

8-1-1990

## Uniform Copyright Protection for Computer Software in the EEC

Mark P. Tellini

Follow this and additional works at: <http://lawdigitalcommons.bc.edu/iclr>

 Part of the [Intellectual Property Commons](#)

---

### Recommended Citation

Mark P. Tellini, *Uniform Copyright Protection for Computer Software in the EEC*, 13 B.C. Int'l & Comp. L. Rev. 483 (1990), <http://lawdigitalcommons.bc.edu/iclr/vol13/iss2/10>

This Recent Developments is brought to you for free and open access by the Law Journals at Digital Commons @ Boston College Law School. It has been accepted for inclusion in Boston College International and Comparative Law Review by an authorized administrator of Digital Commons @ Boston College Law School. For more information, please contact [nick.szydowski@bc.edu](mailto:nick.szydowski@bc.edu).

# Uniform Copyright Protections for Computer Software in the EEC

## INTRODUCTION

Legal protections for computer programs against unauthorized reproduction vary significantly among individual member states of the European Economic Community (EEC).<sup>1</sup> Differences in the availability and scope of protection may restrain or otherwise distort the free movement of goods and services within the Community and thereby discourage software innovation and development.<sup>2</sup> The Commission of the European Communities<sup>3</sup> (Commission) has expressly recognized the fundamental importance of the computer industry to the EEC's economic development.<sup>4</sup> Moreover, the Commission has expressed concern as to the competitiveness of European firms in the world software market.<sup>5</sup> Harmonization of legal protections would eliminate distortions to the internal market, foster investment and development, and enable European producers to better compete with those of the United States and other industrialized nations.<sup>6</sup>

---

<sup>1</sup> See, e.g., Comment, *Copyright Protection of Software in the EEC: The Competing Policies Underlying Community and National Law and the Case for Harmonization*, 75 CALIF. L. REV. 633, 645-57 (1987) [hereinafter Comment, *Software Protection in the EEC*]. The terms "program," "computer program," and "software" are used interchangeably throughout this Comment.

<sup>2</sup> See *id.* at 657-69. For a thorough examination of copyright protections within the European Economic Community (EEC), see generally S. STEWART, *INTERNATIONAL COPYRIGHT AND NEIGHBORING RIGHTS*, 466-79 (1983).

<sup>3</sup> T. HARTLEY, *THE FOUNDATIONS OF EUROPEAN COMMUNITY LAW* 8 (2d ed. 1988). The Commission of the European Communities (Commission) is comprised of seventeen representatives appointed by unanimous agreement among the member states. *Id.* The Commissioners, acting independently of their national governments, propose legislation, coordinate Community policy, and oversee enforcement of Community treaties. *Id.*

<sup>4</sup> Proposal for a Council Directive on the Legal Protection of Computer Programs, COM(88) 816 final, 31 O.J. EUR. COMM. (No. C 91) 4, 13 (1989) [hereinafter Proposed Directive]; see also *infra* notes 17-18 and accompanying text.

<sup>5</sup> See Green Paper on Copyright and the Challenge of Technology: Copyright Issues Requiring Immediate Action, COM(88) 172 final, 171-75 (1988) [hereinafter Green Paper].

<sup>6</sup> See *infra* notes 88-90, 120-31 and accompanying text. In its White Paper on completing the internal market (White Paper), the Commission addressed the need for the harmonization of protective measures for software within the Community and announced that it would submit a proposal for a directive. See *Completing the Internal Market*, White

The Commission recently submitted to the Council of the European Communities (Council)<sup>7</sup> a proposal for a directive establishing a Community framework for the legal protection of computer software.<sup>8</sup> This proposed directive would protect computer programs as literary works by granting software creators exclusive rights under copyright.<sup>9</sup> The proposed directive further defines the conditions and term of this protection, the person(s) in whom the right arises, and the acts requiring authorization of this right holder.<sup>10</sup> By providing uniform legal protections within the EEC, the Commission hopes to eliminate market distortions and create an environment that is conducive to investment and innovation.<sup>11</sup>

This Comment considers the Commission's proposal for the legal protection of computer programs.<sup>12</sup> Part I examines the present state of legal protections in individual member states<sup>13</sup>

Paper from the Commission to the European Council, COM(85) 310 final, at 37 [hereinafter White Paper].

<sup>7</sup> T. HARTLEY, *supra* note 3, at 13-14. The Council of the European Communities (Council) is comprised of government ministers from each of the twelve member states. *Id.* Enactment of Commission proposals generally requires adoption by the Council. *Id.*

<sup>8</sup> See Proposed Directive, *supra* note 4. Directives are legislative initiatives directed to the member states requiring them to harmonize national laws in conformity with Community law. CLIFFORD CHANCE, *THE CCH GUIDE TO 1993: CHANGES IN EEC LAW 108* (1989). Member states must then enact their own legislation pursuant to the proscriptions of the directive. *Id.*

<sup>9</sup> Proposed Directive, *supra* note 4, at 13-15. For a critical evaluation of the Commission's proposed directive, see BUSINESS SOFTWARE ASSOCIATION, *WHITE PAPER ON THE PROPOSAL FOR A EUROPEAN COMMUNITY DIRECTIVE ON THE LEGAL PROTECTION OF COMPUTER PROGRAMS* (Sept. 1989) [hereinafter BSA, WHITE PAPER]; *THE COMMON STATEMENT ON THE EC DIRECTIVE FOR THE LEGAL PROTECTION OF COMPUTER PROGRAMS* (Brussels, Sept. 1989) [hereinafter COMMON STATEMENT] (initiative sponsored by twenty-seven European and United States software firms and trade associations). See also *infra* notes 94, 96, 99, 109, 112-15, 117, 121. The Business Software Alliance (formerly Business Software Association) (BSA), an industry group representing six leading U.S. software publishers, was organized in 1988 to combat software piracy. BUSINESS SOFTWARE ALLIANCE, *PROFILE 1* (1990). The BSA has been active in the consultative process related to the Commission's proposed directive. *Id.* at 2. In September 1989, the BSA organized an initiative among twenty-seven European and U.S. software concerns regarding the proposed directive. See COMMON STATEMENT, *supra*. The BSA has also testified before the United States Trade Representative on issues concerning the proposed directive and its impact on U.S. software interests. *Financial Times*, Jan. 24, 1990, at 6, col. 4; Telephone interview with Lori Forte, Director of Public Affairs of the Business Software Alliance (Jan. 26, 1989).

<sup>10</sup> Proposed Directive, *supra* note 4, at 13-15; see also *infra* text accompanying notes 103-04.

<sup>11</sup> Proposed Directive, *supra* note 4, at 5-6.

<sup>12</sup> This Comment reflects developments through February 1, 1990 as reported in publicly available documents.

<sup>13</sup> See *infra* notes 17-63 and accompanying text.

and the distortions that arise from such divergent protections.<sup>14</sup> Part II outlines the proposed Council directive.<sup>15</sup> Finally, Part III concludes that harmonization under the proposed directive should eliminate market distortions and provide authors with effective legal protections without unduly restraining software innovation and development.<sup>16</sup>

## I. MEMBER STATE LAW GOVERNING UNAUTHORIZED REPRODUCTION OF SOFTWARE

### A. *Divergent Member State Protections*

The size and growth of the European software industry is of fundamental importance to the economic development of the EEC. Computer program technology plays a vital role in nearly every sector of the EEC's economy including such areas as medicine, education, manufacturing, transport, commerce, and banking.<sup>17</sup> Adequate protection against unauthorized reproduction of programs is therefore necessary if the development of software technology is to continue at a pace sufficient to support EEC economic growth.<sup>18</sup>

Computer software is a particularly vulnerable target for pirates who reproduce programs at a fraction of the cost of their original development.<sup>19</sup> Pervasive piracy costs European software developers billions of dollars annually.<sup>20</sup> In 1988, lost revenues attributable to software piracy in Spain and Italy alone totalled over one billion dollars.<sup>21</sup> EEC estimates indicate that for each legitimate copy of a computer program, five and seven forged

---

<sup>14</sup> See *infra* notes 64–78 and accompanying text.

<sup>15</sup> See *infra* notes 79–119 and accompanying text.

<sup>16</sup> See *infra* notes 120–49 and accompanying text.

<sup>17</sup> Proposed Directive, *supra* note 4, at 5.

<sup>18</sup> See *id.*

<sup>19</sup> Green Paper, *supra* note 5, at 3. For a discussion of international software piracy, see generally G. HOFFMAN, *CURBING INTERNATIONAL PIRACY OF INTELLECTUAL PROPERTY: POLICY OPTIONS FOR A MAJOR EXPORTING COUNTRY* (1989).

<sup>20</sup> See Tamburrini, *Software Protection: The Situation in Italy*, 5 *COMPUTER L. & PRAC.* 82 (1988).

<sup>21</sup> BUSINESS SOFTWARE ASSOCIATION, *FACT SHEET ON SOFTWARE COPYING IN SPAIN AND ESTIMATES OF LOSS 1* (1989); BUSINESS SOFTWARE ASSOCIATION, *FACT SHEET ON SOFTWARE COPYING IN ITALY AND ESTIMATES OF LOSS 1* (1989).

copies are circulating in France and the United Kingdom respectively, with as many as twenty-five forgeries circulating in Italy.<sup>22</sup>

Internationally, the trend, especially among major trading partners of the EEC, is towards protection of software by copyright.<sup>23</sup> Copyright protection of computer software exists in some form in nearly all member states of the Community.<sup>24</sup> Case law in member states has increasingly recognized protection by copyright,<sup>25</sup> and many states have proposed or adopted legislation confirming this trend.<sup>26</sup> Thus, at least five member states now explicitly recognize the protection of computer programs by copyright:<sup>27</sup> the Federal Republic of Germany (Germany),<sup>28</sup> France,<sup>29</sup> the United Kingdom,<sup>30</sup> Spain,<sup>31</sup> and Ireland.<sup>32</sup> Similar

<sup>22</sup> Tamburrini, *supra* note 20, at 82. By comparison, an industry trade group, the Software Publishers Association, estimates that in the U.S. a single forged copy of a program circulates for every legitimate copy. Telephone interview with Peter Beruk, Litigation Manager of the Software Publishers Association (Jan. 18, 1989).

<sup>23</sup> New Developments, *Commission Proposes Legal Protection for Computer Programs*, 4 Common Mkt. Rep. (CCH) ¶ 95,036 (1989).

<sup>24</sup> Green Paper, *supra* note 5, at 178. For a thorough examination of the legal protections available in each member state prior to this proposed directive, see Comment, *Software Protection in the EEC*, *supra* note 1.

<sup>25</sup> Green Paper, *supra* note 5, at 178. See, e.g., Judgment of November 24, 1986, Corte cass., Foro Italiano, Corte cass. [Foro It. I] (1987, n.5) 289, cited in Sumner, *Copyright, Patent, and Trade Secret Protection for Computer Software in Western Europe*, 8 COMPUTER L.J. 327, 356 (1988) (Italian Supreme Court decision affirming that software is subject to copyright as a creative work); Judgment of March 7, 1986, Cass. ass. plén., Bulletin des arrêts de la Cour de cassation, chambres civiles, Cinquième section civile [Bull. Civ. V] 5 [hereinafter Judgment of March 7, 1986], cited in Sumner, *supra*, at 348 (French Supreme Court ruling extending copyright protections to computer programs).

<sup>26</sup> Green Paper, *supra* note 5, at 178.

<sup>27</sup> *Id.* While the Commission's Green Paper does not report on the status of Irish copyright protections for software, the Irish delegation to the 1985 World Intellectual Property Convention reported that Irish copyright law does in fact extend such protections. See Comment, *Software Protection in the EEC*, *supra* note 1, at 655.

<sup>28</sup> Urheberrechtsgesetz, 1985 Bundesgesetzblatt, Teil I [BGBl.I] 1137, trans. in UNESCO & WIPO, COPYRIGHT LAWS AND TREATIES OF THE WORLD, at Germany: Item 1-1 (Supp. 1984-86) [hereinafter COPYRIGHT LAWS & TREATIES].

<sup>29</sup> Loi n° 85-660 du 3 juillet 1985, Relative aux droits d'auteur et aux droits des artistes-interprètes, des producteurs de phonogrammes et de vidéogrammes et des entreprises de communication audiovisuelle, Titre V, 1985 Journal Officiel de la République Française [J.O.] 7495, 1985 Dalloz-Sirey, *Législation* [D.S.L.] 361 [hereinafter Loi n° 85-660 du 3 juillet 1985], trans. in COPYRIGHT LAWS & TREATIES, *supra* note 28, at France: Item 1-3 (Supp. 1958).

<sup>30</sup> Copyright (Computer Software) Amendment Act, 1985, ch. 41, reprinted in COPYRIGHT LAWS & TREATIES, *supra* note 28, at United Kingdom: Item 1-2 (Supp. 1984-86).

<sup>31</sup> Intellectual Property Law of November 11, 1987, cited in Sumner, *supra* note 25, at 362.

<sup>32</sup> Comment, *Software Protection in the EEC*, *supra* note 1, at 655; see also *supra* note 27.

legislative initiatives are underway in three other member states: Italy,<sup>33</sup> Denmark,<sup>34</sup> and the Netherlands.<sup>35</sup> In addition, both Belgium<sup>36</sup> and Luxembourg<sup>37</sup> are favoring the protection of software by copyright. Only Greece<sup>38</sup> and Portugal<sup>39</sup> have failed to embrace copyright protection of computer programs.<sup>40</sup>

Judicial interpretation of copyright law and the extent of protection provided vary significantly among those member states that do recognize protection of software by copyright.<sup>41</sup> Generally, member state protections diverge as to eligibility criteria,<sup>42</sup> scope,<sup>43</sup> and duration.<sup>44</sup>

### 1. Eligibility Criteria for Copyright Protection

Where a member state has extended copyright protections to software, court decisions may limit the types of programs qualifying for protection.<sup>45</sup> German courts limit protection to personal

<sup>33</sup> Green Paper, *supra* note 5, at 178; *see also* Sumner, *supra* note 25, at 356–57.

<sup>34</sup> Green Paper, *supra* note 5, at 178; *see also* Sumner, *supra* note 25, at 344–45.

<sup>35</sup> Green Paper, *supra* note 5, at 178; Woltring, *Going Dutch Between Copyright and Droit d'Auteur: Some Remarks on Software Protection from a Dutch Perspective*, 5 *COMPUTER L. & PRAC.* 75 (1988).

<sup>36</sup> Green Paper, *supra* note 5, at 178.

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

<sup>39</sup> Comment, *Software Protection in the EEC*, *supra* note 1, at 655. An examination of Portugal's Code of Copyright, published September 17, 1985, reveals that Portuguese law does not extend copyright protections to computer programs. *See* Lei n.º 45/85, de Setembro, Alteração do Decreto—Lei n.º 63/85, de 14 de Março, e do Código do Direito de Autor e dos Direitos Conexos, 1985 Boletim do Ministério da Justiça, Legislação 5, *trans.* in *COPYRIGHT LAWS & TREATIES*, *supra* note 28, at Portugal: Item 1 (Supp. 1984–86).

<sup>40</sup> Comment, *Software Protection in the EEC*, *supra* note 1, 655–59. In fact, copyright law in Greece and Portugal is marked by outright hostility to such private interests. *Id.* While some form of copyright protection for computer programs has been proposed in Portugal, the fact remains that in both these member states, governments hostile to private property interests may not vigorously enforce such laws. *Id.* at 655–58.

<sup>41</sup> Proposed Directive, *supra* note 4, at 6.

<sup>42</sup> *See infra* notes 45–51 and accompanying text.

<sup>43</sup> *See infra* notes 52–57 and accompanying text.

<sup>44</sup> *See infra* notes 58–63 and accompanying text.

<sup>45</sup> Green Paper, *supra* note 5, at 187. *See, e.g.*, Judgment of May 9, 1985, Bundesgerichtshof, 94 Entscheidungen des Bundesgerichtshofes in Zivilsachen [BGHZ] 276 [hereinafter *Inkasso-Programm*], *cited in* Hoffman, *Protection for Computer Software: An International Overview: Part 1*, 10 *EUR. INTELL. PROP. REV.* 337, 339 (1988) [hereinafter Hoffman, *International Overview*] (German originality criteria); Judgment of March 7, 1986, *supra* note 25 (French originality criteria); Judgment of April 11, 1984, Pret., Pisa, 56 *IL DIRITTO DI AUTORE* [DIR. AUT.] 85 [hereinafter Pretore of Pisa], *cited in* Comment, *Software Protection in the EEC*, *supra* note 1, at 653 (Italian originality criteria).

intellectual creations.<sup>46</sup> To qualify for copyright protection, programs must evidence "design superiority over the general average ability . . . ."<sup>47</sup> The threshold level, however, of "design superiority" may be rather high for certain programs.<sup>48</sup> For example, some German courts have been reluctant to extend protection to computer programs for videogames presumably because the creative effort required was considered too trivial.<sup>49</sup> French and Italian courts have established their own divergent originality criteria. The French "intellectual contribution" standard for protection by copyright requires programs to be creative in the sense that they are not mere rearrangements of another's steps or ideas.<sup>50</sup> Italian courts, however, have required computer programs to be of sufficient creativity so as to constitute "work[s] pertaining to the sciences."<sup>51</sup> In light of these diverging standards, there appears to be little concurrence with respect to originality criteria for copyright protection eligibility.

## 2. Scope of Software Protections

Similar differences exist with respect to the scope of copyright protections afforded by individual member states.<sup>52</sup> Under traditional copyright law, right holders have certain exclusive rights regarding the reproduction, adaptation, and distribution of their works.<sup>53</sup> Among these rights are the traditional "moral rights" which grant authors exclusive rights to claim authorship of their work and to restrict subsequent adaptation thereof.<sup>54</sup> Such rights protect the integrity of an author's work by circumscribing activ-

---

<sup>46</sup> Hoffman, *International Overview*, *supra* note 45, at 339.

<sup>47</sup> See *Inkasso-Programm*, *supra* note 45, at 287, *quoted in* Hoffman, *International Overview*, *supra* note 45, at 339.

<sup>48</sup> See Green Paper, *supra* note 5, at 187; *see also* Comment, *Software Protection in the EEC*, *supra* note 1, at 647-48.

<sup>49</sup> Comment, *Software Protection in the EEC*, *supra* note 1, at 647-48.

<sup>50</sup> *Id.* at 650; *see also* Hoffman, *International Overview*, *supra* note 45, at 440-42. Eligibility for copyright protection under French law is further complicated by the fact that the amendment extending copyright protection to software, adopted in 1985, does not address the legal status of software authored before that date. Sumner, *supra* note 25, at 347.

<sup>51</sup> Pretore of Pisa, *supra* note 45, at 85, *quoted in* Comment, *Software Protection in the EEC*, *supra* note 1, at 653.

<sup>52</sup> See Proposed Directive, *supra* note 4, at 6.

<sup>53</sup> See Green Paper, *supra* note 5, at 189-93. *See generally* S. STEWART, *supra* note 2, at 50-78.

<sup>54</sup> S. STEWART, *supra* note 2, at 59-62.

ities, such as distortion or adaptation, that might prove damaging to his or her reputation.<sup>55</sup> While German copyright law extends these traditional moral rights to creators of software, France and the United Kingdom deny authors these rights.<sup>56</sup> British and French authors, therefore, have significantly less discretion over subsequent modification of their works.<sup>57</sup> Thus, the extent of copyright protection available to authors in each of these member states may vary considerably.

### 3. Terms of Protection

Finally, member state copyright protections may vary significantly as to duration.<sup>58</sup> In France, copyright protection is limited to a term of twenty-five years from the creation of a work.<sup>59</sup> In Germany, however, protection extends for the life of the author plus seventy years.<sup>60</sup> Under article 7(8) of the Berne Convention, French software is not entitled to a longer period of protection in other member states than that established under French law.<sup>61</sup> Hence, although marketed in jurisdictions with longer protection periods, French programs are nevertheless limited to twenty-five years of protection.<sup>62</sup> French programs that are marketable after this relatively short term of protection has run are then vulnerable to exploitation.<sup>63</sup>

<sup>55</sup> *Id.* For a discussion of moral rights and an example of their application in another medium, see generally Comment, *Motion Picture Colorization, Authenticity, and the Elusive Moral Right*, 64 N.Y.U. L. Rev. 628 (1989). Film makers maintain that colorization threatens the integrity of their films and prejudices their artistic reputations. *Id.* They argue that copyrights confer upon them the moral right to veto colorization of their works. *Id.* It is not clear, however, to what extent moral rights may be necessary with respect to the protection of computer programs. See *infra* note 149 and accompanying text.

<sup>56</sup> Comment, *Software Protection in the EEC*, *supra* note 1, at 646-52.

<sup>57</sup> *Id.*

<sup>58</sup> See Proposed Directive, *supra* note 4, at 6.

<sup>59</sup> Loi n° 85-660 du 3 juillet 1985, *supra* note 29.

<sup>60</sup> Urheberrechtsgesetz, § 64, 1965 BGBl.I 1282, *trans. in* COPYRIGHT LAWS & TREATIES, *supra* note 28, at Germany: Item 1-1 (Supp. 1984-86). Yet, noncopyright protections for some videogames have been limited to terms of six to twelve months. Comment, *Software Protection in the EEC*, *supra* note 1, at 648; see *infra* note 63.

<sup>61</sup> Berne Convention for the Protection of Literary and Artistic Works of September 9, 1886, art. 7(8), —U.S.T. —, T.I.A.S. No. —, —U.N.T.S. —, *reprinted in* SEN. TREATY DOC. No. 27, 99th Cong., 2d Sess. (1985) [hereinafter Berne Convention].

<sup>62</sup> See *id.*

<sup>63</sup> See *id.* These concerns over divergent terms of protection take on heightened significance with respect to German videogames which may be limited to twelve months of protection under German law. Comment, *Software Protection in the EEC*, *supra* note 1, at 648. Under article 7(8) of the Berne Convention, these programs are soon vulnerable to



### B. *Issues Arising from Disharmony*

Uneven enforcement<sup>64</sup> of disparate laws may significantly distort competition and restrain the free movement of goods, services, and capital within the Community.<sup>65</sup> Software developers are more likely to establish operations and market their products in member states affording more extensive legal protection.<sup>66</sup> Developers, for example, may be less inclined to produce and market in France with its narrow originality criteria, limited authors' rights, and significantly shorter term of protection.<sup>67</sup> Differences in member state law thereby affect investment decisions and ultimately impede the free movement of capital throughout the Community.<sup>68</sup>

In member states where legal protections are limited or non-existent, software developers are particularly vulnerable to piracy.<sup>69</sup> A member state that is hostile to copyright monopolies—and thus reluctant to vigorously enforce copyright protections—may discourage firms located elsewhere in the Community from distributing their products inside its borders.<sup>70</sup> Uneven enforcement may thus result in significant distortions to internal trade. Producers, understandably reluctant to market their goods in unprotected jurisdictions, may respond with territorial licensing<sup>71</sup>

exploitation when marketed outside Germany regardless of protections accorded similar programs in those markets. *See* Berne Convention, *supra* note 61, at art. 7(8).

<sup>64</sup> While this Comment focuses on fundamental legal differences in member state protections for software, inadequate and inconsistent enforcement of existing law also contributes significantly to widespread piracy and the market distortions it engenders. *See* Comment, *Software Protection in the EEC*, *supra* note 1, at 657–59; *see also infra* notes 117, 121.

<sup>65</sup> *See generally* Comment, *Software Protection in the EEC*, *supra* note 1, at 657–69.

<sup>66</sup> *See id.* at 670; Proposed Directive, *supra* note 4, at 6, 8.

<sup>67</sup> *See* Comment, *Software Protection in the EEC*, *supra* note 1, at 651.

<sup>68</sup> *See id.* at 657–69.

<sup>69</sup> *Id.* at 657–58.

<sup>70</sup> *See id.* at 657–69.

<sup>71</sup> *Id.* at 666. "Territorial licensing" involves licensing agreements by which developers keep their products out of certain undesirable markets, presumably to avoid increased risks of piracy. *Id.* Article 85 of the Treaty of Rome (EEC Treaty) prohibits "all agreements between enterprises . . . which have as their object or result the prevention, restriction or distortion of competition within the Common Market." Treaty Establishing the European Community, Mar. 25, 1957, art. 3(a), 298 U.N.T.S. 11 [hereinafter EEC Treaty]; Comment, *Software Protection in the EEC*, *supra* note 1, at 666. Article 85 would seem to prohibit such agreements, especially where discrimination against national markets is involved. Comment, *Software Protection in the EEC*, *supra* note 1, at 666. It is unclear, however, as to whether territorial licensing is, in fact, expressly prohibited. For a thorough analysis of this issue, *see id.* at 662–69.

or outright refusal to sell software in these markets.<sup>72</sup> Language differences among the member states require manufacturers to produce separate language versions of software packages for each country.<sup>73</sup> In member states where manufacturers perceive a high risk of piracy, it may not prove worthwhile for them to produce a separate language version for that market.<sup>74</sup> Threatened with unauthorized reproduction and predatory marketing, software producers may also seek artificially high prices in order to recoup a faster return on their investment. Consumers thereby suffer limited availability and higher prices. Moreover, with little incentive to invest additional effort or resources, producers may be reluctant to update or service their software.<sup>75</sup>

Divergent software protections impede the free movement of goods, services, persons, and capital by directly influencing investment and marketing decisions.<sup>76</sup> Such distortions to a competitive market may thereby contravene article 3 of the Treaty of Rome (EEC Treaty) which requires the elimination of obstacles to a competitive and open market.<sup>77</sup> Moreover, an uncertain and capricious investment climate generally discourages development and marketing of software throughout the Community.<sup>78</sup>

## II. PROPOSAL FOR A COUNCIL DIRECTIVE

### A. Overview

Article 3 of the EEC Treaty provides for the elimination of all customs duties, quotas, and other obstacles to a single market.<sup>79</sup> The elimination of such obstacles, however, is not in itself sufficient to ensure a competitive internal market.<sup>80</sup> Thus, the EEC Treaty contains several provisions requiring the harmonization of various member state laws.<sup>81</sup> In its 1985 White Paper,<sup>82</sup> the Commission acknowledged the need for harmonization of pro-

---

<sup>72</sup> See Comment, *Software Protection in the EEC*, *supra* note 1, at 635, 658–59.

<sup>73</sup> Federation Against Software Theft (FAST), *EC Green Paper on Copyright and the Challenge of Technology*, 5 *COMPUTER L. & PRAC.* 94 (1989).

<sup>74</sup> *Id.*

<sup>75</sup> Comment, *Software Protection in the EEC*, *supra* note 1, at 672.

<sup>76</sup> See Proposed Directive, *supra* note 4, at 6, 8.

<sup>77</sup> See EEC Treaty, *supra* note 71, at art. 3.

<sup>78</sup> See Proposed Directive, *supra* note 4, at 6.

<sup>79</sup> EEC Treaty, *supra* note 71, at art. 3(a).

<sup>80</sup> See White Paper, *supra* note 6, at 17.

<sup>81</sup> *Id.* at 17–22; EEC Treaty, *supra* note 71, at art. 100A.

<sup>82</sup> See White Paper, *supra* note 6.

tective measures for computer software and pledged to submit a proposal as a matter of priority.<sup>83</sup> The Commission's 1988 Green Paper on copyright<sup>84</sup> further emphasized the need for harmonization and outlined a framework for such a proposal.<sup>85</sup> Consequently, the Commission recently submitted to the Council a proposed directive establishing a Community framework for the legal protection of computer software.<sup>86</sup>

The proposed directive introduces protections where they do not already exist and establishes a standard of uniform protection. The Commission thus hopes to eliminate restraints on the free circulation of computer programs within the EEC.<sup>87</sup> Moreover, the Commission has expressed concern as to the competitiveness of European firms in the world software market.<sup>88</sup> Currently, U.S. firms are the dominant suppliers of software in the Community.<sup>89</sup> By creating a favorable environment for the investment of intellectual effort and financial resources, the Commission hopes that European software firms may better compete with those of the U.S. and other industrialized nations.<sup>90</sup>

<sup>83</sup> *Id.* at 37.

<sup>84</sup> See Green Paper, *supra* note 5.

<sup>85</sup> See *id.* at 170-201.

<sup>86</sup> See Proposed Directive, *supra* note 4. The Commission submitted its proposed directive to the Council on January 5, 1989. *Id.* at 4. Differences in the availability and scope of protections for software threaten the proper functioning of the internal market. *Id.* at 8. The appropriate legal basis for such a directive is thus found within article 100A of the EEC Treaty providing for approximation of member state laws that may affect the functioning of the internal market. *Id.*; EEC Treaty, *supra* note 71, at art. 100A. According to article 100A, the proposed directive must be adopted by a qualified majority of the Council in cooperation with the European Parliament (Parliament) and after consultation with the Economic and Social Committee. EEC Treaty, *supra* note 71, at art. 100A. Having obtained a favorable opinion from Parliament, the Council has now instructed its Committee of Permanent Representatives of the Member States (COREPER) to formulate a "common position." Press Release, Council of the European Communities, General Secretariat (Brussels, July 18, 1989). There are pending, however, various proposals to amend the proposed directive. See, e.g., *infra* note 109.

<sup>87</sup> Proposed Directive, *supra* note 4, at 6.

<sup>88</sup> See Green Paper, *supra* note 5, at 171-75. The Commission is particularly concerned with small and medium sized enterprises which are expected to contribute significantly to the growth of the European software industry. Proposed Directive, *supra* note 4, at 5-6.

<sup>89</sup> Green Paper, *supra* note 5, at 174. The Commission estimates that in 1985, the U.S. share of the Western European software market comprised sixty-five to eighty-five percent of the market for system software and approximately fifty-five percent for application software. *Id.* at 172.

<sup>90</sup> See Proposed Directive, *supra* note 4, at 5.

## B. *Protection by Copyright*

The Commission has selected copyright as the appropriate means to ensure adequate legal protection for software against unauthorized reproduction.<sup>91</sup> Within this copyright framework, computer programs are to be protected as literary works.<sup>92</sup> The proposed directive thus subjects computer programs to the same originality criteria that apply to literary works.<sup>93</sup> The only requirement then, for determining a program's eligibility for protection, is that the work is original.<sup>94</sup> There are no other qualitative or aesthetic tests.<sup>95</sup>

Copyright, however, will only protect the expression of a computer program.<sup>96</sup> It will not protect the ideas, logic, or algorithms underlying the program.<sup>97</sup> Copyright, therefore, protects the compilation of these underlying steps rather than protecting the

---

<sup>91</sup> *Id.* at 7. The Commission's determination was based on the overwhelming weight of evidence submitted during the consultation process following publication of its Green Paper. *Id.* For a critical review of the proposed directive and its protection of computer programs by copyright, see Staines, *The European Commission's Proposal for a Council Directive on the Legal Protection of Computer Programs*, 11 EUR. INTELL. PROP. REV. 183 (1989).

<sup>92</sup> Proposed Directive, *supra* note 4, at 13. Article 1(2) states, in pertinent part, that "[p]rotection shall be accorded to computer programs as literary works." *Id.* The international copyright conventions to which EEC member states subscribe do not expressly extend copyright protections to software. *Id.* at 7-8. By treating computer programs as literary works, the proposed directive includes software within the parameters of these international conventions. *Id.*

<sup>93</sup> *Id.* at 13. Article 1(4)(a) states that "[a] computer program shall not be protected unless it satisfies the same conditions as regards its originality as apply to other literary works." *Id.*

<sup>94</sup> *Id.* at 9. The BSA, however, argues that the originality criterion of article 1(4)(a) requires clarification. BSA, WHITE PAPER, *supra* note 9, at 2. The Explanatory Memorandum introducing the proposed directive (Explanatory Memorandum) defines originality to mean that "the work has not been copied." Proposed Directive, *supra* note 4, at 13. Incorporating this definition into the text of article 1(4)(a) would significantly clarify the issue of a program's originality. See BSA, WHITE PAPER, *supra* note 9, at 2; see also COMMON STATEMENT, *supra* note 9, at 2:2.

<sup>95</sup> Proposed Directive, *supra* note 4, at 9.

<sup>96</sup> *Id.* at 13. Article 1(3) states, in pertinent part, that "[p]rotection in accordance with this Directive shall apply to the expression in any form of a computer program but shall not extend to the ideas, principles, logic, algorithms or programming languages underlying the program." *Id.* But see BSA, WHITE PAPER, *supra* note 9, at 1-2 (exclusion of "logic, algorithms, or programming languages" invites confusion, may cause excessive litigation, and departs from the treatment of computer programs as literary works); see also COMMON STATEMENT, *supra* note 9, at 2:1-2.

<sup>97</sup> Proposed Directive, *supra* note 4, at 13. Algorithms are the steps used to construct a program in the same fashion that a composer uses musical scales to create a score. *Id.* at 5.

steps individually.<sup>98</sup> Likewise, the proposed directive would not protect access-protocols and interfaces as copyrightable subject matter.<sup>99</sup> Effective monopolies of interfaces and access-protocols stifle technical progress by impeding the development of compatible programs.<sup>100</sup> Moreover, such monopolies hinder the development of industry standards for compatibility and interoperability.<sup>101</sup> In light of these goals, access-protocols and interfaces are not protected.<sup>102</sup>

### C. *Authorship and Beneficiaries*

The proposed directive confers exclusive rights upon the person or group of persons who has created a computer program.<sup>103</sup> This person or group of persons is defined as the right holder.<sup>104</sup> Where the author of a program is working under contract or in the course of employment, the employer or party commissioning the work shall retain exclusive rights in the program.<sup>105</sup> All authors of a work will qualify for protection if at least one of the authors is eligible under that member state's copyright law with respect to literary works.<sup>106</sup>

---

<sup>98</sup> *Id.*

<sup>99</sup> *Id.* at 13. Article 1(3) states, in pertinent part, that "[w]here the specification of interfaces constitutes ideas and principles which underlie the program, those ideas and principles are not copyrightable subject matter." *Id.* Interfaces and access-protocols are those aspects of a computer program that ensure compatibility with other programs and interoperability of software and hardware. *Id.* at 7; see also Green Paper, *supra* note 5, at 184. *But see* BSA, WHITE PAPER, *supra* note 9, at 1-2 (objecting to exclusion of interfaces as copyrightable subject matter).

<sup>100</sup> See Green Paper, *supra* note 5, at 184.

<sup>101</sup> See *id.*

<sup>102</sup> Proposed Directive, *supra* note 4, at 13.

<sup>103</sup> *Id.* at 14. Article 2(1) states, in pertinent part, that "the author of a computer program is the natural person or group of natural persons who has created the program." *Id.*

<sup>104</sup> See *id.*

<sup>105</sup> *Id.* Article 2(3) states that "[w]here a computer program is created under a contract, the natural or legal person who commissioned the program shall be entitled to exercise all rights in respect of the program, unless otherwise provided by contract." *Id.* Article 2(4) states that "[w]here a computer program is created in the course of employment, the employer shall be entitled to exercise all rights in respect of the program, unless otherwise provided by contract." *Id.*

<sup>106</sup> *Id.* Article 3(1) states that "[p]rotection shall be granted to all natural or legal persons eligible under national copyright legislation as applied to literary works." *Id.* Article 3(2) states, in pertinent part, that "the computer program shall be protected in favour of all authors if at least one author is a beneficiary of protection in accordance with [article 3(1)]." *Id.*

Under the proposed directive, authors presumably register their copyrights pursuant to the laws of their respective member states. See EEC Treaty, *supra* note 71, at art. 100A;

#### D. "Restricted Acts"

The proposed directive articulates various "restricted acts," that is, certain uses of a computer program which require authorization of the right holder.<sup>107</sup> The proposed directive thus gives authors exclusive rights to control the reproduction, adaptation, and distribution of their works.<sup>108</sup> Under the proposed directive, right holders will also enjoy exclusive rights to control reproduction, especially with respect to the viewing, running, transmission, and storage of their works.<sup>109</sup>

An author's exclusive rights to control reproduction, adaptation, and distribution are not exhausted by the rental, leasing, or

---

Proposed Directive, *supra* note 4, at 15; CLIFFORD CHANCE, *supra* note 8, at 108. Under article 3 of the Berne Convention, foreign authors need not register their copyrights within the EEC to enjoy protections under Community law. See Comment, *Will the Soviet Union and the Peoples' Republic of China Follow the United States' Adherence to the Berne Convention?*, 13 B.C. INT'L & COMP. L. REV. 207, 209-10 (1990) [hereinafter Comment, *Berne Convention*]; Berne Convention, *supra* note 61, at art. 3. Article 5 of the Berne Convention outlines the principle of national treatment under which authors marketing their works in a foreign country receive the same protections enjoyed by citizen-authors of that country. Comment, *Berne Convention*, *supra*, at 209-10; Berne Convention, *supra* note 61, at art. 5. Although the Berne Convention does not explicitly extend copyright protections to software, the proposed directive extends such protections by treating computer programs as literary works. See *supra* note 92. Thus, under the Berne Convention's principle of national treatment, foreign authors will enjoy copyright protection when marketing their works within the EEC without regard to protections available in their country of origin. See Proposed Directive, *supra* note 4, at 8.

<sup>107</sup> Proposed Directive, *supra* note 4, at 14. Article 4 states, in pertinent part:

[T]he exclusive rights . . . shall include the right to do or to authorize: (a) the reproduction of a computer program by any means and in any form, in part or in whole. In so far as they necessitate a reproduction of the program in part or in whole, loading, viewing, running, transmission or storage of the computer program shall be considered restricted acts; (b) the adaptation of a computer program; (c) the distribution of a computer program by means of sale, licensing, lease, rental and the importation for these purposes.

*Id.*

<sup>108</sup> See *id.* at 10-11. These provisions appear to include the traditional moral rights which enable authors to maintain the integrity of their works by restricting adaptation and publication. See *id.* But see *infra* notes 148-49 and accompanying text.

<sup>109</sup> Proposed Directive, *supra* note 4, at 10-11. Strict control over reproduction and adaptation should protect authors from "reverse engineering." BUSINESS SOFTWARE ASSOCIATION, WHITE PAPER: COPYING THROUGH REVERSE ENGINEERING 14 (Nov. 1989). Reverse engineering is the process by which a computer program is taken apart and then rebuilt in such a manner as to conceal its true origin. *Id.* at 1. But a proposal to amend the proposed directive would significantly undermine protections provided under the proposed directive by providing a right to reverse engineering. See *id.* at 14. Adoption of such a right would stifle investment and innovation in the European software industry and would imperil many small and financially vulnerable firms. *Id.* at 8-9, 14. See also Financial Times, Jan. 24, 1990, at 6, col. 4.

licensing of the program.<sup>110</sup> The author's exclusive rights, however, are exhausted once the program has been sold with his or her consent.<sup>111</sup> Once a program has been sold to the public, purchasers need not obtain authorization for the normal use, transmission, or storage of the program nor can they be restricted from lending it to third parties.<sup>112</sup> Reproduction and adaptation, however, other than for the purposes of normal use, still require authorization of the right holder.<sup>113</sup> The proposed directive further prevents authors who have sold their programs from restricting use of their works by public libraries.<sup>114</sup>

### E. *Term of Protection and Infringement*

The proposed directive establishes a term of protection of fifty years from the date of creation of a computer program.<sup>115</sup> The

<sup>110</sup> Proposed Directive, *supra* note 4, at 11-12.

<sup>111</sup> *Id.* at 14. Article 4(c) states, in pertinent part, that "[t]he right to control the distribution of a program shall be exhausted in respect of its sale and its importation following the first marketing of the program by the right holder or with his consent." *Id.* Article 5(1) states:

Where a computer program has been sold or made available to the public other than by a written license agreement signed by both parties, the acts enumerated in Article 4(a) and (b) shall not require the authorization of the right holder, in so far as they are necessary for the use of the program. Reproduction and adaptation of the program other than for the purposes of its use shall require the authorization of the right holder.

*Id.*

<sup>112</sup> *See id.* at 11. Article 5(1), however, effectively invalidates "shrink-wrap" licensing agreements. *Id.* at 12. These agreements advise purchasers of their obligations and rights by way of written notice on the packaging of the software. *Id.* Unwrapping of the package by the purchaser manifests consent to the obligations so expressed. *Id.* Previously, authors were able to "sell" their programs under shrink-wrap agreements without forfeiting strict control over reproduction, adaptation, and distribution. *See id.* The BSA objects to the proposed directive's discriminatory treatment of software sold under shrink-wrap agreements. BSA, WHITE PAPER, *supra* note 9, at 2; *see also* COMMON STATEMENT, *supra* note 9, at 2:5.

<sup>113</sup> Proposed Directive, *supra* note 4, at 14. *But see* BSA, WHITE PAPER, *supra* note 9, at 3 (recommending substantial clarification of the provisions of article 5(1)).

<sup>114</sup> Proposed Directive, *supra* note 4, at 14. Article 5(2) states:

Where a computer program has been sold or made available to the public by means other than a written license agreement signed by both parties, the exclusive right of the right holder to authorize rental shall not be exercised to prevent use of the program by the public in non-profit making public libraries.

*Id.* The BSA, however, argues that the use of software in public libraries poses serious risks of harm to the economic interests of authors. BSA, WHITE PAPER, *supra* note 9, at 3. At the very least, the proposed directive should require stringent safeguards to minimize these risks. *Id.*; *see also* COMMON STATEMENT, *supra* note 9, at 2:6.

<sup>115</sup> Proposed Directive, *supra* note 4, at 14. Article 7 states that "[p]rotection shall be granted for 50 years from the date of creation." *Id.* *But see* BSA, WHITE PAPER, *supra* note

proposed directive further creates a cause of action for the importation and possession of unauthorized reproductions of programs where the party knew or should have known of the infringement.<sup>116</sup> All dealings in these infringing copies including the sale, receipt, transmittal, and storage thereof would provide a cause of action under member state law.<sup>117</sup> In addition, the proposed directive establishes a claim against those who produce, import, possess, or deal in articles or software specifically designed to circumvent technical protections for preventing reproduction.<sup>118</sup> The proposed directive, therefore, prohibits those programs developed to facilitate unauthorized reproduction of copy-protected software.<sup>119</sup>

### III. PROTECTIONS UNDER THE COMMISSION'S PROPOSED DIRECTIVE

#### A. *Eliminating Market Distortions*

The Commission's proposed directive establishes a common framework for the legal protection of software within the EEC.<sup>120</sup> By clearly defining eligibility criteria and the scope and term of

9, at 3 (recommendation to amend article 7 of the proposed directive to extend protection for the life of the author plus fifty years, consistent with the term of protection generally provided under the Berne Convention); see also COMMON STATEMENT, *supra* note 9, at 2:7.

<sup>116</sup> Proposed Directive, *supra* note 4, at 14. Article 6(1) states that "[i]t shall be an infringement of the author's exclusive rights in the computer program to import, possess or deal with an infringing copy of the program, knowing or having reason to believe it to be an infringing copy of the work." *Id.*

<sup>117</sup> *Id.* at 12. Under the Berne Convention's principle of national treatment, foreign authors marketing their works within the EEC normally have a cause of action in that member state in which the transgression occurred. See Berne Convention, *supra* note 61, at art. 5(3). This raises the issue of enforcement of rights granted under the proposed directive. See BSA, WHITE PAPER, *supra* note 9, at 3-4. The proposed directive is noticeably silent on the matter of enforcement. See *id.* The BSA recommends adding certain provisions that would facilitate infringement actions. *Id.* Recommendations include shifting the burden of proof in such actions, liberalizing rules on evidence and inspections, and establishing stronger criminal and civil remedies and fines. *Id.*; see also COMMON STATEMENT, *supra* note 9, at 2:8-9.

<sup>118</sup> Proposed Directive, *supra* note 4, at 14. Article 6(2) states that "[i]t shall be an infringement of the author's exclusive rights in the computer program to make, import, possess or deal with articles intended specifically to facilitate the removal or circumvention of any technical means which may have been applied to protect a program." *Id.*

<sup>119</sup> *Id.* For a discussion on the subject of utilities for illegally reproducing copy-protected software and their legal treatment in France, see generally de Bellefonds, *The Copying of Software and Software for Copying: Case Law in France: La Commande Electronique Case*, 11 EUR. INTELL. PROP. REV. 338 (1989).

<sup>120</sup> See *supra* notes 79-119 and accompanying text.



protection, the proposed directive should result in significant improvement to the functioning of the internal market.<sup>121</sup> For example, the proposed directive would eliminate divergent member state originality criteria that establish minimums of intellectual effort or scientific value.<sup>122</sup> Under the proposed directive, the only requirement for eligibility is that of originality—that a program is the author's own work and is not itself a copy.<sup>123</sup> This clear standard should eliminate much of the confusion and distortions currently resulting from the divergent interpretations of member state courts.<sup>124</sup>

The proposed directive would also harmonize the scope and term of protections among member states. First, the Commission's proposed directive establishes a uniform term of protection of fifty years from the creation of a program.<sup>125</sup> Second, authors are granted uniform rights as to the reproduction, adaptation, and distribution of their works.<sup>126</sup> Harmonization, therefore, should eliminate the legal disparities whereby authors enjoy greater protections, for example, under German law than French law.<sup>127</sup>

In light of these improvements, legal protections accorded by individual member states should no longer factor into the investment decisions of software producers. Previously, software developers were more likely to establish operations in member states that afforded more extensive legal protections. Harmonization should effectively eliminate these distortions to competition and the free movement of capital within the EEC.<sup>128</sup>

The proposed directive should also alleviate market conditions that have encouraged territorial licensing and market discrimination. Uniform protections would thus eliminate market distor-

<sup>121</sup> See *supra* notes 64–68 and accompanying text. Any success of the proposed directive in limiting piracy, protecting authors' rights, and eliminating market distortions, of course, presumes effective enforcement of the member state laws implemented under the proposed directive. See BSA, WHITE PAPER, *supra* note 9, at 3–4. Uniform law without adequate enforcement jeopardizes the reforms of the proposed directive. See *id.*; COMMON STATEMENT, *supra* note 9, at 2:8–9; *supra* note 125. See also Tamburrini, *supra* note 20, at 82 (protections without appropriate criminal sanctions would likely prove ineffective).

<sup>122</sup> See *supra* notes 45–51 and accompanying text.

<sup>123</sup> See *supra* notes 93–95 and accompanying text.

<sup>124</sup> See *supra* notes 64–68 and accompanying text.

<sup>125</sup> See *supra* note 115 and accompanying text.

<sup>126</sup> See *supra* notes 107–14 and accompanying text.

<sup>127</sup> See *supra* notes 56–57, 59–63 and accompanying text.

<sup>128</sup> See *supra* notes 64–68 and accompanying text.

tions resulting from the reluctance among producers to market in jurisdictions with more limited protections. Uniformity, therefore, may significantly improve availability of software in member states such as Greece and Portugal where legal protections for software are limited.<sup>129</sup>

Uniform protections may also affect pricing policies to the benefit of consumers. Producers, operating in a less capricious legal environment, may be less inclined to seek artificially high prices for their products in order to recoup a faster return on their investments. Rather, a stable investment climate will enable producers to take a more long-term view with respect to pricing and returns on capital.<sup>130</sup> In fact, uniformity should foster an environment throughout the EEC that is generally more favorable to investment in software development.<sup>131</sup>

### B. *Balancing of Interests*

Throughout its proposed directive, the Commission makes a concerted effort to balance an author's exclusive proprietary rights, on the one hand, with the public's interest in technical progress, on the other.<sup>132</sup> Certainly a framework of copyright protection creates a favorable environment for the investment of intellectual and financial resources, thereby promoting development and innovation.<sup>133</sup> But monopoly rights created under copyright may hinder technical progress by protecting innovations that might otherwise contribute to the development of new software.<sup>134</sup> The Commission has thus been cautious in granting exclusive rights under copyright law.<sup>135</sup> For example, in the interest of promoting technical innovation and greater standardization within the computer industry, the Commission limits proprietary rights to some aspects of software such as access-protocols and interfaces. This gives other authors the flexibility to incorporate identical interfaces and access-protocols into their own programs, thereby ensuring greater compatibility and stan-

---

<sup>129</sup> See *supra* notes 69–74 and accompanying text.

<sup>130</sup> See *supra* note 75 and accompanying text.

<sup>131</sup> See *supra* notes 76–78 and accompanying text.

<sup>132</sup> Proposed Directive, *supra* note 4, at 16.

<sup>133</sup> *Id.*

<sup>134</sup> See Green Paper, *supra* note 5, at 184.

<sup>135</sup> See Proposed Directive, *supra* note 4, at 7.

dardization.<sup>136</sup> Similarly, the Commission endorses the flexibility of protection by copyright, recognizing the advantage of a system that provides statutory protection of private intellectual property interests while at the same time permitting other authors to develop analogous programs based on similar or even identical ideas.<sup>137</sup>

### C. *Rights of Authors*

The "restricted acts" specified in the Commission's proposed directive should afford authors considerable control over reproduction of their programs.<sup>138</sup> In light of the vulnerability of software to unauthorized reproduction and considering that even a partial reproduction may result in significant economic harm to the author, such rights are necessary if the right holder is to achieve adequate protection for his or her work.<sup>139</sup> For technical reasons unique to computer programs, normal use requires temporary reproduction as a part of the internal processes of the computer on which they are run.<sup>140</sup> In addition, software manufacturers frequently recommend the making of a back-up copy of a program.<sup>141</sup> Under the proposed directive, these activities, though typically inconsequential, constitute "restricted acts" over which the right holder retains considerable discretion.<sup>142</sup> Where producers perceive a risk of piracy or misappropriation due to such activities, they are free to restrict reproduction by means of licensing or lease agreements.<sup>143</sup> For example, the commercial rental of computer programs represents a serious threat to authors' economic rights.<sup>144</sup> Because rental software is particularly susceptible to unauthorized reproduction, it is essential that producers retain control over the rental of their programs.<sup>145</sup>

---

<sup>136</sup> See *supra* notes 99–102 and accompanying text.

<sup>137</sup> Proposed Directive, *supra* note 4, at 7.

<sup>138</sup> See *supra* notes 107–10, 113 and accompanying text.

<sup>139</sup> See Proposed Directive, *supra* note 4, at 11.

<sup>140</sup> Green Paper, *supra* note 5, at 190. Such internal processes include loading, running, transmission, and storage of the program. See Proposed Directive, *supra* note 4, at 10.

<sup>141</sup> Green Paper, *supra* note 5, at 190. See generally de Bellefonds, *supra* note 119, at 338 (brief discussion of back-up copies and their legal treatment in France).

<sup>142</sup> See *supra* notes 107–10 and accompanying text.

<sup>143</sup> Proposed Directive, *supra* note 4, at 11–12.

<sup>144</sup> *Id.* at 11. For an overview of commercial software rental and the corresponding risks of piracy, see generally Zigelbaum, *The Computer Software Protection Act: A Legislative Response to Software Piracy through Software Rentals*, 1 SOFTWARE L.J. 67 (1985).

<sup>145</sup> Proposed Directive, *supra* note 4, at 11.

The right holder's control over reproduction, however, is significantly diminished once the program has been sold on the market with his or her consent.<sup>146</sup> In such cases, producers waive their strict rights and purchasers no longer require authorization for the types of insubstantial reproduction mentioned above.<sup>147</sup> Similarly, producers waive their rights to control adaptation upon sale of their programs.<sup>148</sup> Such waiver of control is especially appropriate in that computer programs frequently require alterations for purposes of tailoring the software to its intended use or eliminating the "bugs" frequently found within new programs.<sup>149</sup>

### CONCLUSION

The Commission's proposed directive establishes uniform legal protections for computer software within the Community. Such harmonization of member state law would eliminate differences in the availability, scope, and terms of protection for software that currently impair the free movement of goods and capital within the EEC. A common framework for the protection of computer programs should thereby eliminate distortions in the investment decisions of software developers with respect to establishment, product line, and pricing. Moreover, uniformity should eliminate disincentives to the marketing of software in certain jurisdictions. Harmonization, therefore, should result in an environment significantly more favorable to the investment of intellectual and financial resources in EEC software development.

*Mark P. Tellini*

---

<sup>146</sup> See *supra* notes 110-14 and accompanying text.

<sup>147</sup> See *supra* notes 140-41 and accompanying text; Proposed Directive, *supra* note 4, at 10-11.

<sup>148</sup> See *supra* notes 110-14 and accompanying text.

<sup>149</sup> Comment, *Software Protection in the EEC*, *supra* note 1, at 660.