### Focus on Education & Training in Standards

#### Teaching About Voluntary Codes and Standards

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Voluntary codes and standards play a key governing role in the world today. They can help ensure that consumer products are safe. They can enable cell phones and other digital devices to interact with each other. They can affect how buildings are constructed so they can withstand hurricanes and earthquakes. And so much more. When law students and graduate students in public policy learn about "codes" and "standards" they however learn about government rules and regulations-not the voluntary or consensus standards created by nongovernmental standard-setting organizations. Despite their technically non-binding nature, voluntary codes and standards can influence industry behavior and have far-reaching impacts on modern products and business practices. Moreover, they can become legally binding when they are incorporated by reference into government regulations.

To help address the deficiency in what professionals know about standards, the Standards Coordination Office at National Institute of Standards & Technology (NIST) launched the Standards Coordination Office Curricula Development Cooperative Agreement Program. Similar to a grant program, this cooperative agreement program aims to strengthen education and learning about standards and standardization by supporting the development of new courses, modules, seminars and learning resources integrating standards into formal curriculum. The number of awards given each year is based on various factors, such as the number of proposals received and funding available. The evaluation criteria have evolved as NIST continues to improve the program each year, but the essential goal has remained the same: supporting standards education at U.S. colleges and universities.

As one of the many recipients of support under NIST's program, the Penn Program on Regulation at the University of Pennsylvania has created a resource website, www.Codes-and-Standards.org. The purpose of this website is to provide an abundance of curricular materials for faculty in law schools and public policy programs to use to teach their students about the world of voluntary codes and standards. This brief essay explains the rationale behind the creation of Codes-and-Standards.org, as well as descriptions of the resources it contains.

Voluntary codes and standards serve important functions with respect to coordinating and governing. In much the same way that binding regulations can, legal and policy professionals working in the field need to know more about them. Students in law and policy programs learn about how commerce depends on coordinating business behavior and product design to conform to norms that facilitate trade and interoperability. The faculty members who teach these students understand the need for societal norms to protect human health and safety and protect the environment. But the curricula in law and policy predominantly focuses on the design and implementation of legislative and regulatory standards, not voluntary codes and standards.



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#### Teaching About Voluntary Codes and Standards, continued

To help promote greater understanding of voluntary codes and standards, the Penn Program on Regulation has developed a suite of teaching materials prepared by a variety of experts at Penn and elsewhere. Faculty members anywhere can use these materials to integrate formal learning about voluntary codes and standards into their existing courses. The website, Codes-and-Standards.org, houses a rich collection of teaching guides, lesson plans, case studies, PowerPoint slides, videos, handouts, and readings that is freely available to the public. The materials are organized around five "modules," each focusing on a different facet of the world of codes and standards, all of which are suitable for use in a variety of different existing courses offered in law and policy schools. A brief summary of each of these five modules offers a clear sense of the scope of materials available at Codes-and-Standards.org:

- 1. Introduction to Codes and Standards. For any instructor coming to the world of codes and standards for the first time, this module offers overarching resources that can be used in any course touching on voluntary codes and standards. It addresses questions such as: What are codes and standards? Where do they come from? How are they made? It contains materials that can be used to create a stand-alone lesson in any existing course. This module can also be used to supplement the content in any of the other four modules.
- 2. Standard Essential Patents. The module on standard essential patents delves into a critical way that standards intersect with the technology development. The central problem motivating this module arises when a standard-setting organization creates a technical standard that can be met only through the use of someone's patented technology. To prevent the patent holder from extracting undue market power, legal principles require that standard essential patents be licensed on fair, reasonable, and non-discriminatory (FRAND) terms. This module is built around a case study of the Microsoft v. Motorola litigation-where a federal court confronted a dispute over what FRAND means-and can be used in courses on intellectual property, patents, contracts, regulatory law, and technology policy.
- 3. Incorporation by Reference. As noted previously, public laws and regulations often incorporate by reference private codes and standards. This module delves into the fascinating issues implicated by incorporating voluntary standards into public law. Since voluntary standards can be copyrighted, they are not always reproduced in public sources of laws and regulations-they are just noted "by reference." This has raised a variety of questions that can be explored in the classroom about government transparency, copyright law, and administrative efficiency.
- 4. Health and Safety Standards. Many voluntary standards seek to protect consumers' and workers' health and safety. This module provides materials for instructors to teach about voluntary standards using a famous U.S. Supreme Court case-Industrial Union Department, AFL-CIO v. American Petroleum Institute, or the so-called Benzene Case. It is suitable for use in courses on administrative law, environmental law, statutory interpretation, legislation, and regulatory law.



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#### Teaching About Voluntary Codes and Standards, continued

5. Building Standards and Federal Preemption. A final module shows instructors how they can teach about federal preemption by using case studies of litigation challenging green building codes that incorporated by referencing various voluntary energy efficiency standards. The litigation around which the module's materials are organized arose from a claimed conflict between state and local building codes with federal energy efficiency laws. This module affords instructors a concrete context for teaching about federal preemption law, as well as to promote learning about building codes and climate change regulation.

Given the vital role that voluntary codes and standards can play in commerce today, it is appropriate that the training of all professionals involved in business operations and transactions gain a greater familiarity with these standards and how they are developed. The course modules and multi-media case studies assembled at Codesand-Standards.org, which are all freely available in the public domain, use real-world examples to accommodate teaching about voluntary codes and standards in existing courses. As a result of their detail and structure, the modules can also be used by instructors without any prior background working with standard-setting organizations.

#### IFAN Survey Results to be released June 27, 2023

results of our recent survey of standards users worldwide will be released in June. This wide-ranging report documents the first in a regular polling of standards users from every corner of the world. It provides definition of the needs and issues currently facing our community.

IFAN is pleased to announce that the This first report looks at a wide variety of issues. These include challenges within organizations that use standards as well as concerns regarding broader community issues, like digital rights management, new publication formats and commercial policies.

> IFAN, the voice of standards users worldwide, is the only organization with the scope to define these

# **IFAN Survey**

broader issues from a global perspective. As the standards community at large continues to focus on harmonization and broad distribution, this survey and the report we have generated will provide an essential window into the challenges facing IFAN's constituency, standards users themselves.

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21 June: CEN- CENELEC GA 26/27 June: IFAN Board meets in Geneva July

6 July: 50th IFAN European Group Meeting, online

#### September

18-22 September ISO GA Brisbane, Australia

#### October

IFAN Members' Assembly TBC 23-26 October IEC GE, Cairo

## Calendar

For further information on IFAN: IFAN Publications: www.ifan.org/ifan-publications Contact IFAN: ifan@ifan.org

