

Singapore Management University

Institutional Knowledge at Singapore Management University

Research Collection Yong Pung How School Of
Law

Yong Pung How School of Law

12-2006

A universal copyright fund: A new way to bridge the copyright divide

Kung-chung LIU

Singapore Management University, kcliu@smu.edu.sg

Haochen SUN

Follow this and additional works at: https://ink.library.smu.edu.sg/sol_research



Part of the [Intellectual Property Law Commons](#)

Citation

LIU, Kung-chung and SUN, Haochen. A universal copyright fund: A new way to bridge the copyright divide. (2006). *National Taiwan University Law Review*. 1, (2), 33-56.

Available at: https://ink.library.smu.edu.sg/sol_research/3127

This Journal Article is brought to you for free and open access by the Yong Pung How School of Law at Institutional Knowledge at Singapore Management University. It has been accepted for inclusion in Research Collection Yong Pung How School Of Law by an authorized administrator of Institutional Knowledge at Singapore Management University. For more information, please email cherylds@smu.edu.sg.

Article

A Universal Copyright Fund: A New Way to Bridge the Copyright Divide

Kung-Chung Liu[†] & Haochen Sun^{††}

CONTENTS

I.	FAILURE OF THE COPYRIGHT COMPULSORY LICENSING REGIME	36
A.	<i>Insertion of a Compulsory Licensing System into the Berne Convention</i>	36
B.	<i>Developing Countries' Inability to Fully Utilize Compulsory Licensing</i>	40
1.	<i>The Berne Appendix is Overly Strict, Complex and Ambiguous</i>	40
2.	<i>Developing Countries Lack the Administrative and Legal Infrastructure</i>	42
3.	<i>Fear of Unilateral Trade Sanctions</i>	42
C.	<i>Simplification of Requirements for the Granting of Compulsory Licenses is infeasible</i>	43
II.	UNIVERSAL TELECOM SERVICE	44
A.	<i>Origin</i>	44
B.	<i>Development</i>	45
1.	<i>Universal Service via Implicit Subsidy</i>	45

[†] Research Fellow, Institutum Iurisprudentiae, Academia Sinica, Taipei, Taiwan.

^{††} Lecturer on Law, Zhejiang Gongshang University School of Law and Fellow, Berkman Center for Internet & Society, Harvard Law School, US. The authors would like to thank the two anonymous referees for their invaluable comments and Mr. Kent Suarez for editing this paper. The draft of this paper was presented at the Third Conference on Asian and European Intellectual Property Rights jointly convened by Max Planck Institute for Intellectual Property, Competition and Tax Law, Institutum Iurisprudentiae/Center for Institution and Behaviour Studies, Academia Sinica, and Singapore Intellectual Property Academy. We are grateful to the conference participants for their helpful comments and suggestions.

2. <i>Statutory Universal Service</i>	46
3. <i>Overall Evaluation of Universal Telecom Service</i>	50
III. A UNIVERSAL COPYRIGHT FUND	51
A. <i>It's a Voluntary Act of Each Individual</i>	51
B. <i>It's Easy to Understand and Collect</i>	52
C. <i>It's Not a Centralized Fund</i>	52
D. <i>Management and Usage of the Fund</i>	53
IV. ENCOURAGING DEVELOPMENT IN OTHER AREAS	53
REFERENCES.....	55

In recent years copyright protection has witnessed an unprecedented increase at the national, regional and international levels and along with it a potential shift in theoretical underpinnings of copyright law toward an ingenious idea that copyrights should be defined as “rights that are, like natural property rights, permanent and absolute.”¹ As rightly summarized by one commentator: “Copyright legislation has long been notorious for its embodiment of successful industry rent-seeking.”² Worse still, the ever-increasing digitization of works, along with the deployment of technical measures to protect such works and the expansive use of the Internet, further exacerbate the divide between the IP-rich and IP-poor countries in their ability to benefit from such works. A new term, “digital divide”, was coined in the mid 1990s to reflect the perceived gap between the information haves and have-nots in the information age. In 2001 the G8 Digital Opportunity Task Force described the phenomenon as follows:

This “digital divide” is, in effect, a reflection of existing broader socio-economic inequalities and can be characterized by insufficient infrastructure, high cost of access, inappropriate or weak policy regimes, inefficiencies in the provision of telecommunication networks and services, lack of locally created content, and uneven ability to derive economic and social benefits from information-intensive activities.³

Accordingly, many efforts have been made to address the issue of the digital divide, mainly targeted at leveling the differences in telecom networks and Internet access and a humanitarian approach. For example, Peter Yu suggests turning the digital divide into “digital dividends” via five A’s: Awareness, Access, Affordability, Availability and Adaptability.⁴

1. Lawrence Lessig, *Copyright's First Amendment*, 48 UCLA L. REV. 1057, 1068 (2001) (criticizing the recent argument that copyrights should not be the rights that “get defined or balanced against other state interests, but as rights that are, like natural property rights, permanent and absolute” and pointing out that “the ‘exclusive rights’ clause has become the ‘intellectual property’ clause”).

2. Neil Weinstock Netanel, *Locating Copyright Within the First Amendment*, 54 STAN. L. REV. 1, 67-69 (2001).

3. Report of the Digital Opportunity Task Force, *Digital Opportunities for All: Meeting the Challenge* 6 (2001), available at <http://www.g8.utoronto.ca/summit/2001genoa/dotforce1.html> (last visit July 14, 2005). The DOT Force was created by the G8 Heads of State at their Kyushu-Okinawa Summit, and comprised 43 teams from government, the private sector, and non-profit and international organizations, representing developed and developing countries. For a discussion about the concept of the digital divide, see also Haochen Sun, *Copyright Law Under Siege: An Inquiry into the Legitimacy of Copyright Protection in the Context of the Global Digital Divide*, IIC 36 (2/2005), 192-213; Pippa Norris, DIGITAL DIVIDE? CIVIC ENGAGEMENT, INFORMATION POVERTY, AND THE INTERNET WORLDWIDE 45-47(2001).

4. Peter Yu, *Bridging the Digital Divide: Equality in the Information Age*, 20 CARDOZO ARTS & ENT. L.J. 6, 52 (2002).

However, this paper tries to deal with this longstanding and yet rapidly worsening problem by borrowing from experiences on how the telecommunications world provides universal service to each and every household at affordable prices, and endeavors to shed some new light on how the copyright divide can be narrowed. It is structured in three parts. The first part will examine the past and future failure of the current compulsory licensing scheme which was worked out in the last century in the international copyright treaties, followed by a study of the universal services arrangement in telecommunications in the second part. The third part will envisage a universal copyright fund for the world community to consider. It is our firm belief that in order to do the IP-poor more than lip service, citizens of the world and the international community should and can invent a workable mechanism.

I. FAILURE OF THE COPYRIGHT COMPULSORY LICENSING REGIME

A. *Insertion of a Compulsory Licensing System into the Berne Convention*

Back in the middle of the last century, a “copyright war” broke out between the developed and developing countries. Those newly politically independent countries perceived that they were not economically independent enough and therefore that steps must be taken to surmount the barriers of economic development and nurture a sound environment for sustainable development. The provision of better education and vocational training, and the fostering of a viable technological base are, in these countries’ eyes, the preconditions for realization of their ambitions of political, economical, and cultural independence. Bringing these plans to fruition necessitated unfettered access to a wide array of educational and informational materials. However, copyright protection afforded by the Berne Convention was regarded by many as one of the major contributing factors giving rise to access problems, for it enabled publishers in the developed countries to charge overly high fees, and prevented people in the developing countries from benefiting from access to these unaffordable materials. Thus, issues regarding the affordability and availability of copyrighted materials occasioned by the international copyright regime occupied the center of the post-colonial debate for the equity and legitimacy of international law. Developing countries argued that the Berne Convention is one of the products of colonialism and that they were deprived of the equal chance to participate in the process of treaty-making-and-revision. The limited participation of developing countries tipped the Berne Convention in favor of developed countries’ interests and rendered it unsympathetic to their development needs. As

many developing countries proposed, the Berne Convention should be revised in a manner conducive to the promotion of economic, social, cultural and technological development in these countries. Developed countries, of course, were of the position that the sanctity of the Berne Convention and its core principles should and must be championed.

Ironically, the reform of the international copyright system was first undertaken not within the framework of the Berne Convention, but in the context of the Universal Copyright Convention (UCC),⁵ which sets forth relatively low standards for copyright protection.⁶ The first meeting reflecting the needs of these “new” countries was jointly organized by UNESCO and the International Bureau for the Protection of Intellectual Property (BIRPI) and was held at Brazzaville in 1963.⁷ While the initial intentions of twenty-three African countries were oriented towards the revision of UCC to accommodate their development policies, they ultimately shifted their concern towards modifying the Berne Convention.⁸

Facing mounting pressure from developing countries⁹ and in order to attract more countries into the Berne Union,¹⁰ the 1964 Report of the Study Group rendered a statement friendly to developing countries :

However, it is also necessary to promote the general development of copyright reforms intended to make the rules relating to it more simple to apply, as well as to adapt them to the social, technical and economic conditions of the contemporary community.¹¹

5. Universal Copyright Convention, Sept. 6, 1952, 6 U.S.T. 2731, T.I.A.S. No. 3324, 216 U.N.T.S. 132, as revised at Paris on July 24, 1971.

6. Note that ‘relatively low’ implies the author does not feel they are very high, i.e., that they are rather low. “Lower” would mean lower than the Berne Convention, for example. Choose either depending on your meaning but don’t mix “relatively” and “lower”.

7. See Proposals for Revising the Substantive Copyright Provisions (Articles 1-20), Doc S/1, prepared by the Government of Sweden with the assistance of BIPRI, in WIPO, *Records of the Intellectual Property Conference of Stockholm*, June 11 to July 14, 1967, 137. BIRPI organized the administration of the Berne Convention before the inception of the World Intellectual Property Organization in 1967. UNSECO, under the lead of the United States, administers the UCC

8. SAM RICKETSON, *THE BERNE CONVENTION FOR THE PROTECTION OF LITERARY AND ARTISTIC WORKS: 1886-1986 597-98* (1987). Professor Ricketson explained the reasons for this shift: “[i]n part, this was due to the impending revision of the Berne Convention, which none was then contemplated in relation to the UCC. Another reason may have been that the Berne Convention, in view of its longer history, was seen as the more prestigious instrument.”

9. See PAUL GOLDSTEIN, *INTERNATIONAL COPYRIGHT : PRINCIPLES, LAW, AND PRACTICE* 314 (2001).

10. See RICKETSON, *supra* note 8, at 600.

11. BIRPI, General Report of the Swedish/BIRPI Study Group, 1 July 1964, Doc DA/22/2, 5.

The Report suggested a number of proposals to modify the Berne Convention in favor of developing countries, permitting the reservations of the obligations regarding translations, copyright duration, broadcasting, educational uses, and so forth.¹² The conflation of the above recommendations with those from the 1965 Committee of Governmental Experts¹³ formed the final proposals for the revision of the Berne Convention.¹⁴ At the same time, a separate protocol to the Berne Convention was also proposed to encompass the impending revisions for the developing countries.¹⁵

The Stockholm Revision Conference convened in 1967 was marked by the polarized stance taken by some of the developing and developed countries. India, for example, argued that copyrights should not be absolute and there should be no barrier to the adoption of compulsory licenses in appropriate circumstances.¹⁶ On the contrary, the U.K. delegation was in the strongest opposition to the revision, contending that “the Protocol appeared to be a way of giving economic assistance to developing nations at the expense of authors and that it was an inappropriate way of achieving this objective”.¹⁷ Certain developed countries, such as France, Italy and Ireland were in the middle path and showed readiness to provide assistance to developing countries.¹⁸ Yet underneath their superficial willingness to make concessions was still the longstanding protectionist approach to the sanctity of copyright protection.¹⁹ Against this backdrop, the Protocol was adopted by the final plenary session of the Stockholm Conference. The lack of real compromise by the developed and developing nations foreshadowed the future failure of the Protocol. The Stockholm Protocol, among other things, established a compulsory licensing regime, albeit an extremely complex one, to override the translation right and the reproduction right for certain purposes.

Unsurprisingly, the Stockholm Protocol was then met with strong opposition from interest groups in the developed countries. The prevailing

12. See *Proposals for Revising the Substantive Copyright Provisions (Articles 1-20)*, Document S/1, prepared by the Government of Sweden with the assistance of BIPRI, in WIPO, *Records of the Intellectual Property Conference of Stockholm*, June 11 to July 14, 1967, at 137-39.

13. See *ibid.*, at 139-142.

14. See *ibid.*, at 142-143.

15. See *ibid.*, at 144. Being interim measures, these revisions would be abandoned by the countries when they reached higher level of development. Also, given the extensive nature of the revisions, “there were stylistic reasons for including them in a separate Protocol”. See RICKETSON, *supra* note 8, at 603.

16. See RICKETSON, *supra* note 8, at 607.

17. See RICKETSON, *supra* note 8, at 608.

18. *Ibid.*

19. For instance, France later adopted a more critical view of the Protocol and ultimately refrained from ratifying it. See RICKETSON, *supra* note 8, at 621.

viewpoint was that this Protocol had been embedded with too many concessions in favor of developing countries,²⁰ and therefore “constitutes a sacrifice of the rights of authors in developed countries and jeopardizes the best interests of authors in developing countries.”²¹ The U.S. even warned that the adoption of the Protocol would create an insurmountable barrier to its desired accession to the Berne Convention. Thus, steps were later taken to overcome this shameful impasse.²² After years of turmoil and debates the revision of the Berne Convention and UCC proceeded simultaneously at the 1971 Paris Conference. At the end of this Conference, the revision of the Berne Convention and UCC, and the Appendix based upon the revised Stockholm Protocol, were ultimately adopted.

The Berne Appendix subjects both the translation rights and the reproduction right in developing countries to compulsory licenses. In the case of the translation right, qualified countries may replace exclusive rights with nontransferable, nonexclusive licenses under conditions that include the expiration of at least three years from a work’s publication,²³ provided that a translation “has not been published in a language in general use in that country by the owner of the right of translation,”²⁴ and that the license “shall be granted only for the purpose of teaching, scholarship or research.”²⁵ In respect of the reproduction right, the non-exclusive and non-transferable compulsory license is limited to copies made for use in “systematic instructional activities”²⁶ and is available if copies have not, within five years of publication, been distributed for this purpose at a reasonable price;²⁷ in the case of works in the natural and physical sciences, the minimum period is reduced to three years,²⁸ and in the case of fiction, poetry, drama, music, and art books, it is increased to seven years.²⁹ In order to prevent trade diversion, the export of copies made under this compulsory license from the qualified

20. Typical concerns were highlighted by one delegate of the U.S.: (1) the lack of any real guarantee that authors would be paid in cases of use for “teaching, scholarship and research”; (2) the problems that might arise with respect to the transmittal of compensation in the case of the other reservations; (3) the provisions allowing export of copies to other developing countries; (4) the inadequate definition of a developing countries and (5) the lack of any direct incentive to developing countries to improve the level of protection beyond that offered by the Protocol. *See* RICKETSON, *supra* note 8, at 621.

21. General Assembly of ALAI, 23 April 1968, Paris: [1968] Copyright 146. RICKETSON, *supra* note 8, 622.

22. *See* RICKETSON, *supra* note 8, at 625-632.

23. Berne Appendix, Article II: (2) (a).

24. *Ibid.*

25. Berne Appendix, Article III: (5).

26. Berne Appendix, Article III: (2) (a)(ii).

27. Berne Appendix, Article III: (2) (b).

28. Berne Appendix, Article III: (3) (i).

29. Berne Appendix, Article III: (3) (ii).

country is prohibited.³⁰

The Berne Convention and its Appendix were integrated into the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement)³¹ through the Uruguay Round of multilateral trade negotiation.³² The integration reveals that, despite the passage of time, the Appendix is still an internationally respected instrument designed especially for the developing countries. In December 1996, WIPO Copyright Treaty (WCT)³³ was adopted at the WIPO Diplomatic Conference, expanding and updating the international legal framework established by the TRIPS Agreement and the Berne Convention. The WCT only permits its members to “carry forward and appropriately extend into the digital environment limitations and exceptions in their national laws which have been considered acceptable under the Berne Convention” and “devise new exceptions and limitations that are appropriate in the digital network environment”,³⁴ provided that the three-step test is met.³⁵

B. *Developing Countries’ Inability to Fully Utilize Compulsory Licensing*

However, despite the existence of the Berne Appendix, many developing countries were unable to employ the instrument of compulsory licensing to mobilize and improve their educational and training systems, due to the lack of financial means to obtain even compulsory licenses from publishers in the developed countries to translate the needed books into local languages in the first place, and to purchase books if they were published at all under compulsory licenses. In addition, the following three factors further undercut developing countries’ ability to utilize compulsory licensing to enhance the availability of copyrighted materials.

1. *The Berne Appendix is Overly Strict, Complex and Ambiguous*

Conditions for granting compulsory licensing set forth in the Berne Appendix are overly strict, extremely complicated, and disturbingly

30. Berne Appendix, Article IV: (4).

31. Agreement on Trade-Related Aspects of Intellectual Property Rights, April 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments—Results of the Uruguay Round vol. 31, 33 I.L.M. 81, art. 28.1 (1994).

32. Article 9 (1) of the TRIPs Agreement provides that “[m]embers shall comply with Articles 1 through 21 of the Berne Convention (1971) and the Appendix thereto.” However, the provision concerning moral rights was not incorporated into the TRIPs Agreement. See TRIPs Agreement, *id.*, art. 9 (1).

33. WIPO Copyright Treaty, 20 December 1996, 36 I.L.M. 65.

34. Agreed Statement concerning Article 10 of the WCT.

35. See WCT, art. 10.

ambiguous. Berne Union or TRIPS members who are eligible to benefit from the concessions encompassed in the Berne Appendix, should satisfy and comply with the detailed requirements provided for in the Appendix. First, they should be developing countries in line with the two criteria stipulated in the Appendix:

- any eligible member should be regarded as a developing country “in conformity with the established practice of the General Assembly of the United Nations”; and

- with respect to its “economic situation and its social or cultural needs”, any eligible member does not “consider itself immediately in a position to make provision for the protection of all the rights as provided for in [Berne Convention]”.

These two detailed conditions should be met simultaneously. Any violation of either requirement will render a member ineligible to enjoy the benefits accruing from the Appendix. As threshold criteria, however, they appear to be too vague and thus fail to proffer sufficient guidance to confirm the eligibility of beneficiary countries. The notion of “established practice” per se is not a defined concept in the context of United Nations systems.³⁶ The other condition, in spite of its initial embedded intention to provide clarification, adds superfluous uncertainty to the ascertainment of eligible beneficiary countries, because the economic situation and social or cultural needs are somewhat subjective and sometimes extremely difficult to prove.

Moreover, the eligible members must comply with the specific conditions for the granting of compulsory licensing. Article II of the Appendix may constitute the longest single provision extant in international treaties. Combined with Article IV of the Appendix, it generally sets up nine preconditions for the granting of compulsory licensing for the purpose of translation. Nonetheless, under these two Articles, there may be double or triple the number of sub-conditions awaiting to be adhered to. Although conditions to be met are extremely complex, the Appendix fails to systematize them to provide clear-cut guidance to which developing countries could make reference before the issuance of a compulsory license. The same could be said of Article III, which permits eligible developing countries to grant compulsory licenses overriding the reproduction right. In addition to their strictness and complexity, these Articles have been embodied with vague terms, leading to the problem of unpredictability. Article II, for example, requires that any compulsory license should be granted only for the purpose of “teaching, scholarship or research”. But, the nature of the excuses –

36. See RICKETSON, *supra* note 8 (pointing out that the potential two criteria to shed light on the “established practice” are not universally acceptable).

“teaching, scholarship or research” – are ambiguous in nature. Could they be commercial or only non-profit? It is very hard to construe this provision to make certain the extent of “teaching, scholarship or research” as legitimate excuses for granting compulsory licenses.

2. Developing Countries Lack the Administrative and Legal Infrastructure

Many developing countries may have not the administrative and legal infrastructure to design and implement the copyright law or administrative law to effectively avail themselves of the flexibility afforded by the Appendix, and to monitor domestic beneficiaries' compliance with the requisite conditions provided for in the Appendix. Some developing countries, as we can see, are still ruled by man rather by the law. The lack of popular acceptance of the notion of rule of law makes it almost impossible to establish an effective legal system to implement the obligations mandated by the Berne Convention and TRIPS Agreement, not to mention adherence to the complex conditions in the Berne Appendix. Some developing countries have merely embryonic or rudimentary copyright laws which are not sophisticated enough to perform the obligations set forth in the Appendix. Although many developing countries have their own modern copyright laws, the enforcement of copyrights has been poorly organized, partly because of the lack of public respect for copyright law and partly because of the lack of an administrative law to effectively support the enforcement process. Upgrading their copyright protection, particularly the enforcement system, involves large sums of money. Many least-developed countries may not have the financial ability to do so. Therefore, in order to avoid the likely breach of obligations under the Berne Convention and its Appendix, many developing countries may have chosen not to utilize compulsory licensing.

3. Fear of Unilateral Trade Sanctions

Finally and perhaps most significantly, many developing countries fear that sanctions might be threatened, bilaterally or multilaterally. The combination of political pressures and unilateralism in copyright protection potentially impinges upon developing countries' ability to utilize compulsory licensing which is likely to undermine the interests of the publishers in the developed countries. Starting from 1988, by using its powerful stick—Section 301 of its Trade Act—the U.S. has initiated, continued to rely on and will be unlikely to give up its unilateralism in foreign policy on intellectual property protection to escalate the level of

international protection copyright protection. The presence of this annual “check-up” and “diligent” review of other countries’ domestic copyright protection has the potential to undermine the flexibilities afforded by the international copyright law.

C. Simplification of Requirements for the Granting of Compulsory Licenses is Infeasible

Compulsory licensing systems fail to achieve the initial aim of promoting access to affordable copyrighted materials. To resolve this conundrum, one solution would be to simplify the requirements regarding the granting of compulsory licenses. However, given the decades that it took to get the Appendix adopted, it is feared that the simplification will probably take again decades. Given the expansive structure of the international copyright regime, it becomes increasingly difficult, if not impossible, to amend the Berne Appendix with consensus reached among member states. In addition, potentially insurmountable defects embedded in this approach undermine its feasibility and efficacy.

The TRIPS Agreement incorporates the majority of the Berne Convention and its Appendix. Therefore, within the framework of current copyright regime, a question rises as to whether WIPO or WTO should be responsible for the amendment of the Berne Convention. If WIPO presided over the amendment, would all WTO Members accept amendments that alter the obligations under Berne Appendix, and vice versa? If the WIPO and WTO determined to collaborate in respect of amendment, would their member states accept such institutional cooperation or the final resultant amendment? Additionally, the procedures regarding national ratification of the amendment of treaty obligations may obstruct the final passage of the amendment to the Berne Appendix. As a general constitutional proposition, many countries would take the view that an amendment that substantially alters rights and obligations is, in essence, a new agreement that must be approved by their legislatures. This procedure may give powerful lobbyists from copyright-based industries the chance to persuade legislators to defeat the amendment. If the amendment were not ratified domestically, the amendment would eventually turn out to be in vain. Hence, considering the uncertainty of ratification at the national level, any amendment to the Berne Convention would be legally insecure.

Moreover, due to the highly protectionist environment of international copyright protection, it is unlikely that the copyright giant countries and WIPO would support simplification of the Berne Appendix. The WIPO even recommends that the protection of intellectual property “is a tool that

may be used to narrow the digital divide”.³⁷

Even the procedural difficulty and highly protectionist environment were overcome, and even swiftly, we believe it is not fair to provide economic assistance to needed people at the expenses of authors. Therefore, it is sensible and equitable to seek an alternative path with popular participation to narrow the copyright divide. In the following section, we will propose an alternative approach.

II. UNIVERSAL TELECOM SERVICE

A. *Origin*

In advocating a fully interconnected monopoly for the provision of telecom services as opposed to competition the president of AT&T, Theodore Vail invented a slogan in 1907: “One policy, one system, universal service”, referring to interconnection of competing systems into a unified system under AT&T. As part of his strategy to restore the abating market power of AT&T due to the rising competition made possible by the expiry of its patents in 1893, Vail vigorously promoted regulation for monopoly telephone services.³⁸ He declared, “If there is to be state control and regulation, there should also be state protection –protection to a corporation striving to serve the whole community... from aggressive competition which covers only that part which is profitable.”³⁹ That appeal found legal and political support, because competition was at that time widely seen as chaotic and could lead to either undesirable cream-skimming activities and a wasteful duplication in the profitable urban areas or under-provision of telecom services in remote and uneconomic regions.⁴⁰ Regulated monopoly appeared to offer a solution that allowed the benefit of economies of scale, left room for public input and control and avoided ruinous price competition that would destabilize the industry structure.

In 1913, AT&T reached an antitrust-settlement with the Department of Justice in which AT&T agreed to refrain from acquiring any more directly competing companies. After the agreement the independent companies that were directly competing with AT&T exchanged territories so that each had a geographic monopoly and connected to the single long-distance network owned by AT&T.⁴¹ By 1934, when the

37. WIPO, INTELLECTUAL PROPERTY ON THE INTERNET: A SURVEY OF ISSUES, para. 380, available at <http://ecommerce.wipo.int/survey/html/5.html>.(emphasis added).

38. GERALD BROCK, THE SECOND INFORMATION REVOLUTION 31-32 (2003).

39. PETER HUBER, LAW AND DISORDER IN CYBERSPACE 26 (1997).

40. HUBER, *supra* note 39, at 36-37.

41. HUBER, *supra* note 39, at 33.

regulated-monopoly policy was cemented into law by the Communications Act, most states had already empowered their utility commissions to shut down competition.

B. *Development*

1. *Universal Service via Implicit Subsidy*

In the clear, Vail's aspirations had nothing to do with an all-reaching penetration of telecom services in every household at an affordable price. Over time, the concept has changed significantly. With the establishment of monopolies under regulation, both the Federal Communications Commission (FCC, with exclusive jurisdiction over interstate services) and state utility commissions (with exclusive jurisdiction over intrastate services) are obligated by law to oversee that the monopolistic telecom service providers "provide service on request at just and reasonable rates". Regulators have thereby pursued a policy of "universal service" to make basic telephone service available throughout the U.S. at rates that are both affordable and relatively uniform.⁴²

From the beginning, a flat-rate price structure (with a fixed monthly fee and no additional charges for conversations) was used for local residential service to avoid the high costs of manually recording and charging for individual calls. This structure later became a politically favored rate structure protected by the state regulatory commissions who then despite inflation resisted any increase in the local fees to secure popular support.⁴³ In contrast, early long-distance voice transmission was extremely expensive due to the high costs of electronics and the labor-intensive process in setting up relay calls. However, the rapid decline of costs for electronic components after the Second World War greatly reduced the costs of the provision of long-distance service. The cost reductions in long-distance services were transformed into price reductions for local services through a process known as "separation": the Communications Act prescribed that the separation of costs among jurisdictions, therefore among local and long-distance telecom service providers, should be approved by the FCC. In 1947 the first such separations formula went into effect, splitting telephone equipment into a number of categories and allocating them between federal and state jurisdictions on the basis of relative use. When the FCC took initiative in 1951 to require cut in AT&T's interstate rates, state regulators protested

42. CHARLES KENNEDY, AN INTRODUCTION TO U.S. TELECOMMUNICATIONS ACT 185 (2d ed. 2001).

43. BROCK, *supra* note 38, at 115.

that the high earnings indicated a need for a change in the formula towards increasing the share of interstate revenue paid back to local operators, rather than for a reduction in the interstate long-distance rates. The FCC gave in to pressure from congressional leaders and state regulators and agreed to shift costs from the intrastate to the interstate jurisdiction and consequently increase the local telecom companies' share of interstate toll revenue, thus eliminating the painful necessity to grant local rate increases.⁴⁴ High-volume long-distance callers and urban residents had to pay artificially high phone bills to subsidize and support universal service for others.

In addition to large-scale implicit subsidies, U.S. regulators also endorsed a number of support programs that were open and explicit. The most important of these were: (a) the federal support programs for small companies with high local loop costs or stitching costs, namely the Universal Service Fund (borne entirely by long-distance carriers), (b) the Dial Equipment Minutes Weighting program, and the Long-Term Support program; as well as (c) the Lifeline and Linkup programs for low-income consumers.⁴⁵ It was mainly the implicit subsidy from long-distance telecom services to local telecom services that inter alia helped raise the percentage of U.S. households with telephone service from 61.8 percent to 88.5 percent between 1950 and 1968.

Not limited to the U.S., the notion of universal service and its implementation through one way or the other has been a common feature of the telecom sector across nations.⁴⁶ So much so that it was mentioned by the reference paper prepared by the negotiating group on basic telecommunications of the WTO on April 24, 1996.⁴⁷ Undeniably though, the scope and extent of universal service varies dramatically from developed to developing and least developed countries.⁴⁸

2. *Statutory Universal Service*

In the U.S., the long-awaited 1996 Telecommunications Act abandoned the policy based on the assumption of natural monopoly, that service would be best provided by monopolies, and instead embraced a

44. BROCK, *supra* note 38, at 187.

45. KENNEDY, *supra* note 42, at 186.

46. IAN LLOYD/DAVID MELLOR, TELECOMMUNICATIONS LAW 125 (2003).

47. The reference paper states: 3. Universal service

Any procedures for the allocation and use of scarce resources, including frequencies, numbers and rights of way, will be carried out in an objective, timely, transparent and non-discriminatory manner. The current state of allocated frequency bands will be made publicly available, but detailed identification of frequencies allocated for specific government uses is not required.

48. In Ethiopia, the universal service aims incredibly low: a telephone booth in every town in 2002, *see* LLOYD/MELLOR, *supra* note 46, at 127.

policy based on the assumption of interconnected competition in which all portions of the industry (including local basic markets) were potentially competitive. The patchwork of mechanisms that supported the goal of universal service then became inconsistent with that of deregulation and competition, because there existed a disparity between cost of service provision and price charged for it, and the cost averaging was hostile to technological innovation and suppressed competition (competition for low-cost, high-revenue services was banned, yet competition for high-cost, low-revenue services discouraged). Consequently, the Telecommunications Act set out a framework for comprehensive reform of the system and expanded the scope of universal service, which in many aspects could serve as an ideal example of universal service.⁴⁹

a. *Universal Service Principles*

In accordance with the U.S Telecommunications Act, the FCC shall, with the assistance of a Federal-State Joint Board, base policies for the preservation and advancement of universal service on the following principles:

Quality services should be available at just, reasonable, and affordable rates.

Access to advanced telecommunications and information services should be provided in all regions of the Nation.

Consumers in all regions of the nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.

All providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service.

There should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service.

Elementary and secondary schools and classrooms, health care providers, and libraries should have access to advanced telecommunications services.

Such other principles as the Joint Board and the Commission

49. Shin-Yi Peng, *Universal Telecommunication Services in China—Trade Liberalization, Subsidy, and Technology in the Making of Information Equality in the Broadband Era*, 4(1) ASIA-PACIFIC LAW & POLICY JOURNAL 41-45 (2003).

determine are necessary and appropriate for the protection of the public interest, convenience, and necessity and are consistent with this chapter.⁵⁰

b. *Definition*

The U.S. Telecommunications Act understands universal service as an evolving level of telecommunications services that the FCC shall establish periodically, taking into account advances in telecommunications and information technologies and services, and therefore requires that the FCC in establishing the definition of the services shall consider the extent to which such telecommunications services:

- are essential to education, public health, or public safety;
- have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers;
- are being deployed in public telecommunications networks by telecommunications carriers; and
- are consistent with the public interest, convenience, and necessity.⁵¹

c. *Funding of Universal Service*

(a) Via Universal Service Fund

Universal service fund can take on at least two forms, virtual and real. The Taiwanese Telecommunications Act adopts a virtual universal fund in that it calculates on a yearly basis the losses and necessary management expenses arising from the universal services, collects them from the telecommunications enterprises publicly designated by the Ministry of Transportation and Communication and reimburses the universal service provider.

The U.S. Telecommunications Act foresees a concrete universal service fund to which telecommunications carriers make contribution: Every telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the FCC to preserve and advance universal service. The FCC may exempt a carrier or class of carriers from this requirement if the carrier's telecommunications activities are limited to such an extent that the level

50. 47 USC 254 (b). With a moderate goal in mind, Article 20(1) of the Taiwanese Telecommunications Act prescribes: "To protect the basic telecommunications rights and interests of R.O.C. nationals, the Ministry of Transportation and Communication may designate, based on different areas and service items, a Type I telecommunications enterprise to provide universal telecommunications services."

51. 47 USC 254 (c). In contrast, Article 20(2) of the Taiwanese Telecommunications Act defines universal telecommunications services as the necessary telecommunications services of certain quality that may be fairly enjoyed by all nationals at a reasonable price.

of such carrier's contribution to the preservation and advancement of universal service would be de minimis. Any other provider of interstate telecommunications may be required to contribute to the preservation and advancement of universal service if the public interest so requires.⁵²

To implement the goals of the 1996 Telecommunications Act, the FCC issued a series of orders. In 1997 the FCC announced the Universal Service Order, which ushered in an explicit universal service fund derived from percentage-based fees levied against telecom carriers. The Order was struck down by the 5th Circuit in 1999, because the court found that the support mechanism, by assessing the interstate and intrastate revenues of providers of interstate telecom services, violated section 2(b)'s prohibition on the federal regulation of "charges... in connection with intrastate communication."⁵³ The FCC then proposed the CALLS Order in 2001,⁵⁴ which established a transitional \$650 million universal service fund. This fund was to be combined with the existing universal funds and programs, and all telecom carriers (including local, long distance, and wireless) were to pay into this fund proportionally based on their interstate retail revenues. Again the 5th Circuit revoked the Order in 2001 in *Texas Office of Public Utility Counsel v. FCC (TOPUC II)*. According to TOPUC II, "affordability" mandated by 47 USC 254(b)(1) is an aspirational guideline to be carefully balanced with other statutory objectives, the lofty, expansive language hardly constitute specific statutory commands. Congress gave the FCC the latitude to formulate a policy that considers affordability along with other policy goals; the establishing of the \$650 million Universal Service Fund was arbitrary and capricious because

although Interexchange Carriers (IXCs, i.e. long-distance carriers) and Local Exchange Carriers (LECs, i.e. local carriers) agreed on the amount to be paid, the FCC still has to exercise sufficiently independent judgment, which it failed to do;

the FCC also failed to provide some reason as to why it found one study among the 6 for the calculation of universal service fund (ranging from \$250 million to \$3.9 billion) to be more persuasive than the other.

(b) Via Offsetting the Benefits from the Provision of Universal Service

If we look at the other side of the Atlantic, to date only France and Italy have introduced funding schemes similar to that of the U.S. In the majority of European countries, no funding mechanism was put in place for the provider of universal service. In the UK for example, successive

52. 47 USC 254 (d).

53. *Tex. Office of Pub. Util. Counsel v. FCC*, 183 F. 3d 393 (5th Cir. 1999) ("TOPUC I").

54. The order derives its appellation from the Coalition of Affordable Local and Long Distance Service ("CALLS"), a group of local and long-distance providers that helped draft the initial proposal.

studies by the Office of Telecommunications (OfTel) have argued that the British Telecommunications (BT) obtains a cost benefit from the provision of universal service for the following four reasons:

Lifecycle-BT has a better chance of retaining unecomomic customers when they become economic;

Ubiquity-customers moving between areas know of BT as a potential supplier, but may not be aware of BT's competitors;

Brand image-BT's image is enhanced by serving uneconomic customers; and

Advertising opportunity-provided by payphones.

According to the Office of Communications (Ofcom, succeeding OfTel), the current costs of Universal Service Obligation (USO) for BT are around £50-70m and the benefits are around £60m. Ofcom believes therefore that there is unlikely to be an undue financial burden on BT as a result of USO that would justify conducting a full cost benefit analysis and setting in place new USO funding arrangements.⁵⁵

3. *Overall Evaluation of Universal Telecom Service*

In essence, universal service is effectively a social and political issue that involves distribution of income among the many different participants in the provision and use of communications. Distribution activities of regulation inevitably create efficiency losses,⁵⁶ and lobbying—even rent seeking. With the scaling up of distribution (e.g. the Schools Fund in the US grew from 0.8% to 3% of the interstate revenue from 1998 to 2002), universal service will be attacked as being regulatory takings, and its constitutionality questioned, as the U.S. telecom case law indicates.⁵⁷

Notwithstanding the obvious drawbacks, universal telecom service has overcome the geographical distance and the financial divide between citizens within a country by averaging different costs. It even helped the cohesion of a state. Universal telecom service becomes an integral and indispensable part of our civic life worldwide, as also exemplified by other network utilities, such as gas, public transportation, electricity, water, etc. Universal telecom service cannot be convincingly said to be

55. Ofcom, Consultation Documents Universal Service Obligation, published on January 10 2005, available at <http://www.ofcom.org.uk/consult/condocs/uso> (last visit July 19, 2005).

56. BROCK, *supra* note 38, at 298.

57. The U.S. Supreme Court has established three factors to analyze a regulatory takings claim: the economic impact of the regulation on the claimant; the extent to which the regulation has interfered with distinct investment-backed expectations, in particular, one must offer reasonably specific predictions of the size and scale of this taking, thereby show the extent to which the regulation has interfered with its distinct investment-backed expectations; and the character of the governmental action. *Connolly v. Pension Benefit Guar. Corp.*, 475 U.S. 211, 225 (1986).

regulatory takings, because its providers function only as an intermediary for the realization and funding of such service, as they pass the costs of providing universal service on to users. Admittedly, there is indeed discrimination between users who are paying and those who are receiving subsidies, but even the paying party benefits greatly from the networks and their network effect (the value of the networks will increase with the expansion of networks, and decrease with the shrinking of networks).

III. A UNIVERSAL COPYRIGHT FUND

The universal telecommunications service mechanism has in many countries successfully closed the gap between individuals in terms of their ability to access telecom services. The most outstanding advantage of universal telecom service is its ease of implementation. It is a mechanism with grass-roots participation from the population, in which everybody can make his contribution, however trivial it might be. It is worthwhile for the international community to explore the possibility of transplanting this model of success to the copyright context by setting up a Universal Copyright Fund in order to narrow the copyright divide between countries. Two seemingly insurmountable obstacles lie gloomily ahead: 1. The universal telecommunications service mechanism has been operational only on the national level. To translate this national experience to a global endeavor would make a vast difference. 2. The structure and operation of such a Universal Copyright Fund is so complex that it can be easily dismissed as Utopian. To avoid these obstacles, the Universal Copyright Fund would have to stay local, at least at the initial stage. We will explain our conceptions of the nature and operation of this fund in the following section.

A. *It's a Voluntary Act of Each Individual*

The essence of this fund is that people in the developed countries voluntarily help their fellow human kind in the developing and least developed countries via paying an amount of surcharge equivalent to that, which is used to cover universal telecom service in the individual developed countries. In other words, the fund is collected on an opt-in basis. One might intuitively wonders why would people in the developed countries be willing to offer help? Well, some might see that the significantly escalated globalization of the world market without some income redistribution scheme on a global level has its moral crises, and are would therefore be willing to make some humble meager contribution to alleviate the global digital divide. Some would help simply out of humanitarian inclination to treat their neighbors, whether domestic or

international, equally. For some, short-term donation would generate customers and revenues in the long run because of the increased value of an expanded communications network and other key infrastructures. Most important of all, the sum that individuals pay would be extremely small according to our scheme, too small to say no. Taking the US for example, in 2004 a total amount of about US\$ 6.4 billion was paid to the universal service fund. Divided by 296,604,518 Americans (as of July 13, 2005), each would pay only US\$ 21 per year.⁵⁸ In Taiwan, an average of ca. NT\$ 63 (US\$ 2) per person was paid for the universal service in 2005.⁵⁹

B. It's Easy to Understand and Collect

The Universal Copyright Fund could boast its ease of being understood and accepted by the general public of the donating countries, because it resembles the ideas and practice that are deeply rooted in civil societies, and its beneficial effects are self-explanatory. The Universal Copyright Fund could also easily exhibit fund-collecting efficacy by just following the model of universal telecom service, namely through automatic collection by telecom service providers of an implicit or preferably an explicit surcharge in the telecom services bills. It would save individual donators and the fund management the troubles and costs of transmitting and gathering the donations.

C. It's Not a Centralized Fund

For some, the United Nations might be the most reputable and far-reaching international organization that proffers a wide range of programs to globally enhance social, economic, cultural and technological development, and is therefore suitable for the task of realizing the Universal Copyright Fund. If need be, it can easily utilize the expertise of its specialized agencies, i.e. WIPO and WTO. However, such a centralized fund has its downsides arising from the inevitable political complications, such as diplomatic recognition, and economic inefficiency in collecting and distributing funds. We therefore prefer a decentralized system in which every country runs its own Universal Copyright Fund and makes autonomous decisions on how it is put to use. In our scenario, every country will need to do more than passive donation and take the initiative

58. 2004 Annual Report of the Universal Service Administrative Company, available at <http://www.universalservice.org> (last visit July 13, 2005).

59. According to the notice of the Taiwanese DGT (on November 30, 2004, available at <http://www.dgt.gov.tw/chinese/bulletin/bulletin-93/bulletin-Telecom-service-931130.shtml>, last visit July 13, 2005), some NT\$ 1.438 billion was foreseen as needed for universal service in Taiwan. Divided by a population of 23 million then equals ca. NT\$ 63.

to engage developing and/or least developed countries. That again deepens and widens the cooperation between the donating countries and the receiving countries.

D. Management and Usage of the Fund

As mentioned earlier, the surcharge for the Universal Copyright Fund would be collected by telecom companies. It is recommended that the collected surcharge be passed on to the same mechanism that runs the universal service fund, to piggyback on its experiences. There is no need to set up an extra agency, which has to start from scratch. The Universal Copyright Fund would have a board of directors comprising representatives from the government and private sector as well. The fund would invite developing and the least developed countries to apply for the fund by conjuring up concrete plans of how best the fund can be utilized, then an independent review panel would evaluate the submitted proposals, and finally, the board of directors would prioritize and designate the recipient countries. As for the usage of the fund, a sensible guideline is to follow one of the proposals of the G8 Digital Opportunity Task Force, i.e. for the improvement of connectivity with, increase of, access to, and reduction of costs of information communication infrastructure in the recipient countries, since it is the key to bridging the digital divide.

IV. ENCOURAGING DEVELOPMENT IN OTHER AREAS

In fact, our envisioning of a fund to solve a specific global problem is already a reality in other areas. Beginning from 2001, a partnership between governments, civil society, the private sector and affected communities was forged, the Global Fund to Fight AIDS, Tuberculosis and Malaria. The Global Fund to Fight AIDS, Tuberculosis and Malaria is an independent organization governed by an international board that consists of representatives of donors (some 45 countries) and recipient governments, non-governmental organizations, the private sector (including businesses and philanthropic foundations) and affected communities. Also participating in ex officio capacity are representatives of the World Health Organization, UNAIDS (Joint United Nations Program on HIV/AIDS), and the World Bank. The Fund operates as a financial instrument, not an implementing entity, and supports programs that reflect national ownership. It evaluates proposals through an independent Technical Review Panel, thereby establishing a simplified, rapid and innovative grant-making process with operational transparency and accountability.⁶⁰

60. Available at the website of Global Fund to Fight AIDS, Tuberculosis and Malaria:

Since 2001, the Global Fund has attracted US\$ 4,7 billion in financing through 2008. In four rounds of funding, the Global Fund has approved assistance worth US\$ 3,4 billion through more than 300 grants to 127 countries.⁶¹ Given their similar ideas, structure and ways of operation, it is reasonable to conclude that the success of the Global Fund to Fight AIDS, Tuberculosis and Malaria sheds some promising light on the future of the Universal Copyright Fund.

The Live 8 concerts and the resultant pledge made by the G8 leaders on July 7, 2005 to increase aid to Africa by US\$ 25 billion by the year 2010 validly demonstrate the readiness of the general public and the governments in the developed world to help.⁶² So if we can channel their attention and contributions to the Universal Copyright Fund, the Fund would have a fair chance of converging the digital divide that splits our common world. To launch this worldwide undertaking, we need first to establish a non-profit organization to promote the ideas. Once a country volunteers to be the pioneer and sets up a working example, the rest of the world will surely follow, sooner or later.

<http://www.theglobalfund.org/en/about/how/> (last visit July 15, 2005).

61. Available at the website of Global Fund to Fight AIDS, Tuberculosis and Malaria: <http://www.theglobalfund.org/en/faq> (last visit July 15, 2005).

62. http://en.wikipedia.org/wiki/Live_8 (last visit July 15, 2005).

REFERENCES

- Brock, Gerald, (2003), *The Second Information Revolution*, Harvard University Press.
- Goldstein, Paul, (2001), *International Copyright: Principles, Law, and Practice*, Oxford University Press.
- Huber, Peter, (1997), *Law and Disorder in Cyberspace*, Oxford University Press.
- Kennedy, Charles, (2001), *An Introduction to U.S. Telecommunications Act*, 2nd ed, Artech House Publishers.
- Lessig, Lawrence, (2001) "Copyright's First Amendment," *48 UCLA L. Rev.*
- Lloyd, Ian and Mellor, David, (2003), *Telecommunications Law*, LexisNexis UK.
- Netanel, Neil Weinstock, (2001) "Locating Copyright Within the First Amendment," *54 Stan. L. Rev.* 1.
- Norris, Pippa, (2001), *DIGITAL DIVIDE: Civic Engagement, Information Poverty, and the Internet Worldwide*, Cambridge University.
- Peng, Shin-Yi, (2003) "Universal Telecommunication Services in China—Trade Liberalization, Subsidy, and Technology in the Making of Information Equality in the Broadband Era," *4 Asia-Pacific Law & Policy Journal, Issue 1.*
- Ricketson, Sam, (1987), *The Berne Convention for the Protection of Literary and Artistic Works: 1886-1986*, Sweet & Maxwell Ltd.
- Sun, Haochen, (2005) *Copyright Law Under Siege: An Inquiry into the Legitimacy of Copyright Protection in the Context of the Global Digital Divide*, IIC 36.
- Yu, Peter, (2002) "Bridging the Digital Divide: Equality in the Information Age," *20 Cardozo Arts & Ent. L.J.*