Notes

The Administrative Law of Standardization in the PRC

INTRODUCTION

In China, as in most other countries, there are official standards for a wide variety of industrial, agricultural, and commercial products, processes, testing methods, and measurement methods. All of these standards are "technological laws and regulations"[1] and, as such, have a variety of legal ramifications. The number of official standards in China has increased dramatically over recent years and promises to continue to do so.[2] These standards are incorporated by reference in a host of laws regulating everything from environmental protection to trade, technology transfer, and product liability. Although standards provide the touchstones for liability under the numerous laws and regulations which apply them, they are rarely set forth explicitly in those laws. Furthermore, although standards are not generally found in "internal documents" nor off limits to foreigners, they can be difficult to research and unpredictable in their application. Like the tip of an iceberg, these statutory references to

1. Standardization Control Regulations of the People's Republic of China (Zhonghua Renmin Gongheguo Biaozhunhua Guanli Tiaoli) ch. 4, art. 18 (promulgated July 31, 1979) (BIAOZHUNHUA DANGAN YU BIAOZHUN ZILIAO GUANLI 113 (1986)) (BBC Summary of World Broadcasts trans. Sept. 5, 1979, at A3) [hereinafter Standardization Regulations]. It is not clear whether the term "technological laws and regulations" in the Standardization Regulations is consistent with the administrative nomenclature recently mandated by the State Council in the Xingzheng Fagui Zhiding Chengxu Zanxing Tiaoli (Provisional Regulations on the Process of Enactment of Administrative Laws and Regulations) (promulgated Apr. 21, 1987) *reprinted in* ZHONGGUO FAZHI BAO (Chinese Legal Gazette), May 11, 1987, at 2, col. 1 [hereinafter Administrative Regulations].

2. *Wo Guo Zhiding Guojia Biaozhun Yu Jiuqian Ge (Number of National Standards Adopted in China Surpasses 9000)*, Renmin Ribao (Haiwai Ban) (People's Daily Overseas Edition) [hereinafter RMRB (HB)] Dec. 1986. *See Report on Speeding Up the Work of Adoption of International Standards*, in 1985 CHINA STATE BUREAU OF STANDARDS Y.B. 12 [hereinafter CSBSY '85].

standards provide an oblique clue to the extent of administrative law which lies below the surface of China's legal system.

The term "standard" (*biaozhun*) encompasses a wide variety of quantitative and qualitative prescriptions. "Standardization administration" (*biaozhunhua guanli*) (sometimes referred to as "standardization control") commonly involves the formulation and implementation of specifications and criteria with regard to the raw materials used in, or the technological methods used for, producing every type of manufactured good, spare parts, component parts, as well as for their nomenclature.[3] Standards are used to set an absolute reference for units of space and time.[4] Standards may be set for terms, embracing definitions and even translations, and these standards will be used to interpret the terms of contracts unless the parties stipulate their own definitions.[5] There is even a State Standard for the Fundamental Terms of Standardization.[6] Standards may prescribe testing methods, mechanical specifications, the measurement of viscosity,[7] the sizes of screws,[8] or the specifications for frozen ox semen.[9] The common denominator of all standards in China, as is sometimes the case in the United States, is that their formulation is often a form of lawmaking which is delegated by the legislature to agencies with specialized competence.[10]

China's standards bear on the activities of both foreign and Chi-

3. For a definition of "standardization control," see FAXUE CIDIAN (Legal Dictionary) 662 (Shanghai Cishu Chubanshe, rev. & enl. ed. 1984).

4. *See, e.g.*, GB 3102.1-82, Quantities and Units of Space and Time (formulated 1982), CSBSY '85, *supra* note 2, at 34-35. "GB" in the standardization number refers to a State Standard (*Guojia Biaozhun*).

5. *See, e.g.*, GB 3291-82, Textile Terms and Terminology (General Part for Textiles) (formulated 1982), CSBSY '85, *supra* note 2, at 469, which also includes the standard English translations of these terms.

6. GB 3935.1-83, CSBSY '85, *supra* note 2, at 29; UDC 006:001.4, Biaozhunhua Jiben Shuyu (Fundamental Terms of Standardization), BIAOZHUNHUA ZHONGYAO WENJIAN HUIBIAN XUBIAN (YI) (Continuing Collected Major Documents on Standardization (1)) 615 (Zhongguo Biaozhun Chubanshe ed. 1986) [hereinafter STANDARDIZATION DOCUMENTS].

7. *See, e.g.*, GB 5547-85, Resin Finishing Agent—Determination of the Viscosity (formulated 1985), 1986 CHINA STATE BUREAU OF STANDARDS Y.B. 87 [hereinafter CSBSY '86].

8. *See, e.g.*, GB 846-85, Cross Recessed Countersunk Head Tapping Screws (formulated 1967), CSBSY '86, *supra* note 7, at 120.

9. *See, e.g.*, GB 4143-84, Frozen Semen of Ox (formulated 1984), CSBSY '85, *supra* note 2, at 43.

10. For a recent U.S. characterization of standard setting as lawmaking, see Drake v. Honeywell, Inc., 797 F.2d 603, 608 (8th Cir. 1986), where the court writes:

> Legislative authority is granted, for example, to issue consumer product safety standards, 15 U.S.C. § 2056(a) (1982); . . . Where the Commission issues rules under these provisions and explicitly states that it intends to exercise the authority delegated by Congress, the resulting rules are legislative, and their violation gives rise to a private cause of action under section 23(a).

nese businesses in many ways. With respect to foreigners or Chinese who sell their products in China, standards provide the basis for determining whether they will be held strictly liable in damages for injuries caused by those products. They provide the specifications and measurement methods which determine whether a joint venture may be subject to economic or even criminal sanctions for discharging pollutants into the environment or for endangering the health of its workers. Standards are used to determine eligibility for import licenses, domestic contracts and import substitution status for foreigners who seek to sell their goods in China. By the same token, Chinese products are more marketable abroad when they conform with internationally recognized standards, which China is increasingly adopting into its own sets of standards.

There are also strong but sometimes contradictory interests in standardization as a part of an overall economic development strategy. For example, in 1986 the State Bureau of Standards enacted a state standard for 32 by 32 Dot Matrix Font Set and Data Set with Chinese Characters for Information Exchange.[11] The standard was designed to enhance the ability of databases in different parts of the country to interface with one another. Such an approach to increasing the accessibility of information in individual databases could have profound implications for the ability of state planners to evaluate the condition of the economy.[12] And yet, premature standardization of technological specifications in a rapidly advancing field may stifle technological innovation. This problem is not peculiar to socialist economies; to some extent it is shared by every complex industrialized society. But in an economy which relies largely on centralized planning and is reluctant to "let the market decide" which standards it may want to accept, this problem can be particularly significant.[13]

For all its impact, the rapidly developing administrative law of standards and standardization in China has received virtually no attention from foreigners interested in China. The rate of growth of China's standardization program has increased steadily over the last

11. Zhong Ming, Deputy Director of the State Bureau of Standards, at May 10, 1986 press conference announcing the adoption of GB 6345, 1-86 and 2-86, 32 x 32 Dot Matrix Font Set and Data Set with Chinese Characters for Information Exchange.

12. For a brief statement of the importance of access to information in China's development program, see *Information Work — The Cornerstone of Modernization Engineering*, Renmin Ribao (People's Daily) [hereinafter RMRB] Dec. 12, 1986, at 1 (Foreign Broadcast Information Service — Daily Report: China [hereinafter FBIS] trans. Dec. 23, 1986, at K14).

13. For an official approach to this problem, see GB 3533.1-83, Assessing Principles and Methods for Calculating the Economic Effects of Standardization (formulated 1983), CSBSY '85, *supra* note 2, at 29, and GB 3533.2-84, Verifying Methods for Economic Effects of Standardization (formulated 1984), CSBSY '86, *supra* note 7, at 33.

thirty-five years, and there are signs that standardization has recently gained the attention of high-level decision-makers. This may be due to a realization that as a form of "non-tariff trade barrier," standardization presents state planners with a weapon at home and an obstacle abroad in their efforts to improve the country's balance of trade.[14] The administrative system is not yet complete or effective in many respects. A standardization law has not yet been passed,[15] but while it is being drafted, it is incumbent upon those interested in China's economic and political development to take note of the problems and potentialities of such an immense national undertaking.

This note will examine the legal aspects of China's standardization program with reference to its historical development and present administrative operations. The present administrative structure for standardization in China will be examined, first in terms of the country's legal framework for the formulation of standards, and then in terms of its implementation and enforcement. The role of standards in product liability and customs administration will then be discussed in detail to illustrate the implementation and enforcement of standards in China, with reference to standardization laws in other parts of the world. Finally, the resolution of standard-related disputes will be examined with an eye to avoiding some of the pitfalls of standardization.

I. BACKGROUND: THE HISTORICAL DEVELOPMENT OF STANDARDIZATION

A. The Origins of Standardization Law

China was a latecomer to the field of standardization in its modern sense. The great ancient civilizations, including China, developed standards for weights and measures which were implemented and enforced by governments to the extent of their authority. The degree to which a government was able to maintain standards of weights and measures was often a measure of its control and strength, particularly insofar as these standards were necessary for commercial intercourse and the smooth administration of taxation.[16]

Systematic standardization at the national and international

14. *See, e.g.*, Ye Bailin, *Technology Barriers — A New Trend in Trade Protectionism*, RMRB, Aug. 23, 1986, at 7 (FBIS trans. Aug. 29, 1986, at K16).

15. DANGDAI ZHONGGUO DE BIAOZHUNHUA (Modern China's Standardization) 65 (Xu Haofeng ed. 1986) [hereinafter MODERN STANDARDIZATION]. According to this source, drafting began on a Standardization Law in 1984. It is hoped that such a law would clarify the relationships between the numerous regulations, rules and measures which presently govern the subject.

16. Weidlein & Reck, *A Million Years of Standards*, in NATIONAL STANDARDS IN A

level, implemented by trade associations and enforced by governmental administrative mechanisms, is a development which grew out of the industrial revolution. With the transformation of the modes of production during the nineteenth century in the West, standardization was a natural and necessary response to the problems of managing new interdependencies among industries. Mass production techniques depended on interchangeable parts and uniform measurement references for industry, consumers, and the scientific community.[17]

Standardization organizations developed almost simultaneously in the countries which were the first to industrialize. First, national research institutions were founded which were charged with keeping the techniques of measurement and testing in step with scientific advances.[18] Soon after the establishment of the national research laboratories, standardization expanded into the field of industrial practice.[19] As various countries industrialized, the functions of their national research bureaus and those of the industrial standards associations gradually came to overlap.[20] Governmental research

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MODERN ECONOMY 9 (D. Reck ed. 1956). One historian describes the use of standards in ancient civilizations as follows:

> The problem faced by the rulers of governments of maintaining accurate standards of measures and weights has been with us for several thousands of years. In ancient Babylonia, sometime between 2400 and 2350 B.C., King Dungri . . . introduced a uniform standard of weights and made provisions for maintaining it by establishing an official testing-house in his capital where the original standards were preserved and where copies were tested and certified as accurate. The testing house was probably attached to a temple and was under the direction of the priests. In Egypt public weighers ascertained the correct amounts of goods bought and sold, and reference measures were cut on the stone walls of temples. In Athens public standards were maintained for checking not only the Athenian weights but also the Persian and Phoenician for the Greek maritime trade.

Id. at 8-9.

17. *The Future Role and Mission of the National Bureau of Standards: Hearings Before the Subcomm. on Science, Research and Technology of the House Comm. on Science and Technology*, 99th Cong., 1st Sess. (1985) 1 [hereinafter *NBS Hearings*] (testimony of Mr. Walgren).

18. Germany's Imperial Physical-Technical Institute was organized in 1887. Britain's National Physical Laboratory was founded in 1900. Weidlein & Reck, *supra* note 16, at x. In the United States, the Bureau of Standards Organic Act was passed in 1901 to establish a National Bureau of Standards (NBS). Act of 1901, ch. 872, 31 Stat. 1449 (1901). The United States federal government's power to standardize weights and measures had been enshrined in art. I, § 8 of the Constitution, but it was not until after the country had started industrializing that standardization began to grow rapidly as a discrete field of endeavor.

19. The British founded the British Standards Institution in 1901 to correlate and promote industrially and commercially usable standards on a national basis. The United States followed with the founding of the American Engineering Standards Committee (later renamed the American Standards Association) in 1918. Weidlein & Reck, *supra* note 16, at x.

20. The U.S. experience illustrates this development. The U.S. National Bureau of Standards (NBS) was moved from the jurisdiction of the Department of the Treasury to that of the Department of Commerce and Labor (now the Department of Commerce) in 1903. 32 Stat.

institutions and industrial associations of many countries now cooperate in the international sphere through organizations such as the International Organization for Standardization (ISO).[21]

Two fundamental debates have accompanied the development of the standardization agencies in both capitalist and socialist industrialized countries, and the debated issues are confronting China as well. One of these issues concerns the extent to which standards should be mandatory, legally binding and enforced with governmental sanctions. This question derives in part from the bifurcated nature of standards in general. On the one hand, standards act as a resource insofar as they assure a common language for scientific and technological interchange. In the words of one American industry representative, "attainment of quality depends absolutely on our ability to measure — to assure that what is specified or required is achieved. And measurements depend on a foundation of measurement equipment and standards which have a known relationship to an ultimate reference."[22] On the other hand, standards often have a more purely prescriptive character. This role is particularly visible in the areas of environmental, health and safety regulation, but it is also significant in the fields of industrial and agricultural production. Even in an economy which relies predominantly on central planning, there is a contradiction between the need to make standards mandatory in order to insure uniformity and interchangeability and the need to make them voluntary in order to allow for the innovation and improvements in accuracy which come with technological development.

The other issue which confronts all countries in their standardization efforts is the timing of standardization and the constant need for standards revision. A concern is often expressed by industry representatives that developing even voluntary standards prematurely

826, ch. 552, § 4, Feb. 14, 1903. Part of the legislative mandate of the NBS was to "support industry and commerce" by providing measurement and standards services. *NBS Hearings, supra* note 17, at 8 (testimony of Dr. John P. McTague, Dpty. Dir. White House Office of Science and Technology). To fulfill this responsibility, the NBS undertook to evaluate engineering data and maintain data bases on physical and chemical properties of materials. *Id.* at 19 (testimony of Mr. Mineta). This role became more sophisticated when the NBS began to formulate predictive equations, mathematical models and conduct other "infratechnological" research. *Id.* Eventually, the NBS was called on to assist in developing standards for federal regulatory agencies. In the regulations promulgated by these agencies NBS standards became "mandatory" in the sense that non-conformance produced legal consequences. *See, e.g.*, Consumer Product Safety Act, 15 U.S.C. §§ 2056(a), (allowing the agency to set standards), 2058(g)(2), 2069, 2070 (allowing the agency to prescribe civil and criminal penalties).

21. Weidlein & Reck, *supra* note 16, at x.

22. *NBS Hearings, supra* note 17, at 261 (testimony of Edward Nemeroff, Pres. Datron Industries).

creates a risk of retarding innovation in an emerging technology.[23] Nevertheless, keeping standards up-to-date can be costly, and insufficient resources may result in hindrances for industry. The administrative framework for standardization which has developed in complex modern industrial societies to balance these costs has its counterparts in the system China is developing, and the issues which have confronted these societies will inevitably confront China as well.

B. Standardization in Pre-Liberation China

Like the other great ancient civilizations, China established standards for weights and measures at a very early stage. In China, standards played a central role in the form of bureaucratic administration that developed. As the Western historian of Chinese science, Joseph Needham, has pointed out, the Chinese word for "law" (*fa*) originally meant something more like "standard," that is, a quantitative prescription.[24] When Emperor Qin Shihuang forcibly brought the warring states together into what would become the Chinese nation in 221 B.C., one of his enduring contributions was a design for Chinese unity which included "one weight, one measure, in the place of the discords and confusions of the petty states."[25]

Emperor Qin introduced a standardized script, standardized weights and measures, and even a standard gauge for chariot wheels. Under his reign, quantitative standards were devised for penalties.[26] Emperor Qin's Legalist ministers sought to use standardization as a means of wiping out intellectual opposition to the Emperor; "[c]arrying standardization to an extreme, a minister proposed in 213 B.C. that all books not sponsored by the Legalists should be burned, excepting only works on agriculture, medicine, pharmacy, and divination. The Imperial Library was to become the repository of all knowledge."[27]

The overzealous standardization efforts of the Legalists were

23. *Id.* at 32 (testimony of Mr. Brown). The creation of standards in the fiber optics field was used as an example of premature standardization which retarded industrial innovation in the U.S. For a formulation of the U.S. Federal Government's approach to this problem, see Recommendation 78-4: Federal Agency Interaction with Private Standard-Setting Organizations in Health and Safety Regulation (adopted Dec. 14-15, 1978), in ADMINISTRATIVE CONFERENCE OF THE UNITED STATES — RECOMMENDATIONS AND REPORTS 13 (1978), and Hamilton, *The Role of Nongovernmental Standards in the Development of Mandatory Federal Standards Affecting Safety or Health*, in ADMINISTRATIVE CONFERENCE OF THE UNITED STATES — RECOMMENDATIONS AND REPORTS 247 (1978).

24. C. RONAN, 1 THE SHORTER SCIENCE AND CIVILIZATION IN CHINA 275 (1978).

25. J. PERRY, THE STORY OF STANDARDS 3 (1955).

26. RONAN, *supra* note 24, at 275.

27. J. GARRATY & P. GAY, THE COLUMBIA HISTORY OF THE WORLD 123 (1983).

aborted by the fall of the Qin Dynasty in 206 B.C., and over the next two thousand years the fortunes of standardization rose and fell with the dynastic cycle. Industrial standardization in China generally remained confined to a few relatively simple weights and measures until efforts were made during the early part of this century to incorporate the advances being made in the field of standardization around the world.

By the 1930s, China had established a central standardizing organization called the Chinese Industrial Standards Committee to formulate standards for industry and commerce. A National Bureau of Standards was also created in order to develop more sophisticated standards for measurement and test methods, and to assist the Chinese Industrial Standards Committee in formulating industrial and commercial standards. The Chinese National Bureau of Standards resembled the National Bureau of Standards in the United States, while the Industrial Standards Committee was more similar to the French Comité Supérieur de Normalization or the American Standards Association.[28] The Industrial Standards Committee was composed of representatives of government, industry, and academia. It formulated standards in the fields of civil engineering, mechanical engineering, electrical industries, dyeing and textile industries, and mining and metallurgical industries.[29]

Although the activities of the early twentieth century Chinese standardization organizations were confined to a narrow domain of industrial and commercial undertakings, their significance was seminal. The Chinese National Bureau of Standards and the Industrial Standards Committee employed procedures for formulating new standards which were similar in many respects to those employed in China today. Standards were drafted at the National Bureau of Standards, which then submitted them to the Ministry of Industries for examination. The draft standards were then passed on to the Industrial Standards Committee, which would examine them in Divisional Meetings before presenting them to the Plenary Meetings for discussion. The resolutions of the Plenary Meetings would be submitted by the Committee to the Ministry of Industries, and after any revision required by the National Bureau of Standards, they would be submitted to the Minister of Industries for final approval and presented to the National Government for promulgation. Although the Industrial Standards Committee, along the lines of the Comité Supérieur de

28. For a more thorough description of the work of these non-Chinese institutions, see WORLD POWER CONFERENCE: A SURVEY OF THE PRESENT ORGANIZATION OF STANDARDIZATION, NATIONAL AND INTERNATIONAL 11-14, 32-33 (1936) [hereinafter SURVEY].

29. *Id.* at 6.

Standardization in France, made some of its standards compulsory,[30] many were intended to be consensual, voluntary standards for industries to use according to their needs. It is unclear what the enforcement and appeals procedure was during the implementation phase for standards which were mandatory. By 1946, detailed rules were promulgated with respect to the establishment of national standards and the use of "certification marks" which were granted to products which conformed with national standards.[31] Throughout this period, however, the increasingly tumultuous political situation in China forced standardization, along with most other forms of technological and administrative advancement, to the back burner until after 1949.

C. Standardization in Post-Liberation China

The development of China's standardization program since 1949 may be divided into five stages. During the period immediately following liberation, standardization was by necessity decentralized and domestically oriented. A few product quality standards for import and export were developed,[32] but the extension of state control over the means of production and the creation of new administrative institutions to manage them were seen as prerequisites to industrial integration.[33] Nevertheless, the First Five-Year Plan established standards agencies in several major industrial departments. These included the "National Approval Committee for Petroleum Product Specifications," established by the Ministry of Fuel Industry, which promulgated standards for petroleum products and methods for testing them. The Building Material Scientific Research Institute was appointed as the national testing authority for cement standards by the Ministry of Heavy Industry. The Ministry of Metallurgical Industry established 214 Ministry Standards, the Ministry of Machine Building promulgated standards for mechanical drawing, limits, and fits, and the electronics department promulgated a number of standards for electrical equipment and electricity supply.[34] One of the basic tasks during this period was to encourage "veteran workers" to accept new state standards for quality measurement in place of their traditional methods of "measurement by eye."[35]

The second stage in China's standardization effort began in 1956

30. *Id.* at 12.

31. CHINESE LAW — PAST AND PRESENT 337 (Lin Fu-shun ed. 1966).

32. T. RAWSKI, CHINA'S TRANSITION TO INDUSTRIALISM — PRODUCER GOODS AND ECONOMIC DEVELOPMENT IN THE TWENTIETH CENTURY 30-34 (1980).

33. CSBSY '85, *supra* note 2, at 11.

34. *Id.*

35. RAWSKI, *supra* note 32, at 37.

with the Twelve-Year Scientific and Technological Development Program established by the Scientific Programming Commission of the State Council. The Program focused on the importance of unified national technical standards in economic development, and it authorized what in 1958 became the State Scientific and Technological Commission to take charge of standardization work at the national level. The State Scientific and Technological Commission then established a bureau of standards to administer standardization and by the end of 1958 the bureau had promulgated 124 National Standards (*Guojia Biaozhun*).[36] Standardized reporting systems were beginning to enable Beijing's planners to make "inter-enterprise comparisons of inventories, fixed and circulating capital, waste rates, and costs." They used these systems to exercise the type of detailed control over major machinery producers that they had applied to key steel plants over five years earlier.[37] This trend continued during the period of economic "reconsolidation" that followed the Great Leap Forward and the Sino-Soviet split. In 1962 the State Council promulgated the Regulations on Technical Standards of Industrial and Agricultural Products and of Engineering Projects.[38] The following year, at the First National Conference on Standards Work, a Ten-Year Program for the Development of Standardization Work was put forward. The Ten-Year Program prioritized National Standards but allowed for the appointment of a series of research institutes and enterprises under various State Council departments which were to conduct their own research, development and revision of standards. By the time the second stage ended in 1966, China had promulgated 1000 National Standards.[39]

The third stage of China's standardization drive coincided with the Cultural Revolution (1966-1976) and was understandably characterized by no dramatic progress in the field of standardization. Nevertheless, standardization was one of the few forms of lawmaking which did continue throughout the Cultural Revolution, and by 1976 another 400 National Standards had been added to the country's growing list.[40]

Centralized domestic standards development and administration were revived during the fourth stage of China's standardization drive,

36. *Id.* at 11.

37. *Id.* at 34.

38. The Regulations on Technical Standards of Industrial and Agricultural Products and of Engineering Products were supplanted by the Standardization Control Regulations of the PRC in 1979. *See* Standardization Regulations, *supra* note 1, art. 40.

39. CSBSY '85, *supra* note 2, at 11-12.

40. *Id.* at 12.

which began in 1977. In the agricultural sector, for example, efforts were initiated to standardize farm machinery and enhance interchangeability of spare parts for farm machines in order to solve the problem of "disorderly production."[41] The State Council approved the establishment of the State Bureau of Standards (*Guojia Biaozhun Ju*) in May 1978, and the following year the Second National Conference on Standardization Work was held. Out of this conference emerged the Standardization Control Regulations of the PRC (Standardization Regulations), which were approved by the State Council and promulgated the same year.

The Standardization Regulations set out what remains the basic administrative law framework for standardization in China. In general terms, the Standardization Regulations describe the purposes of standardization, the procedures for adopting standards, the methods of implementation and supervision of standardization, and the type of standards and standards-making organizations. The purposes of the Standardization Regulations are set forth in the chapter entitled "General Principles." Article 1 states that "standardization is an important way to organize modern production and is essential to scientific management."[42] It declares the special role of standardization "in the course of socialist construction" and says that it is required for "specialization, top quality, and high speed."[43] More specifically, the Standardization Regulations explain that technical standards, which it equates with standards in general, provide a common technical basis for economic and commercial intercourse. Although the Standardization Regulations are still China's most important single piece of standardization administration legislation, they have been supplemented, qualified and, in some cases, obfuscated by subsequent measures.

The fifth and present stage of China's standardization program, which began in 1984, is distinguished from the fourth stage by its strong emphasis on quality standards and the adoption of international standards. With the integration of standards by reference in a host of other new types of legislation and regulations, standards administration is becoming more complex. The rapid growth in China's economy that has followed the adoption of the "Open Door Policy" has seen new products, new techniques and even new industries placing unprecedented pressure on standardization bodies to

41. J. SIGURDSON, TECHNOLOGY AND SCIENCE IN THE PEOPLE'S REPUBLIC OF CHINA 142 (1980) (citing speeches presented at the 1978 National Conference on Agricultural Mechanization).

42. Standardization Regulations, *supra* note 1, art. 1.

43. *Id.*

keep pace.[44]

In 1984 the State Economic Commission and the State Bureau of Standards jointly held the National Conference on the Adoption of International Standards.[45] The Conference confirmed that the emphasis of the present stage of standardization should be on quality standards. Accordingly, the State Council subsequently approved the Report on Speeding up the Work of Adoption of International Standards[46] in order to make China's exports more accessible to foreign markets and to ensure the suitability of foreign products being imported to China. The State Council's policy appears to have been implemented; by the end of 1986, a total of 9300 National Standards had been formulated, 1600 of them in 1986 alone.[47]

According to the latest policy reports available, China's future policy with regard to standardization will be to incorporate international standards directly into China's own standards by adopting them as State, Ministry or Enterprise Standards.[48] It is not clear how this policy will coincide with another of China's major current policy directions, namely, the decentralization of standardization adoption, implementation and revision powers.[49] Perhaps the contradiction between these two policy directions explains why the Standardization Law of the People's Republic of China, drafting of which began in 1984,[50] has not yet been passed.

II. THE FORMULATION OF STANDARDS

The Standardization Regulations set forth the basic procedure for formulating standards. In a number of respects, this procedure is left unclear. In some cases, this lack of clarity is resolved by specialized legislation. The scope of the Standardization Regulations encompasses standards in the fields of production (both agricultural and industrial), construction and engineering, commodity circulation, environmental protection, safety and public health, "and other technical requirements which should be unified."[51] Although the Standardization Regulations do not specifically provide for the "notice and comment" type proceedings which allow for industry and consumer

44. RMRB (HB), Feb. 10, 1987, at 1.

45. CSBSY '85, *supra* note 2, at 12.

46. *Id.*

47. *Number of National Standards Adopted in China Surpasses 9000, supra* note 2.

48. *China to Improve Quality Standards*, China Daily, Apr. 15, 1987, at 1, col. 1. The article states that the National Bureau of Standards plans to adopt more than 4000 international quality standards by 1990.

49. *Id.*

50. MODERN STANDARDIZATION, *supra* note 15, at 65.

51. Standardization Regulations, *supra* note 1, art. 2.

input on proposed standards in the U.S.,[52] there are nevertheless several points during the Chinese formulation and adoption process at which domestic and foreign opinions may be represented.

A. Factors Considered in Formulating Standards

According to the Standardization Regulations, the factors which must be considered when formulating standards include such seemingly obvious variables as "the requirements of practical use."[53] More concretely, standards are to be formulated with an eye toward enhancing the interchangeability of spare parts, assembly parts, components, instruments and similar items. This interchangeability factor is specifically extended to make civilian standards compatible with military needs; in the words of the Standardization Regulations, "attention should also be paid to applying these standards in both military and civilian use."[54]

In addition to interchangeability, another major factor to be taken into account in formulating standards is gradation according to quality.[55] Thus, within a given standard, there may be latitude for varying degrees of quality, as long as they are reflected in the standard. Products may receive special certifications to sell for a higher price than is normally allowed for similar products if their quality is certified as being higher than the general standard. Enterprises are supposed to be able to use "high-quality markings" on their products if they receive certifications from product quality supervision and inspection organizations, general acknowledgment from the relevant department and approval from the responsible higher authority.

B. Types of Standards

The Standardization Regulations provide for three types of standards: (1) State Standards (*Guojia Biaozhun*), (2) Ministry Standards (*Bu Biaozhun*), and (3) Enterprise Standards (*Qiye Biaozhun*). There is also the "Basic Standard" (*Jichu Biaozhun*) which is not mentioned specifically by the Standardization Regulations, but which usually relates to fundamental references used in other standards.[56] Ministry Standards become "Specialized Standards" (*Zhuanye Biaozhun*)[57] after they have passed through a period of transition and have

52. Adminis. Proced. Act, 5 U.S.C. § 552 (West 1982).

53. Standardization Regulations, *supra* note 1, art. 3.

54. *Id.* art. 4.

55. *Id.* art. 5.

56. GB 3935.1-83, § 1.2.7, Fundamental Terms of Standardization (1), STANDARDIZATION DOCUMENTS, *supra* note 6, at 618.

57. *Zhuanye Biaozhun* is sometimes translated as "Professional Standard." For pur-

attained general acceptance.[58] Specialized Standards are intended to be applied uniformly on a national basis, but only within the domain of the specialization or ministry which formulated them.[59] In cases where Ministry and Enterprise Standards conflict with State Standards, the latter control.[60] Where Ministry and Enterprise Standards conflict, the language of the regulations is less explicit, and seems merely precatory when it says that "Enterprise Standards should not conflict with the Ministry Standards (Specialized Standards)."[61] At least one authority has commented that Ministry Standards are "generally" superior to Enterprise or "local" Standards, although this commentator believed that the hierarchy of standards was legally flexible so long as the "spirit" of the Standardization Regulations was upheld.[62] Therefore, while National Standards are clearly superior to Ministry and Enterprise Standards, it is not clear that Ministry Standards must always control where an Enterprise Standard might differ.

State Standards, as opposed to Ministry or Enterprise Standards, are used with regard to items with a peculiarly national significance. For example, State Standards are intended to apply to basic raw materials, industrial and agricultural products which are produced on a mass scale or which "affect the livelihood of the broad masses."[63] State Standards are also intended to apply to general environmental, health and safety matters. State Standards are also appropriate for use with items which do not affect a large number of people, but which have a disproportionate impact on the economy by virtue of their use in communications or production processes.[64] For example, the standard for Computer Information Interchange mentioned above was made subject to standardization at the State Standards level under this provision.[65]

Product quality standards have been further subdivided into three categories: (1) international advanced standards (*guoji xianjin shuiping*), (2) international general level standards (*guoji yiban shuiping*), and (3) domestic advanced level standards (*guonei xianjin shuip-*

poses of this paper, the standard translation prescribed by GB 3935.1-83, Fundamental Terms of Standardization (1) will be used. *Id. Cf.* Standardization Regulations, *supra* note 1, art. 14.

58. Standardization Regulations, *supra* note 1, art. 11.

59. STANDARDIZATION DOCUMENTS, *supra* note 6, at 618.

60. Standardization Regulations, *supra* note 1, art. 11.

61. *Id.*

62. Yu Guosu, *Zenyang Queding Chanpin de Jishu Biaozhun?* (How Does One Ascertain the Technological Standard for Products?), ZHONGGUO FAZHI BAO (Chinese Legal Gazette), Mar. 27, 1987, at 3, col. 4.

63. Standardization Regulations, *supra* note 1, art. 12.

64. *Id.*

65. Zhong Ming Press Conference, *supra* note 11.

ing). Furthermore, products are now categorized into three levels: "superior level products" (*youjipin*), "first level products" (*yijipin*), and "qualified products" (*hegepin*).[66] This new subdivision in the standardization categories appears to be intended primarily to allow for the gradual adoption of international standards directly into China's growing body of domestic standards.

C. *Methods of Adopting Standards*

State Standards may be proposed by departments immediately concerned with the subject area as well as by the Bureau of Standards. They may also be proposed by individuals or work units.[67] State Standards should be proposed to the State General Standardization Bureau unless they are within the purview of the State Capital Construction Commission, the Ministry of Public Health, or the various ministries and departments concerned with military industries. Standards which are of "particular importance" should be referred to the State Council for its examination and approval as well.[68]

Standards may be adopted from other countries or international organizations, though the Standardization Regulations do not specifically provide so. In illustration, China purchased a full set of U.S. military standards and specifications from the U.S. Department of Defense for US$40,000. According to the Deputy Director of the State Bureau of Standards, the deal reportedly included standards and specifications for 43,000 items, and committed the U.S. to provide annual revisions and supplements. The number of standards included in this program included 55,113 articles as of November 1984.[69] China is also a member of the International Standardization Organization and the International Electrotechnical Commission, each of which maintains materials on national and international standards, some of which China has adopted.[70]

Ministry Standards and Enterprise Standards are the responsibility of specialized departments and are presumably supposed to relate to subjects within their particular competence. Ministry Standards,

66. *Number of National Standards Adopted in China Surpasses 9000, supra* note 2.

67. Standardization Regulations, *supra* note 1, art. 16.

68. *Id.* art. 13.

69. Zhong Ming, *Zai ISO, IEC Guonei Jishu Guikou Danwei Gongzuo Huiyi Shangde Gongzuo Baogao* (Working Report of the Conference of Domestic Corresponding Units of the ISO and IEC), in STANDARDIZATION DOCUMENTS, *supra* note 6, at 325.

For an example of the U.S. practice with regard to international standardization cooperation in the military sphere, see STAFF OF INVESTIGATIONS SUBCOMM. OF HOUSE COMM. ON ARMED SERVICES, 99TH CONG., 1ST SESS., REPORT ON DEFENSE CATALOGING AND STANDARDIZATION ACT OF 1952 5, 10 (Comm. Print 1985).

70. *See* Zhong Ming, *supra* note 69, at 323, 325-26.

when they have gone through the undefined "period of transition" mentioned in Article 11, become Specialized Standards and are applicable to an entire specialty or profession on a national basis.[71] All the promulgating agency normally needs to do is report its formulation and promulgation of a standard to the State General Standardization Bureau for the record.[72] Separate measures have been promulgated with regard to the specific procedures for the administration of Specialized Standards.[73]

Enterprises are allowed to make enterprise standards which are higher or more rigorous than state standards or ministerial-level standards. The methods for adopting Enterprise Standards are not stipulated in the Standardization Regulations.[74] Enterprise Standards adoption procedures went through a period of "rectification" in 1982 after Premier Zhao Ziyang and the State Council called for devolution of greater standards-making powers to the enterprise level.[75] Nevertheless, some scholars still feel that the procedures used for insuring that Enterprise Standards conform to national standardization parameters are too burdensome and call for simplification.[76]

According to the Standardization Regulations, review of standards must take place once every three-to-five years "so that each standard can be positively evaluated for revision or abolition."[77] It does not appear that in the absence of the statutorily required re-examination, a standard which was promulgated more than five years ago will automatically lapse, although re-examination may be a factor which is taken into account in evaluating the appropriateness of sanctions under Article 27 in cases of nonconformance. In all, because the Standardization Regulations contain so many vague provisions, only some of which are clarified by other measures, there is much room for further examination of the processes by which standards are adopted and revised.

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71. Standardization Regulations, *supra* note 1, arts. 11, 14.

72. *Id.* art. 14.

73. *See Zhuanye Biaozhun Guanli Banfa* (Methods of Administration for Specialized Standards (Trial)), in STANDARDIZATION DOCUMENTS, *supra* note 6, at 469.

74. Standardization Regulations, *supra* note 1, art. 15. To date, regulations governing formulation and promulgation of enterprise standards have not been made public.

75. *See Guanyu Qiye Biaozhunhua Gongzuo Zhengdun Qingkuang he Jinhou Yijian Baogao* (Report Concerning Rectification Work for Enterprise Standardization and Opinions for the Future), STANDARDIZATION DOCUMENTS, *supra* note 6, at 388.

76. *See, e.g.*, Yan Shuchun, *Qiye Biaozhun de Shenpi Chengxu Ying Congjian* (The Examination and Approval Procedure for Enterprise Standards Should be Simplified), in ZHONGGUO BIAOZHUNHUA (China Standardization) Nov. 5, 1986, at 24.

77. Standardization Regulations, *supra* note 1, art. 9.

III. IMPLEMENTATION AND ENFORCEMENT

A variety of means are used to implement and enforce standards formulated under the Standardization Regulations. Article 18 of the Standardization Regulations provides that once standards are approved and promulgated they become "technological laws and regulations."[78] As such, they may be enforced either directly by state inspection and supervision organizations, or indirectly by virtue of their incorporation in other laws, regulations and rules.

A. Direct Implementation and Enforcement

Direct administrative inspection and supervision is provided for in the Standardization Regulations. Article 25 provides that provinces, municipalities, and autonomous regions are to establish product quality supervision and inspection organizations in cities with concentrated industry, and that these organizations will be under the leadership of the standardization administration departments at the same levels.[79]

The broad range of responsibilities delegated to inspection and supervision organizations under the Standardization Regulations includes serving as arbitrators in cases of disputes over product quality, passing information on standard compliance to higher authorities and guiding local enterprises in product quality inspection work.[80] These organizations may conduct unscheduled inspections of production facilities or entrust other units to do so.[81] They also have the power to order certificates of quality to be withheld from enterprises which fail to measure up to quality standards, but when it comes to fines or criminal sanctions, they may merely recommend to higher authorities that sanctions be imposed.[82]

The Methods for the Administration of Product Quality Supervision and Inspection Stations (Trial)[83] (Trial Inspection Station Methods) fill in some of the gaps left by the Standardization Regulations, but on the whole they merely repeat the provisions outlined above. The inspection stations are empowered to establish their own rules

78. *Id.* art. 18.
79. *Id.* art. 25.
80. *Id.* art. 26.
81. *Id.* art. 27.
82. *Id.*
83. *Chanpin Zhiliang Jiandu Jianyan Zhan Guanli Banfa (Shixing)* (Methods of Administration of Product Quality Supervision and Inspection Stations (Trial)) (promulgated Aug. 5, 1983) [hereinafter Inspection Station Methods], in STANDARDIZATION DOCUMENTS, *supra* note 6, at 432.

and regulations within their statutory competence.[84] The inspection stations are responsible for granting and renewing "superior quality product" certifications which allow products to sell for a higher price, but they must award such certificates in accordance with the "unified plan."[85] This provision is intended to insure that similar standards are applied throughout China to determine what constitutes a "superior quality product." The inspection stations are also responsible for acting as standards resource centers at the local level by providing references for enterprises which want to grade their products.[86] The Inspection Station Methods have still not been fully implemented, although by their terms the inspection stations were contemplated as the "front line" of China's standardization program. Since 1981, over one hundred quality inspection stations have been established, but as of late 1987 only twenty-two of those had received operational certificates from the State Economic Commission and the National Bureau of Standards.[87] It is not clear what powers the inspection stations have in the absence of such certification, but it is certain that the task which lies before them is a large one.

The Standardization Regulations require all new products to pass standardization examinations. Article 22 stipulates that the designing assignment papers and design documents for new products must be submitted to a standardization administration department, such as the inspection and supervision stations described above. This department must give its approval before serialized production of a new product may begin. Under Article 28, a certificate of quality is also required before new products may be granted a trademark.[88] The huge increase in the number of products entering the Chinese market over the last few years makes it seem questionable whether this requirement could possibly have been met in every case.[89]

Under the Standardization Regulations, nonconformance which results in "undesirable consequences" will be "criticized, punished, or subjected to economic sanctions." The Standardization Regulations allow for flexible deferments to its conformance requirements, although these require special petitions to the department which origi-

84. *Id.* art. 6, § 4; art. 17.

85. *Id.* art. 15, § 2.

86. *Id.* art. 15, § 3.

87. *National Quality Inspection Centers to Open*, Xinhua Domestic Service, Oct. 19, 1987 (FBIS trans. Oct. 19, 1987, at K20).

88. Standardization Regulations, *supra* note 1, art. 28.

89. RMRB (HB), Feb. 10, 1987, at 1. The report said that several thousand new consumer products appeared on the market in China in 1986, but it made no mention of whether these products had obtained the certifications required by the Standardization Regulations.

nally issued the standards for approval.[90] Manufacturers of substandard products are also subject to having their wares displayed at "Shoddy Product Exhibitions." One such exhibition, planned by the Ministry of Light Industry for December 1987, and later cancelled due to industry pressures, was scheduled to include substandard household appliances produced by both Chinese and Chinese-foreign joint venture enterprises.[91] According to the Deputy Director of the Ministry's Quality Supervision and Control Committee, Mr. Gong Zhaorong, the exhibition was designed to "create social pressure on enterprises which turn out poor-quality products, and help leaders at all levels to better understand the gravity of the problem of product quality."[92]

A harsher response to nonconformance is to order production to stop. In July 1987 some thirty-three categories of products ceased production by order of the Certification Office of the State Economic Commission. The office granted authority to inspection and supervision stations "at every level" to stop uncertified production (i.e., goods which were never certified as up to standard, or which are later decertified for being found substandard or for other reasons). According to one representative of the State Economic Commission special office, the certification and decertification procedure will be used to enable the State to exert "indirect control" over the scale of production, and thereby to determine which enterprises should continue to produce.[93]

B. Indirect Implementation by Incorporation

The incorporation of standards by reference in other laws is probably the most significant means of implementing standards.[94] One method of indirect implementation and enforcement is by incorporation in quota requirements for state enterprises. Standards may be used to determine whether the output of an enterprise suffices to

90. Standardization Regulations, *supra* note 1, art. 18.

91. *Storm Over Ban on Shoddy Show*, China Daily, Dec. 14, 1987, at 1, col. 3.

92. *Exhibit of Shoddy Products Shakes Producers*, Xinhua Overseas Service, Aug. 20, 1987 (FBIS trans. Aug. 20, 1987, at K7).

93. Wang Yanping, *Quality Checks Improve Production Methods*, China Daily (Business Weekly), July 6, 1987, at 1, col. 2.

94. The statutes which incorporate standards by reference are far too numerous to list here, but for the sake of illustration, they include such statutes as: The Environmental Protection Law of the PRC, arts. 18, 19, 20, 23, 26 (1979); Regulations of the PRC Controlling the Prevention of Pollution of Sea Areas by Vessels, art. 19 (1983) (regarding standards governing discharge of pollutants from vessels); Law of the PRC on Mineral Resources, art. 26 (1986) (requires proof of conformance with relevant standards as a prerequisite for obtaining mining license); The Industrial Product Quality Liability Regulations (1986), and various import licensing regulations which are discussed *infra*.

meet its obligations under the State Plan. Article 20 provides that certifications of quality should be issued by the departments to which the raw materials or other goods are provided, and that these certificates constitute the basis for evaluation of quota fulfillment.[95]

The inspection and supervision stations are responsible for supplying quantitative data and testing facilities to assist in such evaluations.[96] Similarly, the products of a joint venture enterprise qualify for import substitution status only if they conform to the relevant quality standards.[97] Moreover, standards provide the touchstone for liability in civil disputes, and they may be invoked to assess the suitability and degree of criminal or administrative sanctions. They may also determine the availability of import or export licenses. To illustrate the administration of standards, it is useful to focus on the role of standards in two fields: product liability and import licensing.

1. Product Liability

The number of product liability disputes that are brought to courts in China involving domestic entities has increased over the past decade.[98] This trend will no doubt continue because the cause of action for product liability disputes has been formalized in the General Principles of Civil Law (Civil Law), and in the Industrial Product Liability Regulations (Product Liability Regulations),[99] both of which were promulgated by the State Council in April 1986. Standards play a determinative role in product liability cases in China and their use in this context illustrates the importance placed on them by Chinese planners.

The Civil Law imposes liability for injuries caused by substandard products regardless of negligence or fault. This principle of strict liability for substandard products is contained in Article 122 of the Civil Law, which states that "[w]hen products of substandard quality cause personal injury or damage to property, the manufac-

95. Standardization Regulations, *supra* note 1, art. 20.

96. Inspection Station Methods, *supra* note 83, art. 6, § 1; art. 16, §§ 1, 3.

97. Guanyu Zhongwai Hezi Jingying Qiye Chanpin Yichandingjin Banfa (Import Substitution Measures for Chinese-Foreign Equity and Contractual Joint Ventures) art. 3, § 3, *reprinted in* RMRB (HB), Oct. 31, 1987, at 3, col. 1. For elaboration, see *He Chunlin Details Advanced Tech and Import Substitution Application Procedure*, China Market Intelligence, Oct. 1987, at 2.

98. *See generally*, X. ZHANG & Y. JIA, JINGJIFA ANLI XIJIE (Analysis of Cases on Economic Law) (1986).

99. Gongye Chanpin Zhiliang Zeren Tiaoli (Industrial Product Quality Liability Regulations) (promulgated Apr. 5, 1986, effective July 1, 1986) [hereinafter Product Liability Regulations] *reprinted in* ZHONGGUO FAZHI BAO (China Legal Gazette), Apr. 14, 1986, at 2.

turer or seller shall bear civil responsibility according to law."[100] From the Chinese wording of Article 122, it appears that a party incurs liability only if the injury is caused by the fact that the product is substandard, and would therefore not be strictly liable for injuries caused by the product which did not occur because of its substandard nature. According to Article 117, a party responsible for injuries caused by a substandard product is liable for damages in the amount of the actual value of the property lost and for compensation to the injured party for "other aggravated damage it may suffer therefrom."[101]

At least one commentator has proposed that damages under these provisions would be as extensive as in the tort law of many U.S. states, and that such damages would include not only compensation for medical expenses, loss of earnings, and contribution to dependents,[102] but also consequential damages.[103] By the same token, however, if a product is shown to meet the standard, then presumably under the Civil Law there would be no strict liability. In U.S. state tort law, by way of comparison, the cause of action for negligence is much broader and complying with standards formulated by the National Bureau of Standards or other governmental agencies does not play a large role in determining whether or not there should be liability,[104] though in some cases it may constitute evidence for a jury to consider in determining the standard of care that the defendant should have followed in a negligence suit.[105]

100. General Principles of Civil Law of the People's Republic of China, art. 122 (adopted Apr. 12, 1986, effective Jan. 1, 1987) (trans. in 34 AM. J. COMP. L. 715 (1986)) [hereinafter Civil Law].

101. *Id.* art. 117, §§ 1, 3.

102. *Id.* art. 119.

103. Jones, *The New General Rules: A Realistic Perspective on Chinese Civil Law*, E. ASIAN EXEC. REP., Sept. 1986, at 12. In support of his conclusion, Mr. Jones cites a Chinese treatise which states that "[c]omplete compensation includes both direct and indirect losses. The one causing the injury must make compensation for the reduction [in value] of the property. This is a direct loss. He must also make compensation for benefits that could actually have been obtained under normal circumstances. This is an indirect loss." *Gao Deng Xuexiao Faxue Shiyong Jiaocai* (Higher Education Experimental Teaching Materials for Law) in MINFA YUANLI (Principles of Civil Law) 232 (1983).

104. *See, e.g.*, Sandra Leblanc Simon, *et. al.* v. Southwest Louisiana Electric Membership Corporation, *et. al.*, 390 So.2d 1265, 1268 (La. 1980) (compliance with National Bureau of Standards' Safety Rules for the Installation and Maintenance of Electrical Transmission Lines held not to relieve party from negligence where additional safety precautions were warranted).

105. Alabama Power Co. v. Marine Builders, Inc., 475 So. 2d 168, 177 (Ala. 1985). In some situations, U.S. national standards may even be inadmissible as evidence in U.S. state court tort suits. *See, e.g.*, Meadows v. Coca-Cola Bottling, Inc., 392 So.2d 825, 827 (Ala. 1981) (standards only admissible if introduced by someone whom the court deems an expert witness). Of course, U.S. tort law generally imposes strict liability where products are found to be defective, but the role that standards play in determining whether a product is defective is

The Product Liability Regulations offer more specific provisions than the Civil Law with regard to product liability cases involving domestic persons or entities (including joint ventures) who manufacture or distribute industrial products. Although they are primarily drafted with a view to the problems created by delivery of substandard goods in fulfillment of intra-industry contracts, they also contain provisions which in American law would be in the domain of torts. At the same time, much of the structure and detail of the Product Liability Regulations resembles the U.S. Consumer Product Safety Act.[106]

The scope of China's Product Liability Regulations includes not only industrial products such as machinery and equipment, but also raw materials, component and spare parts, packaging and finished consumer products.[107] Article 11 of the Product Liability Regulations repeats the rule of the Civil Law, stipulating that if substandard products cause injury the manufacturer is liable.[108] The forms of liability of a manufacturer of a substandard product include prompt replacement or repair, exchange of the substandard product for a full refund, providing parts and technical services support to the maintenance or sales enterprises which sell the products and compensation for actual economic losses.[109]

Under the Product Liability Regulations, the liability of those who store or transport substandard products appears to be limited to injuries arising out of their activities, and does not appear to include liability for injuries caused by substandard products.[110] This conclusion is supported by the assertion of one Chinese authority that the

minimal by the comparison to the role they play under China's statutes. *See* Restatement (Second) of Torts, § 420A (1977), and Reporter's Notes.

Moves in the U.S. have been made to have Congress limit the potential liability of manufacturers where national standards are met by eliminating the availability of punitive damages in such cases, but even these have failed so far. *See, e.g.*, the Product Liability Reform Act of 1986, title III, Section 303(c) of which included a "government standards" defense against punitive damages that would have barred an award of punitive damages for injuries caused by a drug that received pre-marketing approval from the Food and Drug Administration or by an aircraft-related product certified by the Federal Aviation Administration. S.2760, Cal. No. 856, 99th Cong., 2d Sess., Rpt. No. 99-422, CONG. Q., June 28, 1986, at 1512.

In comparison, the Chinese Civil Code at least appears to offer a safe harbor for those who conform to the appropriate standards. The comparative irrelevance of U.S. federal standards in this context is partly due to the fact that tort and contract product liabilities are traditionally a matter of state law, but it also derives from a deep-rooted skepticism in the U.S. about mandatory standards in general.

106. 15 U.S.C.A. § 2051 (West Supp. 1987).

107. Product Liability Regulations, *supra* note 99, art. 9, §§ 1-7.

108. *Id.* art. 11.

109. *Id.* art. 11, §§ 1-5.

110. *Id.* art. 13.

producer must guarantee or indemnify distributors and users for injuries caused by substandard products.[111] Substandard packaging would also seem to give rise to liability under Article 9, § 5, although the Product Liability Regulations do not stipulate whether such liability could exceed the amount of damages incurred to the products as a result of the inadequate packaging.[112]

Chapter Seven of the Product Liability Regulations provides for a full range of administrative sanctions for those producing or marketing substandard products, including fines and confiscations,[113] and even criminal penalties in cases where serious physical injury or death are caused by substandard products.[114]

China's emphasis on the role of standards as the touchstone for liability in product liability cases under the Civil Law and the Product Liability Regulations resembles the Soviet model more closely than it resembles the American system. In the tort context, Soviet law also provides for liability where injuries result from substandard products. Liability under Soviet law, however, does not seem as strict as under the Chinese provisions mentioned above. In the Soviet scheme, for example, a defective product is evidence of a sort of negligence *per se* which the defendant can overcome only by a showing of due care.[115] In Soviet contract disputes, a manufacturer's failure to conform with state standards may give rise to civil liability under the Civil Code of the Russian Soviet Federated Socialist Republic, Sections 261 and 266. The forms of liability under the Soviet civil codes range from a buyer's right of rejection, damages, and criminal penalties in severe cases,[116] and both the Chinese and the Soviet provisions place a much greater emphasis on specific performance as a remedy than American common law courts.[117] Perhaps this similarity is due to a common desire to promote product quality and meet state quotas without encouraging excessive civil litigation. Regardless, it is significant that in both China and the Soviet Union, state enterprises are not protected by virtue of sovereign immunity when their products fail to meet state standards.

111. Zhai Guangchen, *Dui Chanpin Zhiliang Bu Hege de Qiye Zhenggai Tihui* (The Experience of Rectification and Reform of Enterprises Whose Products' Quality Does Not Meet Specifications), ZHONGGUO BIAOZHUNHUA, *supra* note 76, at 2, 3.

112. Product Liability Regulations, *supra* note 99, art. 9, § 5.

113. *Id.* arts. 23-25.

114. *Id.* arts. 25-26.

115. Darby, *Products Liability in the Soviet Union*, 11 INT'L LAWYER 184-85 (1977).

116. *Id.* at 186-87.

117. For a discussion of the Soviet provisions, see *id.* at 187.

2. Import Licensing

Standards are only beginning to play a major role in China's strategy for maintaining a favorable balance of trade. Licenses are required for all products being imported into or exported out of China, and to obtain a license a product must conform with the relevant standard. Over the last thirty years, licensing standards for imports were generally designed to prevent the sale of hazardous or otherwise undesirable goods on the Chinese market and to insure that technology imported was suitable for China's needs. Recently, there has been a growing awareness in China of the use of standards as a form of "non-tariff barrier" in other countries.[118] Consequently, there is an increasing danger that standards will be used as a means of protecting Chinese products from competition by foreign imports on the domestic market. At the same time, China's desire to augment its balance of trade with greater exports has lead to a concerted effort to raise product quality through the administrative assimilation of internationally acceptable standards designed to make its products more competitive on foreign markets.

The Standardization Regulations apply to imports. Article 24 stipulates that imported equipment and technology must undergo standards examinations prior to being approved for sale in China. Standardization of imports is designed at least in part to insure compatibility of imports with China's existing technological infrastructure in order to minimize the economy's dependence on foreign suppliers.[119] More specifically, the Director of the State Bureau of Standards has stipulated that imported technology and equipment must conform to the international measurement system used in China, and that items using the British measurement system may not be imported. The Director also said that the standards of electricity requirements for imports, such as voltage and frequency, must conform to China's standards.[120] In an official 1984 report to the State Economic Commission, the State Bureau of Standards stressed that financial losses had ensued where state foreign trade organizations had not allowed standardization inspection and supervision organizations to prohibit foreign goods from entering China even though they

118. *See* Ye Bailin, *supra* note 14.

119. *Biaozhunhua Shi Jishu Yinjin he Shibei Jinkou Gongzuo de Yige Zhongyao Zucheng Bufen* (Standardization is an Important Component of Technology Transfer and Equipment Import) (interview with Cheng Zhuanhui, Director of the National Bureau of Standards), in GUOJI MAOYI (*International Trade*) July 1984, *reprinted in* STANDARDIZATION DOCUMENTS, *supra* note 6, at 482-83 [hereinafter Cheng Zhuanhui].

120. *Id.* at 484.

did not meet Chinese standards.[121]

Standards promulgated by the State Bureau of Standards under the Standardization Regulations are not always exclusive in the import context. All imports and exports to or from China are subject to inspection by the State Administration of Import and Export Commodities Inspection (SAIECI).[122] With regard to imports, the Regulations of the PRC on the Inspection of Import and Export Commodities (Import-Export Inspection Regulations) stipulate that such inspection should be made according to the standards specified in the contract, but in cases where no such standards are specified, the SAIECI may refer to "relevant standards and provisions."[123] The Import-Export Inspection Regulations stipulate that export commodities, on the other hand, must conform with PRC standards.[124] Thus, it appears from the Import-Export Inspection Regulations that whereas import contracts may vary a standard by their terms, export contracts are held more strictly to the Chinese standard.

It is sometimes difficult to determine whether a standard cited in a contract that varies from the Chinese standard is lower than the Chinese standard or just different from it. In some cases, being different might be enough to make the standard inappropriate. For example, an import contract standard for a dot matrix format used in an information interface software system may be as technically sophisticated as the Chinese standard, but it may nevertheless be unwelcome in China because the purpose of standardization of China's dot matrix format for information interface software is to insure compatibility, not just to achieve a certain level of technical sophistication. In such a case, it may be during the internal administrative approval process that approval for the import contract is withheld. Alternatively, nonconformance may be spotted by pre-shipment inspection by PRC

121. *Guanyu Woguo Jinchukou Maoyi he Jishu Yinjin Gongzuo zhong Cunzai de Biaozhunhua Wenti* (Standardization Problems in China's Import-Export and Technology Transfer Work), STANDARDIZATION DOCUMENTS, *supra* note 6, at 402.

122. Zhonghua Renmin Gongheguo Jinchukou Shangpin Jianyan Tiaoli (Regulations on the Inspection of Import and Export Commodities of the People's Republic of China) arts. 2, 3 (promulgated Jan. 28, 1984) [hereinafter Import-Export Inspection Regulations], ZHONGHUA RENMIN GONGHEGUO GUOWUYUAN GONGBAO (State Council Gazette) [hereinafter State Council Gazette] 67 (1984).

123. *Id.* art. 2. *See* Zhonghua Renmin Gongheguo Jinchukou Shangpin Jianyan Tiaoli Shishi Xize (Detailed Rules for the Implementation of the Regulations on the Inspection of Import and Export Commodities of the PRC) art. 14 (promulgated June 1, 1984) [hereinafter Implementation Rules for Import-Export Inspection Regulations], State Council Gazette 741 (1984).

124. *Id.* arts. 11, 12. *See* Implementation Rules for Import-Export Inspection Regulations, *supra* note 123, art. 21. These standards may include international standards as stipulated in the General Agreement on Tariffs and Trade's "Standards Rules." Cheng Zhuanhui, *supra* note 119, at 483.

authorized inspectors. At least one province, Fujian, has already made such pre-shipment inspections mandatory, leading to increased costs and allegations of junketing by inspection officials.[125] If the problem is not raised before importation, however, the parties may encounter problems if the product's failure to conform with the Chinese standard is discovered later. Although the recently promulgated Provisions for the Supervision and Control over the Quality of Import Commodities (Import Inspection Provisions)[126] have begun to clarify some of the confusion concerning which commodities are subject to inspection and which inspection organs have jurisdiction to inspect them, the new Import Inspection Provisions do not stipulate which standards should be applied or when State Standards are mandatory.[127]

If an enterprise with foreign investment is certified as an "export-oriented enterprise" under the Provisions of the State Council for the Encouragement of Foreign Investment, it has more leeway to vary the standards of products used exclusively for the enterprise in China. According to rules promulgated by the Ministry of Foreign Economic Relations and Trade (MOFERT) in January 1987, the imports of export-oriented enterprises which are for their sole use will be examined by customs "only in accordance with documents and contracts approved for the establishment of the enterprises."[128] Thus, if alternative standards are approved when the enterprise is established, then imports along those lines would appear to raise no problems under the MOFERT rules.

C. *Tension Between Differing Purposes of Standardization*

The use of standards in the field of product liability reflects a

125. *What to Expect from New Import Inspection Rules*, Business China, Oct. 26, 1987, at 155.

126. Provisions for Supervision and Control over the Quality of Import Commodities (China Daily trans. Oct. 5, 1987) [hereinafter Import Inspection Provisions]. For a discussion of the serious problems that have arisen with regard to standard inspection in the import context, see *What to Expect from New Import Inspection Rules*, *supra* note 124, at 153.

127. Under the provisions, the Chinese government imposes a mandatory "import quality license system" on certain imports affecting the public interest. The SAIECI, together with other agencies, is responsible for promulgating a catalog of such imports. If the proposed imports are listed in this catalog, they are subject to the above system; and Chinese safety laws, which may include some State Standards, apply. *See* Import Inspection Provisions, *supra* note 126, art. 6.

128. *See* Duiwai Jingji Maoyibu Guanyu Waishang Touzi Qiye Shenling Jinchukou Xukezheng de Shishi Banfa (MOFERT Rules for Foreign Investment Enterprises to Apply for Import and Export License) art. 4 (promulgated Jan. 24, 1987), State Council Gazette 119 (1987). *See also* Guowuyuan Guanyu Guli Waishang Touzi de Guiding (Provisions of the State Council of the People's Republic of China for the Encouragement of Foreign Investment) art. 13 (promulgated Oct. 11, 1986), State Council Gazette 757 (1986).

policy which is in conflict with the purpose of standards in the import context. In the former area, standards are intended to promote quality while reducing litigation by making the bases of liability more straightforward. Achieving this goal depends on formulating standards that are very basic in their requirements and specifications. In the import context, on the other hand, the goal appears to be to formulate sophisticated standards in order to control more effectively the kinds of goods which enter China. The problem arises in holding Chinese enterprises to the more sophisticated foreign or international standards used in the import context unless necessary to encourage exports. This may be the reason for the recent product quality subdivisions announced at the 1986 China Standardization Association Conference.[129] By dividing product quality standards into three new categories (international advanced standards [*guoji xianjin shuiping*], international general level standards [*guoji yiban shuiping*], and domestic advanced level standards [*guonei xianjin shuiping*]), the Bureau of Standards may have intended to be able to hold export products to higher standards than products made and sold domestically. But the new categories also make it possible to hold foreign imported products to a higher standard than domestically produced items. At a time when China is seeking admission to the General Agreement on Tariffs and Trade (GATT), such discrimination might become awkward under the provisions of the Agreement on Technical Barriers to Trade.[130] The resolution of this tension between two differing purposes of standardization illustrates the trend toward increasing complexity that characterizes China's standardization administrative system.

IV. RESOLUTION OF STANDARD DISPUTES

There are three general approaches to handling disputes over standards. The first approach is to assist in the formulation of the standard itself and thereby prevent problems that arise from the imposition of a standard that might be inappropriate, unreasonable or

129. *Number of National Standards Adopted in China Surpasses 9000, supra* note 2.

130. General Agreement on Tariffs and Trade (GATT), *Basic Instruments and Selected Documents, 26th Supp.* 8 (1980).

As of October 1984, thirty-three countries had accepted the Agreement on Technical Barriers to Trade, and another twenty-three had observer status to the Committee on Technical Barriers to Trade. The terms of the Agreement are somewhat vague, allowing for developing country exceptions which may apply to China. GATT, *Basic Instruments and Selected Documents, 31st Supp.* 236 (1985).

The PRC formally submitted its request to "resume its status as a contracting party" to GATT early in 1987. China Daily, Oct. 24, 1987, at 2. The Guomindang government had signed the agreement in October 1947.

ill-defined. The second approach is to negotiate a deferment, waiver or special certification with the standardization authorities. The third approach is to try to litigate the interpretation, application or even the fundamental fairness of a standard.

With respect to the preventive approach, Chinese and foreign parties can influence the formulation of standards by offering their advice directly to the units formulating the standard or indirectly through international standardization organizations such as the International Standardization Organization (ISO) or the International Electrotechnical Commission (IEC).[131] The National Standards Institute drafts or reports proposed national standards to its superior organ, the State Bureau of Standards, which examines, approves and promulgates them, but both bodies may accept standards proposed by individual units or ministries to which Chinese or foreign parties may offer their suggestions. In the technology transfer context, for example, it might often be wise for a foreign party to supply information about changes in Chinese standards that would make its product more amenable to China's technological infrastructure. Technical documentation for standardization proposals may be submitted directly to the State Bureau of Standards or indirectly through the China Standards Reporting Network (CSRN).[132]

With respect to the second method, both the Standardization Regulations and the Product Liability Regulations provide for cooperative means for resolving standards disputes in cases of non-conformance. Arbitration may be conducted by the product quality supervision and inspection organizations under the Standardization Regulations "when there are disputes between production and marketing units on product quality."[133] The Standardization Regulations provide that "[w]hen it becomes difficult to follow standards, it is necessary to explain the reasons, and a report proposing a time limit for deferment and measures for implementing the standards should be submitted . . . to the department that has issued the standards for approval."[134] Similarly, under the Product Liability Regulations, departments in charge of enterprises responsible for producing sub-

131. For an introduction to the resources of the International Standardization Organization which China draws on in formulating standards, see *ISO "KWIC Suoyin" zhong 22 ge Guoji Zuzhi Jianjie* (Introduction to the Twenty-two International Organizations in the ISO "KWIC System"), STANDARDIZATION DOCUMENTS, supra note 6, at 702.

132. *See* Zhonguo Biaozhun Qingbaowang Zhangcheng (Shixing) (Charter of the China Standards Reporting Network (Trial)), arts. 4, 6, STANDARDIZATION DOCUMENTS, supra note 6, at 188.

133. Standardization Regulations, *supra* note 1, art. 26.

134. *Id.* art. 18. Note that this provision also requires a report proposing a time limit "following examination and endorsement by a higher responsible department."

standard goods may grant those enterprises time to bring the quality of their goods up to standard.[135] The variety of sanctions which the responsible department or the supervisory organs may impose on the enterprise, as discussed above, would all seem to be subject to some degree of negotiation.

Litigation of administrative matters is on the rise in China.[136] The forum of first instance in a dispute over standards would normally be with the agency which examined and promulgated the standard, since it is charged with the standard's interpretation.[137] Such an agency may delegate this power of interpretation,[138] and in cases where the standard was formulated by an individual or unit, one might expect that individual or unit to have some say in the interpretation of the standard. In cases of dispute over whether an imported product conforms to the appropriate standard, the parties to the dispute are supposed to obtain a standards appraisal from a Chinese notary public of the SAIECI.[139]

Normally, standards disputes between parties in privity are to be resolved in accordance with the dispute resolution procedures stipulated in the contract between the parties under the Economic Contract Law[140] or the Foreign Economic Contract Law.[141] Where there is no contract, or where the contract does not stipulate procedures for dispute resolution, either party may apply to the relevant quality inspection organ for mediation or bring suit in a people's court.[142]

Special administrative affairs tribunals have been established in people's courts which may handle some types of standards disputes. If administrative sanctions are imposed for non-conformance with a standard, these tribunals would seem to be the appropriate forum for an appeal.[143] The Civil Procedure Code does not specifically provide for these tribunals; the tribunals seem to be a more recent creation of special regulations. There is normally a one-year statute of limita-

135. *See* Product Liability Regulations, *supra* note 99, chs. 1, 5, 7; *see also State Council Regulations on Product Quality*, Xinhua Domestic Service, Apr. 11, 1986, (FBIS trans. Apr. 14, 1986, at K27).

136. *See* Zhang Sutang, *People's Courts File Lawsuits Against Government*, Xinhua Domestic Service, Nov. 14, 1986 (FBIS trans. Nov. 20, 1986, at K10).

137. Standardization Regulations, *supra* note 1, art. 13.

138. *Id.* art. 17.

139. Implementation Rules for Import-Export Inspection Regulations, *supra* note 123, arts. 28-30.

140. Product Liability Regulations, *supra* note 99, art. 20.

141. Zhonghua Renmin Gongheguo Shewai Jingji Hetong Fa (Foreign Economic Contract Law of the People's Republic of China) (promulgated March 21, 1985) (trans. in China Laws for Foreign Business, ¶ 35-500 (CCH Australia Ltd. Ed.).

142. *Id.* art. 20.

143. *People's Courts File Lawsuits Against Government*, *supra* note 136.

tions for bringing a dispute to arbitration or trial, beginning from the time when the aggrieved party knew or should have known of the defect.[144]

Of the three approaches to standard dispute resolution noted above, it would obviously be preferable to be in a position to use the first approach. The second approach is less attractive than helping to formulate the standard in the first place, since it presumes at least an alleged violation, but it would usually be more attractive than litigating over a standard. Litigation of administrative matters is a relatively new practice in China, but it may be the only alternative in the many instances where the agency which is responsible for administering a standard is also the body charged with its interpretation.

CONCLUSION

The scope of the administrative law of standards in China is enormously broad, and the goals of the country's standardizers seem equally as ambitious. Yet nowhere in the Standardization Regulations or in the other standardization-related measures discussed above is there any mention of the notion that some standards might be voluntary, except where contracts stipulate standards higher than the official standards. In contrast with countries like the United States, which place great emphasis on formulation and implementation of standards through private trade associations, Chinese standardizers seem determined to standardize the country directly into achieving the "Four Modernizations" by means of mandatory centralized standardization. Such ambitions require huge resources, both in terms of funding and in terms of skilled personnel. Without such resources in an era of rapid technological innovation, outdated standards may not be revised quickly enough, new standards may go unformulated, good standards will go ignored, and the result could be technological stagnation.

Over the last decade, China has begun to unleash some of its people's tremendous talents by means of its economic and social reforms. The role of standardization in the process of change need not be stifling. Indeed, standards may be the catalyst for turning innovation into practical technology made available for widespread use. But the administrative law of standardization may develop differently depending on whether China retreats to primary reliance on a model of mandatory central planning or advances into greater use of indirect market-related macroeconomic controls for developing its economy. In either case, the administrative law of standardization

144. Product Liability Regulations, *supra* note 99, art. 22.

will become increasingly important as more standards are adopted and enforced, and it would behoove anyone interested in the development of the Chinese economy to form a clearer perception of the role standards will play in that development.

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