Standards Setting in China

Challenges and Best Practices

February 2020

THE US-CHINA BUSINESS COUNCIL
美 中 贸 易 全 国 委 员 会

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Executive Summary

A company's participation in domestic standards-setting institutions in China can contribute to its success in the market. While aligning standards with the technical specifications of a product can create market opportunities, in cases where Chinese standards diverge from the international ones that multinationals use elsewhere, these standards can lead to increased costs and delays, require the reengineering of products, and serve to block market access. Official statistics indicate a trend toward decreasing alignment with international standards, making it all the more important that foreign companies are able to participate effectively in China's domestic system. While China has made significant progress in recent years in opening its standards-setting organizations (SSOs) to foreign companies and increasing transparency, several hurdles remain. The US-China Business Council (USCBC) spoke with member companies and other stakeholders to better understand some of these challenges.

Core Challenges

- Getting a seat at the table: While experiences with different drafting bodies vary, many opportunities to provide input are invitation-only in practice. Chinese stakeholders will sometimes hold ad hoc meetings that exclude foreign companies outside of formal technical committee meetings, and foreign companies are barred from taking part in certain working groups.
- Lack of transparency: While more and more draft standards are being released for longer public comment periods, companies still reported instances of comment periods being too short to provide meaningful input. Further, there is no follow-up mechanism to let companies know if or how their input was considered.
- Effectively exerting influence: Influencing the standards-setting process effectively can be challenging—even for companies that are able to fully participate in drafting—and can vary greatly depending on alignment with strategic government or domestic industry interests, national security considerations, and the administration of due process in a given SSO.

Best Practices

- Establish company as an industry leader: Many USCBC members are global leaders in their industries and are able to influence standards as a result of their high-quality technical input. Companies can bolster their reputation by sending experts to industry events and holding technical seminars to educate peers.
- Align interests with industry and government priorities: Companies use multiple channels to build support for their standards proposals among industry players, including building coalitions of shared interests in technical committees, engaging local industry through associations, and conducting informal advocacy with key standards stakeholders. Companies are often able to be most influential in standards that help achieve stated government goals.
- Organize effectively internally and prioritize: Internal coordination and buy-in from company leadership are both essential to successfully influencing standards. Companies often prioritize work on mandatory standards that could impact their bottom line.

Introduction

Standards are technical requirements, guidelines, or specifications that help to maximize product compatibility, interoperability, quality, and safety. Standards are set both through international organizations as well as through countries' own standards-setting bodies with the involvement of a wide range of stakeholders including industry, government, and academia.

The ability to effectively participate in standards setting is critical for businesses to be successful in China. Standards that are in-line with a company's product can create market opportunities, and unique Chinese standards that differ from those used elsewhere in the world can constitute a market access barrier. This report identifies standards-setting challenges that USCBC member companies face in China and benchmarks best practices.

Methodology

This report is derived from interviews with over 30 stakeholders from USCBC member companies, SSOs, and think tanks. Member company interviewees focused on the information and communication technology (ICT), life sciences, consumer products, chemical, and manufacturing industries.

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China's Current Standardization System and Reform Efforts

Standards in China were originally mandatory requirements set by the government and used to manage large-scale production in a planned economy, but since China passed the first iteration of its *Standardization Law* in 1989, it has developed a system that incorporates more stakeholders and voluntary standards. China began a new effort to optimize its standardization system in 2015 when the State Council released a plan for standardization reform outlining goals through 2020. Objectives include allowing the market to set standards alongside government-directed standards-setting activities, improving the coordination of standards setting, cultivating the ability of social organizations to set standards, increasing the alignment between Chinese and international standards, promoting Chinese standards abroad, and increasing participation in international standards setting. USCBC has published a separate report on China's role in international standards setting.

One of the highlights of this reform effort has been the 2017 revisions to China's *Standardization Law*, which USCBC actively provided feedback on to drafters. This was the first time the law had been updated since its creation, and it made several important changes, including streamlining the management of mandatory standards and providing the legal basis for associations to set standards.

China is now in the process of formulating a strategic outline for its next stage of standardization policy. "China Standards 2035," a strategic research program led by the Chinese Academy of Engineering, kicked off in March of 2018 and recently concluded in January 2020 with the launch of a new "National Standardization Strategic Development Research" project.

Government oversight

The Standardization Administration of China (SAC) is responsible for standards at the central level. Previously, SAC fell under the General Administration of Quality Supervision, Inspection, and Quarantine (AQSIQ) but in March 2018, it was absorbed into the State Administration for Market Regulation (SAMR), a newly formed super regulator responsible for a large swath of regulatory functions. While it is now integrated into SAMR, SAC has kept its name for external liaison purposes.

While there are high-level guiding policies on standards, the role of the government is not monolithic. There are many stakeholders involved in standardization from industry, government, and academia representing diverse interests. Even within the government, there are different agencies in charge of different standardization processes with no one agency influential enough to direct the others, making it difficult for SAC to wrangle competing interests, sometimes causing conflicting standards. The State Council created a high-level interagency joint conference for standardization work in 2015 in an attempt to address inter-department coordination issues, although stakeholders reported that they have not seen much change in practice.

Types of Chinese standards

China's standards-setting system currently includes five different types of standards:

1. National standards are technical requirements that apply nation-wide and can be either mandatory or voluntary (literally translated as "recommended"). Mandatory standards are sometimes referred to as "GB" standards because their unique identifying codes all use this prefix, which stands for *guobiao* (国标), or "national standard." According to the *Standardization Law*, mandatory standards are primarily meant to address human health, safety, environment, and national security issues. For other issues, there are voluntary national standards. Most national standards are issued by SAC, with exceptions in certain industry-specific areas.
2. Industry standards are also national in scope and provide technical requirements in a specific industry where no national standards exist. If a national standard is written that encompasses the scope of an industry standard, the corresponding industry standard is typically repealed. Industry standards are issued by the relevant industry regulator and registered with SAC. Companies reported that the importance of industry standards varies by sector.
3. Local standards address standardization requirements that are not covered by national or industry standards and are particular to local conditions. They are developed under the authority of provincial governments (or municipal governments with the permission of the provincial government), usually overseen by the relevant market regulation authority, and must be registered with SAC. They apply within the jurisdiction of their issuing body.
4. Association standards, sometimes translated as "social organization standards," are a new type of standard given legal standing in 2017. Association standards are voluntary and can be drafted and issued by any social organization legally registered under the Ministry of Civil Affairs (MOCA) where no relevant national, industry, or local standard exists. This allows these organizations to quickly create standards to meet market needs, since the drafting process for government-led standards is very lengthy. Many association standards are being drafted in areas of quickly changing, cutting-edge technology like artificial intelligence, blockchain, and big data.
5. Enterprise standards are drafted by companies and apply only within that company, although they must be self-declared to the government. These standards must not be lower than the corresponding national or industry standards if any exist, and some companies may use enterprise standards to demonstrate their products' technical superiority.

Type of Standard	Mandatory vs. Voluntary	Government Involvement	Number of Standards
National	Mandatory or voluntary	Government-led	36,877
Industry	Voluntary	Government-led	62,262
Local	Voluntary	Government-led	37,818
Association	Voluntary	Industry-led	9,790
Enterprise	Voluntary	Industry-led	1,140,000

Statistics Source: CGTN, September 2019

China's standardization system is primarily government-led with a significant number of mandatory standards that essentially serve the purpose that technical regulations would in most countries. This makes it dramatically different from the United States's industry-led system, in which the government plays a supporting role and most standards are voluntary.

While China's industry and local standards were, in some cases, mandatory prior to 2017, revisions to the *Standardization Law* now only allow for national standards to be mandatory, and mandatory industry and local standards are being phased out, revised, or converted to national standards. However, some mandatory industry and local standards may be left in place in certain areas that involve core safety concerns such as environmental protection, engineering and construction, and medicine and health.

China's technical committees and the drafting process for national standards

National standards (and, frequently, industry standards) are usually drafted by technical committees (TCs) or subcommittees (SCs), which are made up of experts from industry, government, and academia and are typically overseen by government ministries or state-affiliated industry associations. There are currently over 1,300 TCs and SCs conducting standardization work in China. Many TCs fall directly under SAC, but some are overseen by more industry-specific bodies. For example, TC 485, the committee in charge of drafting mobile communications standards, falls under the Ministry of Industry and Information Technology, and TC 63, which covers chemical standards, is managed by the China Petroleum and Chemical Industry Association. In cases where a relevant TC does not exist, national and industry standards may be drafted directly by a government regulator, state-affiliated industry association, state research institute, or ad hoc group of experts.

In many cases, the heads of TCs are public-sector experts from state-run associations, state research institutes, universities, state-owned enterprises (SOEs), or even sitting government officials, indicating a high level of government involvement in these bodies.

Drafting Process for Mandatory National Standards

The drafting process varies depending on the type of standard and recent regulations have clarified the process for mandatory national standards. These standards can be proposed by central government departments, provincial-level governments, companies, organizations, or private citizens, and if approved, SAC will issue a public drafting plan. The relevant government department then usually assigns the project to a TC, which gathers a group of experts to formulate a draft, solicit public comments, and conduct a technical review. The review may involve a vote if consensus is not reached. After a standard is published, the department responsible for drafting will organize a reexamination at least every five years to determine whether it needs to be revised or abolished.

Main Channels for Participation

1. Direct participation: The most involved way to participate in standards setting is to take part directly in the SSOs that draft standards, usually, state-run TCs.
2. Submitting written comments: Similar to draft regulations, many draft standards will be posted online for public comment. While it may be more difficult to influence the course of a standard once an initial draft has been composed, companies report that submitting comments can still be effective if large portions of an industry have objections.
3. Leveraging industry associations: Different associations have varying degrees of involvement with standards. Some domestic associations are in charge of the TCs that draft national and industry standards or even draft these standards directly, and some issue their own standards. Both foreign and domestic associations can be useful channels to submit written comments on standards.
4. Exerting indirect influence: Companies can conduct informal advocacy and education efforts with associations, Chinese partners, and standards-setting bodies. Companies often interact with engineers, standards participants, senior executives, and legal experts to make sure that they understand the links between the company's business and standards.

Divergent Standards: What is the Business Impact?

Chinese standards that differ from international standards are one of the main reasons that foreign companies participate in Chinese standards setting in the first place—to ensure that standards do not incorporate unique requirements that differ from the international standards companies use elsewhere and could negatively impact their business. Unique Chinese standards can sharply increase engineering costs and the time needed for a foreign company to bring a product to the Chinese market, or sometimes even restrict market access altogether. Reengineering products for the Chinese market can also affect a company's global resource distribution.

To what degree has China accepted international standards?

China is a signatory to the World Trade Organization (WTO) Technical Barriers to Trade Agreement, which stipulates that countries use international standards as the base for their standards. While China has made some progress, there is still a long way to go.

Official statistics from January 2020 indicate that of the nearly 38,000 national standards issued by SAC currently in effect, just over one third are adopted fully or in-part from international standards. While some international standards may be used directly, others may only be used in part or as a loose reference for Chinese standards, which can end up being just as problematic as unique Chinese standards. Despite China's increasing involvement in international SSOs, the percent of Chinese national standards issued each year that adopt international content has shown a steady decreasing trend over the past decade from 35 percent in 2010 to 24 percent in 2019.

It is not just the content of standards that matters. Even if standards are similar to international standards, sometimes, what constitutes a voluntary requirement in other markets may be a mandatory requirement in China. For example, many Chinese drug and medical device standards align with the United States Pharmacopeia—a collection of US medicine, food ingredient, and dietary supplement standards—but certain requirements that are voluntary in the US market are mandatory in China, decreasing the flexibility for companies to innovate and use the technologies and processes most suitable for their business needs.

Examples of unique Chinese standards

- The Cybersecurity Multi-Level Protection Scheme (MLPS 2.0)
- Cryptography standards
- Bioequivalency testing standards for generic pharmaceuticals
- Maximum residue limits (MRL) for pesticides
- Environmental emissions standards
- Food safety and food contact standards

While unique Chinese standards are a serious issue for many companies, especially when requirements in standards and certification processes could restrict market access as in the ICT and medical devices sectors, a few companies noted exceptions. Where a company's product line in the Chinese market is different from other markets to meet consumer demands, unique Chinese standards may not impact their business.

Source: SAC, Rhodium Group.
Note: China only recognizes standards published by ISO, IEC, and ITU as international standards.

Challenges With Participating and Exerting Influence in Standards Setting

Many member companies have indicated anecdotally that transparency and access to standards-setting processes have improved in recent years. However, data from USCBC's 2019 Member Survey show that two thirds of members still do not feel that they receive equal treatment compared to Chinese companies.

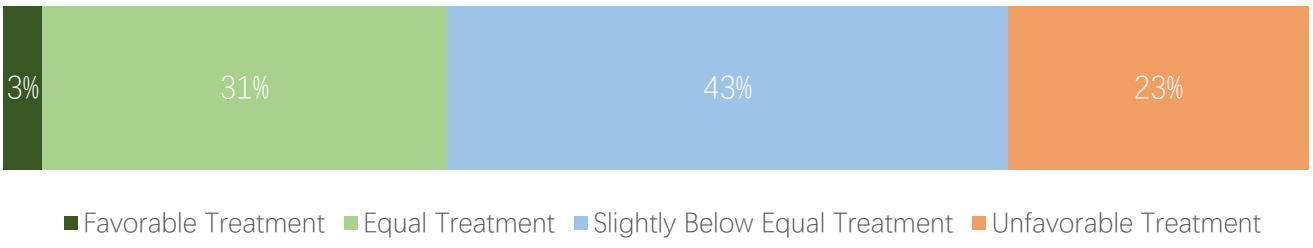
Access is improving, though challenges remain

Access in Chinese SSOs for foreign companies has seen significant improvement in recent years. Many TCs that had blocked foreign participation or only allowed foreign companies to participate as observers have become more open to foreign companies participating as members, making contributions, and even taking leadership positions. For example, TC260 invited foreign companies to join as official members for the first time in 2016. The Chinese government has also made high-level commitments to allow domestic and foreign-invested enterprises to participate equally in standards setting, including in the *Foreign Investment Law*.

However, members report that several TCs and specific working groups within TCs remain off-limits to foreign companies in practice. For example, in TC260 there are two working groups that do not allow foreign companies to participate, and until very recently, the TC260 working group for cryptography, which has significant business implications for foreign ICT companies, did not allow foreign participation either. While there are no explicit policies that bar foreign participation, companies reported that their applications to participate remain in perpetual limbo.

Many companies also reported that even if they were able to participate in later stages of drafting or submit comments on draft standards, it was very difficult to participate in the early stages of drafting, which is often only open to invited experts, and agenda setting, which is tightly government-controlled.

USCBC Member Company Treatment in Standards Setting Compared to Chinese Companies



Source: 2019 USCBC Member Survey

Another challenge that limits companies' ability to participate in standards setting is an overly broad definition of national security. Sometimes it can be justified to bar foreign participation on national security grounds, such as in setting standards for classified information systems. However, in other cases, the national security rationale is applied liberally, such as when many industry players including foreign companies were kept in the dark about government policies on the use of gasoline with 10 percent ethanol for national security reasons, and not invited to participate in the related standards processes.

Multiple companies reported that there are meetings of Chinese standards stakeholders outside of regular TC meetings that they are not allowed to participate in, often based on national security rationale. While it is not unusual for industry players to meet for technical discussions outside of TCs, when these meetings exclude foreign companies and make technical decisions that TCs then rubber stamp, it defeats the purpose of opening the TCs to foreign participation.

Processes not fully transparent, despite recent progress

Transparency has improved significantly in recent years. Starting in 2017, SAC began publishing the text of all mandatory and voluntary national standards that it issues on a centralized online platform, although food safety, environmental, and construction standards are issued by other agencies and maintained in separate databases. Companies can submit written feedback on specific standards via this platform. SAC also maintains databases of information on national, industry, local, association, and enterprise standards including the drafting bodies and the organizations that oversee them, their implementation status, and the names of the drafters and their affiliations.

The level of transparency, however, varies depending on the type of standard. For example, the database of national standards provides information on what stage of drafting current standards projects are in and serves as a centralized platform for online comment solicitation. However, other types of standards are only published in these databases after their release, at which point it is too late for companies to get involved.

Transparency can also depend on the government agency in charge of the standards-setting process. Since SAC represents China at many international SSOs and has been exposed to international practices, the TCs that it manages tend to have better transparency and due process than those managed by other stakeholders.

Increasing numbers of draft standards are released for public comments for longer periods. In January 2020, SAMR issued new measures on mandatory national standards that increase the comment period from 30 to 60 days. However, these measures do not apply to other types of standards and companies report that it has not been uncommon for comment periods to be far shorter than that. Additionally, there is no feedback mechanism to let companies know if or how their input was considered.

Another issue with comment solicitation is that sometimes it is conducted on an invite-only basis, which may exclude relevant stakeholders. Other times, only associations will be invited to comment rather than companies themselves, so companies not involved in the relevant associations will be left out of the comment process.

TC meeting agendas and proposals are also rarely released with sufficient lead time. Such practices make it extremely difficult for multinational companies that require translation and coordination between offices in different countries to prepare meaningful input for TC meetings.

Differing priorities impact influence

Aside from technical considerations, the extent to which a company's position is compatible with local industry and government priorities can have a major impact on how much influence a company has. This is particularly important in China's standards-setting environment, where due process is often weaker than international SSOs. Strong, rules-based processes are essential to reduce biases and ensure that all stakeholders have their voices heard.

Standards setting goes beyond technical factors; it is also an economic decision about what is best for an industry and what technology is most accessible for consumers. Generally, the more integrated a company's technology is into the Chinese supply chain, the more common interests it will have with local industry.

If a foreign company is the only party benefiting from a standards proposal or the only companies benefitting are multinationals, local players may be against it, and in some cases, a TC may avoid using the most technically advanced standard in order to avoid excessive harm to a local industry. From a domestic industry perspective, it could be impractical to use the most technically advanced standard if the only products that meet those standards would be prohibitively expensive for consumers.

The line between these legitimate considerations and protectionism can be blurry, though, and in cases where a standards-setting process is leveraged by domestic interests for protectionist purposes, Chinese consumers are denied access to the best products. Such protectionist measures can take many forms, for example, unique technical requirements that bar market access for certain products or invasive testing requirements that create unpalatable IP risks for foreign companies. In some cases, maintaining standards lower than international ones allow less technically advanced domestic rivals to increase their competitiveness. In USCBC's 2019 Member Survey, 30 percent of member companies experienced standards-related protectionism in China.

How a company's business aligns with Chinese government priorities is another important factor in a company's ability to influence standards setting. If a company's industry is included in Chinese strategic priorities, there may be efforts to use standards to support domestic companies and further industrial policy goals, which can disadvantage foreign companies. On the flip side, if a company's technology can help achieve a government priority, companies can often be successful in aligning Chinese standards with the specifications of their product, even if this may give them an advantage over local competitors in some cases.

Other Challenges in China's Standards-Setting Environment

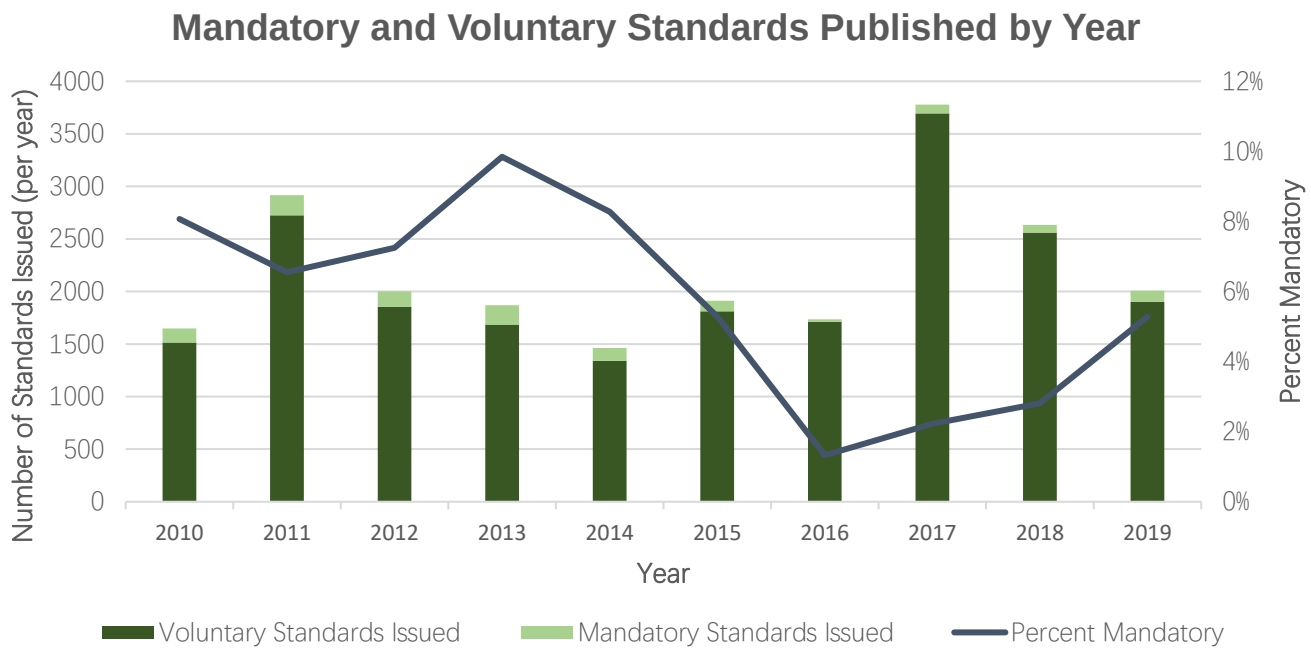
Certain characteristics of the overall standards-setting environment in China create challenges for foreign and domestic Chinese companies alike.

Non-science-based standards

Some mandatory standards prescribe arbitrary or cosmetic requirements, often without clear safety, performance, or quality-related goals. Excessively restrictive or prescriptive standards can hamper innovation, particularly for emerging technologies, as they leave companies little flexibility for experimentation. Standards are sometimes designed in a way that no market players can practically comply with, either because of contradictory or excessively high requirements. These are often the result of rushed drafting with insufficient deliberation from industry players. Sometimes, contradictory requirements can be the result of competing interests between government agencies. Standards that even industry leaders cannot practically meet fuel selective enforcement concerns, since authorities can penalize a company for non-compliance at any time.

Blurred line between voluntary and mandatory standards

Although China has far fewer mandatory standards than voluntary ones, if adherence to a voluntary standard is referenced as a requirement in a regulation, or as part of a business contract or government procurement tender, compliance can then become mandatory. In particular, if a standard is set around a government priority or becomes widely accepted in the Chinese market, it often constitutes a de facto requirement in practice,



Data Source: SAC

regardless of whether it is technically mandatory. Since China typically only notifies the WTO of mandatory standards that could constitute barriers to trade, it can be difficult for businesses to identify these de facto mandatory standards and could significantly impact their business. This has led to sharp concerns in industries like ICT, where most standards are technically voluntary.

Unclear rules and differing understandings between regulators that have overlapping jurisdiction also lead to issues with the implementation of voluntary standards. Some companies reported receiving fines for failing to meet voluntary standards but were able to push back with varying degrees of success through legal arguments and advocacy efforts.

Emergence of association standards

Company concerns with association standards tended to focus on their relatively weaker due process safeguards and potential to become mandatory without foreign input. While association standards can be drafted quickly and provide an agile response to market needs, they can result in large numbers of low quality or even contradictory standards, and a fragmented, confusing standards environment for all involved. The large number of new SSOs are difficult for companies to track and resource-intensive to participate in. Despite these concerns, some companies were hopeful that issues with this new type of standard could be solved over time, and a few even indicated successful participation in drafting these kinds of standards.

Official statistics show that there are currently 12,756 association standards set by 2,997 different social organizations as of January 2020.

IP and liability concerns with enterprise standards

Several companies expressed concerns that enterprise standards could create intellectual property (IP) leakage risks when declaring their enterprise standards with the government or expose themselves to unnecessary liability since they could be fined for noncompliance with their own standards. The government also has plans to begin offering incentives for leaders in enterprise standards setting as a way to encourage high-quality products, which raises concerns about fair competition if IP concerns prevent foreign companies from using these standards.

SOE use of enterprise standards

Large SOEs in China have an overwhelming presence in some industries, allowing their enterprise standards to sometimes functionally serve as national standards. As enterprise standards are generally drawn up in an intra-company process that is not transparent to external stakeholders, foreign suppliers do not have a chance to provide input or comment on them. Some companies have suggested that SOEs prefer to use enterprise standards over national standards as they are more flexible and they can be adapted quickly as technology develops. However, any trend toward enterprise standards over national standards is a trend toward less

transparency and greater risk for US suppliers. It is particularly problematic if the SOEs use their enterprise standards to preference wholly-owned subsidiary manufacturers of the relevant parts, components, or materials or other SOEs over foreign suppliers.

Association fee collection practices

In addition to drafting their own standards, associations are often entrusted to draft government-led standards and sometimes even oversee TCs. While companies indicated that it was normal to pay associations membership fees, several companies characterized some association-led standardization projects as "pay to play." In some cases, there is the possibility that certain companies could be given more influence in the drafting process if they contribute more money. A few companies noted that they did not participate in these types of "pay to play" projects at all due to company compliance policies, limiting their ability to participate in some standards projects through associations.

Implementation transition period and clarification

Companies reported challenges with short implementation timelines for new standards. It takes time to make changes to manufacturing processes, product designs, and supply chains as well as train their regulatory affairs and quality assurance teams to comply with a new standard. New standards may also include items that require clarification before implementation, which can be challenging to obtain official guidance for. This can be problematic as certification bodies will sometimes test products according to the strictest interpretation.

Out-of-date standards

Chinese standards that are out of date and behind current international standards can force companies to keep their most advanced products out of the Chinese market, to the detriment of Chinese consumers. While revisions to the *Standardization Law* requiring the review of standards every five years may help address this problem, it remains an issue.

Best Practices for Companies

While challenges vary significantly depending on the industry and stakeholders involved, the companies that tend to be successful in standards setting usually follow these general best practices:

Establish company as an industry leader

It is often the technical contributions of a company that give it more influence in standards setting, and industry leaders tend to be in the best position to provide this. They also often enjoy better access since companies are more likely to be invited to standards setting activities if their technology is well respected in the industry.

The ability to leverage advanced technology and industry leadership depends somewhat on the development level of the industry in China. In industries where foreign companies are significantly more technically advanced than their Chinese counterparts, they can often be more influential in standards setting because they will have more technical expertise to make contributions. However, as the technological gap between foreign and Chinese companies narrows in more mature industries, it may become challenging for foreign companies to rely solely on superior technology to exert influence.

Companies can also bolster their reputation by sending experts to industry events or holding technical seminars to educate industry peers. Standards drafting groups sometimes proactively reach out to foreign industry leaders for input.

Build industry consensus

Coalition building and stakeholder engagement is a strategic investment that should align with a company's long-term goals. There are multiple channels that can be useful for building industry consensus to support standards setting:

- SSOs: There are intangible benefits to engaging directly with key contributors during the drafting process in a TC. Where there are competing ideas and consensus cannot be reached, coalition-building is critical for successfully influencing a standards project. Companies should lobby fellow industry partners, both foreign and domestic, and have healthy communications with other stakeholders that will be impacted by a standard to create camps of shared interests. Direct participation in a TC is the most resource-intensive method, but it may be worthwhile if a particular standards proposal is central to a company's business interests and there are competing ideas on how it should be written. While a company may be unlikely to convince those that are strongly opposed to their proposal to change their minds, success can be contingent on convincing companies that are ambivalent about a certain standard to vote with them. One company characterized the role of its employees who participate in TCs as "technical diplomats."
- Associations: Associations can be an important channel to conduct education and advocacy to build industry support for a certain proposal or technology before taking an issue to the relevant TC. Because utilizing associations is less resource-intensive than direct participation, it can be an efficient

way to provide input on lower priority standards initiatives. This can be particularly effective in industries where there is a high degree of consensus between foreign and domestic companies. Participation by proxy through associations can also be a way for companies to provide input on sensitive projects where individual companies would not want to be singled out for their objections.

- Indirect: Companies may also choose to hold educational technical seminars or send their experts to relevant industry events in an attempt to build support for their position on a standards project. When companies are not able to participate directly in SSOs or are blocked from official participation, they may rely on these indirect avenues of influence. One company mentioned that while many of their foreign experts were not able to participate directly in TCs because of the language barrier, they would sometimes host side meetings or workshops and invite both local and international experts for informal education initiatives. Another company mentioned that it was able to use enterprise standards for a product without any standards yet to gain industry recognition for the product's technical specifications.

Engage with the relevant regulators

Some companies found it helpful to engage directly with SAC or the regulator in charge of an industry (which often oversees relevant TCs) about standards issues either in addition to or instead of working through SSOs or associations. Engagement with regulators can provide opportunities to raise standards-based complaints or seek clarity on implementation timelines and whether certain requirements are voluntary or mandatory. However, it can be difficult to gain access to regulators, which is often the limiting factor for companies looking to leverage this channel.

Align business plans with government priorities

The Chinese government will periodically release its priorities in various planning documents and government guidance. Five-year plans highlight priority areas for standardization work, as do SAC's annual standards work plans. For example, SAC's 2019 priority areas for standardization lays out specific goals for a wide range of industries. Standardization efforts in these, and other areas where standards could help support government goals, may be less likely to run into resistance. Emphasizing how a company's standards proposal supports stated government priorities can also be helpful when conducting advocacy with relevant government stakeholders.

Optimize internal organization

The way companies organize their standards work internally tends to have less to do with their industry and more to do with the size of the company and diversity of its business units. The most common structure involves a coordinator role to track developments in the market, identify opportunities, decide standards priorities, conduct training, and collect input from different teams. This coordinator needs to have good connections with the company's technical teams, for example, if they need to ask a busy engineer to review a quickly translated document under a tight deadline to see if their product will still work under new standards.

Members of a company's regulatory affairs team sometimes participate directly in the standards-setting activities after collecting input from technical teams, and in other cases, the engineers with the technical expertise will participate directly and coordinate with regulatory affairs. One company has each of its business units conduct their standards work independently based on business needs, meeting virtually with local executives to coordinate. Another company separated their work on mandatory standards from other standards work since they considered mandatory standards to fall under regulatory compliance work. Many companies dedicate resources specifically for standards setting in China because it is such a large market, while others use a combination of resources on the ground and at headquarters.

While government affairs teams are not usually the lead on standards work at most companies, they tend to be more involved in standards work in China compared to other markets due to the high level of government involvement in Chinese standards setting, especially if any non-technical issues are involved. Companies noted that there is often a disconnect between the technical experts who understand the products and the government affairs personnel who understand the strategic implications of new standards.

Companies also noted the importance of leadership buy-in for standards work. It can be difficult for businesses to justify spending so many resources on work that might not create new value for the company. However, executives who understand standards know that they can be critical to maintain market access long term and even create new business opportunities.

Conclusion

Many USCBC members are global leaders in their industries and report successful experiences in Chinese standards setting by way of contributing high-quality technical input. However, difficulties with access to standards-setting activities and transparency continue to create challenges for foreign companies, despite improvements in recent years.

Closer adherence to WTO principles for standards-setting would make processes more open, transparent, consensus-based, and impartial, and alleviate many of the issues foreign companies are experiencing. USCBC has laid out detailed policy recommendations for the Chinese government to address some of these issues in a separate advocacy letter and continues to advocate for these outcomes on behalf of US industry in China.

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Appendix – Timeline of Major Standardization Policies and Developments

2015

- March: The State Council issued its Plan for Deepening Standardization Work Reform, which provided a high-level roadmap to improve China's standardization system through 2020, outlining specific goals for each two-year period. Subsequent plans provide more detail on goals for 2015-2016, 2017-2018, and 2019-2020.
- June: The State Council created a high-level interagency conference for standardization work convened by a state counsellor and with an office in SAC for everyday work.
- December: The State Council issued the 13th Five-Year Plan for Standardization, covering the period from 2016 through 2020, which details areas where China aims to revise or create standards across a wide range of industries, outlines a number of standardization-related projects, and includes more detail on many of the goals outlined in the standardization reform plan.

2017

- January: Article 10 of State Council Circular No. 5 promised to promote equal participation in standards setting for foreign-invested and domestic enterprises as well as increasing transparency and openness in standards setting.
- November: The National People's Congress (NPC) passed revisions to the *Standardization Law* for the first time since 1989 streamlining the management of mandatory standards and providing the legal basis for associations to set standards. The law was implemented in January 2018.
- December: After soliciting input from foreign industry, SAC, the National Development and Reform Commission, and Ministry of Commerce issued guidance to implement Circular No. 5 that explicitly permitted foreign companies with a presence in China to participate in TCs as either a committee member or an observer.

2018

- February: SAC released its priorities for 2018 standardization work, outlining standardization goals for the year.
- March: Led by the Chinese Academy of Engineering, a group of stakeholders began the research and drafting for China Standards 2035, which will serve as the strategic guiding document for the next phase of China's standardization work.
- July: SAMR, along with seven other government bodies, issued opinions on establishing a "pioneer" system for enterprise standards that would help drive the development of high-quality products by giving leaders in enterprise standards preferential conditions in government procurement, access to capital, and access to credit.

2019

- January: SAC and MOCA release final rules on managing association standards, replacing provisional rules issued the previous year.
- March: SAC released a notice on 2019 key standardization work, which outlined goals for that year to continue to improve China's domestic standards setting and increase its influence in international standards setting.
- March: The NPC passed the new *Foreign Investment Law*, in which Article 15 guarantees the right of foreign-invested enterprises to participate equally in standards setting.
- November: SAC issued a notice encouraging the parallel development of Chinese and foreign-language versions of Chinese national standards, which would facilitate the ability of foreign companies to participate in Chinese standards setting and also increase the international exposure of Chinese standards.

2020

- January: SAMR issued Administrative Measures for Mandatory National Standards, which outline the scope and drafting process for these standards. It is also currently revising measures on national standards in general, which have been in place since 1990.
- January: Research on China Standards 2035 concluded with the launch of a new "National Standardization Development Strategy Research" program.
- January: SAMR issued revised Administrative Measures for Local Standards, updating these regulations on the scope and requirements for local standards for the first time since 1990 to align with the 2017 revisions to the *Standardization Law*.