite, including inconsistencies and ambiguities that arise between the MHP

specification and the MHP Test Suite. The MEG will raise these issues with the provider(s) of the implicated test applications in the MHP Test Suite. If the provider agrees that a particular test application contains bugs or other errors, it shall so notify the MEG and the MEG may then direct the Custodian to suspend use of the test application(s) in question until the provider provides the MEG with a corrected test. (If the provider fails to respond to the MEG within 30 days, the provider shall be considered to agree that there is a bug or error and the terms of the previous sentence apply.) If, however, the provider does not agree that the test application in question contains a bug or other error, then it shall so notify the MEG and the provider and MEG shall use their best efforts to find together an appropriate and timely solution. If despite the best efforts of MEG and the provider, there is no agreement on whether the test application contains a bug or other error, the MEG may recommend to the Steering Board that the Custodian suspend the use of the test application unless and until the provider provides the MEG with a corrected test. The MEG may not delete or modify a test application, even if the Custodian has been directed to suspend its use, without the consent of the provider.

17. Subject to paragraph 14 and 16, any conflict that arises between the MHP specification and a test application or a valid Implementation will be resolved by the normal DVB processes, supported by the MEG.

4.3.1.2.3 Criteria for approval of test applications.

18. The MEG shall not approve any test application that does not conform to the MHP specification or is more restrictive than the MHP specification. In case of doubt, the MHP specification shall be the reference.
19. The MEG will ensure that any test application is genuinely independent of any particular implementation of the MHP specification, that is, that it does not arbitrarily favour or compel the use of one or more particular Implementations over other Implementation(s), so that there is an open and competitive market of MHP software.
20. Whenever considering the use of test applications or modules, at equivalent functionality in the MHP environment, the MEG shall favour those used in other tests that implementers may be required to pass to meet compliance criteria in the relevant user community that is wider than DVB MHP. Main criteria for the selection of test applications or modules, however, remain compatibility and usefulness in a DVB MHP environment; a test application is assumed not to test for the presence or absence of elements outside of the MHP specification.
21. The MEG shall not approve any test application or the MHP Test Suite that prevents the evolution and the extension of all elements in the MHP specification.
22. Each test application should test a single identifiable aspect of the MHP specification unambiguously and give a consistent indication of the result of the test it performs.

4.3.1.2.4 Continuing work on interoperability

23. The MEG will work with Implementers to ensure that there is full interoperability between different vendors of MHP software that run on the MHP. Where any problems may occur, the MEG will address these as already described.
24. The MEG will form a dedicated subgroup whose purpose is to scrutinise byte code verifier and class file parser source code only on request of DVB members based on a claim of interoperability problems. The scope of this subgroup may be modified pursuant to paragraph 2 if a specification is more fully developed for these elements of source code.

4.3.1.3 Attachment 1 to MEG Rules and Procedures: MEG Confidentiality Agreement

This Confidential Agreement is among the entity identified on the signature page hereof as the receiving party and the other entities signing similar counterpart signature pages.

The DVB Project has formed the MHP Experts Group ("MEG") to advise its Steering Board on the release of the test suite for the Multimedia Home Platform. The working methods, recommendations and output of the MEG are comprised in the DVB MHP Experts Group Rules and Procedures substantially in the form of the Annex hereto. The receiving party desires to participate in the MEG and it is a condition to such participation that the receiving party be bound by this Confidentiality Agreement.

In this Confidentiality Agreement, the following terms have the meaning set out below:

Confidential Information

Any information delivered or communicated by a disclosing party to the receiving party as part of the activities of the MEG, or any other information relating to the disclosing party's test applications or source code, which is marked confidential or proprietary, or, if disclosed orally during a meeting of the MEG or one of its subgroups, is identified as confidential. Confidential Information does not include information

- (i) is now, or later becomes, generally known to the public (or than through the receiving party's fault);
- (ii) is known by the receiving party at the time of receipt;
- (iii) is lawfully obtained by the receiving party from any third party who has lawfully obtained such information. The receiving party bears the burden of showing that any of the foregoing exclusions applies to any part of the Confidential Information.

Residual Knowledge

Ideas, concepts, know-how or techniques related to the disclosing party's Confidential Information that are retained in the unaided memories of the receiving party's employees. An employee's memory will be unaided if the employee has not intentionally memorised the Confidential Information for the purpose of retaining and subsequently using or disclosing it.

The receiving party agrees that the Confidential Information shall be used solely for the activities of the MEG as set forth in the DVB MHP Experts Group Rules and Procedures.

The receiving party agrees to keep the Confidential Information strictly confidential and shall not disclose Confidential Information to any other person except to

- (A) another member of the MEG similarly bound by a Confidential Agreement or to
- (B) its employees, and to Affiliates, subcontractors and to their employees, provided that
 - (i) such disclosure is necessary for the purposes of the Experts Group;
 - (ii) each is made aware of the requirements of this Confidential Agreement;
 - (iii) in the case of Affiliates and subcontractors, each is subject to the same obligation as the receiving party not to disclose the Confidential Information; and
 - (iv) in the case of any employee, he is under an obligation not to disclose confidential information of his employer.

In this Confidentiality Agreement, an Affiliate is a subsidiary or parent company of the receiving party, as well any entity owned or controlled, directly or indirectly by the receiving party or by an entity owning or controlling the receiving party in the same way, where ownership or control exists through the direct or indirect ownership of 50 percent or more of

the voting share capital or right by any other means to elect or to appoint directors or persons who collectively can exercise such control.

The receiving party shall protect the Confidential Information with the same degree of care as it normally uses in the protection of its own confidential and proprietary information, but in no case with any less degree than reasonable care. The receiving party shall, at the request of the chairman MEG, provide written assurances concerning the steps taken by the receiving party to preserve the confidentiality of the Confidential Information.

This agreement is not intended to prevent the receiving party from using Residual Knowledge, subject to any valid patents, copyrights and semiconductor mask rights of the disclosing party; provided, however, that the use of Residual Knowledge is prohibited when it is used for the development of competing test suites . In this Confidentiality Agreement, a "competing test suite" is any test suite that tests functionality which is also substantially covered by an existing test suite already provided to DVB when the existing test suite has been provided by a company or organisation other than the company or organisation developing this test suite.

Nothing in the foregoing shall be understood to restrict the use of Residual Knowledge by:

- (i) the receiving party concerning tests used to validate compatibility of an element of the MHP specification when the receiving party holds a copyright interest in such element;
- (ii) the receiving party for the development of test programs as development tools that are only for the receiving party's internal use; and
- (iii) the receiving party in connection with its participation in the development of test suites by, or its provision of test suites into, another standards forum if the test suites in question are provided to such forum by the same party that previously (and rightfully) provided them to DVB.

Upon his finding of a breach of this agreement by a receiving party, the chairman MEG may recommend to the DVB Steering Board that the receiving party be excluded from the MEG. This Confidentiality Agreement shall expire in respect of the receiving party on the third anniversary of the earlier to occur of

- (i) the dissolution of the MEG, and
- (ii) the day on which the receiving party and its Affiliates cease, after notice to the MEG, to be a member of the MEG.

At the time of either such dissolution or leaving, the receiving party shall immediately return to the disclosing party all Confidential Information in its possession or deliver to the disclosing party its certificate that it has destroyed all such Confidential Information.

The entity identified on the signature page hereof agrees to be bound by the Rules and Procedures of the MHP Experts Group substantially in the form of the Annex to this Confidentiality Agreement.

The effective date of this Confidentiality Agreement as to the receiving party shall be the date indicated on the signature page hereof. This Confidentiality Agreement shall be governed by the laws of Switzerland.

Counterpart Signature Page of a receiving party under the MHP Experts Group Confidentiality Agreement

Pursuant to the terms of the MHP Experts Group Confidentiality Agreement among the parties therein named, the undersigned hereby executes and delivers its counterpart signature page under that Agreement.

Executed as of _____, 200_ by the receiving party named below:

Address for notice
pursuant to o this Agreement

[NAME OF RECEIVING PARTY]

[Name of receiving party]
[address]
[city, country]

by _____
its

fax:

attention;

4.3.1.4 Attachment 2 to MEG Rules and Procedures: Definitions

Custodian	The European Telecommunications Standards Institute or, if different, the Custodian named under the DVB Conformance Testing Custodian Agreement
Further Test applications	Test applications, amending or supplementing an MHP Test Suite, or related to an amendment to MHP.
Implementation	An implementation of the MHP specification which <ul style="list-style-type: none"> (i) fully implements the appropriate profile of the MHP specification with the possible exception of options; (ii) implements all required interfaces and functionality of the MHP specification; and (iii) is self-certified, pursuant to the DVB Conformance Testing Custodian Agreement, to have passed the MHP Test Suite.
MEG	As defined in paragraph 1.
MHP specification	The MHP specification, as specified by the Steering Board of the DVB Project on 22 February 2000 under specification number MHP 1.0 as such specification may from time to time be amended.
MHP Test Suite	As defined in paragraph 1.
test applications	Test applications incorporated in the MHP Test Suite.

4.3.2 DVB Steering Board Clarification with respect to the Rules and Procedures of the MHP Experts Group

The Steering Board on 24 October 2001 adopted the following clarification in respect of the Rules and Procedures of the MHP Experts Group:

The process of interaction between the MHP Experts Group and a technology provider set out in Paragraph 14 will be used to address allegations that a particular Test Application fails to meet the criteria specified in MHP Expert Group Rules 18 through 21, whether the allegation was made before or after adoption of the Test Suite submitted by the technology provider. A technology provider is expected to continue to participate in that process, provided that the MHP Experts Group remains constituted and available to serve its specified purpose.

4.3.3 MEG Feedback Mechanism

6 Feedback Process ³²

In this section we describe how a conflict that arises between the MHP specification and a test application or a valid implementation is to be resolved. This process is supported by DVB/MEG and is a process provided for under the Rules and Procedures paragraph 17.

In the case of any differences between the process described herein and the Rules and Procedures, the Rules and Procedures are controlling.

In Feedback Timescales below a time scale is set out for the feedback process. This time scale is purely indicative and the actual timing of any response to a query may greatly exceed that given below. In addition, application of the Rules and Procedures may add significantly to the time needed for a response under the feedback process. An implementer considering a query under the process described in this section should take into account the time scale and the prospect of delays.

6.1 Basis for a Query

An implementer may make a query against a test application for the following reasons:

- A. the test application contains bugs or other errors, including inconsistencies and ambiguities that arise between the MHP specification and the test application;
- B. the test application is more restrictive than the MHP specification;
- C. the test application is not genuinely independent of any particular implementation of the MHP specification; that is, it arbitrarily favours or compels the use of one or more particular implementations over other implementations;
- D. the test application tests for the presence (or absence) of elements outside the MHP specification;
- E. the application prevents the evolution or the extension of all elements in the MHP specification; or
- F: the test application fails to test a single identifiable aspect of the MHP specification unambiguously and to give a consistent indication of the result of the test it performs.

These are criteria specified in the Rules and Procedures.

³² The MEG feedback mechanism is from Section 6 of the DVB-MHP Conformance Requirements, SB 30 (00) 13 (TM 2354)

6.2 Presenting a Query

6.2.1 Form of the Query

An implementer submits a query on the form available at <URL> or using the feedback form distributed on the Test Suite media. An implementer should submit a separate query for each test application or set of test applications challenged for a common reason.

The appellant must specify the grounds for the query according to one of the categories set out in Basis for a Query above.

In addition the appellant supplies the following information:

- Test challenger name and company
- Confidentiality requested
- Test identification or *Alternate Test* identification
- MHP Specification version, profiles and options (if any)
- MHP Test Suite version
- *Exclusion List* version
- Test configuration, test harness, and other test environment information
- Test output
- Rationale for test appeal

Where the query-maker requests confidentiality, it is responsible for ensuring that its identity is only contained within the <query-maker> element of the feedback form. Information in the <appeal_details> element is presented to DVB/MEG process unaltered and query-makers are responsible for ensuring that information in this element does not reveal their identity.

6.2.2 Submission of the Query

The completed form is submitted by e-mailing the Appeal form to <mail address>.

On receipt of the Appeal form the TSMA registers the Appeal for tracking purposes

6.2.3 Review of the Query

The feedback process will follow the steps described below, each step being notified to the TSMA who tracks review progress:

Step 1 Completeness requirements. Upon its receipt the TSMA reviews the submitted form to ensure that all the required fields have been completed.

If after review the submitted form meets the formal requirements, the TSMA acknowledges receipt of the submitted form, removes the identity of the query-maker, and passes the challenge to the DVB/MEG for further consideration.

Step 2 - Uniqueness and merit. The DVB/MEG reviews the submitted form for uniqueness and merit. If the query is identical to another (because it concerns the same test application and justification), the DVB/MEG will advise the TSMA, and TSMA will notify the query-maker, that its query fails because it is not unique.

If the query is patently without merit, the DVB/MEG will advise the TSMA, and TSMA will notify the query-maker, that the query fails, without full review, for that reason.

Step 3 - Full review. If the DVB/MEG concludes that the query is unique and has merit, the TSMA, in consultation with DVB/MEG, consults the original developers of the test application and if necessary members of other DVB bodies to determine whether the query is justified (that is, whether the test application falls within one of the categories in Basis for an Query above).

In the full review, a test suite developer and/or *Specification Interpretation Authority* may be called to act as reviewer. All queries where the DVB/MEG analysis proposes the addition of

corrigenda to the MHP Specification will be referred to the *Specification Interpretation Authority*.

In addition to the electronic information exchange process, a meeting or other forms of exchange may be called for. Where the query-maker requests a meeting to discuss the status of its query prior to DVB/MEG final decision, the TSMA, in its sole discretion, after consultation with the DVB/MEG, shall decide whether such a review meeting or other exchange is required.

The result of the consultation, review and exchange will serve as the basis for response of the DVB/MEG.

Step 4 Response. Based on its full review, the DVB/MEG issues, and the TSMA delivers to the implementer, a response on whether the query is justified.

6.3 Feedback Decision

The feedback process may result in:

- Rejection for failure to submit a complete form
- Failure for not being unique or being without merit
- Failure after a full review, for presenting a justification or satisfying one or more of the criteria as detailed in Basis for an Query above; or
- Approval after full review.

6.4 Consequences of a Successful Query

After a successful query, if the test application has failed because the test application contains bugs or other errors, including inconsistencies and ambiguities that arise between the MHP specification and the test application, then the DVB/MEG will seek to resolve the problems identified in the test application in accordance with the process described in Rules and Procedures paragraph 16.

If the test application has failed for any other reason stated in Basis for a Query above, then the DVB/MEG will seek to resolve the problem in accordance with the process described in Rules and Procedures paragraph 14.

The TSMA maintains a list of excluded test applications and makes this available to test suite users.

6.5 Challenge to a Response

A challenge may be brought against the response issued as part of the feedback process using the procedure adopted within the DVB Project.

6.7 Feedback Process Timescales

To the extent possible, the TSMA shall observe the time scale of working days set out in this section. (A query-maker cannot rely on adherence to this time scale, as indicated in the third paragraph of this section.)

Step 1	Completeness – Rejection or Acknowledgement	2
Step 2	Assessment of Uniqueness and Merit	5
Step 3	Full Review	30
Step 4	Response	10
Step 5	Register and Database Updates	2
Step 6	Test Application Correction and Provision (see Consequences of a Successful Query above)	10

4.4 Intellectual Property Rights, Conformance Testing associated with the Globally Executable MHP

DVB SB 38 (02) 11

DVB IPRM 27 (03) 3

Intellectual Property Rights, Conformance Testing associated with the Globally Executable MHP

Several sections of the GEM specification do not require literal conformance with the corresponding requirement in the underlying MHP specification but allow for comparable substitution. As defined in GEM, a "functionally equivalent" requirement is one that specifies behaviour that performs the same function with substantially the same behaviour as the original specification, as seen from the application's point of view.

Sister standards fora are called upon to set the specifications for Functional Equivalents. This statement describes the approach that has been adopted by the DVB Project

- to ensure that IPRs essential to these Functional Equivalents are available on terms fair, reasonable and non-discriminatory; and
- to achieve an understanding of the working of the conformance testing regime the sister standards forum proposes for its GEM specification and its relationship to our own.

This statement has been adopted by the November 2002 Steering Board as an interpretation of the statues of the DVB Project under art 17 DVB MoU. A copy of this statement may be communicated to a sister standards forum so it can understand our internal process and our approach to these issues.

IPRs associated with GEM implementations

Principle of reciprocity. Under article 14.2 of our Memorandum of Understanding, each DVB member undertakes, on its behalf and behalf of its affiliates, that it will grant non-exclusive, non-transferable, world-wide licences, on fair, reasonable and non-discriminatory terms under any of its IPRs necessarily infringed by a DVB specification, for use in or of equipment fully complying with such specification, *to any third party which submits a similar undertaking with respect to such specification.* (This is a summary; for the text of art 14 DVB MoU, see <http://www.dvb.org>.) Thus the third party must reciprocate by offering, in return for a grant by a DVB member of a licence of essential IPR, a licence of its own IPR essential to that specification on terms fair, reasonable and non-discriminatory.

The process which is set out in this statement extends this principle of reciprocity to Functional Equivalents. Because we expect standards fora to specify the Functional Equivalents, we look to them to confirm to the DVB Project that their members are bound by an IPR policy comparable to our own. In this statement, a standards forum can include a recognised standards setting body, an industry consortium, or similar entity. The term "member" may include any contributor to the standards forum process.

Review of IPR policy of sister standards forum. A sister standards forum seeking to specify Functional Equivalents will be invited to submit its IPR policy, to confirm that its members undertake to grant licences to IPRs essential to specifications of that standards forum on terms fair, reasonable and non-discriminatory, and to provide other relevant materials. (The standards forum may also request that the DVB Project submit to it a copy of its own IPR policy.)

The submission of the standards forum will be reviewed by the IPR Module. If the submission is found to be acceptable to the IPR Module, the Chairman IPRM will so notify the standards organisation. If the submission is found to be unacceptable or if no consensus is reached by

the IPR Module on the submission, the Chairman IPRM will report this result to the Steering Board which shall make a final determination.

The submission will be reviewed to determine if the members of standards forum undertake to grant licences to IPRs essential to specifications of that standards forum, including Functional Equivalents, on terms fair, reasonable and non-discriminatory. In this undertaking, there may be exceptions for reciprocity, full compliance with the specification and other customary limitations. It is not expected that the IPR policy of the sister standards forum follows all the elements of the IPR policy of the DVB Project.

Substantive changes adopted by sister forum. Our review of the materials submitted pursuant to this statement, and the rights available to DVB members under Article 14.1 (notice of inability to offer essential IPRs), are based in part on the Functional Equivalents which the sister forum intends to adopt. At the time our GEM specification is revised to reference as "fully compliant" the base specification of the sister forum, the Technical Module will have been informed of these specific Functional Equivalents and the nomenclature for the reference (for example, profile or major version number).

A substantive change to this specification – a new profile or major version change evidenced, for example, by a corresponding name under its nomenclature convention – would require a revision of our GEM specification. This new specification would allow our members, under article 14.1, to review their essential IPRs in respect of the GEM revision. (For the sake of completeness: a minor change to the Functional Equivalents of the sister forum would not require a revision of our GEM specification; and issues arising out of an article 14.1 notice relating to a GEM revision would not reopen the IPR position for prior versions of GEM.)

Conformance testing

The DVB Project has developed a sophisticated regime for conformance testing and IPR licensing for its MHP. It is based around the MHP Test Suite, distributed by a neutral custodian, which is called upon to receive certificates from each implementer when it has successfully completed the test suite. The custodian also handles some aspects of IPR licensing; the DVB Project Office is responsible for the licensing of the MHP Mark; and we are presently fostering a pooling arrangement that covers MHP and other DVB specifications. All these elements are described at length in DVB blue book A066, *MHP Implementation Arrangements and associated agreements*, available at <http://www.mhp.org>.

Among our goals in the MHP process are interoperability of MHP equipment and ease of IPR licensing. The DVB hopes that the sister standards forum shares these goals and indeed can integrate its own processes with those which we have established.

It will be the task of the IPR Module, based on the submissions of the sister standards forum, to indicate to the Steering Board when the processes, relating to conformance testing and licence administration, adopted by the forum represent an egregious departure from our own, do not otherwise conform to industry practice and would seriously prejudice the interests of the DVB Project or a number of its members. In the more likely case (ie when the processes are harmonious), the IPR Module will make itself available to advise on the means to integrate these processes into the DVB's own.

[Change to GEM specification]

To be "fully compliant" with this specification, equipment shall also be fully compliant with any one of the following other specifications.

- MHP 1.X
- OCAP 1.X

For avoidance of doubt, equipment which is fully compliant with all of this specification apart from the above clause is not fully compliant with this specification.

[letterhead of DVB Project]

[date]

for further information, please contact:

Carter Eltzroth, Chairman IPRM

celtzroth@dvb.org

[Sister Standards Forum]

[address]

Dear []:

Globally Executable MHP: IPR Policy

The DVB Project is pleased that you are considering adopting our GEM specification which, when combined with Functional Equivalents to be specified by you, will provide functionalities very similar to the Multimedia Home Platform.

As part of our work with you, each of us should have an understanding of the other's policies on intellectual property rights, conformance testing and related aspects of our activities. This letter summarises our views on each of these. (I assume that you have separately supplied to the DVB Project the proposed specifications for the Functional Equivalents to be adopted by you.)

1. Intellectual Property Rights. Our IPR policy covers the duty of our members to license intellectual property rights infringed when implementing a specification. The core of our policy is that each of our members undertakes to grant non-exclusive, non-transferable world-wide licences on fair, reasonable and non-discriminatory terms and conditions, under any of its IPRs necessarily infringed when implementing a DVB specification, for use in equipment fully complying with such specification, to any third party agreeing to submit a similar undertaking. This is a summary of article 14.2 of the DVB's Memorandum of Understanding; the full text of our article 14 can be found at www.dvb.org. I attach the statement recently adopted by our Steering Board on the application of our IPR rules to GEM.

It is important for the DVB to know that you have a similar policy, that is, which compels each of your members (or contributors to your specification setting process) to grant, subject to customary exceptions, licences to IPRs it owns which are essential to the Functional Equivalents you adopt on terms fair, reasonable and non-discriminatory. Can you confirm that this is your policy? Could you also send to us a copy of your IPR policy? As part of our GEM process, we will review your IPR policy to assess whether it is comparable to our own.

I also call your attention to the effort, undertaken by the DVB Project, to foster a voluntary licensing programme for IPRs essential to the Multimedia Home Platform. We should discuss whether it would be desirable for your GEM implementation to be included in the ongoing initial work – review of declarations of essential IPR – which, we hope, will lead to one or more patent pools covering MHP and GEM products.

2. Conformance testing. As part of our work on the Multimedia Home Platform, we also developed an MHP Test Suite for use in conformance testing. A central goal has been to ensure interoperability of equipment implementing the MHP specification. Under our regime, a neutral custodian distributes the MHP Test Suite, receives certificates of completion of

conformance testing, and handles some IPR licensing. An implementer successfully completing the MHP Test Suite is entitled to the MHP mark. This is a very cursory outline of our regime; a far more detailed description, and related documents, are available in the DVB blue book A066, *MHP Implementation Arrangements and associated agreements*, available at <http://www.mhp.org>.

Could you describe to us the conformance testing regime you intend to undertake in connection with your GEM specification?

We encourage you to consider establishing a regime comparable to the DVB's. As an initial step, it may be suitable for you to contact the companies which developed the test applications incorporated in the MHP Test Suite.

3. Other aspects relating to adoption of GEM. As part of our work together, we'd also like to discuss with you your nomenclature convention and how it signals, for example, a substantive change to a specification adopted by you, or a revision for debugging or to correct errors.

[Further paragraph intended for specific standards forum]

If you have any questions about the DVB's policy on IPRs, conformance testing, our GEM process, or our request, please don't hesitate to contact the undersigned.

Sincerely,

Carter Eltzroth
Chairman IPRM

Attachment: SB interpretation

4.5 Memorandum for DVB Re: Notification of DVB MHP agreements, Maurits Dolmans and John Temple Lang (Cleary, Gottlieb, Steen & Hamilton) (22 October 2001)

CLEARY, GOTTLIB, STEEN & HAMILTON

PRIVILEGED AND CONFIDENTIAL
ATTORNEY-CLIENT COMMUNICATION

MEMORANDUM FOR DVB

Re: Notification of DVB MHP agreements

This Memorandum contains an analysis under EC competition law of the proposed agreements to be signed in connection with the choice of Personal Java technology ("Java") as a key component of the Multimedia Home Platform ("MHP") standard developed by the Digital Video Broadcasting ("DVB") Project³³

I. SUMMARY AND CONCLUSION

1. The main issue concerns the question whether Implementers should be entitled to include Additional Functionality in the Licensor Name Space (also called "supersetting in the Sun/Java name space"). While several Sun MHP license agreements state clearly that a license to superset in that name space is withheld, and the scope of the Patent and Code Licenses are expressly limited to exclude all Implementations that superset in the Sun/Java name space, this is in our view (based on the information we have received) compatible with Article 81(1) and (3) of the EC Treaty, and no notification is required under Article 81(3).

The main reasons for this conclusion are that (a) the DVB agreements do not include a contractual ban on supersetting in the Sun/Java name space; (b) EC competition law does not require Sun to grant licenses to superset in its name space (since the MHP Specification does not require supersetting in the Sun/Java name space), (c) EC law permits Sun to limit the field of use of its license, taking into account also its objective of maintaining interoperability, and (d) to the extent that Article 82 EC could be applied to Sun's refusal to grant licenses to superset in its name space (which we think is not now the case) or its decision not to declare patents, this is not a matter for DVB, but for Sun.

The Commission would very likely take into account that the outcome of a prohibition of the MHP arrangements -- on the ground that it hampers supersetting in the Sun/Java name space -- would not only be (i) to (re)create a fragmented multimedia home platform environment, reducing competition and hampering market integration, but also (ii) the risk of elimination of Java-compatible Clean-Room Implementations, even those without supersetting in the Licensor name space, since in the absence of standardization Sun would no longer be required to license Essential Patents to Clean-Room Implementers at all.

2. Questions have been raised whether Clean-Room Implementers whose products fail the Test Suite have enough information about the Test Suite to adjust their implementations. The Commission would probably take the view that unless sufficient data are available to Clean-Room Implementers who fail the Test Suite

³³ Definitions are used as used in the DVB Steering Board, MHP Declaration, version 4.0, and the relevant agreements, unless otherwise indicated.

to modify their implementation to make it fully MHP-compliant, the grant of a license to Sun's Essential Patents should not be made conditional upon the Implementation having passed the Test Suite. (This is without prejudice to Sun's right to limit the scope of the Patent Licenses to fully MHP-compliant implementations.) We understand, however, that the necessary information will be made available under license on fair, reasonable and non-discriminatory terms. The requirement to pass the Test Suite as a condition for the Patent License should therefore be permissible.

II. DISCUSSION

A. The DVB arrangements

The DVB Project was established to create market-driven, open standards for interoperable digital video and multimedia broadcasting technology. The DVB Project, amongst other activities, develops MHP Specification to provide technology for interoperable multimedia home platforms (such as set top boxes, integrated digital televisions and multimedia computers).³⁴

1. **Compliance.** Compliance with the MHP specification is voluntary. This may be changed if the specification is presented to a recognized standardization body for inclusion in certain formal standards.³⁵ There is no ban on the use of other technology in Implementations, including competing technology, although competition questions arise because certain agreements discussed below appear to restrict supersetting in the Java/Sun name space.³⁶
2. **Essential IPRs.** The MHP Specification refers to a specific version or release of the Java specification, including a byte code verifier and class file parser in source code form.³⁷ The MHP Specification is permitted to evolve independent of the Java specification.³⁸

Sun Microsystems ("Sun") claims certain intellectual and industrial property rights ("IPRs") in the Java specification. To the extent that these are Essential, Sun grants licenses to these IPRs on standard terms and conditions. These arrangements are as follows:

1. The Java specification is not published on the DVB MHP specification website. Instead, reference is made there to a website controlled by Sun, where the Java specification is made available for review subject the electronic acceptance of a document called "Terms of Use - Evaluation" (the "Evaluation Terms of Use").³⁹ Implementation of the Java specification in an MHP Implementation is permitted only after execution of

³⁴ cf. DVB Steering Board, MHP Declaration, version 4.0, p. 2. The following description is not complete and is included for background only.

³⁵ cf. DVB Steering Board, MHP Declaration, version 4.0, p. 2.

³⁶ "Supersetting" can be defined as "the addition, in the Licensor Name Space, of features or functionality not required by the MHP Specification", with "Licensor Name Space" as applied to Sun being defined as "any file or class name or interface declaration which begins with the name "java.*", or "sun.com" or their equivalents in any subsequent naming convention promulgated by [Sun]" (see, e.g., Article 2.1(a) of the Test Suite License) and "MHP Specification" defined as "the DVB Multimedia Home Platform as adopted by the Steering Board of the DVB Project on the date of its first adoption, and as such Specification may be amended from time to time" (see, e.g., Article 1.3 of the Test Suite License).

³⁷ DVB Steering Board, MHP Declaration, version 4.0, p. 4.

³⁸ DVB Steering Board, MHP Declaration, version 4.0, p. 4. Sun explained that this is possible by using the extension mechanisms provided by the Java language.

³⁹ We assume that the final document will be identical to the texts as they are reflected in this memorandum.

separate "Terms of Use – Implementation", governing implementation of the Licensor Portion of the DVB MHP Specification (the "Implementation Terms of Use").

2. Sun makes a byte code verifier and class file parser in source code form available for MHP Implementations free of charge through a neutral Custodian (ETSI) on the basis of standard terms and conditions in a DVB MHP Code License and Non-Disclosure Agreement (the "Code License").⁴⁰ Clean-Room Implementations are allowed, and Clean-Room Implementers are therefore entitled to access the byte code verifier and class file parser in source code form and include them in their Implementations in object code form.⁴¹
3. Sun makes relevant test suites for the Java Specification available for MHP Implementation royalty-free (although a one-time administrative fee of Euro 1,000 is payable to the Custodian) through the Custodian (ETSI) on the basis of standard terms and conditions in the DVB MHP Test Suite License and Non-Disclosure Agreement (the "Test Suite License").
4. Sun has not disclosed the existence or scope of any Essential Patent Claims, and has not made an assertion that it owns such patents, but agrees to license any and all Essential Patents it may own now or in the future for MHP Implementations that pass the Test Suite. Implementers have two alternatives: they may sign (a) a standard royalty-free reciprocal patent license, called the DVB MHP Patent License Agreement, pursuant to which they agree not to bring claims against Sun or other Implementers under any Essential Patents the licensee may own (the "Reciprocal Patent License"), or (b) a standard royalty-bearing agreement, entitled DVB MHP \$1 Patent License Agreement (the "\$1 Patent License").⁴² If licensees under the Reciprocal Patent License bring certain patent actions against Sun, their royalty-free license automatically becomes royalty-bearing.

Except for the Terms of Use providing access to the Licensor Portion, there is no requirement for a commercial relationship with Sun for the development, transmission or use of MHP Implementations, and Sun will accordingly have no access to sensitive market information.

3. **Conformance testing.** Conformance to MHP Specification is confirmed on the basis of voluntary self-certification by the Implementers. To that end, DVB provides a Test Suite through the Custodian. Implementers (including equipment manufacturers of DVB products) whose Implementations have passed the Test Suite obtain the right to use the DVB MHP Trade Mark in return for the delivery of a Certificate of Completion of the Conformance Testing. Such Implementers are, however, free to use the Mark and may also use other conformity marking.

Any DVB Member may offer a Test Suite for consideration by the Expert Group ("EG").⁴³ Nevertheless, when an element of the MHP Specification (such as

⁴⁰ The use of the byte code verifier and the class file parser is not mandatory, but an optional free feature (Custodian Agreement, Recital "h"). The same applies to the test harness.

⁴¹ DVB Steering Board, MHP Declaration, version 4.0, p. 4. See also Custodian Agreement, Article 1 (definition of Implementer), Article 3.d, and Recital "h". Clean-Room Implementations are "*Implementations of the Specification or parts thereof that are based only on the published text of the Specification and on know-how owned by the Implementer ...*" (Section II.5 of the DVB Steering Board MHP Declaration).

⁴² An MHP patent pool may be formed consistent with Article 14.9 of the DVB Memorandum of Understanding, but this memorandum does not address any competition law aspects of these plans.

⁴³ DVB Steering Board, MHP Declaration, version 4.0, p. 7.

Java) has been originally proposed by a technology provider (such as Sun), the provider has the right to present the initial version of the test application related to that element.⁴⁴ The proposed Test Suite is then scrutinized and reviewed by the EG to ensure effectiveness and independence for use in testing all Implementations of the Specification from various sources.⁴⁵

The EG is prohibited from approving any Test Suite that does not conform to the Specification or that is more restrictive than the Specification (e.g., if it tests for compliance with additional requirements not set by DVB).⁴⁶ A Test Suite must not prevent the evolution or extension of any elements in the MHP Specification.⁴⁷ The EG may reject any Test Suite or module presented by any party, on the basis of identifiable and relevant data.⁴⁸ If modified versions of that test application are subsequently proposed in order to deal with concerns identified by the EG, the EG shall offer a right of first and last presentation to the original technology contributor.⁴⁹

B. Documents Reviewed

We have reviewed the following agreements, and understand that these agreements have been executed without material change (subject to our comments below):

1. MHP Implementation Arrangements, comprising:
 - a. The DVB Conformance Testing Custodian Agreement, including the Second Amendment (the "Custodian Agreement")
 - b. MHP Mark Licence Agreement (the "Mark License")
 - c. Rules and Procedures of the DVB MHP Experts Group, including the Clarification to be adopted by the Steering Board on October 24, 2001 (the "EG Rules and Procedures")
2. Licensing terms proposed by Sun Microsystems Inc.,
 - a. DVB MHP Test Suite Licence and Non-Disclosure Agreement (the "Test Suite License")
 - b. DVB MHP Code License and Non-Disclosure Agreement (the "Code License")
 - c. DVB MHP Patent License Agreement (the "Reciprocal Patent License")
 - d. DVB MHP \$1 Patent License Agreement (the "\$ 1 Patent License")
 - e. The Common Annex to the Test Suite License, Patent Cross-License, and Code License, to be attached to a letter from Sun to ETSI and DVB dated October 24, 2001 ("Common Annex")

⁴⁴ EG Rules and Procedures, para. 13.

⁴⁵ DVB Steering Board, MHP Declaration, version 4.0, p. 7.

⁴⁶ DVB Steering Board, MHP Declaration, version 4.0, p. 7.

⁴⁷ Further, under the rules and procedures adopted for the experts group, the EG is to: *"ensure that any test application is genuinely independent of any particular implementation of the MHP specification ... that is, that it does not arbitrarily favour or compel the use of one more particular Implementations over other Implementation(s), so that there is an open and competitive market of MHP software."* Moreover, a test application to be included in the MHP Test Suite should not *"prevent the evolution or extension of all elements in the MHP specification."* See EG Rules and Procedures, paras. 18, 19, 21.

⁴⁸ DVB Steering Board, MHP Declaration, version 4.0, p. 7.

⁴⁹ DVB Steering Board, MHP Declaration, version 4.0, p. 8.

- f. Evaluation Terms of Use
- g. Implementation Terms of Use
- 3. Further documents related to the licensing of essential IPRs for the Multimedia Home Platform
 - a. Amended and Restated Memorandum of Understanding of the DVB Project
 - b. MHP Declaration (version 4.0) adopted by the Steering Board on its November 1999 meeting
 - c. Principles on use of test suite elements and MHP supersetting adopted at the June 2000 meeting of the Steering Board.

The texts of these Agreements were circulated towards the end of February. DVB Members were invited on March 1 to comment on competition aspects. Comments and observations were provided (mostly orally) by Convergence, Hewlett-Packard, Microsoft, and Sun. The draft of this memorandum was presented during a Steering Board meeting on April 5, 2001, and an IPRM meeting on May 31, 2001. Further reactions and comments were received from Convergence, Microsoft and Sun. A final brief paper was received from Microsoft on October 17, 2001, which was discussed during the IPRM meeting on October 18, 2001.

C. Legal Framework

1. **Article 81 EC.** Article 81(1) of the EC Treaty prohibits agreements or arrangements between undertakings that may affect trade between EU Member States and that have as their object or effect the prevention, restriction, or distortion of competition within the EU. Article 81(2) EC provides that the restrictions in such agreements are automatically void.⁵⁰ Article 81(3) EC permits the Commission to exempt restrictive agreements that might otherwise be prohibited, if (a) they foster technical or economic progress, (b) are indispensable to achieve such progress, (c) benefit consumers, and (d) do not completely exclude competition.

The DVB MHP arrangements, as well as the various license agreements listed above are "agreements between undertakings" for the purpose of Article 81(1) EC. Given the participants in the DVB MHP process and having regard to the nature of the arrangements as creating a standard for use throughout the EEA and elsewhere, we assume that the arrangements have an effect on "trade between Member States" and that their effect on competition can be appreciable. The key issues are, therefore:

- Whether particular provisions in the proposed agreements to be executed in connection with the choice of Java as a key component of the DVB MHP standard could result in the "prevention, restriction, or distortion of competition within the EU";
- Whether, if that is the case, the provisions in question could meet the conditions for exemption under Article 81(3); and
- Whether aspects of the arrangements fall under Article 82 EC.

In considering these issues it must be kept in mind that a limitation on the field of use of a license is generally not restrictive of competition for purposes of Article 81, since a holder of an IP right has normally no duty to grant a license and is therefore entitled to limit the scope of any license that it grants.

2. **Standardization Agreements.** The Commission has recently adopted Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation

⁵⁰

The European Court of Justice has held that if under applicable contract law the restrictive terms of the contract are severable, only the restrictive terms are void.

agreements.⁵¹ These include general principles applicable to standardization agreements, defined as agreements which have as their primary objective the definition of technical or quality requirements with which current or future products, production processes or methods may comply. Similar principles may apply to the terms of access to a particular quality mark such as the MHP Mark.

According to the Guidelines, standardization agreements based on non-discriminatory, open and transparent procedures are normally not caught by Article 81(1), provided that such agreements (a) do not oblige manufacturers to comply with the standard, or (b) are "*parts of a wider agreement to ensure compatibility of products*".⁵² Article 81(1) EC may, however, prohibit standardization agreements that prevent the participants or third parties from developing alternative standards or selling products that do not comply with the standards, or that prevent certain manufacturers from implementing the standard.⁵³

Even if a standardization agreement entails restrictions of competition, it may benefit from an individual exemption under Article 81(3) EC.⁵⁴ The Commission makes it clear that it "*generally takes a positive approach towards agreements that promote economic interpenetration in the common market or encourage the development of new markets and improved supply conditions,*"⁵⁵ provided that an appreciable proportion of the industry is involved in the setting of the standard in a transparent manner.⁵⁶ This suggests that if the DVB arrangements are brought to the EC Commission's attention, they would be positively reviewed, provided that they contain no restrictions of competition that are not indispensable to achieve the reasonable objectives of the MHP standard, such as unnecessary restrictions on innovation.⁵⁷ Moreover, the necessary information to apply the standards must be available to those wishing to enter the market.⁵⁸ More specifically:

⁵¹ Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements, OJ 2001 C 3/2, para 159.

⁵² *Ibid.*, para 163. We assume that participation in the DVB Project is unrestricted, non-discriminatory and transparent.

⁵³ *Ibid.*, para 167.

⁵⁴ In the case of standardization and vertical agreements, if issues arise, notification can be made, and exemption can be issued with retroactive effect. See Article 4(2)(3)(a) of Regulation 17/62, which provides that the Commission may grant exemptions for agreements that have as their "sole" object the development of uniform application of standards or types, even if these agreements have not been notified. The same applies for license agreements, see Article 4(2)(a) of Regulation 17/62 as amended by Council Regulation (EC) No 1216/1999 of 10 June 1999 amending Regulation No 17, OJ 1999 L 148/5.

⁵⁵ Guidelines on horizontal cooperation, *Ibid.*, para. 169.

⁵⁶ Guidelines on horizontal cooperation, *Ibid.*, para 169.

⁵⁷ *Ibid.* para. 173. The Commission recognizes in its Guidelines (para. 171) that it may be necessary in some cases to select a particular technology such as the Java Specification as a platform or framework for a standard, provided that the choice is justifiable and made through an open process. We understand that this condition was met in the case of Java, but have not reviewed the standard-setting process itself or the criteria for the choice of the Java Specification.

⁵⁸ Guidelines on horizontal cooperation, para 169.

"To avoid elimination of competition in the relevant market(s), access to the standard must be possible for third parties on fair, reasonable and non-discriminatory terms."⁵⁹

A similar view with regard to standardization agreements was expressed in the Commission's Communication on IPRs and Standardization:

1. *all persons wishing to use European standards must be given access to those standards.*

2. *standards are available for use on fair, reasonable and non-discriminatory terms, regardless of whether the users participate in the work of the standard-making body or not, but taking into account the circumstances of the use".⁶⁰*

In accordance with these obligations, each DVB Member undertakes in paragraph 14.2 of the Statutes of the DVB Project that it is:

"willing to grant or cause the grant of non-exclusive, non-transferable, world-wide licenses on fair, reasonable and non-discriminatory terms and conditions under any [Essential IPRs which it has the free right to grant or cause the grant] for use in or [manufacture] of equipment fully complying with such specification to any third party which has or will submit an equivalent undertaking with respect to any relevant IPRs it may have or obtain with respect to such specification."

From the perspective of EC competition law, "fair and reasonable terms" mean that the consideration extracted in exchange for the license must not be exploitative. "Non-discrimination" means that all similarly situated licensees and licensors must have access to the technology on the same terms and conditions, so as to enable them to compete on a level playing field. Deviation from the non-discrimination principle is allowed only if there is an objective justification and the difference in treatment is proportionate to the difference in circumstances.

- 3. Article 82 EC.** The competition law analysis would be incomplete without reference to Article 82 EC. This provision bans abuses of a dominant position in a substantial part of the common market. The threshold question for the application of this article is the existence of a dominant position. Article 82 EC would therefore not apply to the DVB group. Nor does it today apply to Sun, we assume, whose Java technology competes in the market that might be defined as the market for application software environments. Should the MHP standard become successful, however, manufacturers of MHP-compliant products may become dependent on Sun's technology to such an extent that Sun is put in a dominant position. The Commission has taken the position that:

"A longer term benefit will probably accrue to the manufacturer who voluntarily licenses his technology to become a standard, since his market share will eventually grow significantly in respect of the rights for which he receives royalty payments even if he is no longer the sole manufacturer of the product itself' and even if the royalty rate which he receives is less than that which he would have obtained from a licensee on the open market".⁶¹

⁵⁹ *Ibid.*, para 174.

⁶⁰ See COM 92/445, October 22, 1992, Commission Communication on IPRs and Standardization, para. 6.2.1.1.and 2.

⁶¹ Commission Communication on IPRs and Standardization, para. 2.1.8. See also the Commission's Open letter to ETSI and CBEMA, dated February 1994, concerning the ETSI IPR Policy: "Once an essential technology is included with the agreement of the IPR holder in a standard, particularly one that is made mandatory pursuant to Community legislation, the owner of the IPR relating to that technology occupies in

Whether Sun will in future acquire a dominant position in the market for the supply of technology needed for the implementation of the DVB MHP standard is a matter of fact, depending on a number of factors such as the nature of the standard (mandatory or not), the degree to which the standard is adopted by the market participants, the level of competition between MHP compliant and non-compliant products, the number of compliant products incorporating competitive technology, and the countervailing power of the users.

If Sun is found dominant in future, Article 82 EC would impose certain limitations on Sun's exercise of its IPRs or contractual rights. In particular, dominant technology suppliers must not exercise their rights in a discriminatory fashion or with a view to creating or maintaining barriers to entry in a downstream market (in our case, the market for MHP-compliant products). Article 82 EC should therefore be taken into account in assessing the possible future application of EC competition rules to Sun's license agreements for the DVB MHP environment. Proceedings under Article 82 should not, however, implicate the DVB Project.

To remedy or prevent abuses, technology suppliers with a dominant position may be required to license IPRs, but only in exceptional circumstances. The Commission has indicated that if a standard had been adopted, implemented, and made mandatory by a Community instrument, a refusal to license the technology necessary to use the standard would raise serious questions under Article 82 EC.⁶² This does not, however, apply to technology that is not necessary to use a standard, even if that technology gives the user a competitive advantage in the standardized environment.

D. Analysis of the DVB MHP Agreements

It has been suggested that the DVB MHP arrangements directly or indirectly restrict supersetting in the Java/Sun name space and hinder Clean-Room Implementers, and that they therefore restrict innovation with appreciable negative effect on competition, in breach of Article 81 EC.

No ban on supersetting or Clean-Room Implementations. It appears to be undisputed, first, that the MHP Specification itself does not prohibit supersetting, and that it allows for Clean-Room Implementations.⁶³ Nor is there any prohibition of supersetting or Clean-Room Implementations in the basic DVB MHP agreements (the Amended and Restated Memorandum of Understanding of the DVB Project, the MHP Declaration version 4.0) or the MHP Implementation Arrangements (the Custodian Agreement, MHP Mark License Agreement, Rules and Procedures of the DVB MHP Expert Group). Indeed, the principles on use of certain test suite elements and MHP supersetting adopted at the June 2000 meeting of the Steering Board specify explicitly that:

most if not all situations a dominant position ... vis-à-vis manufacturers requiring licenses on that IPR in order to be able to participate in the market for the equipment in question."

⁶² *Ibid.*, 5.1.11.

⁶³ An implementation that is found to be non-compliant because of supersetting in a manner incompatible with the MHP Specification will be denied the Mark, but the DVB MHP arrangements do not by agreement prohibit the marketing of non-compliant products. We assume, and have not investigated, that the MHP Specification is not more restrictive than reasonably necessary to achieve interoperable products with a reasonably necessary quality. In fact, it has been suggested that the MHP Specification is insufficient and that as a practical matter Implementers cannot compete without also using other Java technology. We have not investigated whether the MHP Specification is sufficiently comprehensive to be competitive. The Commission would likely take the view that the scope of the MHP Specification is a matter to be decided by the DVB Project, that the market will determine whether the Specifications are sufficient, and that it cannot intervene in these technical decisions.

"1. We have agreed in DVB that clean-room implementations of the DVB MHP Specification are allowed. For this reason, there cannot be any discrimination between clean-room and non-clean-room implementations.

2. We have agreed in DVB that supersetting the DVB MHP Specification cannot be forbidden by the DVB Project. As a consequence, implementers may choose to superset in their proprietary name space, in a dvb.org namespace, or elsewhere. Supersetting, however, is not part of the DVB MHP Specification, and consequently cannot be governed by the DVB MHP Implementation Arrangements. Thus, a supersetted implementation of the DVB MHP Specification is not, by definition, excluded from being an Implementation. However, there is no requirement that licensors explicitly grant through the DVB arrangements IP rights or Test Suite rights (for the original provider's tests) for anything but the MHP specification. ...

4. Any implementation of the DVB MHP Specification that rightfully and successfully runs through the DVB MHP Test Suite must be entitled to obtain the DVB MHP Label, [regardless] of whether or not the implementer has chosen to superset the DVB MHP Specification. ...

6. The DVB Steering Board encourages DVB members who want to build products that superset the DVB MHP Specification, to do so in their proprietary namespace."

The remaining key questions are, therefore, whether:

- (a) the DVB MHP Specification requires the use of a technology licensed pursuant to an agreement that contractually prevents or disadvantages Clean-Room Implementation, or contractually prevents supersetting in the Licensor Name Space even if such supersetting does not affect compliance with the MHP Specification,
- (b) whether any such requirement restricts competition, and
- (c) whether any such a requirement fails to meet the conditions for exemption under Article 81(3) EC.

In addition, the question arises whether Sun could be required under Article 82 EC to permit supersetting in the Sun/Java name space. We discuss below the Test Suite License, the Patent Licenses, the Code License, the Custodian Agreement and the Rules and Procedures for the Expert Group.

1. Test Suite License

Implementers obtain a non-exclusive license to use the DVB MHP Mark upon delivery to the Custodian of the Certificate certifying that during the Conformance Testing, the Implementation satisfied the MHP Test Suite.⁶⁴

The MHP Mark may in the future be used by a large number of companies, and if it develops into a widely recognized and trusted symbol for MHP-compliant products, users of the Mark may have a competitive advantage over those who choose not to use it or are prevented from using it. Moreover, it appears that the Patent Licenses are conditional upon satisfaction of the MHP Test Suite – although it remains unclear whether Sun in fact has any Essential Patents reading on MHP Implementations. Finally, the Implementation Terms of Use allow access to specifications only to make "Implementations", defined as implementations that pass the Test Suite. We assume therefore that the Test Suite License can have an appreciable impact on competition, and we review below certain conditions for access to the Sun portion of the MHP Test Suite.

⁶⁴ MHP Mark License Agreement, Art. 2(a).

(a) Provisions concerning supersetting. The key objective of the DVB Project was to ensure that any entity successfully completing the Conformance Testing, and not only Sun licensees, could obtain the MHP mark and Essential Patent licenses. For this reason, Clean-Room Implementation is allowed.⁶⁵ The issue arises, therefore, whether limitations in the Test Suite License for the Sun portion of the MHP Test Suite indirectly prevent entities that superset in the Java/Sun name space (including Clean-Room Implementers) from obtaining the MHP Mark or a license to Sun's Essential Patents.

Article 2 of the Test Suite License grants the Implementer the right to *"use the Test Suites solely for the purpose of testing and self-certifying Implementations in accordance with the DVB MHP Conformance Testing Requirements."*⁶⁶ Nevertheless, the scope of the license is limited:

"Nothing in the foregoing shall be understood to grant a license for Licensee to use the Test Suites in connection with an implementation of DVB MHP which implements features or functionality not required by the MHP Specification ("Additional Functionality") where the Additional Functionality is implemented in the Licensor Name Space, unless either of the following two conditions are met:

- 1. the Licensor has separately licensed the Licensee to implement the Additional Functionality in the Licensor Name Space; or*
- 2. no licence is required from Licensor to authorize Licensee to implement the Additional Functionality in the Licensor Name Space."⁶⁷*

The Agreement also states:

"Licensor, as the licensor, asserts that such license is not granted hereunder and is required in all cases where Additional Functionality is

⁶⁵ See DVB Steering Board MHP Declaration, para. III.3. The Custodian Agreement specifies the process for the delivery of the MHP Test Suite to those wishing to test an implementation. The Agreement allows an Implementer the choice not to sign certain licences, and, as a Clean-Room Implementer, implement MHP based only on the published text of MHP and on the know-how owned by it. A Clean-Room Implementer who believes it is capable of developing a product based purely on the MHP Specification, without infringing any of Sun's IP rights, can obtain the MHP Test Suite, and, after having signed the Certificate of Completion of Conformance Testing, obtain the MHP Mark.

⁶⁶ No objections have been raised against the ban on using the Sun portion of the Test Suites to certify non-MHP compliant products (e.g., to certify their compliance with personal Java Specifications). This restriction is a legitimate field of use restriction, and we understand that in any event the Sun portion of the Test Suite does not test for compliance with the complete set of personal Java specifications.

⁶⁷ Article 2.1 of the DVB MHP Test Suite License and Non-disclosure Agreement. It has been suggested that the word "license" might be interpreted to refer to the Terms of Use (acceptance of which is required to obtain access to the Java Specification) or the license of the Test Suite. If this were correct, then (a) the provision would become meaningless, and (b) competition concerns might arise to the extent Sun has no IPRs preventing supersetting, since IPRs in the Test Suite would thus be used to prevent Clean-Room Implementers from engaging in activities not involving any IPR infringement. The Common Annex confirms that, in accordance with its plain meaning, the wording in condition 2 of Article 2.1 *"must be interpreted to mean that if Licensor has no intellectual or industrial property [whether patent, copyright or trademark] that reads on supersetting in the Java name space, the Licensee is licensed to use the Test Suite to test and self-certify Implementations in accordance with DVB MHP Conformance Testing Requirements even if these Implementations include Additional Functionality in the Licensor Name Space."*

implemented within the Licensor Name Space.⁶⁸ To the extent to which Licensor offers to other licensees a license agreement authorizing the use of the Test Suites on such implementations, Licensor agrees to offer such license to Licensee on terms that are fair, reasonable, and non-discriminatory."

In other words, if the Implementer intends to add functionality in the Sun/Java name space beyond what is required by the MHP Specification, it must either have obtained a further license from Sun allowing it to superset in the Licensor Name Space or have taken the view -- a view which the Licensee knows Sun does not accept -- that no such license is needed because Sun has no proprietary rights in its name space and the Implementer has independently developed the additional functionality in its clean-room environment.⁶⁹ The key questions are (a) whether this constitutes a "contractual" limitation of an Implementer's commercial freedom to engage in acts in which it is otherwise free to engage,⁷⁰ (b) if so, whether this has an appreciable impact on competition, and (c) if so, whether there is an objective and proportional justification. Three situations can be distinguished:

- (1) Implementers that have signed or choose to execute a standard Java Technology License and Distribution Agreement ("TLDA") and a Sun Community Source License ("SCSL") are separately licensed by Sun to superset in the Licensor Name Space to the extent the Additional Functionality is agreed through the Java Community Process.⁷¹ They therefore meet condition 1 in Article 2.1(a). Article 2.1(a) of the Test Suite License specifies that *"To the extent to which Licensor offers to other licensees a license agreement authorizing the use of the Test Suites on such implementations, Licensor agrees to offer such license to Licensee on terms that are fair, reasonable, and non-discriminatory."* We understand and assume on this basis that Sun is prepared to grant a standard TLDA and SCSL to all Implementers who meet the conditions for those agreements and who wish to obtain a licence to the full version of, for example, personal Java including all Additional Functionality approved through the Java Community Process ("JCP").

In connection with condition 1 we note that the TLDA and SCSL prevent superseding in the Licensor Name Space outside the JCP and that Sun licensees are therefore also restricted to some extent.⁷² This does not, however, affect the competition analysis of the Test Suite License. First, the restriction flows not from the DVB MHP arrangements, but from Sun's IPRs to the Java technology and the limitations in the TLDA and SCSL. If these agreements are brought to the EC Commission's attention, the latter is likely to conclude that Sun is entitled to limit the scope of its TLDA and SCSL to reproduction and distribution without unauthorized modification, and to impose technical specifications and limits on the

⁶⁸ As explained in the previous footnote, the words "such license", in accordance with its plain wording, are designed to refer not to the Terms of Use or the Test Suite License, but to a license to implement Additional Functionality in the Licensor Name Space.

⁶⁹ It has been suggested that the assertion requires Implementers who wish to rely on condition 2, to approach Sun before proceeding with implementation, to ascertain whether the condition is met. In our view, Article 2.1(a) does not allow this interpretation. The Common Annex confirms that *"The assertion in Article 2.1 does not contractually require Implementers who wish to rely on condition 2 to approach the Licensor before proceeding with implementation, to ascertain whether condition 2 is met."*

⁷⁰ If the restriction is not contractual, but a mere limit on the scope of an IPR license, Article 81 EC does not apply.

⁷¹ See Article 2 of the TLDA and Article 2 of the SCSL.

⁷² Article 2.b(v) of the TLDA and Article 2.2 of Exhibit E to the SCSL.

field of application of the licensed technology.⁷³ The Test Suite License, then, does not limit the licensees any more than they already are limited as a result of the TLDA and the SCSL, which is permitted under EC competition rules. Moreover, apart from the points mentioned above, the ban on implementation of unauthorized Additional Functionality in the Licensor Name Space may entail no appreciable restriction of competition, if there is sufficient scope for product differentiation and innovation through supersetting outside the Licensor Name Space (see below).

- (2) Clean-Room Implementers tend to take the view that Sun has no IPR to prevent the use of files, class names or interface declarations with names that include the word "java" or "sun".⁷⁴ If their position is correct, and Sun does not own any copyright, trademarks or other rights preventing the unauthorized use of these names, no license is required to authorize a company to implement Additional Functionality in the Licensor Name Space, and the Clean-Room Implementers meet condition 2 of Article 2.1(a) of the Test Suite License. Accordingly, the limitation on the scope of the license would not affect them.⁷⁵
- (3) If Sun does own IPRs that prevent supersetting in its name space, and the inclusion of unlicensed or unauthorized functionality in that name space is prohibited, we understand that Sun would be entitled to block any infringing Clean-Room Implementation in its entirety. Clean-Room Implementers will no longer have access to Sun's portion of the Test Suite, but that has no appreciable competitive effect in itself since the Implementation would be prohibited under intellectual property law. In other words, Article 81 EC would not apply, because the superset Implementation would not be contractually banned by the Test Suite License, but by Sun's IPRs. We note in this connection that the MHP Specification does not require the inclusion of Additional Functionality in the Licensor Name Space,⁷⁶ and Sun is therefore not required to license an Implementer to allow supersetting in the Licensor Name Space on any terms.

⁷³ Cf. Article 2(1)(8) of the Technology Transfer Block Exemption Regulation, whitelisting "*an obligation on the licensee to restrict his exploitation of the licensed technology to one or more technical fields of application covered by the licensed technology or to one or more product markets.*" Cf. also Article 2(1)(5) of that Regulation, whitelisting "*an obligation on the licensee to observe ... technical specifications, for the licensed product ... in so far as these ... are necessary for (a) a technically proper exploitation of the licensed technology; or (b) ensuring that the product of the licensee conforms to the minimum quality specifications that are applicable to the licensor and other licensees; and to allow the licensor to carry out related checks.*"

⁷⁴ See, for instance, Convergence, page 4.

⁷⁵ The Test Suite License Agreement defines Licensor Name Space as "*any file or class name or interface declaration which begins with the names "java.*", "javax.*" or "sun.com" or their equivalents in any subsequent naming convention promulgated by Licensor.*" It has been suggested that Licensees are thus forced to agree that Sun is allowed to appropriate existing shared name spaces (such as org.dvb) or licensee or third party name spaces by promulgating new naming convention, and subsequently take legal action against Implementers who have implemented independently developed functionality in such name space. In our view, a definitional provision cannot be interpreted as advance consent to possible name space appropriation. Moreover, we understand that such an approach would not be accepted by the JCP, as it could hamper cross-platform compatibility of Java applications and expose each licensee's name space to similar treatment. The Common Annex specifies that "*the term Licensor Name Space shall not include any public class or interface declaration whose names begin with com.[name of Licensee].*, org. dvb.*, or org.havi.*.*"

⁷⁶ Convergence appears to question this, but seems to refer to optional rather than mandatory specifications. See Convergence II, p. 2

Nor would Article 82 EC require Sun to license any intellectual property it has on its name space so as to allow supersetting in the Licensor Name Space. Even assuming that Sun had a dominant position in an upstream technology market, Sun is allowed as a general principle to refuse to license any right it has in its name space.⁷⁷ A compulsory license to Sun's IPRs can be granted only in exceptional circumstances, for instance, if Sun cut off previously existing licenses to exclude competitors from a downstream market, if Sun engaged in discriminatory licensing, or if the conditions of the *Magill* case were met.⁷⁸ These conditions would not appear to be met, since Sun does not control the downstream market for MHP Implementations. Moreover, Sun may well be able to invoke as an objective justification the need to preserve cross-platform compatibility of Java technology and Java-based applications. In any event, any future application of Article 82 EC to Sun does not implicate DVB, since it does not affect the legality of the DVB MHP agreements.

The reasoning set out above is not affected by the assertion in Article 2.1(a) that a license is required from Sun in all cases where Additional Functionality is implemented within the Licensor Name Space. This is a unilateral statement, with which the Licensee is not required to agree. Licensees remain free to make contrary assertions at any time. They are, however, on notice that Sun considers that it has IPRs in its name space, and they are therefore estopped from suggesting that Sun has changed its position or waived these claims in the context of the DVB MHP arrangements, or that Sun has implicitly licensed them its IPRs to superset in its name space.

(b) Limitations on Incomplete Implementations. Article 2.1 allows the Test Suite to be used for the purpose of testing Incomplete Implementations only if such implementations:

"are delivered to a DVB MHP Full Implementer for subsequent integration and distribution as part of an Implementation distributed by such Full Implementer."

Incomplete Implementation is defined as an:

"implementation of the DVB MHP Specification that implements less than all the required interfaces and functionality of the Licensor Portion".

"Full Implementer" is defined as a signatory of the Test Suite License who has:

"confirmed in writing to Licensee both that such entity has entered into such agreement and that it acknowledges that any license granted by Licensee with respect to a less-than-complete implementation of the Licensor Portion is expressly limited in scope to integration into and distribution as part of an Implementation."

The Full Implementer must also have issued a Certificate of Assurance to the Custodian, presumably to represent that it will integrate the Incomplete Implementation in a Full Implementation.

The EC Commission, if it were asked to review these provisions, would likely conclude that this limitation on the scope of the Test Suite License is a legitimate technical field of use restriction.⁷⁹ Incomplete Implementations (whether stand-alone or in combination with other

⁷⁷ Case 238/87, *Volvo v. Veng*, [1988] ECR 6211, para. 8, Case 53/87, *Maxicar v. Renault*, [1988] ECR 6039, para. 15.

⁷⁸ Case C-241/91P and C-242/92P *ITP and RTE v. Commission*, [1995] ECR I-743.

⁷⁹ Commission Regulation 240/96 on the application of Article 81(3) of the Treaty to certain categories of technology transfer agreements (Technology Transfer Block Exemption), Art. 2(1)(8), whitelisting *"an obligation on the licensee to restrict his exploitation of the licensed technology to one or more technical fields of application covered by the licensed technology or to one or more product markets."* Cf. also Article 2(1)(5) of that Regulation, whitelisting *"an obligation on the licensee to observe ...*

technology) are objectively defined by reference to technical characteristics of the end-product -- non-compliance with the full MHP Specification -- and may be found to belong to a different product market than Full Implementations. The Commission is likely to agree that Sun and DVB have legitimate reasons not to permit use of the Test Suite to certify Incomplete Implementations other than for integration in a full Implementation, since the proliferation of Incomplete Implementations could affect the interoperability of MHP consumer equipment (and, from Sun's perspective, the cross-platform and cross-application compatibility of Java-based products) and reduce the attractiveness of the MHP standard. We understand that the rationale for prohibiting Incomplete Implementations is to foster maximum compatibility and interoperability of all implementations, which is consistent with the objective of the standard.

2. The Patent Licenses

The Patent Licenses grant manufacturers of MHP-compliant products a choice between a royalty-bearing patent license and a royalty free patent cross-license to Sun's Essential Patent Claims to implement the MHP standard. Several questions arise, relating to supersetting, scope of the cross-license, the treatment of Incomplete Implementations, and the denial of Patent Licenses to products that have not passed the Test Suite.

(a) Supersetting. Article 2.1 of both Patent Licenses limits the scope of the license to using, making, having made, importing, and distributing an "Implementation",⁸⁰ provided, however, that:

"nothing in the foregoing shall be understood to grant a license for Licensee under Licensor's Essential Patent Claims in connection with an Implementation which implements features or functionality not required by the MHP Specification ("Additional Functionality") where the Additional Functionality is implemented in the Licensor Name Space."

Thus, the scope of the license excludes Implementations that include code providing Additional Functionality in the Sun/Java name space.⁸¹ This is not dependent on the question whether (a) Sun has any other IPRs in the Licensor Name Space, since the patents are withheld even if Sun has no such IPRs; or (b) the supersetting causes incompatibility problems, since the patents are withheld even if the product is fully MHP-compliant.

Several commenters raised EC competition law questions about the limitation of the scope of the license. Nevertheless, based on the limited information at our disposal, we conclude that the Commission would probably accept the current wording. This conclusion is based on the following main considerations:

technical specifications, for the licensed product ... in so far as these ... are necessary for (a) a technically proper exploitation of the licensed technology; or (b) ensuring that the product of the licensee conforms to the minimum quality specifications that are applicable to the licensor and other licensees; and to allow the licensor to carry out related checks."

⁸⁰ Both agreements define the term "Implementation" in Article 1.5 as a fully MHP-compliant product that "does not modify or subset any file or class name or interface declaration in the Licensor Name Space". We understand that supersetting is an extension or addition of functionality rather than a "modification" and that the definition of "Implementation" therefore includes all fully MHP-compliant products, including those that include supersets.

⁸¹ Note that Sun licensees would not be prevented from supersetting in the Licensor Name Space to the extent that they are separately licensed by Sun to add functionality in that name space under the TLDA or SCSL, but that such Additional Functionality would be limited to functionality adopted through the JCP. Sun, as the technology owner, is in theory allowed to add any functionality of its choice in its own name space, but Sun has indicated that it has no plan or interest to add functionality that has not been adopted through the JCP.

- Sun is not required by the DVB rules to declare its patents, and has decided not to do so. If it turns out that Sun does not own patents reading on Implementations, or the patents are not Essential to meet the MHP Specification, no patent license is required at all. In that case, the limitation on the scope of the license does not affect Implementers.
- Nor do problems arise in connection with Implementers who have signed or choose to execute a standard TLDA and SCSL. They are not affected by the limited scope of the Patent Licenses to the extent that they are already licensed under Sun's patents, and prevented by the standard TLDA and SCSL from engaging in unauthorized supersetting in the Licensor Name Space. As explained above, the EC Commission is likely to conclude that Sun is entitled to limit the scope of its TLDA and SCSL to reproduction and distribution without modification or addition, and to impose technical specifications and limits on the field of application.⁸² The Patent License, then, does not limit existing Sun Java licensees any more than they already are by the TLDA and the SCSL, within the bounds of EC competition rules.
- The commenters' questions concentrated on the position of Clean-Room Implementers. We understand that these Implementers take the view that Sun has no Essential Patents at all,⁸³ and that they therefore need no license from Sun to make, use and sell Clean-Room Implementations. If they are right and they refrain from obtaining a license to any Sun patents, the limitation on the scope of the license has no immediate practical effect on their approach towards supersetting. Nevertheless, it cannot be excluded that Sun in fact does own Essential Patents, and if that is the case, competition law requires Sun to make these patents available to them on fair, reasonable and non-discriminatory terms and conditions. In that case, the following considerations are relevant:
 - (a) If Sun is entitled to invoke copyright, trademark, or other rights to prevent unauthorized supersetting in its name space, the exclusion from the patent license of Implementations with Additional Functionality in the Licensor Name Space would likely be found to have no appreciable effect on competition.⁸⁴ After all, supersetting in, and unauthorized use of, the Sun/Java name space would already be prohibited, and Sun is not required to license its rights to that name space under Article 82 (if that provision applies at all) or under Article 81, since the MHP Specification does not require supersetting in the Sun/Java name space.
 - (b) If Sun has no intellectual or industrial property in its name space, the question arises whether Clean-Room Implementers are being discriminated against, since they are prevented from making, using or selling an Implementation including supersets in the Licensor Name Space, whereas Sun licensees are entitled to add functionality in that name space -- albeit limited to Additional Functionality agreed through the JCP. In our view, the Commission will probably find no discriminatory licensing, for the following reasons.
 1. Article 2.1 provides for a limitation of the scope of the license, and Sun's cause of action against superset Implementations would

⁸² Cf. Articles 2(1)(8) and 2(1)(5) of the Technology Transfer Block Exemption Regulation, cited above.

⁸³ See, for instance, Convergence, page 11.

⁸⁴ Sun would be entitled to demand a ban on continued sales of Implementations including superset code in the Sun/Java name space, but could not deny an Essential Patent license and would therefore not be allowed to demand (a) a ban on future sales of Implementations *without* such code, or (b) past royalties (except to the extent the Clear Room Implementer has previously invoked its Essential Patents to block Sun and other Implementers from manufacturing, using and marketing Implementations).

therefore be based on patent law rather than contract. So long as supersetting in the Licensor Name Space is not required by the MHP Specification, Sun is not obliged to license its Essential Patents to permit such supersetting.

2. Sun could argue that the conditions for a finding of illegal discrimination are not met:
 - First, the Patent Licenses make no distinction between TLDA/SCSL licensees and Clean-Room Implementers.
 - Second, all potential Implementers are treated equally in that they have a choice (i) to develop a Clean-Room Implementation without supersetting in the Sun/Java name space, or (ii) to obtain a license from Sun under the TLDA and SCSL allowing them to add functionality, provided that they limit themselves to functionality adopted through the Java Community Process and available to all other licensees equally.
 - Third, we have no information at this stage indicating that Clean-Room Implementers are or will be at an appreciable competitive disadvantage.⁸⁵
 - Finally, the Commission is in our view likely to take into account, as an objective justification, MHP's desire to maintain cross-platform compatibility for MHP applications, as well as Sun's desire to maintain the cross-platform compatibility of Java applications and to avoid the development of strategic incompatibility.⁸⁶ The choice of Java specification sets an expectation of compatibility and interoperability. If an API is present in a particular namespace in an implementation designed to be compatible with another implementation, and the other implementation does not have the API in the correct name space, or a different API, applications will not operate correctly on both platforms. Thus, given that applications written for supersettled versions of Java will not work (or not work as expected) on a non-supersettled MHP or Java platform, allowing licensees to supersets at will could affect the continued interoperability of MHP and Java implementations, which is the essence of the Java environment.⁸⁷ We

⁸⁵ Convergence has alleged this, but we are not in a position to verify its allegation on the basis of specific facts.

⁸⁶ For example, incompatibility introduced with an intention to create applications, which are only compatible with a certain platform.

⁸⁷ The Commission is likely to take into account that unauthorized distribution of incompatible implementations of Sun's Java Technology threatens to undermine cross-platform and cross-implementation compatibility. The threatened fragmentation of the Java programming environment would harm Sun's relationship with other licensees who have implemented Java virtual machines. In addition, there is a risk that an incompatible and unauthorized version of the Java Technology will become a competing or even *de facto* standard. (Cf. 87 F. Supp. 2d 992; 2000 U.S. Dist. LEXIS 1917, vacated by the US Court of Appeals for the Ninth Circuit and remanded to determine whether a presumption of irreparable harm was correctly established, 188 F. 3d. 1115; U.S. App. LEXIS 19955). This reasoning is not jeopardized by the consideration that the MHP Specifications will not automatically evolve with changes in the Java specifications. We understand that DVB insisted that it not be forced to follow those changes, and the arrangements therefore strike a reasonable balance.

understand that the cross-platform compatibility of Java was one of the criteria for DVB's selection of Java as a component of the MHP Specification, amongst other reasons, because it reduced the risk of dependence on a single platform (such as a proprietary operating system). To this extent, the provisions in the Patent Licenses are consistent with DVB's reasonable interest.

3. The limitation of the scope of the license appears to be a permissible technical field of use restriction, since the scope is objectively defined by reference to technical considerations.⁸⁸ This is all the more likely to survive Commission scrutiny since the EC Commission is in our view likely to accept the legitimacy and broadly competitive effect of Sun's concern to maintain the integrity of the Java technology and foster continued full cross-platform interoperability of all Java implementations (see above).
4. Finally, apart from the points mentioned above, the ban on implementation of Additional Functionality in the Licensor Name Space might entail no appreciable restriction of competition, because there is sufficient scope for product differentiation and innovation through supersetting outside the Licensor Name Space. Sun explained that the facilities of the Java language provide for the possibility of extending elements in the org.dvb or licensee's name space into the Java name space, by including in the org.dvb or licensee's name space a reference to a Java element. According to Sun, this can always be done, is the preferred way of adding platform specific extensions, and has been done in the DVB specification as well as other specifications including HAVi, DAVIC, OpenCable, ATSC and OSGi. It may be that there will be instances where modifications in the Licensor Name Space are a more effective or efficient way to add functionality than making modifications in the dvb.org name space or introducing the new functionality in the licensee's own name space.⁸⁹ The information available to us at this stage does not, however, indicate that the supersetting in the Licensor Name Space is "necessary" to meet consumer demand that cannot be met otherwise, nor that any reduced efficiency associated with adding the new functionality outside the Licensor Name Space would have an appreciable negative competitive effect.

For these reasons, we consider the risk to DVB to be minimal. Even if the Commission were to conclude after review that the current wording is too limited, it would very likely refrain from imposing fines on DVB, nor would it require DVB to abandon the MHP standardization arrangements. The Commission would take into account for purposes of Article 81(1) and (3) that the outcome of a prohibition of the MHP arrangements would not only be (i) to (re)create a fragmented multimedia home platform environment, hampering the objectives of competition and integration of the common market, but also (ii) the risk of complete elimination of all Clean-Room Implementations, even those without supersetting in the Licensor name space, since in the absence of standardization Sun would no longer be required to license Essential Patents to Clean-Room Implementers at all. This outcome would be inconsistent with the ultimate objectives of competition law and the Commission will therefore seek to avoid it.

⁸⁸ The Commission will likely take the position that Sun is not required to license for all technical fields of use, since requiring it to grant unlimited licenses would discourage Sun from making its technology available for standardization. See Articles 2(1)(8) and 2(1)(5) of the Technology Transfer Block Exemption Regulation, above.

⁸⁹ See possible example suggested by Convergence, p. 8.

Accordingly, if the Commission were to take action at all, it would most probably instead review Sun's licensing practice under Article 82 EC to assess whether (a) Sun is dominant, (b) Sun could be found to have leveraged its Essential Patents (or the uncertainty surrounding its patent claims) to prevent activities not within the scope of the Essential Patents, (c) the exclusion of supersetting in the Sun/Java name space had an appreciable negative effect on innovation because no alternatives to such supersetting exist, (d) Sun has objective justification for the limitation on the scope of the license, and (e) whether it is necessary and possible to order Sun to extend the scope of its license, or to prohibit Sun from invoking its Essential Patents to ban implementations that are fully MHP-compliant merely on the ground that they include supersetting in the Licensor Name Space.⁹⁰

(b) Scope of cross-license. Every Implementer is entitled to a royalty-free license to Sun's Essential Patents, unless the licensee:

"brings a claim: (i) against any entity alleging that its using, making, having made, importing or distributing an implementation of the Licensor Portion as part of an Implementation infringes any Essential Patent Claims of the Licensee making such allegation; or (ii) against Licensor alleging that its using, making, having made, importing or distributing Licensor Materials directly or indirectly infringes any Essential Patent Claims or that Licensor, as the copyright owner of the Licensor Portion, has induced any other entity to infringe the alleging party's (or its Affiliates') Essential Patent Claims." (Article 2.2. of the Reciprocal Patent License)

If the Licensee chooses to bring such actions, the royalty-free license automatically becomes a royalty-bearing license.⁹¹

⁹⁰ The risk to Sun may be somewhat increased by the consideration that Sun has chosen not to reveal any Essential Patents. The very uncertainty, combined with the uncertainty concerning Sun's rights in its name space, could lead prospective Clean-Room Implementers to seek a license and to refrain from supersetting in the Licensor Name Space, simply in order to avoid the risk of patent litigation. The risks associated with this issue would be minimized by a minor adjustment of the wording of Article 2.1 to mirror Article 2.7 of the Test Suite License: *"nothing in the foregoing shall be understood to grant a license for Licensee under Licensor's Essential Patent Claims in connection with an Implementation which implements to implement features or functionality not required by the MHP Specification ("Additional Functionality") where the Additional Functionality is implemented in the Licensor Name Space."* The risk would in our view be virtually eliminated if the provision could be modified to mirror the text of Article 2.1(a) of the Test Suite License. Sun has decided it does not wish to make these changes.

⁹¹ Microsoft has suggested that Article 2.2(ii) appears to be unnecessarily broad, in that it could be interpreted to allow Sun to convert the royalty-free license to a \$1 royalty-bearing license – and thus impose costs on the licensee for undisclosed patents – if the Licensee invokes Essential Patents not only against Implementations, but also against *non-MHP-compliant* Sun products incorporating "Licensor Materials". If so, this could raise antitrust issues. We assume, however, that Article 2.2.(ii) was intended merely to discourage licensees from bringing contributory or vicarious infringement action to enjoin Sun from making available Licensor Materials through the Custodian for use by Implementers to make, use or sell MHP-compliant products. The use of the word "Licensor Materials" (defined as *"technology licensable from Licensor, through the Custodian, for use with or in association with Implementations"*) appears to confirm that Article 2.2.(ii) was not intended to apply to litigation relating only to non-MHP compliant products. The Common Annex confirm that *"Article 2.2(ii) cannot be interpreted to allow Licensor to terminate the royalty-free license solely on the ground that the Licensee brings a claim under its Essential Patent Claims against Licensor's using, making, having made, importing or distributing Licensor Materials (whether in whole or in part) other than for or in Implementations."* We understand from the

A cross-license arrangement along the lines of Article 2.2(i) is legitimate in a standardization situation.⁹² Sun and other licensors of Essential Patents are not required to license their Essential Patents to an Implementer that refuses to make its Essential Patents available for MHP Implementations on fair, reasonable and non-discriminatory terms. If Sun could not withhold its license to such an Implementer, the latter, if it prevailed, would be able to take advantage of the standardization to control the market for MHP Implementations while maintaining barriers to entry.⁹³

It has been argued that (a) competition law does not allow a provision requiring licensees to cross-license Sun and other licensees for free, and that (b) a royalty-free cross-license to Sun and all other licensees would in effect prevent or inhibit the creation of a patent pool, because owners of essential patents who sign the Reciprocal Patent License are prevented from charging fair, reasonable, and non-discriminatory royalties for their patents. The effect is the more pronounced, it is suggested, since Sun has refused to declare its patents and there is uncertainty as to whether Sun in fact has any patents reading on Implementations. We do not regard this as a competition law problem for DVB. Third parties who wish to charge Sun and other licensees fair, reasonable and non-discriminatory royalties for their Essential Patents can do so, and have at least two options.

- First, they can elect the \$1 Patent License rather than the Reciprocal Patent License, initiate legal action against Sun to challenge the validity or applicability of Sun's patents, and if successful, reclaim any and all royalties paid to Sun under the \$ 1 Patent License. Neither Patent License contains a no-challenge clause, nor can Sun terminate the \$ 1 Patent License on the ground that the licensee challenges Sun's Patents.
- Second, Implementers who doubt the validity or applicability of Sun's Patents, can state their willingness to pay fair, reasonable and non-discriminatory royalties to Sun for any Essential Patents owned by Sun, invite Sun to disclose these patents, and if Sun refuses to do so, explain that they believe no royalties are due in the absence of any and all information suggesting that Sun in fact owns any patents reading on Implementations. If Sun responds by bringing suit to collect royalties, Sun will have to disclose the patents, and the Implementer can challenge Sun's claims. Sun should refrain from requesting injunctive relief against Implementers who challenge the validity or applicability of Sun's patents: (a) Sun is estopped from demanding an injunction against Implementers who have declared that they are prepared to pay fair, reasonable and non-discriminatory royalties, since Sun has publicly stated that it is willing to license any patents it has on such terms,⁹⁴ and (b) an demand for injunctive relief would raise competition problems under

discussion during the IPRM of October 18, 2001, that the last sentence of Article 2.2(ii) also applies only to Implementations.

⁹² *MPEG-II*, IP/98/1155 and *DVD*, IP/00/1135.

⁹³ The consideration that Sun has not disclosed its Essential Patents does not change this conclusion. According to para. 14.1 of the Statutes of the DVB Project, "*Within 90 days from notification of approval of a specification by the Technical Module, each Member shall, on behalf of itself and its affiliated companies, submit to the chairman of the Steering Board a list of all the IPRs owned or controlled by the Member or any of its affiliated companies, to the extent that the Member knows that such IPRs will be necessarily infringed when implementing such specification and for which it will not or has no free right to make licenses available.*" (emphasis added) Accordingly, so long as Sun has not submitted such a list with the specified time limit, there appears to be no contractual requirement to make a list of such patents available. We understand that Sun has waived its right to give such notice.

⁹⁴ We note that the Patent Licenses do not contain "irreparable harm" clauses that reserve Sun's right to seek injunctive relief. For an example of such an "irreparable harm" clause elsewhere, see Article 6.7 of the Test Suite license. Of course, irreparable harm clauses do not bind non-signatories anyway.

Articles 81 and 82 EC. Accordingly, Sun should limit itself to an action for damages (the lost profits of \$ 1 royalties per item). Injunctions to exclude the Implementer from the market should be permissible only if the Implementer indicates it will refuse to sign the \$ 1 License regardless of a finding of validity and applicability of Sun patents, or breaches material provisions.⁹⁵

If one or more Implementers take either of these approaches, Sun must at some stage take a decision whether to insist on execution of patent licenses. In accordance with EC competition law and Sun's own statements, Sun is obliged to avoid discrimination. It must either require each and every Implementer to pay the \$1 royalty or grant the free cross-license, or relinquish the right to consideration altogether. Pursuant to Articles 81 and 82, as applied in a standardized environment, Sun cannot at the same time refrain from enforcing its rights against certain Implementers while continuing to extract consideration from others, since this would tilt the playing field against those who have agreed to cross-license Sun for free (assuming that the licensee has IPRs to cross-license) or to pay Sun a \$ 1 royalty per device.

(c) Limitations on Incomplete Implementations. Article 2.1 extends the Essential Patents license to:

"using, making or having made and then delivering to a DVB MHP Full Implementer an Incomplete Implementation for subsequent integration and distribution as part of an Implementation distributed by such Full Implementer. No license is granted hereunder with respect to Incomplete Implementations that, if used, are not integrated into and distributed as part of an Implementation distributed by a DVB MHP Full Implementer."

The definitions of "Incomplete Implementation" and "Full Implementer" are the same as in the Test Suite License (see above). The EC Commission, if it were asked to review these provisions, would likely conclude that this limitation on the scope of the Essential Patents license is a legitimate technical field of use restriction, for the same reasons as explained above in connection with the Test Suite License.⁹⁶

(d) Denial of Patent License to untested implementations. As explained above, the limitation of the scope of the Patent License to fully MHP-compliant Implementations is a legitimate technical field of use restriction, consistent also with the interests of DVB MHP standardization. Article 2.1, read in conjunction with Article 1.5 and 1.1 suggest, however, that a fully MHP-compliant implementation may nevertheless be denied a license to Sun's Essential Patents, if any, if it has not passed the Test Suite. For the reasons set out in Section D.5 below, this limitation is permissible only if two conditions are met: (a) the Test Suite is available without restrictions on competition (which appears to be the case, as discussed above); and (b) adequate information is made available (in the public domain, or otherwise subject to fair, reasonable, and non-discriminatory license terms) to Clean-Room Implementers to allow them to adjust their implementation should it fail to pass the Test Suite. We understand and assume that the Test Suite source code is available on such terms and conditions,⁹⁷ and the requirement to pass the Test Suite before obtaining an Essential Patent license would therefore raise no competition law concerns.

3. Terms of Use

As indicated above, the Licensor Portion of the MHP Specification is not published on the DVB MHP specification website, but on a website controlled by Sun (subject to constraints pursuant

⁹⁵ Licensees who wish to take this approach may wish to pay royalties in escrow pending litigation in order to demonstrate their good faith.

⁹⁶ Commission Regulation 240/96 on the application of Article 81(3) of the Treaty to certain categories of technology transfer agreements, Art. 2(1)(8)

⁹⁷ Reference was made to documents approved by MHP-EG and the TM (meg011r2). See section 5(b) below.

to the Custodian Agreement). Access to the Licensor Portion is subject to electronic acceptance of "Terms of Use", one for evaluation, and one for implementation.⁹⁸

(a) Evaluation Terms of Use. The draft of the Evaluation Terms of Use provides that:

"I acknowledge that I may view, download, use and reproduce the Specifications accessible through this site solely for the purpose of evaluating such Specifications and for determining whether I wish to make an Implementation under the terms described in the DVB Blue Book, Implementation Arrangements for the DVB Multimedia Home Platform: Conformance Test Suite (DVB document no. A066 [October 2001]) to be available at www.dvb.org (including, without limitation, Article 2.7 of the DVB MHP Test Suite License and Non-Disclosure Agreement). No license is granted hereunder for any other purpose."

As explained above, the Commission has made clear that to avoid elimination of competition in the relevant market(s), information to apply the standard must be available to those wishing to enter the market.⁹⁹ This should not be interpreted as requiring Sun to allow DVB to make the information directly available on the DVB MHP website, nor as requiring Sun to give up any IPRs it has in the Licensor Portion. Accordingly, to the extent that the Licensor Portion is covered by Sun's IPRs, all that is required is that access to the specifications must be possible for any and all actual or potential suppliers on fair, reasonable and non-discriminatory terms. Should the EC Commission scrutinize the Evaluation Terms of Use, it is likely to accept that the license to any Sun's IPRs in the Licensor Portion is validly limited to "the purposes of evaluation".

The question was raised whether the Evaluation Terms of Use contractually reinforce Sun's intellectual property rights by requiring the licensee to "acknowledge" Sun's existing rights under copyright law. We conclude that even if this wording is interpreted as a no-challenge clause, it is unlikely to have an appreciable effect on competition. First, there appears to be no doubt that Sun in fact owns copyrights and possible trade secret rights in the Java specification. Second, the wording of the Terms of Use appears to describe adequately Sun's exclusive rights under copyright, and therefore has no independent restrictive effect. Third, the European Court of Justice accepted in *Bayer/Suellhoefer* that a no-challenge clause included in a patent licensing agreement would not restrict competition if the license in question is free.¹⁰⁰ In as much as the Terms of Use are free, without other contractual restriction, we conclude that there is no restriction of competition if the wording were found to contain an implicit no-challenge clause.

(b) Implementation Terms of Use. Implementation of the Java specification in an MHP-compliant product is permitted only after execution of separate Implementation Terms of Use. The draft requires a prospective implementer to subscribe electronically to the following statement:

"I acknowledge that I may view, download, use and reproduce the Specifications accessible through this site only for the purpose of implementing such Specifications under the terms described in the DVB Blue Book, Implementation Arrangements for the DVB Multimedia Home Platform: Conformance Test Suite (DVB document no. A066 [October 2001]) to be available at www.dvb.org (including, without limitation, Article 2.7 of the DVB MHP Test Suite License and Non-Disclosure Agreement). I also acknowledge that I may only implement and distribute the Specifications accessible through this site pursuant to such Agreement. No license is granted hereunder for any other purpose."

⁹⁸ See Article 5(b) of the Custodian Agreement.

⁹⁹ Guidelines on horizontal cooperation, *Ibid.*, para 174.

¹⁰⁰ *Bayer, Maschinenfabrik Hennecke v. Heinz Suellhoefer*, [1988] ECR 5249.

As discussed above, even if it is determined that this language contains an implicit no-challenge clause, there appears to be no appreciable competitive effect.

Article 2.7 of the Test Suite License Agreement grants a license under Sun's copyrights and trade secrets¹⁰¹ to:

"view and download the Licensor Portion, to reproduce it for internal use in conjunction with the activities contemplated hereunder, and to implement¹⁰² the Licensor Portion but only in the form of an Implementation; provided, however, that nothing in the foregoing shall be understood to grant a license for Licensee to implement Additional Functionality where the Additional Functionality is implemented in the Licensor Name Space[.]"

As discussed above in the context of the Test Suite License and Patent Licenses, the limitation of the scope of the license should not be interpreted as a contractual ban on supersetting. Nor does Sun leverage its Essential IPRs in the specifications by withholding them for MHP-compliant implementations that include supersets.¹⁰³ To the extent Sun has IPRs reading on its name space, the exclusion of supersetting from the scope of their license would likely be found a legitimate technical field of use restriction, and Sun is not required under Article 81 EC to grant a license to superset as the MHP Specification does not require supersetting. If Sun has no proprietary interest in its name space, the Licensee is free to superset without a license from Sun. In other words, Article 2.7 indicates that Sun reserves whatever IPRs it has to prevent supersetting, but Article 2.7 does not contractually prevent supersetting in the Sun/Java name space.

4. Code License

(a) Supersetting. Article 2.1 of the Code License grants a license to use Sun's class file parser and byte code verifier source code, but only *"as part of Licensee's Implementation which does not extend or superset in the Licens[or] Name Space."* Thus, Sun prohibits use of the code in products which superset in the Java/Sun name spaces. In this respect, the Code License is more restrictive than Article 2.7 of the Test Suite License. Nevertheless, in our view, the limitation of the scope of the source code license should not be deemed in breach of EC competition law:

¹⁰¹ The reference to trade secrets does not appear to prejudice the openness of the Specifications, since the Terms of Use licenses are royalty free.

¹⁰² Microsoft points out that "implementation" is not a restricted Act (Microsoft paper of October 17, 2001). We understand, however, from the discussion at the IPRM of October 18, 2001, that implementation will in practice in most, and probably all, cases involve a reproduction, distribution, or creation of a derivative work, all of which are restricted acts under the EC software copyright directive (Council Directive 91/250 of May 14, 1991 on the legal protection of computer software, OJ 1991, L 122/42, as amended, OJ 1993, L 290/9). In addition, it should be kept in mind that Sun may have trade secret rights and that in any event, the license pursuant to the Terms of Use is free of charge. Also, Article 2.7 does not prevent an implementer from arguing that implementation is possible without engaging in restricted acts, and that no license is needed. The inclusion of "implementation" within the scope of the license therefore raises no competition issues.

¹⁰³ Article 2.7 merely withholds a license *"to implement Additional Functionality ... in the Licensor Name Space,"* is without prejudice to the question whether a license is needed at all to superset in the Sun/Java name space. Note that the Specifications under the Implementation Terms of Use are available only for Implementations, which require certification through the use of the Test Suite. Article 2.1(a) of the Test Suite License (which withholds a license to use the Test Suite *"in connection with"* an Implementation that includes supersets unless either of the two conditions is met), is analyzed above.

- Implementers who have signed or choose to execute a TLDA and a SCSL will not sign a separate Code License, and are already legitimately prevented by the standard code license from supersetting in the Licensor Name Space outside the JCP.¹⁰⁴
- Clean-Room Implementers will not sign the Code License, since their exposure to Sun source code would create risks of copyright violation for their non-MHP Java-compatible implementations. They are therefore not bound by the limitations to the scope of the Code License, and will either develop equivalent code themselves or license it from another Clean Room Implementer, such as HP. This is possible, since the use of Sun's class file parser and byte code verifier is not required by the MHP Specification, and the Test Suite will therefore not test for the presence of Sun's byte code verifier and class file parser.
- In the theoretical case that Clean-Room Implementers nevertheless wish to use Sun's code, the limitation on the scope of the license is in our view likely to be found permissible (a) if Sun is entitled to invoke copyrights, trademarks, or other claims to prevent unauthorized supersetting in its name space, but also (b) as a permissible technical field of use restriction, even if supersetting in the Licensor Name Space is not prohibited under Sun's other IPRs (see above).¹⁰⁵
- Finally, the ban on implementation of Additional Functionality in the Licensor Name Space may entail no appreciable restriction of competition, because (a) Clean-Room Implementers are able to develop MHP-compliant Implementation without supersetting in the Sun/Java name space, and (b) there would appear to be scope for product differentiation and innovation through supersetting outside that name space (see above).

(b) Partial Implementations. Article 2.1 of the Code License excludes Incomplete Implementations from the scope of the license unless these are to be integrated into a Full Implementation. This is a permissible technical field of use restriction, for the reasons discussed above in connection with the Patent License.

(c) No source code redistribution. It has been suggested that the Code License places "open source" implementers at a disadvantage, because (a) open source implementers are required to share the source code of their Implementation with other open source developers,¹⁰⁶ and (b) Article 2.1 of the Code License prohibits redistribution in source code form.¹⁰⁷ Open source developers can, however, write their own class file parser and byte code verifier if they wish to share that code with other open source developers.¹⁰⁸ Alternatively, they may be able to write their product as an Incomplete Implementation, for subsequent integration with the Sun class file parser and byte code verifier. In any event, past practice and statements of the EC Commission in standards cases do not suggest that Sun is required

¹⁰⁴ Cf. Article 2(1)(8) and 2(1)(5) of the Technology Transfer Block Exemption Regulation.

¹⁰⁵ We understand, moreover, that the class file parser and byte code verifier would have to be modified to integrate fully with the Clean-Room Implementation. Sun is not required under competition law to grant a license to modify its code, and the consideration that the license is granted in a standards context should not change this general rule so long as the standard does not require use of the Sun class file parser and byte code verifier.

¹⁰⁶ See, for instance, the GNU General Public License of the Open Source Foundation, at <http://www.gnu.org/copyleft/gpl.html>. This is not a competition law problem. The GNU license recognizes that "*it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.*" The same applies *mutatis mutandis* to open source developers.

¹⁰⁷ Convergence, p. 6.

¹⁰⁸ We assume that open source Implementers will wish to develop their own class file parser and byte code verifier, or license one from another open source, so as to avoid being exposed to Sun's copyrighted code that could prejudice their clean room process.

to allow Implementers to redistribute code in source code form so long as the necessary information to implement the MHP standard is available to all potential implementers on fair, reasonable, and non-discriminatory terms. Since all open source developers who wish to have access to the source code can obtain it through the Custodian after having signed the Code License, we do not regard this aspect as giving rise to a restriction of competition.

(d) Confidential Information. The definition of Confidential Information in Article 4.1 suggests that it might include information in the public domain, which in theory could raise an EC competition law question to the extent that it restricts licensees from engaging in activities that third parties are free to do. We understand, however, that Sun has no intention to enforce the confidentiality provisions with respect to information that is generally known to or easily accessible for software engineers without confidentiality restriction. Accordingly, the Common Annex confirms:

"The definition of Confidential Information in Article 4.1 shall not include information that the Licensee can document (i) is now or later becomes generally known to the public other than through the receiving party's fault; (ii) is known by the receiving party at the time of receipt; (iii) is lawfully obtained by the receiving party from a third party who has lawfully obtained such information."

5. Rules and Procedures of the Expert Group

The DVB Project has established an MHP Experts Group (the "EG") to advise the Steering Board on the selection and evaluation of the Test Suite.¹⁰⁹ The EG decides by consensus.

(a) Sun's right to provide initial Test Suite. Any DVB member or third party is free to offer its source code or Test Suites for the EG for consideration.¹¹⁰ According to paragraph 13 of the EG Rules and Procedures, however,

"When an element of the MHP Specification has been originally proposed by one entity, it shall have the right to present the initial version of the test application related to that element."

It has been suggested that this gives Sun the exclusive right to propose a test application for the Java portion of the MHP standard, in breach of Article 81 EC.¹¹¹ It is said that Sun could give advantages to its own licensees, and that Clean-Room Implementers would have greater difficulty in certifying their Implementations to obtain the Mark and a Patent Licence, and that the choice of the Sun Test Suite therefore restricts competition. In our view, on the basis of the information currently at our disposal, the Commission would not object to these arrangements if their attention were drawn to them, for the following reasons:

- We understand that it is reasonably necessary to allow only one official Test Suite, to ensure full cross-platform interoperability of all MHP-based applications. The use of different Test Suites could result in certification of Implementations that are not fully compatible with one another, thus reducing the value of the MHP standard and the benefits of standardization. Different service providers in Europe might use different MHP implementations, possibly leading to, for example, geographic market fragmentation. This would also be detrimental for application developers, since no test suite could guarantee full compatibility.
- Sun's right is not an exclusive right. The EG has the right to reject Sun's test application on objective grounds. The EG is charged with reviewing Test Suites *"to determine their effectiveness and independence for use in testing all Implementations of the Specifications from various sources."*¹¹² There are various

¹⁰⁹ EG Rules and Procedures, para. 5, 7, 9 and following.

¹¹⁰ DVB Steering Board, MHP Declaration, version 4.0, para. V.4, p. 7.

¹¹¹ See e.g., Microsoft's written comments, p. 18.

¹¹² DVB Steering Board, MHP Declaration, version 4.0, para. V.1, p. 7.

safeguards in the EG Rules and Procedures to ensure that Sun could not use the Test Suite to provide artificial advantages to it or its licensees. Paragraph 14 specifies that:

"[...] the MHP-EG shall objectively evaluate and test, with respect to implementations which implement all required interfaces and functionality of the elements of the MHP Specification which it has proposed, whether any particular test application fails to meet the criteria specified in paragraphs 18 to 19."

According to paragraphs 18 through 21:

"18. The MHP-EG shall not approve any test application that does not conform to the MHP specification or is more restrictive than the MHP specification, that is, tests for features and capabilities not required by the MHP specifications. [...]"¹¹³

"19. The MHP-EG will ensure that any test application is genuinely independent of any particular implementation of the MHP specification, that is, that it does not arbitrarily favour or compel the use of one or more particular Implementations over other Implementation(s), so that there is an open and competitive market of MHP software."¹¹⁴

"20. [...] Main criteria for the selection of test applications or modules ... remain compatibility and usefulness in a DVB MHP environment;¹¹⁵ a test application is assumed not to test for the presence or absence of elements outside of the MHP specification."

"21. The MHP-EG shall not approve any test application or the MHP Test Suite that prevents the evolution and the extension of all elements in the MHP specification."¹¹⁶

Accordingly, the Commission is likely to take the view that there are objective reasons for the choice of Sun's test application, in conformity with the standardization objectives, and with sufficient substantive safeguards to ensure that the Test Suite is effective, objective and unbiased.¹¹⁷

The same applies to the procedural safeguards. The EG is required to make an evaluation upon receipt of the test applications proposed by Sun.¹¹⁸ If other test applications are proposed and rejected, the *"rejection shall have to be explained in detail, on the basis of identifiable and relevant data,"* requiring the EG to explain why the Sun test application is better (or at least of equal functionality).¹¹⁹ If a problem is found with the Sun test application and Sun agrees, Sun is required to propose a commercially reasonable solution "promptly." If it does not agree, it must provide reasons and work in good faith with the EG to resolve the issue. The solutions must be "appropriate and timely."¹²⁰ If no solution is found, the test can be deleted or Sun's test application replaced by a better alternative. There is no time limit for this procedure, but the references to "promptly", "timely solutions" and "good faith" provide a sufficient safeguard to avoid abusive delays that could raise antitrust concerns.

¹¹³ See also DVB Steering Board, MHP Declaration, version 4.0, para. V.3, p. 7.

¹¹⁴ DVB Steering Board, MHP Declaration, version 4.0, para. V.6, p. 7.

¹¹⁵ See also DVB Steering Board, MHP Declaration, version 4.0, para. V.9, p. 8.

¹¹⁶ See also DVB Steering Board, MHP Declaration, version 4.0, para. V.13, p. 8.

¹¹⁷ See also DVB Steering Board, MHP Declaration, version 4.0, p. 7.

¹¹⁸ EG Rules and Procedures, paragraph 14.

¹¹⁹ DVB Steering Board, MHP Declaration, version 4.0, para. V.7, p. 7.

¹²⁰ See also DVB Steering Board, MHP Declaration, version 4.0, para. V.10, p. 8.

Similarly, any person may give notice to the EG of shortcomings or bugs, including inconsistencies with the MHP specification, or any suspicion that the Test Suite is more restrictive (for instance, that it fails supersets implementations even if they are MHP-compliant) or favours Sun's or its licensees' implementations over Clean-Room Implementations.¹²¹ In that case, the EG will have to raise the issue with Sun and find "appropriate and timely solutions".¹²² The EG may decide that the Test Suite should be updated, modified, or replaced.¹²³ It may also recommend that the test be dropped for purposes of conformance testing as an interim measure.¹²⁴

Accordingly, the EC Commission would likely conclude that there are sufficient procedural and substantive safeguards to avoid antitrust concerns. It is likely to take into account that the use of a competitors' test application or the development of an entirely new test application for the Java portion of the MHP Specification would be likely to create similar or greater problems and delays.

(b) Access to Test Suite source code. Sun reserves its copyrights and trade secret rights in its test application. According to the Confidentiality Agreement for the MHP Experts Group (the "EG Confidentiality Agreement"), "*Confidential Information shall be used solely for the activities of the MHP-EG,*" and must be kept confidential.¹²⁵ Article 4.2 of the Test Suite License confirms that the same applies to source code and documentation delivered with the Test Suite:

"Licensee agrees that the Confidential Information shall be used solely for the purpose specified in Article 2.1 [use solely for the purpose of testing and self-certifying Implementations in accordance with the MHP Specification] and agrees to keep the Confidential Information strictly confidential..."

It has been suggested that the EG Confidentiality Agreement and the comparable provisions in Article 4 of the Test Suite License place small Clean-Room Implementers at a unfair competitive disadvantage.

- First, as indicated above, the standardization process should be non-discriminatory, open and transparent. This applies also to the activities of the EG. Small Clean-Room Implementers may decide that they cannot participate in the EG because their employees could become "tainted" with Sun copyrighted and confidential material, which could jeopardize their entire product range, and they

¹²¹ The EG can verify that the Test Suite does not test against supersetting by checking it against an Implementation known to be compatible and known to include supersetting.

¹²² EG Rules and Procedures, paragraph 16.

¹²³ Microsoft pointed out that the Rules and Procedures could be read to prevent replacement of the Sun Test Application after initial adoption even if shortcomings or bias was demonstrated and remained unresolved. We understand that the DVB Steering Board will on October 24, 2001 adopt a Clarification with respect to the Rules and Procedures of the MHP Experts Group, confirming that: "*The process of interaction between the MHP Experts Group and a technology provider set out in Paragraph 14 will be used to address allegations that a particular Test Application fails to meet the criteria specified in MHP Expert Group Rules 18 through 21, whether the allegation was made before or after adoption of the Test Suite submitted by the technology provider. A technology provider is expected to continue to participate in that process, provided that the MHP Experts Group remains constituted and available to serve its specified purpose.*" Sun will accept this in a letter of even date to ETSI and the DVB Project Office. This eliminates the concern.

¹²⁴ EG Rules and Procedures, paragraph 16. The EG decides by unanimity, but in case of any conflict, the normal supermajority provisions of the DBV Memorandum of Understanding apply, which prevent Sun from vetoing any proposed remedy.

¹²⁵ Attachment I to the EG Rules and Procedures

do not have sufficient engineers to dedicate one to the EG and shield him/her off. As a result, small players would be unable to influence EG recommendations concerning the Test Suite.¹²⁶

- Second, the need to avoid exposing employees to Sun copyrighted code and trade secrets is said to hamper Clean-Room Implementers in their ability to review the source code of the Test Suite in case their product has failed the test.¹²⁷ This, in turn, is said to jeopardize their ability to market an MHP-compliant product because (a) review of the test application is reportedly necessary to determine how to render the product MHP-compliant; and (b) Clean-Room Implementers who cannot pass the Test Suites are denied the Patent License. To the extent that Sun owns Essential Patents, this would exclude them from the MHP-compliant product market.

It has been suggested that to avoid these concerns, the source code of Sun's test application should be made available in the public domain. On the basis of the information currently at our disposal, we think that the Commission would be unlikely to impose such a requirement, if requested to review the DVB MHP arrangements.

- **Access to source code for testing:** Requiring Sun to place the test application source code in the public domain would be tantamount to requiring Sun to give up its intellectual property rights in its test application as a condition for the selection of its technology. To the extent that (a) passing the Test Suite is required to obtain the necessary Essential Patent license to implement the MHP Specification, and (b) access to the test application source code is required in practice for Clean-Room Implementers to achieve compliance, the Commission can be expected to require that the relevant information, including source code, be accessible under license on fair, reasonable and non-discriminatory terms. We understand that the Test Suite source code and related documentation will be distributed through the Custodian as part of the Test Suite,¹²⁸ and that all licensees are entitled to use it for the purpose of testing, product adjustment and compliance certification. We are also informed that the Test Suite source code will not include the source code of any Sun Implementation and that contamination of clean rooms should therefore be no concern.
- **Access to the EG.** In principle, the decision not to participate in the EG is not imposed by the DVB Project, but left to the Clean-Room Implementers themselves. They are entitled to participate in the EG. It is understandable and

¹²⁶ Microsoft refers to *X/Open Group* in this connection.

¹²⁷ See, for example, Microsoft in its written remarks, p. 19.

¹²⁸ Microsoft disputes this in its October 17, 2001 paper, but the discussion at the IPRM on October 18, 2001 confirmed that the source code is available also outside the MEG. Reference is also made to documents approved by MHP-EG and the TM (meg011r2). According to this documentation, the list of elements to be provided with the Test Suite includes: (1) the Assertion that is being tested and reference to the relevant specification(s); (2) Reference to applicable MHP version(s) profile(s) and option(s); (3) Documentation describing the test application; (4) Documentation describing the running of the test; (5) Description of any associated content in the transport stream, e.g. duration, bit-rate, etc; (6) Documentation on how to interpret the result of running the test; (7) Where applicable, transport stream containing the Java byte-code, and associated signalling of the application, and any other associated content, e.g. AV content, static content, AIT-data, SI-data, stream events, etc; (8) Java byte-code (corresponding to the compiled version of the source code), and reference to the compiler (and version) used to generate it from the source code; (9) Java source code (of a Java class implementing the Xlet interface, and associated classes) intended to test the assertion; (10) If the test application is itself a piece of Java byte-code, e.g. hand coded to test the byte-code verifier, then an assembly listing should be provided in place of the Java source code.

indeed foreseeable that they would wish to avoid exposure to Sun copyrighted and confidential material relating to Sun Implementations, especially if they wish to develop a competing test application. Nevertheless, this is their choice. The choice to be a Clean-Room Implementer entails certain advantages as well as disadvantages.

- **Use of Residuals.** In this connection, we note that the effects of the provisions on confidentiality are mitigated. According to the EG Confidentiality Agreement,

"This agreement is not intended to prevent the receiving party from using Residual Knowledge, subject to any valid patents, copyrights and semiconductor mask rights of the disclosing party."

Residual Knowledge is defined as information:

"retained in the unaided memories of the receiving party's employees ... An employee's memory will be unaided if the employee has not intentionally memorised the Confidential Information for the purpose of retaining and subsequently using or disclosing it."

Accordingly, the use of confidential information for the development of a Clean-Room Implementation, or its adjustment to ensure MHP-compliance, is not prohibited.

- **Ban on use for competing test suites.** EG participants are not allowed to use any knowledge, not even Residual Knowledge, to develop and distribute competing test suites intended to validate compatibility with the Java portion of the MHP standard:

"The use of Residual knowledge is prohibited when it is used for the development of other test suites intended to validate compatibility with an element of the MHP specification owned by a disclosing party. The use of Residual Knowledge is allowed for development of test programs as development tools that are only for the receiving party's internal use."

This is in our view a valid technical field of use restriction. It is mitigated by the Clean-Room Implementer's ability to use the information to make test applications for internal use.

(c) Modification of the EG Rules and Procedures. Certain provisions of the EG Rules and Procedures cannot be changed if that change "*prejudices the position of an original technology provider*".¹²⁹ Although it has been suggested that this raises concerns, we consider that this provision would likely be found permissible under Article 81 EC. Note, however, that the exercise by a technology provider of any right with a view to terminating or amending the license to Essential Patents, Licensor Portion, or other Essential IPRs could be subject to review under Article 82 EC. This might be relevant if the standard is widely adopted and continues to exist, the termination or modification of the licenses would reduce competition, and the competitive impact is disproportional in comparison with the change in the position of the original technology provider.

6. Custodian Agreement

Under Article 5(c) of the Custodian Agreement, a component manufacturer will obtain a Patent License only if (1) it certifies that its component has in fact been incorporated into a final product and (2) the manufacturer of the final product certifies that its product has passed the Test Suite. Component manufacturers are not entitled to obtain the right to use the MHP Mark

¹²⁹ EG Rules and Procedures, para. 2. This applies to para. 6 on delivery of source code to the Custodian, para. 7 on the selection and adoption of source code and Test Suite, para. 13 on the original technology provider's right of first offer of the test application, para. 14 on the evaluation procedure, and paras. 18-20 on the substantive criteria for selection.

because their products, by definition, do not fully implement the MHP standard. In our view, as explained above, this does not involve a restriction of competition, but a legitimate technical field of use restriction. The conditions in Article 5(c) do not appear prohibitively burdensome. With respect to the requirement that Essential Patent licensees pass the Test Suite as a condition for a license, we refer to our discussion above.¹³⁰

III. CONCLUSION

In our view, based on the information currently available, there is no need to notify the proposed arrangements.¹³¹ Assuming that the interpretation of the contracts is clarified along the lines indicated and the proposed modifications are introduced, any restrictions of competition that arise would appear to qualify for exemption under Article 81(3) EC, or raise possible future issues under Article 82 EC to be addressed by Sun rather than the DVB Project. We do not consider notification necessary, and it is advisable only if disputes were to arise leading to a complaint to the antitrust authorities under EC competition law. In the case of standardization agreements such as the DVB MHP arrangements, if issues arise, exemptions can be issued with retroactive effect.¹³²

CLEARY, GOTTlieb, STEEN & HAMILTON

Maurits Dolmans
John Temple Lang
Daniel Ilan

¹³⁰ It has been suggested that Article 3(c) of the Custodian Agreement could be interpreted as requiring any Mark Licensee to accept a Patent License and thus (a) comply with the ban on supersetting in Section 2.1 of the Patent License; (b) recognize the existence, validity or applicability of Sun patents, and (c) provide consideration to Sun in the form of the set royalty or a cross-license. Convergence I. Article 3(d), however, clearly provides an option to the Implementer to execute a Patent License without requiring it to do so. Finally, the Patent Licenses do not require the licensee to recognize the existence, validity or applicability of Sun patents, and do not contain contractual restrictions on supersetting in the Sun/Java name space. In any event, the Second Amendment to the Custodian Agreement confirms that "*Article 3 could not be interpreted as contractually requiring any Mark Licensee to countersign and accept a Patent License or to recognize the existence, validity or applicability of Sun patents.*" For these reasons, we do not expect the EC Commission to raise any concerns in connection with these provisions, should they be asked to review them.

Agreement confirms that "*Article 3 could not be interpreted as contractually requiring any Mark Licensee to countersign and accept a Patent License or to recognize the existence, validity or applicability of Sun patents.*" For these reasons, we do not expect the EC Commission to raise any concerns in connection with these provisions, should they be asked to review them.

¹³¹ For an overview of the procedure for notification, see our Memorandum to DVB of November 2, 2000.

¹³² See Article 4(2)(3)(a) of Regulation 17/62, which provides that the Commission may grant exemptions for agreements that have as their "sole" object the development of uniform application of standards or types, even if these standards have not been notified. For the exemption of the license agreements, the same applies (See Article 4(2)(a) of Regulation 17/62 as amended by Council Regulation (EC) No 1216/1999 of 10 June 1999 amending Regulation No 17, OJ 1999, L 148/5).

4.6 DVB TAKES MAJOR STEP TOWARDS HARMONISED MHP (10 Dec 1997)



PRESS RELEASE

10 december 1997

For Immediate Release

Tel: +41 22 717 2719

Fax: +41 22 717 2727

Contact: Martin Jacklin, DVB Project Office
Ancienne Route 17A, 1218 Grand Saconnex
Geneva, Switzerland

DVB takes major step towards harmonised multimedia home platform

Geneva, 10 December 1997 - Today in Geneva, the Steering Board of the Digital Video Broadcasting (DVB) Project endorsed a set of functional requirements for running applications on advanced set top boxes, TV sets and multimedia PCs for digital broadcasting.

This endorsement by the DVB Steering Board is the first step in the development of open technical specifications for a Multimedia Home Platform (MHP). These specifications are targeted for completion by June 1998 and will be put forward as proposals for non-mandatory standards to European and International Standards bodies.

The goal for DVB is to provide an open solution, enabling multiple service providers to operate through a compatible cost-effective receiver in the home, while fully recognising the investments already made by broadcasters and consumers in existing systems. A compatible receiver platform will form the basis for a greatly expanded market, which in turn will give end users, content providers and network operators confidence in their investments.

The DVB specifications will include a receiver API (application programming interface), download mechanisms for applications, software, and related functions. These will meet the need for the next generation of interactive services, including Internet access. A guiding principle of the specifications is that they will be as compatible as possible with existing API's and systems (e.g. OpenTV, MediaHighway, d-Box Network)

The functional requirements have been developed by the Multimedia Home Platform (MHP) group of the DVB Commercial Module and will be used by the DVB Technical Module to produce specifications. Once complete, the specifications will need to be endorsed by the DVB Steering Board.

Using this approach in the past, DVB has consistently ensured that its output has matched the demands of the growing digital broadcasting market.

Mr. Theo Peek, chairman of the DVB Project said:

"It is an important step forward for the DVB project, and a major achievement to reach consensus from so many key digital broadcasting industry players on such a complex issue. Platform harmonisation means that any digital content provider will be able to address any advanced set top box, TV set or multimedia PC."

Background

The Digital Video Broadcasting Project (DVB) is a consortium of over 200 broadcasters, manufacturers, network operators and regulatory bodies in more than 30 countries worldwide, committed to designing a global standard for the delivery of digital television. Numerous

broadcast services using DVB standards are now operational, in Europe, North and South America, Africa, Asia, and Australasia.

5. Licensor Arrangements: Test Suite Applications

5.1 Sun Microsystems, Inc.

5.1.1 DVB MHP Test Suite License and Non-Disclosure Agreement

BETWEEN:

(1) European Telecommunications Standards Institute, as Custodian (the "Custodian") named by Sun Microsystems, Inc., ("Licensor")

and

(2) the company whose name appears on the signature page hereof (the "Licensee");

WHEREAS:

- i) The Custodian has entered into the DVB Conformance Testing Custodian Agreement with the DVB Project, a not for profit association with legal personality governed by Swiss law, and Licensor;
- ii) By a decision of its Steering Board the DVB Project has adopted a specification for the Mul-timedia Home Platform ("DVB MHP Specification" as further defined below), and the Steering Board has issued its Declaration with respect to certain DVB MHP Rules, the arrangements for a custodian and an experts group, testing and certain other matters;
- iii) The Custodian has been appointed by the DVB Project to undertake a variety of activities related to the administration of the DVB MHP Conformance Testing Requirements (as defined below) as specified and approved by an experts group named by the DVB Project; and
- iv) Licensor, with Custodian acting as Licensor's agent, is willing to license certain Test Suites (as defined below) to Licensee for the limited purpose of testing and self-certifying of Implementations of the DVB MHP Specification.

IT IS HEREBY AGREED AS FOLLOWS:

Article 1 - DEFINITIONS

- 1.1 "*Affiliate*" means any subsidiary or parent company of the Licensee, as well as any entity that owns or controls Licensee or that is owned or controlled by Licensee.
- 1.2 "*DVB MHP Conformance Testing Requirements*" means the test programs, rules, guides, documentation and other materials determined by DVB to be used for establishing whether an implementation of the DVB MHP Specification may be certified as an Implementation.
- 1.3 "*DVB MHP Specification*" (further referred to as the "Specification") means the DVB Multimedia Home Platform as adopted by the Steering Board of the DVB Project on the date of its first adoption, and as such Specification may be amended from time to time.
- 1.4 "*DVB MHP Full Implementer*" means a legal entity that has:
 - (i) entered into a DVB MHP Test Suite License and Non-Disclosure Agreement identical (except for the identity of Licensee) to this Agreement;
 - (ii) confirmed in writing to Licensee both that such entity has entered into such agreement and that it acknowledges that any license granted by Licensee with respect to a less-than-complete implementation of the Licensor Portion is expressly limited in its scope to integration into and distribution as part of an Implementation; and
 - (iii) has provided to Custodian a Certificate of Assurance in the form attached hereto as Exhibit A.
- 1.5 "*Implementation*" means an implementation of the DVB MHP Specification that:

- (i) implements all required interfaces and functionality of the Licensor Portion;
 - (ii) does not modify or subset any file or class name or interface declaration which begins with the names "java. * " or "javax. * " (or their equivalents in any subsequent naming convention promulgated by Licensor);
 - (iii) fully satisfies the DVB MHP Conformance Testing Requirements, including but not limited to any self-certification requirement. Limitations on the supersetting and/or extending of the Licensor Name Space, and on the use of the Test Suites thereon, are set forth in Sections 2.7 and 2.1(a), respectively.
- 1.6 "*Incomplete Implementation*" means an implementation of the DVB MHP Specification that implements less than all the required interfaces and functionality of the Licensor Portion.
- 1.7 "*Licensor Portion*" means those Java TM technology specifications listed in Exhibit B hereto, as amended by DVB and Licensor from time to time, which are published by Licensor and to which the Licensee is referred by the DVB MHP Specification.
- 1.8 "*Test Suites*" means the test suites licensed hereunder, as may be revised by Licensor during the Term, that are licensed by Licensor to the Custodian and included by the Custodian as part of the DVB MHP Conformance Testing Requirements.
- 1.9 "*Term*" means the term of the Agreement as specified in Article 6.1.

Article 2 - LICENSE GRANTS

2.1 Test Suite License.

a. Limited Grant.

Conditioned upon Licensee's full compliance with the obligations set forth in this Agreement, including this Article 2 and Article 4, the Custodian, on behalf of Licensor as licensor, hereby grants, as of the Effective Date, to the Licensee under Licensor's applicable intellectual property rights (excluding trademarks) a limited, non-exclusive, non-transferable, worldwide, royalty-free right and license to use the Test Suites solely for the purpose of testing and self-certifying Implementations in accordance with the DVB MHP Conformance Testing Requirements, which shall include the right to test Incomplete Implementations that are delivered to a DVB MHP Full Implementer for subsequent integration and distribution as part of an Implementation distributed by such Full Implementer. Licensee need not require such Full Implementer to integrate and distribute an Incomplete Implementation as part of an Implementation, but Licensee may not authorize the Full Implementer to distribute Licensee's Incomplete Implementation unless it is integrated into and distributed as part of Implementation.

Nothing in the foregoing shall be understood to grant a license for Licensee to use the Test Suites in connection with an implementation of DVB MHP which implements features or functionality not required by the MHP Specification ("Additional Functionality") where the Additional Functionality is implemented in the Licensor Name Space, unless either of the following two conditions are met:

1. the Licensor has separately licensed the Licensee to implement the Additional Functionality in the Licensor Name Space; or
2. no license is required from Licensor to authorize Licensee to implement the Additional Functionality in the Licensor Name Space.

Licensor, as the licensor, asserts that such license is not granted hereunder and is required in all cases where Additional Functionality is implemented within the Licensor Name Space. To the extent to which Licensor offers to other licensees a license agreement authorizing the use of the Test Suites on such

implementations, Licensor agrees to offer such license to Licensee on terms that are fair, reasonable and non-discriminatory.

Licensor reserves every right to take legal action against Licensee if Licensee uses the Test Suites in breach of this Agreement or outside the scope of the licenses granted herein. Similarly, Licensee reserves every right to take legal action to preserve its rights with respect to the use of the Test Suites.

For the purposes of this Agreement, "Licensor Name Space" shall mean any file or class name or interface declaration which begins with the names "java. * ", "javax. * ", or "com.sun" or their equivalents in any subsequent naming convention promulgated by Licensor ("Licensor Name Space"). To the extent to which Licensor offers to other licensees a license agreement authorizing the use of the Test Suites on such implementations, Licensor agrees to offer such license to Licensee on terms that are fair, reasonable and non-discriminatory.

b. Additional Limitations.

For the avoidance of doubt, Licensee acknowledges and agrees that is not licensed hereunder to:

1. distribute the Test Suites to any third party;
2. modify or create derivative works of the Test Suites, or, except as other provided by law, disassemble or decompile binary portions of the Test Suites, or otherwise attempt to derive the source code from such portions; or
3. develop other test programs or test suites intended to validate compatibility with the Licensor Portion.

2.2 Proprietary Rights Notices.

Licensee shall not remove any copyright notices, trademark notices or other proprietary legends of Licensor or its suppliers contained on or in the Test Suites if in source code form.

2.3 Notice of Breach or Infringement.

Licensee shall notify Custodian immediately in writing when it becomes aware of any breach or violation of the terms of this Agreement.

2.4 Ownership.

Licensor retains all right, title and interest in and to the Test Suites, including any upgrades thereto provided hereunder.

2.5 Support.

Neither Custodian nor Licensor shall incur any such obligations by virtue of this Agreement to provide any support or administrative services concerning the Test Suites, including access to any subsequent releases of the Test Suites.

2.6 Use of Contractors.

Licensee may provide the Test Suites to a contractor for the limited purpose of assisting the contractor in performing services for Licensee to develop, test and self-certify Implementations in accordance with the DVB MHP Conformance Testing Requirements. Such contractor must have executed an agreement with Licensee that is consistent with Licensee's rights and obligations under this Agreement.

2.7 License to Copy and Implement Licensor Portion.

Sun hereby grants to Licensee under Sun's copyrights and trade secrets a limited, worldwide, non-exclusive, perpetual, non-transferable, royalty-free right and license to view and download the Licensor Portion, to reproduce it for internal use in conjunction with the activities contemplated hereunder, and to implement the Licensor Portion but only in the form of an Implementation; provided, however, that nothing in the foregoing shall be understood to grant a license for Licensee to implement Additional Functionality where the Additional Functionality is implemented in the Licensor Name Space The foregoing, limited license shall include the right to implement (subject to the limitations set forth above,

including with respect to Additional Functionality implemented in the Licensor Name Space) Incomplete Implementations that are delivered to a DVB MHP Full Implementer for sub-sequent integration and distribution as part of an Implementation distributed by such Full Implementer. Licensee need not require such Full Implementer to integrate and distribute an Incomplete Implementation as part of an Implementation, but Licensee may not authorize the Full Implementer to distribute Licensee's Incomplete Implementation unless it is integrated into and distributed as part of an Implementation (subject to the limitations set forth in this Section). No license is granted hereunder with respect to Incomplete Implementations that are delivered to any third party other than a DVB MHP Full Implementer for subsequent integration and distribution as part of an Implementation distributed by such Full Implementer.

2.8 No Other Grant.

Licensee acknowledges that this Agreement does not grant any right or license, under any intellectual property rights of the other party, or otherwise, except as expressly provided in this Agreement, and no other right or license is to be implied by or inferred from any provision of this Agreement or by the conduct of the parties. For example, no right, title, or interest in or to any trademarks, service marks or trade names of Licensor or Licensor's licensors is granted under this Agreement.

Article 3 - LIMITED WARRANTY AND DISCLAIMER

THE TEST SUITES ARE LICENSED "AS IS" AND ALL REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT ARE HEREBY DISCLAIMED.

Article 4 - CONFIDENTIAL INFORMATION

4.1 Confidential Information.

For the purposes of this Agreement, "Confidential Information" shall include the Test Suites if in source code form, as well as any documentation and related materials thereto that are clearly marked as "Confidential" or a similar expression.

4.2 Preservation of Confidentiality.

Licensee agrees that the Confidential Information shall be used solely for the purpose specified in Article 2.1, and agrees to keep the Confidential Information strictly confidential and shall not disclose it to any other person except to an Affiliate and to its employees (who under the terms of their employment by the Licensee are subject to an obligation not to disclose confidential information of the Licensee), who have a "need to know" for the purposes specified in Article 2.1 and are made aware of the requirements of this Article 4.

4.3 Standard of Care.

Licensee shall protect the Confidential Information with the same degree of care as it normally uses in the protection of its own confidential and proprietary information, but in no case with any less degree than reasonable care. Licensee shall, at the Custodian's reasonable request, provide written assurances concerning the steps taken by Licensee and its Affiliates to preserve the confidentiality of Confidential Information.

4.4 Residual Knowledge.

Except with respect to the development of other test suites intended to validate compatibility with the Licensor Portion, which shall not mean the development of test programs as development tools that are only for Licensee's internal use, this Agreement is not intended to prevent those employees of Licensee to whom Confidential Information is disclosed pursuant to Section 4.2 from using Residual Knowledge subject to any valid patents, copyrights, and semiconductor mask rights of the disclosing party. Residual Knowledge means ideas, concepts, know-how or techniques related to the disclosing party's technology that are retained in the unaided memories of the receiving party's employees who have had access to

information. An employee's memory will be considered unaided if the employee has not intentionally memorized the information for the purpose of retaining and subsequently using or disclosing it.

4.5 Identity of Licensee.

Licensee acknowledges that Custodian is obligated not to disclose Licensee's identity to Licensor except at the instruction of the Chairman of the DVB Steering Board or in the event that Licensor provides Custodian in good faith with reasonable grounds for believing that Licensee may be in violation of its obligations hereunder.

Article 5 - LIMITATION OF LIABILITY

IN NO EVENT SHALL LICENSOR OR CUSTODIAN BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT (INCLUDING LOSS OF PROFITS, USE, DATA, OR OTHER ECONOMIC ADVANTAGE), NO MATTER WHAT THEORY OF LIABILITY, EVEN IF EITHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OR PROBABILITY OF SUCH DAMAGES. FURTHER, LIABILITY FOR SUCH DAMAGE SHALL BE EXCLUDED, EVEN IF THE EXCLUSIVE REMEDIES PROVIDED FOR IN THIS AGREEMENT FAIL OF THEIR ESSENTIAL PURPOSE. The provisions of this Article 5 allocate the risks under this Agreement between Licensor and Custodian, on the one hand, and Licensee on the other hand, and the parties have relied upon the limitations set forth herein in determining whether to enter into this Agreement.

Article 6 - TERM AND TERMINATION

6.1 Term.

The Term of this Agreement shall begin on the Effective Date and shall continue unless and until the earlier of:

- (i) termination of this Agreement pursuant to this Article 6; or
- (ii) the Test Suites cease to be included as part of the DVB MHP Conformance Requirements.

Termination of this Agreement shall not relieve Licensee of any of its obligations hereunder.

6.2 The license granted in Section 2.1 of this Agreement may be terminated by Licensor upon written notice given by the Custodian upon the occurrence of any of the following events:

- a. the Licensee or any of its Affiliates breaches any of the terms hereof or uses the Test Suites outside the scope of the license granted in Section 2.1; or
- b. there is a voluntary or involuntary filing of bankruptcy by, or similar event affecting, Licensee.

6.3 Effect of Termination.

Upon termination of this Agreement, for any reason, Licensee shall forthwith cease its use of the Test Suites and return to the Custodian all Confidential Information in written, electronic or magnetic form and any copies thereof.

6.4 No Liability for Expiration or Lawful Termination.

Neither party shall have the right to recover damages or to indemnification of any nature, whether by way of lost profits, expenditures for promotion, payment for goodwill or otherwise made in connection with the business contemplated by this Agreement, due to the expiration or permitted or lawful termination of this Agreement. EACH PARTY WAIVES AND RELEASES THE OTHER FROM ANY CLAIM TO COMPENSATION OR INDEMNITY FOR TERMINATION OF THE BUSINESS RELATIONSHIP UNLESS TERMINATION IS IN MATERIAL BREACH OF THIS AGREEMENT.

6.5 No Waiver.

The failure of either party to enforce any provision of this Agreement shall not be deemed a waiver of that provision. The rights of Licensor under this Article 6 are in addition to any other rights and remedies permitted by law or under this Agreement.

6.7 Irreparable Harm.

The parties acknowledge that a material breach of Articles 2 and/ or 4 would cause irreparable harm, the extent of which would be difficult to ascertain. Accordingly, they agree that, in addition to any other legal remedies to which a non-breaching party might be entitled, such party shall be entitled to obtain immediate injunctive relief in the event of a breach of the provisions of such Articles.

Article 7 - MISCELLANEOUS

7.1 Governing Law.

This Agreement is made under and shall be governed by and construed under the laws of the State of California, regardless of its choice of laws provisions.

7.2 Compliance with Laws.

The Licensor Code/Test Suites is subject to U.S. export control laws, including the U.S. Export Administration Act and its associated regulations, and may be subject to export or import regulations in other countries. Licensee agrees to comply strictly with all such regulations and acknowledges that it has the responsibility to obtain such licenses to export, re-export or import the Technology, Documentation or Product(s) as may be required after delivery to Licensee.

7.3 Assignment.

The Custodian may upon notice to the Licensee assign this Agreement to a replacement custodian which shall have the rights and obligations as the Custodian hereunder. Licensor may assign its rights and obligations hereunder upon notice the Custodian.

7.4 Enforcement.

Licensee agrees that, in addition to the Custodian, Licensor shall have the right to enforce this Agreement.

7.5 Complete Understanding.

This Agreement, including Exhibits A, B and C (the Common Annex to the Test Suite License, Patent License, and Code License) hereto, constitutes and expresses the final, complete and exclusive agreement and understanding between Licensee and the Custodian, and between Licensee and Licensor, with respect to its subject matter (that is, the granting of licenses under Licensor’s applicable intellectual property rights [which shall exclude any trademarks] to use the Test Suites with respect to testing and self-certifying Implementations and testing Incomplete Implementations that are subsequently integrated into and distributed as part of an Implementation distributed by a DVB MHP Full Implementer, and to view and down-load the Licensor Portion, to reproduce it for internal use in conjunction with the activities contemplated hereunder, and to implement the Licensor Portion but only in the form of an Implementation), and supersede all previous communications, representations or agreements, whether written or oral, with respect to the subject matter hereof.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives.

Custodian:

Licensee:

By: _____

By: _____

—

Name: _____

Name: _____

(Print or Type)(Print or Type)

—

Title: _____

Title: _____

—

Date: _____

Date: _____

—

EXHIBIT A: Certificate of Assurance

[DATE]

To the Custodian under the DVB Conformance Testing Custodian Agreement:
European Telecommunications Standards Institute
650 Route des Lucioles
06921 Sophia Antipolis, FRANCE

Ladies and Gentlemen:

Certificate of Assurance of DVB Full Implementer

We hereby deliver this Certificate under one or more of the following Agreements, in each case between us and you, as Custodian named by Sun Microsystems, Inc: The DVB MHP Test Suite License and Non-Disclosure Agreement; The DVB MHP Code License and Non-Disclosure Agreement; the DVB MHP JavaTest License Agreement; the DVB MHP Patent License Agreement; and the DVB MHP \$1 Patent License Agreement. In this Certificate, "Agreement" means one or more of such agreements; and all capitalized terms in this Certificate, unless otherwise defined, have the same meaning as in the Agreement.

We hereby represent and warrant that

- (A) we are a DVB MHP Full Implementer;
- (B) we have entered into a DVB MHP Test Suite License and Non-Disclosure Agreement;
- (C) this is the Certificate of Assurance to be provided to the Custodian under the Agreement; and
- (D) this Certificate has been prepared and signed by a person who is properly authorised to sign it.

We further acknowledge that any license granted by Licensor in respect of a less-than-complete implementation of the Licensor Portion is expressly limited in its scope to integration into and distribution as part of an Implementation.

An entity which delivers an Incomplete Implementation to us, as a DVB MHP Full Implementer, is entitled to rely on this Certificate. If the Incomplete Implementation integrates Incomplete Implementations produced by other entities, such other entities may also rely on this Certificate.

Sincerely yours,

DVB MHP FULL IMPLEMENTER

by: _____
its

EXHIBIT B TO DVB MHP TEST SUITE LICENSE AND NON-DISCLOSURE AGREEMENT

Licensors Portion

The following API signatures constitute the Licensors Portion referenced by the DVB MHP TEST SUITE LICENSE AND NON-DISCLOSURE AGREEMENT ("Agreement", and to which this document is Exhibit B). In most cases the granularity of this list is at the level of Java packages (as specified in "The Sun Specifications for DVB" ISBN 1-892488-25-6), in which case the entire package is listed. With respect to the OEM Personal Java TM Application Environment v. 1.2a Specification, however, the description is more precise indicating specific elements in the Java package that are included within the Licensors Portion.

Java TV API version 1.0 specification

javax.tv.graphics.....javax.tv.locator
 javax.tv.media.....javax.tv.net
 javax.tv.service.....javax.tv.service.guide
 javax.tv.service.navigation.....javax.tv.service.selection
 javax.tv.service.transport.....javax.tv.util
 javax.tv.xlet

Java Media Framework API version 1.0 specification

javax.media.....javax.media.protocol

Java Secure Socket Extension version 1.0.2 specification

javax.net.....javax.net.ssl
 javax.security.cert

The OEM Personal Java Application Environment version 1.2a specification

java.awt.....java.awt.event
 java.awt.imagejava.io
 java.lang.....java.lang.reflect
 java.math.....java.net
 java.rmi.....java.security
 java.security.cert.....java.security.spec
 java.util.....java.util.zip

The contents of these packages are as specified in the sections of the PJAE 1.2a specification entitled "JAE 1.1.8 API Specification" and "JAE 1.1.8 API Constants", except for:

The package java.security The package java.security.spec
 The package java.security.cert..... The class java.lang.SecurityManager
 The method java.awt.Toolkit.createImage(java.lang.String)
 The method java.awt.Toolkit.createImage(java.net.URL)
 The method java.awt.Toolkit.getImage(java.lang.String)
 The method java.awt.Toolkit.getImage(java.net.URL)
 The class java.io.FilePermission..... The class java.io.SerializablePermission
 The class java.lang.RuntimePermission..... The class java.util.PropertyPermission
 The class java.net.SocketPermission

These elements are as specified or Personal Java in the "The OEM Specification for the Personal Java TM Application Environment (PJAE) Version 1.2a."

The exact elements for the PJAE packages are as set forth in Appendix 1 to this Exhibit B.*

* Appendix 1 is available at www.mhp.org

EXHIBIT C TO DVB MHP TEST SUITE LICENSE AND NON-DISCLOSURE AGREEMENT
Common Annex to the Test Suite License, Patent License, and Code License

In this Common Annex, capitalized terms shall have the means for such terms in the Agreement. Licensor and Licensee have agreed to the following explanatory statements relating to the Agreement and to certain other agreements.

1. DVB MHP Test Suite License and Non-Disclosure Agreement

- 1.1 Condition 2 of Article 2.1 must be interpreted to mean that if Licensor has no intellectual or industrial property that reads on supersetting in the Java name space, the Licensee is licensed to use the Test Suite to test and self-certify Implementations in accordance with DVB MHP Conformance Testing Requirements even if these Implementations include Additional Functionality in the Licensor Name Space.
- 1.2 The assertion in Article 2.1 does not contractually require Implementers who wish to rely on condition 2 to approach the Licensor before proceeding with implementation, to ascertain whether condition 2 is met.
- 1.3 With respect to the definition of "Licensor Name Space", it is agreed that for the purposes of this Agreement the term Licensor Name Space shall not include any public class or interface declaration whose names begin with com.[name of Licensee].*, org. dvb.*, or org.havi.*.

2. DVB MHP Patent License

- 2.1 Article 2.2(ii) cannot be interpreted to allow Licensor to terminate the royalty-free license solely on the ground that the Licensee brings a claim under its Essential Patent Claims against Licensor's using, making, having made, important or distributing Licensor Materials (whether in whole or in part) other than for or in Implementations.
- 2.2 With respect to the definition of "Licensor Name Space", it is agreed that for the purposes of this Agreement the term Licensor Name Space shall not include any public class or interface declaration whose names begin with com.[name of Licensee].*, org. dvb.*, or org.havi.*.

3. DVB MHP Code License and Non-Disclosure Agreement

- 3.1 The definition of Confidential Information in Article 4.1 shall not include information that the Licensee can document
 - (i) is now or later becomes generally known to the public other than through the receiving party's fault;
 - (ii) is known by the receiving party at the time of receipt;
 - (iii) is lawfully obtained by the receiving party from a third party who has lawfully obtained such information.
- 3.2 With respect to the definition of "Licensor Name Space", it is agreed that for the purposes of this Agreement the term Licensor Name Space shall not include any public class or interface declaration whose names begin with com.[name of Licensee].*, org. dvb.*, or org.havi.*.

In case of doubt or inconsistency between this Annex and the Agreement, this Annex prevails.

5.1.2 DVB MHP Code License and Non-Disclosure Agreement

BETWEEN:

- (1) European Telecommunications Standards Institute, as Custodian (the "Custodian") named by Sun Microsystems, Inc., ("Licensor"); and
- (2) the company whose name appears on the signature page hereof (the "Licensee");

WHEREAS:

- i) The Custodian has entered into the DVB Conformance Testing Custodian Agreement with the DVB Project, a not for profit association with legal personality governed by Swiss law, and Licensor;
- ii) By a decision of its Steering Board the DVB Project has adopted a specification for the Multimedia Home Platform ("DVB MHP Specification" as further defined below), and the Steering Board has issued its Declaration with respect to certain DVB MHP Rules, the arrangements for a custodian and an experts group, testing and certain other matters;
- iii) The Custodian has been appointed by the DVB Project to undertake a variety of activities related to the administration of the DVB MHP Conformance Testing Requirements (as defined below) as specified and approved by an experts group named by the DVB Project;
- iv) Licensor, with Custodian acting as Licensor's agent, is willing to license certain Licensor Code (as defined below) to Licensee for use in its development and distribution of Implementations of the DVB MHP Specification.

IT IS HEREBY AGREED AS FOLLOWS:

Article 1 – DEFINITIONS

- 1.1 "*Affiliate*" means any subsidiary or parent company of the Licensee, as well as any entity that owns or controls Licensee or that is owned or controlled by Licensee.
- 1.2 "*DVB MHP Conformance Testing Requirements*" means the test programs, rules, guides, documentation and other materials determined by DVB to be used for establishing whether an implementation of the DVB MHP Specification may be certified as an Implementation.
- 1.3 "*DVB MHP Full Implementer*" means a legal entity that has:
 - (i) entered into a DVB MHP Test Suite License and Non-Disclosure Agreement in the form attached hereto as Exhibit A;
 - (ii) confirmed in writing to Licensee both that such entity has entered into such agreement and that it acknowledges that any license granted by Licensee with respect to a less-than-complete implementation of the Licensor Portion is expressly limited in its scope to integration into and distribution as part of an Implementation; and
 - (iii) has provided to Custodian a Certificate of Assurance in the form attached hereto as Exhibit B.
- 1.4 "*DVB MHP Licensee*" means a legal entity other than Licensee that is a party to an in-force DVB MHP Test Suite License and Non-Disclosure Agreement with Custodian.
- 1.5 "*DVB MHP Specification*" (further referred to as the "*Specification*") means the DVB Multimedia Home Platform as adopted by the Steering Board of the DVB Project on the date of its first adoption, and as such Specification may be amended from time to time.
- 1.6 "*Implementation*" means an implementation of the DVB MHP Specification that:
 - (i) implements all required interfaces and functionality of the Licensor Portion;

- (ii) does not modify or subset any file or class name or interface declaration in the Licensor Name Space;
 - (iii) fully satisfies the DVB MHP Conformance Testing Requirements, including but not limited to any self-certification requirement.
- 1.7 "Incomplete Implementation" means an implementation of the DVB MHP Specification that implements less than all the required interfaces and functionality of the Licensor Portion.
- 1.8 "Licensor Code" means the byte code verifier and class file parser code provided by Custodian hereunder, as well as any upgrades thereto that are subsequently provided by Custodian.
- 1.9 "Licensor Name Space" means any file or class name or interface declaration which begins with the names "java. * " or "javax. * " or their equivalents in any subsequent naming convention promulgated by Licensor
- 1.10 "Term" means the term of the Agreement as specified in Article 6.1.

Article 2 – LICENSE

2.1 License Grant.

Conditioned upon Licensee's full compliance with the obligations set forth in this Agreement, including this Article 2 and Article 4, the Custodian, on behalf of Licensor as licensor, hereby grants, as of the Effective Date, to the Licensee a limited, non-exclusive, non-transferable, worldwide right and license to modify the Licensor Code to the extent necessary to facilitate use of the Licensor Code as part of Licensee's Implementation which does not extend or superset in the Licensee Name Space, to compile the Licensor Code from source to binary code format, and to reproduce and distribute the Licensor Code in binary code form as part of Licensee's Implementation which does not extend or superset in the Licensee Name Space. Licensee shall not distribute the Licensor Code in source code format, and shall not distribute the Licensor Code except as part of Licensee's Implementation as set forth above; provided, however, that Licensee may sub-license the Licensor Code in binary form to a DVB MHP Full Implementer for subsequent integration and distribution as part of an Implementation (that does not extend or super-set in the Licensee Name Space) distributed by such DVB MHP Full Implementer.

2.2 Proprietary Rights Notices.

Licensee shall not remove any copyright notices, trade-mark notices or other proprietary legends of Licensor or its suppliers contained on or in the Licensor Code.

2.3 Notice of Breach or Infringement.

Licensee shall notify Custodian immediately in writing when it becomes aware of any breach or violation of the terms of this Agreement.

2.4 Ownership.

Licensor retains all right, title and interest in and to the Licensor Code, including any upgrades thereto provided hereunder.

2.5 No Other Grant.

Licensee acknowledges that this Agreement does not grant any right or license, under any intellectual property rights of the other party, or otherwise, except as expressly provided in this Agreement, and no other right or license is to be implied by or inferred from any provision of this Agreement or by the conduct of the parties.

For example, no right, title, or interest in or to any trademarks, service marks or trade names of Licensor or Licensor's licensors is granted under this Agreement.

2.6 Support.

Custodian's obligations to Licensee, if any, with respect to the provision of any support or administrative services concerning the Licensor Code, including access

to any subsequent releases of the Licensor Code, shall be as set forth in a separate agreement between Custodian and Licensee. Neither Custodian nor Licensor shall incur any such obligations by virtue of this Agreement.

2.7 Use of Contractors.

Licensee may provide the Licensor Code to a contractor for the limited purpose of assisting the contractor in performing services for Licensee to develop, test and self-certify Implementations in accordance with the DVB MHP Conformance Testing Requirements. Such contractor must have executed an agreement with Licensee that is consistent with Licensee's rights and obligations under this Agreement.

Article 3 - LIMITED WARRANTY AND DISCLAIMER

The Licensor Code is licensed "AS IS" AND ALL REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT ARE HEREBY DIS-CLAIMED.

Article 4 - CONFIDENTIAL INFORMATION

4.1 Confidential Information.

For the purposes of this Agreement, "Confidential Information" shall include the Licensor Code, as well as any documentation thereto that is clearly marked as "Confidential" or a similar expression.

4.2 Preservation of Confidentiality.

Licensee agrees that the Confidential Information shall be used solely for the purpose specified in Article 2.1, and agrees to keep the Confidential Information strictly confidential and shall not disclose it to any other person except to an Affiliate and to its employees, or contractors pursuant to Section 2.7 above, who:

- (i) under the terms of their employment by or contractor relationship with the Licensee are subject to an obligation not to disclose confidential information of the Licensee;
- (ii) who have a "need to know" for the purposes specified in Article 2.1; and
- (iii) and are made aware of the requirements of this Article 4.

4.3 Standard of Care.

Licensee shall protect the Confidential Information with the same degree of care as it normally uses in the protection of its own confidential and proprietary information, but in no case with any less degree than reasonable care. Licensee shall, at the Custodian's reasonable request, provide written assurances concerning the steps taken by Licensee and its Affiliates to preserve the confidentiality of Confidential Information.

4.4 Identity of Licensee.

Licensee acknowledges that Custodian is obligated not to disclose Licensee's identity to Licensor except at the instruction of the Chairman of the DVB Steering Board or in the event that Licensor provides Custodian in good faith with reasonable grounds for believing that Licensee may be in violation of its obligations hereunder.

Article 5 - LIMITATION OF LIABILITY

IN NO EVENT SHALL LICENSOR OR CUSTODIAN BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT (INCLUDING LOSS OF PROFITS, USE, DATA, OR OTHER ECONOMIC ADVANTAGE), NO MATTER WHAT THEORY OF LIABILITY, EVEN IF LICENSOR OR CUSTODIAN HAS BEEN ADVISED OF THE POSSIBILITY OR PROBABILITY OF SUCH DAMAGES. FURTHER, LIABILITY FOR SUCH DAMAGE ON THE PART OF LICENSOR OR CUSTODIAN SHALL BE EXCLUDED, EVEN IF THE EXCLUSIVE REMEDIES PROVIDED FOR IN THIS AGREEMENT FAIL OF THEIR ESSENTIAL PURPOSE. The provisions of this Article 5

allocate the risks under this Agreement between Licensor and Custodian, on the one hand, and Licensee on the other hand, and the parties have relied upon the limitations set forth here-in in determining whether to enter into this Agreement.

Article 6 - TERM AND TERMINATION

6.1 Term.

The Term of this Agreement shall begin on the Effective Date and shall continue unless and until terminated pursuant to this Article 6. Termination of this Agreement shall not relieve Licensee of any of its obligations hereunder.

6.2 Basis for Termination.

This Agreement may be terminated upon notice given by the Custodian upon the occurrence of any of the following events:

- a. the Licensee or any of its Affiliates breaches any of the terms hereof; or
- b. there is a voluntary or involuntary filing of bankruptcy by, or similar event affecting, Licensee.

6.3 Effect of Termination.

On the occurrence of termination for any reason under this agreement, Licensee shall forthwith cease its use of the Licensor Code and return to the Custodian all Confidential Information in written, electronic or magnetic form and any copies thereof.

6.4 No Liability for Termination.

Neither party shall have the right to recover damages or to indemnification of any nature, whether by way of lost profits, expenditures for promotion, payment for goodwill or otherwise made in connection with the business contemplated by this Agreement, due to the permitted or lawful termination of this Agreement. EACH PARTY WAIVES AND RELEASES THE OTHER FROM ANY CLAIM TO COMPENSATION OR INDEMNITY FOR TERMINATION OF THE BUSINESS RE-LATIONSHIP UNLESS TERMINATION IS IN MATERIAL BREACH OF THIS AGREEMENT.

6.6 No Waiver.

The failure of either party to enforce any provision of this Agreement shall not be deemed a waiver of that provision. The rights of Licensor under this Article 6 are in addition to any other rights and remedies permitted by law or under this Agreement.

6.7 Survival.

The parties' rights and obligations under Articles 3, 4 and 5 shall survive expiration or termination of this Agreement.

6.8 Irreparable Harm.

The parties acknowledge that a material breach of Articles 2 and/ or 4 would cause irreparable harm, the extent of which would be difficult to ascertain. Accordingly, they agree that, in addition to any other legal remedies to which a non-breaching party might be entitled, such party shall be entitled to obtain immediate injunctive relief in the event of a breach of the provisions of such Articles.

Article 7 – MISCELLANEOUS

7.1 Governing Law.

This Agreement is made under and shall be governed by and construed under the laws of the State of California, regardless of its choice of laws provisions.

7.2 Compliance with Laws.

The Licensor Code is subject to U.S. export control laws, including the U.S. Export Administration Act and its associated regulations, and may be subject to export or import regulations in other countries. Licensee agrees to comply strictly with all such regulations and acknowledges that it has the responsibility to obtain such

licenses to export, re-export or import the Technology, Documentation or Product(s) as may be required after delivery to Licensee.

7.3 Assignment.

The Custodian may upon notice to the Licensee assign this Agreement to a replacement custodian which shall have the rights and obligations as the Custodian hereunder. Licensor may assign its rights and obligations hereunder upon notice the Custodian.

7.4 Enforcement.

Licensee agrees that, in addition to the Custodian, Licensor shall have the right to enforce this Agreement.

7.5 Complete Understanding.

This Agreement, including Exhibits A, B and C (the Common Annex to the Test Suite License, Patent License, and Code License) hereto, constitutes and expresses the final, complete and exclusive agreement and understanding between Licensee and the Custodian, and between Licensee and Licensor, with respect to its subject matter (that is, the granting of licenses under Licensor’s applicable intellectual property rights [which shall exclude any trademarks] through the Custodian concerning the use of the Licensor Code), and supersede all previous communications, representations or agreements, whether written or oral, with respect to the subject matter hereof.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives.

Custodian:

Licensee:

By: _____

By: _____

—

Name: _____

Name: _____

(Print or Type)(Print or Type)

—

Title: _____

Title: _____

—

Date: _____

Date: _____

—

EXHIBIT A TO DVB MHP CODE LICENSE AND NON-DISCLOSURE AGREEMENT

Form of DVB MHP Test Suite License and Non-Disclosure Agreement, see item 5.1.1

**EXHIBIT B TO DVB MHP CODE LICENSE AND NON-DISCLOSURE AGREEMENT
Certificate of Assurance**

[DATE]

To the Custodian under the DVB Conformance Testing Custodian Agreement:

European Telecommunications Standards Institute
650 Route des Lucioles
06921 Sophia Antipolis, FRANCE

Ladies and Gentlemen:

Certificate of Assurance of DVB Full Implementer

We hereby deliver this Certificate under one or more of the following Agreements, in each case between us and you, as Custodian named by Sun Microsystems, Inc: The DVB MHP Test Suite License and Non-Disclosure Agreement; The DVB MHP Code License and Non-Disclosure Agreement; the DVB MHP Test Harness License and Non-Disclosure Agreement; the DVB MHP Patent License Agreement; and the DVB MHP \$1 Patent License Agreement. In this Certificate, "Agreement" means one or more of such agreements; and all capitalized terms in this Certificate, unless otherwise defined, have the same meaning as in the Agreement.

We hereby represent and warrant that

- (A) we are a DVB MHP Full Implementer;
- (B) we have entered into a DVB MHP Test Suite License and Non-Disclosure Agreement;
- (C) this is the Certificate of Assurance to be provided to the Custodian under the Agreement; and
- (D) this Certificate has been prepared and signed by a person who is properly authorised to sign it.

We further acknowledge that any license granted by Licensor in respect of a less-than-complete implementation of the Licensor Portion is expressly limited in its scope to integration into and distribution as part of an Implementation.

An entity which delivers an Incomplete Implementation to us, as a DVB MHP Full Implementer, is entitled to rely on this Certificate. If the Incomplete Implementation integrates Incomplete Implementations produced by other entities, such other entities may also rely on this Certificate.

Sincerely yours,

DVB MHP FULL IMPLEMENTER
by: _____
its

**EXHIBIT C TO DVB MHP CODE LICENSE AND NON-DISCLOSURE AGREEMENT
Common Annex to the Test Suite License, Patent License, and Code
License**

See Exhibit C to item 5.1.1 "DVB MHP TEST SUITE LICENSE AND NON-DISCLOSURE AGREEMENT"

5.1.3 DVB MHP JavaTest License Agreement

BETWEEN:

- (1) European Telecommunications Standards Institute, as Custodian (the "Custodian") named by Sun Microsystems, Inc., ("Licensor") and
- (2) the company whose name appears on the signature page hereof (the "Licensee");

WHEREAS:

- i) The Custodian has entered into the DVB Conformance Testing Custodian Agreement with the DVB Project, a not for profit association with legal personality governed by Swiss law, and Licensor;
- ii) By a decision of its Steering Board the DVB Project has adopted a specification for the Multimedia Home Platform, and the Steering Board has issued its Declaration with respect to certain DVB MHP Rules, the arrangements for a custodian and an experts group, testing and certain other matters;
- iii) The Custodian has been appointed by the DVB Project to undertake a variety of activities related to the administration of the DVB MHP Conformance Testing Requirements (as defined below) as specified and approved by an experts group named by the DVB Project;
- iv) Licensee has entered into, or expects to enter into, a DVB MHP Test Suite License and Non-Disclosure Agreement with the Custodian ("Test Suite Agreement"); and
- v) Licensor, with Custodian acting as Licensor's agent, is willing to license a test harness and certain related software to Licensee for use in conjunction with Licensee's testing and self-certifying Implementations of the DVB MHP Specification pursuant to the Test Suite Agreement.

IT IS HEREBY AGREED AS FOLLOWS:

Article 1 - DEFINITIONS

Terms defined in the Test Suite Agreement shall have the same meaning when used in this Agreement. In addition, for the purposes of this Agreement "*JavaTest Software*" means Licensor's JavaTest TM and JavaTest Harness software, and related documentation as provided by Licensor to Custodian in binary code form, including any updates or revisions to such software and documentation as provided by Licensor in its sole discretion.

Article 2 - LICENSE GRANT

2.1 License Grant.

Conditioned upon Licensee's full compliance with the obligations set forth in this Article 2, the Custodian, on behalf of Licensor as licensor, hereby grants, as of the Effective Date, to the Licensee under Licensor's applicable intellectual property rights (excluding trademarks) a limited, non-exclusive, non-transferable, worldwide, royalty-free right and license to use the JavaTest Software in conjunction with and to the same extent to which Licensee is licensed under to use the Test Suites pursuant to the Test Suite Agreement. Except as otherwise provided by law, Licensee may not modify or create derivative works of the JavaTest Software, or disassemble, decompile or otherwise attempt to derive the source code of the JavaTest Software.

2.2 Notice of Breach or Infringement.

Licensee shall notify Custodian immediately in writing when it becomes aware of any breach or violation of the terms of this Agreement.

2.3 Ownership.

Licensor retains all right, title and interest in and to the JavaTest Software, including any upgrades thereto provided hereunder.

2.4 Support.

Neither Custodian nor Licensor shall incur any such obligations by virtue of this Agreement to provide any support or administrative services concerning the JavaTest Software, including access to any subsequent releases of the JavaTest Software.

2.5 Use of Contractors.

Licensee may provide the JavaTest Software to a contractor when, and to the same extent to which, Licensee provides the Test Suites to such contractor for the limited purpose of assisting the contractor in performing services for Licensee to develop, test and self-certify Implementations in accordance with the DVB MHP Conformance Testing Requirements.

2.6 No Other Grant.

Licensee acknowledges that this Agreement does not grant any right or license, under any intellectual property rights of the other party, or otherwise, except as expressly provided in this Agreement, and no other right or license is to be implied by or inferred from any provision of this Agreement or by the conduct of the parties. For example, no right, title, or interest in or to any trademarks, service marks or trade names of Licensor or Licensor's licensors is granted under this Agreement.

Article 3 - LIMITED WARRANTY AND DISCLAIMER

THE JavaTest SOFTWARE IS LICENSED "AS IS" AND ALL REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT ARE HEREBY DIS-CLAIMED.

Article 4 - IDENTITY OF LICENSEE

Licensee acknowledges that Custodian is obligated not to disclose Licensee's identity to Licensor except at the instruction of the Chairman of the DVB Steering Board or in the event that Licensor provides Custodian in good faith with reasonable grounds for believing that Licensee may be in violation of its obligations hereunder.

Article 5 - LIMITATION OF LIABILITY

IN NO EVENT SHALL LICENSOR OR CUSTODIAN BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT (INCLUDING LOSS OF PROFITS, USE, DATA, OR OTHER ECONOMIC ADVANTAGE), NO MATTER WHAT THEORY OF LIABILITY, EVEN IF EITHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OR PROBABILITY OF SUCH DAMAGES. FURTHER, LIABILITY FOR SUCH DAMAGE SHALL BE EXCLUDED, EVEN IF THE EXCLUSIVE REMEDIES PROVIDED FOR IN THIS AGREEMENT FAIL OF THEIR ESSENTIAL PURPOSE. The provisions of this Article 5 allocate the risks under this Agreement between Licensor and Custodian, on the one hand, and Licensee on the other hand, and the parties have relied upon the limitations set forth herein in determining whether to enter into this Agreement.

Article 6 - TERM AND TERMINATION

6.1 Term.

This Agreement shall begin on the Effective Date and shall continue unless and until the earlier of:

- (i) termination of this Agreement pursuant to this Article 6; or
- (ii) termination of Licensee's Test Suite Agreement.

6.2 The license granted in Section 2.1 of this Agreement may be terminated by Licensor upon written notice given by the Custodian upon the occurrence of any of the following events:

- a. the Licensee or any of its Affiliates breaches any of the terms hereof or uses the JavaTest Software outside the scope of the license granted in Section 2.1; or
- b. there is a voluntary or involuntary filing of bankruptcy by, or similar event affecting, Licensee.

6.3 Effect of Termination.

Upon termination of this Agreement, for any reason, Licensee shall forthwith cease its use of the JavaTest Software.

6.4 No Liability for Expiration or Lawful Termination.

Neither party shall have the right to recover damages or to indemnification of any nature, whether by way of lost profits, expenditures for promotion, payment for goodwill or otherwise made in connection with the business contemplated by this Agreement, due to the expiration or permitted or lawful termination of this Agreement.

EACH PARTY WAIVES AND RELEASES THE OTHER FROM ANY CLAIM TO COMPENSATION OR INDEMNITY FOR TERMINATION OF THE BUSINESS RELATION-SHIP UNLESS TERMINATION IS IN MATERIAL BREACH OF THIS AGREEMENT.

6.5 No Waiver.

The failure of either party to enforce any provision of this Agreement shall not be deemed a waiver of that provision. The rights of Licensor under this Article 6 are in addition to any other rights and remedies permitted by law or under this Agreement.

6.6 Irreparable Harm.

The parties acknowledge that a material breach of Article 2 would cause irreparable harm, the extent of which would be difficult to ascertain. Accordingly, they agree that, in addition to any other legal remedies to which a non-breaching party might be entitled, such party shall be entitled to obtain immediate injunctive relief in the event of a breach of the provisions of such Articles.

Article 7 - MISCELLANEOUS1

7.1 Governing Law.

This Agreement is made under and shall be governed by and construed under the laws of the State of California, regardless of its choice of laws provisions.

7.2 Compliance with Laws.

The JavaTest Software is subject to U.S. export control laws, including the U.S. Export Administration Act and its associated regulations, and may be subject to export or import regulations in other countries. Licensee agrees to comply strictly with all such regulations and acknowledges that it has the responsibility to obtain such licenses to export, re-export or import the Technology, Documentation or Product(s) as may be required after delivery to Licensee.

7.3 Assignment.

The Custodian may upon notice to the Licensee assign this Agreement to a replacement custodian which shall have the rights and obligations as the Custodian hereunder. Licensor may assign its rights and obligations hereunder upon notice the Custodian.

7.4 Enforcement.

Licensee agrees that, in addition to the Custodian, Licensor shall have the right to enforce this Agreement.

7.5 Complete Understanding.

This Agreement, including any terms or provisions of the Test Suite Agreement expressly referenced by this Agreement, constitutes and expresses the final, complete and exclusive agreement and understanding between Licensee and the Custodian, and between Licensee and Licensor, with respect to its subject matter (that is, the granting of licenses under Licensor’s applicable intellectual property rights, which shall exclude any trademarks, to use the JavaTest Software with respect to testing and self-certifying Implementations and testing Incomplete Implementations that are subsequently integrated into and distributed as part of an Implementation distributed by a DVB MHP Full Implementer), and supersede all previous communications, representations or agreements, whether written or oral, with respect to the subject matter hereof.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives.

Custodian:

Licensee:

By: _____

By: _____

—

Name: _____

Name: _____

(Print or Type)(Print or Type)

—

Title: _____

Title: _____

—

Date: _____

Date: _____

—

5.1.4 Sun's Clarification with respect to the Rules and Procedures of the MHP Experts Group

[Excerpt of letter of Sun Microsystems, Inc, dated 24 October 2000, addressed to the European Telecommunications Standards Institute and to the DVB Project Office]

"In addition, we confirm to you, in respect of the Rules and Procedures of the DVB MHP Expert Group that we have assumed that the process of interaction between the MHP Experts Group and Sun set out in Paragraph 14 would be used to address allegations that a particular Test Application fails to meet the criteria specified in MHP Expert Group Rules 18 through 21, whether the allegation was made before or after adoption of the Test Suite submitted by Sun. Sun would continue to participate in that process, provided that the MHP Experts Group remains constituted and available to serve its specified purpose. In case of doubt or inconsistency between this paragraph and the Rules and Procedure, this further paragraph prevails."

5.2 MHP Test Consortium

5.2.1 MHP Test Consortium Test Suite License and Non-Disclosure Agreement

BETWEEN:

- (1) **European Telecommunications Standards Institute**, a standards-making organisation recognised by the European Union with its headquarters at 650 Route des Lucioles, 06921 Sophia Antipolis, France (the "**Custodian**") and as agreed to by **Sony United Kingdom Limited** acting on behalf of the **MHP Test Consortium** (the "**Licensor**"); and
- (2) The **Company** whose name appears on the signature page hereof (the "**Licensee**").

WHEREAS:

- A.** The Custodian has entered into a DVB Conformance Testing Custodian Agreement (the "Custodian Agreement") with (i) the DVB Project, a not for profit organisation with legal personality governed by Swiss law; and (ii) one or more rights holders; the Licensor has given to the Custodian a letter of instruction relating to this Agreement and consistent with the Custodian Agreement;
- B.** By a decision of its Steering Board the DVB Project has adopted a specification for the Multimedia Home Platform (the "DVB MHP Specification", as further defined below), and its Steering Board has issued a "Declaration" in relation to certain DVB MHP Rules, the arrangements for a custodian and an experts group, testing and certain other matters;
- C.** The Custodian has been appointed by the DVB Project to undertake a variety of activities related to the administration of the Conformance Testing Requirements (as defined below) as specified and approved by an experts group named by the DVB Project; and
- D.** The MHP Test Consortium is the owner of, or the members collectively have license rights to, certain Test Suites and related materials (as defined below). The MHP Test Consortium currently consists of Licensor, Philips Consumer Electronics B.V., Panasonic European Laboratories GmbH, Nokia Corporation, Canal+ Technologies, Institut fur Rundfunktechnik GmbH, Alticast Corporation and Convergence GmbH.
- E.** The Licensor acting through its agent the Custodian, is willing (and authorised by the MHP Test Consortium) to license the Test Suites to the Licensee for the limited purpose of testing and self-certifying of Implementations (as defined below) of the DVB MHP Specification.

NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

1. DEFINITIONS

In this Agreement, unless inconsistent with the context or otherwise specified, the following definitions shall apply.

"Affiliate"	means any subsidiary or parent company of the Licensee, as well as any entity that owns or controls the Licensee or that is owned or controlled by the Licensee.
--------------------	--

“Agreement”	means the provisions of this MHP Test Consortium test suite license and non-disclosure agreement.
“Conformance Testing Requirements”	means the test programs, rules, guides, documentation and other materials determined by the DVB Project to be used for establishing whether an implementation of the DVB MHP Specification may be certified as an Implementation.
“DVB MHP Specification”	(or otherwise referred to as the “Specification”) means the DVB Multimedia Home Platform specification as adopted by the Steering Board of the DVB Project on the date of its first adoption under specification number MHP 1.0, and as such Specification may be amended from time to time by the DVB Project.
“DVB MHP Implementer”	means a legal entity that has (i) produced and Implementation; (ii) entered into an MHP Test Consortium Test Suite License and Non-Disclosure Agreement identical (except for the identity of the Licensee) to this Agreement; (iii) completed and satisfied the Conformance Testing Requirements delivered to the Implementer by the Custodian and (iv) has provided to the Custodian the Certificate of Completion of the Conformance Testing attached as Annex A to the Custodian Agreement.
“Effective Date”	means the date of signature of this Agreement.
“Implementation”	means an implementation of the Specification that (i) fully implements the appropriate profile of the Specification with the possible exception of options, (ii) implements all required interfaces and functionality of the Specification; and (iii) fully satisfies the Conformance Testing Requirements, including, but not limited to, any self-certification requirement.
“Incomplete Implementation”	means an implementation of the Specification that implements less than all the required interfaces and functionality of the Specification and/or that does not fully satisfy the Conformance Testing Requirements.
“Term”	means the term of this Agreement as specified in Clause 7.
“Test Suites”	means the test suites licensed hereunder, as may be revised by the Licensor during the Term, that are licensed by the Licensor to the Custodian, and included by the Custodian as part of the Conformance Testing Requirements.

2. LICENSE GRANTS

- 2.1 Subject to the terms of this Agreement, the Licensor hereby grants, as of the Effective Date, to the Licensee, a limited, non-exclusive, non-transferable, world-wide, royalty-free license to use the Test Suites. This grant is solely for the purpose of testing and self-certifying Implementations in accordance with the Conformance Testing Requirements, which shall include the right to test Incomplete Implementations that are delivered to an Implementer for subsequent integration and distribution as part of an Implementation distributed by such

Implementer. Licensee need not require such Implementer to integrate and distribute an Incomplete Implementation as part of an Implementation, but Licensee shall not authorise the Implementer to distribute Licensee's Incomplete Implementation unless it is integrated into and distributed as part of an Implementation.

- 2.2 Nothing in the foregoing shall be understood to grant a license for the Licensee to use the Test Suites in any other manner than as set out in Clause 2.1 or to sub-license the Test Suites.
- 2.3 The Licensor reserves every right to take legal action against the Licensee if the Licensee uses the Test Suites in breach of this Agreement or outside the scope of the licenses granted herein. Similarly, the Licensee reserves every right to take legal action to preserve its rights with respect to the use of the Test Suites.
- 2.4 For the avoidance of doubt the Licensee acknowledges and agrees that it is not licensed hereunder to:
 - (a) distribute the Test Suites to any third party; or
 - (b) modify or create derivative works of the Test Suites, or, except as otherwise provided by law, disassemble or decompile binary portions of the Test Suites, or otherwise attempt to derive the source code from such portions; or
 - (c) use the Test Suites, or any portion thereof, to develop other test programs or test applications or suites intended to validate compatibility with the MHP Specification, or any portion thereof.
- 2.5 No license is granted hereunder with respect to Incomplete Implementations that are delivered to any third party other than an Implementer for subsequent integration and distribution as part of an Implementation distributed by such Implementer.

3. PROPRIETARY RIGHTS

- 3.1 Except to the extent that such rights are granted under this Agreement, the Licensee shall not acquire any title, copyright or other proprietary rights in the Test Suites or any copies thereof.
- 3.2 The Licensee undertakes and agrees not to remove, suppress or modify in any way any proprietary marking, including any trade mark or copyright notice, on or in the Test Suites if in source code form.
- 3.3 The Licensee shall notify the Custodian immediately if the Licensee becomes aware of any unauthorised access to, use or copying of the Test Suites by any person or any other breach or violation of the terms of this Agreement.
- 3.4 The Licensor retains all right title and interest in and to the Test Suites, including any upgrades to the Test Suites.
- 3.5 Neither the Custodian nor the Licensor shall incur any obligations by virtue of this Agreement to provide any support or administrative services concerning the Test Suites, including access to any subsequent releases of the Test Suites.
- 3.6 The Licensee may provide the Test Suites to a contractor for the limited purpose only of assisting the contractor in performing services for the Licensee to develop, test and self-certify Implementations in accordance with the Conformance Testing Requirements. This contractor must have executed an agreement with the Licensee that is consistent with the Licensee's rights and obligations under this Agreement. _ Licensee shall assume responsibility for any such contractor to the extent necessary in order protect the interests of Licensor in accordance with this Agreement.

- 3.6 The Licensee acknowledges that this Agreement does not grant any right or license under any intellectual property rights of the Licensor, or otherwise, except as expressly provided for in this Agreement, and no other right or license is to be implied or inferred from any provision of this Agreement or by the conduct of the parties. For example, no right, title or interest in or to any patents, trademarks, service marks or trade names of the Licensor or the Licensor's licensors is granted under this Agreement.

4. LIMITED WARRANTY

THE TEST SUITES ARE LICENSED "AS IS" AND ALL REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT ARE HEREBY DISCLAIMED.

5. CONFIDENTIALITY

- 5.1 The Licensee hereby acknowledges that the Test Suites, and in particular, but without the limitation, the source code, contain confidential information of the Licensor. The Licensee undertakes to keep confidential all information contained in or otherwise received from the Licensor in connection with the Test Suites (the "Confidential Information").
- 5.2 The Licensee hereby agrees that the Confidential Information shall be used solely for the purposes specified in Clause 2.1 above, and agrees to keep the Confidential Information strictly confidential at all times and shall not disclose it to any person except to an Affiliate and to its employees (who under the terms of their employment by the Licensee are subject to an obligation not to disclose confidential information of the Licensee), and who have a "need to know" for the purposes specified in Clause 2.1 and are made aware of the requirements of this Clause 5.
- 5.3 The Licensee shall protect the Confidential Information with the same degree of care as it normally uses in the protection of its own confidential and proprietary information, but in no case with any lesser degree than reasonable care. The Licensee shall, at the Custodian's reasonable request, provide written assurances concerning the steps taken by the Licensee and its Affiliates to preserve the confidentiality of the Confidential Information.
- 5.4 The Licensee acknowledges that the Custodian is obligated not to disclose the Licensee's identity to the Licensor except at the instruction of the Chairman of the DVB Steering Board or in the event that the Licensor provides the Custodian in good faith with reasonable grounds for believing that the Licensee may be in violation of its obligations hereunder.
- 5.5 The terms of this Clause 5 shall survive termination of this Agreement.

6. LIMITATION OF LIABILITY

IN NO EVENT SHALL THE LICENSOR OR THE CUSTODIAN BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE LOSSES OR DAMAGES OF ANY KIND WHATSOEVER AND HOWSOEVER CAUSED, WHETHER ARISING UNDER CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, INCLUDING (WITHOUT LIMITATION) LOSS OF PRODUCTION, LOSS OF OR CORRUPTION TO DATA, LOSS OF PROFITS OR OF CONTRACTS, LOSS OF OPERATION TIME AND LOSS OF GOODWILL OR ANTICIPATED SAVINGS. The parties acknowledge that they have relied upon the limitations set forth in this Clause in determining whether to enter into this Agreement.

7. TERM AND TERMINATION

- 7.1 The term of this Agreement shall begin on the Effective Date and shall continue unless and until the earlier of:
- (a) termination of this Agreement pursuant to this Clause 7; or

- (b) the Test Suites cease to be included as part of the Conformance Testing Requirements.

Termination of this Agreement shall in no way relieve the Licensee from any of its obligations under this Agreement.

7.2 The License granted pursuant to Clause 2.1 of this Agreement can be terminated by the Licensor upon written notice given by the Custodian upon the occurrence of the following events:

- (a) the Licensee or any of its Affiliates breaches any of the terms hereof or uses the Test Suites outside of the scope of the license granted hereunder; or
- (b) the Licensee shall convene any meeting of creditors or pass a resolution for winding up or suffer a petition for winding up; or
- (c) the Licensee shall have an administrative receiver or receiver appointed over the whole or part of its assets or suffer the appointment of an administrator; or
- (d) the Licensee, being an individual commits any act of bankruptcy or compounds with his creditors or comes to any arrangements with any creditors.

7.3 Upon termination of this Agreement, for any reason whatsoever, the Licensee shall forthwith cease its use of the Test Suites and return to the Custodian all Confidential Information in written, electronic or magnetic form and any copies thereof.

7.4 None of the parties shall have the right to recover damages or to indemnification of any nature, whether by way of lost profits, expenditures for promotion, payment for goodwill or otherwise made in connection with the business contemplated by this Agreement, due to the expiration or permitted or lawful termination of this Agreement. EACH PARTY WAIVES AND RELEASES THE OTHERS FROM ANY CLAIM TO COMPENSATION OR INDEMNITY FOR TERMINATION OF THE BUSINESS RELATIONSHIP UNLESS TERMINATION IS IN MATERIAL BREACH OF THIS AGREEMENT.

8. FORCE MAJEURE

None of the parties shall be liable for any delay in performing or failure to perform its obligations (other than a payment obligation) under this Agreement due to any cause outside its reasonable control. Such delay or failure shall not constitute a breach of this Agreement and the time for performance of the affected obligation shall be extended by such period as is reasonable.

9. ASSIGNMENT

The Licence is personal to the Licensee and the Licensee may not assign or otherwise transfer its rights or obligations under this Agreement.

The Custodian may upon notice to the Licensee assign this Agreement to a replacement custodian who shall have the same rights and obligations as the Custodian hereunder.

The Licensor may assign its rights and obligations hereunder upon notice to the Custodian.

10. NOTICES

All notices which are required to be given under this Agreement shall be in writing and shall be sent to the address of the recipient set out elsewhere in this Agreement or such other address as the recipient may designate by notice given in accordance with this Clause. Any such notice may be delivered personally, by first class pre-paid letter or facsimile transmission and shall be deemed to have been received:-

- (a) By hand delivery - at the time of delivery.

- (b) By first class post – forty-eight (48) hours after the date of mailing;
- (c) By facsimile, immediately on transmission provided a confirmatory copy is sent by first class pre-paid post or by hand by the end of the next business day.

11. SEVERABILITY

If any part of this Agreement is found by a court of competent jurisdiction or other competent authority to be invalid, unlawful or unenforceable then such part shall be severed from the remainder of this Agreement which shall continue to be valid and enforceable to the fullest extent permitted by law.

12. IRREPERABLE HARM

The Parties acknowledge that a material breach of Articles 2 and/or 5 would cause irreparable harm, the extent of which would be difficult to ascertain. Accordingly, they agree that, in addition to any other legal remedies to which a non-breaching party might be entitled, such party shall be entitled to obtain immediate injunctive relief in the event of a breach of the provisions of such Articles.

13. WAIVER

No waiver of any breach of this Agreement shall constitute a waiver of any other breach of the same or other provisions of this Agreement and no waiver shall be effective unless made in writing.

14. ENTIRE AGREEMENT

- 14.1 This Agreement is the complete and exclusive statement of the agreement between the parties relating to the subject matter of the Agreement and supersedes all previous communications, representations and arrangements, written or oral. The Licensee acknowledges that no reliance is placed on any representation made but not embodied in this Agreement.

14.2 Except as otherwise permitted by this Agreement, no change to its terms shall be effective unless it is in writing and signed by persons authorised on behalf of the parties.

15. GOVERNING LAW

This Agreement shall be construed in accordance with and governed by the Laws of England and each party agrees to submit to the non-exclusive jurisdiction of the English Courts. Headings have been included for convenience only and shall not be used in construing any provision herein.

EXECUTION:

SIGNED on behalf of the

Licensee

By:

.....

Name:

.....

Title:

.....

Address:

Facsimile:

SIGNED on behalf of the

Custodian

By:

.....

Name:

.....

Title:

.....

5.2.2 MHP Test Consortium HAVi Test Suite License and Non-Disclosure Agreement

BETWEEN:

- (1) **European Telecommunications Standards Institute**, a standards-making organisation recognised by the European Union with its headquarters at 650 Route des Lucioles, 06921 Sophia Antipolis, France (the "Custodian") and as agreed to by **Panasonic European Laboratories GmbH** acting on behalf of the **MHP Test Consortium** (the "Licensor"); and
- (2) The Company whose name appears on the signature page hereof (the "Licensee").

WHEREAS:

- A. The Custodian has entered into a DVB Conformance Testing Custodian Agreement (the "Custodian Agreement") with (i) the DVB Project, a not for profit organisation with legal personality governed by Swiss law; and (ii) one or more rights holders; the Licensor has given to the Custodian a letter of instruction relating to this Agreement and consistent with the Custodian Agreement;
- B. By a decision of its Steering Board the DVB Project has adopted a specification for the Multimedia Home Platform (the "DVB MHP Specification", as further defined below), and its Steering Board has issued a "Declaration" in relation to certain DVB MHP Rules, the arrangements for a custodian and an experts group, testing and certain other matters;
- C. The Custodian has been appointed by the DVB Project to undertake a variety of activities related to the administration of the Conformance Testing Requirements (as defined below) as specified and approved by an experts group named by the DVB Project; and
- D. The MHP Test Consortium is the owner of, or the members collectively have license rights to, certain Test Suites and related materials (as defined below). The MHP Test Consortium currently consists of Licensor, Philips Consumer Electronics B.V., Sony United Kingdom Limited, Nokia Corporation, Canal+ Technologies, Institut fur Rundfunktechnik GmbH, Alticast Corporation and Convergence GmbH.
- E. The Licensor acting through its agent the Custodian, is willing (and authorised by the MHP Test Consortium) to license the Test Suites to the Licensee for the limited purpose of testing and self-certifying of Implementations (as defined below) of the DVB MHP Specification.

NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

1. DEFINITIONS

In this Agreement, unless inconsistent with the context or otherwise specified, the following definitions shall apply.

- | | |
|---|--|
| "Affiliate" | means any subsidiary or parent company of the Licensee, as well as any entity that owns or controls the Licensee or that is owned or controlled by the Licensee. |
| "Agreement" | means the provisions of this MHP Test Consortium test suite license and non-disclosure agreement. |
| "Conformance Testing Requirements" | means the test programs, rules, guides, documentation and other materials determined by |

the DVB Project to be used for establishing whether an implementation of the DVB MHP Specification may be certified as an Implementation.

“DVB MHP Specification”	(or otherwise referred to as the “Specification”) means the DVB Multimedia Home Platform specification as adopted by the Steering Board of the DVB Project on the date of its first adoption under specification number MHP 1.0, and as such Specification may be amended from time to time by the DVB Project.
“DVB MHP Implementer”	means a legal entity that has (i) produced and Implementation; (ii) entered into an MHP Test Consortium Test Suite License and Non-Disclosure Agreement identical (except for the identity of the Licensee) to this Agreement; (iii) completed and satisfied the Conformance Testing Requirements delivered to the Implementer by the Custodian and (iv) has provided to the Custodian the Certificate of Completion of the Conformance Testing attached as Annex A to the Custodian Agreement.
“Effective Date”	means the date of signature of this Agreement.
“Implementation”	means an implementation of the Specification that (i) fully implements the appropriate profile of the Specification with the possible exception of options, (ii) implements all required interfaces and functionality of the Specification; and (iii) fully satisfies the Conformance Testing Requirements, including, but not limited to, any self-certification requirement.
“Incomplete Implementation”	means an implementation of the Specification that implements less than all the required interfaces and functionality of the Specification and/or that does not fully satisfy the Conformance Testing Requirements.
“Term”	means the term of this Agreement as specified in Clause 7.
“Test Suites”	means the test suites licensed hereunder, as may be revised by the Licensor during the Term, that are licensed by the Licensor to the Custodian, and included by the Custodian as part of the Conformance Testing Requirements.

2. LICENSE GRANTS

- 2.1 Subject to the terms of this Agreement, the Licensor hereby grants, as of the Effective Date, to the Licensee, a limited, non-exclusive, non-transferable, world-wide, royalty-free license to use the Test Suites. This grant is solely for the purpose of testing and self-certifying Implementations in accordance with the Conformance Testing Requirements, which shall include the right to test Incomplete Implementations that are delivered to an Implementer for subsequent integration and distribution as part of an Implementation distributed by such Implementer. Licensee need not require such Implementer to integrate and distribute an Incomplete Implementation as part of an Implementation, but Licensee shall not authorise the Implementer to distribute Licensee's Incomplete

Implementation unless it is integrated into and distributed as part of an Implementation.

- 2.2 Nothing in the foregoing shall be understood to grant a license for the Licensee to use the Test Suites in any other manner than as set out in Clause 2.1 or to sub-license the Test Suites.
- 2.3 The Licensor reserves every right to take legal action against the Licensee if the Licensee uses the Test Suites in breach of this Agreement or outside the scope of the licenses granted herein. Similarly, the Licensee reserves every right to take legal action to preserve its rights with respect to the use of the Test Suites.
- 2.4 For the avoidance of doubt the Licensee acknowledges and agrees that it is not licensed hereunder to:
 - (a) distribute the Test Suites to any third party; or
 - (b) modify or create derivative works of the Test Suites, or, except as otherwise provided by law, disassemble or decompile binary portions of the Test Suites, or otherwise attempt to derive the source code from such portions; or
 - (c) use the Test Suites, or any portion thereof, to develop other test programs or test applications or suites intended to validate compatibility with the MHP Specification, or any portion thereof.
- 2.5 No license is granted hereunder with respect to Incomplete Implementations that are delivered to any third party other than an Implementer for subsequent integration and distribution as part of an Implementation distributed by such Implementer.

3. PROPRIETARY RIGHTS

- 3.1 Except to the extent that such rights are granted under this Agreement, the Licensee shall not acquire any title, copyright or other proprietary rights in the Test Suites or any copies thereof.
- 3.2 The Licensee undertakes and agrees not to remove, suppress or modify in any way any proprietary marking, including any trade mark or copyright notice, on or in the Test Suites if in source code form.
- 3.3 The Licensee shall notify the Custodian immediately if the Licensee becomes aware of any unauthorised access to, use or copying of the Test Suites by any person or any other breach or violation of the terms of this Agreement.
- 3.4 The Licensor retains all right title and interest in and to the Test Suites, including any upgrades to the Test Suites.
- 3.5 Neither the Custodian nor the Licensor shall incur any obligations by virtue of this Agreement to provide any support or administrative services concerning the Test Suites, including access to any subsequent releases of the Test Suites.
- 3.6 The Licensee may provide the Test Suites to a contractor for the limited purpose only of assisting the contractor in performing services for the Licensee to develop, test and self-certify Implementations in accordance with the Conformance Testing Requirements. This contractor must have executed an agreement with the Licensee that is consistent with the Licensee's rights and obligations under this Agreement. _ Licensee shall assume responsibility for any such contractor to the extent necessary in order protect the interests of Licensor in accordance with this Agreement.
- 3.7 The Licensee acknowledges that this Agreement does not grant any right or license under any intellectual property rights of the Licensor, or otherwise, except as expressly provided for in this Agreement, and no other right or license is to be implied or inferred from any provision of this Agreement or by the conduct of the parties. For example, no right, title or interest in or to any patents, trademarks,

service marks or trade names of the Licensor or the Licensor's licensors is granted under this Agreement.

4. LIMITED WARRANTY

THE TEST SUITES ARE LICENSED "AS IS" AND ALL REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT ARE HEREBY DISCLAIMED.

5. CONFIDENTIALITY

- 5.1 The Licensee hereby acknowledges that the Test Suites, and in particular, but without the limitation, the source code, contain confidential information of the Licensor. The Licensee undertakes to keep confidential all information contained in or otherwise received from the Licensor in connection with the Test Suites (the "Confidential Information").
- 5.2 The Licensee hereby agrees that the Confidential Information shall be used solely for the purposes specified in Clause 2.1 above, and agrees to keep the Confidential Information strictly confidential at all times and shall not disclose it to any person except to an Affiliate and to its employees (who under the terms of their employment by the Licensee are subject to an obligation not to disclose confidential information of the Licensee), and who have a "need to know" for the purposes specified in Clause 2.1 and are made aware of the requirements of this Clause 5.
- 5.3 The Licensee shall protect the Confidential Information with the same degree of care as it normally uses in the protection of its own confidential and proprietary information, but in no case with any lesser degree than reasonable care. The Licensee shall, at the Custodian's reasonable request, provide written assurances concerning the steps taken by the Licensee and its Affiliates to preserve the confidentiality of the Confidential Information.
- 5.4 The Licensee acknowledges that the Custodian is obligated not to disclose the Licensee's identity to the Licensor except at the instruction of the Chairman of the DVB Steering Board or in the event that the Licensor provides the Custodian in good faith with reasonable grounds for believing that the Licensee may be in violation of its obligations hereunder.
- 5.5 The terms of this Clause 5 shall survive termination of this Agreement.

6. LIMITATION OF LIABILITY

IN NO EVENT SHALL THE LICENSOR OR THE CUSTODIAN BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE LOSSES OR DAMAGES OF ANY KIND WHATSOEVER AND HOWSOEVER CAUSED, WHETHER ARISING UNDER CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, INCLUDING (WITHOUT LIMITATION) LOSS OF PRODUCTION, LOSS OF OR CORRUPTION TO DATA, LOSS OF PROFITS OR OF CONTRACTS, LOSS OF OPERATION TIME AND LOSS OF GOODWILL OR ANTICIPATED SAVINGS. The parties acknowledge that they have relied upon the limitations set forth in this Clause in determining whether to enter into this Agreement.

7. TERM AND TERMINATION

- 7.1 The term of this Agreement shall begin on the Effective Date and shall continue unless and until the earlier of:
 - (a) termination of this Agreement pursuant to this Clause 7; or
 - (b) the Test Suites cease to be included as part of the Conformance Testing Requirements.

Termination of this Agreement shall in no way relieve the Licensee from any of its obligations under this Agreement.

- 7.2 The License granted pursuant to Clause 2.1 of this Agreement can be terminated by the Licensor upon written notice given by the Custodian upon the occurrence of the following events:
- (a) the Licensee or any of its Affiliates breaches any of the terms hereof or uses the Test Suites outside of the scope of the license granted hereunder; or
 - (b) the Licensee shall convene any meeting of creditors or pass a resolution for winding up or suffer a petition for winding up; or
 - (c) the Licensee shall have an administrative receiver or receiver appointed over the whole or part of its assets or suffer the appointment of an administrator; or
 - (d) the Licensee, being an individual commits any act of bankruptcy or compounds with his creditors or comes to any arrangements with any creditors.
- 7.3 Upon termination of this Agreement, for any reason whatsoever, the Licensee shall forthwith cease its use of the Test Suites and return to the Custodian all Confidential Information in written, electronic or magnetic form and any copies thereof.
- 7.4 None of the parties shall have the right to recover damages or to indemnification of any nature, whether by way of lost profits, expenditures for promotion, payment for goodwill or otherwise made in connection with the business contemplated by this Agreement, due to the expiration or permitted or lawful termination of this Agreement. EACH PARTY WAIVES AND RELEASES THE OTHERS FROM ANY CLAIM TO COMPENSATION OR INDEMNITY FOR TERMINATION OF THE BUSINESS RELATIONSHIP UNLESS TERMINATION IS IN MATERIAL BREACH OF THIS AGREEMENT.

8. FORCE MAJEURE

None of the parties shall be liable for any delay in performing or failure to perform its obligations (other than a payment obligation) under this Agreement due to any cause outside its reasonable control. Such delay or failure shall not constitute a breach of this Agreement and the time for performance of the affected obligation shall be extended by such period as is reasonable.

9. ASSIGNMENT

The Licence is personal to the Licensee and the Licensee may not assign or otherwise transfer its rights or obligations under this Agreement.

The Custodian may upon notice to the Licensee assign this Agreement to a replacement custodian who shall have the same rights and obligations as the Custodian hereunder.

The Licensor may assign its rights and obligations hereunder upon notice to the Custodian.

10. NOTICES

All notices which are required to be given under this Agreement shall be in writing and shall be sent to the address of the recipient set out elsewhere in this Agreement or such other address as the recipient may designate by notice given in accordance with this Clause. Any such notice may be delivered personally, by first class pre-paid letter or facsimile transmission and shall be deemed to have been received:-

- (a) By hand delivery - at the time of delivery.
- (b) By first class post – forty-eight (48) hours after the date of mailing;

- (c) By facsimile, immediately on transmission provided a confirmatory copy is sent by first class pre-paid post or by hand by the end of the next business day.

11. SEVERABILITY

If any part of this Agreement is found by a court of competent jurisdiction or other competent authority to be invalid, unlawful or unenforceable then such part shall be severed from the remainder of this Agreement which shall continue to be valid and enforceable to the fullest extent permitted by law.

12. IRREPERABLE HARM

The Parties acknowledge that a material breach of Articles 2 and/or 5 would cause irreparable harm, the extent of which would be difficult to ascertain. Accordingly, they agree that, in addition to any other legal remedies to which a non-breaching party might be entitled, such party shall be entitled to obtain immediate injunctive relief in the event of a breach of the provisions of such Articles.

13. WAIVER

No waiver of any breach of this Agreement shall constitute a waiver of any other breach of the same or other provisions of this Agreement and no waiver shall be effective unless made in writing.

14. ENTIRE AGREEMENT

- 14.1 This Agreement is the complete and exclusive statement of the agreement between the parties relating to the subject matter of the Agreement and supersedes all previous communications, representations and arrangements, written or oral. The Licensee acknowledges that no reliance is placed on any representation made but not embodied in this Agreement.

14.2 Except as otherwise permitted by this Agreement, no change to its terms shall be effective unless it is in writing and signed by persons authorised on behalf of the parties.

15. GOVERNING LAW

This Agreement shall be construed in accordance with and governed by the Laws of England and each party agrees to submit to the non-exclusive jurisdiction of the English Courts. Headings have been included for convenience only and shall not be used in construing any provision herein.

EXECUTION:

SIGNED on behalf of the

Licensee

By:

.....

Name:

.....

Title:

.....

Address:

Facsimile:

SIGNED on behalf of the

Custodian

By:

.....

Name:

.....

Title:

.....

5.3 OpenTV Inc: DVB MHP Open TV Inc. Test Application License Agreement

BETWEEN:

- (1) European Telecommunications Standards Institute, as Custodian ("Custodian") named by the DVB Project (defined below), and agreed to by OpenTV, Inc., ("Licensor")

and

- (2) the company whose name appears on the signature page hereof ("Licensee");

WHEREAS:

- (i) Custodian has entered into the DVB Conformance Testing Custodian Agreement (the "Custodian Agreement") with the DVB Project;
- (ii) By a decision of its Steering Board taken on February 22, 2000, the DVB Project has adopted a specification for the Multimedia Home Platform ("DVB MHP Specification" as further defined below), and, on November 9, 1999, the Steering Board issued a Declaration (DVB SB 27 (99) 15 Rev. 2) with respect to certain DVB MHP rules, the arrangements for a custodian and an experts group, testing and certain other matters;
- (iii) Custodian has been appointed by the DVB Project to undertake a variety of activities related to the administration of the DVB MHP Conformance Testing (defined below) as specified and approved by an experts group named by the DVB Project; and
- (iv) Licensor, with Custodian acting as Licensor's agent, is willing to license certain Test Applications (defined below) to Licensee for the limited purpose of testing and self-certifying Implementations of the DVB MHP Specification.

IT IS HEREBY AGREED AS FOLLOWS:

Article 1 - DEFINITIONS

- 1.1 **"Affiliate"** means any subsidiary or parent company of Licensee, as well as any entity that owns or controls Licensee or that is owned or controlled by Licensee.
- 1.2 **"Conformance Testing" or "MHP Test Suite"** refers to the test programs, rules, guides, documentation and other materials determined by DVB to be used for establishing whether an implementation of the DVB MHP Specification may be certified as an Implementation.
- 1.3 **"DVB MHP Specification"** (further referred to as the "Specification") means the DVB Multimedia Home Platform Specification as adopted by the Steering Board of the DVB Project on the date of its first adoption, and as such Specification may be amended from time to time.
- 1.4 **"DVB Project"** means the Digital Video Broadcasting Project, a not-for-profit association with legal personality governed by Swiss law under the terms of an Amended and Restated Memorandum of Understanding dated December 17, 1996, or, if such association ceases to exist, the body succeeding to its activities or its assignee named pursuant to Section 6(c) of the Custodian Agreement.
- 1.5 **"Implementation"** means an implementation of the DVB MHP Specification that:

- (i) fully implements the appropriate profile of the MHP Specification;
 - (ii) implements all mandatory interfaces and functionality of the MHP Specification; and
 - (iii) fully satisfies the MHP Test Suite including but not limited to any self-certification requirement.
- 1.6 **"Implementer"** means a legal entity that has:
- (i) produced an Implementation;
 - (ii) entered into a DVB MHP OpenTV, Inc. Test Application License Agreement identical (except for the identity of Licensee) to this Agreement, and any other similar agreements required by Custodian;
 - (iii) completed and satisfied the MHP Test Suite delivered to the Implementer by Custodian; and
 - (iv) has provided to Custodian the Certificate of Completion of the Conformance Testing attached as Annex A to the Custodian Agreement.
- 1.7 **"Incomplete Implementation"** means an implementation of the DVB MHP Specification that implements less than all the mandatory interfaces and functionality of the MHP Specification and/or that does not fully satisfy the MHP Test Suite.
- 1.8 **"Test Applications"** means Licensor's test applications, including, without limitation, all related code, documentation and other materials that are developed by Licensor, and as may be amended by Licensor from time to time, and included in the MHP Test Suite provided to Licensee by Custodian.
- 1.9 **"Term"** means the term of the Agreement as specified in Article 6.1.

Article 2 - LICENSE GRANTS

2.1 Test Applications License.

a. Limited Grant.

Conditioned upon Licensee's full compliance with the obligations set forth in this Agreement, including this Article 2 and Article 4, Custodian, on behalf of Licensor, hereby grants, as of the effective date of this Agreement, to Licensee a limited, non-exclusive, non-transferable, worldwide, royalty-free right and license to use, and make a reasonable number of copies of, the Test Applications solely for the purpose of testing and self-certifying Implementations in accordance with the Conformance Testing, which shall include the right to test Incomplete Implementations that are delivered to an Implementer for subsequent integration and distribution as part of an Implementation distributed by such Implementer. Licensee need not require such Implementer to integrate and distribute an Incomplete Implementation as part of an Implementation, but Licensee shall not authorize the Implementer to distribute Licensee's Incomplete Implementation unless it is integrated into and distributed as part of Implementation.

Licensor reserves its rights to take legal action against Licensee if Licensee uses the Test Applications in breach of this Agreement or outside the scope of the licenses granted herein. Similarly, Licensee reserves its rights to take legal action to preserve its rights with respect to the use of the Test Applications. Licensee shall defend, indemnify and hold harmless Custodian and Licensor for any claims, damages, expenses (including reasonable attorneys' fees), judgments, and awards arising out of, or relating to, Licensee's unauthorized use of the Test Applications. Licensee's indemnity obligations hereunder shall survive any termination of this Agreement.

b. Additional Limitations.

For the avoidance of doubt, Licensee acknowledges and agrees that it is not licensed hereunder to:

1. distribute the Test Applications to any third party;
2. modify or create derivative works of the Test Applications, or, except as otherwise provided by law, disassemble or decompile binary portions of the Test Applications, or otherwise attempt to derive the source code from such portions; or
3. use the Test Applications, or any portion thereof, to develop other test programs or test applications or suites intended to validate compatibility with the MHP Specification, or any portion thereof.

2.2 Proprietary Rights Notices.

Licensee shall not remove any copyright notices, trademark notices or other proprietary legends of Licensor or its suppliers contained on or in the Test Applications.

2.3 Notice of Breach or Infringement.

Licensee shall notify Custodian immediately in writing when it becomes aware of (i) any breach or violation of the terms of this Agreement, or (ii) any claim that the Test Applications, and /or Licensee's use thereof, infringe a third party's intellectual property rights. Custodian shall notify Licensor immediately in writing when it becomes aware, by notice from the Licensee or otherwise, of (i) any breach or violation of the terms of this Agreement, or (ii) any claim that the Test Applications, and /or Licensee's use thereof, infringe a third party's intellectual property rights.

2.4 Ownership.

Licensor retains all right, title and interest in and to the Test Applications, including any upgrades thereto provided hereunder.

2.5 Support.

Neither Custodian nor Licensor shall incur any obligations by virtue of this Agreement to provide any support or administrative services concerning the Test Applications, including providing access to any subsequent releases of the Test Applications.

2.6 Use of Contractors.

Licensee may provide the Test Applications to a contractor for the limited purpose of assisting the contractor in performing services for Licensee to develop, test and self-certify Implementations in accordance with the Conformance Testing. Such contractor must have executed an agreement with Licensee that is consistent with Licensee's rights and obligations under this Agreement.

2.7 Incomplete Implementations.

No license is granted hereunder with respect to Incomplete Implementations that are delivered to any third party other than an Implementer for subsequent integration and distribution as part of an Implementation distributed by such Implementer.

2.8 No Other Grant.

Other than the express rights to use and copy the Test Applications granted at Article 2.1 above, Custodian and Licensor grant no other rights to Licensee under this Agreement. Licensee acknowledges that this Agreement does not grant any right or license to any intellectual property rights of Licensor and no other right or license is to be implied by or inferred from any provision of this Agreement or by the conduct of the parties. Licensee further acknowledges that no right, title, or interest in or to any patents, patent applications, copyrights, trademarks, or trade secrets of Licensor that might be essential to Licensee's Implementation is granted under this Agreement.

Article 3 - LIMITED WARRANTY AND DISCLAIMER

THE TEST APPLICATIONS ARE LICENSED "AS IS" AND ALL REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT ARE HEREBY DISCLAIMED.

Article 4 - CONFIDENTIAL INFORMATION**4.1 Confidential Information.**

For the purposes of this Agreement, the Test Applications shall be considered "Confidential Information."

4.2 Preservation of Confidentiality.

Licensee agrees that the Confidential Information shall be used solely for the purpose specified in Article 2.1, and agrees to keep the Confidential Information strictly confidential and shall not disclose it to any other person except to an Affiliate and to its employees (who under the terms of their employment by Licensee are subject to an obligation not to disclose confidential information of Licensee), who have a "need to know" for the purposes specified in Article 2.1 and are made aware of, and have agreed to abide by, the requirements of this Article 4.

4.3 Standard of Care.

Licensee shall protect the Confidential Information with the same degree of care as it normally uses in the protection of its own confidential and proprietary information, but in no case with any less degree than reasonable care. Licensee shall, at Custodian's reasonable request, provide written assurances concerning the steps taken by Licensee and its Affiliates to preserve the confidentiality of Confidential Information.

4.4 Residual Knowledge.

Except with respect to the development of other test applications intended to validate compatibility with the MHP Specification, or portions thereof, which shall not mean the development of test programs as development tools that are only for Licensee's internal use, this Agreement is not intended to prevent those employees of Licensee to whom Confidential Information is disclosed pursuant to Section 4.2 from using Residual Knowledge, subject to any valid patents, copyrights, and semiconductor mask rights of the disclosing party. Residual Knowledge means ideas, concepts, know-how or techniques related to the disclosing party's technology that are retained in the unaided memories of the receiving party's employees who have had access to information. An employee's memory will be considered unaided if the employee has not intentionally memorized the information for the purpose of retaining and subsequently using or disclosing it.

4.5 Identity of Licensee.

Licensee acknowledges that, prior to Licensee obtaining the right to use the MHP Mark in connection with Licensee's Implementation, Custodian is obligated not to disclose Licensee's identity to Licensor except at the instruction of the Chairman of the DVB Steering Board or in the event that Licensor provides Custodian in good faith with reasonable grounds for believing that Licensee may be in violation of its obligations hereunder. The DVB Project Office will, however, make publicly available the list of Implementations that have obtained the DVB MHP Mark or Label.

Article 5 - LIMITATION OF LIABILITY

IN NO EVENT SHALL LICENSOR OR CUSTODIAN BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT (INCLUDING LOSS OF PROFITS, USE, DATA, OR OTHER ECONOMIC ADVANTAGE), NO MATTER WHAT THEORY OF LIABILITY, EVEN IF EITHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OR PROBABILITY OF SUCH DAMAGES. FURTHER, LIABILITY FOR

SUCH DAMAGE SHALL BE EXCLUDED, EVEN IF THE EXCLUSIVE REMEDIES PROVIDED FOR IN THIS AGREEMENT FAIL OF THEIR ESSENTIAL PURPOSE. The provisions of this Article 5 allocate the risks under this Agreement between Licensor and Custodian, on the one hand, and Licensee on the other hand, and the parties have relied upon the limitations set forth herein in determining whether to enter into this Agreement.

Article 6 - TERM AND TERMINATION

6.1 Term

The Term of this Agreement shall begin on the latest signature date below and shall continue unless and until the earlier of:

- (i) termination of this Agreement pursuant to this Article 6; or
- (ii) the Test Applications cease to be included as part of the MHP Test Suite.

Termination of this Agreement shall not relieve Licensee of any of its obligations hereunder.

6.2 The license granted in Section 2.1 of this Agreement may be terminated by Licensor or Custodian, upon written notice given by Custodian, upon the occurrence of any of the following events:

- a. the Licensee or any of its Affiliates breaches any of the terms hereof or uses the Test Applications outside the scope of the license granted in Section 2.1;
- b. a claim that the Test Applications, and /or Licensee's use thereof, infringe a third party's intellectual property rights; or
- c. there is a voluntary or involuntary filing of bankruptcy by, or similar event affecting, Licensee.

6.3 Effect of Termination.

Upon termination of this Agreement, for any reason, Licensee shall forthwith cease its use of the Test Applications and return to Custodian all Confidential Information in written, electronic or magnetic form and any copies thereof. Articles 2.4, 2.8, 4.1, 4.2, 4.3, 4.4, 5, 6, and 7 shall survive any termination of this Agreement.

6.4 No Liability for Expiration or Lawful Termination.

Neither party shall have the right to recover damages or to indemnification of any nature, whether by way of lost profits, expenditures for promotion, payment for goodwill or otherwise made in connection with the business contemplated by this Agreement, due to the expiration or permitted or lawful termination of this Agreement. EACH PARTY WAIVES AND RELEASES THE OTHER FROM ANY CLAIM TO COMPENSATION OR INDEMNITY FOR TERMINATION OF THE BUSINESS RELATIONSHIP UNLESS TERMINATION IS IN MATERIAL BREACH OF THIS AGREEMENT.

6.5 No Waiver.

The failure of either party to enforce any provision of this Agreement shall not be deemed a waiver of that provision. The rights of Licensor under this Article 6 are in addition to any other rights and remedies permitted by law or under this Agreement.

6.6 Irreparable Harm.

The parties acknowledge that a material breach of Articles 2 and/ or 4 would cause irreparable harm, the extent of which would be difficult to ascertain. Accordingly, they agree that, in addition to any other legal remedies to which a non-breaching party might be entitled, such party shall be entitled to obtain immediate injunctive relief in the event of a breach of the provisions of such Articles.

Article 7 - MISCELLANEOUS

7.1 Governing Law.

This Agreement is made under and shall be governed by and construed under the laws of the State of California, regardless of its choice of laws provisions.

7.2 Compliance with Laws.

The Test Applications are subject to U.S. export control laws, including the U.S. Export Administration Act and its associated regulations, and may be subject to export or import regulations in other countries. Licensee agrees to comply strictly with all such regulations and acknowledges that it has the responsibility to obtain such licenses to export, re-export or import the Test Applications, or any portion thereof, as may be required after delivery to Licensee.

7.3 Assignment.

Custodian may upon notice to Licensee assign this Agreement to a replacement custodian which shall have the rights and obligations as Custodian hereunder. Licensor may assign its rights and obligations hereunder upon notice to Custodian.

7.4 Enforcement.

Licensee agrees that, in addition to Custodian, Licensor shall have the right to enforce this Agreement.

7.5 Complete Understanding.

This Agreement constitutes and expresses the final, complete and exclusive agreement and understanding between Licensee and Custodian, and between Licensee and Licensor, with respect to its subject matter (that is, the granting of a license to use the Test Applications with respect to testing and self-certifying Implementations).

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives.

Custodian:

Licensee:

By: _____

By: _____

Name: _____

Name: _____

(Print or Type)

(Print or Type)

Title: _____

Title: _____

Date: _____

Date: _____

5.4 Sony United Kingdom Limited: Sony Test Suite License And Non Disclosure Agreement

BETWEEN:

- (1) **European Telecommunications Standards Institute**, a standards-making organisation recognised by the European Union with its headquarters at 650 Route des Lucioles, 06921 Sophia Antipolis, France (the "Custodian") and as agreed to by **Sony United Kingdom Limited** (the "Licensor"); and
- (2) The Company whose name appears on the signature page hereof (the "Licensee").

WHEREAS:

- A. The Custodian has entered into a DVB Conformance Testing Custodian Agreement (the "Custodian Agreement") with (i) the DVB Project, a not for profit organisation with legal personality governed by Swiss law; and (ii) one or more rights holders; the Licensor has given to the Custodian a letter of instruction relating to this Agreement and consistent with the Custodian Agreement;
- B. By a decision of its Steering Board the DVB Project has adopted a specification for the Multimedia Home Platform (the "DVB MHP Specification", as further defined below), and its Steering Board has issued a "Declaration" in relation to certain DVB MHP Rules, the arrangements for a custodian and an experts group, testing and certain other matters;
- C. The Custodian has been appointed by the DVB Project to undertake a variety of activities related to the administration of the Conformance Testing Requirements (as defined below) as specified and approved by an experts group named by the DVB Project; and
- D. The Licensor, acting through its agent the Custodian, is willing to license certain Test Suites (as defined below) to the Licensee for the limited purpose of testing and self-certifying of Implementations (as defined below) of the DVB MHP Specification.

NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

DEFINITIONS

In this Agreement, unless inconsistent with the context or otherwise specified, the following definitions shall apply.

"Affiliate"	means any subsidiary or parent company of the Licensee, as well as any entity that owns or controls the Licensee or that is owned or controlled by the Licensee.
"Agreement"	means the provisions of this Sony test suite license and non-disclosure agreement.
"Conformance Testing Requirements"	means the test programs, rules, guides, documentation and other materials determined by the DVB Project to be used for establishing whether an implementation of the DVB MHP Specification may be certified as an Implementation.
"DVB MHP Specification"	(or otherwise referred to as the "Specification") means the DVB Multimedia Home Platform specification as adopted by the Steering Board of the DVB Project on the date of its first adoption under specification number MHP 1.0, and as such

Specification may be amended from time to time by the DVB Project.

“DVB MHP Implementer”

means a legal entity that has (i) produced an Implementation; (ii) entered into a Sony Test Suite License and Non-Disclosure Agreement identical (except for the identity of the Licensee) to this Agreement; (iii) completed and satisfied the Conformance Testing Requirements delivered to the Implementer by the Custodian and (iv) has provided to the Custodian the Certificate of Completion of the Conformance Testing attached as Annex A to the Custodian Agreement.

“Effective Date”

means the date of signature of this Agreement.

“Implementation”

means an implementation of the Specification that (i) fully implements the appropriate profile of the Specification with the possible exception of options, (ii) implements all required interfaces and functionality of the Specification; and (iii) fully satisfies the Conformance Testing Requirements, including, but not limited to, any self-certification requirement.

“Incomplete Implementation”

means an implementation of the Specification that implements less than all the required interfaces and functionality of the Specification and/or that does not fully satisfy the Conformance Testing Requirements.

“Term”

means the term of this Agreement as specified in Clause 7.

“Test Suites”

means the test suites licensed hereunder, as may be revised by the Licensor during the Term, that are licensed by the Licensor to the Custodian, and included by the Custodian as part of the Conformance Testing Requirements.

LICENSE GRANTS

- 2.1 Subject to the terms of this Agreement, the Licensor hereby grants, as of the Effective Date, to the Licensee, a limited, non-exclusive, non-transferable, worldwide, royalty-free license to use the Test Suites. This grant is solely for the purpose of testing and self-certifying Implementations in accordance with the Conformance Testing Requirements, which shall include the right to test Incomplete Implementations that are delivered to an Implementer for subsequent integration and distribution as part of an Implementation distributed by such Implementer. Licensee need not require such Implementer to integrate and distribute an Incomplete Implementation as part of an Implementation, but Licensee shall not authorise the Implementer to distribute Licensee's Incomplete Implementation unless it is integrated into and distributed as part of an Implementation.
- 2.2 Nothing in the foregoing shall be understood to grant a license for the Licensee to use the Test Suites in any other manner than as set out in Clause 2.1 or to sub-license the Test Suites.
- 2.3 The Licensor reserves every right to take legal action against the Licensee if the Licensee uses the Test Suites in breach of this Agreement or outside the scope of the licenses granted herein. Similarly, the Licensee reserves every right to take legal action to preserve its rights with respect to the use of the Test Suites.

- 2.4 For the avoidance of doubt the Licensee acknowledges and agrees that it is not licensed hereunder to:
- (a) distribute the Test Suites to any third party; or
 - (b) modify or create derivative works of the Test Suites, or, except as otherwise provided by law, disassemble or decompile binary portions of the Test Suites, or otherwise attempt to derive the source code from such portions; or
 - (c) use the Test Suites, or any portion thereof, to develop other test programs or test applications or suites intended to validate compatibility with the MHP Specification, or any portion thereof.
- 2.5 No license is granted hereunder with respect to Incomplete Implementations that are delivered to any third party other than an Implementer for subsequent integration and distribution as part of an Implementation distributed by such Implementer.

3. PROPRIETARY RIGHTS

- 3.1 Except to the extent that such rights are granted under this Agreement, the Licensee shall not acquire any title, copyright or other proprietary rights in the Test Suites or any copies thereof.
- 3.2 The Licensee undertakes and agrees not to remove, suppress or modify in any way any proprietary marking, including any trade mark or copyright notice, on or in the Test Suites if in source code form.
- 3.3 The Licensee shall notify the Custodian immediately if the Licensee becomes aware of any unauthorised access to, use or copying of the Test Suites by any person or any other breach or violation of the terms of this Agreement.
- 3.4 The Licensor retains all right title and interest in and to the Test Suites, including any upgrades to the Test Suites.
- 3.5 Neither the Custodian nor the Licensor shall incur any obligations by virtue of this Agreement to provide any support or administrative services concerning the Test Suites, including access to any subsequent releases of the Test Suites.
- 3.6 The Licensee may provide the Test Suites to a contractor for the limited purpose only of assisting the contractor in performing services for the Licensee to develop, test and self-certify Implementations in accordance with the Conformance Testing Requirements. This contractor must have executed an agreement with the Licensee that is consistent with the Licensee's rights and obligations under this Agreement. Licensee shall assume responsibility for any such contractor to the extent necessary in order protect the interests of Licensor in accordance with this Agreement.
- 3.7 The Licensee acknowledges that this Agreement does not grant any right or license under any intellectual property rights of the Licensor, or otherwise, except as expressly provided for in this Agreement, and no other right or license is to be implied or inferred from any provision of this Agreement or by the conduct of the parties. For example, no right, title or interest in or to any patents, trademarks, service marks or trade names of the Licensor or the Licensor's licensors is granted under this Agreement.

4. LIMITED WARRANTY

THE TEST SUITES ARE LICENSED "AS IS" AND ALL REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT ARE HEREBY DISCLAIMED.

5. CONFIDENTIALITY

- 5.1 The Licensee hereby acknowledges that the Test Suites, and in particular, but without the limitation, the source code, contain confidential information of the Licensor. The Licensee undertakes to keep confidential all information contained in or otherwise received from the Licensor in connection with the Test Suites (the "Confidential Information").
- 5.2 The Licensee hereby agrees that the Confidential Information shall be used solely for the purposes specified in Clause 2.1 above, and agrees to keep the Confidential Information strictly confidential at all times and shall not disclose it to any person except to an Affiliate and to its employees (who under the terms of their employment by the Licensee are subject to an obligation not to disclose confidential information of the Licensee), and who have a "need to know" for the purposes specified in Clause 2.1 and are made aware of the requirements of this Clause 5.
- 5.3 The Licensee shall protect the Confidential Information with the same degree of care as it normally uses in the protection of its own confidential and proprietary information, but in no case with any lesser degree than reasonable care. The Licensee shall, at the Custodian's reasonable request, provide written assurances concerning the steps taken by the Licensee and its Affiliates to preserve the confidentiality of the Confidential Information.
- 5.4 The Licensee acknowledges that the Custodian is obligated not to disclose the Licensee's identity to the Licensor except at the instruction of the Chairman of the DVB Steering Board or in the event that the Licensor provides the Custodian in good faith with reasonable grounds for believing that the Licensee may be in violation of its obligations hereunder.
- 5.5 The terms of this Clause 5 shall survive termination of this Agreement.

6. LIMITATION OF LIABILITY

IN NO EVENT SHALL THE LICENSOR OR THE CUSTODIAN BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE LOSSES OR DAMAGES OF ANY KIND WHATSOEVER AND HOWSOEVER CAUSED, WHETHER ARISING UNDER CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, INCLUDING (WITHOUT LIMITATION) LOSS OF PRODUCTION, LOSS OF OR CORRUPTION TO DATA, LOSS OF PROFITS OR OF CONTRACTS, LOSS OF OPERATION TIME AND LOSS OF GOODWILL OR ANTICIPATED SAVINGS. The parties acknowledge that they have relied upon the limitations set forth in this Clause in determining whether to enter into this Agreement.

TERM AND TERMINATION

- 7.1 The term of this Agreement shall begin on the Effective Date and shall continue unless and until the earlier of:
- (a) termination of this Agreement pursuant to this Clause 7; or
 - (b) the Test Suites cease to be included as part of the Conformance Testing Requirements.
- Termination of this Agreement shall in no way relieve the Licensee from any of its obligations under this Agreement.
- 7.2 The License granted pursuant to Clause 2.1 of this Agreement can be terminated by the Licensor upon written notice given by the Custodian upon the occurrence of the following events:
- (a) the Licensee or any of its Affiliates breaches any of the terms hereof or uses the Test Suites outside of the scope of the license granted hereunder; or
 - (b) the Licensee shall convene any meeting of creditors or pass a resolution for winding up or suffer a petition for winding up; or

- (c) the Licensee shall have an administrative receiver or receiver appointed over the whole or part of its assets or suffer the appointment of an administrator; or
- (d) the Licensee, being an individual commits any act of bankruptcy or compounds with his creditors or comes to any arrangements with any creditors.

7.3 Upon termination of this Agreement, for any reason whatsoever, the Licensee shall forthwith cease its use of the Test Suites and return to the Custodian all Confidential Information in written, electronic or magnetic form and any copies thereof.

7.4 None of the parties shall have the right to recover damages or to indemnification of any nature, whether by way of lost profits, expenditures for promotion, payment for goodwill or otherwise made in connection with the business contemplated by this Agreement, due to the expiration or permitted or lawful termination of this Agreement. EACH PARTY WAIVES AND RELEASES THE OTHERS FROM ANY CLAIM TO COMPENSATION OR INDEMNITY FOR TERMINATION OF THE BUSINESS RELATIONSHIP UNLESS TERMINATION IS IN MATERIAL BREACH OF THIS AGREEMENT.

8. FORCE MAJEURE

None of the parties shall be liable for any delay in performing or failure to perform its obligations (other than a payment obligation) under this Agreement due to any cause outside its reasonable control. Such delay or failure shall not constitute a breach of this Agreement and the time for performance of the affected obligation shall be extended by such period as is reasonable.

9. ASSIGNMENT

The Licence is personal to the Licensee and the Licensee may not assign or otherwise transfer its rights or obligations under this Agreement.

The Custodian may upon notice to the Licensee assign this Agreement to a replacement custodian who shall have the same rights and obligations as the Custodian hereunder.

The Licensor may assign its rights and obligations hereunder upon notice to the Custodian.

10. NOTICES

All notices which are required to be given under this Agreement shall be in writing and shall be sent to the address of the recipient set out elsewhere in this Agreement or such other address as the recipient may designate by notice given in accordance with this Clause. Any such notice may be delivered personally, by first class pre-paid letter or facsimile transmission and shall be deemed to have been received:-

- (a) By hand delivery - at the time of delivery.
- (b) By first class post – forty-eight (48) hours after the date of mailing;
- (c) By facsimile, immediately on transmission provided a confirmatory copy is sent by first class pre-paid post or by hand by the end of the next business day.

11. SEVERABILITY

If any part of this Agreement is found by a court of competent jurisdiction or other competent authority to be invalid, unlawful or unenforceable then such part shall be severed from the remainder of this Agreement which shall continue to be valid and enforceable to the fullest extent permitted by law.

12. IRREPERABLE HARM

The Parties acknowledge that a material breach of Articles 2 and/or 5 would cause irreparable harm, the extent of which would be difficult to ascertain. Accordingly, they agree that, in addition to any other legal remedies to which a non-breaching party might be entitled, such party shall be entitled to obtain immediate injunctive relief in the event of a breach of the provisions of such Articles.

13. WAIVER

No waiver of any breach of this Agreement shall constitute a waiver of any other breach of the same or other provisions of this Agreement and no waiver shall be effective unless made in writing.

14. ENTIRE AGREEMENT

14.1 This Agreement is the complete and exclusive statement of the agreement between the parties relating to the subject matter of the Agreement and supersedes all previous communications, representations and arrangements, written or oral. The Licensee acknowledges that no reliance is placed on any representation made but not embodied in this Agreement.

14.2 Except as otherwise permitted by this Agreement, no change to its terms shall be effective unless it is in writing and signed by persons authorised on behalf of the parties.

15. GOVERNING LAW

This Agreement shall be construed in accordance with and governed by the Laws of England and each party agrees to submit to the non-exclusive jurisdiction of the English Courts. Headings have been included for convenience only and shall not be used in construing any provision herein.

EXECUTION:

SIGNED on behalf of the

Licensee

By:

.....

Name:

.....

Title:

.....

Address:

Facsimile:

SIGNED on behalf of the

Custodian

By:

.....

Name:

.....

Title:

.....

6. Licensor Arrangements: Implementation

6.1 Sun Microsystems, Inc.

6.1.1 DVB MHP Patent License Agreement

BETWEEN:

- (1) European Telecommunications Standards Institute, as Custodian (the Custodian) named by Sun Microsystems, Inc. ("Licensor"), and
- (2) the company whose name appears on the signature page hereof (the "Licensee");

WHEREAS:

- i) The Custodian has entered into a DVB Conformance Testing Custodian Agreement with the DVB Project, a not for profit association with legal personality governed by Swiss law, and Licensor;
- ii) By a decision of its Steering Board the DVB Project has adopted a specification for the Multimedia Home Platform (DVB MHP Specification, as further defined below), and the Steering Board has issued its Declaration with respect to certain DVB MHP Rules, the arrangements for a custodian and an experts group, testing, and certain other matters;
- iii) The Custodian has been appointed by the DVB Project to undertake a variety of activities related to the administration of the DVB MHP Conformance Testing Requirements (as defined below) as specified and approved by an experts group named by the DVB Project;
- iv) Licensee desires to use, make, have made, sell, offer for sale, import, lease, repair, or otherwise distribute Implementations (as defined below) of the DVB MHP Specification.
- v) Custodian, acting as agent for one or more prospective licensors ("Licensors") of certain Essential Patent Claims (as defined below), is authorized to enter into an agreement with Licensee pursuant to which such Licensors agree not to assert their Essential Patent Claims with respect to Implementations (also as defined below) in exchange for certain reciprocal covenants from Licensee.

IT IS HEREBY AGREED AS FOLLOWS:

Article 1 - Definitions

- 1.1 *"DVB MHP Conformance Testing Requirements"* means the test programs, rules, guides, documentation and other materials determined by DVB to be used for establishing whether an implementation of the DVB MHP Specification may be certified as an Implementation.
- 1.2 *"DVB MHP Full Implementer"* means a legal entity that has:
 - (i) entered into a DVB MHP Test Suite License and Non-Disclosure Agreement (the form of which is attached hereto as Exhibit A);
 - (ii) confirmed in writing to Licensee both that such entity has entered into such agreement and that it acknowledges that any license granted by Licensee with respect to a less-than-complete implementation of the Licensor Portion is expressly limited in its scope to integration into and distribution as part of an Implementation; and
 - (iii) has provided to Custodian a Certificate of Assurance in the form attached hereto as Exhibit B.
- 1.3 *"DVB MHP Specification"* (further referred to as the *"Specification"*) means the DVB Multimedia Home Platform as adopted by the Steering Board of the DVB

Project on the date of its first adoption, and as such Specification may be amended from time to time.

- 1.4 *"Essential Patent Claims"* means claims of a patent or patent application, issued now or in the future, that are necessarily infringed by the using, making or distributing an Implementation, wherein a claim is necessarily infringed only when it is not possible to avoid infringing the claim, because there is no technically feasible, non-infringing alter-native for implementing the DVB MHP Specification as an Implementation. Notwithstanding the foregoing sentence, Essential Patent Claims do not include any claims:
- (i) other than those set forth above even if contained in the same patent as Essential Patent Claims;
 - (ii) that read solely on any portion or extension of an implementation of the DVB MHP Specification that is not compliant with the DVB MHP Specification; or
 - (iii) that apply to the combination of an Implementation with other technology if the inclusion of such other technology is the determining factor in causing such combination to be covered by the Essential Patent Claims.
- 1.5 *"Implementation"* means an implementation of the DVB MHP Specification that:
- (i) implements all required interfaces and functionality of the Licensor Portion;
 - (ii) does not modify or subset any file or class name or interface declaration in the Licensor Name Space;
 - (iii) conforms to the DVB MHP Conformance Testing Requirements, including but not limited to any self-certification requirement.
- 1.6 *"Incomplete Implementation"* means an implementation of the DVB MHP Specification that implements less than all the required interfaces and functionality of the Licensor Portion..
- 1.7 *"Licensor Materials"* means any technology licensable from Licensor, through the Custodian, for use with or in association with Implementations. For example, Licensor Materials might include test programs that are incorporated as part of the DVB MHP Conformance Testing Requirements and source and binary code licensable from Licensor, through the Custodian, for inclusion into Implementations.
- 1.8 *"Licensor Name Space"* means any file or class name or interface declaration which begins with the names "java. * ", "javax. * " or "com.sun" or their equivalents in any subsequent naming convention promulgated by Licensor.
- 1.9 *"Licensor Portion"* means those Java™ technology specifications listed in Exhibit C hereto, as amended by DVB and Licensor from time to time, which are published by Licensor and to which the Licensee is referred by the DVB MHP Specification.
- 1.10 *"Term"* means the term of the Agreement as specified below in Article 4.

Article 2 - License

2.1 Limited Patent License.

Conditioned upon Licensee's full compliance with the obligations set forth in this Agreement, and subject to the termination provisions set forth in Section 2.2 below, the Custodian, on behalf of Licensor as licensor, hereby grants, as of the Effective Date, to the Licensee under Licensor's Essential Patent Claims a limited, non-exclusive, non-transferable, worldwide right and license to use, make, have made, import or distribute an Implementation; provided, however, that nothing in the foregoing shall be understood to grant a license for Licensee under Licensor's Essential Patent Claims in connection with an Implementation which implements features or functionality not required by the MHP Specification ("Additional Functionality") where the Additional Functionality is implemented in the Licensor

Name Space. The foregoing license, subject to the limitations set forth herein (including with respect to Additional Functionality implemented in the Licensor Name Space), shall extend to Licensee's using, making or having made and then delivering to a DVB MHP Full Implementer an Incomplete Implementations for subsequent integration and distribution as part of an Implementation distributed by such Full Implementer. No license is granted hereunder with respect to Incomplete Implementations that, if used, are not integrated into and distributed as part of an Implementation distributed by a DVB MHP Full Implementer. The foregoing license shall extend to any distributors or customers of Licensee with respect to their use of an Implementation which does not, unless separately and expressly licensed by Sun to do so, implement Additional Functionality in the Licensor Name Space.

2.2 Termination of Limited License.

The foregoing license shall terminate if Licensee (including its assignee or successor) brings a claim:

- (i) against any entity alleging that its using, making, having made, importing or distributing an implementation of the Licensor Portion as part of an Implementation infringes any Essential Patent Claims of the Licensee making such allegation; or
- (ii) against Licensor alleging that its using, making, having made, importing or distributing Licensor Materials directly or indirectly infringes any Essential Patent Claims or that Licensor, as the copyright owner of the Licensor Portion, has induced any other entity to infringe the alleging party's (or its Affiliates') Essential Patent Claims.

2.3 Maximum Royalty.

Upon the termination of the limited patent license set forth herein, Licensor shall offer to such terminated licensees a similar license under Licensor's Essential Patent Claims with respect to using, making, having made, importing or distributing any Implementation which does not extend or superset in the Licensee Name Space, subject to payment of a royalty on hardware devices embodying the Implementation, which royalty shall not exceed \$1 U.S. per hardware unit.

2.4 Ownership.

Licensor retains, now and at any future time, all right, title, and interest in and to patents and patent applications owned or controlled by Licensor or its Subsidiaries, including but not limited to any rights relating to any Essential Patent Claims.

2.5 No Other Grant.

Licensee acknowledges that this Agreement does not grant any right or license, under any intellectual property rights of the other party, or otherwise, except as expressly provided in this Agreement, and no other right or license is to be implied by or inferred from any provision of this Agreement or by the conduct of the parties. For example, no right, title, or interest in or to any trademarks, service marks or trade names of Licensor or Licensor's licensors is granted under this Agreement.

Article 3 - General

3.1 Effective Date.

This Agreement shall become effective upon the execution date of the last signing party.

3.2 No Other Licenses.

Except for the rights expressly provided by this Agreement, Licensor does NOT grant, by implication, or estoppel, or otherwise, any rights under any patents or other intellectual property rights.

3.3 Limitation of Liability

IN NO EVENT SHALL LICENSOR OR CUSTODIAN BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT (INCLUDING LOSS OF PROFITS, USE, DATA, OR OTHER ECONOMIC ADVANTAGE), NO MATTER WHAT THEORY OF LIABILITY, EVEN IF EITHER PARTY HAS BEEN ADVISED OF THE POSSSIBILITY OR PROBABILITY OF SUCH DAMAGES. FURTHER, LIABILITY FOR SUCH DAMAGE SHALL BE EXCLUDED, EVEN IF THE EXCLUSIVE REMEDIES PROVIDED FOR IN THIS AGREEMENT FAIL OF THEIR ESSENTIAL PURPOSE.

3.4 Term.

The Term of this Agreement shall begin on the Effective Date and shall continue until its termination, pursuant to Section 2.1 above.

3.5 No Waiver.

The failure of Licensor to enforce any provision of this Agreement shall not be deemed a waiver of that provision. The rights of Licensor under this Article 3 are in addition to any other rights and remedies permitted by law or under this Agreement.

3.6 Governing Law.

This Agreement is made under and shall be governed by and construed under the laws of the State of California, regardless of its choice of laws provisions.

3.7 Assignment.

The Custodian may upon notice to the Licensee assign this Agreement to a replacement custodian which shall have the rights and obligations as the Custodian hereunder. Licensor may assign its rights and obligations hereunder upon notice to the Custodian.

3.8 Complete Understanding.

This Agreement, including Exhibits A, B, C and D (the Common Annex to the Test Suite License, Patent License, and Code License) hereto, constitutes and expresses the final, complete and exclusive agreement and understanding between Licensee and the Custodian, and between Licensee and Licensor, with respect to its subject matter (that is, the granting of licenses under Licensor’s Essential Patent Claims and through the Custodian with respect to Implementations, and Incomplete Implementations that are integrated into and distributed as part of an Implementation distributed by a DVB MHP Full Implementer). and supersede all previous communications, representations or agreements, whether written or oral, with respect to the subject matter hereof.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives.

Custodian:

Licensee:

By: _____

By: _____

—

Name: _____

Name: _____

(Print or Type)(Print or Type)

—

Title: _____

Title: _____

—

Date: _____

Date: _____

—

EXHIBIT A TO DVB MHP PATENT LICENSE AGREEMENT
Form of DVB MHP Test Suite License and Non-Disclosure Agreement

See item 5.1.1 "DVB MHP TEST SUITE LICENSE AND NON-DISCLOSURE AGREEMENT"

**EXHIBIT B TO DVB MHP PATENT LICENSE AGREEMENT
Certificate of Assurance**

[DATE]

To the Custodian under the DVB Conformance Testing Custodian Agreement:
European Telecommunications Standards Institute
650 Route des Lucioles
06921 Sophia Antipolis, FRANCE

Ladies and Gentlemen:

Certificate of Assurance of DVB Full Implementer

We hereby deliver this Certificate under one or more of the following Agreements, in each case between us and you, as Custodian named by Sun Microsystems, Inc: The DVB MHP Test Suite License and Non-Disclosure Agreement; The DVB MHP Code License and Non-Disclosure Agreement; the DVB MHP JavaTest License Agreement; the DVB MHP Patent License Agreement; and the DVB MHP \$1 Patent License Agreement. In this Certificate, "Agreement" means one or more of such agreements; and all capitalized terms in this Certificate, unless otherwise defined, have the same meaning as in the Agreement. We hereby represent and warrant that

- (A) we are a DVB MHP Full Implementer;
- (B) we have entered into a DVB MHP Test Suite License and Non-Disclosure Agreement;
- (C) this is the Certificate of Assurance to be provided to the Custodian under the Agreement; and
- (D) this Certificate has been prepared and signed by a person who is properly authorised to sign it.

We further acknowledge that any license granted by Licensor in respect of a less-than-complete implementation of the Licensor Portion is expressly limited in its scope to integration into and distribution as part of an Implementation.

An entity which delivers an Incomplete Implementation to us, as a DVB MHP Full Implementer, is entitled to rely on this Certificate. If the Incomplete Implementation integrates Incomplete Implementations produced by other entities, such other entities may also rely on this Certificate.

Sincerely yours,

DVB MHP FULL IMPLEMENTER

by: _____

its

EXHIBIT C TO DVB MHP PATENT LICENSE AGREEMENT**Licensor Portion**

The following API signatures constitute the Licensor Portion referenced by the DVB MHP PATENT LICENSE AGREEMENT ("Agreement", and to which this document is Exhibit C). In most cases the granularity of this list is at the level of Java packages (as specified in "The Sun Specifications for DVB" ISBN 1-892488-25-6), in which case the entire package is listed. With respect to the OEM Personal Java ™ Application Environment v. 1.2a Specification, however, the description is more precise indicating specific elements in the Java package that are included within the Licensor Portion.

Java TV API version 1.0 specification

javax.tv.graphics.....javax.tv.locator
 javax.tv.media.....javax.tv.net
 javax.tv.service.....javax.tv.service.guide
 javax.tv.service.navigation.....javax.tv.service.selection
 javax.tv.service.transport.....javax.tv.util
 javax.tv.xlet

Java Media Framework API version 1.0 specification

javax.media.....javax.media.protocol

Java Secure Socket Extension version 1.0.2 specification

javax.net.....javax.net.ssl
 javax.security.cert

The OEM Personal Java Application Environment version 1.2a specification

java.awt
java.awt.event
 java.awt.imagejava.io
 java.lang
java.lang.reflect
 java.math.....java.net
 java.rmi
java.security
 java.security.cert.....java.security.spec
 java.util.....java.util.zip

The contents of these packages are as specified in the sections of the PJAE 1.2a specification entitled "JAE 1.1.8 API Specification" and "JAE 1.1.8 API Constants", except for:

The package java.security The package java.security.spec
 The package java.security.cert The class java.lang.SecurityManager
 The method java.awt.Toolkit.createImage(java.lang.String)
 The method java.awt.Toolkit.createImage(java.net.URL)
 The method java.awt.Toolkit.getImage(java.lang.String)
 The method java.awt.Toolkit.getImage(java.net.URL)
 The class java.io.FilePermission The class java.io.SerializablePermission
 The class java.lang.RuntimePermission.....The class java.util.PropertyPermission
 The class java.net.SocketPermission

These elements are as specified or Personal Java in the "The OEM Specification for the Personal Java ™ Application Environment (PJAE) Version 1.2a." The exact elements for the PJAE packages are as set forth in Appendix 1 to this Exhibit C.*

* Appendix 1 is available at www.mhp.org

EXHIBIT D TO DVB MHP PATENT LICENSE AGREEMENT

Common Annex to the Test Suite License, Patent License, and Code License

See Exhibit C to item 5.1.1 "DVB MHP TEST SUITE LICENSE AND NON-DISCLOSURE AGREEMENT"

6.1.2 DVB MHP \$1 Patent License Agreement

BETWEEN:

- (1) Sun Microsystems, Inc. ("Licensor") and
- (2) the company whose name appears on the signature page hereof (the "Licensee");

WHEREAS:

- i) Licensor has entered into a DVB Conformance Testing Custodian Agreement with the DVB Project, a not for profit association with legal personality governed by Swiss law, and Licensor;
- ii) By a decision of its Steering Board the DVB Project has adopted a specification for the Multimedia Home Platform (DVB MHP Specification, as further defined below), and the Steering Board has issued its Declaration with respect to certain DVB MHP Rules, the arrangements for a custodian and an experts group, testing, and certain other matters;
- iii) Licensee desires to use, make, have made, sell, offer for sale, import, lease, repair, or otherwise distribute Implementations (as defined below) of the DVB MHP Specification.
- iv) Licensor is prepared to enter into an agreement with Licensee concerning Licensor's Essential Patent Claims as they apply to Implementations (also as defined below) as set forth herein.

IT IS HEREBY AGREED AS FOLLOWS:

Article 1 - Definitions

- 1.1 "*DVB MHP Conformance Testing Requirements*" means the test programs, rules, guides, documentation and other materials determined by DVB to be used for establishing whether an implementation of the DVB MHP Specification may be certified as an Implementation.
- 1.2 "*DVB MHP Full Implementer*" means a legal entity that has:
 - (i) entered into a DVB MHP Test Suite License and Non-Disclosure Agreement (the form of which is attached hereto as Exhibit A);
 - (ii) confirmed in writing to Licensee both that such entity has entered into such agreement and that it acknowledges that any license granted by Licensee with respect to a less-than-complete implementation of the Licensor Portion is expressly limited in its scope to integration into and distribution as part of an Implementation; and
 - (iii) has provided to Custodian a Certificate of Assurance in the form attached hereto as Exhibit B.
- 1.3 "*DVB MHP Specification*" (further referred to as the "*Specification*") means the DVB Multimedia Home Platform as adopted by the Steering Board of the DVB Project on the date of its first adoption, and as such Specification may be amended from time to time
- 1.4 "*Essential Patent Claims*" means claims of a patent or patent application, issued now or in the future, that are necessarily infringed by the using, making or distributing an Implementation, wherein a claim is necessarily infringed only when it is not possible to avoid infringing the claim, because there is no technically feasible, non-infringing alternative for implementing the DVB MHP Specification as an Implementation. Notwithstanding the foregoing sentence, Essential Patent Claims do not include any claims:

- (i) other than those set forth above even if contained in the same patent as Essential Patent Claims;
 - (ii) that read solely on any portion or extension of an implementation of the DVB MHP Specification that is not compliant with the DVB MHP Specification; or
 - (iii) that apply to the combination of an Implementation with other technology if the inclusion of such other technology is the determining factor in causing such combination to be covered by the Essential Patent Claims.
- 1.5 *"Implementation"* means an implementation of the DVB MHP Specification that:
- (i) implements all required interfaces and functionality of the Licensor Portion;
 - (ii) does not modify or subset any file or class name or interface declaration in the Licensor Name Space;
 - (iii) conforms to the DVB MHP Conformance Testing Requirements, including but not limited to any self-certification requirement.
- 1.6 *"Incomplete Implementation"* means an implementation of the DVB MHP Specification that implements less than all the required interfaces and functionality of the Licensor Portion.
- 1.7 *"Licensor Materials"* means any technology licensable from Licensor, through the Custodian, for use with or in association with Implementations. For example, Licensor Materials might include test programs that are incorporated as part of the DVB MHP Conformance Testing Requirements and source and binary code licensable from Licensor, through the Custodian, for inclusion into Implementations.
- 1.8 *"Licensor Name Space"* means any file or class name or interface declaration which begins with the names "java. * ", "javax. * " or "com.sun" or their equivalents in any subsequent naming convention promulgated by Licensor.
- 1.9 *"Licensor Portion"* means those Java TM technology specifications listed in Exhibit C hereto, as amended by DVB and Licensor from time to time, which are published by Licensor and to which the Licensee is referred by the DVB MHP Specification.
- 1.10 *"Term"* means the term of the Agreement as specified below in Article 4.

Article 2 - License

2.1 Limited Patent License.

Conditioned upon Licensee's full compliance with the obligations set forth in this Agreement, Licensor hereby grants, as of the Effective Date, to the Licensee under Licensor's Essential Patent Claims a limited, non-exclusive, non-transferable, worldwide right and license to use, make, have made, import or distribute an Implementation; provided, however, that nothing in the foregoing shall be understood to grant a license for Licensee under Licensor's Essential Patent Claims in connection with an Implementation which implements features or functionality not required by the MHP Specification ("Additional Functionality") where the Additional Functionality is implemented in the Licensor Name Space. The foregoing license, subject to the limitations set forth herein (including with respect to Additional Functionality implemented in the Licensor Name Space), shall extend to Licensee's using, making or having made and then delivering to a DVB MHP Full Implementer an Incomplete Implementations for subsequent integration and distribution as part of an Implementation distributed by such Full Implementer. No license is granted hereunder with respect to Incomplete Implementations that, if used, are not integrated into and distributed as part of an Implementation distributed by a DVB MHP Full Implementer. The foregoing license shall extend to any distributors or customers of Licensee with respect to their use

of an Implementation which does not, unless separately and expressly licensed by Sun to do so, implement Additional Functionality in the Licensor Name Space.

2.2 Royalties.

Licensee shall pay to Licensor a royalty of one United States dollar (\$1 U.S.) for each shipping unit containing Licensee's Implementation (or Incomplete Implementation to the extent authorized in Section 2.1) distributed by or under license from Licensee; provided, however, that Licensee shall not be responsible for royalties due with respect to shipping units for which Licensee can establish that a royalty has been paid to Licensor on the same unit by the DVB Full Implementer to whom Licensee has provided an Incomplete Implementation. Payment of any royalties due hereunder shall be made quarterly, shall be due thirty (30) days following the end of the calendar quarter to which they relate and shall be submitted with a written statement documenting the number of units distributed by Licensee and the number of units distributed under license from Licensee.

2.3 Taxes.

All payments required by this Agreement shall be made in United States dollars, are exclusive of taxes, and Licensee agrees to bear and be responsible for the payment of all such taxes, including, but not limited to, all sales, use, rental receipt, personal property or other taxes and their equivalents which may be levied or assessed in connection with this Agreement (excluding only taxes based on Licensor's net income). To the extent Licensee is required to withhold taxes based upon Licensor's income in any country, Licensee shall provide Licensor with written evidence of such withholding, suitable for Licensor to obtain a tax credit in the United States.

2.4 Records.

Licensee shall maintain account books and records consistent with Generally Accepted Accounting Principles appropriate to Licensee's domicile, as may be in effect from time to time, sufficient to allow the correctness of the royalties required to be paid pursuant to this Agreement to be determined.

2.5 Audit Rights.

Licensor shall have the right to audit such accounts upon reasonable prior notice using an independent auditor of Licensor's choice (the "Auditor"). The Auditor shall be bound to keep confidential the details of the business affairs of Licensee and to limit disclosure of the results of any audit to the sufficiency of the accounts and the amount, if any, of a payment adjustment that should be made. Such audits shall not occur more than once each year (unless discrepancies are discovered in excess of the five percent (5%) threshold set forth in Section 2.6, in which case two consecutive quarters per year may be audited). Except as set forth in Section 2.6 below, Licensor shall bear all costs and expenses associated with the exercise of its rights to audit.

2.6 Payment Errors.

In the event that any errors in payments shall be determined, such errors shall be corrected by appropriate adjustment in payment for the quarterly period during which the error is discovered. In the event of an underpayment of more than five percent (5%) of the proper amount owed, upon such underpayment being properly determined by the Auditor, Licensee shall reimburse Licensor the amount of said underpayment and all reasonable costs and expenses associated with the exercise of its rights to audit, and interest on the overdue amount at the maximum allowable interest rate from the date of accrual of such obligation.

2.7 Ownership.

Licensor retains, now and at any future time, all right, title, and interest in and to patents and patent applications owned or controlled by Licensor or its Subsidiaries, including but not limited to any rights relating to any Essential Patent Claims.

2.8 No Other Grant.

Licensee acknowledges that this Agreement does not grant any right or license, under any intellectual property rights of the other party, or otherwise, except as expressly provided in this Agreement, and no other right or license is to be implied by or inferred from any provision of this Agreement or by the conduct of the parties. For example, no right, title, or interest in or to any trademarks, service marks or trade names of Licensor or Licensor's licensors is granted under this Agreement.

Article 3 - TERM AND TERMINATION**3.1 Term.**

The Term of this Agreement shall begin on the Effective Date and shall continue unless and until terminated pursuant to this Article 3. Termination of this Agreement shall not relieve Licensee of any of its obligations hereunder.

3.2 Termination.

This Agreement may be terminated upon notice given by Licensor upon the occurrence of any of the following events:

- a. the Licensee or any of its Affiliates breaches any of the terms hereof; or
- b. there is a voluntary or involuntary filing of bankruptcy by, or similar event affecting, Licensee.

3.3 No Liability for Termination.

Licensee shall have no right to recover damages or to indemnification of any nature, whether by way of lost profits, expenditures for promotion, payment for goodwill or otherwise made in connection with the business contemplated by this Agreement, due to the permitted or lawful termination of this Agreement.

LICENSEE WAIVES AND RELEASES LICENSOR FROM ANY CLAIM TO COMPENSATION OR INDEMNITY FOR TERMINATION OF THE BUSINESS RELATIONSHIP UNLESS TERMINATION IS IN MATERIAL BREACH OF THIS AGREEMENT.

3.4 No Waiver.

Licensor's failure to enforce any provision of this Agreement shall not be deemed a waiver of that provision. The rights of Licensor under this Article 3 are in addition to any other rights and remedies permitted by law or under this Agreement.

Article 4 - MISCELLANEOUS**4.1 Effective Date.**

This Agreement shall become effective upon the execution date of the last signing party.

4.2 No Other Licenses.

Except for the rights expressly provided by this Agreement, Licensor does NOT grant, by implication, or estoppel, or otherwise, any rights under any patents or other intellectual property rights.

4.3 Limitation of Liability.

IN NO EVENT SHALL LICENSOR OR CUSTODIAN BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT (INCLUDING LOSS OF PROFITS, USE, DATA, OR OTHER ECONOMIC ADVANTAGE), NO MATTER WHAT THEORY OF LIABILITY, EVEN IF EITHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OR PROBABILITY OF SUCH DAMAGES. FURTHER, LIABILITY FOR SUCH DAMAGE SHALL BE EXCLUDED, EVEN IF THE EXCLUSIVE REMEDIES PROVIDED FOR IN THIS AGREEMENT FAIL OF THEIR ESSENTIAL PURPOSE.

4.4 No Waiver.

The failure of Licensor to enforce any provision of this Agreement shall not be deemed a waiver of that provision. The rights of Licensor under this Article 3 are in addition to any other rights and remedies permitted by law or under this Agreement.

4.5 Governing Law.

This Agreement is made under and shall be governed by and construed under the laws of the State of California, regardless of its choice of laws provisions.

4.6 Assignment.

The Custodian may upon notice to the Licensee assign this Agreement to a replacement custodian which shall have the rights and obligations as the Custodian hereunder. Licensor may assign its rights and obligations hereunder upon notice to the Custodian.

4.7 Complete Understanding.

This Agreement constitutes and expresses the final, complete and exclusive agreement and understanding between Licensee and the Custodian, and between Licensee and Licensor, with respect to its subject matter (that is, the granting of royalty-bearing licenses under Licensor’s Essential Patent Claims and through the Custodian with respect to Implementations and Incomplete Implementations that are integrated into and distributed as part of an Implementation distributed by a DVB MHP Full Implementer). and supersede all previous communications, representations or agreements, whether written or oral, with respect to the subject matter hereof.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives.

Licensor

Licensee:

By: _____

By: _____

—

Name: _____

Name: _____

(Print or Type)(Print or Type)

—

Title: _____

Title: _____

—

Date: _____

Date: _____

—

**EXHIBIT A TO DVB MHP \$1 PATENT LICENSE AGREEMENT
Form of DVB MHP Test Suite License and Non-Disclosure Agreement**

See item 5.1.1 "DVB MHP TEST SUITE LICENSE AND NON-DISCLOSURE AGREEMENT"

**EXHIBIT B TO DVB MHP \$1 PATENT LICENSE AGREEMENT
Certificate of Assurance**

[DATE]

To the Custodian under the DVB Conformance Testing Custodian Agreement:

European Telecommunications Standards Institute
650 Route des Lucioles
06921 Sophia Antipolis, FRANCE

Ladies and Gentlemen:

Certificate of Assurance of DVB Full Implementer

We hereby deliver this Certificate under one or more of the following Agreements, in each case between us and you, as Custodian named by Sun Microsystems, Inc: The DVB MHP Test Suite License and Non-Disclosure Agreement; The DVB MHP Code License and Non-Disclosure Agreement; the DVB MHP JavaTest License Agreement; the DVB MHP Patent License Agreement; and the DVB MHP \$1 Patent License Agreement. In this Certificate, "Agreement" means one or more of such agreements; and all capitalized terms in this Certificate, unless otherwise defined, have the same meaning as in the Agreement.

We hereby represent and warrant that

- (A) we are a DVB MHP Full Implementer;
- (B) we have entered into a DVB MHP Test Suite License and Non-Disclosure Agreement;
- (C) this is the Certificate of Assurance to be provided to the Custodian under the Agreement; and
- (D) this Certificate has been prepared and signed by a person who is properly authorised to sign it.

We further acknowledge that any license granted by Licensor in respect of a less-than-complete implementation of the Licensor Portion is expressly limited in its scope to integration into and distribution as part of an Implementation.

An entity which delivers an Incomplete Implementation to us, as a DVB MHP Full Implementer, is entitled to rely on this Certificate. If the Incomplete Implementation integrates Incomplete Implementations produced by other entities, such other entities may also rely on this Certificate.

Sincerely yours,

DVB MHP FULL IMPLEMENTER

by: _____
its

EXHIBIT C TO DVB MHP \$1 PATENT LICENSE AGREEMENT

Licensors Portion

The following API signatures constitute the Licensors Portion referenced by the DVB MHP \$1 PATENT LICENSE AGREEMENT ("Agreement", and to which this document is Exhibit C). In most cases the granularity of this list is at the level of Java packages (as specified in "The Sun Specifications for DVB" ISBN 1-892488-25-6), in which case the entire package is listed. With respect to the OEM Personal Java TM Application Environment v. 1.2a Specification, however, the description is more precise indicating specific elements in the Java package that are included within the Licensors Portion.

Java TV API version 1.0 specification

javax.tv.graphics.....javax.tv.locator
 javax.tv.media.....javax.tv.net
 javax.tv.service.....javax.tv.service.guide
 javax.tv.service.navigation..... javax.tv.service.selection
 javax.tv.service.transpor.....javax.tv.util
 javax.tv.xlet

Java Media Framework API version 1.0 specification

javax.media.....javax.media.protocol

Java Secure Socket Extension version 1.0.2 specification

javax.net.....javax.net.ssl
 javax.security.cert

The OEM Personal Java Application Environment version 1.2a specification

java.awt.....java.awt.event
 java.awt.image.....java.io
 java.lang.....java.lang.reflect
 java.math.....java.net
 java.rmi.....java.security
 java.security.cert.....java.security.spec
 java.util.....java.util.zip

The contents of these packages are as specified in the sections of the PJAE 1.2a specification entitled "JAE 1.1.8 API Specification" and "JAE 1.1.8 API Constants", except for:

The package java.security.....The package java.security.spec
 The package java.security.cert.....The class java.lang.SecurityManager
 The method java.awt.Toolkit.createImage(java.lang.String)
 The method java.awt.Toolkit.createImage(java.net.URL)
 The method java.awt.Toolkit.getImage(java.lang.String)
 The method java.awt.Toolkit.getImage(java.net.URL)
 The class java.io.FilePermission.....The class java.io.SerializablePermission
 The class java.lang.RuntimePermission..... The class java.util.PropertyPermission
 The class java.net.SocketPermission

These elements are as specified or Personal Java in the "The OEM Specification for the Personal Java TM Application Environment (PJAE) Version 1.2a."

The exact elements for the PJAE packages are as set forth in Appendix 1 to this Exhibit C.*

* Appendix 1 is available at www.mhp.org

6.1.3 Click Through License

You have chosen to download Sun Specifications for DVB version 1.1

6.1.3.1 TERMS OF USE - EVALUATION

READ THESE TERMS OF USE CAREFULLY BEFORE DOWNLOADING THE SPECIFICATIONS LINKED HERETO.

BY CLICKING ON THE ACCEPT BUTTON BELOW, YOU ARE ACCEPTING AND AGREEING TO ABIDE BY THESE TERMS OF USE.

IF YOU ARE AGREEING TO THESE TERMS OF USE ON BEHALF OF A COMPANY, YOU REPRESENT THAT YOU ARE AUTHORIZED TO BIND THE COMPANY TO THE TERMS OF USE.

IF YOU DO NOT AGREE TO ANY OF THE TERMS OF USE, CLICK ON THE REJECT BUTTON AND EXIT NOW.

I acknowledge that I may view, download, use and reproduce the Specifications accessible through this site solely for the purpose of evaluating such Specifications and for determining whether I wish to make an Implementation under the terms described in the DVB Blue Book, Implementation Arrangements for the DVB Multimedia Home Platform: Conformance Test Suite (DVB document no. A066 [October 2001]) to be available at www.dvb.org (including, without limitation, Article 2.7 of the DVB MHP Test Suite License and Non-Disclosure Agreement). No license is granted hereunder for any other purpose.

6.1.3.2 TERMS OF USE - IMPLEMENTATION

READ THESE TERMS OF USE CAREFULLY BEFORE DOWNLOADING THE SPECIFICATIONS LINKED HERETO.

BY CLICKING ON THE ACCEPT BUTTON BELOW, YOU ARE ACCEPTING AND AGREEING TO ABIDE BY THESE TERMS OF USE.

IF YOU ARE AGREEING TO THESE TERMS OF USE ON BEHALF OF A COMPANY, YOU REPRESENT THAT YOU ARE AUTHORIZED TO BIND THE COMPANY TO THE TERMS OF USE.

IF YOU DO NOT AGREE TO ANY OF THE TERMS OF USE, CLICK ON THE REJECT BUTTON AND EXIT NOW.

I acknowledge that I may view, download, use and reproduce the Specifications accessible through this site only for the purpose of implementing such Specifications under the terms described in the DVB Blue Book, Implementation Arrangements for the DVB Multimedia Home Platform: Conformance Test Suite (DVB document no. A066 [October 2001]) to be available at www.dvb.org (including, without limitation, Article 2.7 of the DVB MHP Test Suite License and Non-Disclosure Agreement). I also acknowledge that I may only implement and distribute the Specifications accessible through this site pursuant to such Agreement. No license is granted hereunder for any other purpose.

”

6.2 Clarification of HAVi licensing for DVB

Currently there are two DVB draft specifications where HAVi is involved, the multimedia home platform (MHP) and the home local network (HLN). The role of HAVi in these two specifications is quite different. The MHP specification contains only a part from the HAVi specification, whereas the HLN specification is fully based upon HAVi.

HAVi's position with regard to the use of HAVi in DVB is as follows:

1. DVB is granted copyright to publish parts of the HAVi specification as part of the DVB specifications, conditional upon DVB extending the same right to HAVi for modifications in the HAVi specification as may be proposed by DVB.
2. HAVi licensing is not required for a HAVi component technology in DVB-MHP (e.g. for the HAVi L2GUI in MHP). Products with DVB-MHP, but without one or more DVB-HLN ports, are not HAVi-compliant.
3. IPR issues for the HAVi component technology in MHP are regulated by the DVB MoU.
4. Products that are HAVi-compliant need a HAVi license. Products that support DVB-HLN will be HAVi-compliant.

HAVi has determined the license fee for HAVi products to be \$0.10 per product plus a one-time administrative fee of \$5,000. -

(signed by HAVi-Licensors Loek Faessen on 17 April 2000)

6.3 MHP Testing Consortium

6.4 Call for IPR Declarations



PRESS RELEASE

Contact: Harold Bergin
WHD Public Relations
P.O. Box 3035,
London SW1P 3BH
United Kingdom

Tel: +44 (0)20 7799 3100
Fax: +44 (0)20 7976 0922
E-mail: harold@whdpr.com
E-mail: smith@dvb.org (DVB Project Office)

DVB PROMOTES POOLING OF MHP PATENTS (3 Sept. 2001)

Geneva, 3 September 2001: The DVB Project announced today that it will foster the formation of a patent pool for its Multimedia Home Platform standard. The objective is to create efficient access to the intellectual property rights necessary for the implementation worldwide of its MHP standard. A patent pool formed on a voluntary basis by holders of intellectual property rights and administered independently of the DVB Project can help fulfil this objective.

The pool will be a voluntary, agreed-upon, joint licensing arrangement for a portfolio of patent rights. It will enable a "one-stop-shop" facility for those requiring licenses. It is intended to result in widespread, non-discriminatory and reasonable licensing of patent rights for MHP technology. In addition to MHP, the announcement covers all the other specifications adopted by the DVB Project since its initial call for declarations in May 1997. As a first step, those holding IPRs essential to the MHP standard, or to the DVB standards listed in the annex, are invited to identify their IPRs to the DVB Project Office before 1 December 2001.

Theo Peek, Chairman of the Steering Board of the DVB Project, said: "Now that the MHP specification has been completed, we can turn to ensuring that the IPRs associated with that standard and our other standards are available efficiently and on terms which are fair, reasonable and non-discriminatory. As with the licensing scheme fostered by DVB and developed by the rights holders in the DVB-T specification, our effort will benefit industry and consumers alike, as it will accelerate the introduction of MHP implementation and DVB services throughout the world. In addition, the pool will meet the goals of IPR holders whose interest is to promote the widest distribution of DVB services and MHP equipment and applications. The mechanism to be developed within a pool formed voluntarily by IPR holders will provide an efficient means to license these IPRs."

Carter Eltzroth, chairman of the DVB's IPR Module, stated, "Our call for declarations builds on the model we successfully created for the DVB's terrestrial specification. When the declarations of IPR essential to a DVB specification are submitted, an independent patent specialist will assess them. Based on the conclusions drawn from that assessment, those holding essential IPR in each specification will be invited to consider forming a licensing programme. Of course, the economic terms of that programme, and the choice of licensing administrator, will remain a decision of the participants in each licensing programme."

"One important focus for this work will be the Multimedia Home Platform," Carter Eltzroth continued. "The scheme to be adopted by the MHP rights holders will inevitably draw upon the implementation arrangements under which the intellectual property rights held by Sun Microsystems Inc in MHP are already made available through the European Telecommunications Standards Institute, as custodian."

The DVB is separately issuing a request for proposals for those companies and individuals that are interested in being engaged by the DVB to serve as the independent IPR assessor.

Holders of IPRs essential to the implementation of a DVB standard are invited to identify their rights to:

DVB Patent Pool Coordinator
DVB Project Office
c/o European Broadcasting Union
17A, Ancienne Route
CH-1218 Grand-Saconnex (GE)
Switzerland
Email: melamed@dvb.org

This press release is available in a short and long version. Attached to the long press release are (1) notes to editors, (2) a description of the information to be submitted by an entity declaring essential IPRs, (3) a list of the specifications covered by this press release, and (4) the request for proposals from those interested in serving as the DVB Patent Pool Coordinator.

Notes to Editors.

1. The DVB Project is the industry-led standards forum that is adopting specifications for digital television and other platforms. Its DVB specifications for digital terrestrial, cable and satellite television have been introduced in Europe and elsewhere throughout the world. Once adopted by the DVB, a recognized standards body, such as ETSI or CENELEC, standardizes its specifications.
2. The DVB Project has adopted a specification for the Multimedia Home Platform, which paves the way for an open standard API designed to facilitate seamless services across broadcast, telecommunications and computer platforms. MHP defines a generic interface between interactive digital applications and the terminals on which these applications execute. The notice calling for declarations also covers all the specifications adopted by the DVB Project since the time of its last call in May 1997. A list of the specifications now covered is attached.
3. The DVB's IPR policy is set out in its Memorandum of Understanding. DVB specifications enjoy an important advantage since the DVB members have undertaken to provide their IPRs essential to a specification on terms that are fair, reasonable and non-discriminatory. A member may give notice that its IPRs are not so available, but to date no such notice has ever been delivered. The complete text of the DVB MoU and its article 14 on IPR policy can be found at www.dvb.org.
4. Under the IPR policy, the DVB fosters a voluntary, agreed-upon, joint licensing arrangement (a "patent pool") for each of its specification. The DVB has successfully fostered a licensing programme for its DVB-T specification, which is now administered by MPEG LA. In addition, since 1995, the companies that developed the DVB common scrambling algorithm have been licensing their technology under a programme under the custodianship of ETSI. Details of these programmes can be found at www.mpegla.com and www.etsi.fr.
5. For the Multimedia Home Platform, arrangements are already in place for the licensing of MHP's java portion, for MHP conformance testing with an MHP Test Suite and for MHP branding. The licensing arrangements cover the rights held by Sun Microsystems Inc. The licensing programme for MHP is likely to build on these MHP implementation arrangements. Details on these arrangements can be found at www.mhp.org.
6. As indicated in the press release, the pooling process contemplated has several steps: the submission of declarations by those holding IPRs essential to the MHP

specification or to one of the other listed specifications; an assessment by a independent patent specialist; and an invitation to those found holding essential IPR to consider forming a pool. At this point, the DVB's fostering process, as provided under its MoU, stops. It is for the rights holders to establish the economic and other terms of their licensing policy.

Information to be submitted by an entity declaring essential IPRs

The identification of a patent right considered essential to the implementation of a DVB standard should specify:

- (a) the standard by number, e.g. EN or ETS, and the relevant section of the standard,
- (b) the patent/patent application number and filing date,
- (c) the date of publication of the patent specification, and
- (d) a list showing the countries in which corresponding patent applications in the same patent family are filed/granted together with the current status of each such patent/application.

The DVB Project expects to receive responses by 1 December 2001. Thereafter the DVB Project will encourage those holding essential IPRs to complete an arrangement for one or more pools, each of which may be constituted as a stand-alone licensing entity, in early 2002. IPR holders may choose to create individual licensing pools, corresponding, for example, to different DVB specifications. Later declarations may also be assessed.

Copies of the specifications are available from the DVB Project Office. Please send requests directly to the following email address:

iprm@dvb.org

Please note that copies can only be supplied via this channel to organisations for the purpose of identifying their essential IPRs. For all other requirements, copies of the DVB specifications must be obtained through ETSI, CENELEC or the EBU.

Specifications covered by the DVB's Call for Declarations

This call for declarations of intellectual property rights essential to DVB specifications is the first call since May 1997. The first call covered most notably the DVB's transmission terrestrial, cable and satellite standards.

The present call covers most notably the specification for the Multimedia Home Platform. Set forth below is a list of titles of covered specifications, together with the reference number of the related recognized standards body. More complete description of each specification can be found at www.dvb.org/iprdeclare

Reference No. Title

EN 300 748	Multipoint Video Distribution Systems (MVDS) at 10 GHz and above
EN 300 749	Framing structure, channel coding and modulation for MMDS systems below 10 GHz
EN 301 701	OFDM modulation for microwave digital terrestrial television
EN 301 210	Framing structure, channel coding and modulation for Digital Satellite News Gathering (DSNG) and other contribution applications by satellite
EN 301 222	Co-ordination channels associated with Digital Satellite News Gathering (DSNG)
EN 301 775	Standard for conveying VBI data in DVB bitstreams
EN 301 192	Specification for data broadcasting
TR 102 154	Implementation Guidelines for the use of MPEG-2 Systems, Video and Audio in Contribution Applications
ETS 300 743	Subtitling systems
ETS 300 802	Network-independent protocols for DVB interactive services
ES 200 800	Interaction channel for Cable TV distribution systems (CATV)
ETS 300 801	Interaction channel through Public Switched Telecommunications Network (PSTN)/ Integrated Services Digital Networks (ISDN)
EN 301 199	Interaction channel for Local Multipoint Distribution System (LMDS) distribution systems
EN 301 195	Interaction channel through the Global System for Mobile Communications (GSM)
TR 101 201	Interaction channel for Satellite Master Antenna TV (SMATV) distribution systems; Guidelines for versions based on satellite and coaxial sections
EN 301 790	Interaction channel for Satellite Distribution Systems
EN 301 958	Digital Video Broadcasting (DVB); Specification of interaction channel for digital terrestrial TV including multiple access OFDM
TS 101 812	Digital Video Broadcasting (DVB); Multimedia Home Platform (MHP)
TS 102812	Digital Video Broadcasting (DVB); Multimedia Home Platform (MHP) in HTML extensions
ETS 300 813	DVB Interfaces to Plesiochronous Digital Hierarchy (PDH) networks
ETS 300 814	Interfaces to Synchronous Digital Hierarchy (SDH) networks
TR 100 815	Guidelines for the handling of ATM signals in DVB systems
TS 101 224	Home Access Network (HAN) with an active Network Termination (NT)
TS 101 225	In-Home Digital Network (IHDN) Home Local Network (HLN)
TR 101 891	Digital Video Broadcasting (DVB); Professional Interfaces: Guidelines for the

	implementation and usage of the DVB Asynchronous Serial Interface (ASI)
EN 50201 (CENELEC)	Interface for DVB-IRDs
TS 102 201	Interfaces for DVB-IRDs
TS 101 197 - 1	DVB SimulCrypt; Part 1: Head-end architecture and synchronization
TS 103 197	Head-end Implementation of SimulCrypt
TR 101 290	Measurement guidelines for DVB systems
TR 101 291	Usage of DVB test and measurement signaling channel (PID 0x001D) embedded in an MPEG-2 Transport Stream (TS)

Background

The DVB Project

The Digital Video Broadcasting Project (DVB) is an industry-led consortium of over 300 broadcasters, manufacturers, network operators, software developers, regulatory bodies and others in over 35 countries committed to designing global standards for the delivery of digital television and data services. The DVB standards cover all aspects of digital television from transmission through interfacing, conditional access and interactivity for digital video, audio and data. The consortium came together in 1993 to create unity in the march towards global standardisation, interoperability and future proofing.

To date, there are numerous broadcast services using DVB standards. There are hundreds of manufacturers offering DVB compliant equipment, which is already in use around the world. DVB dominates the digital broadcasting world. A host of other services is also on-air with DVB-T, DVB-S and DVB-C including data on the move and high-bandwidth Internet over the air. Further information about DVB can be found at: www.dvb.org.

DVB Multimedia Home Platform (MHP)

DVB-MHP was ratified last year by the DVB Steering Board and was formally adopted by the European Telecommunications Standards Institute (ETSI) (ETSI TS 101 812 (MHP)). This action paved the way for the deployment of the open standard API (Application Program Interface), which now facilitates seamless services across broadcast, telecommunications and computer platforms. MHP defines a generic interface between interactive digital applications and the terminals on which those applications execute. The standard enables digital content providers to address all types of terminals ranging from low to high-end set-top boxes, IDTVs and multimedia PCs. With MHP, DVB extends its successful open standards for broadcast and interactive services in all transmissions networks including satellite, cable terrestrial and wireless systems. Further information on MHP can be found at: www.mhp.org.

If you or a colleague would like to receive DVB press releases via e-mail please send your request to: news@whdpr.com.



PRESS RELEASE

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E-mail: smith@dvb.org (DVB Project Office)

DVB EXTENDS PATENT POOL TO GLOBALLY EXECUTABLE MHP (1 May 2003)

Momentum grows for world GEM specifications for interactive television.

Geneva – 1st May 2003 – The DVB Project announced today that it has extended the work of the DVB patent coordinator to include an assessment of its recently adopted specification for the Globally Executable MHP. The work of the coordinator, Sughrue Mion PLLC, will now encompass the DVB's MHP specification, the OCAP specification of CableLabs, and the GEM specification. DVB, together with CableLabs and Sughrue, held a first meeting for potential declarants and other interested parties to discuss the pooling process in Geneva, Switzerland last week on the fringes of the DVB's steering board.

The patent coordinator's work is to review declarations made of patents essential to these and other DVB specifications. It is the first step in a process leading to the formation of a patent pool covering these standards. The objective is to create efficient access to the intellectual property rights necessary for implementation and offered on terms fair, reasonable and non-discriminatory. Holders of IPRs essential to a DVB specification should make their declarations as promptly as possible to Sughrue Mion.

Carter Eltzroth, Legal Director DVB, stated, "DVB is pleased with the number and quality of declarations to date and the addition of GEM to the work will add momentum. New declarants will be joining the seven declarants to date (representing 45 patents) and other important rights holders across the consumer electronic and software communities. I look forward to closing this initial phase of the patent pooling process later this year."

Sughrue as independent patent specialist will assess the declarations submitted. Based on the conclusions drawn from that assessment, those holding essential IPR in each specification will be invited to consider forming a licensing programme. The economic terms of that programme, and the choice of licensing administrator, remain a decision of the participants in each licensing programme.

Alan Kasper, partner at Sughrue Mion, stated, "Our Geneva meeting was the first of several to explain the pooling process, our role in assessing the declarations, and our methodology. I look forward to the next meetings with other potential licensees and interested parties." Meetings are tentatively scheduled to occur during the NCTA in Chicago in early June, in East Asia, and at the IBC in Amsterdam in mid-September.

Holders of IPRs essential to the implementation of a DVB standard are invited to identify their rights by submitting the attached Statement of Declarant (available also at www.mhp.org) and a per-patent submission fee of \$3,500 USD to:

DVB Patent Pool Coordinator

c/o Alan J Kasper, Esq

T: +1 202 293 7060

Sughrue Mion PLLC

E: akasper@sughrue.com

2100 Pennsylvania Avenue NW

Washington DC 20037-3213

Notes to Editors.

1. The **DVB Project** is the industry-led standards forum that is adopting specifications for digital television and other platforms. Its DVB specifications for digital terrestrial, cable and satellite television have been introduced in Europe and elsewhere throughout the world. Once adopted by the DVB, a recognized standards body, such as ETSI or CENELEC, standardizes its specifications.
2. The DVB Project has adopted a specification for the **Multimedia Home Platform**, which paves the way for an open standard API designed to facilitate seamless services across broadcast, telecommunications and computer platforms. MHP defines a generic interface between interactive digital applications and the terminals on which these applications execute. The notice calling for declarations also covers all the specifications adopted by the DVB Project from the time of its pooling exercise in May 1997 to September 2001. GEM is also covered. (A further call will be made for later specifications.) A list of the specifications now covered is attached.
3. The DVB's **IPR policy** is set out in its Memorandum of Understanding. DVB specifications enjoy an important advantage because the DVB members have undertaken to provide their IPRs essential to a specification on terms that are fair, reasonable and non-discriminatory. A member may give notice that its IPRs are not so available, but to date no such notice has ever been delivered. The complete text of the DVB MoU and its article 14 on IPR policy can be found at www.dvb.org.
4. Under the IPR policy, the DVB fosters a voluntary, agreed-upon, joint licensing arrangement (a "**patent pool**") for each of its specifications. The DVB has successfully fostered a licensing programme for its DVB-T specification, which is now administered by MPEG LA. In addition, since 1995, the companies that developed the DVB common scrambling algorithm have been licensing their technology under a programme under the custodianship of ETSI. Details of these programmes can be found at www.mpegla.com and www.etsi.com.
5. For the Multimedia Home Platform, arrangements are already in place for the licensing of MHP's java portion, for **MHP conformance testing with an MHP Test Suite** and for MHP branding. The licensing arrangements cover the rights held by Sun Microsystems Inc. and rights held by Sun and others in the MHP Test Suite. The licensing programme for MHP is likely to build on these MHP implementation arrangements. Details on these arrangements can be found at www.mhp.org and in the DVB Blue Book A066 (revision forthcoming).
6. Since the time of the initial call in September 2001, the DVB has worked with CableLabs and other standards fora on extending the core of MHP, the **Globally Executable MHP**, to other broadcast environments. For this reason, patents essential to the OCAP specification will also be reviewed by Sughrue Mion, the patent coordinator.
7. As indicated in the press release, the pooling process contemplated has several steps. First, those holding IPRs in MHP or one of the other listed specifications should submit declarations to Sughrue Mion, the independent patent coordinator, which will examine the applicability of these IPRs. After its assessment an invitation to those found holding applicable IPR will be invited to consider forming a pool. At this point, the **DVB's fostering process**, as provided under its MoU,

stops. It is for the rights holders to demonstrate the essentiality of their IPRs and to establish the economic and other terms of their licensing policy.

Information to be submitted by an entity declaring essential IPRs

A rights holder submits its declaration to Sughrue Mion by completing the Statement of Declarant (attached to this press release and available at www.mhp.org). Sughrue Mion expects to receive responses as soon as possible. Thereafter the DVB Project will encourage those holding essential IPRs to complete an arrangement for one or more pools, each of which may be constituted as a stand-alone licensing entity. IPR holders may choose to create individual licensing pools, corresponding, for example, to different DVB specifications. Later declarations may also be assessed.

Copies of the specifications are available from the DVB Project Office. Please send requests directly to the following email address: noetzli@dvb.org.

Please note that copies can only be supplied via this channel to organisations for the purpose of identifying their essential IPRs. For all other requirements, copies of the DVB specifications must be obtained through ETSI, CENELEC or the EBU.

Specifications covered by the DVB's Call for Declarations

The present call for declarations of intellectual property rights is the first since May 1997. The 1997 call included DVB's transmission standards for terrestrial, cable and satellite digital broadcasting.

This call covers later specifications, notably the Multimedia Home Platform and the GEM specification. It also includes CableLabs' OCAP specification based on the GEM specification. Set forth below is a list of titles of covered specifications, together with the reference number of the related recognized standards body. More complete description of each specification can be found at www.dvb.org.

<u>Reference No.</u>	<u>Title</u>
EN 300 748	Multipoint Video Distribution Systems (MVDS) at 10 GHz and above
ETS 300 802	Network-independent protocols for DVB interactive services
EN 301 195	Interaction channel through the Global System for Mobile Communications (GSM)
TR 101 201	Interaction channel for Satellite Master Antenna TV (SMATV) distribution systems; Guidelines for versions based on satellite and coaxial sections
EN 301 790	Interaction channel for Satellite Distribution Systems
EN 301 958	Digital Video Broadcasting (DVB); Specification of interaction channel for digital terrestrial TV including multiple access OFDM
TS 101 812	Digital Video Broadcasting (DVB); Multimedia Home Platform (MHP) specification 1.0.2
TS 103 812	Digital Video Broadcasting (DVB); Multimedia Home Platform (MHP) in HTML extensions
TS 102 819	Digital Video Broadcasting (DVB); Globally Executable MHP (GEM)
ETS 300 813	DVB Interfaces to Plesiochronous Digital Hierarchy (PDH) networks
ETS 300 814	Interfaces to Synchronous Digital Hierarchy (SDH) networks
TR 100 815	Guidelines for the handling of ATM signals in DVB systems
TS 101 224	Home Access Network (HAN) with an active Network Termination (NT)
TS 101 225	In-Home Digital Network (IHDN) Home Local Network (HLN)
TR 101 891	Digital Video Broadcasting (DVB); Professional Interfaces; Guidelines for the implementation and usage of the DVB Asynchronous Serial Interface (ASI)
EN 50201	Interface for DVB-IRDS

TS 102 201	Interfaces for DVB-IRDs
TS 101 197 - 1	DVB SimulCrypt; Part 1: Head-end architecture and synchronization
TS 103 197	Head-end Implementation of SimulCrypt
ETR 290	Measurement guidelines for DVB systems
TR 101 290	Measurement guidelines for DVB systems
TR 101 291	Usage of DVB test and measurement signaling channel (PID 0x001D) embedded in an MPEG-2 Transport Stream (TS)

Background

The DVB Project

The Digital Video Broadcasting Project (DVB) is an industry-led consortium of over 250 broadcasters, manufacturers, network operators, software developers, regulatory bodies and others in over 35 countries committed to designing global standards for the delivery of digital television and data services. The DVB standards cover all aspects of digital television from transmission through interfacing, conditional access and interactivity for digital video, audio and data. The consortium came together in 1993 to create unity in the march towards global standardisation, interoperability and future proofing.

To date, there are numerous broadcast services using DVB standards. There are hundreds of manufacturers offering DVB compliant equipment, which is already in use around the world. DVB dominates the digital broadcasting world. A host of other services is also on-air with DVB-T, DVB-S and DVB-C including data on the move and high-bandwidth Internet over the air. Further information about DVB can be found at: www.dvb.org.

DVB Multimedia Home Platform (MHP)

DVB-MHP was ratified in 2000 by the DVB Steering Board and was formally adopted by the European Telecommunications Standards Institute (ETSI) (ETSI TS 101 812 (MHP)). This action paved the way for the deployment of the open standard API (Application Program Interface), which now facilitates seamless services across broadcast, telecommunications and computer platforms. MHP defines a generic interface between interactive digital applications and the terminals on which those applications execute. The standard enables digital content providers to address all types of terminals ranging from low to high-end set-top boxes, IDTVs and multimedia PCs. With MHP, DVB extends its successful open standards for broadcast and interactive services in all transmissions networks including satellite, cable terrestrial and wireless systems. With the launch of the MHP conformance testing regime, MHP implementations are now commercially available. Further information on MHP can be found at: www.mhp.org.

Globally Executable MHP (GEM)

The DVB-MHP GEM specification, standardised by ETSI (TS 102 819), is set to become the first ever common world-wide standard for interactive television. The GEM specification defines the APIs, protocols and content formats that can be relied upon in all interactive television standards and specifications that support globally interoperable MHP applications.

GEM provides a means of ensuring that MHP applications can be carried over networks other than DVB. Where DVB has not been adopted, and therefore where the full MHP standard cannot be implemented, application interoperability can be assured by combining MHP based GEM with the appropriate specifications from another body to produce a GEM receiver.

DVB and MHP are registered trademarks of the DVB Project.

CableLabs

Founded in 1988 by members of the North American cable television industry, Cable Television Laboratories is a non-profit research and development consortium that is dedicated to pursuing new cable telecommunications technologies and to helping its cable operator members integrate those advancements into their business objectives. Cable operators from around the world are members. CableLabs maintains web sites at www.cablelabs.com; www.packetcable.com; www.cablemodem.com; www.cablenet.org; and www.opencable.com.

CableLabs is a registered trademark, and OCAP is a trademark, of CableLabs.

Sughrue Mion PLLC

The firm of Sughrue Mion PLLC is a 100 lawyer firm headquartered in Washington DC and specializing in the practice of law related to intellectual property rights. Since its inception over 45 years ago, the firm has represented its clients in all aspects of patent practice, both in the United States and internationally. The firm’s diverse client based, encompassing a broad spectrum of multinational corporations, high technology growth companies and small start-up ventures, has offered the firm experience in all fields of technology, particularly telecommunications, and has provided Sughrue a wealth of litigation, licensing and client counselling opportunities. Sughrue also has offices in Menlo Park, California, and Tokyo, Japan. Further details can be found at www.sughrue.com.

If you or a colleague would like to receive DVB press releases via e-mail please send your request to: news@whdpr.com.

STATEMENT OF DECLARANT

Ref. No. _____

PART 1: SUMMARY DATA FOR CANDIDATE PATENT or APPLICATION

- A. Title: _____
- B. Patent or Application Number: _____
- C. Publication Date: _____
- D. Publication Number: _____
- E. Listing of all applicable standards: _____
- F. Proprietor of Listed IPR: _____
- G. Contact Person and Details:
 Name (title) _____
 Address: _____

 Email: _____
 Telephone: _____
 Facsimile: _____
- H. English Language Copy or Translation Submitted: Y N

I. PATENT APPLICATION FAMILY

COUNTRY	APPL. NO.	FILING DATE	PUB. NO.	PATENT NO.

7. DVB IPR Policy

7.1 Memorandum of Understanding



Memorandum of Understanding further amended and restated for the development of harmonised Digital Video Broadcasting (DVB) services based on European specifications.

The Statutes of the DVB Project

The signatories:

Considering:

- that the future of terrestrial, cable and satellite television services is important for the public, broadcasters, operators and for the manufacturers who are part of the consumer electronics industry;
- that DVB has enabled digital broadcasting services by satellite and cable to begin in Europe and elsewhere in the world based on the standardisation by the Moving Picture Experts Group (MPEG) of source coding and multiplexing;
- that the future technology for programme production, editing, transmission network and home display will be digital;
- that digital systems, combined with compression technology are now used for feeding cable head ends;
- that digital broadcasting systems, based on DVB specifications, are soon to be introduced into the current terrestrial frequency bands without disturbing existing analogue services;
- that Directive 95/47/EC calls for all digital television transmissions to conform to standards from a recognised European Standards Body and in this regard relevant DVB specifications have been incorporated into European standards;
- that the objectives of the original statutes of the DVB Project (MoU) have now largely been achieved ;
- that enterprises that are, or intend to, invest in systems based on DVB specifications might reasonably expect the DVB to provide an effective technical support to maintain those specifications over a very extended period;
- that Europe needs a forum that brings together all the various parts of the market to keep under review market and technology developments in digital broadcasting so as to identify at a very early stage where further co-operation is needed;

- that some DVB techniques may also be applicable to the future multi-media environment and technical issues will arise across the various interfaces with other technologies such as interactive technologies;
- that the European Commission will review from time to time the state of the digital broadcasting market with a view to the evolution of the regulatory regime and that a forum that brings together all the different parts of the market could be a valuable source of information and advice for such;
- that revised statutes (MoU) are needed that modify the original ones so as to fully reflect the objectives of this new phase of the DVB project;
- that the initial version of the statutes (MoU) was adopted on 10 September 1993; this initial version was amended and restated on 17 December 1996; and the members of the DVB Project have adopted these amended and restated Statutes (MoU) to reflect among other things a more flexible means to advance the work of the DVB Project;

agree the following Articles: -

Article 1 Form, registered office and purpose

- 1.1** The DVB Project is hereby established as a not-for-profit association with legal personality governed by articles 60 and seq. of the Swiss Civil Code and by these Statutes.
- 1.2** The registered office of the DVB Project shall be at the registered office of the European Broadcasting Union (EBU) in Geneva, or at such other location in Europe as the Steering Board may determine in accordance with the Swiss Civil Code.
- 1.3** The purpose of these Statutes (MoU) is to create in Europe a framework for a harmonious and market-driven development of digital broadcasting via cable, satellite and terrestrial means, including broadband wireless (MMDS, LMDS, etc.), interactive services, and to promote links between this European activity and similar activities in other parts of the world.
- 1.4** This shall be realised through:
- preparing and promoting DVB technical specifications for digital television and their widespread international utilisation/adoption.
 - facilitating the introduction of new services using those standards.
 - facilitating the closest possible co-ordination between pre-competitive R&D and standardisation.
 - maintaining the existing DVB specifications to meet the needs of the market in Europe and elsewhere.
 - keeping under continuous review the market and technology developments to identify new developments in digital video broadcasting and related areas where European co-operation is essential for market success.

Article 2 Membership

2.1 Membership

These Statutes (MoU) may be signed by an entity/administration, a group of entities or organisations who commit themselves to the purposes of these Statutes (MoU) and to actively contribute to the work of at least one of the Modules. Such signatories are called Members or Full Members under these Statutes (MoU).

2.2 Observership

Observership status may be granted by decision of the General Assembly to any legal person, company or entity on a basis of mutual reciprocity.

Observers have the right to attend the meetings of the General Assembly with the right to speak but not the right to vote.

The Steering Board may recommend to the General Assembly for Observers an exemption of the full or fractional annual membership fee.

Article 3 Objectives

The deliverables from these Statutes (MoU) are intended to contribute to the following objectives:

- (a)** expanding the number of systems throughout the world that conform to DVB specifications thus realising the benefits for everyone from economies of scale and compatible transmissions;
- (b)** meeting the needs for a high standard of specification maintenance by all the enterprises that invest in systems to DVB specifications both in Europe and other parts of the world ;
- (c)** appropriate solutions to intellectual property rights problems that may arise in the implementation of DVB specifications;
- (d)** providing an effective forum at the European level for identifying, at the earliest possible stage, where further technical co-operation and development is needed to realise the benefits of digital broadcasting technology;
- (e)** ensuring timely action is being taken on any further technical specifications needed by the market, building on the work of the competent European bodies wherever possible;
- (f)** ensuring that the further evolution of the official regulatory policy frameworks for digital video broadcasting services in Europe are based on the best information of the market and industrial conditions;
- (g)** forging links with organisations with compatible aims and objectives to that of the DVB in other parts of the world that intend to base their work, in whole or in part, on DVB specifications.

Article 4 Structure

The organisational structure shall comprise the following:

- General Assembly (GA)
- Steering Board (SB)
- Commercial Module (CM)
- Technical Module (TM)
- Intellectual Property Rights Module (IPRM)
- Promotion and Communications Module (PCM)

The Steering Board may modify the organisational structure in order to achieve the objectives of these Statutes (MoU). The meetings of the Steering Board and the Modules shall take place at the location of the Project Office or at such other location in Europe as the Modules may determine. The location in Europe or elsewhere of joint meetings with other organizations shall be decided by the Steering Board.

Article 5 General Assembly (GA)

- 5.1.** Ordinary meetings of the General Assembly shall be convened once a year, at which the Assembly shall consider the report of the Steering Board, adopt the accounts for the past year and approve the budget for the next year.
- 5.2.** Every two years, at an ordinary meeting, the General Assembly shall appoint the members of the Steering Board for the next two years. Existing members will be eligible for re-appointment.
- 5.3.** Extra-ordinary meetings of the General Assembly may be convened by the Steering Board and shall be convened on a proposal of at least 1/3 of the Full Members.

Article 6 Steering Board (SB)**6.1** The Steering Board shall be composed of:

- A maximum of 40 elected representatives. To ensure a balanced representation of views from broadcasters, operators, manufacturers and administrations these representatives shall be composed of the numbers shown from each of the following constituencies:

Content Providers/Broadcasters (public and private) 14

Infrastructure providers (satellite, cable, terrestrial or network operator) 9

Manufacturers/software suppliers 10

Governments/national regulatory bodies 7

- Only those Full Members indicating their intention to contribute with resources and activities for the benefit of the DVB Project will be eligible to stand for election;
- Representatives of the European Commission, EBU, ACT, ECCA and EACEM shall be ex-officio members of the Steering Board, without voting rights;
- In addition the Steering Board may co-opt additional members without voting rights, to ensure an adequate spread of interests including geographical balance;
- The chairmen of the Modules and any Expert Groups of the Steering Board shall be ex-officio members of the Steering Board, without voting rights;

The Board shall be elected at the General Assembly. Where the number of nominations exceeds the number of places then the Chairman of the General Assembly shall proceed with an election. The election in any constituency shall be confined to those present from that constituency using the rules and procedures adopted by the Board for this purpose.

6.2 The Steering Board shall be responsible for:

- the policy direction of the overall Digital Video Broadcasting Project (DVB);
- co-ordination, priority setting and management of the DVB project;
- advice to public authorities including the European Commission on regulatory needs to facilitate the aims and objectives of the Statutes (MoU);
- amending the working structure as required from time to time;
- electing a chairman who will hold office for two years and who may be re-elected;
- establishing its own rules of procedures, including voting rules.
- appointing the chairmen of subordinate bodies taking into account any nominations from those bodies and approving their terms of reference and internal rules;
- dealing with any procedural disputes;
- appointing a Project Manager as may be required;
- keeping all signatories informed of the work of the Steering Board, Modules and any Expert Groups;
- preparing any proposals for amending the Statutes (MoU) to be put to the Full Members for approval;
- approving the establishment of relationships with organisations in other parts of the world and setting down the entitlements of members of those

other organisations to receive information on and take part in the work of the DVB.

- 6.3** The EBU shall provide a "Project Office" support to the Steering Board for any Project Management.
- 6.4** All reasonable efforts shall be taken to ensure decisions of the Board are taken on the basis of consensus. However, when a consensus on an issue cannot be achieved during a meeting of the Steering Board, a call for an indicative vote may be made by the Board Chairman or by ten or more members of the Steering Board. If the indicative vote indicates a favorable outcome (with the majority indicated below) but a consensus is nonetheless not achieved, a call for a deciding vote may be made by ten or more members of the Steering Board to be held at the following meeting of the Steering Board. At such second meeting, the decision shall be valid where
- (i) two-thirds of the members of the Steering Board are in favor, and
 - (ii) no constituency votes against the decision, by simple majority of its Steering Board representatives present and voting.

Co-opted and ex officio members of the Steering Board may neither vote nor call for a vote. Where the decision concerns advice to an institution of the European Union, then all minority and dissenting views shall be transmitted as well to that institution and other relevant parties.

Article 7 Commercial Module (CM)

The Commercial Module is open to senior managers concerned with the commercial exploitation of services/products in digital broadcasting and related areas.

The Commercial Module shall aim to create a common vision of Europe's future digital distributive electronics highways. It shall keep under review developments in the digital video broadcasting market, both commercial and technological, with a view to identifying, at the earliest possible time, the need for new co-operation.

The Commercial Module shall provide the definition of service requirements, priorities and time scale requirements to the Technical Module and upon completion of the specifications, when agreement between the two Modules is achieved, shall report to the Steering Board their endorsement of the results.

The Commercial Module shall endeavour to reach consensus including the use of indicative voting but if this is not possible in a timely way it shall put the options and the minority opinions to the Steering Board.

Article 8 Technical Module (TM)

The Technical Module provides technical expertise and is open to the technical experts of all Full Members.

The Technical Module also provides a forum for the co-ordination of R&D activities. It shall register details of all R&D projects wishing to come within the scope of these Statutes (MoU).

The Technical Module works according to requirements set down by the Commercial Module. It delivers specifications for one or more Standards via the Steering Board to the recognised standards setting entities, notably the EBU/ETSI/CENELEC Joint Technical Committee. It provides a conduit to other relevant standardisation activities including MPEG for the purpose of meeting the objectives of these Statutes (MoU).

In areas related to digital broadcasting but outside of it, the Technical Module shall recommend to the Commercial Module the adoption of standards of competent standardisation bodies or support for the activities in these related areas under way in other fora or other standards bodies. The Technical Module shall only produce DVB specifications in these related areas where there is no prospect of a standard emerging in a timely way that meets market need defined by the Commercial Module.

The Technical Module is entitled to deal with purely technical issues without there being a defined commercial requirement, but with the approval of the Commercial Module at the earliest possible time.

The Technical Module shall endeavour to reach consensus including the use of indicative voting but if this is not possible in a timely way it shall put the options together with the minority opinions to the Commercial Module and to the Steering Board as appropriate.

Article 9 Intellectual Property Rights Module (IPRM)

The Intellectual Property Rights Module shall provide a forum for members to seek out solutions to any intellectual property rights issue that arise in relation to DVB specifications, within the framework of Article 14.

Article 10 Promotion and Communications Module (PCM)

The Promotion and Communications Module shall ensure the flow of information to all parts of the world concerning DVB activities and specifications according to priorities set by the Steering Board and within a budget set by the Steering Board. This shall include organising the participation of the DVB Project in conferences and exhibitions around the world.

Article 11 Responsibilities of the Modules

Each Module shall be responsible for its own organisational arrangements, providing always that such arrangements do not conflict with these Statutes. Each shall propose for approval by the Steering Board its terms of reference and rules of procedure. They may offer to the Steering Board a nomination for the Chairman of their Module. Full Members are entitled to send representatives to all modules.

Article 12 Sources of funds

12.1 The activities under these Statutes (MoU) shall be funded in one of three ways:

- (a)** Costs of individual participation to be met by the organisations of the participants. This shall include elected officials.
- (b)** All other expenses from a membership fee set each year by the Steering Board within a ceiling not too far removed from the initial membership fee.
- (c)** Other sources of funding approved by the Steering Board.

12.2 The initial membership fee shall be 10,000 Euros with no reduction for those joining later in a particular year. The Steering Board may waive the membership fee where a number of Members already paying their fee also wish to be represented by an association.

12.3 The accounts shall be administered by the European Broadcasting Union or such other body as the Steering Board shall determine.

Article 13 Documentation

13.1 All Members shall be entitled to receive all output documents from all Modules of activities and the minutes of the Steering Board. The Steering Board shall determine its policy on the confidentiality of papers and similarly each of the Modules shall do likewise for its papers. This procedure shall also take into account the confidentiality agreements of the various contributing projects.

13.2 Members and Observers shall be entitled to receive all documents available during General Assembly meetings.

Article 14 Intellectual Property Rights

Recognising that the DVB Project is not a standards body, the DVB Project takes the basic position that if specifications made by the DVB group are being adopted as standard by a recognised standards body the IPR policy of that standards body should apply to such standards. In order to expedite and to support the standardisation process Members commit themselves to the following policy.

- 14.1** Within 90 days from notification of approval of a specification by the Technical Module, each Member shall, on behalf of itself and its affiliated companies, submit to the chairman of the Steering Board a list of all the IPRs owned or controlled by the Member or any of its affiliated companies, to the extent that the Member knows that such IPRs will be necessarily infringed when implementing such specification and for which it will not or has no free right to make licences available.
- 14.2** With respect to any IPRs, owned or controlled by the Member or any of its affiliated companies, under which it or any such affiliated company has the free right to grant or to cause the grant of licences and to the extent that such IPRs will be necessarily infringed when implementing any specification approved by the Technical Module, other than those that are notified under clause 14.1 hereof, each Member hereby undertakes, on its behalf and on behalf of its affiliated companies, that it is willing to grant or to cause the grant of non-exclusive, non-transferable, world-wide licences on fair, reasonable and non-discriminatory terms and conditions under any of such IPRs for use in or of equipment fully complying with such specification to any third party which has or will submit an equivalent undertaking with respect to any relevant IPRs it may have or obtain with respect to such specification.
- 14.3** A Member shall have the right up until the time of final adoption as a standard by a recognised standards body of a specification approved by the Steering Board to declare to the DVB Steering Board that it will not make available licences under an IPR that was subject to the undertaking for licensing pursuant to article 14.2 above, only in the exceptional circumstances that the Member can demonstrate that a major business interest will be seriously jeopardised.
- 14.4** As used in this Article 14, "affiliated company" shall mean, in respect of a Member, any legal entity which directly or indirectly controls, is controlled by, or is under common control with the Member, but only as long as such control exists, where the term "control" means the ownership, directly or indirectly, of more than 50 % of the interest representing the right to vote or to manage the affairs of an entity.
- 14.5** This Article covers digital video broadcasting via satellite, cable, terrestrial and broadband wireless (MMDS, LMDS, etc) means and incorporating the global MPEG2 standard for source coding and multiplex to the extent possible, together with the relevant aspects of the related receiving equipment (including in each case scrambling) and does not cover associated matters such as conditional access. For the avoidance of doubt Article 14 does not cover the IPR arising from the MPEG2 standard itself.
- 14.6** Any notifications made by Members in connection with this Article 14 shall not constitute notice from any Member to any other Member (or any Observer) or constitute a charge or basis for a charge, of infringement of any IPR or related damages claim of any kind, for any purpose, under any applicable law.
- 14.7** Each Member hereby agrees, on its behalf and on behalf of its affiliated companies, that, subject to clause 14.9 of this Article 14, all disputes with any other Member of these statutes (MoU) regarding solely the terms and conditions of licences arising in connection with the undertaking in this Article 14 shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by three arbitrators appointed in accordance with such Rules. Arbitration shall take place in Frankfurt, Germany. German substantive law shall apply. The language of the arbitral proceedings shall be the English language unless agreed otherwise between the Members.
- 14.8** Clauses 14.1 through 14.6 of this Article 14 to these Statutes (MoU) sustains in force the provisions of Article 19 of the previous version of the statutes (MoU) adopted by the General Assembly in accordance with the voting procedure pursuant Article 15 of that version and those provisions applied retrospectively.

- 14.9** For any specification approved by the Steering Board clause 14.7 of this Article shall come into force two years after the notification referred to in clause 14.1 unless by such date at least 70 percent of all Members or their affiliated companies holding IPRs which have been identified as being necessarily infringed when implementing such specification and subject to the undertaking for licensing pursuant to clause 14.2 (but excluding Members or their affiliated companies, all of whose IPRs were subsequently available under clause 14.3) have notified the Steering Board of a voluntary agreed upon joint licensing programme regarding their identified IPR for such specification.

Article 15 Withdrawal

A Member may withdraw from the DVB Project at any time by giving 1 month's notice in writing to the Chairman of the Steering Board. Such withdrawal shall not affect the existing obligations on the Member in its individual capacity.

Article 16 Amendments

Any amendments to these Statutes (MoU) shall be prepared by the Steering Board and shall be decided by the General Assembly or by postal ballot to Members. If the proposal is put to the vote by the General Assembly, it will be adopted when two-thirds or more of the votes are in favour and greater than 50 percent of Members have voted. If the proposal is put out to all Members for a vote by postal ballot, it will be adopted, after giving Members not less than two months to reply, when two-thirds or more of the votes are in favour and greater than 50 percent of Members have voted. If in either case the 50 percent quorum is not achieved (but the proposal shall have received favourable votes from two-thirds of those voting), then the proposal may be either

- (i) put to all Members for a further vote by correspondence and will be adopted, after giving Members not less than two months to reply, when three-quarters or more of the votes cast in the further vote are in favour (without regard to the number of Members voting), or
- (ii) put to the vote by a second General Assembly and will be adopted when three-quarters or more of the votes cast are in favour (without regard to the number of Members voting).

Article 17 Interpretation

The Steering Board shall provide guidance on any questions of interpretation of the statutes (MoU).

Article 18 Duration

These amended and restated statutes (MoU) amend and restate the statutes (MoU) of the DVB Project adopted on 10th September 1993, as amended and restated on 17th December 1996 and the DVB Project continues without interruption subject to article 20 hereunder.

Article 18 No agency

No Member shall act or represent or hold itself out as having authority to act as an agent or partner of any other Member, or in any way bind or commit any other Member to any obligations.

Article 20 Dissolution

- 20.1** The DVB Project may be dissolved by decision of the General Assembly taken under the procedure specified in Article 16. Dissolution of the DVB Project shall not affect any existing obligations on the Members in their individual capacity arising from Article 14.
- 20.2** In the event of dissolution of the DVB Project, any remaining assets, after payment of all outstanding liabilities, shall be transferred to a similar association pursuing the same objectives. Under no circumstances will the assets be returned to the members, nor used for their own benefit.

7.2 Copyright Policy

FINAL

DVB Copyright Policy

1. Each contributor grants the DVB Project, under any applicable IPRs (excluding patent, patent applications or trademarks) owned or licensable by such contributor, a nonexclusive, nontransferable, worldwide, royalty-free license to use, copy, distribute to other members of the DVB Project, and make derivative works of any contribution it makes, for the sole purpose of drafting and creating specifications (as defined in Article 8, Paragraph 3), draft specifications, reports or other documents made pursuant to the activities of the DVB ("Materials").
2. Upon approval of such Materials by the DVB Project, each contributor further grants the DVB Project, under any applicable IPRs (excluding patent, patent applications or trademarks), owned or licensable by such contributor, a nonexclusive, nontransferable, worldwide, royalty-free, perpetual, irrevocable, sublicenseable license to (a) use, copy, distribute and make derivative works of any contribution included in such approved Materials, and to implement such approved Materials and derivative works for purposes of implementing a specification, and (b) use, make, reproduce, sell, distribute, import or transmit implementations of such approved Materials and derivative works for purposes of implementation of a specification. Subject to the rights granted herein, all right, title and interest in and to an individual contribution shall remain with the contributor.
3. Ownership of the copyright in Materials created by the DVB Project or any of its Modules, Committees or other bodies shall vest in the DVB Project. Members of the DVB Project shall be allowed to make copies of and use such Materials for their own use free of charge.
4. The Steering Board may grant licenses to third parties to specifications on terms and conditions determined by the Steering Board, consistent with the policies of the DVB Project.
5. A specification referenced in a DVB specification is normative if it refers to a document that sets out provisions that are necessary to implement a mandatory or optional provision of the specification. The text of a normatively referenced document must be publicly available for evaluation without contractual restrictions other than those reasonably intended to restrict duplication and redistribution (which may include the obligation to pay reasonable fees). A copyright license to implement the referenced document must be available to DVB implementers on fair, reasonable, and non-discriminatory terms and conditions. The Steering Board may make an exception to the above provisions if it determines that an exception is in the interest of the DVB Project.

7.3 GEM Policy (see item 4.4)

7.4 Call for IPR Declarations (see item 6.4)
