

UCITA and Proposed Revisions to UCC Article 2: New Rules for Software Transactions

Cem Kaner

October 2001

kaner@kaner.com

Contract Fundamentals

A contract is an *agreement* between two or more people (or companies) that creates obligations to do or to provide particular things.

- In many cases, there is no agreement-creation process. Instead, we talk of the *voluntary assumption of an obligation* as the basis of the contract.

A software contract can involve *goods* (such as a program bought at a store) or *services* (such as custom programming), or some mix of the two (such as a program that comes with a maintenance contract).

Contracts:

Uniform Commercial Code

Article 2 governs contracts for sale of goods in USA.

Sale of packaged software has been treated by the courts as a sale of goods.

Sale of custom software is a sale of services, not covered by the UCC, though several courts have applied the UCC anyway.

UCC is maintained and updated by

- National Conference of Commissioners on Uniform State Laws (NCCUSL) a legal drafting organization funded by the 50 US states to write “Uniform” laws. (300 lawyers appointed by states, typically by Governor.)
- American Law Institute, another non-profit body of senior lawyers (3000 judges, law professors, senior partners, elected to membership by the Institute.)

Uniform Commercial Code

Interesting features of Article 2

- Gap fillers, and implied terms
- Perfect tender rule
- Implied warranty of merchantability
- Implied warranty of fitness for a particular purpose
- Battle of the forms rules:
 - contract by conduct
 - forms as proposals for modification
- Modification rules: material vs. non-material modifications
- Some rules apply only to merchants

Uniform Computer Information Transactions Act

UCITA will govern all contracts in electronic information.

"Information" means data, text, images, sounds, mask works, computer programs, software, databases, or the like, including collections and compilations of them.

"All contracts" includes contracts for the sale, licensing, service, support, maintenance, documentation, (etc.) of information (such as software).

As we'll see in "Scope", UCITA also stretches instantly to cover computers bundled with software, computer peripherals, and does or will easily stretch to much other embedded software (and often to products in which the software is embedded).

UCITA Scope (Slide 1)

SECTION 103. SCOPE; EXCLUSIONS.

(a) This [Act] applies to computer information transactions.

(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 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.

UCITA Scope (Slide 2)

SECTION 104. MIXED TRANSACTIONS: AGREEMENT TO OPT-IN OR OPT-OUT. The parties may agree that this [Act], including contract-formation rules, governs the transaction, in whole or part, or that other law governs the transaction and this [Act] does not apply, if a material part of the subject matter to which the agreement applies is computer information or informational rights in it that are within the scope of this [Act], or is subject matter within this [Act] under Section 103(b), or is subject matter excluded by Section 103(d)(1) or (3).

My interpretation:

Section 103 appears to exclude embedded software, but most software that is embedded in a device is embedded in a computer in that device, and many devices that software is embedded in can be called peripherals. Additionally, the software is often a material part of today's goods transactions. (Examples, rice cookers, cars, smart refrigerators). So, much (or most) embedded software already fits within UCITA.

UCITA Scope (Slide 2)

Section 103: For safety-critical software that is not covered under UCITA, manufacturers can re-engineer. Sell the software in a separate transaction (separate contract), perhaps give optional versions so that no particular copy is inherently part of the sale of the goods. (Prototypic example: aftermarket fuel injector chip and software). Or re-engineer in a way that makes the software more obviously part of a computer or peripheral.

Now bring **Section 104** into play. If the software is a material part of the transaction, the manufacturer can bring the goods that come with the computer (the computer, the car, the refrigerator) out of Article 2 and into UCITA.

NCCUSL (but not ALI) Approved Changes to Article 2 Scope

COMMITTEE CHANGES TO UNIFORM COMMERCIAL CODE ARTICLE 2 — SALES SECTION 2-102. SCOPE (as restyled 9/20/01).

- (a) This article applies to transactions in goods.
- (b) This article does not apply to contracts to create, modify, or acquire information.
- (c) If a transaction involves information and goods, this article applies to the goods and does not apply to the information. However, if software is contained in goods that are sold or leased, this article applies to the software and the goods considered as a whole unless:
 - (1) the goods in which the software is contained is a computer; or
 - (2) giving the buyer or lessee of the goods access to or use of the software is a substantial purpose of transactions in goods of the type sold or leased.
- (d) If a transaction is governed by subsection (c)(1) or (2), this article applies to the goods, but does not apply to the software even if the goods predominate in the transaction. Informational rights are not affected even if information is contained in goods.

Definitions:

"Computer" — no definition.

NCCUSL (but not ALI) Approved Changes to Article 2 Scope

COMMITTEE CHANGES TO UNIFORM COMMERCIAL CODE ARTICLE 2 — SALES

"Goods" — "Goods" means all things, including specially manufactured goods, that are movable at the time of identification to a contract for sale and future goods. The term includes the unborn young of 2-107. The term does not include money in which the price is to be paid, the subject matter of foreign exchange transactions, documents, letters of credit, letter-of-credit rights, instruments, investment property, accounts, chattel paper, deposit accounts, or general intangibles. The term includes any physical medium in which information resides.

"Information" -- "Information" means data, text, images, sounds, mask works, computer programs, software, databases, or the like, including collections and compilations of them.

"Information Rights" -- "Information rights" include all rights in information created under laws governing patents, copyrights, mask works, trade secrets, trademarks, publicity rights, or any other law that gives a person, independently of contract, a right to control or preclude another person's use of or access to the information on the basis of the rights holder's interest in the information.

"Software" means a computer program and any supporting information provided in connection with a transaction relating to the computer program.

My Articles on Scope

The Problem of Embedded Software (Part 1) January 2001 with Professor Phil Koopman, published in UCC Bulletin (February, March issues) <http://www.badsoftware.com/embedd1.htm>

The Problem of Embedded Software (Part 2) March 2001 with Professor Phil Koopman, published in UCC Bulletin (April issue) <http://www.badsoftware.com/embedd2.pdf>

Proposed Article 2 Revisions Fall Short for Embedded Software, November 2000, with Professor Phil Koopman (for UCC 2 drafting committee) <http://www.badsoftware.com/embedd0.pdf>

Comments to the Federal Trade Commission submitted for its hearing on software warranties and consumer protection. <http://www.badsoftware.com/ftc2000.htm>

Software Engineering and UCITA, published in the Journal of Computer Law. <http://www.badsoftware.com/engr2000.htm>

Basic Quality Engineering: Quality-Related Costs

The *Cost of Quality* is the total amount the company spends to achieve and cope with the quality of its product.

This includes the company's investments in improving quality, and its expenses arising from inadequate quality.

Basic Quality Engineering: Quality-Related Costs

Prevention

- Cost of preventing software errors, documentation errors, and any other sources of customer dissatisfaction

Appraisal

- Costs of looking for defects (all types of inspection and testing).

Internal Failure

- Costs of coping with errors discovered during development.

External Failure

- Costs of coping with errors discovered, typically by your customers, after the product is released.

Total Cost of Quality =

Prevention + Appraisal + Internal Failure + External Failure costs.

Categorizing Quality Costs

<i>Prevention</i>	<i>Appraisal</i>
<ul style="list-style-type: none"> • Staff training • Requirements analysis • Early prototyping • Fault-tolerant design • Defensive programming • Usability analysis • Clear specification • Accurate internal documentation • Pre-purchase evaluation of the reliability of development tools 	<ul style="list-style-type: none"> • Design review • Code inspection • Glass box testing • Black box testing • Training testers • Beta testing • Test automation • Usability testing • Pre-release out-of-box testing by customer service staff
<i>Internal Failure</i>	<i>External Failure</i>
<ul style="list-style-type: none"> • Bug fixes • Regression testing • Wasted in-house user time • Wasted tester time • Wasted writer time • Wasted marketer time • Wasted advertisements • Direct cost of late shipment • Opportunity cost of late shipment 	<ul style="list-style-type: none"> • Technical support calls • Answer books (for Support) • Investigating complaints • Refunds and recalls • Interim bug fix releases • Shipping updated product • Supporting multiple versions in the field • PR to soften bad reviews • Lost sales • Lost customer goodwill • Reseller discounts to keep them selling the product • Warranty, liability costs

Quality Costs

Notice how this analysis ignores **externalized** failure costs -- the costs absorbed by the customer.

- *(See my paper, [Quality / Cost Analysis: Benefits & Risks](http://www.kaner.com), at www.kaner.com.)*

UCITA provides a wide range of tools to help software publishers externalize their failure costs.

- Over the short term, this allows publishers to ship lower quality products with impunity, and with minimal risk.
- Over the longer term, this an invitation to the industry to commit suicide.

It's Too Easy to Forget the Customer's Costs in Quality / Cost Analysis

THE PINTO:

Benefits and Costs Relating to Fuel Leakage Associated with the Static Rollover Test Portion of FMVSS 208

Benefits -- Savings to Ford

180 burn deaths	\$200,000 each
180 serious burn injuries	\$67,000 each
2100 burned vehicles	\$700 each
<u>Total Benefit</u>	<u>\$49.5 million</u>

Costs of Fixing the Problem

11 million cars	\$11 each
1.5 million trucks	\$11 each
<u>Total Costs</u>	<u>\$137 million</u>

Quality-related litigation reflects the customer's intent to transfer its failure costs back to the company whose defective product caused them.

But what about the customer's costs? Quality / Cost analysis doesn't ask us to minimize them. Can we ignore them?

Uh-oh. If the customer's costs are big, this sounds like a good way to get sued.

Seller: external costs	Customer: failure costs
<i>These are the types of costs absorbed by the seller that releases a defective product.</i>	<i>These are the types of costs absorbed by the customer who buys a defective product.</i>
<ul style="list-style-type: none"> • Technical support calls • Preparing answer books • Investigating complaints • Refunds and recalls • Interim bug fix releases • Shipping updated product • Supporting multiple versions in the field • PR to soften harsh reviews • Lost sales • Lost customer goodwill • Reseller discounts to keep them selling the product • Warranty, liability costs • Gov't investigations 	<ul style="list-style-type: none"> • Wasted time • Lost data • Lost business • Embarrassment • Frustrated employees quit • Demos or presentations to potential customers fail because of the software • Failure during tasks that can only be done once • Cost of replacing product • Reconfiguring the system • Cost of recovery software • Cost of tech support • Injury / death

History of UCITA

- UCITA was initially an amendment to Article 2. The Article 2 revision committee couldn't reach agreement and split into an Article 2 (law of sales) committee and an Article 2B (law of software licenses) committee.
- The Article 2B project ended when the American Law Institute withdrew, citing concerns that Article 2B was trying to write around federal Copyright law and that it was making fundamental changes in contract law.
- NCCUSL renamed the bill's name to UCITA and went forward on its own. This is the first time that ALI and NCCUSL have split.
- Passed as law in Virginia and Maryland, but rejected in several other states.
- Well-funded lobbying effort, updates at www.UCITA.com.

What Does UCITA Do? Good News

Intent: Update the UCC to handle software more sensibly

- Unified framework for software and digital content.
- Unify treatment of software-related products and services.
- Clarifies when and where a contract is formed
- Clarifies the rules governing shrinkwrap and clickwrap licenses
- Clarify the rules for informing customers of contract terms, including (especially) warranty terms, remedies, use restrictions, and transfer restrictions.
- Strengthens protections against piracy and use outside of the reasonable expectations of the vendor
- Allows more flexible licensing terms, which may affect software pricing
- Minimizes risk of frivolous lawsuits against vendors

What Does UCITA Do? Bad News

My belief, after thorough research over many years, is that the new wave (UCITA and the court cases influenced by UCITA) represents a radical and fundamental change in contract law.

- Terms are unavailable to customers before the sale (no duty to supply them even on request).
- Terms can be called “conspicuous” even though they are undiscoverable before the sale.
- Material terms will be enforced even though they were unavailable pre-sale and they conflict with the law’s default rules or with normal expectations.

Along the same lines, Geoffrey C. Hazard, Jr., the Chair of the Permanent Editorial Board of the Uniform Commercial Code, spoke at a meeting of the UCC Article 2B Drafting Committee (St. Louis, May, 1998). He said that the process of presenting nonnegotiable, post-sale notifications of the seller's terms that come with software is far from any notion of a voluntary assumption of obligations and from traditional notions of contracting in general.

Software is “Different”

- Repeated argument within 2B/UCITA meetings that software is more complex, nonlinear, *Real Hard To Get Right*.
- There is some merit to this argument--see my paper, *The Impossibility of Complete Testing* at www.badsoftware.com.
- **HOWEVER, THIS ONLY STRETCHES SO FAR. *In mass-market software, almost all defects reported by customers were found before the product was released.***
- Proposal from Paglia/Nader, IEEE, ICCA, myself:
 - No liability for unknown defects (unless gross negligence)
 - No liability for known but understandably documented defects
 - Non-excludable, capped liability for known, nondisclosed defects.
- ***This assigns liability in a way that allows publishers to fully manage their risks ---> Proposal was repeatedly rejected.***

UCITA's Effects: Categories of External Failure Costs

- **Customer Support Costs**
- Lost Sales (esp. lost to competitors)
- Legal Costs

UCITA's Effects on Customer Support Costs

- Publisher gets to charge customers for support, even for known bugs. (This is via the exclusion of incidental damages.)
- Easy to set up a waiver of liability--include it in the click-wrap with bug fixes.
- Seller can require precision and completeness in customer's bug reporting.
- Vendor's support contract will not require it to fix all defects.
- In a contract dispute, vendor can sometimes use "self-help" to shut down the operation of the program.
- Vendor will have the same or (probably) greater power to restrict customer's right to maintain its software or hire 3rd party support.

UCITA's Effects: Categories of External Failure Costs

- Customer Support Costs
- **Lost Sales (esp. lost to competitors)**
- Legal Costs

UCITA's Effects on Lost Sales: Competitive Effects

Note the 1998 ALI resolution and its supporting memo (see later slide on ALI for more details):

- **"The Draft reflects a persistent bias in favor of those who draft standard forms, most commonly licensors. It would validate practices that involve post-purchase presentation of terms in both business and consumer transactions (using "shrink-wrap" and "clickwrap"), undermining the development of competition in contingent terms, such as warranties and remedies. . . ."**

Think of the terms you don't discover until after the sale:

- What your rights are to use the product
- Warranty--how long and what it covers
- Support costs and policies--whether you can return the product at all and how much it costs to get support for known defects, whether you are allowed to fix problems yourself or hire a repair technician on your own.
- Who can use the product, whether you can resell it used.
- And, not a "term" but an essential characteristic of the product, what defects the product has (especially the defects the seller knows about and is choosing not to disclose to you or its competitors).

UCITA's Effects on Lost Sales: Competitive Effects

Lets companies prohibit publication of criticisms.

- "The customer shall not disclose the results of any benchmark test to any third party without McAfee's prior written approval."
- "The customer will not publish reviews of the product without prior consent from McAfee."
- (And see the new Front Page licensing language, this week's InfoWold GripeLine.)
- *Microsoft and Oracle have both successfully blocked publication of benchmark results.*

Before you say that these would be struck down--**on what basis?**

- Nondisclosures (like other contractual use restrictions) are binding in signed licenses.
- Under UCITA, a clicked "license" is equivalent to a signed license.
- Therefore, these are binding in click-wrap licenses. *Right?*

UCITA's Effects on Lost Sales: Competitive Effects

Perlman amendment (passed by NCCUSL)

- "If a court as a matter of law finds the contract or any term of the contract to have been unconscionable or **contrary to public policies relating to innovation, competition, and free expression** at the time it was made, the court may refuse to enforce the contract or it may enforce the remainder of the contract without the impermissible term as to avoid any unconscionable or otherwise impermissible result."

Corresponding 2B change

- "If a contract term **violates a fundamental public policy**, the court may refuse to enforce [it]. . . to the extent that the **interest in enforcement is clearly outweighed by a public policy against enforcement of that term.**"

UCITA's Effects on Lost Sales: Competitive Effects

Makes possible a ban on reverse engineering

"A common criticism of software publishers is that their **EULAs prohibit reverse engineering, decompilation, and disassembly** of their software. Software publishers typically restrict these activities because they risk exposing, and hence losing, to the public domain, the publisher's crown jewel—the secrets contained in the software's source code. Most purchasers of off-the-shelf software, however, care little, if at all, about the right to reverse engineer, and they certainly are not interested in paying more money to acquire this right. The entities that are most interested in acquiring this right are competitors of the software developer. **A competitor should not be permitted to acquire the right to examine a company's trade secrets for the low price that the typical end user pays for the software.**"

--- Robert W. Gomulkiewicz (a senior corporate attorney at Microsoft) and Mary L. Williamson (1996)

(A EULA is an end user license agreement, typically typically shrink-wrapped and presented to the customer after the sale.)

UCITA's Effects on Lost Sales: Competitive Effects

Ban on reverse engineering: Problem? Here's why colleagues and I have reverse engineered:

- Personal education.
- Understand and work around (or fix) limitations and defects in tools that I was using..
- Understand and work around (or fix) defects in third-party products.
- Make my product compatible with (able to work with) another product.
- Make my product compatible with (able to share data with) another product.
- To learn the principles that guided a competitor's design.
- Determine whether another company had stolen and reused some of my company's source code.
- Determine whether a product is capable of living up to advertised claims.

See my paper on reverse engineering at www.badsoftware.com

UCITA's Effects: Categories of External Failure Costs

- Customer Support Costs
- Lost Sales (esp. lost to competitors)
- **Legal Costs**

UCITA's Effects on Legal Costs

- No implied warranty (in practice).
- Magnuson-Moss and state consumer protection statutes based on goods go away, again reducing customers' warranty rights.
- Creates exceptions to the express warranty created by demonstration.
- Reduces right to a refund (limits the perfect tender rule).
- Provides that a contract can be non-cancelable in the event of breach.
- Virtually no remedies
 - Post-sale remedy limitations are fully enforceable.
 - No refund for incidental expenses, such as charges for telephone support
 - No reimbursement for damage by known bugs
 - Eliminates principle of minimum adequate remedy

UCITA's Effects on Legal Costs -- Material Breach

A significant known defect that the mass-market publisher will not fix will often be material under the Restatement but non-material under UCITA.

Restatement of Contracts

- Extent to which injured party will be deprived of benefit she reasonably expected
- Extent to which injured party can be adequately compensated for the lost benefit
- Extent to which breaching party will suffer forfeiture
- Likelihood of cure
- Extent to which breaching party's behavior comports with standards of good faith & fair dealing.

UCITA

- Substantially deprives nonbreaching party of a significant benefit of contract.
- Substantial failure to perform essential term.
- Likely to cause substantial harm.
- Contract so provides.

UCITA's Effects on Legal Costs

Nearly impossible to sue

- Choice of law
- Choice of forum
 - *Get a copy of the plaintiff's cert. Petition in Gateway 2000 v. Hill. The facts are a lot less defense-friendly than the 7th Circuit opinion might lead you to believe. Without implying for a moment that Gateway 2000 intended fraud, you should recognize this as a case that lays out a how-to guide for the mass market defrauder.*
- Arbitration clauses are a type of choice of forum clause, UCITA is likely to make these fully enforceable. Arbitration often limits customer's ability to obtain documents and deposition, or to be awarded punitive damages. The expected external failure cost under products liability arbitration is lower, for the defendant manufacturer of a highly defective product, than a products liability lawsuit would be.

Summary of Objections to UCITA: Mass-Market

- No accountability for known defects.
- Makes warranty disclaimers too easy
- **Eliminates applicability of key consumer protection laws**
- **Limits express warranties**
- Limits your uses of the software
- Limits transfer (such as resale or gift of used software)
- Lets the publisher choose state/country's law and forum
- No duty to protect your privacy
- No pre-sale or time-of-sale disclosure of the contract terms

Summary of Objections to UCITA: Mass-Market

Unreasonable electronic commerce rules

- **Message “receipt”.**

YOU ARE DEEMED TO HAVE RECEIVED AN ELECTRONIC MESSAGE WHEN IT REACHES YOUR INTERNET SERVICE PROVIDER.

THIS ISN'T EVEN A REBUTTABLE PRESUMPTION, AND IT DOESN'T MATTER WHETHER YOU ACTUALLY RECEIVE THE MESSAGE OR NOT!

- **online fraud**

see my paper, “SPLAT! Requirements Bugs on the Information Superhighway.”

- **online error**

Summary of Objections: Larger Business

- Eliminates the perfect tender rule (cancellation for obvious defects that are found right away)
- Makes it harder to cancel a contract for “material breach”
- **Lets publisher say you can never cancel the contract**
- Transfer rules inflate costs of mergers and acquisitions
- Makes it risky to try an evaluation copy (publisher immunized from liability for defects that you could have found during evaluation)
- Allows self-help (shutdown of your software without a court order)
- Creates security risk (hacker invades your system by taking advantage of the self-help hole opened by the vendor).

Objections: Independent Developers / Authors

- Lets publishers ban reverse engineering
- Gives big customers stricter warranties from small vendors
- Subjects consultants to mixed or uncertain law
- Reduces publishers' duty to actively market a work
- Makes it easier to refuse payment for competently written, contracted-for articles
- Makes it easier to refuse payment for ideas submitted under contract
- Lets publishers breach their writers' transfer restrictions

Politics of UCITA

Typical proponents:

- Software publishers
- Computer manufacturers
- Database publishers (West / Lexis / NASDAC)
- CitiBank, Daimler Chrysler

Typical opponents

- Consumers
- Librarians, Infoworld
- Insurance companies, Caterpillar, Boeing, Sun Micro, SIM, CCIA
- Staff members of the Federal Trade Commission, 25 Attorneys General
- American Intellectual Property Law Assoc and IP section of the NY City Bar Association
- ACM-USA, IEEE-USA, ICCA, CPSR, ASQ, SEI, professional societies and trade groups representing software engineers.

ALI's Withdrawal from UCC 2B

ALI passed resolutions in May 1997 and 1998 calling for fundamental revision of Article 2B. It withdrew from Article 2B in 1999.

The 1997 resolution attacked the Article 2B approach to intellectual property, and urged the drafters to conform Article 2B to federal intellectual property policies, as expressed in the federal laws governing copyrights and patents.

The 1998 resolution focused on customers and competition. This is from the resolution's supporting memo(Braucher and Linzer):

“The Draft reflects a persistent bias in favor of those who draft standard forms, most commonly licensors. It would validate practices that involve post-purchase presentation of terms in both business and consumer transactions (using "shrink-wrap" and "clickwrap"), undermining the development of competition in contingent terms, such as warranties and remedies. It would also allow imposition of terms outside the range of reasonable expectations and permit routine contractual restrictions on uses of information traditionally protected by federal intellectual property law. A fundamental change of approach is needed.”

Irrational Myths About Customer Dissatisfaction

- Myth: publishers are helpless to prevent defects.
 - *In mass-market products, most calls involve known defects.*
- Myth: most calls for help reflect customer ignorance or fault.
 - *Kaner / Pels data (desktop publishing application): 50% of calls could have been prevented with cheap fixes.*
- Myth: no one uses documentation.
 - *Dataquest -- 85% of people in trouble solve their own problem*
 - *Kaner's data (financial application) -- 88% of callers said they checked the docs first and could identify the weakness in the doc that led them to give up and call for help.*
- Myth: investments in support aren't good business.
 - *SoftLetter on MS's \$500 million investment in support:*
“Despite lots of wishful thinking to the contrary, spending money to upgrade a company's service reputation remains a lousy investment.”

Bad Software: Mis-set Customer Expectations

The Canadian government (Industry Canada, Competition Bureau) recently completed a study of the claims made on the packaging of consumer software. Here is the bottom line:

“Over 2000 claims were evaluated during this survey. Overall, some 163 or 8.1% of all claims evaluated were potentially false or misleading. While this may appear to be a small percentage based on the number of claims evaluated, these incorrect claims represent 65% of all the software titles tested.”

For detail, <http://strategis.ic.gc.ca/FBP> and search for “software”.

50% of software publishers don't give their manuals to the test group for testing. (Savings: about 15 minutes labor per page.) (Risk: In most states, the manual creates express warranties. The product must conform to all of the manual's “statements of fact”. The manual provides evidence of breach of contract.)

Web Sites

American Law Institute

- www.ali.org

Affect

- www.ucita.com

Kaner:

- www.badsoftware.com

Kunze:

- www.ucitaonline.com

NCCUSL

- www.nccusl.org

UCITA

- www.law.upenn.edu/bll/ulc/ulc.htm (latest draft
<http://www.law.upenn.edu/bll/ulc/ucita/ucita01.htm>)

NEXT UCITA MEETING

November 16-18

Omni Shoreham Hotel, Washington DC

See me for the meeting announcement