



Participating in China's Standards Regime

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Executive Summary

The ability to obtain information on product and technology standards and participate in the process through which standards are set is a central part of navigating any market. Because standards shape how products are designed, manufactured, packaged, sold, and used, company executives across an array of industries are paying more attention to standards development, particularly in important growth markets such as China.

PRC government officials have significantly increased standards-related activities in recent years and have attempted to build a modern system of standards and conformity assessment procedures. Foreign companies today note better transparency, greater access to the standards-setting process, and stronger links between China's standards-setting groups and international counterparts.

Many foreign companies, however, still confront significant barriers to participation in China's standards-setting system. In the US-China Business Council's (USCBC) 2010 member priorities survey, only one in five respondents involved in standards described their ability to participate in China's standards-setting activities as "good," with most reporting an "average" or "poor" capacity. Many companies do not know which groups may permit foreign participation in standards-setting, and such companies lack successful strategies for accessing the standards system.

To address these information gaps, USCBC in August 2009 interviewed nearly 30 standards experts and government affairs practitioners from member companies in China. The interviewees discussed a range of topics—such as the environment for companies that seek to participate in China's standards-setting system, the challenges they face, and the strategies they are using to overcome those challenges. This report is drawn from those interviews and provides information about the standards regime and best practices for participating in it.

As companies look to sell their goods and services in the international marketplace, they encounter standards—sets of rules that govern how products are developed, designed, produced, packaged, marketed, sold, and supported. Standards establish minimum thresholds that products must meet before entering the market. Companies that seek to enter new markets must understand existing and proposed

standards, as these standards provide the "ground rules" under which products enter the market and compete.

Though standards frameworks in many countries are well established, standards and their related regimes in other markets are still being developed. Such is the case for China, where standards systems have developed rapidly in recent years, with a

surge of new standards governing various products and services. Many companies in China have sought to understand these draft standards before they are finalized and actively shape their development. Companies that are able to influence standards may maximize their products' advantages while avoiding unnecessary or duplicative design, production, and compliance costs.

China's Standards Regime

Though the PRC Standardization Law dates back to 1989, China's surge in standards activity is more recent. In 2002, as part of the 10th Five-Year Plan (FYP, 2001-05), a group of PRC government agencies launched a multi-year research project to study and suggest specific improvements to modernize China's standards system. China announced the results of that study in 2005, setting goals to build a complete national technical standards regime on par with international systems, boost Chinese participation in regional and international standards-setting activities and groups, and increase the number of Chinese standards adopted by international standards-setting bodies. Though these results were never incorporated into further government regulations, they have guided the thinking of government officials.

Since the study's release, the PRC government has drafted and implemented many new standards in areas such as agriculture, energy and the environment, food safety, health, information technology (IT), and telecom. According to the latest figures available from the Standardization Administration of China (SAC), China had 23,843 national standards as of June 2009, more than 12,000 of which are under revision.

SAC, which was created underneath the Administration of Quality Supervision, Inspection, and Quarantine (AQSIQ) in 2001, is the main agency tasked with building and overseeing China's standards. SAC manages and supervises China's standards system and related activities and represents China in many notable international standards groups. SAC also designates other government agencies—including AQSIQ, the Ministry of Agriculture (MOA), and the Ministry of Industry and Information Technology (MIIT)—to manage standardization activities for certain

industries and represent China in specific international standards bodies.

China's current standards system evolved from an older state-planning regime in which standards were set by industry-specific government agencies to spur economic and industry development. Today's system—including its breakdown of types of standards—retains aspects of that regime, despite attempts to modernize and respond to China's rapidly developing market economy.

Currently, China maintains four types of standards that can affect companies and their products.

- **National standards** National standards, known as *guobiao* (GB), apply nationwide to products across industries. Such standards are drafted either by state-run technical committees or by similar groups under designated government agencies. Individual standards have the two-letter "GB" abbreviation, followed by a number and the year the standard is implemented. For example, GB 14887-2003 is a national standard for traffic signals and lights, originally approved and implemented in 2003.
- **Industry standards** Standards covering particular industries or sectors, known as *hangbiao*, are drafted by industry associations and standards-related organizations. These standards are identified by two-letter abbreviations, many of which reflect China's earlier state-planning regime. For example, "YD" is the abbreviation for many telecom products, because such standards were originally developed under the umbrella of the former Ministry of Post and Telecommunications (*youdian bu*).
- **Local standards** Provincial-level regulators oversee local standards, or *dibiao* (DB), which are generally drafted to cover standards "gaps" or to handle products specific to a particular province or city. Such gaps may include areas that lack national or industry standards but require safety, hygiene, or other restrictions (such as for local food or health products). Given their limited geographic scope, local standards are generally managed by local branches of AQSIQ. Such standards are enumerated with a "DB," followed by a province code. For example, a standard starting with "DB 44" refers to a local standard developed in Guangdong.

- **Enterprise standards** Companies have the option to develop and register individual company standards, known as *qibiao* (QB). These standards lay out additional technical requirements on top of national, industry, or local standards, and are used by companies to enforce standards internally or to demonstrate publicly the technological level or quality of their products.

National, industry, and local standards can be mandatory or voluntary, with voluntary standards adding a “/T” after the two-letter abbreviation at the beginning of the standard name.

Company Participation in Standards-Setting Groups

China’s standards are drafted and revised through formal and informal channels that vary based on the type of standards and industries involved. These channels can include government agencies, inter-agency committees, industry associations, ad hoc drafting groups, and even individual companies. Although companies can – and are – participating in standards drafting activities at multiple levels, limited company resources cause many companies to focus attention on national and industry standards, as these generally have the broadest impact on their products. As such, this report uses participation in national-level standards-setting activities to illustrate the progress and continued challenges for company participation.

As noted above, most national standards are drafted and revised through technical committees (TCs), which are responsible for setting priorities and work plans within their individual technical standards area and for drafting and revising those standards. SAC can also designate other agencies and organizations to oversee technical committee work. Many of these designees are PRC government agencies such as AQSIQ, MIIT, and the Ministry of Public Security, but others specialize in standards work. For example, the Chinese Electronics Standardization Institute – a research and policy group set up under the aegis of SAC, MIIT, the Ministry of Science and Technology, and the State Council Information Office – oversees committees in the electronics sector and plays a large role in setting the industry’s standards policy and direction.

As of April 2011, official SAC lists included roughly 500 technical committees, ranging from committees that deal with standards for product voltage, current, and frequency (TC 1), to standards for mobile laboratories (TC 509). Depending on the technical committee’s scope, activity, and membership, the committee may create formal and informal subgroups for more specialized standards areas. For example, TC 15, which handles plastics, includes eight active subcommittees (SC) on topics such as polyvinyl chloride resin products (SC 7), petrochemical plastic resin products (SC 1), and thermoset polymers (SC 11). Technical committees vary in terms of their staffing and arrangement, but most committees are headed by a standing secretariat led by a public-sector technical expert. Most committees feature about 20 additional members, including technical experts and company representatives.

Formal technical committee participation

The most direct way of participating in China’s standards-setting processes is by becoming a formal technical committee member, but obtaining membership is challenging. In USCBC’s 2010 member priorities survey, 35 percent of USCBC survey respondents tracking standards in China said that participation in technical committees remains one of their top concerns about China’s standards and conformity assessment system.

Some companies are not able to participate in these committees because of internal reasons: for example, they have limited human or financial resources available for standards activities. A company that designates one staff member to cover standards as a part of the employee’s overall portfolio may not have the time and energy to participate as a voting committee member. Other companies may be unable to participate because of existing rules that limit the number of technical committees in which any individual can participate. (According to the 2009 PRC Administrative Rules for National Technical Committees, individuals may not serve on more than three technical committees simultaneously.)

Companies that want and are able to participate in technical committees must confront the member selection process, which differs between committees. SAC attempted to standardize technical committee membership rules in 2008 with the release of draft Requirements for the Establishment of Technical Committees. But many stakeholders, particularly

foreign companies that would have been allowed to participate only as non-voting observers, resisted the changes. The final requirements, passed in January 2009, deleted those provisions, thus leaving decisionmaking on membership rules and processes to individual committees.

Since 2009, some companies have reported selection processes that allow individuals seeking technical committee membership to be openly considered based on evidence they provide to committee leadership. One member company, for example, cited a technical committee that asked all applicants to make a public presentation before the committee's leadership justifying why they should be invited to join the committee. At the conclusion of the presentations, the leadership voted and extended offers to several companies, including foreign enterprises.

How a committee's leadership evaluates potential members can vary, however. Factors that influence membership decisions can include the prospective company's operations, employees, and investment in China, participation by the company in overseas or international standards groups related to the committee's coverage area, and the company's overall experience with relevant technical areas. Most committees examine the technical expertise of potential members to evaluate what they can contribute to the committee's work. Technical contributions can include intelligence on new developments in the international standards-setting arena.

Despite some progress, other companies report consistent barriers to participation. In established technical committees and standardization groups with full membership, existing members often have no desire to reshuffle membership and admit new players, either domestic or foreign. Committee leaders thus never re-examine membership.

Existing technical committee policies or practices may lead companies to choose not to join even if the opportunity were available. For example, China's standards development process lacks clearly defined policies on treatment of intellectual property rights (IPR). This situation concerns many companies that fear participating in standards-setting activities could force them to disclose or contribute their IPR at low or zero-royalty rates.

In some cases, however, existing domestic players specifically exclude or limit foreign companies from participation in technical committees because they want to protect their market position or because of perceived national security concerns. National security issues have been a chief concern for IT companies in particular. Several important standards policy-making groups—such as those that deal with the encryption-related trusted computer modules (TCM) and multilevel protection system (MLPS) standards—have excluded foreign IT company participation, despite foreign companies' considerable technical expertise and interest in assisting committees. In other cases, committees have allowed foreign companies to participate but have limited them to observer status or partial involvement, in which companies may participate in discussions about certain standards areas only. For example, foreign companies in some technical committees have been allowed to observe some subcommittees and working-level discussions but have been barred from others.

Informal standards participation

Companies that are unable to participate as voting or observer members on technical committees have sought other means to participate in standards-setting. One means is to provide comments or feedback on draft standards and standards-related policies. PRC agencies have made considerable strides to increase transparency across the regulatory landscape, including standards, and companies have increasing opportunities to provide comments on draft standards to SAC directly, and through the World Trade Organization's Technical Barriers to Trade (WTO/TBT) notification process. For example, MIIT in July 2010 released for comment a draft version of revised regulations for China's regime for limiting hazardous substances (the so-called "China RoHS" framework), and many companies and associates offered feedback. In October 2010, the revised regulations were also offered for a second round of public comment through the WTO/TBT process.

In addition to providing comments, a company may be able to participate as a technical advisor to standards-setting groups even if the company cannot be a full member. Serving as a technical advisor could involve providing technical or industry information to a drafting group or reviewing draft standards. Companies can also seek to build ties with companies and experts who are formally participating. For example, one member

company active in energy-related technology has built relationships with the China National Standardization Institute to provide expert advice on specific standards areas. At the same time, they have worked to identify relevant academic and industry experts who work in this area to build common messaging for specific standards.

Other companies have sought to increase their standards profile to position themselves for more formal or informal participation. To achieve this goal, companies may encourage existing staff to publish in respected industry journals or present at conferences and events in the standards community. They can also seek to hire established industry experts from technical institutes or other relevant organizations. In addition, companies have used their participation or leadership in international standards activities to promote increased Chinese adoption of accepted international standards or to build relationships that can create more opportunities for domestic standards-related interaction. For example, one member company active in shaping standards within the International Organization for Standardization (ISO) successfully encouraged greater Chinese participation and buy-in to the work of the ISO committee dealing with their product area – and then used that leverage to participate more in standards-setting within China.

Comparison: Other standards-setting groups

Foreign companies have a mixed record of participation in industry and local-level standards-setting activities, partly because these standards are less important for many companies and feature a wider variety of standards-setting groups. Some industry associations are active on standards issues and open to limited foreign participation. For example, the China Communication Standards Association has permitted several foreign companies to participate in its standards-setting activities through existing joint ventures – though at a significantly higher cost than their domestic counterparts.

Best Practices for Company Participation in Standards-Setting

Companies that wish to participate in China's standards-setting system must be able to work within China's regime and adapt to its top-down approach and weak emphasis on voluntary standards-setting (see the *CBR*, January-February

2010, p.40). Companies that aim to participate should consider a few steps.

- **Analyze the landscape** Based on the company's key products and manufacturing processes, company personnel should research the status of relevant standards in China. Companies should learn which technical committees and industry associations are active on standards that affect their products and processes, the involvement of Chinese and foreign competitors in these groups, and how PRC standards compare with international standards. In some areas – such as energy efficiency and smart grid technology – where varying groups are competing for standards leadership, multiple groups may be active on different aspects of a product or technology.
- **Audit company resources** Companies should assess the amount of time, resources, and technical expertise they have to invest in standards issues. They should pay particular attention to resources that can be used in China and what resources have already been allocated on international standards activities. Companies should also work internally to build a more cohesive standards team and consider how to tie standards work to their broader product strategies in China.
- **Assign strategic priorities** Companies should determine which resources to allocate to specific standards areas and how to best use the resources. Potential strategies include monitoring standards-related information channels, such as government and association websites, databases, and newsletters; building relationships with standards-related officials and groups, including formal and informal industry groups, research and technical institutions, and government-affiliated groups and agencies; and formally participating in standards-setting activities.
- **Assemble the pitch** Companies looking to build relationships with standards officials or seeking formal participation in standards-setting activities should gather information about themselves and their resources to make the case that they should be involved in standards discussions. This pitch should include information about the company's operations and investment in China, but pay particular attention to the company's potential

technical contributions to standards development.

- **Approach targeted standards groups** Based on the information collected, companies should reach out to relevant standards groups to offer expertise and explore possible participation at the appropriate level. Depending on the standards area, it may make sense to approach and interact with multiple standards-related groups to broaden potential information and participation channels.
- **Advocate on technical grounds** Once a company begins to participate, it should remember that the technical experience that enabled participation in the first place continues to hold the most value in standards-related discussions. When lobbying on a particular standard, technical concerns and proactive technical fixes make more convincing arguments to standards developers than

market access issues or market impact assessments.

Moving Forward

China's standards system is complex and rapidly changing, making it challenging for companies to approach. Despite the challenges, some foreign companies can point to successes – concrete instances where they were able to navigate and even guide the development of standards in vital areas. To be successful, US companies must devote the time and resources to understand the differences between China's system and those in other markets, determine what level of involvement is necessary for their product and technology areas, and build the channels and relationships necessary to participate in the system.