

TEACHING GUIDES

TECHNICAL STANDARDS MEET ADMINISTRATIVE LAW: A TEACHING GUIDE ON INCORPORATION BY REFERENCE

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INTRODUCTION

Each year, federal administrative agencies routinely adopt thousands of legally binding rules through a process that culminates in those rules being published in the *Federal Register* and codified in the *Code of Federal Regulations* (CFR). This module offers law faculty the information, plans, and resources needed to introduce students to a common federal rulemaking practice called incorporation by reference. When an agency incorporates by reference, it promulgates a rule that, with approval from the Office of the Federal Register (OFR), identifies—but does not reprint—material already published elsewhere.¹ The identified materials are then “deemed published in the Federal Register” and in the CFR.² The incorporated materials become part of the agency’s rule—thus becoming binding law—without actually being included in the law.

Sometimes the incorporated materials are what are commonly known as private or voluntary “standards.”³ Such standards are developed by industry groups or nongovernmental organizations and are relied upon widely by many companies in the design of their products and processes. Standards that are incorporated by reference may therefore be enforced against regulated entities, even though those entities cannot find any actual text detailing their legal obligations in the official public code; the incorporated standards can only be found elsewhere, often in private, copyrighted collections of standards developed and maintained by industry associations or private standard-setting organizations (SSOs). It is valuable for students to learn about incorporation by reference because the practice is widespread across administrative agencies. According to the Standards Incorporated by Reference (SIBR) database maintained by the National Institute of Standards and Technology (NIST), federal regulations contain more than 23,000

1. See 5 U.S.C. § 552(a)(1) (2012).

2. See *id.*

3. In this Teaching Guide and in the field of practice generally, agencies promulgate “rules” that incorporate “standards.” The meaning of these terms in the incorporation by reference context is different from their meanings as used in discussions of the jurisprudential distinction between “rules” and “standards.” See generally Duncan Kennedy, *Form and Substance in Private Law Adjudication*, 89 HARV. L. REV. 1685 (1976); Pierre J. Schlag, *Rules and Standards*, 33 UCLA L. REV. 379 (1985). Something that is a rule or a standard in the incorporation by reference sense can be either a rule or a standard in the legal theory sense.

incorporations of private standards by reference.⁴ The topic of incorporation by reference is important both because it raises issues arising in professional practice and because it raises core legal and institutional issues.

This module is designed to help faculty conduct a single class session, or even part of a class session, on incorporation by reference. It is adaptable for use in a variety of courses, most principally administrative law, statutory interpretation, legislation and regulation, and intellectual property. In addition, incorporation by reference may raise issues under the Takings Clause⁵ and thus might be explored in courses on constitutional law or property law. At still another level, questions about publicity and transparency as prerequisites for the morality of the law might even make incorporation by reference appropriate for teachers of courses on jurisprudence and legal philosophy who seek practical applications to explore with students.

The central question underlying incorporation by reference is how to ensure public access to private standards that federal agencies incorporate into legally binding regulations. These standards are typically developed by non-governmental SSOs that assert copyright in their standards and rely on the revenue generated from the sale of those standards to fund their standard-setting processes. Federal law requires copies of incorporated standards to be, at a minimum, available for public inspection at the OFR in Washington, D.C., and in the promulgating agency's public library (often located only in D.C., although a few agencies maintain libraries in regional offices as well).⁶ Before the Internet, this level of public access was generally considered sufficient. But as many agency documents and the overall federal rulemaking process itself have moved online, incorporated standards have lagged behind in terms of public accessibility. Those who want to read a standard to comment on a proposed rule or to understand what a federal regulation with an incorporated standard requires often have to pay the SSO to purchase a copy of the standard—and sometimes these costs can be substantial.⁷ This module challenges students to identify possible solutions that could promote public access to incorporated standards. The case of incorporation by reference will prove more difficult—and more interesting—to students than it first appears.

4. This figure is current as of January 14, 2019. See *Standards Incorporated by Reference (SIBR) Database*, NAT'L INST. OF SAFETY & TECH., <https://www.nist.gov/standardsgov/what-we-do/federal-policy-standards/sibr> (last visited May 2, 2019) [hereinafter *SIBR Database*].

5. See U.S. CONST. amend. V.

6. Emily S. Bremer, *Incorporation by Reference in an Open-Government Age*, 36 HARV. J.L. & PUB. POL'Y 131, 136 (2013) [hereinafter Bremer, *Incorporation by Reference*].

7. Emily S. Bremer, *On the Cost of Private Standards in Public Law*, 63 KAN. L. REV. 279, 289 (2015) [hereinafter Bremer, *On the Cost of Private Standards*].

I. LEARNING OBJECTIVES

Depending on how the instructor approaches and defines the exercise, this module can be an effective way to teach students about the following issues across a variety of subjects:

- *Standards*: What are voluntary consensus standards? How are they developed and by whom? What purposes do they serve? When should government agencies use these privately developed technical standards in regulation? What do applicable federal laws, as well as federal policy guidelines, say about when agencies must use these standards? What are the options for funding the standard-setting process? If copyright revenues are no longer available to SSOs, what alternative sources of funding might be available to them and how will a shift to a new revenue model affect the standards system?
- *Administrative Law*: What material is an agency legally obligated to publish in the *Federal Register*? What material is an agency required to provide to the public at the start of the public comment period on a proposed rule? What material is an agency required to provide to the public after a final rule has been promulgated? Is public inspection in person at an agency office sufficient in light of the new possibilities and expectations created by the emergence of the Internet and electronic rulemaking? Has the law kept up with these developments? If not, what administrative values are at stake?
- *Statutory Interpretation*: How should the traditional tools of statutory interpretation be used to understand and implement the federal statute governing incorporation by reference? What issues arise when an older statute—the core provision of the relevant statute in this case was enacted in 1966⁸—must be applied to a new, unforeseen set of circumstances—the Internet and changing expectations about the accessibility of information? How should legislative history be used to help answer these questions? When a problem implicates multiple statutes, how does an interpreter resolve a conflict among competing statutory purposes?
- *Institutions*: How does the institutional position of the interpreter affect how a statute should or can be interpreted and

8. S. REP. NO. 88-1219, at 1 (1964).

implemented? If the law has not kept up with the world it governs, who should or can address that reality? With incorporation by reference, there are a variety of institutional actors with some claim to interpretive authority and responsibility: OFR, the Office of Management and Budget (OMB), individual agencies, the courts, and Congress.⁹

- *Administrative Policymaking*: If the ideal policy outcome is one that the law does not presently require or authorize, is that ideal simply out of reach? If not, which institution within government (e.g., OFR, OMB, and individual agencies) can or should act to achieve the ideal? By doing what? Can or should the courts resolve the matter? If so, how? Is a new statute necessary? If so, what should the new statute say? Even if the passage of a new statute is the best choice but is otherwise unobtainable, are there nonlegislative solutions or ways that the government can collaborate with the private sector to improve the status quo?
- *Copyright*: Do SSOs have a valid claim to copyright in the standards they produce? Does the government's use of a standard in a regulation affect the status of the copyright? If so, in what circumstances? Is governmental use of a copyrighted standard in regulation necessarily fair use? Does the government need to purchase a license to provide free online access to incorporated standards? Is that a feasible or desirable alternative? If an SSO has a valid copyright in a standard and loses that copyright as a consequence of the government's unilateral decision to use the standard in regulation, does the SSO have a claim under the Constitution's Takings Clause?

As this list suggests, the issues surrounding incorporation by reference, and by extension this course module, are surprisingly rich. This Teaching Guide is intended to be adaptable—an instructor need not address all these issues to use the module effectively.

II. MATERIALS IN THIS COURSE MODULE

This Teaching Guide is part of a larger course module containing materials designed to help the instructor prepare to teach a class session on incorporation by reference. It also includes materials that can be assigned to

9. Emily S. Bremer, *A Multidimensional Problem*, 45 ENVTL. L. REP. 10783, 10783 (2015) [hereinafter Bremer, *A Multidimensional Problem*].

students in advance of the class session. All of the following materials for this module can be found online at the Voluntary Codes and Standards website:¹⁰

- **Teaching Guide:** this document.
- **Selected Reading Materials:** either for assignment to students or preparation of the instructor—or both.
 - Excerpt from Freedom of Information Act (FOIA), 5 U.S.C. § 552(a)(1) (adopted 1966).
 - Excerpt from FOIA’s legislative history, S. REP. NO. 88-1219 (1964) (“Description of Subsection (a),” appearing on page 6 of 9).
 - OMB Circular A-119:¹¹
 - Office of Mgmt. & Budget, Exec. Office of the President, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, 63 Fed. Reg. 8546 (Feb. 19, 1998).
 - Office of Mgmt. & Budget, Exec. Office of the President, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, 81 Fed. Reg. 4673 (Jan. 27, 2016).
 - Admin. Conf. of the U.S., Recommendation 2011-5, *Incorporation by Reference*, 77 Fed. Reg. 2257 (Jan. 17, 2012).
- **PowerPoint Slides:** optional if the instructor chooses to lecture for some or all of the class session.
- **Videos:** suitable for assignment to students in advance or for display in class—or both.
- **Glossary:** attached as the Appendix to this Teaching Guide but also available separately online.

In addition, Section VI of this Teaching Guide provides a list of additional background reading that may be helpful to the instructor.

10. Penn Program on Regulation, *Incorporation by Reference*, PENN LAW, <https://www.law.upenn.edu/institutes/ppr/codes-standards/incorporation-by-reference.php> (last visited May 3, 2019) [hereinafter *Incorporation by Reference (Website)*].

11. The 1998 and 2016 versions of the Office of Management and Budget (OMB) Circular are substantially the same with respect to the core elements of federal standards policy. But the 2016 version addresses the incorporation by reference public access issue. If the instructor wants students to consider how federal standards policy would affect their own solution to the incorporation by reference issue, it will make most sense to assign the 1998 version.

III. BACKGROUND FOR INSTRUCTORS

The incorporation by reference issue has three core dimensions associated with it: (1) *administrative law*, including publication requirements under the FOIA, public participation requirements in informal rulemaking, and the public interest in access to the law; (2) *federal standards policy*, which imposes additional statutory requirements on agencies and facilitates a valuable public-private partnership in standards; and (3) *copyright law*, which introduces a final layer of complexity to an already important subject. Since 2011, multiple institutions have taken steps toward solving the public access conundrum created by incorporation by reference. These developments since 2011 add depth to the module and attest to the broad importance of incorporation by reference in the contemporary legal system.

A. Administrative Law

Federal agencies are required by law to publish certain administrative materials, including proposed rules and final rules, in the *Federal Register*, a daily government publication.¹² Final rules, which have the force of law, are additionally compiled and subsequently published by subject matter in the CFR. The CFR, which is technically considered a special edition of the *Federal Register*, provides an orderly codification of all agency pronouncements that have legal effect. An agency that fails to publish regulatory materials as required may not enforce their unpublished rules against anyone lacking actual notice.¹³

Incorporation by reference is a regulatory drafting technique that is permitted under a provision of FOIA enacted in 1966. Now codified at 5 U.S.C. § 552(a)(1), the incorporation by reference provision is embedded in the section of the law that establishes the consequences (i.e., unenforceability) for nonpublication:

Except to the extent that a person has actual and timely notice of the terms thereof, a person may not in any manner be required to resort to, or be adversely affected by, a matter required to be published in the Federal Register and not so published. *For the purpose of this paragraph, matter reasonably available to the class of persons affected thereby is deemed published in the Federal Register when incorporated by reference therein with the approval of the Director of the Federal Register.*¹⁴

OFR has regulations governing the process agencies must go through to secure the Director's approval to incorporate materials by reference in the CFR.¹⁵ As noted earlier, the CFR currently contains more than 23,000 incorporations by reference.¹⁶

12. See 5 U.S.C. § 552 (2012).

13. See *id.* § 552(a)(1).

14. *Id.* (emphasis added).

15. See 1 C.F.R. § 51 (2014).

16. *SIBR Database*, *supra* note 4.

Private standards—also called “voluntary consensus standards”¹⁷—are the focus of this course module because their incorporation by reference in federal regulations raises the most interesting and controversial questions. But incorporation by reference is also frequently used for other kinds of materials. Indeed, the two agencies that incorporate by reference most frequently do so for nonstandards-related purposes. First, the Environmental Protection Agency (EPA) uses incorporation by reference to approve State Implementation Plans (SIPs) under the Clean Air Act. The materials that EPA incorporates by reference when approving SIPs are state environmental regulations.¹⁸ Second, the Federal Aviation Administration (FAA) uses incorporation by reference for airworthiness directives, standard instrument approaches to airports, and airspace designations. Owners and operators of aircraft regulated by FAA are under a general duty to keep their aircraft in a safe and airworthy condition.¹⁹ When a known problem with a particular aircraft comes to light, the FAA issues an airworthiness directive to specifically require owners and operators of that aircraft to address that problem through a targeted inspection or repair.²⁰ The FAA incorporates by reference the needed service information, which is typically contained in a copyrighted manual produced by the aircraft’s manufacturer.²¹ In addition, for standard instrument approaches to airports and airspace designations, the FAA incorporates maps by reference because maps cannot be published in the CFR due to size and formatting issues.²²

Although the EPA and FAA frequently incorporate materials other than standards, the incorporation by reference of private standards is controversial because these standards are developed by nongovernmental SSOs that

17. See National Technology Transfer and Advancement Act of 1995, Pub. L. No. 104-113, § 12, 110 Stat. 775, 783 (1996).

18. Bremer, *Incorporation by Reference*, *supra* note 6, at 146.

19. See 14 C.F.R. § 39.5(a)–(b) (2012); see also Emily S. Bremer, *Incorporation by Reference*, *supra* note 6, at 146 (discussing the Federal Aviation Administration’s (FAA’s) incorporation of manufacturer service manuals into its airworthiness directives).

20. See 14 C.F.R. §§ 39.7, 39.9.

21. See, e.g., Airworthiness Directives; The Boeing Company Airplanes, 77 Fed. Reg. 60,889–91 (Oct. 5, 2012) (to be codified at 14 C.F.R. pt. 39); *Airworthiness Directives: Incorporation by Reference*, FED. AVIATION ADMIN., https://www.faa.gov/aircraft/air_cert/continued_operation/ad/type_incorp/ (last visited Mar. 8, 2019).

22. Although the *Federal Register* and *Code of Federal Regulations* (CFR) are now available online, formatting is determined by the physical print editions. This is because: (1) Office of Federal Register (OFR) is still under a statutory mandate to publish the physical print editions and (2) the online versions are not official because they are dynamic (an agency or court needs to know with certainty what the law required on a particular day before it can enforce that law against someone).

often make them only available for a fee. Of course, by law all materials incorporated by reference must be “reasonably available,” which has traditionally meant public inspection at OFR and in the relevant agency’s library.²³ This in-person physical availability is theoretically free, but it requires an in-person visit, usually to Washington, D.C..

Most standards are produced by private nonprofit SSOs that assert copyright in their standards and rely on the revenue from the sale of those documents to fund the standard-setting process.²⁴ When an agency uses a standard in a regulation, the copyright prevents the agency from publishing the full text of that standard in the *Federal Register*, CFR, or on the agency’s own website.²⁵ Instead, the agency incorporates the standard “by reference,” which means the agency identifies the standard and the organization that created it in the relevant *Federal Register* notice and CFR provision, but it does not print any of the standard’s content in those governmental documents.²⁶ Interested persons must contact the relevant SSO to obtain a copy of the standard if they wish to read its content.²⁷

The cost to purchase a copy of an incorporated standard varies. Although many are now starting to be available for free online, typically in a read-only format, many others are available only for a fee. For instance, a case study of standards incorporated by reference into federal pipeline safety regulations revealed that approximately 66% of the standards were available online for free, while the average cost to purchase a copy²⁸ was \$150.44, the median cost was \$112.00, and the maximum cost was \$630.00.²⁹ The cost to purchase a complete set of the standards incorporated by reference into the regulations was \$9,477.85.³⁰

Requiring interested persons to pay to read standards incorporated by reference into proposed and final regulations can present a significant problem from the perspective of administrative law and its longstanding commitment

23. See 5 U.S.C. § 552(a)(1) (2012).

24. Bremer, *On the Cost of Private Standards*, *supra* note 7, at 279.

25. See *id.*

26. See 5 U.S.C. § 552(a)(1).

27. OFR’s regulations require agencies to include “the title, date, edition, author, publisher, and identification number of the publication,” 1 C.F.R. § 51.9(b)(2) (2012), as well as contact information for the standard-setting organization (SSO) or other publisher. See 1 C.F.R. § 51.9(b)(4); OFFICE FED. REGISTER, *IBR HANDBOOK* 26 (2018), <https://www.archives.gov/files/federal-register/write/handbook/ibr.pdf>.

28. The vast majority of the standards that were found to be available online for free were available in a read-only capacity but could also be purchased in print or unrestricted electronic format.

29. Bremer, *On the Cost of Private Standards*, *supra* note 7, at 289.

30. See *id.* at 314–16.

to government transparency. Requiring payment undermines public participation in the rulemaking process by erecting a barrier for those who wish to comment on a proposed regulation. After a final rule is promulgated, payment requirements necessitate that anyone seeking to know what the law requires pay a private party to read the full text of a federal law.³¹

Any solution to this public access problem must be designed so as not to cause unintended or undesirable consequences in two other areas of law and policy. The first involves federal standards law and policy, and its underlying commitment to the value of a public-private partnership in standard-setting. The second area is copyright law. As explained below, these two areas, although distinct, are interrelated. The following two sections lay the groundwork for teaching about the public access problem by explaining these two areas and how they are relevant. These two sections are followed by a third section that identifies various possible solutions that have been offered to improve public access to incorporated standards and how those solutions might affect both standards law and policy and copyright law.

B. Federal Standards Law and Policy

Under federal standards law and policy, agencies are generally required to use available privately developed standards in lieu of developing “government-unique” standards to fulfill standardization needs in regulation and procurement.³² This policy is embodied in the National Technology Transfer and Advancement Act of 1995 (NTTAA)³³ and OMB Circular A-119.³⁴ The statute states that “all Federal agencies and departments shall use technical standards that are developed or adopted by voluntary consensus standards bodies, using such technical standards as a means to carry out policy objectives or activities determined by the agencies and departments,” making exception only for situations in which using the available standard would be

31. Regulated parties usually already have access to incorporated standards because they need them to run their business regardless of the incorporation by reference. Perhaps for this reason, most of the complaints about public access to incorporated standards come from third-party beneficiaries of the regulations. These individuals and entities are interested not in their own legal obligations, but in the legal obligations being imposed upon others.

32. Office of Mgmt. & Budget, Exec. Office of the President, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, 81 Fed. Reg. 4673 (Jan. 27, 2016), https://www.nist.gov/sites/default/files/revise/circular_a-119_as_of_01-22-2016.pdf [hereinafter OMB Circular A-119 (2016)].

33. Pub. L. No. 104-113, 110 Stat. 775 (1996). Despite its title, the National Technology Transfer and Advancement Act (NTTAA) was actually enacted in the first months of 1996 and presented to President Clinton for signing on March 7, 1996.

34. See OMB Circular A-119 (2016), *supra* note 32.

“inconsistent with applicable law or otherwise impractical.”³⁵ In addition, the requirement to use private standards extends only to voluntary consensus standards, which are defined according to the process used in their development.³⁶ OMB Circular A-119 broadly defines the attributes of the voluntary consensus process: (1) openness, (2) balance of interest, (3) due process, (4) an appeals process, and (5) consensus, which is defined as general agreement but not necessarily unanimity.³⁷

Federal standards law and policy offers a number of benefits. It saves substantial time and money that federal agencies would otherwise have to invest to develop standards themselves.³⁸ It gives agencies access to technical and engineering expertise that exists outside of the government.³⁹ And it promotes uniformity in the standards that are used across the government and in the private sector to address the same subject matter.⁴⁰

Most importantly, federal standards law and policy recognizes the reality that the United States has a vast, predominately private standardization system.⁴¹ This system emerged in the late 1800s and—as it has grown and become more sophisticated—a strong public-private partnership in standards has emerged.⁴² In the 1960s and 1970s, federal agency use of private standards in regulation became commonplace.⁴³ The Administrative Conference of the United States (ACUS)⁴⁴ adopted a recommendation on the subject around the same time as the first version of Circular A-119 was being developed in the late 1970s.⁴⁵ In early 1996, Congress essentially codified OMB Circular A-119 by enacting the NTTAA.⁴⁶

35. See National Technology Transfer and Advancement Act of 1995, Pub. L. No. 104-113, § 12, 110 Stat. 775, 783.

36. See *id.*

37. OMB Circular A-119 (2016), *supra* note 32, at 16.

38. See Tyler R.T. Wolf, *Existing in a Legal Limbo: The Precarious Position of Standards-Development Organizations*, 65 WASH. & LEE L. REV. 807, 812, 817 (2008).

39. See Bremer, *On the Cost of Private Standards*, *supra* note 7, at 299–300.

40. See generally *id.* at 304–05 (discussing the history of NIST and the emergence of voluntary consensus standards).

41. See *id.* at 303.

42. See *id.* at 301–02, n.137.

43. *Id.* at 305–06; Bremer, *Incorporation by Reference*, *supra* note 6, at 134, 148–49.

44. The Administrative Conference of the United States (ACUS) is a free-standing federal agency that studies administrative procedure and makes consensus-based recommendations for improvement to other agencies, the President, Congress, and the Judicial Conference. See ADMIN. CONF. OF THE U.S., <https://www.acus.gov/acus> (last visited Mar. 1, 2019).

45. See Admin. Conf. of the U.S., Recommendation 78-4, *Guidance in Federal Agency Interaction with Private Standard-Setting Organizations*, 44 Fed. Reg. 1357, 1357 (Jan. 5, 1979).

46. Wolf, *supra* note 38, at 816 n.61.

As a practical matter, when an agency needs a technical standard to flesh out a regulatory requirement, it often finds that a private technical standard has already become the prevailing standard in the relevant industry.⁴⁷ In these circumstances, the agency may need to use the existing standard to carry out its statutory mandate and effectively integrate public regulatory requirements with an existing network of private technical standards.⁴⁸

C. Copyright

Copyright is the second area of law relevant to the public access problem surrounding incorporation by reference. Copyright law presents at least three issues.

The first issue is the eligibility of standards for copyright protection. The general view that standards can be copyrighted has not been seriously challenged in the courts.⁴⁹ One scholar has questioned it, however, at least with respect to certain information and communications technology standards.⁵⁰

The second issue is whether and under what circumstances a government reproduction of a copyrighted work might constitute a fair use. A 1999 opinion from the Department of Justice's Office of Legal Counsel (OLC) addresses this question, explaining that a government use is not necessarily a fair use.⁵¹

The third issue is whether a standard loses its copyright protection when a government entity adopts that standard as law or incorporates it by reference into law.⁵² Two theories might suggest that a copyrighted standard does lose its protection upon incorporation. One theory is that the standard enters the public domain when it becomes part of the law.⁵³ Another theory is that, upon adoption or incorporation, the *idea* of the standard merges with the one and only possible expression of "the law."⁵⁴ It is a fundamental principle of copyright law that ideas cannot be copyrighted.⁵⁵ Only expressions of ideas

47. See Bremer, *On the Cost of Private Standards*, *supra* note 7, at 308.

48. See Nina A. Mendelson, *Private Control Over Access to the Law: The Perplexing Federal Regulatory Use of Private Standards*, 112 MICH. L. REV. 737, 784–87 (2014).

49. See Pamela Samuelson, *Questioning Copyright in Standards*, 48 B.C. L. REV. 193, 194–95 (2007).

50. See generally *id.*

51. Whether Government Reproduction of Copyrighted Materials is a Noninfringing "Fair Use," 23 Op. O.L.C. 87, 104 (1999), <https://www.justice.gov/sites/default/files/olc/opinions/1999/04/31/op-olc-v023-p0087.pdf>.

52. See Bremer, *Incorporation by Reference*, *supra* note 6, at 170–71.

53. Samuelson, *supra* note 49, at 219–20.

54. Bremer, *Incorporation by Reference*, *supra* note 6, at 170–71.

55. See 17 U.S.C. § 102 (2012).

can be copyrighted.⁵⁶ When there is only one or two ways to express an idea, the expression and the idea may merge.⁵⁷ As a consequence, the expression will have no or only very thin copyright protection. If the merger doctrine is applied in the incorporation by reference context, this means that when the standards are incorporated into law by reference, they lose much or all of their copyright protection.⁵⁸

The canonical case most relevant to this third issue of continued copyright protection for standards incorporated into federal regulations was *Veck v. Southern Building Code Congress International, Inc.*⁵⁹ This case involved a model building code developed for the purpose of being adopted as a law. Two small towns in Texas adopted the code as intended.⁶⁰ A local activist seeking to make the law more accessible bought a copy of the model code, stripped the copyright information from it, and posted it online as the code of the two towns.⁶¹ The code developer sued and prevailed in the district court and before a Fifth Circuit panel.⁶² A divided en banc court reversed, holding that the code as adopted into law could not be copyrighted, although the code developer retained copyright in the model code.⁶³ The court explained its decision by invoking both the public domain theory and merger doctrine.⁶⁴ But it expressly held that it was only deciding the applicability of copyright to adopted model codes, specifically distinguishing from its ruling standards incorporated by reference into the law, citing OMB Circular A-119.⁶⁵ Thus, *Veck* did not resolve the question of continued copyright protection for incorporated standards. The Supreme Court denied a petition for certiorari in the case.⁶⁶

There are at least two aspects of the *Veck* court's decision that are difficult to understand. First, the court held that the code developer retained some copyright in its model code and yet could not prevent *Veck* from posting the code online as adopted into law.⁶⁷ As explained above, however, what *Veck* in fact posted was the model code and, in all cases in which a model code is adopted as law, the model code will be identical or nearly identical to

56. *Id.*

57. Samuelson, *supra* note 49, at 215.

58. *Id.*

59. 293 F.3d 791 (5th Cir. 2002), *cert. denied* 539 U.S. 969 (2003).

60. *Id.* at 793.

61. *Id.*

62. *Id.* at 794.

63. *Id.* at 793–94, 806.

64. *Id.* at 799–801.

65. *Id.* at 803–04, 804 n.20.

66. 293 F.3d 791 (5th Cir. 2002), *cert. denied* 539 U.S. 969 (2003).

67. *Id.* at 793.

the code as adopted as law. It is therefore hard to see, as a practical matter, what rights the code developer retained following the court's decision.

Second, as already noted, the court expressly stated that the "wholesale adoption of a model code" as law is different from the "official incorporation of extrinsic standards," explaining that the copyright caselaw involving the latter "is distinguishable in reasoning and result."⁶⁸ In so doing, the court cited Circular A-119.⁶⁹ Whether a code or standard is adopted as law or incorporated by reference, however, the legal consequence is the same: the previously private, copyrighted code or standard becomes part of "the law."⁷⁰ The *Veck* court's attempt to distinguish between these two methods of giving legal effect to a privately authored document presumably cannot be justified on any principled basis and is thus perhaps best understood as a pragmatic attempt to cabin the decision and avoid any conflict with federal standards law and policy.

As explained further below, the only subsequent court that has squarely considered the issues left open in *Veck* has held that standards incorporated by reference into federal regulation retain their copyright protection.⁷¹ The U.S. Court of Appeals for the D.C. Circuit reversed the district court, but declined to address the central questions, citing constitutional avoidance concerns.⁷² The case was remanded for further proceedings before the district court.

The copyright issue is intimately related to the matter of funding the standard-setting process. As previously noted, the revenue model most SSOs have adopted relies heavily on the revenue generated from the sale of standards. Copyright protects this model. When you think of counterfeit products, you generally think of things like Louis Vuitton handbags. But standards get counterfeited, too! For example, the National Fire Protection Association (NFPA) has had problems with people selling counterfeit copies of the National Electric Code.⁷³ NFPA's ability to enforce its copyright protects the SSO's primary funding source and helps to prevent the dissemination of potentially erroneous copies of its standards.

68. *Id.* at 804 (citing *CCC Info. Servs. v. Maclean Hunter Mkt. Reports, Inc.*, 44 F.3d 61 (2d Cir. 1994); *Practice Mgmt. Info. Corp. v. Am. Med. Ass'n*, 121 F.3d 516 (9th Cir. 1997), *opinion amended by* 133 F.3d 1140 (9th Cir. 1998)).

69. *Id.* at 804 n.20.

70. *Id.* at 802.

71. See *Am. Soc'y for Testing & Materials v. Public.Resource.Org, Inc.*, Nos. 13-cv-1215 & 14-cv-0857, 2017 WL 473822, at *1, *14-15 (D.D.C. Feb. 2, 2017).

72. See *Am. Soc'y for Testing & Materials v. Public.Resource.Org*, 896 F.3d 437, 441, 459 (D.C. Cir. 2018).

73. Mike Hazell, *NFPA President Jim Shannon Talks About Copyright Lawsuit*, NAT'L FIRE PROTECTION ASS'N BLOG (Oct. 8, 2013), <https://community.nfpa.org/community/nfpa-to-day/blog/2013/10/08/nfpa-president-jim-shannon-talks-about-copyright-lawsuit>.

There are alternative funding models that could reduce or eliminate the need for SSOs to rely on copyright royalties, but each has its disadvantages:

- SSOs could rely on membership fees or other fees imposed on anyone who wishes to participate in the standard-setting process. This would simply shift the costs upstream. The difficulty is that the fees may then operate as a barrier to participation by financially limited interest groups such as small businesses and consumer advocacy groups.⁷⁴
- SSOs could rely more on donations. The difficulty here is that this could give the largest and most wealthy members of industry too much leverage over the standard-setting process. This could weaken the integrity of—or at least the appearance of the integrity of—the standard-setting process and compromise standard quality. In one instance, an entity that gave large donations to NFPA threatened to discontinue its support because it was displeased with the substance of NFPA’s standards. Because NFPA had sufficient revenue from other sources—copyright royalties—it was able to tell the entity, in effect, to take a hike.⁷⁵
- The government could pay for the licenses necessary to provide free online access to all incorporated standards. This would effectively turn the standards into public goods accessible to all, including members of industry who would otherwise purchase copies of the standard for non-regulatory purposes. In essence, the government would have to buy out the market for the standard. The cost would be prohibitive. This approach might also create a financial incentive for an agency to use an outdated version of a standard for which another agency had already secured the necessary license, rather than select the best standard possible.

A final point to note about funding is that, as a practical matter, few standards make money. SSOs typically have a small number of standards that are widely used and generate most of their revenue. These successful standards

74. James A. Thomas, *A Business Model that Works*, STANDARDIZATION NEWS (May/June 2010), https://www.astm.org/PRESIDENT/mj10_a_business_model_that_works.html.

75. James Shannon, President & Chief Exec. Officer, Nat’l Fire Prot. Ass’n, Remarks at the American National Standards Institute (ANSI) Open Forum: Government Reliance on Voluntary Consensus Standards and Conformance Programs (Oct. 2, 2013) (on file with author).

thus cover the SSOs' overall costs, including the costs to develop more minor standards that are needed but could not generate sufficient revenue to support themselves.⁷⁶ The most successful standards are also the ones that federal agencies most often need to incorporate by reference. These are the standards most likely to have acquired de facto authoritative status in an industry due to their usefulness, proven quality, and widespread acceptance.⁷⁷ Thus, although a small percentage of all standards are used in regulation, the standards incorporated are often the ones that generate the bulk of the revenue necessary to fund standards development more broadly. As a consequence, eliminating the SSOs' ability to rely on the revenue that these most prominent standards generate would likely have significant ripple effects throughout the entire standardization system.⁷⁸

D. Possible Solutions

This Section examines the various legal and policy solutions that have been suggested to expand public access to standards incorporated by reference into federal regulations. The funding considerations and options discussed in the previous section may be relevant to this analysis, but SSO funding is predominantly a private sector concern. In contrast, this Section considers solutions from the government's perspective—what could Congress, the Executive Branch, or courts do to address incorporation by reference's public access problem.

Free Access Mandate. For many students, the most obvious solution to incorporation by reference's public access problem would be to mandate free access to incorporated standards. Because the government neither creates nor has unilateral control over private standards that are or may be incorporated by reference, a free access mandate would most likely need to be structured as a statutory requirement that agencies only use standards that the public can freely access. The requirement could be imposed via a government-wide statute, perhaps enacted as an amendment to 5 U.S.C. § 552(a)(1).

76. See *Standards, Regulations and Incorporation by Reference: An Interview with Emily Bremer of the Administrative Conference of the United States*, ASTM STANDARDIZATION NEWS (Nov./Dec. 2012), <https://www.astm.org/standardization-news/?q=first-person/standards-regulations-and-incorporation-by-reference-nd12.html>.

77. Bremer, *On the Cost of Private Standards*, *supra* note 7, at 332.

78. A reasonable estimate is that only 2%–4% of all privately authored technical standards are incorporated by reference into federal regulations. For example, the case study of technical standards incorporated into federal pipeline regulations revealed that, while three SSOs were responsible for 73% of the incorporated standards, those standards were only a tiny percentage—one-tenth of 1%, 2%, and 3.7%—of the SSO's respective standards portfolios. See *id.* at 306–07.

This has the virtue of addressing the issue definitively in a single, government-wide statute. There are a variety of issues to consider in evaluating this possibility:

- Would the requirement apply retroactively, to standards already incorporated by reference, or only prospectively, to standards incorporated by reference after the mandate is enacted? If the former, what would be the costs—in terms of funding, time, and opportunity costs—for agencies? Would the statute include a deadline for agencies to complete any rulemaking proceedings necessary to amend existing regulations to remove or modify affected incorporations by reference? If the statute would apply only prospectively, would agencies then have an incentive not to update their incorporations by reference as newer versions of the incorporated standards became available? Standards are typically updated every two-to-five years to improve safety, reflect advances in technology, or respond to changes in industry and market conditions.⁷⁹
- What kind of free access would be required? Incorporated standards must already be accessible to the public for free at the OFR and in agency reading rooms.⁸⁰ If the goal is to provide access beyond these existing public inspection requirements, the text of any new statute mandating free access must clearly state what is required. Possibilities here include: (1) publication of the full text of the standard in the *Federal Register* and CFR; (2) online access on the agency's own website; or (3) online access on the SSO's website. If online access is required, could it be read-only access, or must the document be available in an unrestricted format? How can the agency provide the required free access when the standards are copyrighted? Which option is most likely to address the SSO's concerns for protecting their copyrights and funding models?
- If copyright prevents an agency from complying with the free access mandate, how will that affect federal standards law and policy? The NTTAA provides that agencies may choose not to use

79. See, e.g., Bremer, *Incorporation by Reference*, *supra* note 6, at 188; AM. SOC'Y OF MECH. ENG'RS, *BOILER AND PRESSURE VESSEL CODE: AN INTERNATIONAL CODE* (2017), <https://www.asme.org/wwwasmeorg/media/ResourceFiles/Shop/Standards/New%20Releases/ASME-BPVC-Brochure-webview.pdf> [hereinafter *BOILER AND PRESSURE VESSEL CODE 2017*].

80. Bremer, *Incorporation by Reference*, *supra* note 6, at 136, 143.

an available voluntary consensus standard when that use would be “inconsistent with applicable law or otherwise impractical.”⁸¹ Under this language and by virtue of the last-in-time rule, agencies unable to secure the mandatory free access to incorporated standards could lawfully stop using those standards. This outcome would undermine federal standards policy. Perhaps free access to the law is more important than the values and benefits underlying federal standards policy. But if so, presumably that value judgment should be made deliberately and thoughtfully. If agencies cannot use private standards, how will they meet their standardization needs? Do they have (or can they acquire) the expertise and funding necessary to develop their own standards? If so, how will agencies address potential conflicts between government-unique standards and private standards, which may have acquired *de facto* authoritative status in the industry? Will such conflicts raise the costs of enforcement (for an agency) and compliance (for industry)?

- If the free access mandate effectively prevents agencies from using copyrighted standards that cannot be made freely accessible, how would that affect the agencies’ ability to fulfill their respective statutory missions?
 - In some instances, an agency is required by statute to use a specified private standard in its regulation. For example, the Consumer Product Safety Commission (CPSC) is required by its own organic statute to use standards developed by the American Society for Testing and Materials (ASTM) in CPSC regulations on toy safety.⁸² If ASTM standards are copyrighted and cannot be made freely available, the CPSC would not be able to simultaneously: (1) meet the requirements of its organic statute; (2) comply with a new statute mandating free access; and (3) respect copyright.
 - In other instances, there may be one or more private standards that are authoritative in an industry and their use may be essential to an agency’s mission. For example, the American Society of Mechanical Engineers (ASME) produces the Boiler and Pressure Vessel Code, a multi-

81. See National Technology Transfer and Advancement Act of 1995, Pub. L. No. 104-113, § 12(3), 110 Stat. 775, 783 (1996).

82. 16 C.F.R. § 1250.1 (2018).

volume standard that spans thousands of pages and ensures the safety of everything from residential hot water heaters to nuclear reactors.⁸³ In continuous development since 1914, the Boiler and Pressure Vessel Code has been the de facto national standard since the 1950s and the de facto international standard since 1972.⁸⁴ It is incorporated into the law of all 50 states and into the regulations of numerous federal agencies.⁸⁵ It also provides most of ASME's funding,⁸⁶ making the SSO extremely reluctant to provide it available online for free. Some agencies need to use this standard to ensure public safety or to adequately explain to regulated parties how the standard and the agency's regulatory requirements are integrated.⁸⁷ Again, if a standard like this is copyrighted and cannot be made freely accessible, would a free access mandate effectively block agencies from using such standards even when necessary to advance their missions? Overall, how would this affect agencies, regulated industries, and the public?

Government Licensing. Another possibility is that an agency could negotiate with and pay SSOs for a license to publish the standards that are incorporated into regulations. This could be done incrementally, agency-by-agency, or across government under a statutory requirement or amendment to OMB Circular A-119. The implications of this approach were discussed in the preceding section on copyright.

Free Access in Federal Depository Libraries. The public could be given free access to incorporated standards via their inclusion in the Federal Depository Library Program (FDPL).⁸⁸ Through this program, the Government Publishing Office (GPO) distributes a collection of government documents free of charge to 1150 designated libraries throughout the United States and its territories.⁸⁹ By statute, only "government publications" may be included in

83. See generally AM. SOC'Y OF MECH. ENG'RS, BOILER AND PRESSURE VESSEL CODE (2019), <https://www.asme.org/shop/standards/new-releases/boiler-pressure-vessel-code>; BOILER AND PRESSURE VESSEL CODE 2017, *supra* note 79.

84. See, e.g., Bremer, *On the Cost of Private Standards*, *supra* note 7, at 327–28.

85. See *id.*

86. AM. SOC'Y OF MECH. ENG'RS, ANNUAL REPORT FY2018 23 (2018).

87. Bremer, *On the Cost of Private Standards*, *supra* note 7, at 332.

88. See FED. DEPOSITORY LIBR. PROGRAM, <https://www.fdpl.gov> (last visited Mar. 20, 2019).

89. See *A Brief History of the FDLP: The FDLP Mission Today*, FED. DEPOSITORY LIBR. PROGRAM

the program.⁹⁰ The statute defines “government publication” as “informational matter which is published as an individual document at Government expense, or as required by law.”⁹¹ To include privately published materials such as standards, the statute would need to be amended. Then, individual agencies would be responsible for negotiating with SSOs and paying the costs of licensing the material for distribution to depository libraries. This solution would not achieve the ideal of free online access. But the licensing costs the government would need to pay would likely be much lower than the costs, previously discussed, of licensing the standards for online distribution. Another consideration is that when one agency has already paid the cost to include a standard in the program, another agency that later incorporates the same standard may not have to pay the charge. This could be viewed as an advantage; however, it also could create an incentive for agencies to incorporate by reference outdated versions of standards that have already been included in the FDPL by another agency.

Elimination of Copyright Protection for Incorporated Standards. If incorporated standards were not copyrighted, agencies could freely publish their full text in the *Federal Register* and CFR or online. Copyright protection for incorporated materials, including standards, could be eliminated legislatively, through an amendment to the Copyright Act, or judicially, through application of the copyright doctrines discussed above. Under such a regime, would the incorporation by reference of a standard into a regulation effectuate a taking that requires compensation under the Constitution’s Takings Clause?⁹² How would the loss of copyright as a central feature of the SSO funding model affect the private standardization system? In the absence of a right and incentive to prevent third parties from publishing the standards, who would ensure that only accurate copies are being used for both regulatory and non-regulatory purposes? If the answer is “no one,” would that threaten public safety, economic efficiency, or other values?

Public-Private Collaboration. A final option would be for individual agencies to negotiate with SSOs and encourage them to offer free online access to incorporated standards during the rulemaking process and after the final regulation is promulgated. This option, for which the author of this guide has advocated,⁹³ is discussed in the next section. It is an incremental solution that can be implemented without any change in the law.

(Mar. 20, 2018), <https://www.fdplp.gov/about-fdplp/mission-history/a-brief-history-of-the-fdplp>.

90. See 44 U.S.C. § 1902 (2012).

91. *Id.* § 1901.

92. See U.S. CONST. amend. V.

93. See Bremer, *Incorporation by Reference*, *supra* note 6, at 141.

E. Responses to the Public Access Issue

A class discussion of the policy options listed above could be followed by lecture or discussion of the options that have in fact been pursued more recently to address incorporation by reference's public access problem. This section provides an overview of some of these more recent developments.

ACUS Study. In 2011, ACUS initiated a study of incorporation by reference.⁹⁴ The author of this Teaching Guide was an Attorney Advisor at ACUS at the time and both proposed the study and served as the agency's in-house researcher. The study examined a variety of administrative law issues that arise when agencies incorporate extrinsic materials in federal regulations.⁹⁵ The public access issue was the most difficult and controversial aspect of the study, and although the ACUS study also encompassed the question of public access to non-standards materials, standards were the core concern. In December 2011, ACUS adopted a recommendation that offered a collaborative solution.⁹⁶ It urged administrative agencies to reach out to copyright holders before incorporating by reference any copyrighted material into a proposed rule or final regulation.⁹⁷ It suggested that the agency could ask the copyright holder to provide free online access to the material, using technological tools such as read-only access that could preserve the copyright's value.⁹⁸ This solution was modeled in part on the NFPA's then decade-long experience with offering free online access to all of its codes and standards in a read-only format.⁹⁹ This experience suggested that, although read-only protection is somewhat costly to provide and relatively easy to crack, it is sufficient to expand access while protecting the SSOs' core market (i.e., people working in the relevant industry, who are likely to want hard copies or fully functional electronic copies for use in the field).

Several Public Members of ACUS did not think the ACUS recommendation went far enough. These members included Columbia Law Professor Peter Strauss,¹⁰⁰ Michigan Law Professor Nina Mendelson,¹⁰¹ and Carl

94. *See id.*

95. *See* Admin. Conf. of the U.S., Recommendation 2011-5, *Incorporation by Reference*, 77 Fed. Reg. 2257 (Jan. 17, 2012).

96. *Id.* at 2257.

97. *Id.* at 2258.

98. *Id.*

99. *See* Bremer, *Incorporation by Reference*, *supra* note 6, at 177.

100. *See* Peter Strauss, Comment in Support of Revised Proposal for Amendment of IBR Recommendation, (Dec. 2, 2011), <https://www.acus.gov/sites/default/files/documents/Revised-Strauss-Comments.pdf>.

101. Nina Mendelson, *We Need Full Public Access to the Law*, REG. REV. (July 1, 2013), <https://www.theregreview.org/2013/07/01/01-mendelson-access-to-law/>.

Malamud,¹⁰² a data transparency activist and the founder and CEO of Public.Resource.Org.¹⁰³ These three experts have been actively involved in the post-recommendation incorporation by reference debate, and their contributions are detailed below.¹⁰⁴

OFR Rulemaking. In January 2012, on behalf of a group mostly composed of other law professors, Professor Strauss filed a petition for rulemaking with OFR, asking the agency to revise its incorporation by reference regulations to adopt a more stringent public access requirement for incorporated standards.¹⁰⁵ On February 27, 2012, OFR put the petition out for public comment.¹⁰⁶ On October 2, 2013, OFR partially granted the petition by issuing a notice of proposed rulemaking.¹⁰⁷ Ultimately, on November 7, 2014, OFR issued a final rule updating its incorporation by reference regulations by adopting the ACUS recommendation and implementing it through new requirements for agencies to address the public access issue in the preamble to proposed and final incorporation by reference rules.¹⁰⁸

OMB Circular Revision. In March 2012, OMB began work on a revision of Circular A-119, in part to address the public access issue raised by the incorporation by reference of voluntary consensus standards in regulations.¹⁰⁹ The Circular had last been revised in 1998, in response to the NTTAA's enactment.¹¹⁰ On February 11, 2014, OMB put a draft revision out for public comment.¹¹¹ After extensive public and interagency comment, OMB

102. See Carl Malamud, Comments on Redraft of ACUS IBR Recommendation (Oct. 1, 2011), <https://www.acus.gov/sites/default/files/documents/111001-Malamud-Comments.pdf>; Carl Malamud, Comments on Report (Sept. 12, 2011), <https://www.acus.gov/sites/default/files/documents/Malamud-Comments-on-IBR.pdf>.

103. *Our People*, PUBLIC.RESOURCE.ORG, <https://public.resource.org/about/index.html> (last visited Jan. 29, 2019).

104. Video clips of Professors Strauss and Mendelson discussing incorporation by reference are included online as part of this course module. See *Incorporation by Reference (Website)*, *supra* note 10.

105. Incorporation by Reference, Announcement of a Petition for Rulemaking and Request for Comments, 77 Fed. Reg. 11,414 (proposed Feb. 27, 2012) (to be codified at 1 C.F.R. pt. 51).

106. See *id.*

107. See Incorporation by Reference, 78 Fed. Reg. 60,784 (proposed Oct. 2, 2013) (to be codified at 1 C.F.R. pt. 51).

108. See Incorporation by Reference, 1 C.F.R. § 51 (2014).

109. See Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, 77 Fed. Reg. 19,357 (request for information Mar. 30, 2012).

110. See Office of Mgmt. & Budget, Exec. Office of the President, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, 63 Fed. Reg. 8546 (Feb. 19, 1998) [hereinafter OMB Circular A-119 (1998)].

111. See Federal Participation in the Development and Use of Voluntary Consensus Standards

released a revised version of the Circular in January 2016, explicitly adopting ACUS's collaborative approach to address incorporation by reference's public access problem.¹¹²

Copyright Litigation. In early 2012, Public.Resource.Org set up a lawsuit to test the scope of copyright protection for incorporated standards.¹¹³ The organization sent a large, decorated box containing copies of standards that had been incorporated by reference into federal regulations.¹¹⁴ The box was sent to a number of SSOs and federal government agencies, including ACUS, OMB, and OFR. When they opened the box, they discovered red, white, and blue packing material in the shape of the American flag, followed by a set of reprinted standards, transmittal letters explaining the purpose of the box, and other pictures and artwork.¹¹⁵ The letter solicited comments from the recipients, setting May 1, 2012 as the deadline for comments and explaining that upon the close of the comment period, Public.Resource.Org would begin posting the standards online in violation of the copyright. OMB returned its box unopened and no comments were received. As promised, Public.Resource.Org began to make available an online repository of the full text of all incorporated standards.

In 2013 and 2014, two groups of SSOs filed complaints against Public.Resource.Org in the U.S. District Court for the District of Columbia, alleging

and in Conformity Assessment Activities, 79 Fed. Reg. 8207 (request for comments Feb. 11, 2014).

112. See OMB Circular A-119 (2016), *supra* note 32. OMB did not publish the full text of the Circular in the *Federal Register*. Instead, it published a notice of availability in the *Federal Register* and then posted the full text of the Circular on the White House's website. This link stopped working after President Trump took office, but fortunately NIST now provides the document on its website. See Key Federal Law and Policy Documents: NTTAA & OMB A-119, NAT'L INST. OF STANDARDS & TECH. (July 20, 2018), <https://www.nist.gov/standards/gov/what-we-do/federal-policy-standards/key-federal-directives>.

113. Carl Malamud has also urged Congress to adopt an "Edicts of Government" amendment to the Copyright Act to address these issues. See *An Edicts of Government Amendment: Hearings on Review of U.S. Copyright Law Before the Subcomm. on Courts, Intellectual Prop., & the Internet of the H. Comm. on the Judiciary*, 113th Cong. (2014) (statement of Carl Malamud), <https://www.acus.gov/sites/default/files/documents/Malamud%20Written%20Testimony%20for%201-14-14%20Hearing.pdf>.

114. See Carl Malamud, *Liberating America's Secret, For-Pay Laws*, BOINGBOING (Mar. 19, 2012, 10:29 PM), <http://boingboing.net/2012/03/19/liberating-americas-secret.html>.

115. Slide 8 of the PowerPoint slides, *When Technical Standards Meet Administrative Law: A Teaching Guide on Incorporation by Reference*, that are part of this course module contains some pictures of these materials; although it is not necessary to discuss the subject in class, it certainly adds some color to the discussion. See *Incorporation by Reference (Website)*, *supra* note 10; see also Cory Doctorow's Photos, FLICKR, <https://secure.flickr.com/photos/doctorow/tags/bigboxofstandards/> (last visited Feb. 22, 2019) (providing additional photos of the materials).

copyright infringement and seeking injunctive relief.¹¹⁶ The cases were consolidated and in February 2017, the District Court granted summary judgment to the SSOs.¹¹⁷ On appeal, the United States Court of Appeals for the D.C. Circuit reversed the district court, but declined to address the core issues on constitutional avoidance grounds.¹¹⁸ Rather, the court held that Public.Resource.Org's online publication of the standards could constitute a noninfringing fair use.¹¹⁹ The opinion offered guidance on that analysis, and the D.C. Circuit remanded the case to the district court for further proceedings to evaluate fair use on a standard-by-standard basis.¹²⁰ In a concurring opinion, Judge Katsas addressed the core issue in the case, arguing that "access to the law cannot be conditioned on the consent of a private party."¹²¹

American Bar Association (ABA) Resolution. In 2016, the ABA House of Delegates adopted Resolution 112, urging Congress to amend the law to ensure free public availability of incorporated materials.¹²² The resolution was supported by a report from the ABA's Section on Administrative Law and Regulatory Practice, although the proposed resolution was developed by a special Task Force on Incorporation by Reference.¹²³

IV. DISCUSSION QUESTIONS

This Section of this Teaching Guide provides a list of suggested discussion questions, which can be used in whole or in part. Additional questions can be drawn from the Learning Objectives section at the beginning of the

116. See *Am. Soc'y for Testing & Materials v. Public.Resource.Org, Inc.*, Nos. 13-cv-1215 & 14-cv-0857, 2017 WL 473822, at *1 (D.D.C. Feb. 2, 2017). In early 2012, the Sheet Metal and Air Conditioning Contractors' National Association, Inc. (SMACCNA), sent Public.Resource.Org a takedown notice and Public.Resource.Org responded by filing a preemptive declaratory judgment action in the Northern District of California. See *Complaint, Public.Resource.Org v. Sheet Metal & Air Conditioning Contractors' Nat'l Ass'n*, No. 13-0815 (N.D. Cal. 2013). Under pressure from the standards community, SMACCNA swiftly settled the suit and no opinion on the merits was ever issued.

117. See *Public.Resource.Org, Inc.*, 2017 WL 473822, at *1.

118. See *Am. Soc'y for Testing & Materials v. Public.Resource.Org, Inc.*, 896 F.3d 437, 457 (D.C. Cir. 2018).

119. *Id.*

120. *Id.* at 458.

121. *Id.* (Katsas, J., concurring).

122. AM. BAR ASS'N., RESOLUTION 112 OF THE HOUSE OF DELEGATES (2016), <https://www.americanbar.org/content/dam/aba/images/abanews/2016%20Annual%20Resolutions/112.pdf>.

123. A.B.A. SEC. ADMIN. L. REG. PRAC., REPORT ON RESOLUTION 112 OF THE HOUSE OF DELEGATES (2016), http://www.americanbar.org/content/dam/aba/directories/policy/2016_hod_annual_112.docx.

Teaching Guide.¹²⁴ To improve the quality and efficiency of the classroom discussion, it can be helpful to provide the students with a list of the discussion questions as part of their reading assignment. The next section, Section VI, offers concrete suggestions about which of the following discussion questions would best be used depending on the subject matter of the class—e.g., statutory interpretation, administrative law, or intellectual property.¹²⁵

Question 1: Is it desirable, as a matter of policy, for the full text of standards incorporated by reference in federal regulations to be available for free online?

- a) Why or why not?
- b) What administrative law principles might be furthered by free online availability?

Question 2: Does the law require that the full text of standards incorporated by reference in federal regulations be available for free online?

- a) What does “reasonably available” in 5 U.S.C. § 552(a)(1) mean? Should the way this question might have been answered in 1966 control how that question should be answered today?
- b) Who is within § 552(a)(1)’s “class of persons affected thereby”? Only persons required to comply with the regulation? What about persons who are beneficiaries of the regulation? What about persons with a citizen’s interest in what the law says?
- c) Does the structure of the provision—i.e., embedded in the non-enforcement sanction for nonpublication of a legally binding agency pronouncement—suggest that the “reasonably available” requirement in § 552(a)(1) applies only to materials incorporated by reference in final regulations and not to those incorporated in proposed rules?
- d) Does “reasonably available” in § 552(a)(1) mean free online availability? Something less? If something less, then what?
- e) Does the legislative history of the provision, S. REP. NO. 88-1219 (1964), shed light on these questions?
- f) How much interpretive leeway does OFR have? Can it: (i) interpret “reasonably available” to mean free online availability; (ii) interpret “class of persons affected thereby” to include all members of the public; and (iii) apply the statute to both proposed rules and final regulations?

124. See *supra* Part II.

125. See *infra* Section VI.

Question 3: If the law does not require free online availability, are there other steps the OFR or individual regulatory agencies could take to improve the availability of standards incorporated by reference?

Question 4: Aside from 5 U.S.C. § 552(a)(1), what legal requirements must an agency keep in mind when evaluating how to address the issues raised by regulatory incorporation by reference?

Question 5: What guidance, if any, does OMB Circular A-119 provide on the issues raised by regulatory incorporation by reference?

- a) For the OFR?
- b) For a regulatory agency that uses voluntary consensus standards?

Question 6: Does Congress need to take action to address the issues raised by regulatory incorporation by reference? If so, what action should Congress take?

Question 7: What is the copyright status of standards incorporated by reference into federal regulations?

- a) Are standards eligible for copyright protection?
- b) Would it be a fair use for the government to post an incorporated standard online? Does the answer depend on whether the standard is incorporated into a proposed rule or a final regulation?
- c) When an agency incorporates a standard by reference in a federal regulation, does the standard become part of the public domain?
- d) When an agency incorporates a standard by reference in a federal regulation, does the idea of the standard merge with the fact of the law?
- e) If a government agency unilaterally incorporates by reference a standard into a regulation, resulting in a loss of copyright protection, is the government liable for damages? Would such an action by government constitute a taking under the Fifth Amendment?

V. MODEL LESSON PLANS

This course module could be used in a variety of ways depending on the subject matter of the course and the instructor's goals. Below are a few suggested approaches, although others are certainly possible. This Teaching Guide and the rest of the course module are designed to offer all the resources an instructor might need to tailor the issues as appropriate. For each subject matter course, the guidelines provided below offer suggestions for which of the other materials provided in this module—i.e., readings, discussion questions, PowerPoint slides, and videos—may be most suitable to use with

students. For the instructor's convenience, the suggested Discussion Questions, which appear in the preceding section, are also reprinted below.

A. Statutory Interpretation

Goal: Learn how to interpret a statute. Depending on how much time the instructor wishes to devote, the discussion can encompass: (1) textual analysis; (2) use of legislative history in interpretation; (3) special difficulties of applying an older statute to a new problem; and (4) how adjacent policies can complicate a seemingly straightforward interpretive question.

Class Time: 10–30 minutes.

Reading Assignment: The most suitable reading assignment will depend on how much time the instructor wishes to devote to the module, as well as the depth of the anticipated discussion.

For a brief discussion of how to interpret a text, assign:

- Excerpt from FOIA, 5 U.S.C. § 552(a)(1) (2012) (adopted in 1966).

For a discussion including use of legislative history, add:

- Excerpt from FOIA's legislative history, S. REP. NO. 88-1219, at 11–12 (1964) (“Description of Subsection (a),” appearing on page 6 of 9).

For a discussion delving further into the policy issues, add one of the following:

- Emily S. Bremer, *A Multidimensional Problem*, 45 ENVTL. L. REP. 10783 (2015).
- Emily S. Bremer, *Collaboration Is the Key to Making the Law Free, in Regulating by Reference*, REG. REV. (July 2, 2013), <https://www.theregreview.org/2013/07/02/02-bremer-collaboration/>; Nina A. Mendelson, *We Need Full Public Access to the Law, in Regulating by Reference*, REG. REV. (July 1, 2013), <https://www.theregreview.org/2013/07/01/01-mendelson-access-to-law/>; Peter L. Strauss, *Agencies Should Pay for Any Copyrighted Materials They Incorporate by Reference, in Regulating by Reference*, REG. REV. (Dec. 1, 2011), <https://www.theregreview.org/2011/12/01/agencies-should-pay-for-any-copyrighted-materials-they-incorporate-by-reference/>;¹²⁶ or

126. This series of three essays, collectively titled *Regulating by Reference*, offers different perspectives on how best to address incorporation by reference's public access issue. The

- Emily S. Bremer, *New Rules on Incorporated Standards Encourage Necessary Public-Private Collaboration*, in *Incorporating Private Standards into Public Regulations*, REG. REV. (Jan. 27, 2015), <https://www.theregreview.org/2015/01/27/bremer-public-private-collab/>; Nina A. Mendelson, *Public Access to the Law Must Be Taken More Seriously*, in *Incorporating Private Standards into Public Regulations*, REG. REV. (Jan. 28, 2015), <https://www.theregreview.org/2015/01/28/mendelson-public-access/>; Peter L. Strauss, *We Decline to Define ‘Reasonably Available,’* in *Incorporating Private Standards into Public Regulations*, REG. REV. (Jan. 26, 2015), <https://www.theregreview.org/2015/01/26/strauss-reasonably-available/>.¹²⁷

Guiding the Classroom Discussion: At a minimum, have students read the relevant statutory provision, 5 U.S.C. § 552(a)(1), which permits an agency to satisfy its obligation to publish material in the *Federal Register* by incorporating by reference “matter reasonably available to the class of persons affected thereby.”¹²⁸ For a short discussion of how to analyze and apply a statutory text, the provision can be provided with Slide 9 of the accompanying slide set. The instructor can give a cursory introduction to the policy question and then work the students through Discussion Question 2 on Slide 10.

For a longer discussion that touches on the use of legislative history in statutory interpretation or considers the problem of applying an older statute to a new set of circumstances (or both), have the students read the statute and its legislative history before coming to class and use Discussion Question 2 with Slides 9 and 10.

For a more detailed discussion of the broader policy issues and surprising complexity of the interpretive question, have the students read the statute and one of the shorter works summarizing the incorporation by reference problem. A good option for this purpose would be Emily S. Bremer, *A Multidimensional Problem*,¹²⁹ or one of the two series of essays on incorporation by reference published in *The Regulatory Review*.¹³⁰ The instructor can then lead

entire series is available at *Regulating by Reference*, REG. REV. (July 2, 2013), <https://www.theregreview.org/2013/07/02/regulating-by-reference/>.

127. This collection of essays, collectively titled *Incorporating Private Standards into Public Regulations*, offers different perspectives on the OFR’s revised incorporation by reference regulations and is available at *Incorporating Private Standards into Public Regulations*, REG. REV. (Jan. 26, 2015), <https://www.theregreview.org/2015/01/26/series-incorporation-by-reference/>.

128. 5 U.S.C. § 552(a)(1) (2012).

129. See Bremer, *A Multidimensional Problem*, *supra* note 9.

130. See *Regulating by Reference*, *supra* note 126; *Incorporating Private Standards into Public*

the class through the statutory analysis as discussed above, followed by a more nuanced discussion of the federal standards policy dimension of the problem using Discussion Questions 4 and 5 with Slides 3, 4, 11, and 12.

Discussion Questions: The most suitable Discussion Questions will also depend on the length and depth of the desired classroom discussion.

For discussions of text and legislative history, use Question 2:

Question 2: Does the law require that the full text of standards incorporated by reference in federal regulations be available for free online?

- a) What does “reasonably available” in 5 U.S.C. § 552(a)(1) mean? Should the way this question might have been answered in 1966 control how that question should be answered today?
- b) Who is within § 552(a)(1)’s “class of persons affected thereby”? Only persons required to comply with the regulation? What about persons who are beneficiaries of the regulation? What about persons with a citizen’s interest in what the law says?
- c) Does the structure of the provision—i.e., embedded in the non-enforcement sanction for non-publication of a legally binding agency pronouncement—suggest that the “reasonably available” requirement in § 552(a)(1) applies only to materials incorporated by reference in final regulations and not to those incorporated in proposed rules?
- d) Does “reasonably available” in § 552(a)(1) mean free online availability? Something less? If something less, then what?
- e) Does the legislative history of the provision, S. REP. NO. 88-1219 (1964), shed light on these questions?
- f) How much interpretive leeway does OFR have? Can it: (i) interpret “reasonably available” to mean free online availability; (ii) interpret “class of persons affected thereby” to include all members of the public; and (iii) apply the statute to both proposed rules and final regulations?

For a further discussion of the policy issues, add Questions 4 and 5:

Question 4: Aside from 5 U.S.C. § 552(a)(1), what legal requirements must an agency keep in mind when evaluating how to address the issues raised by regulatory incorporation by reference?

Question 5: What guidance, if any, does OMB Circular A-119 provide on the issues raised by regulatory incorporation by reference?

- a) For the OFR?
- b) For a regulatory agency that uses voluntary consensus standards?

PowerPoint Slides: For a discussion of text and legislative history, use Slides 9 and 10. For a discussion delving further into the policy issues, add Slides 3, 4, 11, and 12.

Videos: Videos may be found on the Incorporation by Reference module on the Penn Program on Regulation's website.

B. Administrative Law/Legislation and Regulation

Goal: To give the students, toward the end of the course, an opportunity to use what they have learned throughout the course. The incorporation by reference issue touches upon statutory interpretation, regulatory implementation, and legislation, and offers an opportunity to explore the role of legislative and regulatory institutions in the public law ecosystem.

Class Time: To work through the full set of issues, at least one eighty-minute class period.

Reading Assignment: In preparation for class, have the students read all the Core Materials listed in Part VII.A., below, which include:

- Excerpt from FOIA, 5 U.S.C. § 552(a)(1) (2012) (adopted in 1966).
- Excerpt from FOIA's legislative history, S. REP. NO. 88-1219, at 11-12 (1964) ("Description of Subsection (a)," appearing on page 6 of 9).
- OMB Circular A-119:¹³¹
 - Office of Mgmt. & Budget, Exec. Office of the President, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, 63 Fed. Reg. 8546 (Feb. 19, 1998).

131. The 1998 and 2016 versions of the Circular are substantially the same with respect to the core elements of federal standards policy. But the 2016 version addresses the incorporation by reference public access issue. If the instructor wants students to consider how federal standards policy would affect their own solution to the incorporation by reference issue, it makes sense to assign the 1998 version.

- Office of Mgmt. & Budget, Exec. Office of the President, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, 81 Fed. Reg. 4673 (Jan. 27, 2016).
- Admin. Conf. of the U.S., Recommendation 2011-5, *Incorporation by Reference*, 77 Fed. Reg. 2257 (Jan. 17, 2012).
- Incorporation by Reference, 1 C.F.R. § 51 (2014).

In addition, the instructor can provide students in advance with a list of the discussion questions that will be used to guide the classroom discussion.

Guiding the Classroom Discussion: Although this material could be taught in multiple ways, the author of this Teaching Guide has started with a short lecture that lays the groundwork by describing standards and standard-setting organizations, the NTTAA, and OMB Circular A-119, using Slides 1–5. Before commencing the classroom discussion, it is prudent to ensure that students understand what a “standard” is in this context. Students are often initially confused as to what “standards” mean in this context (i.e., voluntary technical standards) because law school has already instilled in them a strong sense of what is a “standard” (i.e., mandatory legal standards). The author of this guide has found that the definitional and conceptual distinction is best addressed early and directly. To add color, the instructor can introduce students to the advocates shaping this debate, including by discussing Carl Malamud and his campaign to force free access to standards using Slide 7. Next, the constraints imposed by copyright are introduced using Slide 6.

Having laid the groundwork, the instructor can open the discussion by asking students the policy question of whether the full text of incorporated standards *should* be available for free online using Discussion Question 1 and Slide 8. In the author’s experience, many if not most students initially say “yes” to this question. The instructor can then turn to the first legal question, which is the statutory interpretation question of whether 5 U.S.C. § 552(a)(1) requires free online availability of incorporated standards using Discussion Question 2 and Slide 8. If desired, and depending on how the students respond to the first two questions, the instructor can use this as an opportunity to discuss whether and to what extent the policy and legal questions should or must be addressed separately with Slide 8.

With respect to the statutory interpretation questions, the instructor can spend minimal time, asking only what the text of § 552(a)(1) requires using Discussion Question 2 and Slides 9 and 10, or can delve more deeply by considering the 1966 legislative history of the provision with Discussion Question 2(e). Further nuance can be added by discussing how federal standards policy affects the analysis with Discussion Question 5 and Slide 12.

Throughout the discussion, institutional allocations of authority can also be discussed with Discussion Questions 2(d), 2(f), 3, 4, 5 and Slides 10 and 11.

As the discussion proceeds, the instructor can encourage the students to offer their solutions to improving public access to incorporated standards. Focusing on solutions offers many opportunities to press students to understand how seemingly disparate legal requirements and doctrines—§ 552(a)(1), federal standards law and policy, and copyright law—interact in unforeseen and challenging ways. The instructor can wrap the discussion up by informing the students about how the issue has been and is being addressed by various institutions to date with Slide 13, and Responses to the Public Access Issue section of this Teaching Guide.

Discussion Questions: Discussion Questions 1–6 have been designed with this use of the module in mind.

Question 1: Is it desirable, as a matter of policy, for the full text of standards incorporated by reference in federal regulations to be available for free online?

- a) Why or why not?
- b) What administrative law principles might be furthered by free online availability?

Question 2: Does the law require that the full text of standards incorporated by reference in federal regulations be available for free online?

- a) What does “reasonably available” in 5 U.S.C. § 552(a)(1) mean? Should the way this question might have been answered in 1966 control how that question should be answered today?
- b) Who is within § 552(a)(1)’s “class of persons affected thereby”? Only persons required to comply with the regulation? What about persons who are beneficiaries of the regulation? What about persons with a citizen’s interest in what the law says?
- c) Does the structure of the provision—i.e., embedded in the non-enforcement sanction for non-publication of a legally binding agency pronouncement—suggest that the “reasonably available” requirement in § 552(a)(1) applies only to materials incorporated by reference in final regulations and not to those incorporated in proposed rules?
- d) Does “reasonably available” in § 552(a)(1) mean free online availability? Something less? If something less, then what?
- e) Does the legislative history of the provision, S. REP. NO. 88-1219 (1964), shed light on these questions?
- f) How much interpretive leeway does OFR have? Can it: (i) interpret “reasonably available” to mean free online availability; (ii)

interpret “class of persons affected thereby” to include all members of the public; and (iii) apply the statute to both proposed rules and final regulations?

Question 3: If the law does not require free online availability, are there other steps the OFR or individual regulatory agencies could take to improve the availability of standards incorporated by reference?

Question 4: Aside from 5 U.S.C. § 552(a)(1), what legal requirements must an agency keep in mind when evaluating how to address the issues raised by regulatory incorporation by reference?

Question 5: What guidance, if any, does OMB Circular A-119 provide on the issues raised by regulatory incorporation by reference?

- a) For the OFR?
- b) For a regulatory agency that uses voluntary consensus standards?

Question 6: Does Congress need to take action to address the issues raised by regulatory incorporation by reference? If so, what action should Congress take?

PowerPoint Slides: PowerPoint Slides 1–13 have been designed with this use of the module in mind.

Videos: Videos may be found on the Incorporation by Reference module on the Penn Program on Regulation’s website.¹³²

C. Intellectual Property/Copyright

Goal: Help students understand issues related to copyright in standards, particularly when those standards are incorporated into federal regulations.

Class Time: 15–45 minutes, depending on range of issues discussed.

Reading Assignment: At a minimum, assign *Veck v. Southern Building Code Congress International, Inc.*, 293 F.3d 791 (5th Cir. 2002). To support an even more robust discussion of the fair use question, assign *Whether Government Reproduction of Copyrighted Materials is a Noninfringing “Fair Use,”* 23 Op. O.L.C. 87, 104 (1999), <https://www.justice.gov/sites/default/files/olc/opinions/1999/04/31/op-olc-v023-p0087.pdf>.

132. *Incorporation by Reference (Website)*, *supra* note 10.

Guiding the Classroom Discussion: As in other classes, this material could be taught in multiple ways. The instructor may find that it is useful to begin with a short lecture that lays the groundwork by describing standards and standard-setting organizations, the NTTAA, and OMB Circular A-119, on Slides 1–5. Before commencing the classroom discussion, it is prudent to ensure that students understand what a “standard” is in this context. Students are often initially confused as to what “standards” mean in this context (i.e., voluntary technical standards) because law school has already instilled in them a strong sense of what is a “standard” (i.e., mandatory legal standards). The author of this Guide has found that the definitional and conceptual distinction is best addressed early and directly. To add color, the instructor can introduce students to the advocates shaping this debate, including by discussing Carl Malamud and his campaign to force free access to standards with Slide 7. Next, the constraints imposed by copyright can be introduced with Slide 6. Using Discussion Question 7, the instructor can work students through the analysis of the multiple copyright doctrines that are implicated. The discussion may be concluded with a litigation update.

Discussion Question:

Question 7: What is the copyright status of standards incorporated by reference into federal regulations?

- a) Are standards eligible for copyright protection?
- b) Would it be a fair use for the government to post an incorporated standard online? Does the answer depend on whether the standard is incorporated into a proposed rule or a final regulation?
- c) When an agency incorporates a standard by reference in a federal regulation, does the standard become part of the public domain?
- d) When an agency incorporates a standard by reference in a federal regulation, does the idea of the standard merge with the fact of the law?
- e) If a government agency unilaterally incorporates by reference a standard into a regulation, resulting in a loss of copyright protection, is that a taking under the Fifth Amendment?

PowerPoint Slides: Use Slides 1–7.

Videos: Videos may be found on the Incorporation by Reference module on the Penn Program on Regulation’s website.¹³³

133. *Id.*

VI. READING MATERIALS

A. Core Materials for Instructor and Student Preparation

- Excerpt from FOIA, 5 U.S.C. § 552(a)(1) (adopted 1966).
- Excerpt from FOIA's legislative history, S. REP. NO. 88-1219 (1964) ("Description of Subsection (a)," appearing on page 6 of 9).
- OMB Circular A-119:¹³⁴
 - Office of Mgmt. & Budget, Exec. Office of the President, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, 63 Fed. Reg. 8546 (Feb. 19, 1998).
 - Office of Mgmt. & Budget, Exec. Office of the President, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, 81 Fed. Reg. 4673 (Jan. 27, 2016).
- Admin. Conf. of the U.S., Recommendation 2011-5, *Incorporation by Reference*, 77 Fed. Reg. 2257 (Jan. 17, 2012).
- Incorporation by Reference, 1 C.F.R. § 51 (2014).

B. Additional Materials for Further Reading

- Admin. Conf. of the U.S., Recommendation 78-4, *Guidance in Federal Agency Interaction with Private Standard-Setting Organizations*, 44 Fed. Reg. 1357, 1357 (Jan. 5, 1979).
- National Technology Transfer and Advancement Act of 1995, Pub. L. No. 104-113, § 12, 110 Stat. 775.
- Whether Government Reproduction of Copyrighted Materials is a Non-infringing "Fair Use," 23 Op. O.L.C. 87, 104 (1999), <https://www.justice.gov/sites/default/files/olc/opinions/1999/04/31/op-olc-v023-p0087.pdf>.
- *Veeck v. Southern Building Code Congress International, Inc.*, 293 F.3d 791 (2002) (5th Cir. 2002) (en banc).
- Incorporation by Reference, 77 Fed. Reg. 11,414 (announcement of a petition and comments requested Feb. 27, 2012).

134. The 1998 and 2016 versions of the Circular are substantially the same with respect to the core elements of federal standards policy. But the 2016 version specifically addresses the incorporation by reference public access issue. If the instructor wants students to consider how federal standards policy would affect their own solution to the incorporation by reference issue, it makes sense to assign the 1998 version.

- Incorporation by Reference, 78 Fed. Reg. 60,784 (proposed Oct. 2, 2013).
- Carl Malamud, *Liberating America's Secret, For-Pay Laws*, BOINGBOING (Mar. 19, 2012, 10:29 PM), <http://boingboing.net/2012/03/19/liberating-americas-secret.html>.
- OFFICE OF FED. REGISTER, *IBR HANDBOOK* (2017), <https://www.archives.gov/files/federal-register/write/handbook/ibr.pdf>.
- Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, 77 Fed. Reg. 19,357 (request for information Mar. 30, 2012).
- Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, 79 Fed. Reg. 8207 (request for comment Feb. 11, 2014).
- ABA Resolution 112 (adopted Aug. 9, 2016).
 - A.B.A. SEC. ADMIN. L. REG. PRAC., TASK FORCE ON INCORPORATION BY REFERENCE, PROPOSED RESOLUTION AND REPORT TO THE HOUSE OF DELEGATES (2016), <https://share.ansi.org/Shared%20Documents/Standards%20Activities/Critical%20Issues/ABA%20Resolution%20on%20IBR/ABA%20Resolution%20and%20Report.pdf>.
 - Lorelei Laird, *After Debate, ABA House Calls for Publication of Privately Drafted Standards Used in Legislation*, A.B.A. J. (Aug. 9, 2016, 3:20 PM), http://www.abajournal.com/news/article/after_strong_debate_house_calls_for_publication_of_privately_drafted_standards/.
- *Am. Soc'y for Testing & Materials v. Public.Resource.Org, Inc.*, Nos. 13-cv-1215 & 14-cv-0857, 2017 WL 473822, at *1, *14 (D.D.C. Feb. 2, 2017).
- *Am. Soc'y for Testing & Materials v. Public.Resource.Org, Inc.*, 896 F.3d 437, 441 (D.C. Cir. 2018).

C. Shorter Commentaries Discussing the Issues

- *Standards, Regulations and Incorporation by Reference: An Interview with Emily Bremer of the Administrative Conference of the United States*, STANDARDIZATION NEWS at 18 (Nov./Dec. 2012) (discussing incorporation by reference and the ACUS project on the subject).
- Emily S. Bremer, *Technical Standards Meet Administrative Law: A Primer on an Ongoing Debate*, 65 STANDARDS ENGINEERING 1 (Mar./Apr. 2013) (summarizing the issues raised by regulatory incorporation by reference).
- Emily S. Bremer, *Collaboration Is the Key to Making the Law Free, in Regulating by Reference*, REG. REV. (July 2, 2013), <https://www.theregview.org/>

2013/07/02/02-bremer-collaboration/; Nina A. Mendelson, *We Need Full Public Access to the Law, in Regulating by Reference*, REG. REV. (July 1, 2013), <https://www.theregreview.org/2013/07/01/01-mendelson-access-to-law/>; Peter L. Strauss, *Agencies Should Pay for Any Copyrighted Materials They Incorporate by Reference, in Regulating by Reference*, REG. REV. (Dec. 1, 2011), <https://www.theregreview.org/2011/12/01/agencies-should-pay-for-any-copyrighted-materials-they-incorporate-by-reference/>;¹³⁵ or

- Emily S. Bremer, *New Rules on Incorporated Standards Encourage Necessary Public-Private Collaboration, in Incorporating Private Standards into Public Regulations*, REG. REV. (Jan. 27, 2015), <https://www.theregreview.org/2015/01/27/bremer-public-private-collab/>; Nina A. Mendelson, *Public Access to the Law Must Be Taken More Seriously, in Incorporating Private Standards into Public Regulations*, REG. REV. (Jan. 28, 2015), <https://www.theregreview.org/2015/01/28/mendelson-public-access/>; Peter L. Strauss, *We Decline to Define ‘Reasonably Available,’ in Incorporating Private Standards into Public Regulations*, REG. REV. (Jan. 26, 2015), <https://www.theregreview.org/2015/01/26/strauss-reasonably-available/>.¹³⁶
- Emily S. Bremer, *A Multidimensional Problem*, 45 ENVTL. L. REP. 10783, 10783 (2015) (briefly examining the multiple dimensions—administrative law, standards policy, and copyright—of the incorporation by reference debate).
- A.B.A. SEC. ADMIN. L. REG. PRAC., REPORT ON RESOLUTION 107A OF THE HOUSE OF DELEGATES, (2016), https://www.americanbar.org/content/dam/aba/administrative/administrative_law/107a%20incorporation%20by%20reference.authcheckdam.pdf (approved as Resolution 112 of the House of Delegates, AM. BAR ASS’N. (2016)).

D. Longer Academic Articles for Background Reading

- Robert W. Hamilton, *The Role of Nongovernmental Standards in the Development of Mandatory Federal Standards Affecting Safety or Health*, 56 TEX. L. REV. 1329 (1978).
- Pamela Samuelson, *Questioning Copyright in Standards*, 48 B.C. L. REV. 193 (2007).

135. This series of three essays, collectively titled *Regulating by Reference*, offers different perspectives on how best to address incorporation by reference’s public access issue. See *Regulating by Reference*, *supra* note 126.

136. This collection of essays, collectively titled *Incorporating Private Standards into Public Regulations*, offers different perspectives on the OFR’s revised incorporation by reference. See *Incorporating Private Standards into Public Regulations*, *supra* note 127.

- Emily S. Bremer, *Incorporation by Reference in an Open-Government Age*, 36 HARV. J.L. & PUB. POL'Y 131 (2013) (suggesting ways agencies can address the various administrative law issues that arise when they incorporate extrinsic materials, including standards, into federal regulations).
- Peter L. Strauss, *Private Standards Organizations and Public Law*, 22 WM. & MARY BILL RTS. J. 497 (2013) (arguing for a more aggressive approach than the ACUS recommendation to ensuring free online access to incorporated standards).
- Nina A. Mendelson, *Private Control over Access to Public Law: The Perplexing Federal Regulatory Use of Private Standards*, 112 MICH. L. REV. 737 (2014) (making the strongest case for free online access to incorporated standards).
- Emily S. Bremer, *On the Cost of Private Standards in Public Law*, 63 KAN. L. REV. 279 (2015) (offering a case study of the costs of standards incorporated into federal pipeline safety regulations and a short-lived attempt to statutorily mandate free online access).

APPENDIX: INCORPORATION BY REFERENCE GLOSSARY

ABA	American Bar Association
ACUS	Administrative Conference of the United States
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
CFR	Code of Federal Regulations
CPSC	Consumer Product Safety Commission
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FDPL	Federal Depository Library Program
FOIA	Freedom of Information Act
GPO	Government Printing Office
IBR	incorporation by reference
NFPA	National Fire Protection Association
NIST	National Institute of Standards and Technology
NTTAA	National Technology Transfer and Advancement Act of 1995
OFR	Office of the Federal Register
OLC	Department of Justice's Office of Legal Counsel
OMB	Office of Management and Budget
SIBR database	Standards Incorporated by Reference database
SSO	standard-setting organization