

Suggested Amendment to UCITA:

(Define “Free Software” and exclude it from Consumer and Mass-Market)

**Identification of Section to be changed:**

SECTION 102. DEFINITIONS.

**Text Deleted and Inserted:**

Section 102(a)(16) “Consumer contract” means a contract between a merchant licensor and a consumer. However, a contract to provide free software is not a consumer contract.

Section 102(a) (32) "Free software" means computer information that is available to the public at no charge beyond the cost of media and delivery, that may be redistributed at no charge, and that is distributed without contractual use terms. If the computer information includes a computer program, the source code is available for that program at no charge beyond the cost of media and delivery.

Section 102(a)(~~46~~5) “Mass-market transaction” means a transaction that is: ... (B) any other transaction with an end-user licensee if: ... (iii) the transaction is not: (V) a contract to provide free software.

**Explanation of Amendment**

The default rules for consumer and mass-market software are inappropriate for software that is created by volunteers, distributed for free, and whose source code is also available for inspection and modification.

Suggested Amendment to UCITA:

(Exclude safety-critical embedded software from UCITA)

**Identification of Section to be changed:**

SECTION 103. SCOPE; EXCLUSIONS.

**Text Deleted and Inserted:**

Section 103 (b) Except for subject matter excluded in subsection (d) and as otherwise provided in Section 104, if a computer information transaction includes subject matter other than computer information or subject matter excluded under subsection (d), the following rules apply:

(1) If a transaction includes computer information and goods, this [Act] applies to the part of the transaction involving computer information, informational rights in it, and creation or modification of it. However, if a copy of a computer program is contained in and sold or leased as part of goods, this [Act] applies to the copy and the computer program only if:

(A) the computer program does not control or interact with the goods in such a way that an error in the program could cause personal injury or damage to personal property, and

~~(B)~~ the goods are a computer or computer peripheral; or

~~(B)~~ giving the buyer or lessee of the goods access to or use of the program is ordinarily a material purpose of transactions in goods of the type sold or leased.

**Explanation of Amendment**

In repeated drafting committee discussions during the drafting of UCITA, and in many places in the comments to UCITA, there is a clear intent that UCITA exclude embedded software. However, the black letter is ambiguous. Computer Science professionals have repeatedly warned that much safety-critical embedded software will either fit within the scope of UCITA today or manufacturers of goods will be able to bring the scope of their software within UCITA in the near future by making straightforward engineering changes.

The amendment specifically excludes safety-critical embedded software from UCITA. For those who believe that UCITA already excludes such software, this language merely restates this fact in the black letter in a clearer way.

This amendment does not take all other types of embedded software out of the scope of UCITA. Embedded software whose failure will cause economic losses but not injury or damage to tangible property may or may not fall within the scope of UCITA, depending on how courts interpret the rest of Sections 103 and 104.

We respectfully suggest that UCITA would be improved further by a broader change, deleting all of the language, “(A) the goods are a computer or computer peripheral; or (B) giving the buyer or lessee of the goods access to or use of the program is ordinarily a material purpose of transactions in goods of the type sold or leased,” rather than adding new language that is restricted to safety-critical software.

Suggested Amendment to UCITA:  
(Reverse Engineering and Public Discussion)

**Identification of Section to be changed:**

SECTION 105. RELATION TO FEDERAL LAW; FUNDAMENTAL PUBLIC POLICY;  
TRANSACTIONS SUBJECT TO OTHER STATE LAW.

**Text Deleted and Inserted: (Add the following)**

**Section 105(f) (I) A term in a license is unenforceable if it restricts the licensee from reverse engineering if that reverse engineering is done to achieve interoperability or to discover, prove, repair, or mitigate the effects of software errors or security-related risks.**

**(II) A term in a license is unenforceable if it restricts the licensee from publishing benchmark studies, product reviews or other descriptions of the product that will assist the reader to achieve interoperability or to discover, prove, repair, or mitigate the effects of software errors or security-related risks.**

**(III) A term in a mass-market license is unenforceable if it restricts the licensee from reverse engineering a computer program or it restricts the licensee from publishing the results of benchmark studies or other reviews of the licensed computer information.**

**Explanation of Amendment**

Restrictions on reverse engineering, in negotiated, signed licensing agreements, are generally enforceable. However, the Digital Millennium Copyright Act permits reverse engineering that is done to achieve interoperability or to reduce security risks. The European Union also allows for reverse engineering to achieve interoperability or safety. Section 105(f)(I) makes it explicit that UCITA-based contracts also allow reverse engineering for these limited purposes. In particular, it has become clearer since September 11, 2001 that there is enormous public interest in improving the security of computer systems. Reverse engineering is an essential method for investigating security. Software vendors must not be allowed to bar their customers from using basic methods for protecting themselves and their systems.

Restrictions on reverse engineering in mass-market and consumer software have rarely or never been upheld. Restrictions on speech, that would bar disclosure defects or poor performance of mass-market software, are fundamentally anti-competitive. When the software is available to all, including the software vendor's competitors, a ban on speech does not protect the vendor's secrets from discovery by competitors. It merely protects the vendor from publication of information that might cause customers to choose a competing product. Such a restriction has no place in a market economy.

Suggested Amendment to UCITA:  
(Known Defects)

**Identification of Section to be changed:**

SECTION 403. IMPLIED WARRANTY: MERCHANTABILITY OF COMPUTER PROGRAM.

**Text Deleted and Inserted: (Add the following)**

Section 403(d) A licensor that is a merchant with respect to computer programs of the kind:

(1) Warrants to the licensee that, as of the time of transaction, the licensed computer program has no known defects other than those which have been disclosed to the licensee at or before the time of the transaction. A defect has been disclosed to the licensee if it was made available to the licensee at no cost, for example by publication on the licensor's website, and the licensee was advised how to access the licensor's disclosure of this defect, and the disclosure is reasonably calculated to be informative to the typical licensee of a product of this kind, including a description of the errors or problems that the licensee would be expected to encounter as a consequence of this defect and the steps recommended to avoid or mitigate losses caused by the defect.

(2) Will be liable for incidental and consequential losses of the licensee that were caused by a defect that was known to the licensor at time of transacting but were not disclosed to the licensee. However a mass-market license may limit the remedy to reimbursement of not more than \$500 for incidental losses and consequential losses that involved actual out-of-pocket expenses of the licensee. Unless the contract specifies otherwise, the licensor will not be liable for incidental and consequential losses of the licensee that were caused by a defect that was unknown to the licensor at the time of transacting or that was known and disclosed.

(3) May not disclaim this warranty in a mass-market license or a license for a computer program that will be embedded in goods and whose failure could cause a personal injury or damage to tangible property.

**Explanation of Amendment**

The issue of nondisclosure of known defects is one of the most controversial issues in the UCITA drafting process. It has been a lightning rod for opposition to UCITA, widely raised in the press and in discussions among working professionals.

UCITA allows the licensor broad power to set the terms of the contract, especially in a mass-market contract. There is widespread perception that it is fundamentally unfair to allow the vendor to sell products with known but undisclosed defects, under a non-negotiable contract that allows the vendor to disclaim warranties and exclude most or all remedies. There is widespread belief among computing professionals who have studied UCITA that, within the legal context set by UCITA, a practice of nondisclosure of known defects will have a corrupting influence on the field and will set back the process of developing high quality software.

This simplest and most straightforward approach to this issue, often advocated, is to write an implied warranty of disclosure of known defects into every software license and to hold the licensor accountable for incidental and consequential losses caused by nondisclosed known defects. However, this subjects the licensor to unlimited risk. The approach taken in this

amendment is more cautious. The warranty, in practice, will apply only to mass-market and life-critical embedded software, not to commercial software. The mass-market warranty, in practice, will limit remedies to a maximum of \$500 reimbursement for actual, out of pocket expenses (not lost profits) per customer. This is a strong, but limited, incentive to a manufacturer to disclose its defects. If this isn't a sufficient incentive, or if it does not result in the spread of good practices to commercial software, this section can be broadened later.

The warranty is also made nondisclaimable for embedded software that is safety-critical. Vendors of software that is to be embedded in goods are providing licenses that disclaim warranties and drastically limit remedies. Many vendors do not disclose known defects. Makers of goods that contain embedded software complain that they lack the market power needed to convince the large software vendors to disclose their defects. As a result, safety-critical devices are being built on top of a quality-unknown code base. People have died as a result of defects in safety-critical embedded software. As embedded software becomes even more pervasive in homes, offices, cars and motorcycles, more people will die as a result of defects in the embedded software.

One of the key standards for safety of embedded software is Underwriters Laboratory's STP 1998. This standard *recommends* that manufacturers of devices that incorporate embedded software from other vendors should obtain lists of known defects from the licensors of the software. Members of the drafting committee for the standard now known as STP 1998 advised me (Cem Kaner) that this was a recommendation, rather than a requirement, because of the limited market power of individual manufacturers. It would be unreasonable for an ANSI standard (such as STP 1998) to include a requirement that a reasonably diligent manufacturer could not meet. UCITA potentially exacerbates the problems of embedded software by granting licensors greater freedom. This amendment mitigates the problem by requiring licensors to disclose known defects to the device manufacturers, who will thereby be in a much better position to make their devices safe.

Suggested Amendment to UCITA:  
(Dealing with Injuries)

**Identification of Section to be changed:**

SECTION 109. CHOICE OF LAW.

**Text Deleted and Inserted: (Add the following)**

**Section 109(e) If a computer program, including a program embedded in a device, is the cause of an injury to a person or of damage to tangible property, a term of the license should not be enforced if it (i) selects the law of a state that is neither the state in which the injured party or property owner lives or the state in which the injury or property damage took place, or (ii) requires an injured person or owner of damaged property to travel to another state, or (iii) limits damages available to the injured person or property owner below those that would normally be available in a products liability suit.**