

EXHIBIT E

Twelve Tables of Codes

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§ 1. The Right To Know

The right to know the law, so as not to be ignorant, as ignorance of the law is no excuse.

The right to speak the law, so as to inform the citizenry.

The right to know and speak the law is the underpinning of government in ancient and modern times. The right to know and speak the law is the foundation of the doctrine of the Rule of Law, which provides:

- First, that the laws shall be public, that the arbitrary whims of individual men and women have no place in a society ruled by law. We declare ourselves to be nations of laws, not empires of men.
- Second, that the laws shall apply equally to all. There shall not be one minimum wage for people of color and another for white people. There shall not be one court for men and another for women. The vote shall not be reserved for the rich, disenfranchising the poor with poll taxes or other artificial barriers meant to come between a people and their government.
- Third, that there shall be due process under the law. Judgment shall only be applied after a fair and open proceeding; you shall know the

charges levied against you and shall be provided counsel, so that you may be heard.

When we fail to live up to the Rule of Law, we have failed as a society. Despots may make excuses about extraordinary times or states of emergency, but those reasons are given sheepishly and accepted grudgingly, as we all know that a government that fails to live by the Rule of Law is one that will eventually face the springtime of revolt.

§ 2. *The Rule of Law*

In the early days of the Roman Republic, the commoners rose against their aristocratic masters and demanded that the laws by which they would be judged should be made known. When the aristocrats resisted, preferring to impose the law arbitrarily, the people quit the city of Rome, leaving the city defenseless and without workers to keep it running.

The great secession led in 450 BCE to the promulgation of the Twelve Tables of Law, which were inscribed on bronze tablets and placed in the agoras for all to read. All citizens were expected to read and know the law, indeed when the Gauls burnt the city in 390 BCE and the tablets were destroyed, all the schoolchildren were able to recite them from memory and they were easily reconstructed.

That the laws shall be written down and promulgated for all to know was a universal value. In Greece, the laws of Solon were inscribed on wooden cylinders and placed in the markets. Aristotle stated in *Politics* that “the rule of law...is preferable to that of any individual...[H]e who bids the law rule may be deemed to bid God and Reason alone rule, but he who bids man rule adds an element of the beast; for desire is a wild beast, and passion perverts the minds of rulers, even when they are the best of men. The law is reason unaffected by desire.”

In India, Ashoka the Great ruled from 269 BCE to 231 BCE and inscribed the Code of the Dhamma on 50-foot pillars of stone throughout the land, declaring in Edict Number 4 “that there should be uniformity in law and uniformity in sentencing.” Ashoka appointed Dhamma Officers who went out into the provinces, reading the edicts aloud to the people and helping them to understand his laws.

That the law should be known to all was fundamental, but equally important was that the law should not be for sale. When the Barons of

England confronted King John in 1215 on the meadow of Runnymede, one of their chief complaints was that access to the courts had become matter of access to money and that judgments were for sale to those who chose to pay for them. This led to the most long-lasting provision of Magna Carta, one still in force in the United Kingdom and many other common law jurisdictions:

Article 40: “To no one will we sell—to no one will we deny or delay—access to right or justice.”

Likewise, in Japan, the 7th-century Prince Shokotu recognized that access to the law and justice should not be a matter of access to money. In the 17-Article Constitution, which is also still in effect, he instructed all Ministers and officials of state to observe the principles he set out:

Article 5: “Of complaints brought by the people there are a thousand in one day. If in one day there are so many, how many will there be in a series of years? If the man who is to decide suits at law makes gain his ordinary motive, and hears causes with a view to receiving bribes, then will the suits of the rich man be like a stone flung into water while the complaints of the poor will resemble water cast upon a stone. Under these circumstances the poor man will not know where to take their complaints.”

That all people should know their duties was expressed in China in the first printed book, *The Diamond Sutra*, which was dedicated to “universal free distribution.” In the Chinese Buddhist tradition, one gains merit by copying or printing. The writing of the laws began in China in 536 BCE, when Xing Shu inscribed the code of punishments on a bronze tripod for all to see. Then, 20 years later a neighboring state inscribed the laws on an iron tripod, then private citizens copied them onto bamboo. For the next millennium, the Chinese government balanced the Confucian precepts of rule-by-man with the codified principles of rule-by-law.

As new governments were formed to throw off colonial and dynastic yokes, equality under the law and government by Rule of Law became guiding principles. The U.S. Constitution enshrined equality and due process into the fabric of the newly United States. John Adams explained in his *Dissertation on the Canon and Feudal Law* that the key to making this experiment in democracy work would be the participation of an informed citizenry:

“Let us tenderly and kindly cherish, therefore, the means of knowledge. Let us dare to read, think, speak, and write. Let every order and degree among the people rouse their attention and animate their resolution. Let them all become attentive to the grounds and principles of government, ecclesiastical and civil. Let us study the law of nature; search into the spirit of the British constitution; read the histories of ancient ages; contemplate the great examples of Greece and Rome; set before us the conduct of our own British ancestors, who have defended for us the inherent rights of mankind against foreign and domestic tyrants and usurpers, against arbitrary kings and cruel priests, in short, against the gates of earth and hell.”

An informed citizenry requires the freedom to read and write the law. When the issue came before the U.S. Supreme Court, it ruled unanimously in *Wheaton v. Peters* (1834) that the law belonged to the people, not to the government and certainly not to private citizens, stating “no reporter has or can have any copyright in the written opinions delivered by this Court.”

The principle that the law belongs to the people was repeatedly affirmed. In *Banks v. Manchester* (1888), the Supreme Court rejected copyright claims over state court opinions. In *Veeck v. Southern Bldg. Code Congress* (2002), the 5th Circuit of the Court of Appeals rejected copyright claims over model building codes that were incorporated into law in Texas, stating “[P]ublic ownership of the law means precisely that ‘the law’ is in the ‘public domain’ for whatever use the citizens choose to make of it.”

In the 20th Century, governments all over the world have repeatedly reaffirmed the importance of the Rule of Law and of fundamental human rights, which include the right to know what our governments require of us. This right has been particularly important in the formation of the European Union. Article 15 of the Treaty on the Functioning of the European Union emphasized the “right of access to documents of the Union's institutions,” the Charter of Fundamental Rights of the European Union guarantees a “right of access to documents,” and the Treaty of Amsterdam firmly reaffirmed the principle:

Article 1: “The Union is founded on the principles of liberty, democracy, respect for human rights and fundamental freedoms, and the rule of law, principles which are common to the Member States.”

The courts in Europe have repeatedly reaffirmed these principles. In the United Kingdom, for example, in *Blackpool v. Locker* (1948), the King's Bench refused to enforce regulations that were not available for the public to read. In *Fothergill v. Monarch Airlines* (1981), the House of Lords stated that “the need for legal certainty demands that the rules by which the citizen is bound should be ascertainable by him.” In *Sunday Times v. United Kingdom* (1979), the European Court of Human Rights stated that “[T]he law must be adequately accessible: the citizen must be able to have an indication that is adequate in the circumstances of the legal rules applicable to a given case.”

The Rule of Law is not a concept limited to western or northern countries, to developed countries, or any other lines drawn that divide our world into sectors. The Rule of Law unites our world around a basic truth, that all human beings have basic rights. The Universal Declaration of Human Rights (1948) states:

Article 19: “Everyone has the right to freedom of opinion and expression; this right includes ... to seek, receive and impart information and ideas through any media and regardless of frontiers.”

The rights of speech and expression are fundamental to any declaration of human rights. The right of access to justice is equally fundamental. There can be no human rights in any meaningful sense if we limit who is allowed to read the law and who is allowed to speak it. Human rights begin with all citizens knowing their duties and their rights under the law.

§ 3. *Code is Law*

Law has always been technical. Regulation of public safety and the promotion of standards for fair trade have always stood hand-in-hand with the regulation of the procedures of justice. When the Barons at Runnymede forced King John to agree to Magna Carta, the articles guaranteeing access to justice came right after the article proclaiming a system of uniform weights and measures:

Article 35: “Let there be throughout our kingdom a single measure for wine and a single measure for ale and a single measure for corn, namely ‘the London quarter,’ and a single width

of cloth (whether dyed, russet or halberjet) namely two ells within the selvages and let it be the same with weights and measures.”

England was not unique. In most of the ancient edicts of government, we see the regulation of technology for public safety and the promotion of trade sitting alongside the procedures of justice, the functioning of the divisions of government, and other constitutional issues. In Ashoka's Second Edict he made provisions for the availability of important medical roots and fruits; in other edicts he established systems of irrigation and safe roads. In early Irish law we see provisions of family law sit alongside standards for beekeeping and the proper functioning of watermills.

As our modern era began, the provision of the public safety became an increasingly important function of government. Railways helped open up the United States, but at a tremendous cost in lives from manual hand brakes and link-and-pin couplers for the cars. With the passage of the Railroad Safety Appliance in 1893, the number of accidents fell dramatically as air brakes and automatic couplers became required on all trains.

In American cities, children were dying because milk was being adulterated with fillers such as chalk and kept in grossly unsanitary conditions. With the passage of the Food Act of 1899, the Board of Agriculture was finally able to issue the 1901 Sale of Milk Regulations, establishing standards of purity and hygiene, followed soon after by the Federal Foods and Drugs Act of 1906 which established the Food and Drug Administration.

Perhaps the most significant of the public safety regulations at the turn of the century were the fire codes. The impetus was the horrific New York Triangle Shirtwaist Factory Fire of 1911, where the exit doors were locked shut and 146 garment workers died from fire and smoke, many of them leaping to their deaths from the 10th floor of the factory, a scene so horrific that an observer called it “the day it rained children.”

The fire led to the creation of a Committee on Public Safety led by Frances Perkins, and with the backing of Tammany Hall's Al Smith, to the promulgation of mandatory fire codes. Since then, groups such as the National Fire Protection Association have created the high quality building, fire, electrical, and other public safety codes required throughout the world. When those codes are ignored, we see tragedies such as the Bangladesh Tazreen Fashions fire of 2012, a fire that bore a

striking and horrifying resemblance to the Triangle Shirtwaist fire 101 years earlier.

In our modern world, public safety regulations are a key function of government. Natural gas and oil, for example, power our modern cities, but those substances can cause grave harm. In the United States, we learned this repeatedly when the Texas City refinery explosion of 2005 killed 15 and injured 170, when the Deepwater Horizon oil spill of 2010 threw 4.9 billion gallons of oil into the Gulf, and when a 30-inch gas pipeline in San Bruno, California, exploded and sent a blast of fire 1,000 feet high.

Technical regulations encompass a huge swathe of our modern life, a natural outcome of our technical society. Building and other codes, food safety, hazardous materials, the environment, occupational safety in factories and farms, and the safety of products are all subject to these regulations. While some may argue there is too much regulation and others argue there is too little, before we can have that discussion the citizenry must be informed.

§ 4. *Indefensible Thunderbolts*

Ignorantia juris non excusat is the well-established doctrine that ignorance of the law is no excuse. That citizens must be notified of the laws that affect them was the genesis of the Federal Register, an official gazette of the United States, established after the Supreme Court ruled in the *Hot Oil Case* (1935) that regulations that the government failed to publish were not valid. Notification of the citizenry of their rights and responsibilities is a requirement of lawmaking.

In most of the world, including the United States, there has arisen a system for technical laws known as incorporation by reference. The standards governing topics such as building codes or hazardous material transport are developed by ostensibly private bodies. The government then publishes a notice in an Official Gazette incorporating these standards into the law, but the text of the standards must often be purchased from a private body.

The private bodies that develop these standards have been delegated law-making authority from their governments. In most cases, these private bodies are created by their governments. The British Standards Institution, for example, was created by a Royal Charter in 1929 and

represents the United Kingdom in numerous international forums, including the International Organization for Standardization (which it helped create) and the European Union's European Committee for Standardization (CEN). As the duly delegated agent for this form of European Union regulation, the British Standards Institution is required to adopt and publish EU standards without change, making the law available to citizens. The official United Kingdom repository of statutes lists hundreds of statutory instruments that mention British Standards Institution documents.

While technical standards have the force of law, the governmental bodies that promulgate these standards and a series of nonprofit organizations that have sprung up besides them all too often maintain that the laws are their private property and can only be accessed after paying a fee. More insidiously, these organizations maintain that they continue to own the documents even after you have paid the fee, exercising controls such as restricting the ability to print the document, or copy it, or even to quote excerpts without their case-by-case prior written approval.

These restrictions on use are implemented through a number of techniques. Many standards are only available in a shrink-wrap license, an agreement that claims that by opening the packaging the reader agrees that they don't own the document but only "license" it and agree not to redistribute or quote without permission. For online distribution, many standards come with Digital Rights Management (DRM) software that ties the document to a specific computer and restricts the ability to copy text from the standard or print it.

These restrictions on use are proclaimed loudly and prominently, with watermarks being put on every page of some documents purchased, strident terms of use, and publicity campaigns reminiscent of the "FBI Warnings" stamped on the beginning of many movies. But, there is a world of difference between a privately created movie and a legal document carrying out the edicts of government. To proclaim ownership of edicts of government is a false proclamation, what is known in the law as the *Doctrine of Brutum Fulmen*, the use of an indefensible thunderbolt to make others give up their rights under the law.

The law belongs to the people, and cannot become the private property of some governmental or non-governmental organization, no matter how seemingly well-deserved are the rents one could extract from winning a monopoly concession on a parcel of the law. While standards bodies need money to carry out their valuable work, and while it is clear that these

standards bodies create high-quality documents that are essential to our public safety, one cannot cordon off the public domain simply because of an institutional desire for funds.

An examination of the financial status of standards organizations reveals a wide variation in composition and revenue streams. In India, for example, less than 4% of revenue at the Bureau of Indian Standards (BIS) comes from the sales of documents. BIS, like the British Standards Institution, Underwriters Laboratories, Standards New Zealand, and many other organizations throughout the world, have a thriving business in certification and testing.

Some standards bodies, such as the National Fire Protection Association and the International Organization for Standardization, depend more heavily on the sale of standards documents. However, even in these cases there are many other revenue streams and there are opportunities to adjust the business models to more properly reflect the importance of their work throughout society. And, in many cases, there is room for a fresh look at expenses, such as million-dollar CEO salaries, some of the highest salaries in the non-profit world.

Not all standards bodies have become addicted to these copious revenues that accompany these indefensible thunderbolts. In some countries, such as Thailand, Indonesia, and Ecuador, standards are freely available to citizens as a matter of public policy. Many standards bodies thrive on an open standards model, including key areas such as all the standards that govern the operation of the Internet created by the Internet Engineering Task Force and the World Wide Web Consortium, and the food safety standards promulgated in the Codex Alimentarius by the World Health Organization and the Food and Agriculture Organization of the United Nations.

One of the most insidious aspects of the current system is the wide variance of the price of standards. A basket of 11 public safety standards published by the International Organization for Standardization and also required by the European Union was assembled and priced by Public.Resource.Org in the retail outlets of 42 national standards bodies. Even within the European Union the prices varied wildly, from \$175 in the Former Yugoslav Republic of Macedonia to in Lithuania to \$2628 for the same standards in the United Kingdom. Because access to the standards (and the national forwards to the standards) is vital for economic activity across national borders, the opportunistic pricing by money-hungry standards bodies becomes a tall barrier to trade.

While extracting a tax on each reader of a standards document is an impediment to the Rule of Law, the restriction on reuse of the documents is even more serious. The law is the raw material of democracy, and being able to work with these documents to create better ways to inform the citizenry is crucial to the proper workings of justice, governance, and politics.

In many cases, the standards promulgated by standards bodies are only available electronically on a web site that only works on a certain of browser, or as a PDF file with a plugin that only runs on certain operating systems. In many cases, the documents are so restricted in use that they won't work with software used by the visually impaired, or the searching capabilities are so restricted that lawyers, paralegals, policy analysts, legislative aides, and government officials are unable to find the passages they need.

One of the most important reasons the law has no restrictions on use is so that innovation may flourish in the marketplace, creating better solutions for citizens, lawyers, government workers, and public safety professionals. Restrictions on reuse have frozen the format of standards documents inside dozens of old web sites and outmoded formats maintained by standards organizations, many of whom run Internet sites that are littered with technical errors and broken software.

Perhaps the most troubling indefensible thunderbolts are when the law is kept secret and may not be consulted. In Estonia, one of the most advanced and democratic societies and generally an exemplar of open government practices, Eesti Standardikeskuse (EVS) received an order with payment via PayPal from Public.Resource.Org for €3,208.68 for the purchase of 166 technical standards required under Estonian law. The next day, the order was cancelled, the money returned, and a notice dispatched indicating that the service was being refused. When we inquired as to why, the answer was a curt 1-line response:

“We would keep the circumstances to ourselves and we recommend to order the standards from another country.”

Even in the case of European Union regulations, which must be adopted by all European Union nations without change, there is a national foreword. Other standards are developed specifically for Estonia and are only available from EVS. Public.Resource.Org wrote to the Honorable Thomas Hendrik Ilves, the President of Estonia and a leader in open

government and asked him for help. When he didn't answer, we wrote to the President's aide, and then to the President's son, neither of whom answered. In a society governed by the Rule of Law, should one have to know the President's son to be able to purchase the law? In a modern democracy, should the government be able to pick and choose who shall know the rules?

§ 5. *This Law is Your Law*

The U.S. Copyright Office, in the *Compendium of Copyright Office Practices*, states:

“Edicts of government, such as judicial opinions, administrative rulings, legislative enactments, public ordinances, and similar official legal documents are not copyrightable for reasons of public policy.”

In order to promote public education and public safety, equal justice for all, a better informed citizenry, the rule of law, world trade and world peace, Public.Resource.Org has undertaken to make technical edicts of government available on a noncommercial basis, as it is the right of all humans to know and speak the laws that govern them.

The focus in this release is on mandatory public safety standards. In many nations, public safety standards are expressly mandatory. In other countries, elaborate dances are undertaken to protect an illusion that the standards are somehow voluntary, but in each of the documents published there is a compelling public interest and the documents have been promulgated under the direction of government and play a key role in society.

A number of the documents released come directly from the standard bodies, because they make the documents available in draft or in final form. In other cases, such as China, the documents were submitted to the World Trade Organization, which maintains a portal with thousands of standards. These standards are made available to the public as part of the WTO's mandate to promote world trade by requiring full disclosure of the rules and standards governing trade with a country.

Many of the documented released were purchased directly from standards organizations after careful research. Most of the standards were ordered in paper format. For PDF files, such as those that were obtained from the

World Trade Organization, the documents were fixed by properly embedding fonts and fixing technical errors.

One of the most important reasons for making standards available is to allow for transformative uses, providing better access and utility for citizens. Of the standards being published, several hundred have so far been rekeyed and reset by Public.Resource.Org into valid HTML files. Many of the graphics have been redrawn into the open Scalable Vector Graphics (SVG) format so that the graphics can be resized and manipulated. Likewise, mathematical formulas are being reset into the Math Markup Language (MML), providing better access for the visually impaired and better functionality for those wishing to cut and paste formulas.

A number of other transformative uses become possible when the documents have been rekeyed into valid HTML. Proper metadata is added to the document headers, making them accessible and discoverable by search engines. Access protocols such as FTP and rsync allow bulk access and resynchronization to large collections of standards documents. Digital signatures allow users to verify that the documents have not been modified by comparing them to a known good version of the document.

All over the world, for centuries, nations have embraced the concept of the Rule of Law—the principle that prescribed law, rather than the whims and desires of any individual, should govern society. The Rule of Law is enshrined in ancient texts and in modern legislation, treaties, and judicial decisions. It is a central protection against tyranny and against a society where justice is arbitrary and some gain unfair advantage over others.

Only if the law is truly free and available can we expect people and enterprises to obey the law, to know their rights under the law, and to evaluate and participate in the work of improving the law. Only if the law is accessible to all, can we truly say that a society is governed by the Rule of Law.

By making technical standards governing building safety, transportation safety, energy safety, food and water safety, and other important areas readily available to all without restriction, we make society better. First responders and government officials can do more to protect citizens. Small enterprises can more easily and affordably comply with the law and build new businesses. Students, educators, scientists, engineers, policy advocates, journalists, and government workers can more easily read the standards and learn about technology, commerce, and government. They

can work to improve the standards themselves, and they can improve upon the accessibility and usefulness of the standards by making searchable databases or better navigational tools.

Innovation and education will benefit by opening up this world, but at the root are basic issues of democracy and justice. We cannot tell citizens to obey laws that are only available for the rich to read. The current system acts as a poll tax on access to justice, a deliberate rationing and restriction of information critical to our public safety and economic progress.

The law must be easily available to all people, access to the legal system and the texts that make up the law should not be bought, or sold, or rationed. People must have the right—an unfettered right—to read the law.

People must also have the right to communicate the provisions of law to others—to speak the law. When Justice Stephen Breyer said, “if a law isn't public, it isn't a law,” he was expressing the long-standing doctrine of the Rule of Law, one that has become ever more important in our information age.

Nobody can deny you the right to read and know the law. Nobody can tell you that justice is for sale. Read the law and make it better. Make your society better and make it safer.

You own your government. The Rule of Law is the rule of the people.

The law is yours to read, yours to know, and yours to speak. This law is your law.

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